# Tasmania

**B. Lusk, L. Ney, A. Peacock, & R. Bruno**

**TASMANIAN DRUG TRENDS 2016**
**Findings from the**
**Illicit Drug Reporting System (IDRS)**

**Australian Drug Trends Series No. 167**

# TASMANIAN DRUG TRENDS 2016



## Findings from the Illicit Drug Reporting System (IDRS)

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# ABBREVIATIONS

| | |
|---|---|
| **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) |
| **CPR** | Cardio-pulmonary resuscitation |
| **DDC** | Drunk Driving Courts |
| **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 |
| **GP** | General Practitioner |
| **HBV** | Hepatitis B Virus |
| **HCV** | Hepatitis C Virus |
| **HIV** | Human immunodeficiency virus |
| **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 |
| **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) |
| **OFT** | Oral fluid test |
| **OST** | Opioid Substitution Therapy |
| **OTC** | Over-the-counter |

| | |
|---|---|
| **PBS** | Pharmaceutical Benefits Scheme |
| **PCR** | Polymerase Chain Reaction |
| **PWID** | People who inject drugs |
| **REU** | Regular ecstasy user |
| **S3** | Schedule 3 |
| **S4** | Schedule 4 |
| **S8** | Schedule 8 |
| **SD** | Standard deviation |
| **SDS** | Severity of Dependence Scale |
| **SIS** | State Intelligence Services, Tasmania Police |
| **SPSS** | Statistical Package for the Social Sciences |
| **TAS** | Tasmania |
| **TasCAHRD** | Tasmanian Council on AIDS, Hepatitis and Related Diseases |
| **TASPOL** | Tasmania Police |
| **TGA** | Therapeutic Goods and Administration |

# 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

Ninety-nine 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-one 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, general health workers, youth and outreach workers, addiction medicine specialists, and staff from police and justice-related fields.

## 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 in 2016 were generally consistent with those interviewed in previous Hobart IDRS studies. Participants were predominantly male (61%), and had an average age of 41 years. Participants had completed 10 years of education on average, over four-fifths (85%) were unemployed at the time of the interview, and almost half of the sample reported a previous prison history (46%).

Half of the participants (50%) were injecting multiple times per week (but not every day), with 23% injecting at least once daily. Opioids were the predominant drug of choice among the cohort (56%), and were the class of drug most injected in the preceding month amongst three-quarters of the sample (58%), following by methamphetamine (36%). Over half (57%) were involved in some sort of drug treatment at the time of interview.

## Patterns of drug use among the PWID sample

The major trends identified in the 2016 Tasmanian IDRS report relate to indications of emerging changes in patterns of methamphetamine and pharmaceutical opioid use amongst local PWID. Summaries of major trends for each drug class are reported below by drug type, and are also summarised in Table A.

## Heroin

Just 7% of the sample reported use of heroin in the six months preceding the interview, at a median frequency of fifteen days.

Only six PWID participants interviewed in 2016 could report on local trends in price, purity or availability of heroin.

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) and that, of the 18% of the PWID sample that reported heroin as their drug of choice, only four had recently used heroin – indicated that the low availability of heroin in the state, identified in earlier IDRS studies, continued in 2016.

## Methamphetamine

Seventy-five percent of PWID participants in 2016 reported use of any form of methamphetamine (powder, base/paste, crystal/ice or liquid) in the six months preceding the interview, at a median frequency of 31 days (out of a maximum of 180 days), equating to use on average once per week. This level of use has been stable since 2010 (70-77%).

Powder methamphetamine was used by 33% of participants (a significant decline to that reported in the 2014 (50%) and 2015 (49%) surveys), at a median frequency of 6 days (i.e., monthly use) in the last six months. Crystal methamphetamine was the predominant form used amongst the sample (73%), reflecting a significant increase from 2014 (54%) and 2015 (59%). Median frequency of use increased from 18 days in 2015 to 24 days in 2016. Use of base/paste methamphetamine was reported by just 4%, a decline relative to preceding years.

**Table A: Price, purity, availability and use of heroin, methamphetamine, cannabis and morphine, 2016**

| | Heroin | Methamphetamine | | | Cannabis | | Morphine | Oxycodone |
|---|---|---|---|---|---|---|---|---|
| | | Powder | Paste | Crystal | Bush | Hydro | | |
| **Prevalence of use** | Low (7%) | Reducing level of use: used in last 6 months by 33% of the sample - no longer predominant form used | Decrease in use: used in last 6 months by 4% of the sample; least commonly used form | Significant increase in use: used by 73% of the sample in the last 6 months; now predominant form used | Stable proportion of recent users (74%) and continued lower number of daily users (44%); remains the most frequently used illicit drug; hydro the predominant form used | | Stable use: illicit form used by 51% of the sample in the last six months; MS Contin main form | Decrease in use: illicit form used by 28% of the sample in the last six months; OxyContin main form |
| **Price** | | | | | | | | |
| ***1 mg*** | - | - | - | - | - | - | - | $10 (20mg), mixed reports of stability |
| ***0.1 gram*** | $71, stable ~ | $100, stable | $100, stable ~ | $100, stable | - | - | $100, stable | - |
| ***0.5gram*** | - | $150, stable | $50, stable ~ | $300, stable | - | - | - | - |
| ***gram*** | $300, stable ~ | $250, stable | - | $500, stable | $20, stable | $25, stable | - | - |
| ***ounce*** | - | - | - | - | $200, stable | $300, stable | - | - |
| **Purity/ Potency*** | High/medium; increasing/stable over the last six months (n=6) | Low/medium; mixed reports regarding changes over last 6 months | - ~ | High/medium; no changes over last 6 months | Medium; stable in last 6 months | High/ medium; stable in last 6 months | *Pharmaceutical* | *Pharmaceutical* |
| **Availability** | Difficult; stable over the last 6 months | Easy/very easy; stable over preceding 6 months | - ~ | Easy/very easy; stable over preceding 6 months | Very easy/easy; stable over preceding 6 months | Very easy/easy; stable over preceding 6 months | Easy/very easy; stable over preceding 6 months | Easy; mixed reports of availability in last six months |

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

* Based on PWID and KE estimates of purity/potency

~ n<10

Market prices locally for powder presentations of methamphetamine appear to have remained relatively stable since 2006, particularly in relation to 'point' amounts (approximately 0.1g) of the drug, at $50. Base/paste prices appear to have increased over the past two years, from $50 per 'point' in 2014 to $100 in 2016, although few participants could comment on current street price. 'Point' purchases of crystal methamphetamine have increased from $50 between 2005 and 2011, to $60 in 2012, and have remained at $100 between 2013 and 2016. 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 and base/paste methamphetamine reported it to be 'low' or 'medium' and ice/crystal methamphetamine used locally as 'high' or 'medium' in subjective purity.

Participants interviewed in 2016 regarded powder as 'very easy' or 'easy' to access, with availability 'stable' in recent months. Participants reporting on base/paste believed it was 'very easy' or 'easy' to access; only a small number of participants were able to comment on the trends for this form. Participants also noted that availability of crystal methamphetamine was 'very easy' (52%) or 'easy' (46%), and that this had remained stable over the preceding six months.

Use of crystal methamphetamine appears to have increased since 2012, after several years of decreasing use, with crystal methamphetamine now the dominant form used amongst IDRS PWID. However, it is important to note that these trends may be specific to certain local populations. Indeed, frequent ecstasy consumers reported a decrease in recent methamphetamine use from 2014 to 2016, with powder still the dominant form used (Lusk, Ney, & Bruno, 2017).

## 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 (0.2% of non-pharmacy equipment transactions). Only a small proportion of the Tasmanian IDRS PWID participants reported recent use of the drug (6%), and the median frequency of this use was low (2 days of the last 180).

Reflecting the very low level of cocaine use amongst IDRS participants, only two participants were able to comment on trends related to price, purity and availability, noting that a median price of $200 per gram, and reportedly 'high' purity. Preliminary data from Tasmania Police suggest an increase in number of seizures in 2014/15 (25 seizures with a total weight of 273 grams), albeit still at low levels.

## Cannabis

Three-quarters (74%) of participants in the 2016 Tasmanian sample reported cannabis use in the preceding six months. The median frequency of this use was almost daily (168 out of the previous 180 days), which has been consistent in the Tasmanian PWID cohorts since 2006. While the proportion of PWID participants reporting daily use decreased from 54% in 2006 to 44% in 2016, the rate of daily use has been consistent since 2014. Those PWID participants who used cannabis predominantly reported use of hydroponically-cultivated cannabis (90%), while 74% reported use of outdoor-cultivated cannabis. While cannabis remains a commonly used illicit drug (second behind methamphetamine use), 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 12.9% in 2001 to 10.2% of those aged 14 years and over in 2013.

Participants reported that the median price of a quarter-ounce of outdoor cannabis was $70, and $200 for one ounce. The majority of participants who commented reported stable price trends over the preceding six months. Hydroponically-cultivated cannabis cost a modal price of $90 for a

quarter-ounce and $300 for an ounce. The majority of participants who commented reported that prices remained stable over the preceding six months.

Most participants reporting on subjective potency of bush/outdoor cannabis noted this to be 'medium' (70%). The majority of participants reported that this had not changed over the preceding six months. Potency of hydroponically-cultivated cannabis was considered to be 'high (57%) or 'medium' (28%), and this had not changed over the preceding six months. Both forms were considered 'easy' or 'very easy' to obtain.

## Other opioids

### Morphine

Half (51%) of the Tasmanian sample had used morphine that was not prescribed to them in recent months, similar to 2015 (47%) yet a decline relative to 2014 (71%). Median frequency of use was 32 of the previous 180 days (approximately once per week), and MS Contin remained the predominant preparation.

The modal price reported by PWID for all commonly-used morphine formulations was $1 per mg. Prices have remained relatively stable since 2012, following an increase from previous reports. Despite decreased use, 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 the majority of participants.

### Oxycodone

A new tamper-resistant formulation of controlled release oxycodone hydrochloride tablets (Reformulated OxyContin®) was released onto the Australian market in April 2014, replacing the original formulation which did not have such properties. A generic product without these tamper-resistant properties was released in September 2014. The 2015 IDRS was the first of the IDRS studies to examine usage rates of tamper-proof, generic and other oxycodone products amongst Tasmanian PWID participants.

There has been a decrease in the number of participants reporting past six month use of oxycodone which was not directly prescribed from 2013 (61%) to 2015 (27%), which was stable in 2016 (27%). Median frequency of use also declined, from 15 days in 2013, to four days in 2016. Reporting of availability was not differentiated in 2015 by formulation. Illicit uptake of the generic formulation was low in the 2016 cohort, with only 7% of PWID reporting recent use of this form. Non-prescribed, tamper-resistant 'OP' formulations of oxycodone were more commonly used amongst 2016 PWID, with 18% reporting recently use, at a median frequency of four days in the past six months. Whilst further monitoring is required to determine the stability of this shift in the market, the results of the IDRS study and other research (e.g., Degenhardt et al., 2015) suggest that, at least in the short-term, the change in formulation has reduced illicit use of oxycodone amongst PWID.

Despite their higher relative potency than morphine tablets, illicit OxyContin® has been price-equivalent with morphine ($1/mg) in the local market over recent years. The new formulation of OxyContin® has been reported to cost around half the price of the original formulation on the illicit market, with no clear indication of price for the generic formulation due to low numbers of consumers.

Participants were mixed with regard to availability of oxycodone. In 2015 (noting that reporting of availability was not differentiated in 2015 by formulation), three-quarters (77%) of users reported it as 'easy' or 'very easy' to access. In 2016, where oxycodone use was differentiated by formulation, two-thirds (67%) of users of 'OP' (reformulated) oxycodone reported it as 'easy' or 'very easy' to access. These findings should be placed in the context of considerable reductions in the number of people using oxycodone, meaning that estimates of availability may be biased based on reporting by those who have been readily able to access oxycodone.

**Methadone syrup**
Illicit methadone syrup was used by 23% of the sample in the past six months (a similar number to in 2014, 20%), at a median frequency of 12 days, equating to use approximately once per fortnight. More than two-thirds (70%) of the respondents reporting recent use of illicit syrup were themselves enrolled in methadone maintenance treatment during this period.

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 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 2016, consistent with the majority of reports since 2006. Participants reported prices to be stable in recent months. Methadone syrup was most frequently purchased from friends. Reports of the availability of illicit methadone syrup varied, with nearly half of respondents (47%) noting access as 'difficult', and a third (28%) as 'easy'. The majority of participants (73%) considered availability to have been stable over the preceding six months.

**Physeptone**
Since 2006, the rate of recent use of Physeptone has ranged between 29% and 50% of each sample; in 2016, 32% reported past six month illicit use. The median frequency of use in the previous six months has ranged between three and nine days over this period. The median price of illicit Physeptone tablets doubled between 2010 and 2011 from $10 to $20, and has remained at this price in 2016. The majority of participants who commented described illicit physeptone as 'difficult' (50%) or 'very difficult' (17%) to access. Three-fifths (58%) noted that availability had remained stable over the preceding six months, while one-fifth (38%) reported decreased availability.

## Benzodiazepines
Two-thirds (68%) of participants reported recent use of prescribed or non-prescribed benzodiazepines. The median frequency of use of illicitly sourced benzodiazepines (excluding alprazolam) was 10 days (which equates to over monthly use).

Participants generally considered availability of illicit benzodiazepines to be 'difficult' to access (56%), with only 32% describing access as 'easy'. More than half of this group reported access had remained stable during the six months preceding (53%, n=24), however one-third (36%) noted availability was more difficult.

Between 2006 and 2008, the rate of alprazolam injection amongst Tasmanian IDRS cohorts and NSP clients increased. As a consequence of this, numerous anecdotal reports told of increased health problems such as gangrene. 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. One-quarter (23%) of participants reported having used any alprazolam in the preceding six months, similar to 2015 (24%). Non-prescribed alprazolam was used by 21% of the sample, at a median frequency of 5 days in the preceding six months. Injecting use of any alprazolam tablets in the preceding six months decreased from 21% in 2013 to 8% in 2014, stabilising at 9% in 2015. This trend remains stable in 2016, with 6% of the current cohort reporting injection of any alprazolam in the preceding six months.

## Health-related trends

### Non-fatal overdose

### Opioids

Amongst lifetime opioid users, over one-quarter (29%) reported ever having experienced an opioid overdose, and 4% reported this occurring in the preceding 12 months related to use of heroin or morphine.

### Fatal overdose

### Opioids

The number of accidental deaths in Tasmania attributable to opioid use in 2012 was 13, which equates to a rate of 49.4 per million persons. Nationally, 564 deaths were attributable to accidental opioid deaths, which equates to a rate of 44.7 per million persons. Projected national estimates suggest an increase in the number of opioid-related deaths; however, these data should be interpreted with caution (Roxburgh & Burns, 2016a).

### 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. At the time of undertaking the 2016 IDRS interviews, no such program existed in Tasmania.

Amongst the Tasmanian sample, the majority (83%) of participants reported being familiar with naloxone, and a similar proportion reported they would support the expansion of the naloxone distribution program into Tasmania. However, only 5% of participants were aware of recent scheduling changes that allow naloxone to be purchased from pharmacies without a prescription.

### Drug treatment

The Tasmanian Alcohol and Drug Information Service (ADIS) is a 24-hour alcohol and drug-related telephone information service. While the majority of calls related to alcohol (40%), a greater number of calls in 2013/14, 2014/15 and 2015/16 were related to amphetamine relative to opioids (a reversal relative to previous years).

In the 2014/15 Alcohol and Other Drug Treatment Services – National Minimum Data Set, which summarises treatment services provided from Tasmanian government and non-government agencies across the state, alcohol (40%) and cannabis (29%) were the principal drugs of concern in the majority of cases. Amphetamine cases increased locally (from 11% in 2013/14 to 18% in 2014/15) and nationally (17% in 2013/14 to 20% in 2014/15).

### Hospital admissions

There was a small increase in the number of opioid-related hospital admissions in 2014/15 relative to 2013/14 (124 versus 102 admissions), the Tasmanian rate per million population in 2014/15 was equivalent to the national rate (101% of the national rate) whereas it has been lower in previous years.

A similar increase in number of methamphetamine-related admissions was observed (60 admissions in 2014/15 versus 38 admissions in 2013/14). It is critical to note that, unlike when similar numbers were reported in 2006/07 and 2007/08, the Tasmanian rate is still substantially less than the national rate (48% of the national rate).

Number of cannabis-related admissions increased from 2009/10, from 83 admissions per million population in (equating to 51% of the national rate) to 100 admissions per million population in 2014/15 (equating to 161% of the national rate).

### Injecting risk behaviours

Since 2005/06, self-reported rates of sharing of needles or syringes among clients of non-pharmacy NSP outlets have remained stable, generally remaining less than 1%, with the exception of 2012/13 (3.3%). Similar low rates of sharing used needles have been evident amongst IDRS PWID, generally reported by between 3% and 14% of the sample (3% in 2016).

Almost one-third of the consumers interviewed (29%) reported re-using their own injection equipment in the month prior to interview, similar to that reported in 2015 (32%). The main forms of equipment that consumers reported re-using were 1mL syringes, winged-infusion sets ('butterflies'), 3 mL barrels and 10ml barrels.

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).

### Injection-related health problems

Two-thirds (65%) of the 2016 IDRS cohort reported at least one injection-related injury in the preceding six months, primarily scarring/bruising of injection sites (49%) and 'difficulty injecting' (35%), indicating vascular damage.

### Self-reported mental health

Half (50%) of the sample self-reported experiencing a mental health problem in the preceding six months. Anxiety and depression-related disorders were the most commonly cited. Two-thirds (68%) of those who reported a mental health problem had attended a mental health professional for mental health issues in the preceding six months. Participant scores on the Kessler-10 Psychological Distress Scale demonstrated higher rates of psychological distress in the IDRS sample in comparison to the Australian national average, though lower rates than observed in previous IDRS samples. Specifically, two-fifths of participants scored in either the 'very high' or 'high' categories of psychological distress (26% and 14%, respectively), compared with 4% and 9% respectively in the general population.

### Driving risk behaviour

Four-fifths (80%) of the consumers interviewed who had driven a car in the past six months had done so after consuming illicit or non-prescribed drugs on at least one occasion.

## Law enforcement trends among PWID

### Self-reported criminal activity

One-quarter (26%) of participants reported they had been arrested in the preceding 12 months, most commonly for property crimes. One-third (33%) of the sample self-reported involvement in some type of criminal activity in the preceding month. The crimes most commonly reported were dealing drugs and property crime.

### Arrests

Since 2004/05, the number of arrests relating to opioids (including heroin and other narcotics[1]) has remained relatively small and stable (i.e., between 10 and 18 arrests). In 2014/15 and 2015/16 there was an increase in the number of arrests made by Tasmanian Police in relation to opioids, with 34 and 26 arrests respectively.

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

There have been between 69 and 179 arrests for methamphetamine-related offences annually from 2004/05 to 2013/14. There was a substantial increase in number of arrests, from 2013/14 (72 arrests) to 2014/15 (430 arrests), and 2015/16 (433 arrests).

The number of arrests related to cannabis remained relatively stable between 2006/07 and 2012/13, ranging between 1,337 and 1,954. In 2013/14, this number decreased to 930 such arrests, increasing again in 2014/15 (1,446 arrests) and 2015/16 (1,451 arrests), consistent with levels in previous years.

### Drug-related charges in Tasmanian Courts

The number of individuals before the Hobart Magistrates Court for alleged dealing and trafficking, and possession charges was stable between 2014/15 and 2015/16 (269 versus 262 individuals, respectively). Conversely, the number of individuals incarcerated at Hobart Prison in relation to drug offences in 2014/15 (72 individuals) was much lower than the number incarcerated in 2015/16 (143 individuals).

## Special topics

### Homelessness

Homelessness was assessed for the second time in IDRS studies, following up from 2014. Eighty-three percent of the 2016 PWID sample reported a history of homelessness. Eighteen percent of participants reported being currently homeless, the mean duration of which being six years. Living with friends, relatives or acquaintances (i.e., couch surfing) was reported to be the most common form of homelessness amongst Tasmanian PWID both, with 91% reporting experiencing of this in their lifetime and 30% in the last six months, followed by sleeping rough on the streets (75% and 22% respectively).

# 1 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 2016 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 2015 (Bruno & McLean 2000, 2001, 2002, 2003, 2004a; Bruno, 2005, 2006; de Graaff & Bruno, 2007a, 2008, 2009, 2010, 2011, 2012, 2013; de Graaff, Peacock & Bruno, 2014; Peacock, de Graaff, & Bruno, 2015; Peacock, Humphries, & Bruno, 2016) and state comparisons (McKetin et al., 2000; Topp et al., 2001, 2002; Breen et al., 2003, 2004; Stafford et al., 2005 and 2006; O'Brien et al. 2007; Black et al., 2008; Stafford et al., 2009; Stafford & Burns; 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016) are available as technical reports from the National Drug and Alcohol Research Centre, University of New South Wales[2].

## 1.1 Study aims

The specific aim of the Tasmanian component of the IDRS is to: i) monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis; and ii) identify emerging trends in illicit drug markets in Australia that require further investigation.

[2] 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 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 2016 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; de Graaff, Peacock & Bruno, 2014; Peacock, de Graaff, & Bruno, 2015; Peacock, Humphries, & Bruno, 2016) to determine any changes in drug trends over time.

## 2.1 Survey of people who inject drugs (PWID)

The PWID survey was conducted during May-June 2016, and consisted of face-to-face interviews with 99 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, and 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. Two agencies – Anglicare (Hobart and Glenorchy site) and Department of Health and Human Services Eastern Shore NSP 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, Glenorchy, and the Eastern Shore (Rosny).

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 eligibility 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 $AUD40 for their time and out-of-pocket expenses.

Data analysis was conducted using IBM SPSS for windows, release 24.0.0.0 (IBM SPSS Inc., 2013).

## 2.2 Survey of key experts (KE)

Twenty-one KE, who were working with people who use drugs in the greater Hobart area, participated in face-to-face interviews between August and September 2016. Six KE (29%) were recruited from the pool of KE that had taken part in the 2015 IDRS, and seven KE in 2016 had participated in the interviews in 2014 (seven had also taken part in 2013 and 2012; nine in 2011, 2010; and 2009; three in 2008; one in 2007; one in 2006; and two participated in the 2000 to 2006 studies).

KE included members of the Department of Justice (law enforcement professionals n=2, policy n=1), and from the Department of Health and Human Services (pharmacists n=4, emergency medicine n=1). KE's also included those working in prison mental health (n=2) or as prison drug and alcohol counsellors (n=3). The remainder worked specifically in the drug and alcohol field, comprising psychiatrists (n=2), counsellors and outreach workers (n=3), needle and syringe outlet workers (n=2), and an Addiction Medicine specialist (n=1).

Several KE were interviewed for their expert opinions on specific issues or on other particular areas (such as 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.

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 30 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.

## 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 (Anglicare Hobart, Glenorchy, and Burnie; Eastern Shore Needle and Syringe Program and Clarence GP Superclinic; Salvation Army Launceston; Youth Family and Community Corrections Devonport), data are collected regarding sex, age, equipment shared since last visit, last drug used, and disposal methods for each client transaction. Of note, while data from The Link Hobart was accessed in 2015, we were unable to access this data in 2016 and data from the NSP in Burnie was added for the first time in 2016. The data provided represent responses from 18,943 occasions of service in these six sites (denominator based on number of cases identified from reported client sex) in the 2015/16 financial year.

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) and in regards to differing participant age categories adopted across sites, 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 2015. Between 1995 and 2010, the number of participants in the study steadily climbed from six to 106, however, since this time, the numbers of participants have been notably lower (N=68 in 2011, N=75 in 2012; N=70 in 2013; N=69 in 2014, N=48 in 2015) (Iversen & Maher, 2016)[3].

### 2.3.3 The 1998, 2001, 2004, 2007, 2010 and 2013 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, 1,060 in 2010 and 1,134 in 2013 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, 2014). The survey investigated use of the following illicit drugs relevant to this report: cannabis; methamphetamine; hallucinogens; cocaine; ecstasy/designer drugs; and heroin. Respondents were asked whether they had ever used these drugs and whether they had used them within the past twelve months. Data from the 2016 NDSHS was unavailable at the time of reporting the current study.

### 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 2015/16 financial year were not available at the time of publication. Where available,

[3] 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: Iversen & Maher, 2015)

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; 2013/14=490), with the exception of a decline in the number of tests conducted in 2014/2015 (n=149) before increasing again in 2015/16 (n=418). Since 2013/14 the Justice Department have only utilised standard urine screen tests 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 PWID 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. 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 2014/15 financial year periods. Data for the 2015/16 period were 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 are obtained directly from the Poppy Advisory and Control Board of the Tasmanian Justice Department or via the Department of Justice Annual Report, 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.

# 3 DEMOGRAPHICS

**Key Points:**

- A total of 99 participants were interviewed for the IDRS in 2016;
- Mean age was 41 years (range 19-55 years);
- 61% were male;
- 85% were unemployed at the time of the interview;
- More than half were engaged in a form of drug treatment at the time of the interview, predominantly methadone maintenance treatment; and
- Almost half (42%) of respondents had a prison history.

## 3.1 Overview of the PWID sample

A total of 99 consumers were interviewed. The demographic characteristics of the PWID sample are presented in Table 1. The mean age of participants was 41 years (SD=7.6, range 19-55 years). The average age of the cohort has increased from 26 years in 2000. Three-fifths (61%) of the 2016 cohort were male, and 16% identified as being of Aboriginal and/or Torres Strait Island background. Almost all participants described themselves as heterosexual (93%), and three-fifths reported not being in a relationship (62%).

Among those interviewed in 2016, there was a mean of 10 years of school education (SD=1.5, range 6-12 years), similar to that of cohorts in previous years. Half (51%) of the participants interviewed had attained a trade or technical qualification and 5% had completed tertiary studies at a university. At the time of the interview, over four-fifths of the sample were unemployed (85%), and the majority had received a form of government benefit in the preceding six months (97%).

Over half were engaged in a form of drug treatment (57%), most commonly methadone (63% of those in treatment). The rate in treatment has varied between 40% and 57% since 2006. Almost half (42%) of respondents who commented (n=91) had been in prison at some stage of their lifetime: similar to rates in previous IDRS surveys (between 37% and 48% from 2008-2015). There was a greater proportion of males reporting a prison history (55%, n=30) than females (33%, n=12) ($\chi^2(1_{n=91})=3.94$, p=.047).

The average weekly income in the preceding week was $407 (median $400, SD=$137, range $125-1,000). Although 96 participants reported having received any government benefit in the preceding six months, 87 participants reported it as their main source of income for the previous month.

The sample was drawn from suburbs within the northern, eastern, southern, and inner city areas of Hobart. Based on local council areas, participants who had a fixed address (n=90) were from Hobart City (36%), Clarence (26%), and Glenorchy City (21%); and small proportions from Kingborough, Brighton, Derwent Valley and the Huon Valley. The majority of participants lived in their own (rented or owned) house or flat (77%) and 5% in their parent's or family home; 4% reported living in a shelter or refuge, 5% in a hostel or boarding house, and 8% reported no fixed address.

**Table 1: Demographic characteristics of the PWID sample, 2015-2016**

| Characteristic | 2015 N=100 | 2016 N=99 |
|---|---|---|
| Age (mean years, range) | 41 (27-62) | 41 (19-55) |
| Sex (% male) | 63 | 61 |
| Aboriginal and/or Torres Strait Islander (%) | 15 | 16 |
| Sexual orientation (%): | | |
| Heterosexual | 96 | 93 |
| Bisexual | 0 | 3 |
| Gay or lesbian | 4 | 4 |
| Other | 0 | 0 |
| Relationship status (%): | | |
| Married/de facto | 20 | 12 |
| Partner | 20 | 22 |
| Single | 54 | 62 |
| Separated | 5 | 2 |
| Divorced | 1 | 1 |
| Other | 0 | 1 |
| School education (mean no. years, range) | 10 (5-12) | 10 (6-12) |
| Tertiary education (%): | | |
| None | 45 | 44 |
| Trade/technical | 52 | 51 |
| University/college | 3 | 5 |
| Employment (%): | | |
| Not employed/on a pension | 84 | 85 |
| Full-time | 2 | 2 |
| Part-time/casual | 8 | 6 |
| Home duties | 4 | 2 |
| Student | 1 | 4 |
| Work and Study | - | 1 |
| Currently in drug treatment^ (%) | 55 | 57 |
| Prison history* (%) | 48 | 42 |

**Source:** IDRS PWID interviews

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

* Percentage of people who responded (n=91).

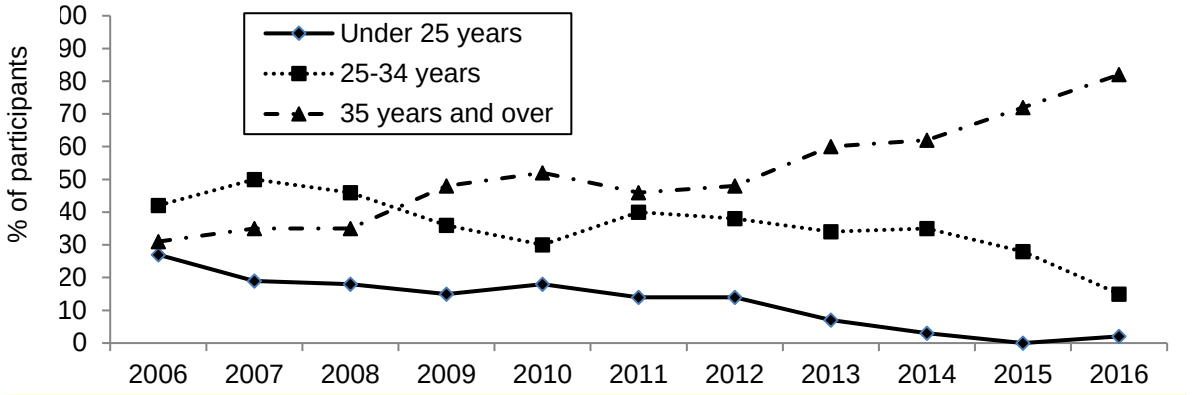
The demographic characteristics of the Tasmanian 2016 PWID sample are largely similar to previous Tasmanian PWID samples (Bruno & McLean 2001, 2002, 2003, 2004a; Bruno 2005, 2006; de Graaff & Bruno 2007a, 2008, 2009, 2010, 2011, 2012, 2013, de Graaff, Peacock & Bruno, 2014; Peacock, de Graaff, & Bruno, 2015; Peacock, Humphries, & Bruno, 2016). There have been substantial overlaps in those participating in the IDRS studies over time: of the participants in the 2016 study who commented (n=83), two-thirds (65%) had previously participated in another IDRS study. Of this group, 34 participated in the 2015 study, 27 in the 2014 study, 21 participated in the 2013 study, 12 participated in the 2012 study, 10 in 2011, nine in 2010, six in 2009, seven in 2008, five in 2007, six in 2006 and four or less in studies prior to 2006 (n=33 participants were unsure of the date(s) of their prior participation). 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. However, there were no notable differences between the 2015 and 2016 cohort. Between the 2015 and 2016 local PWID cohorts, of the demographics examined in Table 1, no statistically significant differences were observed.

### 3.1.1 Age and sex of the PWID sample over time

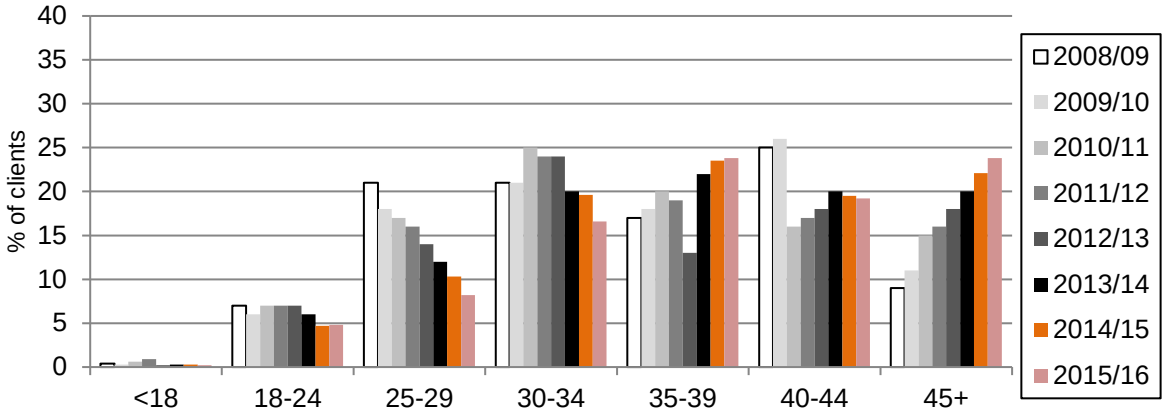
As could be expected, with a noteworthy overlap in participants across these annual samples, the mean participant age in the Tasmanian PWID cohorts steadily increased between 2006 and 2016, from 31 years to 41 years. The rate of participants aged 35 years or older steadily increased from 31% in 2006 to 82% in 2016 ($\chi^2$ ($1_{n=199}$)=50.17, $p$<.001) (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 (Figure 2). In 2015/16, two-thirds (67%) of non-pharmacy NSP transactions involved clients aged 35 or over. 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, 2014).

**Figure 1: Age distribution of PWID in the Tasmania (Hobart) IDRS samples, 2006-2016**




**Source**: IDRS PWID interviews

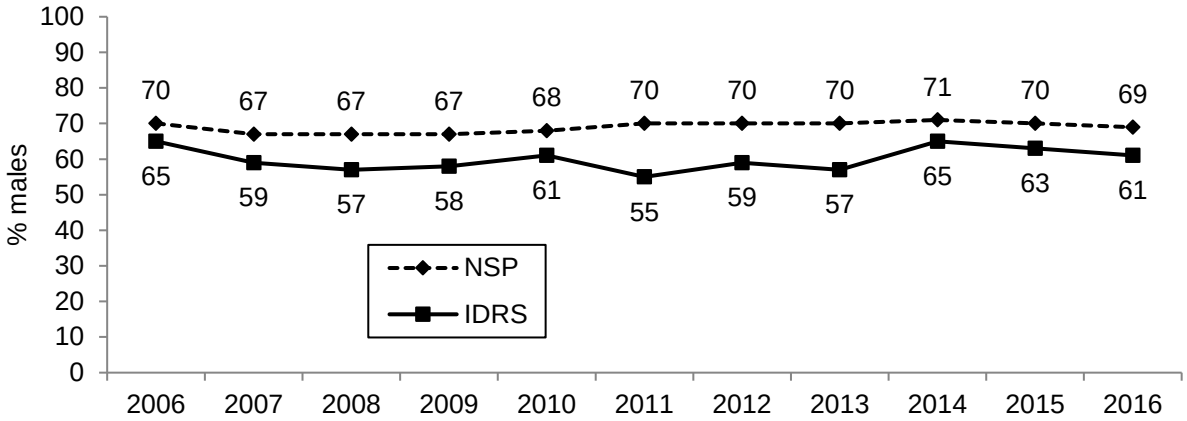
**Figure 2: Age of clients of non-pharmacy Needle and Syringe Program outlets in Tasmania, 2008/09-2015/16**




**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 has remained relatively unchanged since 2006, ranging between 55% and 65% (Figure 3). Data from the Tasmanian NSP program also shows relatively stable proportions of male clients, ranging between 67% and 71% of all client transactions from 2006 to 2016 (Figure 3).

**Figure 3: Proportion of males amongst Tasmanian IDRS PWID cohorts and Tasmanian non-pharmacy Needle and Syringe Program clients, 2006-2016**




**Source**: IDRS PWID interviews and Tasmanian Needle and Syringe Program

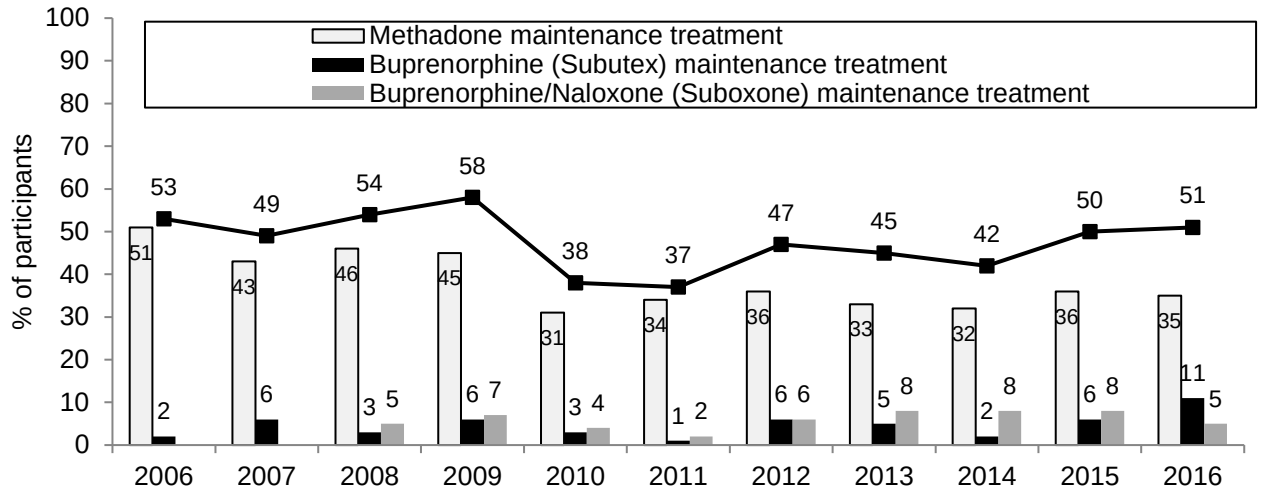
## 3.2 Current and previous drug treatment

Over half of the participants (57%) reported being engaged in some form of drug treatment at the time of interview: higher than any rate reported since 2010 (ranging between 40% and 55%). Most participants who were engaged in treatment (n=56) reported accessing methadone maintenance treatment (63%), buprenorphine (Subutex) (20%) or buprenorphine/naloxone (Suboxone) treatments (9%). The mean duration of time in methadone maintenance treatment was 105 months (SD = 70, range 7-216 months); for Subutex 63 months (SD=53, range 2-180 months); and for Suboxone 42 months (SD=45, range 8-120 months).

Figure 4 suggests stability in the proportion of IDRS participants engaging in opioid substitution therapy (OST), with no change between 2015 and 2016. 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 2. Recent engagement in other forms of non-pharmaceutical-based treatment have remained consistently low.

**Figure 4: Proportion of the PWID sample accessing methadone or buprenorphine maintenance treatments at the time of interview, 2006-2016**




**Source:** IDRS PWID interviews

**Table 2: Proportion of participants reporting treatments other than opioid replacement pharmacotherapy in past six months, 2006-2016**

| Treatment type | 2006 % | 2007 % | 2008 % | 2009 % | 2010 % | 2011 % | 2012 % | 2013 % | 2014 % | 2015 % | 2016 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AOD Counselling | 20 | 17 | 11 | 10 | 3 | 4 | 9 | 8 | 3 | 10 | 3 |
| Detoxification | 0 | 4 | 5 | 0 | 1 | 1 | 3 | 3 | 1 | 0 | 0 |
| Therapeutic community or rehabilitation | 0 | 1 | 2 | 0 | 1 | 2 | 3 | 1 | 2 | 0 | 0 |
| Narcotics Anonymous | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| Other | 2 | 2 | 1 | 1 | 0 | 0 | 2 | 1 | 1 | 2 | 2 |

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

# 4 CONSUMPTION PATTERNS

**Key Points:**

- The mean age of first injection was 20.3 years (range 9-47 years);
- Three-fifths (61%) reported a form of methamphetamine as the first drug they injected;
- One-third (30%) reported methamphetamine, one-fifth (22%) morphine, and one-tenth (11%) methadone as their drug of choice;
- Three-fifths (59%) reported an opioid as the drug most frequently injected in the preceding month. In contrast, one-third (36%) of the sample reported methamphetamine as the drug they had most often injected in the preceding month, which is similar to in 2015 (39%); 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 20.3 (SD=6.0, range 9-47) (Table 3). This was similar to the age reported in 2015 (21.2 years, SD=7.6, range 10-55). There were no significant sex differences in the age of first injection (19.5 years for females and 20.8 years for males).

The mean injecting drug-using career for the 2016 cohort was 20.5 years (SD=8.3, range 0-39 years). There were no significant sex differences in length of injecting drug-using career (20.0 years for females and 20.8 years for males). Three-fifths (61%) reported methamphetamine as the first drug injected, 21% reported morphine and 9% reported heroin.

One-third (30%) of the 2016 IDRS PWID cohort reported methamphetamine, one-fifth (22%) reported morphine, and one-tenth (11%) reported methadone as their drug of choice. Overall preference for any form of opioid (including heroin, methadone, buprenorphine, morphine and oxycodone) was reported by 56% of the sample, similar to the rate reported in 2015 (65%).

Three-fifths (59%) reported an opioid as the drug they had most often injected in the preceding month, similar to 2015 (58%). One-third (36%) of the sample reported methamphetamine as the drug they had most often injected in the preceding month, similar to 2015 (39%). Estimates for these last two years reflect an increase relative to previous years. Only 2% of participants reported heroin as the drug most injected in the last month (Figure 5).

Reports of methamphetamine as the most recent drug injected increased from 2013 to 2014 (16% versus 29%: $\chi^2(1_{n=208})=4.25$, p=.039). Whilst methamphetamine was the most commonly reported last drug injected in 2015 (39%), this figure did not represent a statistically significant increase relative to 2014. Recent methamphetamine use remained stable in 2016 at 39%.

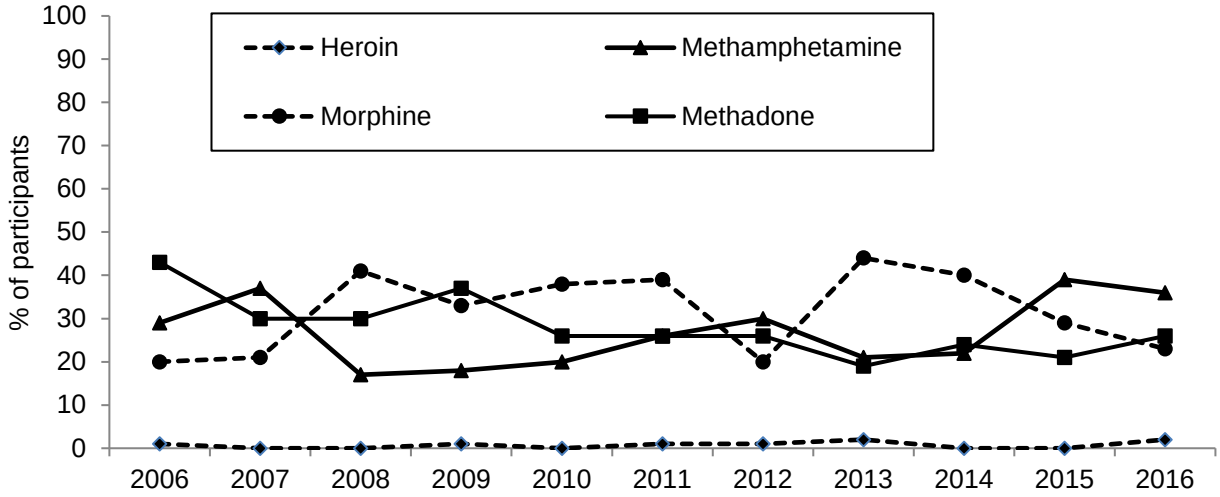
Participants were asked about the frequency of injection in the month preceding the interview:
half (50%) injected more than weekly but not daily, with one-quarter (23%) injecting daily or more frequently.

## Table 3: Injection history, drug preferences and polydrug use of participants, 2015/16

| Variable | 2015 N=100 | 2016 N=99 |
|---|---|---|
| Mean age first injection (years) | 21.2 (range 10-55) | 20.3 (range 9-47) |
| First drug injected (%) | | |
| Heroin | 6 | 9 |
| Methamphetamine | 59 | 61 |
| Methadone | 3 | 1 |
| Morphine | 22 | 21 |
| Oxycodone | 4 | 3 |
| Cocaine | 0 | - |
| Other | - | 5 |
| Drug of choice (%) | | |
| Heroin | 16 | 18 |
| Cocaine | 0 | - |
| Methamphetamine (any form) | 32 | 30 |
| *Powder (speed)* | *23* | *12* |
| *Base* | *0* | - |
| *Crystal (ice)* | *9* | *18* |
| Methadone | 19 | 11 |
| Morphine | 26 | 22 |
| Oxycodone | 2 | 3 |
| Suboxone | 2 | 2 |
| Benzodiazepines | 2 | 2 |
| Cannabis | 0 | 4 |
| Drug injected most often in last month (%) | | |
| Heroin | 0 | 2 |
| Cocaine | 0 | - |
| Methamphetamine (any form) | 39 | 36 |
| *Powder (speed)* | *16* | *8* |
| *Base* | *0* | - |
| *Crystal (ice)* | *23* | *28* |
| Methadone | 21 | 26 |
| Morphine | 29 | 23 |
| Benzodiazepines | 0 | - |
| Buprenorphine | 7 | 5 |
| Oxycodone | 1 | 2 |
| Most recent drug injected (%) | | |
| Heroin | 0 | 1 |
| Cocaine | 0 | - |
| Methamphetamine (any form) | 39 | 39 |
| *Powder (speed)* | *17* | *9* |
| *Base* | *0* | - |
| *Crystal (ice)* | *22* | *30* |
| Methadone | 21 | 25 |
| Buprenorphine (all forms) | 9 | 5 |
| Morphine | 27 | 23 |
| Oxycodone | 2 | - |
| Frequency of injecting in last month (%) | | |
| Weekly or less | 24 | 26 |
| More than weekly, but less than daily | 51 | 50 |
| Once per day | 15 | 6 |
| 2-3 times a day | 9 | 12 |
| >3 times a day | 0 | 5 |
| Polydrug use | | |
| Mean number of drug classes ever used* (range) | 6.6 (3-7) | 6.5 (3-7) |
| Mean number of drug classes used* in last 6 months (range) | 5.5 (5-7) | 4.8 (2-7) |
| Mean number of drug classes ever injected^ (range) | 2.8 (1-5) | 2.5 (1.5) |
| Mean number of drug classes injected^ in last 6 months (range) | 1.7 (1-4) | 1.7 (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 5: Drug injected most last month, 2006-2016**




**Source:** IDRS PWID interviews

The majority of participants reported using a drug on the previous day (95%) (Table 4). Cannabis was the most commonly used drug on the day prior to interview, reported by 54%. Two-fifths of the sample reported use of a benzodiazepine (39%), one-third reported use of methadone (30%: although only one respondent was not currently enrolled in opioid substitution treatment), and nearly one-quarter reported use of methamphetamine (24%; predominantly crystal form (22%)) and nearly one-fifth morphine (15%).

**Table 4: Drugs taken on the day prior to interview among the PWID sample, 2010-2016**

| Drug* | 2010 % | 2011 % | 2012 % | 2013 % | 2014 % | 2015 % | 2016 % |
|---|---|---|---|---|---|---|---|
| Cannabis | 60 | 64 | 59 | 54 | 56 | 47 | 54 |
| Methadone^ | 32 | 34 | 35 | 32 | 32 | 26 | 30 |
| Benzodiazepines | 32 | 38 | 30 | 48 | 39 | 41 | 39 |
| Morphine | 28 | 24 | 16 | 30 | 29 | 16 | 15 |
| Methamphetamine: powder | 10 | 8 | 17 | 5 | 11 | 4 | 2 |
| Methamphetamine: base/paste | 3 | 3 | 3 | 1 | 1 | 0 | 0 |
| Methamphetamine: crystal | 0 | 1 | 2 | 2 | 7 | 14 | 22 |
| Heroin | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Cocaine | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Alcohol | 27 | 29 | 31 | 15 | 21 | 13 | 12 |
| Antidepressant | 5 | 17 | 11 | 21 | 8 | 13 | 4 |
| Buprenorphine | 2 | 3 | 4 | 8 | 2 | 4 | 10 |
| Buprenorphine-naloxone | 1 | 2 | 8 | 8 | 10 | 11 | 5 |
| Oxycodone | 9 | 6 | 11 | 10 | 4 | 5 | 3 |
| Other opiates | 2 | 8 | 4 | 4 | 2 | 0 | 2 |
| *Did not use any drugs* | *1* | *0* | *0* | *4* | *1* | *7* | *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 5). Of those who responded (N=90), only a small minority injected in public spaces (8%). The proportion of the cohort

reporting injecting in public places has remained consistently between 6% and 18% from 2010 to 2016.

**Table 5: Location in which respondents last injected, 2010-2016**

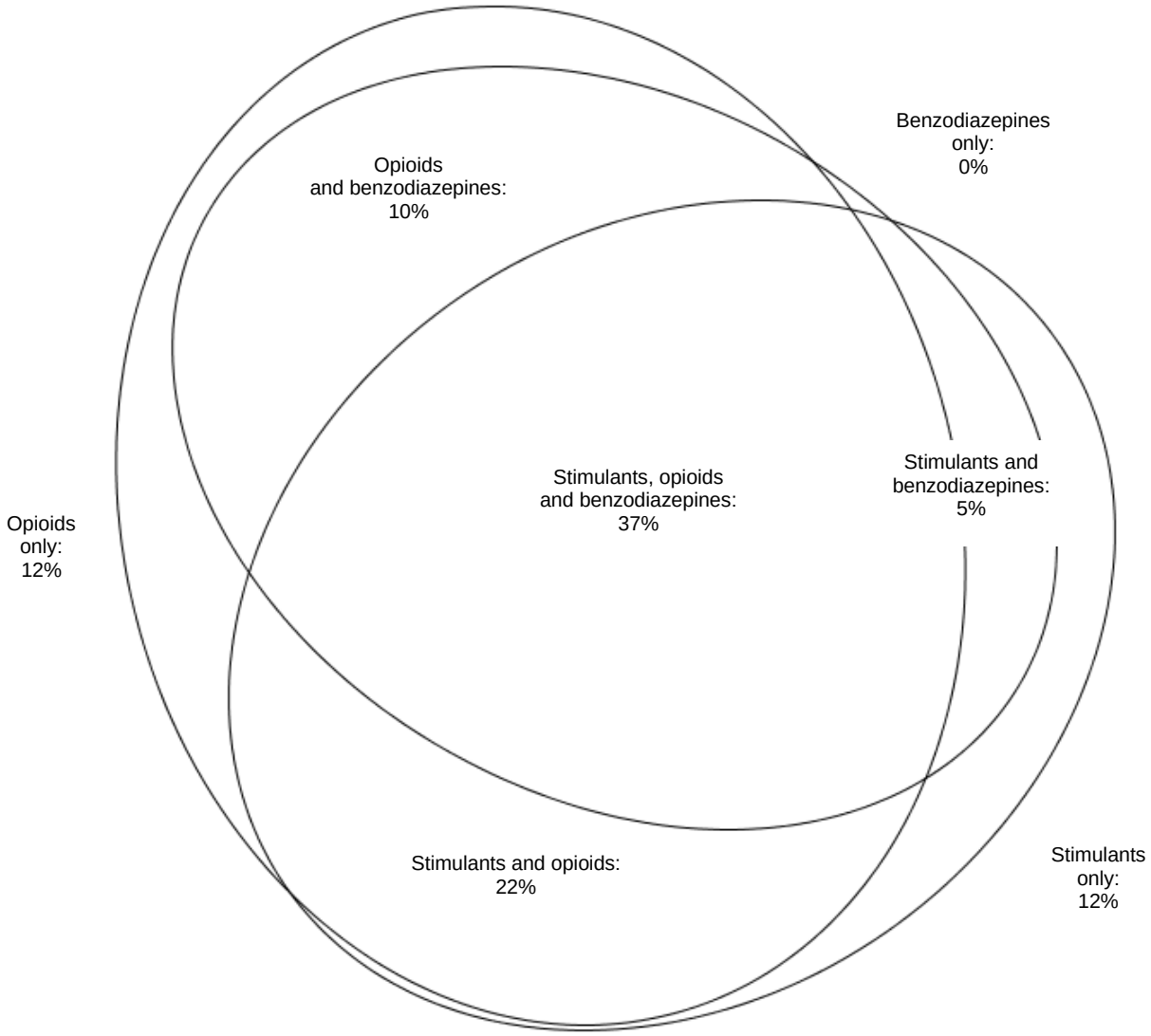
| | 2010 N=100 % | 2011 N=100 % | 2012 N=106 % | 2013 N=105 % | 2014 N=101 % | 2015 N=92 % | 2016 N=90 % |
|---|---|---|---|---|---|---|---|
| Private home | 86 | 79 | 87 | 91 | 85 | 94 | 92 |
| Public toilet | 7 | 4 | 4 | 3 | 7 | 2 | 1 |
| Car | 4 | 12 | 9 | 7 | 8 | 3 | 6 |
| Street/park or beach | 2 | 2 | 1 | 0 | 0 | 1 | 1 |

**Source:** IDRS PWID interviews

Drug use histories of the 2016 IDRS PWID respondents are summarised in Table 6. 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 = 0.7, range 3-7) in their lives, and 5 (mean = 4.8, SD = 1.2, range 2-7) in the preceding six months. Participants reported injecting a median of 2 drug classes over their lifetime (mean = 2.5, SD = 0.9, range 1-5), and 2 (mean = 1.7, SD = 0.6, range 1-3) in the preceding six months.

Figure 6 illustrates polydrug use over the preceding six months, specifically for illicit benzodiazepines, stimulants and illicit pharmaceutical opioids. Over two-fifths of the participants (44%) had used stimulants, illicit pharmaceutical opioids and illicit benzodiazepines in the preceding six months, with a further one-sixth of the sample (17%) using both stimulants and illicit pharmaceutical opioids in this time, and one-sixth (17%) using illicit benzodiazepines and illicit opioids in this time. Given that only 9% of the current cohort reported solely using illicit pharmaceutical opioids and 7% 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 6: Polydrug use in the preceding six months amongst the PWID cohort, 2016**




**Source:** IDRS PWID interviews

## Table 6: Polydrug use history of the PWID sample, 2016

| Drug Class | Ever used % | Ever Injected % | Injected last 6 mths % | Median days injected in last 6 mths* | Smoked last 6 mths % | Snorted last 6 mths % | Swallowed last 6 mths+ % | Used^ last 6 mths % | Median days used^ in last 6 mths* |
|---|---|---|---|---|---|---|---|---|---|
| Heroin | 64 | 62 | 7 | 15 | 2 | 1 | 0 | 7 | 15 |
| Homebake heroin | 24 | 24 | 3 | 3 | 0 | 0 | 0 | 3 | 3 |
| *Any heroin (inc. homebake)* | *66* | *64* | *9* | *15* | *2* | *1* | *0* | *9* | *15* |
| Methadone (prescribed) | 63 | 57 | 26 | 60 | | | 34 | 34 | 180 |
| Methadone (not prescribed) | 66 | 61 | 23 | 12 | | | 3 | 23 | 12 |
| Physeptone (prescribed) | 17 | 13 | 3 | 130 | 0 | 0 | 3 | 3 | 168 |
| Physeptone (not prescribed) | 69 | 67 | 32 | 6 | 0 | 0 | 5 | 32 | 6 |
| *Any methadone (inc. Physeptone)* | *89* | *86* | *52* | *30* | *0* | *0* | *38* | *55* | *148* |
| Buprenorphine (prescribed) | 27 | 9 | 6 | 72 | 0 | 0 | 4 | 11 | 168 |
| Buprenorphine (not prescribed) | 36 | 30 | 10 | 13 | 1 | 0 | 1 | 10 | 15 |
| *Any Buprenorphine (excl. buprenorphine-naloxone)* | *53* | *33* | *14* | *45* | *1* | *0* | *5* | *19* | 72 |
| Buprenorphine-naloxone tablets (prescribed) | 19 | 6 | 2 | 178 | 0 | 0 | 5 | 5 | 180 |
| Buprenorphine-naloxone tablets (not prescribed) | 21 | 18 | 6 | 30 | 0 | 0 | 2 | 7 | 48 |
| *Any Buprenorphine-naloxone tablets* | *34* | *20* | *8* | *48* | *0* | *0* | *7* | *12* | *75* |
| Morphine (prescribed) | 32 | 23 | 2 | 91 | 0 | 0 | 0 | 2 | 93 |
| Morphine (not prescribed) | 93 | 92 | 51 | 39 | 0 | 0 | 2 | 51 | 32 |
| *Any Morphine* | *93* | *92* | *51* | *39* | *0* | 0 | *2* | *51* | *40* |

## Table 6: Polydrug use history of the PWID sample, 2016 (continued)

| Drug Class | Ever used % | Ever Injected % | Injected last 6 mths % | Median days injected in last 6 mths* | Smoked last 6 mths % | Snorted last 6 mths % | Swallowed last 6 mths+ % | Used^ last 6 mths % | Median days used^ in last 6 mths* |
|---|---|---|---|---|---|---|---|---|---|
| Generic Oxycodone (prescribed) | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Generic Oxycodone (not prescribed) | 30 | 25 | 6 | 5 | 0 | 0 | 1 | 7 | 6 |
| OP Oxycodone (prescribed) | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| OP Oxycodone (not prescribed) | 34 | 26 | 15 | 4 | 0 | 0 | 3 | 18 | 4 |
| Other Oxycodone (prescribed) | 11 | 9 | 1 | 6 | 0 | 0 | 0 | 1 | n/r |
| Other Oxycodone (not prescribed) | 51 | 46 | 8 | 3 | 0 | 0 | 2 | 10 | 3 |
| *Any Oxycodone* | *76* | *72* | *24* | *4* | *0* | *0* | *5* | *28* | 4 |
| Fentanyl (any) | 13 | 10 | 4 | 1 | 0 | 0 | 0 | 4 | 2 |
| Over-the-counter codeine | 72 | 7 | 1 | 0 | 0 | 0 | 34 | 34 | 11 |
| Other opioids (not elsewhere classified) | 51 | 10 | 3 | 2 | 0 | 0 | 19 | 21 | 12 |
| Powder/speed | 90 | 86 | 32 | 6 | 5 | 4 | 3 | 33 | 7 |
| Base/point/wax | 43 | 40 | 4 | 11 | 1 | 2 | 2 | 4 | 11 |
| Ice/shabu/crystal | 89 | 86 | 71 | 24 | 27 | 2 | 5 | 73 | 24 |
| Amphetamine liquid | 29 | 28 | 1 | 24 | | | 1 | 1 | 24 |
| *Any form methamphetamine* | *95* | *93* | *74* | *25* | *28* | *5* | *6* | *75* | *31* |
| Pharmaceutical stimulants (prescribed) | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Pharmaceutical stimulants (not prescribed) | 55 | 50 | 24 | 8 | 0 | 0 | 6 | 26 | 8 |
| *Any form pharmaceutical stimulants* | *56* | *50* | *24* | *8* | *0* | *0* | *6* | *26* | *8* |
| Cocaine | 44 | 26 | 5 | 2 | 0 | 1 | 0 | 6 | 2 |
| Hallucinogens | 72 | 15 | 3 | 3 | 1 | 0 | 9 | 12 | 2 |
| Ecstasy | 69 | 27 | 3 | 3 | 0 | 2 | 13 | 15 | 1 |

**Table 6: Polydrug use history of the PWID sample, 2016 (continued)**

| Drug Class | Ever used % | Ever Injected % | Injected last 6 mths % | Median days injected in last 6 mths* | Smoked last 6 mths % | Snorted last 6 mths % | Swallowed last 6 mths+ % | Used^ last 6 mths % | Median days used^ in last 6 mths* |
|---|---|---|---|---|---|---|---|---|---|
| Alprazolam (prescribed) | 26 | 10 | 0 | 0 | 0 | 0 | 2 | 2 | 91 |
| Alprazolam (not prescribed) | 59 | 26 | 6 | 7 | 0 | 0 | 18 | 21 | 5 |
| *Any alprazolam* | *66* | *27* | *6* | *7* | *0* | *0* | *20* | *23* | *na* |
| Benzodiazepines (prescribed) (excl. alprazolam) | 68 | 14 | 1 | 2 | 0 | 0 | 42 | 42 | 168 |
| Benzodiazepines (not prescribed)(excl. alprazolam) | 71 | 16 | 1 | 6 | 0 | 0 | 49 | 49 | 10 |
| *Any benzodiazepines* (excl. alprazolam) | *90* | *19* | *2* | *na* | *0* | *0* | *67* | *67* | *na* |
| *Any benzodiazepines* | *91* | *40* | *7* | *4* | *0* | *0* | *68* | *68* | *150* |
| Seroquel (prescribed) | 19 | 1 | 1 | 2 | 0 | 0 | 9 | 9 | 180 |
| Seroquel(not prescribed) | 31 | 1 | 0 | 0 | *0* | 0 | 9 | 9 | 8 |
| *Any Seroquel* | *44* | *2* | *1* | *2* | 0 | *0* | *17* | *17* | *48* |
| Steroids | 6 | 0 | 0 | 0 | | 0 | 2 | 2 | 49 |
| Alcohol | 98 | 7 | 0 | 0 | | | 55 | 55 | 11 |
| Cannabis | 98 | | | | 72 | | 12 | 74 | 168 |
| Inhalants | 27 | | | | | | | 3 | 1 |
| Tobacco | 100 | | | | | | | 97 | 180 |
| E-cigarette | 25 | | | | | | | 13 | 3 |
| Novel psychoactive substance (NPS) | 25 | 18 | 8 | 8 | 0 | 1 | 0 | 9 | 10 |
| Synthetic cannabis | 10 | | | | 1 | | 1 | 1 | 1 |

**Source:** IDRS PWID interviews

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

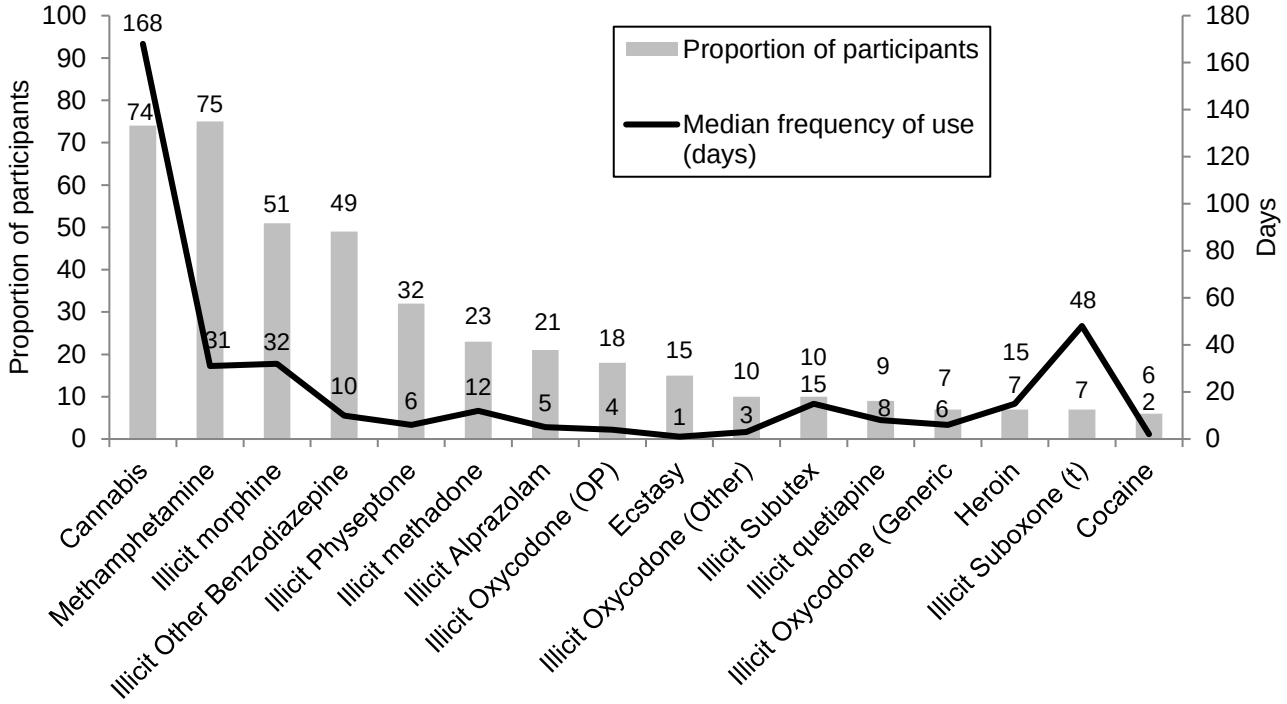
**+** Refers to/includes sublingual administration of buprenorphine

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

n/r: this data was not reported; na: Not assessed

Overall, the most commonly used illicit drugs in the six months preceding interview were methamphetamine and cannabis, used by 75% and 74% of participants, at a median frequency of 31 days (approximately weekly use) and 168 days (almost daily use) respectively (Figure 7). Half reported recent use of illicit morphine (51%; median frequency of 32 days); 49% and 21% reported use of illicit benzodiazepines and alprazolam (at a median frequency of 10 days and 5 days respectively); 18% reported illicit OP oxycodone use (median frequency of 4 days), 10% reported use of other illicit oxycodone (median of 3 days) and 7% reported recent use of illicit generic oxycodone (median frequency of 6 days), all of which equated to monthly use or less. Illicit methadone and Physeptone were used by 23% and 32% of the sample respectively, at a median frequency of around once per fortnight (12 days) for methadone and once per month (6 days) for Physeptone (Figure 7).

**Figure 7: Patterns of drug use among the 2016 IDRS sample**




**Source:** IDRS PWID interviews
t: tablet

## 4.2 Heroin

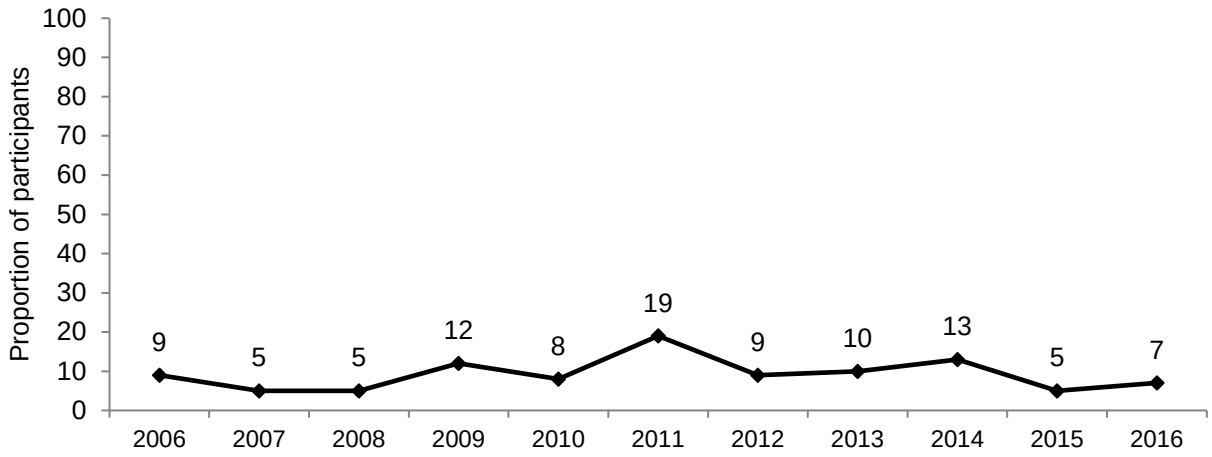
**Key Points**

- Just 7% of participants in the current study reported use of heroin in the preceding six months, at a median frequency of fifteen days; and
- Overall, heroin use in Tasmania remains low amongst IDRS participants and NSP clients.

### 4.2.1 Current patterns of heroin use

Among the 2016 PWID sample, 64% had tried heroin at some stage of their lives, and 7% (n=7) reported use in the preceding six months (Figure 8). Of these 7 recent consumers, all had injected it, at a median frequency of fifteen days (range 2-84 days). Recent use of heroin amongst IDRS cohorts has declined from 38% in 2000 to 7% in 2016. While only 7% of respondents indicated recent heroin use, 18% reported heroin to be their drug of choice. The relatively low level of heroin use in a regularly injecting group indicates heroin supply in Tasmania has been limited (refer to Section 5.1).

**Figure 8: Proportion of PWID participants reporting recent use of heroin, 2006-2016**



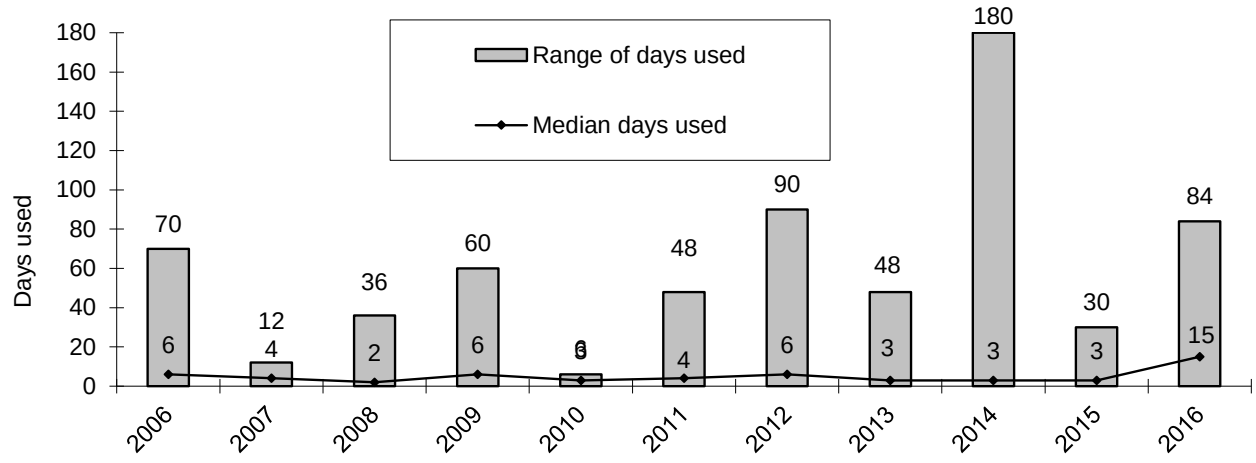

**Source:** IDRS PWID interviews

The median frequency of heroin use has remained relatively low and unchanged between 2006 and 2016, ranging between two and six days, with 2016 representing an increase from the past ten years to a median frequency of 15 days of use in the past six months. In contrast, there has been a wide range in regards to frequency of use (Figure 9). In support of these findings, five KE employed in legal/law enforcement, needle and syringe programs and drug and alcohol services noted that they had perceived increased heroin use during the past year.

Of those PWID who had used heroin in the preceding six months (n=7), four regarded heroin as their drug of choice (57%); the remaining three participants reported powder methamphetamine and morphine, respectively. Two participants (29%) reported that heroin was the drug they had injected most often in the past month.

Participants were asked to describe the main form of heroin they had used in the preceding six months. Of these 7 participants, one reported mainly using white or off-white heroin powder, four reported mainly using white or off-white heroin rock, one reported mainly using of brown powder, and one reported predominant use of brown rock.

**Figure 9: Median days and range of heroin use in past six months, 2006-2016**

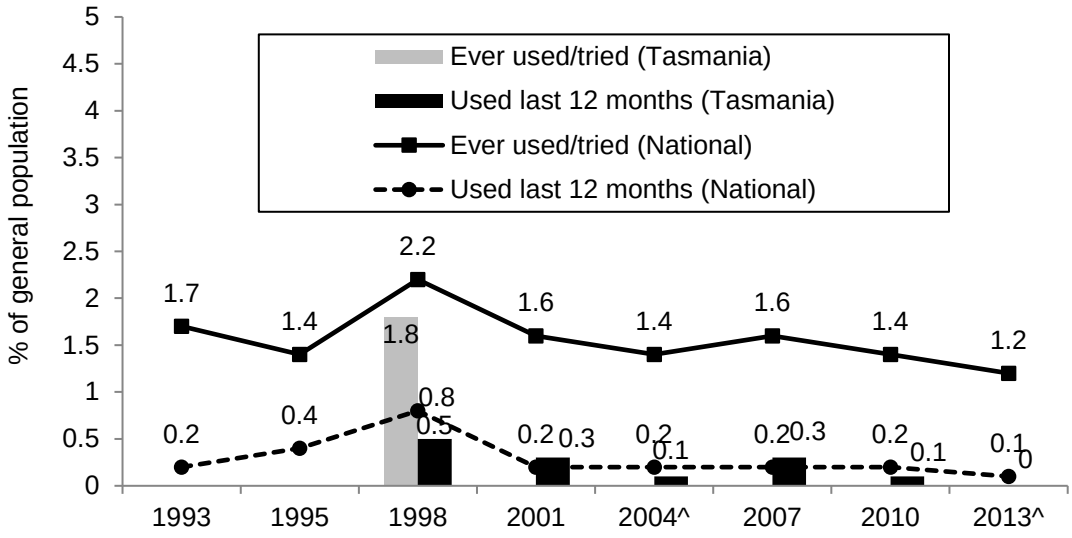



**Source:** IDRS PWID interviews

### 4.2.2 Prevalence of heroin use

The 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare (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 10). While the small numbers involved mean that meaningful inferences are difficult to draw, rates of past year use in all subsequent surveys are similar (AIHW, 2002a; 2005b; 2008b, 2011). In the 2013 survey, past year use was 0.1% in the national sample and less than 0.1% in the Tasmanian sample (AIHW, 2014).

**Figure 10: Prevalence of heroin use in Australia and Tasmania among those aged 14 years and over, 1993-2013**



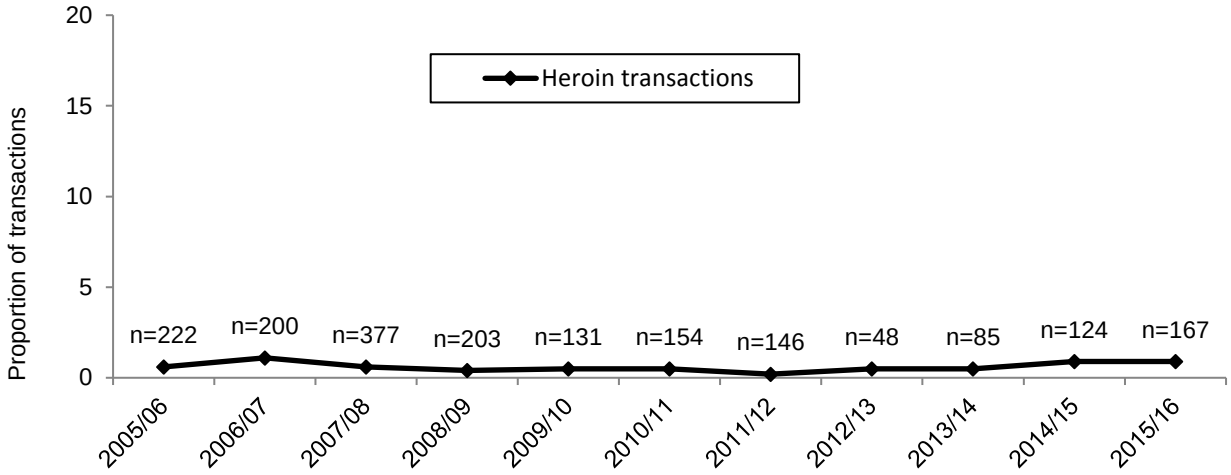

**Source:** National Drug Strategy Household Survey 1993-2014
^ In 2004, less than 0.1% of the Tasmanian sample reported recent use of heroin. In 2013, the rate of the Tasmania sample reporting recent use of heroin was nil or rounded to zero.

### 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 2005/06). It should be noted that data reported here includes some imputation of missing data, thus these figures should best be regarded as estimates.

It is also 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 7% of the PWID sample had used heroin in the past six months, only 2% of participants reported heroin as the drug they most often injected.

**Figure 11: Proportion of heroin reported as 'drug most often injected' in transactions at Tasmanian non-pharmacy Needle and Syringe Program outlets, 2005/06-2015/16**




**Source:** Population Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (Memedovic, Iversen, Geddes, & Maher, 2016) has reported heroin as the last drug injected by 3% or less of participants between 2006 and 2015, with the exception of 2008 (Table 7). 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 2003-2007), and so this finding should be interpreted with caution. Overall, these figures estimate the level of use of heroin as lower than that seen in the NSP client data, although they underscore the point that heroin use is not common amongst Tasmanian PWID.

**Table 7: Australian Needle and Syringe Program (NSP) Survey: Prevalence of heroin as the 'last drug injected', Tasmania, 2006-2015**

| | 2006 (N=150) | 2007 (N=168) | 2008 (N=57) | 2009 (N=122) | 2010 (N=106) | 2011 (N=68) | 2012 (N=75) | 2013 (N=70) | 2014 (N=69) | 2015 (N=48) |
|---|---|---|---|---|---|---|---|---|---|---|
| Heroin | 2% (n=3) | 2% (n=3) | 7% (n=4) | 3% (n=4) | 1% (n=1) | 1% (n=1) | 1% (n=1) | 3% (n=2) | 3% (n=2) | 0% (n=0) |

**Source:** Memedovic, Iversen, Geddes, & Maher, 2016

## 4.3 Methamphetamine

**Key Points**

- Three-quarters (75%) of the Tasmanian sample reported use of a form of methamphetamine in the preceding six months, at a median frequency of 31 days;
- Crystal (96%) was the main form used, followed by powder (44%) and then base/paste methamphetamine (5%);
- Amongst IDRS participants, the rate of recent use of any form of methamphetamine has remained stable between 2012 and 2016, and was 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 2005 and 2006.

In the initial years of the IDRS studies, reports used the overarching term 'amphetamine' to refer to both amphetamine and methylamphetamine (methamphetamine[4]). 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 (Australian Bureau of Criminal Intelligence (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 (Australian Crime Commission (ACC), 2008).

As methamphetamine markets across the country have expanded in recent years, it has become apparent that there is a diversity of forms 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, 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, and the term methamphetamine will be used for 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 Australian PWID market – each falling along a continuum of form, but, all of which are the same substance.

Powder form methamphetamine[5] 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 commonly in small, portable 'laboratories', and is usually based on pharmaceutical pseudoephedrine. 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 2016 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

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

to off-white in colour, or alternatively 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 (partially due to being more difficult to 'cut') (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 2016 IDRS study, participants who had recently purchased this form locally commonly described it as wet, damp or sticky 'paste' substance, and reported the colour as ranging from yellow/orange, to white/cream, to beige.

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 2016 IDRS study 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

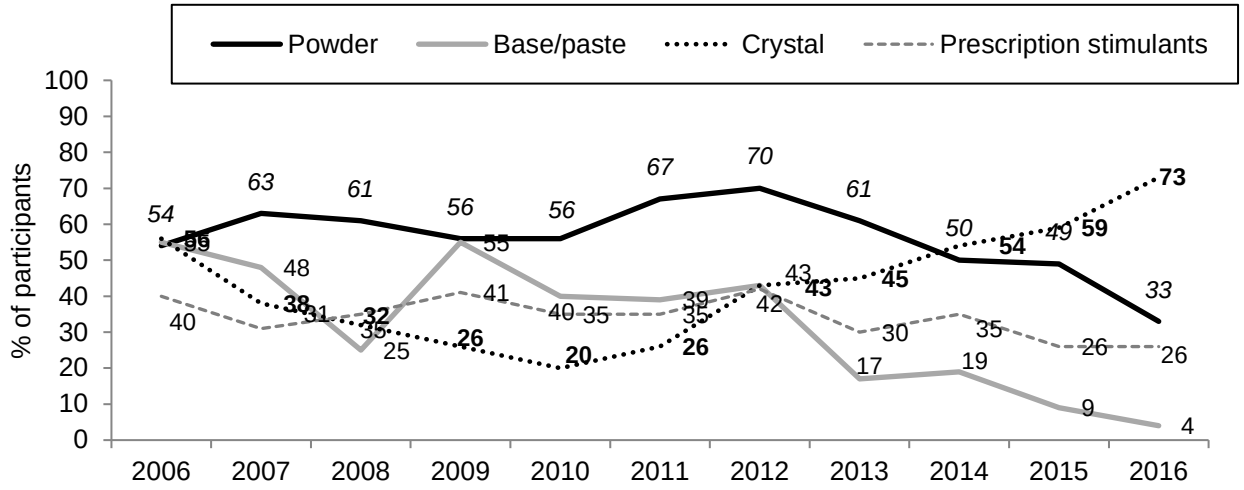
Three-quarters (75%, n=74) of the 2016 PWID cohort reported use of any form of methamphetamine in the six months preceding the interview, at a median frequency of 31 days (range 1-180 days), equating to use slightly less than weekly. This level of use is consistent with the 2015 Tasmanian IDRS (72%, at a median frequency of 23 days).

Demographic characteristics of those who had recently used methamphetamine (n=75) were similar to the rest of the cohort (see Section 3.1) in terms of sex, age, accommodation, sexual identity, current relationship, educational background, employment, prison history, injection frequency, age of first injection, current engagement in treatment and duration of injecting career (although small cell counts for some variables should be noted, thus resulting in lower statistical power to detect group differences). KE working in NSPs and in drug treatment noted a slightly higher proportion of males and young people amongst those reporting recent methamphetamine use, while also noting use was evident across a broad demographic in regards to age, employment, and socio-economic status.

PWID reports of the forms of methamphetamine they had used in the previous six months showed that a wide range of forms and potencies of the drug were available to local consumers (Figure 13). Across the entire cohort, 73% had recently used crystal, 33% reported recent use of powder form, and 4% had recently used base/paste form (

Figure 12). There was a statistically significant change from 2015 to 2016 in the number of participants reporting recent powder form (49% versus 33%; $\chi^2(1_{n=199})=4.41$, p=.036), which is a sharp decline in the downwards trend from 2012 to 2015 of those PWID reporting recent use of the methamphetamine form. There was also a significant increase in the proportion of PWID reporting recent crystal use from 2014 to 2016 (54% versus 73%; $\chi^2(1_{n=199})=6.73$, p=.009) and a trending increase from 2015 to 2016 (59% versus 73%; $\chi^2(1_{n=199})=3.58$, p=.058), which reflects an increasing trend over time, the opposite of recent powder form use.

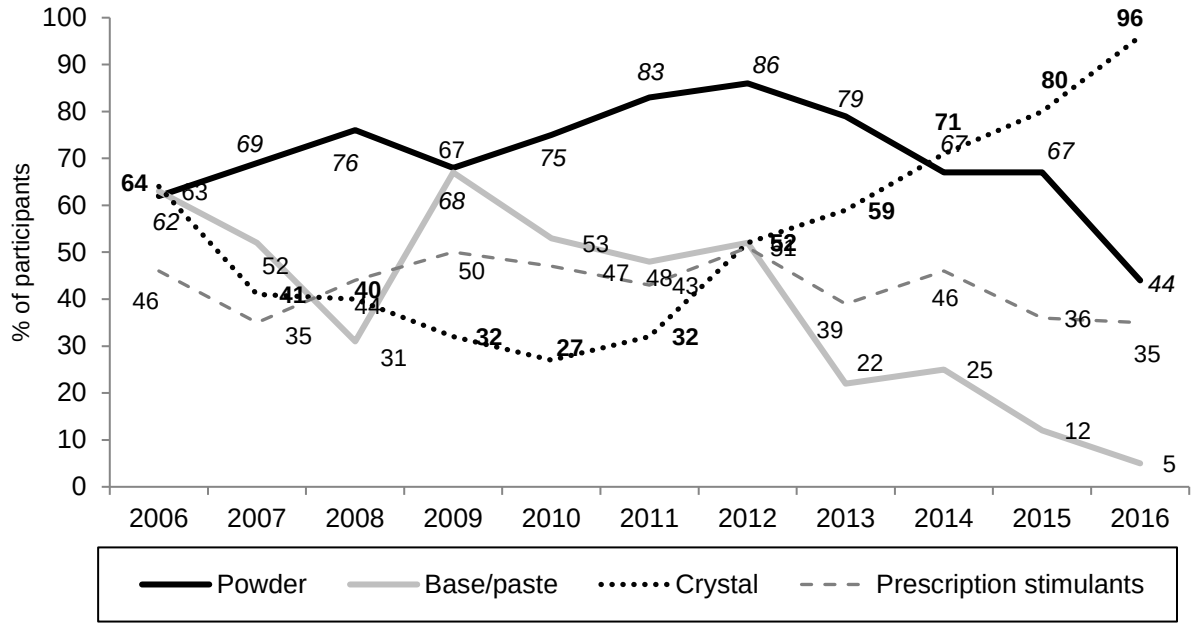
**Figure 12: Proportion of PWID reporting methamphetamine and pharmaceutical stimulant use in the past six months, 2006-2016**




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

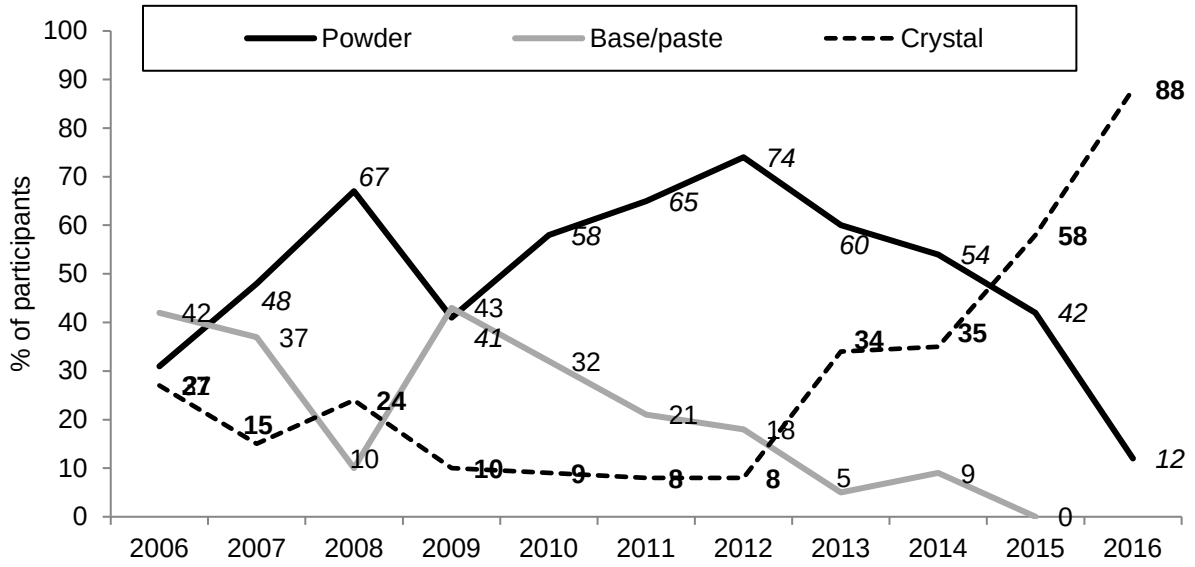
Amongst participants reporting recent use of any form of amphetamine (including prescription stimulants: n=75), crystal (96%) and powder (44%) were the predominant forms used. One-third of those who reported recent use of any amphetamine had recently used prescription stimulants (35%, both licit and illicit), whereas less than one-tenth (5%) reported recent use of base/paste (Figure 13).

**Figure 13: Use of various forms of methamphetamine and prescription stimulants among IDRS PWID participants who reported recent use of a form of an amphetamine, 2006-2016**




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

**Figure 14: Forms of methamphetamine most often used among IDRS PWID participants that had recently used a form of methamphetamine or prescription stimulant, 2006-2016**




**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 2006 to 2016 studies display the changing face of the local methamphetamine market in this time. There are three major changes apparent in these data.

Overall, use of crystal methamphetamine declined from 2006 (64%) to 2010 (32%). Of the proportion of consumers that reported recent amphetamine use, recent use of the crystal form increased from 32% in 2011 to 96% in 2016, a significant increase over this time period ($\chi^2(1_{n=156})=65.37$, p<.001) (Figure 13). In the 2016 IDRS, rates of crystal use amongst consumers exceeded that of the powder form for the third year consecutively, with the majority of consumers (88%) noting that crystal was the form which they used most frequently. Indeed, the rate at which crystal has been used most frequently amongst methamphetamine users increased from 8% in 2011 to 88% in 2016, with a significant increase between 2015 (35%) and 2016; ($\chi^2(1_{n=156})=28.98$, p<.001) (Figure 14).

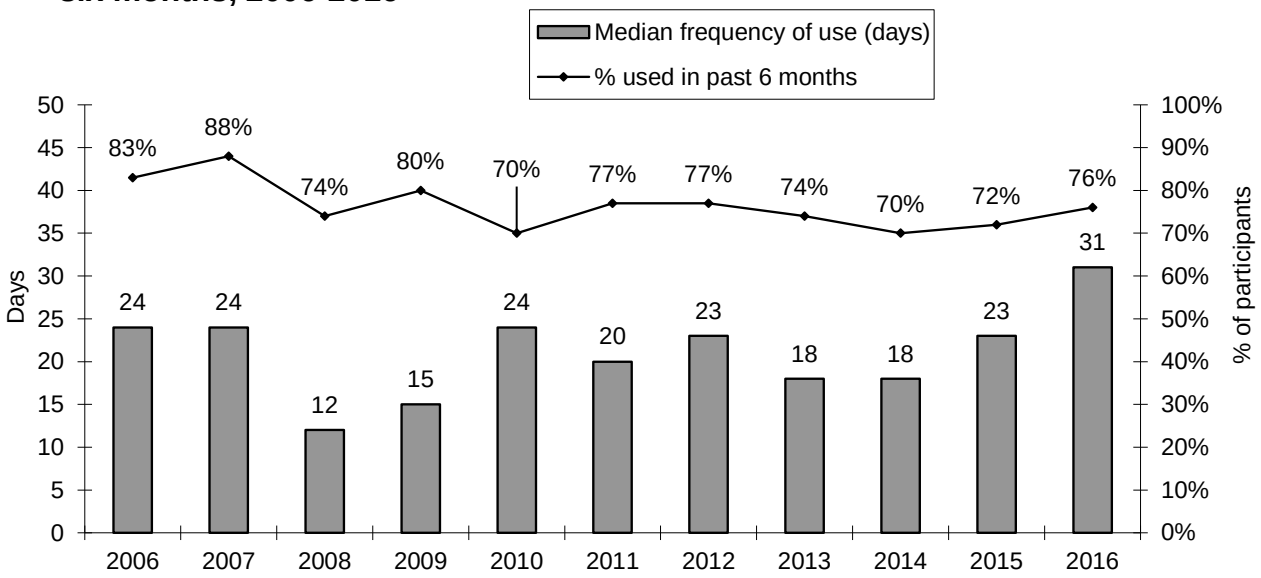
In line with these findings, eight KE reported increasing crystal methamphetamine use, noting an increasing number of existing consumers of methamphetamine switching from powder to crystal forms due to a lack of powder on the market. Similarly, it was noted that powder form use has been declining, and that base was now rarely seen. Increased frequency of crystal use was also commented on by these KE, due to the perceived highly addictive nature of this form of methamphetamine.

Trends in the use of the base/paste form of methamphetamine have generally been the opposite of that for the use of crystal: in 2006, base was the form used by the majority of the PWID cohort (42% of those recently using amphetamine). Use declined significantly from 2006 and 2008 (from 63% to 31%; $\chi^2(1_{n=167})=15.8$, p<.001), and then increased significantly to 67% in 2009 ($\chi^2(1_{n=162})=19.4$, p<.001), when crystal use decreased. Between 2009 and 2012, the proportion of participants with recent amphetamine experience reporting recent use of base remained relatively stable. However, in 2013 and 2014, this rate decreased (52% in 2012 versus 22% in 2013 and 25% in 2014), decreasing again to 12% in 2015 ($\chi^2(1_{n=148})=3.00$, p=.084) although the latter did not reach statistical significance. This trend remains stable in 2016, with only 5% of recent methamphetamine users reporting recent use of base (Figure 13).

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 one participant that had recently used pharmaceutical stimulants had not used some form of methamphetamine in 2016), 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 2006 to 2016 IDRS studies, with 26% to 43% of PWID reporting recent use (26% in 2016) (
Figure 12).

Examining the frequency of use of methamphetamine in more detail, 76% of the current cohort had used methamphetamine at a median frequency of 31 days, which is slightly less than once per week (Figure 15). Between 2008 and 2016, 70-80% of each sample reported recent use of methamphetamine, and the median frequency of this use ranged from 12 to 31 days. These results indicate lower levels of use of methamphetamine between 2008 and 2016 than were reported in previous local IDRS studies. Prior to 2008, between 83% and 88% of each cohort reported recent use of methamphetamine, at a median frequency of 24 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 63%).

**Figure 15: Prevalence and frequency of use of methamphetamine in the preceding six months, 2006-2016**




**Source**: IDRS PWID interviews

In the preceding month, two-fifths of those participants who reported recent use of methamphetamine had done so weekly or less (39%), whereas over half had used more than weekly but less than daily (56%). Just 5% of recent methamphetamine users had used on a daily basis in the preceding six months (Table 8).

**Table 8: Patterns of methamphetamine use in the preceding month, by type, 2016**

| | **Among the entire sample** | **Among those who had used** | | |
|---|---|---|---|---|
| **Form used** | % who had used | % used weekly or less (<24 days) | % used more than weekly, but less than daily (≥24 days and <180 days) | % used daily (180 days) |
| Powder | 33 | 76 *(n=25)* | 21 *(n=7)* | 3 *(n=1)* |
| Base | 4 | 75 *(n=3)* | 0 | 25 *(n=1)* |
| Ice | 73 | 44 *(n=32)* | 53 *(n=38)* | 3 *(n=2)* |
| Any form methamphetamine* | 75 | 39 *(n=29)* | 56 *(n=42)* | 5 *(n=4)* |

**Source:** IDRS PWID interviews
* Also includes liquid methamphetamine

Almost all participants interviewed (95%) had used some form of methamphetamine at some stage in their lives. Interestingly, only one-third of the sample (30%) indicated that a form of methamphetamine was their drug of choice. Of these consumers, the majority (76%, n=23) reported a form of methamphetamine as the drug they had injected most often in the month prior to interview.

Regarding the discrepancy between drug of choice and the drug most often injected, most participants noted that this was due to a lack of availability, or the price, with no participants reporting that their primary concern was 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=36), the drug class was used for a median of 48 days in the preceding six months (SD=51.4, range 6-180).

### 4.3.2 Self-reported symptoms of stimulant dependence

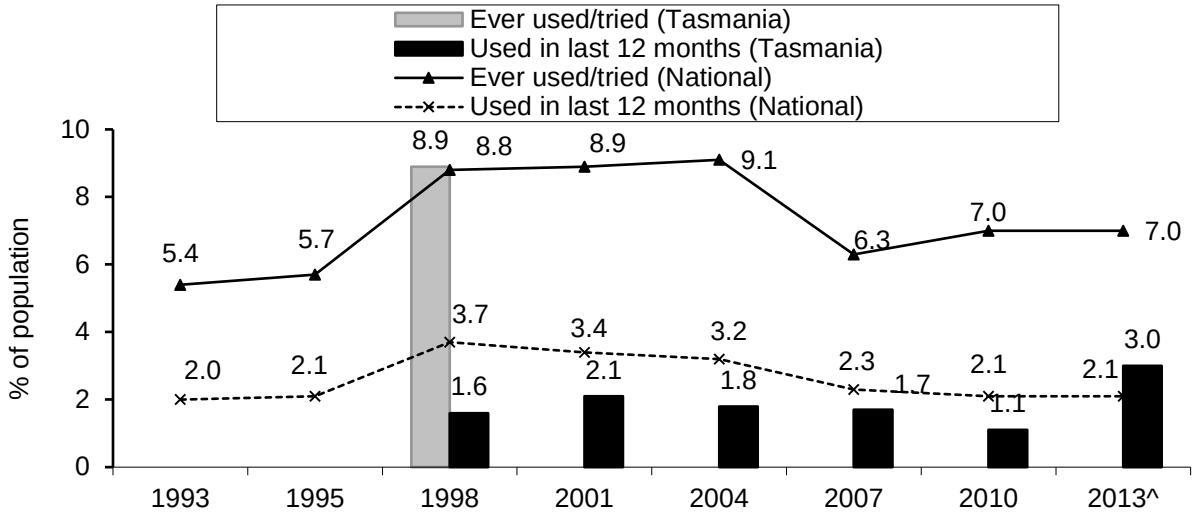
IDRS participants that had used stimulants (methamphetamine, pharmaceutical stimulants, cocaine) during the preceding six months were asked about how they felt about their use of this drug in the last year using the Severity of Dependence Scale (SDS) (n=69 completed this module). The SDS consists of 5 items rated on a scale of 0-3, resulting in a range of possible scores from 0-15, where higher scores suggest greater psychological dependence. With these items, 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 stimulants was 4 (range 0-13). Twenty-nine percent of this group (n=19) 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 Diagnostic and Statistical Manual of Mental Disorders (3rd edition revised; DSM-III-R) diagnosis of amphetamine dependence (Topp & Mattick, 1997). Half of the participants who completed the stimulant SDS had a score of 4 or greater (51%, n=35); it is reasonable to assume that some proportion of these people had experienced significant psychological symptoms of dependence. Of this group, half (54%, n=19) had accessed some form of drug treatment in the preceding twelve months.

### 4.3.3 Prevalence of methamphetamine use

The most recent survey of methamphetamine use within the general community of Tasmania was undertaken within the 2013 National Drug Strategy Household Survey (AIHW, 2014), which sampled 1,134 Tasmanian residents aged 14 years and over. These results indicated that 3.0% had used the drug in the 12 months prior to interview (Figure 16), compared with the 1.1% observed in the 2010 survey. However, these figures should be treated with caution, as the estimate has a large standard error and it is not possible to reliably infer that there has been any change in use rates. Prior to 2010, there was little substantial change in the level of methamphetamine use in the Tasmanian community (2.1% of those aged 14 years and above in 2001, 1.8% in 2004, 1.7% in 2007 and 1.1% in 2010). Rates of past 12 month methamphetamine use nationally remained consistent from 2010 to 2013 (2.1% and 2.1%).

**Figure 16: Prevalence of methamphetamine use in Australia and Tasmania among those aged 14 years and over, 1993-2013**




**Source:** National Drug Strategy Household Survey 1993-2013
^ The 2013 Tasmanian estimate of past 12-month use has a very large standard error and is considered unreliable for general use

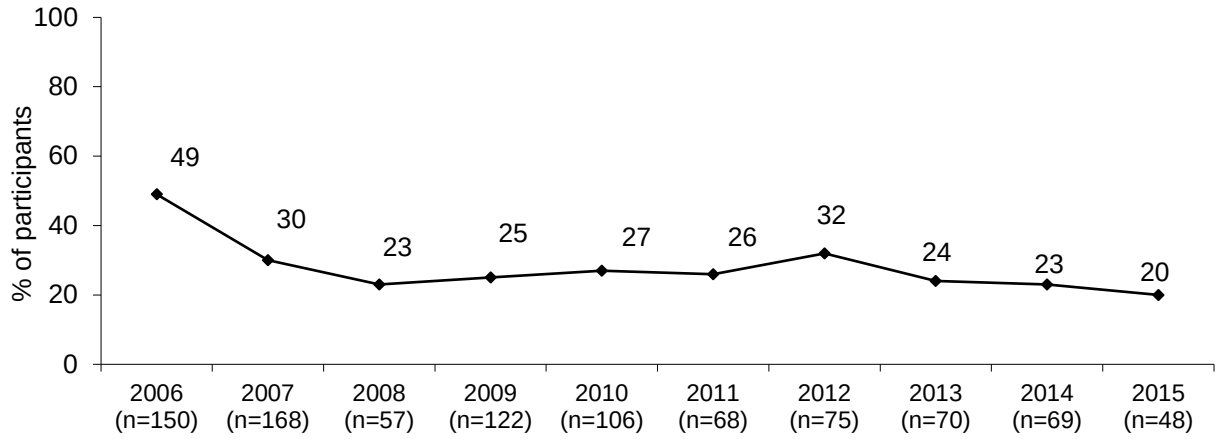
### 4.3.4 Methamphetamine use in particular populations

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 2013/14. In 2014/15, no positive urine drug screens for sympathomimetic amines/amphetamines were reported. In 2015/16, around 1% of positive urine drug screens (n=5) were positive for sympathomimetic amines/amphetamines.

### 4.3.5 Methamphetamine use among PWID

The Australian Needle and Syringe Program Survey (Memedovic, et al., 2016) 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 (most recent data available from 2015 survey). In 2006, 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 was 49%. Since 2007, rates have been lower, fluctuating around 25% of participants (20% in 2015) (Figure 17).

**Figure 17: Australian Needle and Syringe Program Survey: Prevalence of methamphetamine as 'last drug injected' amongst Tasmanian PWID, 2006-2015**

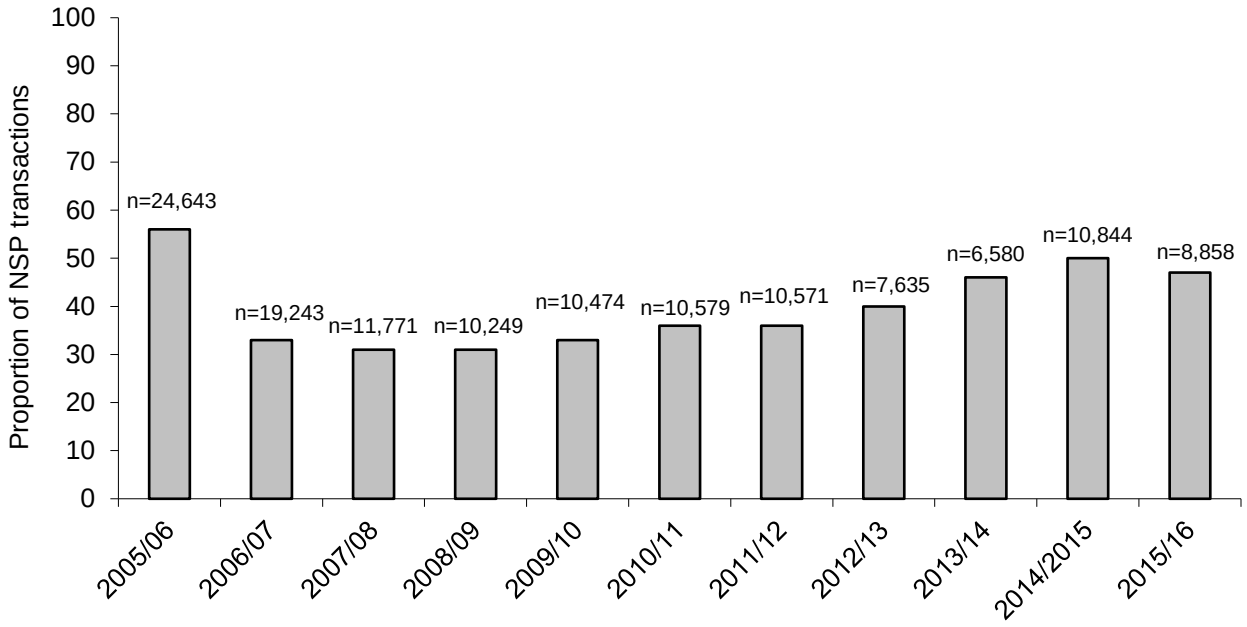



**Source**: Memedovic, Iversen, Geddes, & Maher, 2016

Since 1997, clients of non-pharmacy NSP outlets in Tasmania have been asked which drug they mostly inject. While methamphetamine (including pharmaceutical stimulants) 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 declined from 56% in 2005/06 to 31% in 2007/08 and 2008/09 (Table 18). Since then, rates have slightly increased, although they have not returned to the extent seen during 2005/06.

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. 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 is likely to be an underestimation of the true proportion of methamphetamine injection amongst Tasmanian PWID.

**Figure 18: Proportion of Tasmanian non-pharmacy Needle and Syringe Program clients reporting methamphetamine as 'drug most often injected', 2005/06-2015/16**




**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 2016, 6% of participants had used cocaine in the preceding six months, at a median frequency of one day;
- Amongst local IDRS cohorts, cocaine use has been consistently low, 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 6% of participants (n=6) had used cocaine in the six months preceding interview, at a median frequency of two days (range 1-3 days) in this time (Table 9). Five participants reported exclusive intravenous use, and one reported intranasal use.

Despite this very low level of recent use of cocaine, 44% had tried cocaine at some stage in their lives. Three KE from law enforcement and drug counselling services respectively commented on small increases in cocaine use, however other KE noted no or continued low reported rates of use.

Amongst Tasmanian IDRS participants, low levels of recent use of cocaine have been reported since 2006, ranging between 2% and 12% of each sample. Similarly, the median frequency of use has also remained very low: between one and eight days, which equates to maximum use of approximately once per month. Despite these low levels of use, between 39% and 61% of each sample since 2006 has reported lifetime use of cocaine (Table 9). Due to the small number of respondents who were able to provide information on cocaine, the data provided in this section should be interpreted with caution.

**Table 9: Patterns of cocaine use among Tasmanian IDRS PWID participants, 2006-2016**

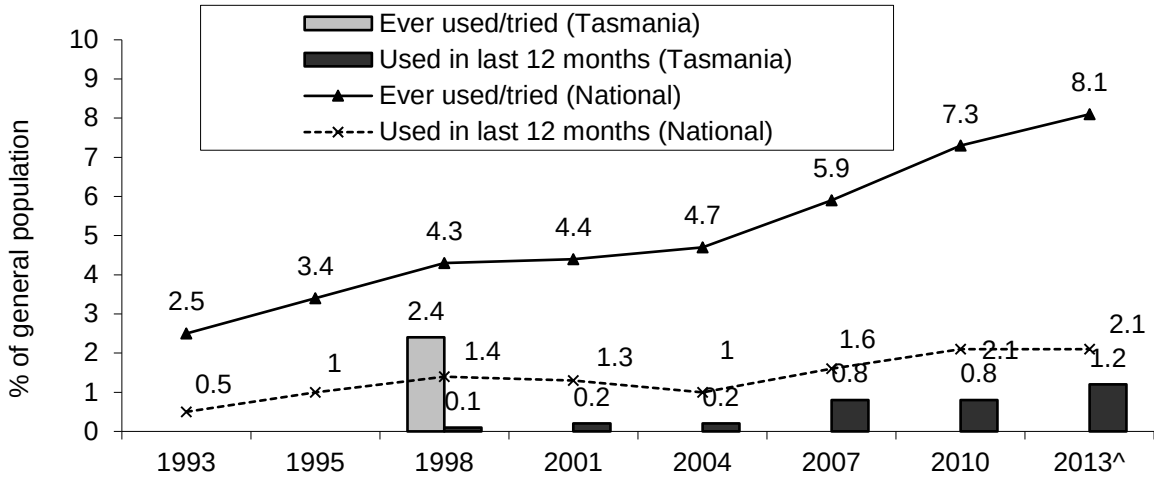
| Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Proportion using cocaine in last 6 months (%) | 12 | 5 | 4 | 2 | 5 | 7 | 11 | 5 | 8 | 2 | 6 |
| Median days used (range) | 3 (1-11) | 2 (1-3) | 5 (1-48) | 3 (2-3) | 3 (2-8) | 2 (1-7) | 1 (1-20) | 2 (2-16) | 2 (1-6) | 8 (1-15) | 2 (1-3) |
| Proportion ever using cocaine (%) | 61 | 46 | 47 | 51 | 39 | 42 | 61 | 46 | 51 | 48 | 44 |

**Source:** IDRS PWID interviews

### 4.4.2 Prevalence of use

According to the findings of the 2013 National Drug Strategy Household Survey (Figure 19; Australian Institute of Health and Welfare, 2014), 1.2% of 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. Rates of past 12 month cocaine use nationally and in the Tasmanian sample of the National Drug Strategy Household Survey have remained consistently low from 1993 to 2013 (National: 0.5% to 2.1%; Tasmania: 0.1% to 1.2%). However, there are indications of a steady increase in rates of lifetime cocaine use amongst the national sample, from 2.5% in 1993, 4.7% in 2004, to 8.1% in 2013.

**Figure 19: Prevalence of cocaine use in Australia and Tasmania among those aged 14 years and over, 1993-2013**




**Source:** National Drug Strategy Household Survey 1993-2013.
^ The 2013 Tasmanian estimate of past 12 month use has a very large standard error and is considered unreliable.

### 4.4.3 Cocaine use among PWID

There were only 18 transactions in which clients of non-pharmacy NSP outlets in 2015/16 indicated that cocaine was the drug they were about to inject. This figure has been consistently low since 2005/06 (Table 10), relating to around 15-47 transactions each year. However, it is important to note that there is 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?') which may underestimate the extent of cocaine use.

**Table 10: Percentage of Tasmanian non-pharmacy Needle and Syringe Program clients reporting cocaine as the 'drug most often injected', 2005/06-2015/16**

| Year | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of transactions reporting cocaine | 15 | 40 | 17 | 16 | 36 | 19 | 18 | 33 | 47 | 40 | 18 |
| % of total transactions reporting cocaine | <0.1 | 0.1 | <0.1 | <0.1 | 0.1 | <0.1 | <0.1 | <0.1 | 0.2 | 0.2 | 0.1 |

**Source:** Population Health, Department of Health and Human Services

Cocaine has not been reported as the last drug injected in any of the 1995-2015 Australian Needle and Syringe Program Surveys (Iversen, Topp & Maher, 2011; Memedovic, et al., 2016), with the exception of one participant reporting such use in 2006.

## 4.5 Cannabis

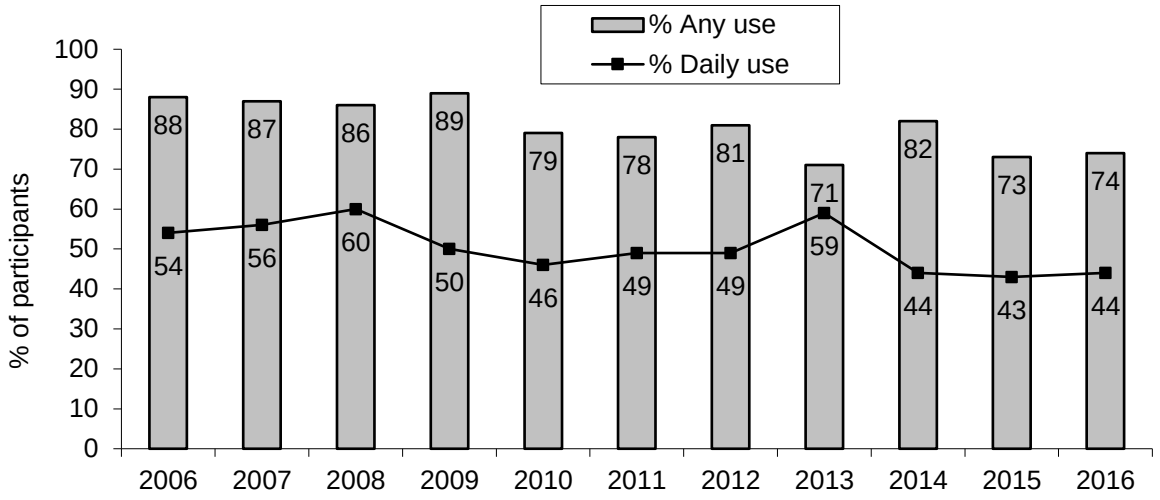
**Key Points:**

- Cannabis remains the most common life-time use illicit drug amongst Tasmanian IDRS samples (98%): three-quarters (74%) of the 2016 sample reported use in the preceding six months, at a median frequency of 168 days (almost daily use);
- Between 2006-2016, the proportion of IDRS participants reporting daily use has ranged between 43% and 60%;
- Hydroponic/indoor-cultivated cannabis is the predominant form used; and
- Synthetic forms of cannabis were used by a very small minority of participants on an infrequent basis.

### 4.5.1 Cannabis use among PWID participants

Among the IDRS PWID respondents in 2016, cannabis was the most commonly used life-time illicit drug, with 98% of participants using it at some time in their lives. Cannabis (74%) was the second most commonly used drug in the six months prior to interview behind methamphetamine use (76%). Among those that had recently used cannabis, median frequency of use was 168 days (range 3-180), which equates to almost daily use. It is important to note a similar proportion reported daily use in 2014 (44%), 2015 (43%) and 2016 (44%). Examining recent cannabis use amongst IDRS cohorts from 2006 to 2016 (Figure 20), there has been little change in the proportions reporting use of the drug across these samples.

**Figure 20: Proportion of Tasmanian IDRS PWID cohorts reporting use of cannabis in the six months prior to interview, 2006-2016**




**Source:** IDRS PWID interviews

Participants who reported recent use of cannabis were asked to comment on the last occasion they consumed cannabis. Of the 73 consumers who commented, 38% (n=28) reported smoking a 'cone' in the last six months. 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 six (range 1-100 cones, SD=19.9). One-tenth (12%, n=9) of cannabis consumers reported smoking a cannabis-cigarette ('joint') within the last six months; the median number of 'joints' was two (range

1-6 ‘joints’, SD=1.9). Almost half of participants reporting recent use of cannabis (48%, n=35) reported ‘other’ method of taking cannabis, though these methods were not specified.

### 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, 90% (n=66) reported use of indoor-cultivated/hydroponic cannabis, 74% (n=54) reported use of outdoor-cultivated/bush cannabis, 21% (n=15) reported use of hashish and 8% (n=6) reported use of hashish oil.

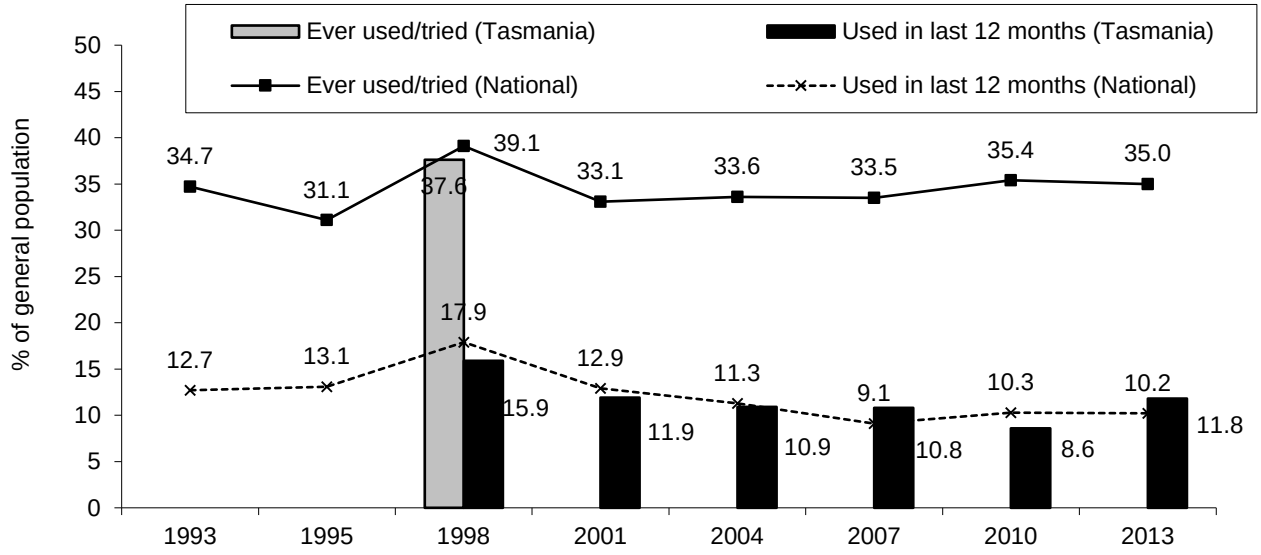
The cannabis used in the past six months by those participating in the PWID survey was cannabis head (the flowering top sections of the female plant), with most cannabis-using PWID reporting some use of both hydroponically/indoor-cultivated and outdoor crops (49% of those participants who commented, n=34). One-third of this group reported exclusive use of indoor-cultivated cannabis (34%, n=24), and 4% outdoor-cultivated cannabis (n=3). Participants were also asked to comment on the main form they had used in preceding six months: 77% (n=56) reported indoor-cultivated cannabis and 22% (n=16) reported outdoor-cultivated cannabis.

In response to local anecdotal reports of use of synthetic forms of cannabis, questions relating to this were included in the 2012-2016 surveys. In 2012 and 2013, 6% and 3% of the samples respectively reported ever having used a form of synthetic cannabis, all doing so in the preceding six months. In. 2015, 13% reported lifetime use but only 2% had used synthetic cannabis in the last six months. Similarly, 10% of the 2016 sample reported lifetime use of synthetic cannabis, but only 1% had used it in the past six months.

### 4.5.3 Prevalence of cannabis use

In the 2013 National Drug Strategy Household Survey (AIHW, 2014), the estimated prevalence of cannabis use in the preceding 12 months in Tasmania increased from 8.6% in 2010 to 11.8% in 2013 ($\chi^2(1_{n=2194})=5.87$, p=0.02) (Figure 21). The rate of past year cannabis use amongst the national sample has similarly remained stable over this time (9.1%, 10.3%, and 10.2% in 2007, 2010, and 2013 respectively).

**Figure 21: Prevalence of cannabis use in Australia and Tasmania among those aged 14 years and over, 1993-2013**




**Source:** National Drug Strategy Household Survey 1993-2013

### 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. In 2004/05, the proportion of positive tests for cannabis was around half of all urine drug screens, fluctuating between 2005/06 and 2009/10 (between 58% and 76% of positive tests). In the 2010/11 to 2012/13 period this rate again decreased to 48% and 50% respectively, returning to previous levels in 2013/14, with 77% of positive urine screens indicating cannabis use. In 2014/15, 50% of positive urine screens indicated cannabis use while the rate decreased in 2015/16, with 29% of urine screens positive for cannabis use.

## 4.6 Opioids

**Key Points:**

*Morphine*

- Half (51%) of the Tasmanian IDRS sample had used non-prescribed morphine in the preceding six months, similar to the rate of use amongst the 2015 cohort (47%);
- The median frequency of illicit use was slightly less for the 2016 than the 2015 cohort (32 days versus 48 days of the past 180, respectively);
- Morphine was the drug of choice for one-fifth (22%) of the sample in 2016; and
- MS Contin was the main preparation used, followed by Kapanol.

*Oxycodone*

- There has been a decrease in the number of participants that have recently used non-prescribed oxycodone from 2013 (61%) to 2016 (28%);
- Median frequency of illicit use also decreased from 15 days amongst the 2013 cohort to 4 days amongst the 2016 cohort;
- OxyContin was the predominant preparation used; and

*Methadone syrup*

- Nearly one quarter (23%) reported recent use of non-prescribed methadone syrup, at a median frequency of 12 days, similar to 2015 (20% at a median frequency of 11 days); and

*Physeptone*

- Almost one-third (32%) had recently used non-prescribed Physeptone tablets, at a median frequency of six days.

*Buprenorphine*

- Subutex and Suboxone tablets were recently illicitly used by small proportions of the sample (10% and 7% respectively) at a median frequency of 15 and 48 days.

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' (or non-prescribed) 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 licit 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).

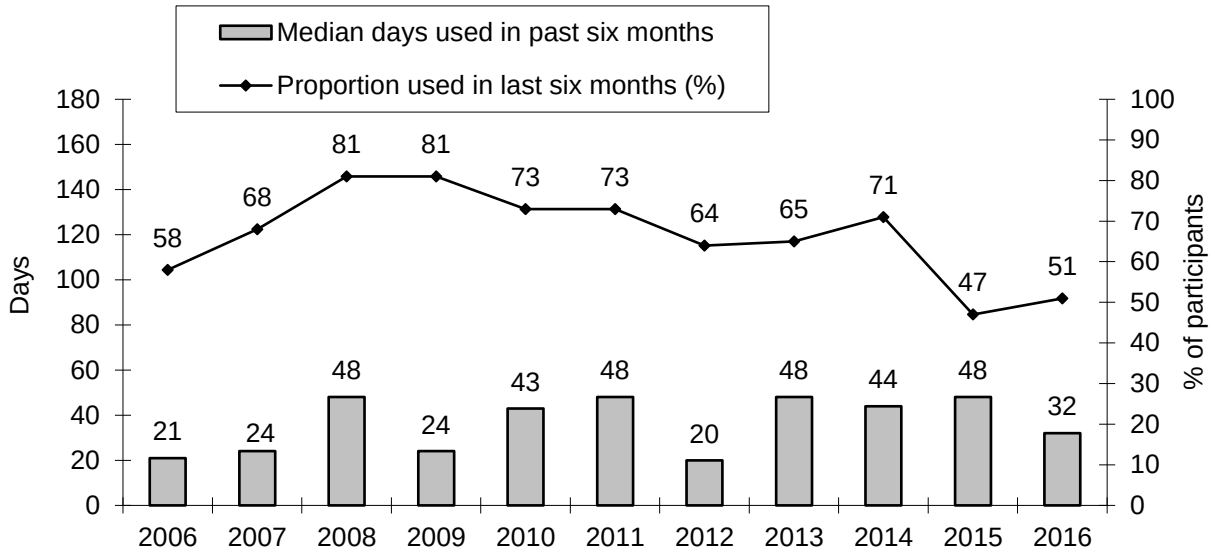
### 4.6.1 Use of morphine

Morphine was reported as the drug of choice by 22% of the sample in 2016, and half the sample (51%) reported use of licit or illicit morphine in the six months preceding the interview. Of those who had recently used illicit morphine (51%, n=50), the median frequency of use in the past six months was 32 days (range 1-180), equating to use more than once per week. The median illicit dose participants reported normally consuming was 60mg (range 5-500mg, SD=71mg, n=48). Just 2% (n=1) of the sample reported recent use of morphine that was prescribed to them, all of whom reported injecting the licit form of this drug. Morphine was reported as the last drug injected prior to interview by 23% of the PWID sample, and the drug most injected in the past month by 23% of the sample.

As displayed in Figure 22, between 2006 and 2008 there was a trend toward increasing morphine use (58% to 81%), with notable increases in the frequency of this use (from 21 to 48 days). In 2009, 81% of the sample reported recent use; however, the frequency of this use decreased to 24 days. This trend stabilised between 2010 and 2014, with around three-quarters of each sample (64% to 73%) reporting recent use of morphine at a median frequency of 20 to 48 days (generally equating to approximately twice a week). In 2015, there has been a significant decrease in rates of use relative to 2014 (48% versus 71%: $\chi^2$ ($1_{n=201}$)=9.44, p=.002), returning to a similar rate evident in 2006. Despite this, frequency of use remained unchanged. In 2016, the proportion of PWID using illicit morphine in the past six months (51%) was similar to 2015, though the median days of use was slightly lower (32 days).

Three KE commenting on morphine use generally reported that rates of use had declined slightly, although several KE noted that morphine powder had been used often by a small group of Tasmanian users in the past year.

**Figure 22: Proportion of Tasmanian IDRS PWID cohorts reporting use of illicit morphine, and the median frequency of this use, in the six months prior to interview, 2006-2016**




**Source**: IDRS PWID interviews

Of the PWID sample, 93% reported they had tried illicit morphine at some stage in their lives, with 92% reporting ever injecting the illicit form of drug. Half (n=50) of participants reported use of illicit morphine in the preceding six months; all of these participants reported injecting the drug, at a median frequency of 39 days (range 1-180), or more than once per week.

The demographics of the group that had used illicit morphine (n=50) in the past six months were similar to that of other PWID (see Section 3.1) in terms of age, gender, cultural background, employment status, education, accommodation, prison history, relationship status, age first injected and frequency of injection. However, participants who had recently used illicit morphine were less likely to report currently being in drug treatment (39% versus 61%; $\chi^2$ ($1_{n=99}$)=5.63, p=.021) than those who had not. Further, participants who had recently used illicit morphine were more likely to have been injecting drugs for longer than participants who had not at a trend level (22 years versus 18.9 years: *t*(97)=-1.93, p=.056).

*Forms used*

Of the 39 participants who commented on the form they had used most often in the preceding six months, four-fifths reported illicit MS Contin (79%, n=31), 13% (n=5) illicit Kapanol and 8% (n=3) had used morphine powder.

Of those who commented, all but one of the participants reporting use of morphine in the last six months (licit and illicit, n=50) 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.

### 4.6.2 Use of oxycodone

While one-quarter of the participants interviewed in the current study reported using illicit oxycodone in the six months prior to interview (28%, n=28), just 3% reported this as their drug of choice, and 2% reported oxycodone as the drug they had most injected in the month preceding the interview.

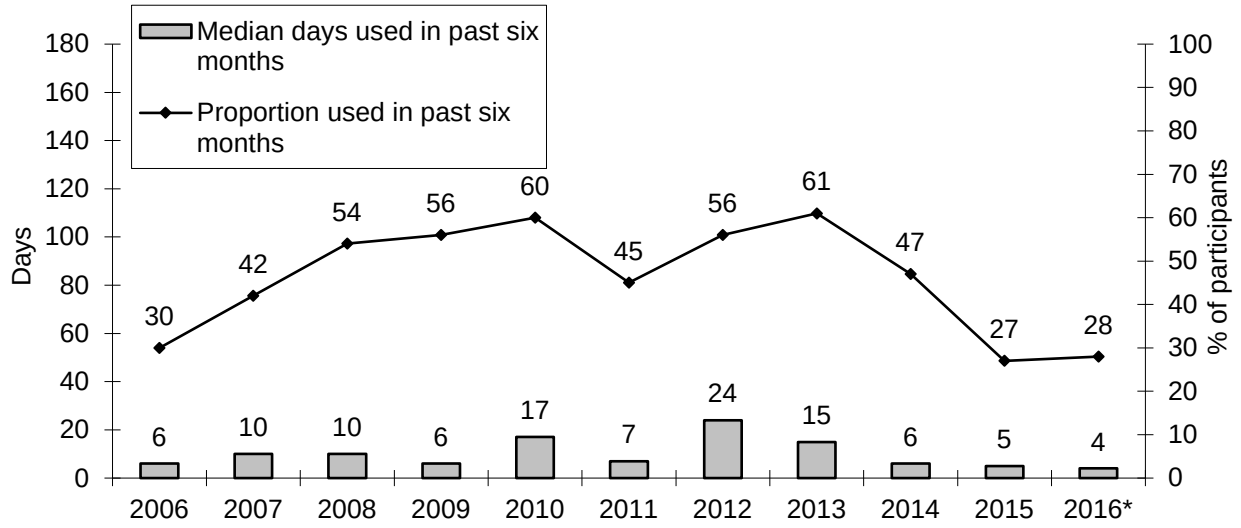
In April 2014, a 'tamper-resistant' controlled-release oxycodone formulation was released. In September 2014, a generic formulation of this product was released without these 'tamper-resistant' properties, and placed on public subsidy in December 2014. In the 2016 IDRS, where oxycodone use was first differentiated by formulation, 7% reported recent use of illicit generic oxycodone (6% injected), 18% reported recent use of the reformulated 'tamper-resistant' oxycodone (15% injected), and 10% reported recent use of other oxycodone (8% injected). These findings suggest low uptake of the generic formulation which does not have physical barriers to reduce tampering since release. However, most PWID who use the reformulated oxycodone have managed to circumvent the physical barriers within the reformulated product meant to deter abuse, and have successfully injected this product. The relative infrequency of injection (median 4 days, range 1-180) suggests that PWID are not regularly tampering with the reformulated product, noting that frequency of use of illicit generic oxycodone (median 6 days, range 1-36) and other oxycodone formulations (median 3 days, range 1-6) was low. However, such findings warrant continued monitoring of tampering with reformulated oxycodone given possible health harms associated with misuse.

Overall, rates of oxycodone use have declined following introduction of the reformulated product. Use of licit and illicit oxycodone among the Tasmanian IDRS PWID cohorts increased from 31% in 2006 to 62% in 2013 (

Figure **23**). However, there was a trend towards decreased rates of recent use in the 2014 cohort relative to the 2013 cohort (62% to 49%: $\chi^2(1_{n=208})=3.13$, p=.077), with a further decrease in rate of use among the 2015 cohort (relative to the 2014 cohort; 28%: $\chi^2(1_{n=201})=6.61$, p=.010). This rate remained stable in 2016 at 28%. Overall median days of use decreased from 2012 (24 days) to 5 days in 2015 and remain stable at 4 days in 2016. These findings suggest that introduction of the reformulated product may have reduced illicit use amongst PWID, as evidenced in IDRS cohorts. Indeed, several KE in the current study commented on continued decreases in rates of oxycodone use, as well as decreased rates of injection of oxycodone. KE noted general awareness of the new reformulated and generic products amongst clients and low rates of use.

The median illicit dose of generic oxycodone participants reported taking was 80mg (range 20-240mg, n=6), while median amounts of 40mg (range 10-300mg, n=15) and 65mg (range 5-100, n=8) were reported for reformulated oxycodone and other oxycodone, respectively.

**Figure 23: Proportion of Tasmanian IDRS PWID cohorts reporting use of illicit oxycodone, and the median frequency of this use, in the six months prior to interview, 2006-2016**




**Source:** IDRS PWID interviews
*Refers combined total of illicit generic, reformulated and other oxycodone use

Three-quarters of the 2016 IDRS cohort (75%, n=74) had ever used illicit oxycodone tablets and 72% had ever injected oxycodone (licit or illicit). No participants reported recent use of oxycodone that was prescribed to them exclusively. As noted for morphine, the majority of oxycodone used by participants in the current study did not come directly from medical practitioners.

The demographics of the group that had used illicit oxycodone (n=28) in the past six months were similar to that of other PWID (see Section 3.1) in terms of age, sex, sexual orientation, cultural and educational background, relationship status, employment status, income source, accommodation, prison history, age of first injection, current drug treatment and duration of injection career.

Over a quarter of the current PWID sample (28%, n=28) reported use of some preparation of non-prescribed oxycodone in the six months prior to interview. Of the 9 participants who commented, 56% (n=5) reported that OxyContin was the form they most used, with 14% (n=4) reporting Endone.

### 4.6.3 Use of methadone

Methadone was reported as the drug of choice of 11% of the PWID sample, with 55% (n=54) of the entire sample reporting some use of methadone (syrup and tablet forms) in the preceding six months. Methadone was injected in the preceding six months by 94% (n=51) of the consumers reporting recent use of the drug.

In regard to methadone syrup, 34% (n=34) 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 7-180 days). Across IDRS PWID cohorts, the proportion of participants reporting recent use of licit methadone syrup has declined from 64% in 2004 to 34% in 2016.

Nearly one-quarter (23%) of the sample reported recent use of illicit methadone syrup, at a median frequency of 12 days (which equates to use approximately once per fortnight). Over two-thirds of those recently using illicit syrup (70%, n=16) were themselves currently receiving methadone maintenance treatment. The median frequency of illicit methadone syrup use tended to be higher for participants currently enrolled in a methadone program (24 days, n=11) compared with those not in

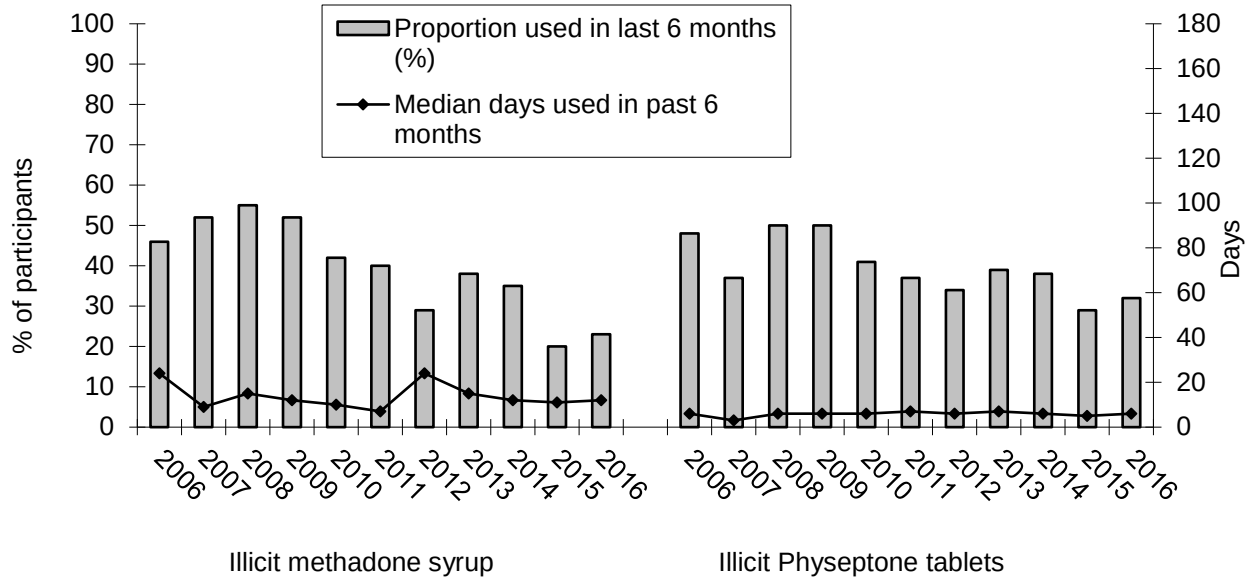
treatment (10 days, n=12). The median dose of illicit methadone syrup normally consumed was 50mg (range 5-100mg, n=23). There may be a spectrum of reasons for use of illicit syrup by those enrolled in the program, including a desire for intoxication, but it is important to also consider the role of incomplete stabilisation, unmet pain management requirements and of problems in the systems around flexibility of dose dispensing in these situations. For a 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 remained relatively stable (between 35% and 55%) from 2006 through to 2014. In contrast, the proportion reporting recent use in 2015 reflected a decrease in use relative to that observed in 2014 (20% versus 35%; $\chi^2(1_{n=201})=4.72$, p=.030). This remained stable in 2016 at 23%. The median frequency of use has remained relatively infrequent from 2006 to 2016, ranging between 7 and 24 days of the preceding six months. Amongst those participants reporting recent use of illicit syrup who commented (n=23), all reported having recently injected the illicit form of the drug (none had swallowed non-prescribed methadone syrup).

The demographics of those that had used illicit methadone syrup in the past six months (n=23) were similar to that of other PWID (see Section 3.1) in terms of age, sex, cultural background, sexual orientation, relationship status, education, accommodation, income source, employment status, prison history, frequency of injection, age of first injection and duration of injecting career. Participants who reported recent illicit methadone syrup use were more likely to currently be in some form of AOD treatment at a trend level than those who did not report such use (65% versus 35%; $\chi^2(1_{n=99})=3.54$, p=.060).

Lifetime use of illicit Physeptone (methadone tablets) was reported by two-thirds of IDRS participants (69%, n=68) and recent use by over one-quarter of the sample (32%, n=32). Between 2006 and 2009, reports of use of illicit Physeptone varied between 37% and 50%, 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=.030), and has remained relatively stable since this time (32% in 2016). Median frequency of illicit Physeptone use amongst the 2016 IDRS cohort was generally infrequent, with participants reporting a median frequency of use of six days in the last six months (range 1-72 days), which equates to use once per month. The median dose participants reported normally taking was 50mg (range 10-100mg, n=31). Of the participants reporting recent illicit use, all reported recent injection of Physeptone, at a median frequency of six days (range 1-72 days). Five participants additionally 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 seven days between 2006 and 2016 (Figure 24).

**Figure 24: Proportion of Tasmanian IDRS PWID cohorts reporting non-prescription use of methadone, and the median frequency of this use, in the six months prior to interview, 2006-2016**




**Source**: IDRS PWID interviews

The demographics of those that had used illicit Physeptone tablets in the past six months (n=34) were similar to that of other PWID (see Section 3.1) in terms of age, sex, accommodation, educational and cultural background, relationship status, sources of income, employment status, sexual preference, prison history, AOD treatment, injection career, and age of first injection (although small cell counts for some variables should be noted in light of lower statistical power to detect group differences). Three participants reported use of Physeptone that was prescribed to them. As noted for most other pharmaceutical opioids, the majority of Physeptone used by participants in the current study 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=54), nearly two-thirds reported licit methadone syrup (63%, n=34), 64% (n=3) reported licit Physeptone tablets, one-fifth (20%, n=11) reported illicit Physeptone tablets, and 13% (n=7) reported illicit syrup.

### 4.6.4 Use of buprenorphine

*Subutex (buprenorphine)*

In the current cohort, 53% (n=52) reported ever using Subutex, with 27% ever receiving the drug prescribed, and 36% ever using illicit Subutex. Just 11% (n=11) of the current PWID participants reported recent use of licit buprenorphine in the six months prior to interview, at a median frequency of 168 days (range 1-180 days). Half of these participants (n=6) had recently injected their own prescribed buprenorphine, at a frequency of 72 days, which equates to three times per week. Of who had recently illicitly accessed buprenorphine (10%, n=10) all had injected it, at a median frequency of 13 days (range 1-90). Four 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. 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 four years.

One-third of the sample (34%, n=34) reported lifetime use of Suboxone tablets; 19% (n=19) had used licit tablets and 21% (n=21) had used illicit tablets. Seven participants had used illicit Suboxone tablets in the six months preceding the interview at a median frequency of 48 days (range 4-90 days). Of these seven participants, six reported injecting the drug on a median of 30 days (range 4-90 days) and two participants reported swallowing the drug. Only one of the participants reporting recent use of illicit use had accessed Suboxone treatment in the preceding six months. Five participants reported recent Suboxone treatment, taking their prescribed drug at a median frequency of 180 days (range 150-180 days). Of these five participants, two reported injecting the drug at a median of 178 days (range 175-180 days). All five of these participants reported swallowing the drug in the past six months.

### 4.6.5 Self-reported symptoms of opioid dependence

IDRS participants that had recently used opioids (n=81) 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) was 7 (range 0-15, n=81). Just three participants 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 (Gossop et al., 1995; Iraurgi et al., 2010; Topp & Mattick, 1997). Eighty percent (n=65) of participants completing the SDS scored five or above, indicating a high level of opioid dependence and/or problematic use amongst the sample. Three-fifths of this group (63%; n=41) 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. Four participants in the 2016 IDRS cohort reported using fentanyl in the preceding six months. Further, seventy-eight people reported on their use of tramadol, and one-fifth (22%) of these seventy-eight respondents reported recent use of illicit tramadol (17% of IDRS PWID). One-fifth (21%; n=21) reported using other opioids in the six months preceding the interview for a median of 12 days (range 1-180 days), with most of these (n=15) reporting use of illicit forms. The main brands reported included panadeine forte (n=16) and other unspecified types (n=3). Only three participants reported injecting these substances for a median of 2 days (range 1-4 days).

### 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 25 and 26 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 25 presents illicit use of each pharmaceutical opioid type as a proportion of the number of pharmaceutical opioid consumers in each cohort, while Figure 26 presents illicit use as a proportion of the entire IDRS sample each year. Illicit morphine has been the predominant non-prescription pharmaceutical opioid used by IDRS PWID participants in all years.

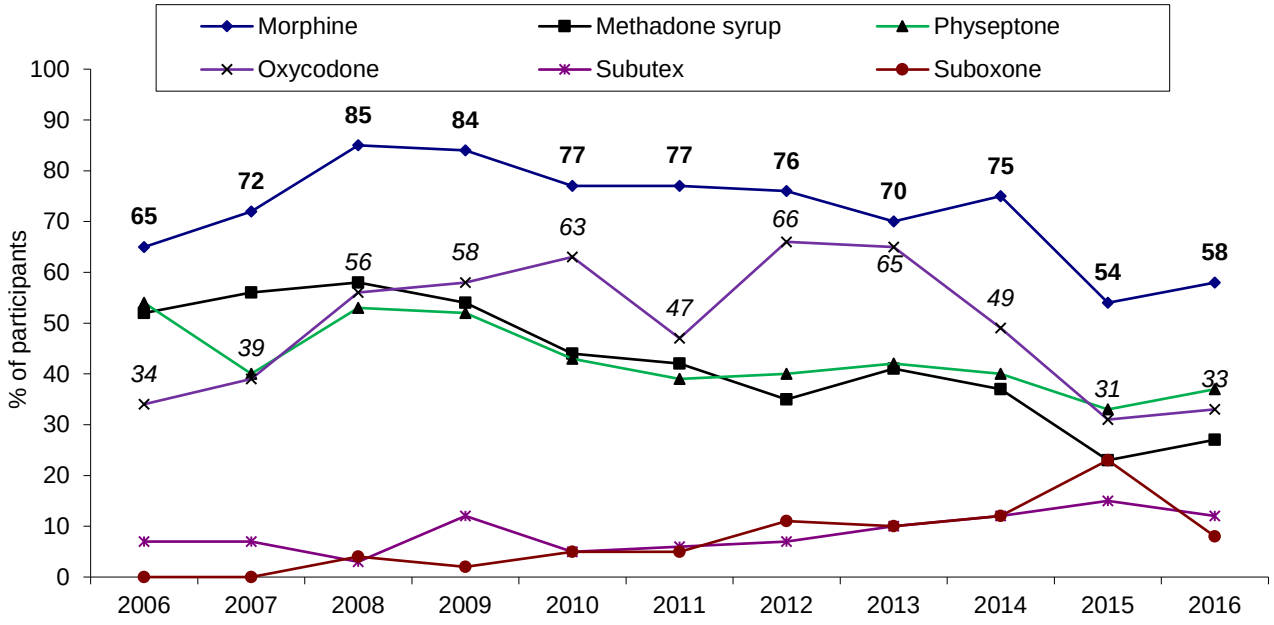
Figure 25 indicates that recent illicit use of morphine has been reported by between 70% and 77% of those who have used illicit opioids from 2006 to 2014 (with the exception of higher numbers in 2008 (85%) and 2009 (84%)). In 2015, there was a decline in the number reporting recent illicit morphine use amongst the total sample (71% in 2014 to 47% in 2015) and amongst those who report any illicit opioid use (75% in 2014 to 54% in 2015). This trend continued in 2016, with 51% using illicit morphine in the total sample and 58% using amongst those who had recently used illicit opioids.

Illicit oxycodone use had become increasingly common amongst PWID. Indeed, the rate of recent illicit use increased from 32% in 2004 to 61% in 2013 ($\chi^2(1_{n=107})=32.01$, $p<.001$). However, similar to morphine, there has been a decrease in use from 2013 to 2014 (61% to 47%: $\chi^2(1_{n=208})=3.67$, $p=.055$) and from 2014 to 2015 (27%: $\chi^2(1_{n=201})=6.61$, $p=.010$). In 2016, these rates remained similar to in 2015 at 28%. These changes are due to the introduction of tamper-proof reformulations of oxycodone in late 2014 (a full discussion can be found in Peacock, Humphries, & Bruno, 2016).

Between 2006 and 2009, the rate of recent use of methadone ranged between 46% and 55%. Since this time, recent use of illicit syrup across the samples had decreased (52% in 2009 versus 29% in 2012), and stabilised. There was a decrease in the rate of recent illicit use from 2014 (35%) to 2015 (20%; $\chi^2(1_{n=201})=4.72$, $p=.030$), which has remained stable in 2016 at 23%. It is important to note that amongst most cohorts (with the exception of 2008 and 2010-2012), at least half of those reporting illicit purchases of methadone syrup were individuals who themselves were also receiving methadone maintenance treatment (48%, n=11 in 2016). The rate of use of Physeptone has varied between 33% and 54% since 2006, with 37% of the 2016 sample reporting use in the preceding six months.

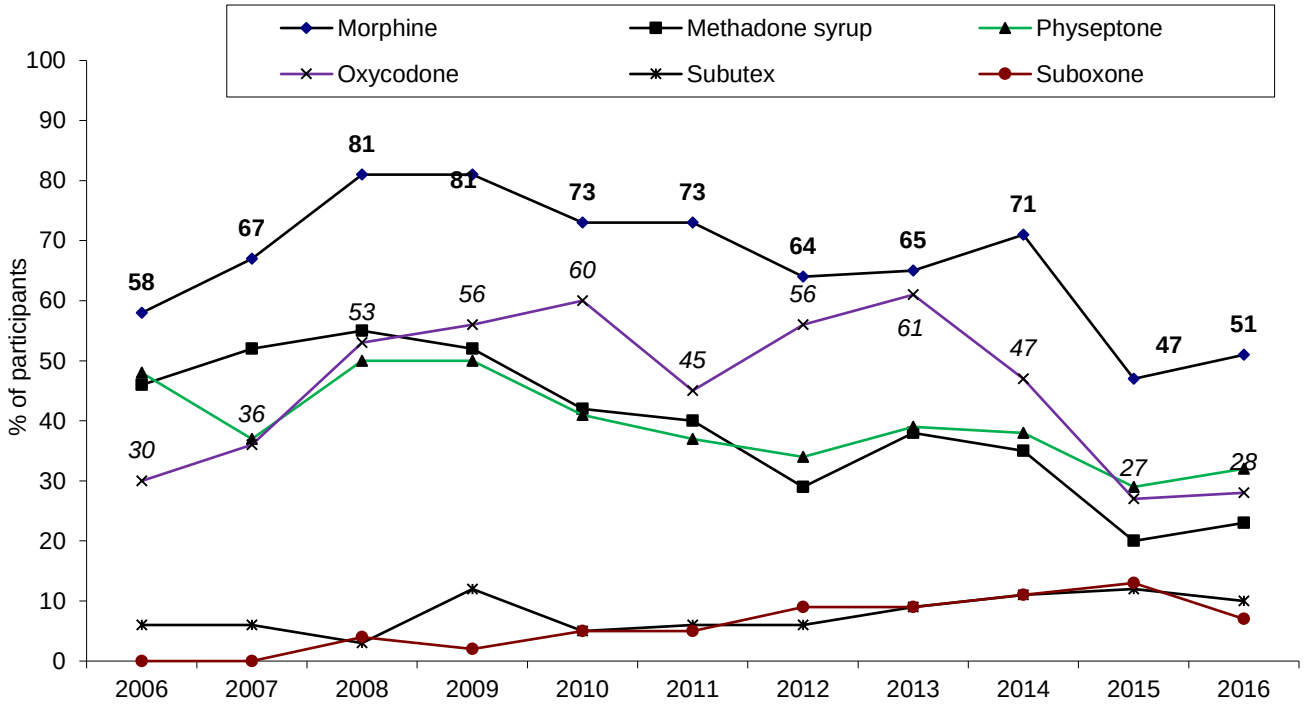
Use of illicit buprenorphine (Subutex) has remained very low since being made available for pharmacotherapy. In 2006, 6% of participants reported illicit use of this drug, and in 2016 this had increased to 10%. Similarly, use of illicit buprenorphine-naloxone tablets (Suboxone) has remained very low across the 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 13%).

**Figure 25: Proportion of opioid consumers within the Tasmanian IDRS PWID cohorts reporting non-prescription use of pharmaceutical opioids in the six months prior to interview, 2006-2016**




**Source**: IDRS PWID interviews

**Figure 26**: **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, 2006-2016**

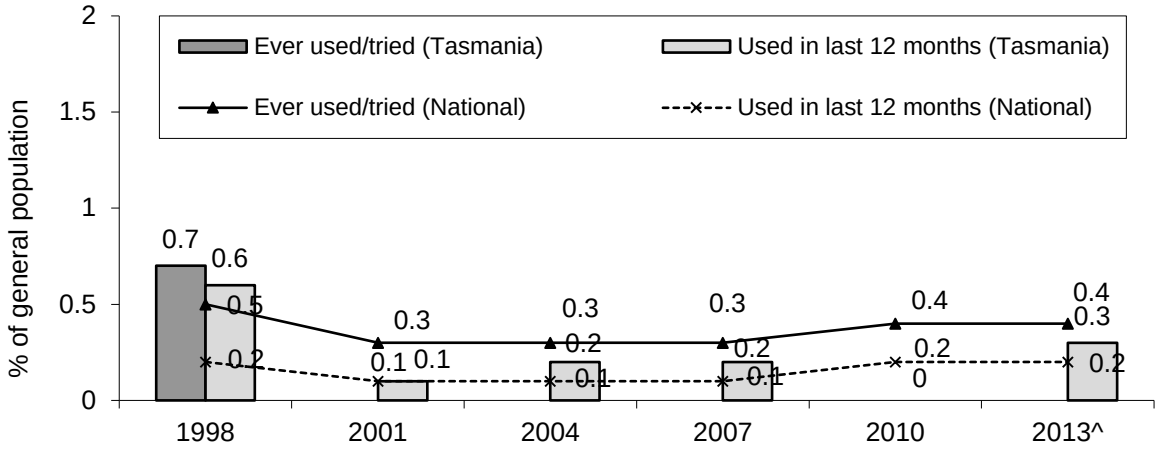



**Source:** IDRS PWID interviews

### 4.6.8 Prevalence of opioid use

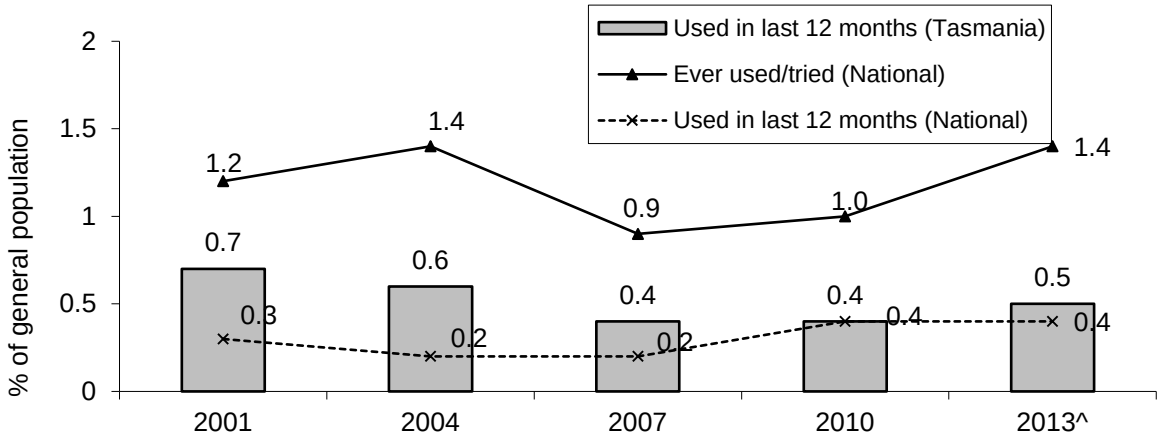
The 2013 National Drug Strategy Household Survey (NDSHS) interviewed 1,134 Tasmanians aged 14 years or above about their drug use. Consistent across 2010 and 2013 surveys, 0.4% and 0.2% of the national sample reported lifetime and recent use of methadone and/or buprenorphine (AIHW 2011, 2014). Rates of past 12 month use amongst the Tasmanian sample also remained relatively stable (0.0% in 2010; 0.3% in 2013). The 2013 NDSHS indicated that 1.4% of those sampled nationally reported lifetime use of other opioids for non-medical purposes, a significant increase relative to 1.0% in 2013 (p<.005). Rates of past 12-month use were similar between 2010 and 2013, with 0.4% of the national sample in both studies reporting such use, and 0.4% and 0.5% of Tasmania sample reporting such use respectively (AIHW, 2014) (Figure 27; Figure 28).

**Figure 27: Prevalence of methadone or buprenorphine* use in Australia and Tasmania among those aged 14 years and over, 1998-2013**




**Source:** National Drug Strategy Household Survey 1998-2013
* Use of buprenorphine was only included in the 2007-2013 surveys
^ A large standard error means this data should be interpreted with caution

**Figure 28: Prevalence of other opioid use (excluding heroin, methadone and buprenorphine) in Australia and Tasmania among those aged 14 years and over, 2001-2013**

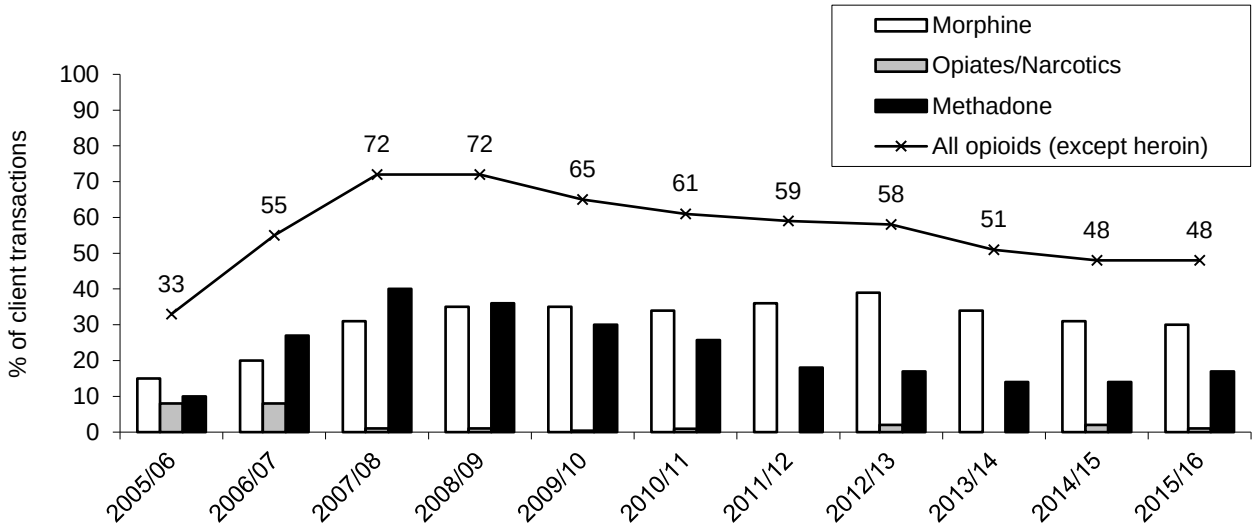



**Source:** National Drug Strategy Household Survey 2001-2013
^ The 2013 Tasmanian estimate of past 12 month use has a very large standard error and is considered unreliable for general use

### 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 eleven years (Figure 29), due primarily to clients nominating the catch-all 'opiates-narcotics' category rather than indicating a specific single drug[6]. 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 33% in 2005/06 to 72% in 2008/09. However, since 2009/10, this has reversed, with the proportion of client transactions for an opioid (excluding heroin) declining from 65% in 2009/10 to 48% in 2014/15, which remained stable at 48% in 2015/16. This trend of increasing use of opioids in the mid-2000s and the small decline since this time has been the 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.

**Figure 29: Percentages of Tasmanian non-pharmacy Needle and Syringe Program clients reporting opioids as 'drug most often injected', 2005/06-2015/16**

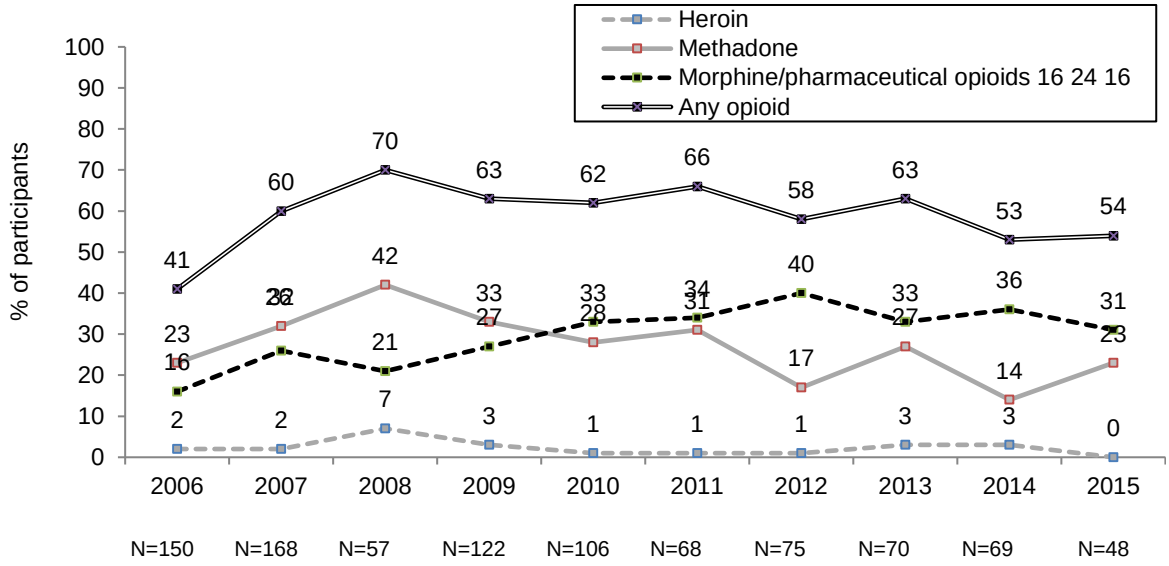



**Source:** Population Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (Iversen, & Maher, 2015) identified opioids as the last drug injected by 41% of the Tasmanian participants for the 2006 survey. Since 2007, however, rates reporting their last drug injected as an opioid have remained around 60% (54% in 2015) (Figure 30).

[6] In 2009/10, 2014/15 and 2015/16, 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.

**Figure 30: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within 'last drug injected', 2006-2015**




**Source:** Memedovic, Iversen, Geddes, & Maher, 2016

## 4.7 Benzodiazepines

**Key Points:**

- Two-thirds of the sample (68%) had recently used benzodiazepines, and half of the total sample (53%) reported recent non-prescribed use of benzodiazepines;
- Two-fifths of the sample had ever injected a benzodiazepine (40%; licit or illicit form), while 7% had injected a benzodiazepine in the last six months;
- Diazepam was the most commonly swallowed benzodiazepine; and
- Alprazolam and diazepam were the most commonly injected benzodiazepines.

### 4.7.1 Benzodiazepine use

The majority of IDRS participants had used benzodiazepines (including alprazolam) at some stage in their lives (91%, n=90). Two-thirds (68%; n=67) of the sample reported using benzodiazepines in the six months preceding the interview.

Lifetime benzodiazepine injection was reported by two-fifths (39%, n=39) of the 2016 PWID cohort, with 7% (n=7) of the whole sample reporting injecting the drug in the six months prior to the interview. Rates of overall recent use have remained fairly stable (86% to 89% across the 2006 to 2015 cohorts), although this year's cohort reported a significantly lower rate of recent use (68%) relative to in 2015 (89%), $\chi^2(1_{n=199})=11.14$, p=.001. Recent injection rates in the IDRS cohorts have been variable, with the highest rates evident in 2008 (36%) and the lowest rates of recent injection evident in this year's cohort (7%) (Figure 31).

Use of licit 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. Two-thirds (71%, n=70) of the 2016 sample reported ever having been prescribed a benzodiazepine, and 21% (n=21) of the total 2016 PWID sample reported ever having injected licit benzodiazepines. While two-fifths (42%; n=42) of the sample reported recent licit use of benzodiazepine, only one participant had injected the licitly accessed benzodiazepines.

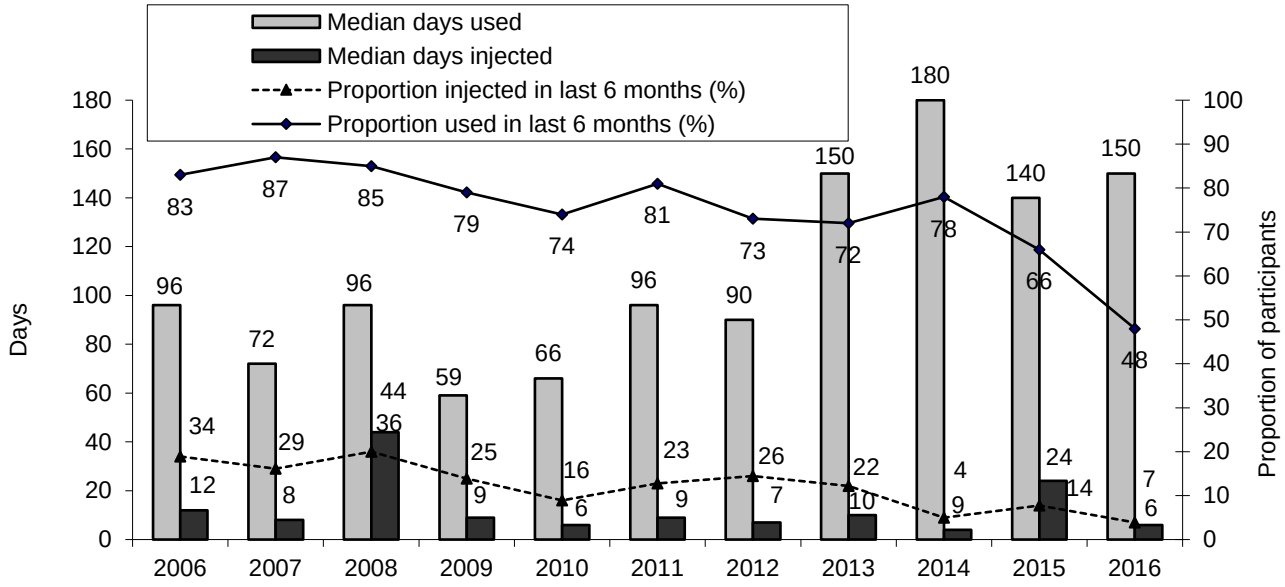
Lifetime use of illicit benzodiazepines was reported by 80% (n=79) of participants; of this group, one third (34%, n=34) had ever injected these. In the preceding six months, half (53%, n=52) reported use of illicit benzodiazepines and 6% (n=6) reported recent injection.

There was a large amount of overlap in the use of licit and illicit benzodiazepines: in the current cohort, 37% (n=25) of those who had recently used benzodiazepines reported exclusively illicit use; 22% (n=15) reported exclusively licit use; and 40% (n=27) had used licit and illicit benzodiazepines.

The median frequency of use of any form of benzodiazepine was 150 days in the preceding six months (SD=64.7, range 1-180). Since 2009, median frequency of benzodiazepine use had been increasing (59 days in 2009; 150 in 2013; 180 in 2014). Among the 7 participants that had recently injected any form of benzodiazepines and commented, the median frequency of injection was 6 days in the preceding six months (SD=16.5, range 1-48 days).

The demographic characteristics of those that had used illicit benzodiazepines in the past six months were similar to those of other PWID (see Section 3.1) in terms of age, sex, educational background, employment, sexual preference, prison history, accommodation, income source, current drug treatment, age of first injection, frequency of injection and duration of injecting career. However, participants who used illicit benzodiazepines in the previous six months were also significantly less likely to be Aboriginal or Torres Strait Islander (25% versus 75%: $\chi^2(1_{n=99})=5.80$, p=.016), though due to lower than expected cell counts this result should be interpreted with caution.

**Figure 31: Proportion of participants reporting recent use of benzodiazepines and median frequency of this use, 2006-2016**




**Source:** IDRS PWID interviews

Examination of Table 11 clearly indicates that, as per trends in previous IDRS cohorts, diazepam is the most commonly used benzodiazepine among those swallowing the drug who commented (n=81). Oral use of alprazolam (Xanax, Kalma, Aplrax) in the preceding six months remained relatively stable between 2006 and 2010 (between 46% and 63%). In 2011, this rate decreased to 35% (54% in 2010: $\chi^2(1_{n=150})=4.25$, p=.040), however, rates rose and stabilised between 2012 and 2014 (between 40% and 58%), declining again in 2015 (37%: $\chi^2(1_{n=136})=5.15$, p=.023). There was a slight decline in alprazolam use in 2016 to 25% from 37% in 2015 ($\chi^2(1_{n=136})=1.62$, p=.203).

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=.02), declining since then to 10% in 2016. Use of oxazepam (Serepax, Murelax, Alepam) was reported by between 37% and 49% of recent oral benzodiazepine users between 2006 and 2010. In 2011 this decreased to 29% ($\chi^2(1_{n=150})=5.6$, p=.020), and remained relatively stable since (31% and 20% in 2015 and 2016, respectively).

**Table 11: Benzodiazepine and related formulations used by PWID orally in the six months prior to interview, 2006-2016**

| | **2006** (n=83) % | **2007** (n=87) % | **2008** (n=75) % | **2009** (n=75) % | **2010** (n=71) % | **2011** (n=79) % | **2012** (n=77) % | **2013** (n=81) % | **2014** (n=74) % | **2015** (n=55) % | **2016** (n=81) % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alprazolam | 63 | 46 | 55 | 49 | 54 | 35 | 43 | 40 | 58 | 37 | 25 |
| Clonazepam | 6 | 5 | 7 | 17 | 17 | 1 | 13 | 9 | 16 | 7 | 3 |
| Diazepam | 80 | 82 | 97 | 96 | 100 | 89 | 95 | 91 | 96 | 80 | 63 |
| Flunitrazepam | 10 | 6 | 9 | 7 | 6 | 5 | 3 | 5 | 3 | - | - |
| Nitrazepam | 25 | 11 | 9 | 21 | 21 | 9 | 13 | 19 | 12 | 7 | 3 |
| Oxazepam | 43 | 44 | 37 | 49 | 49 | 29 | 35 | 27 | 33 | 31 | 21 |
| Temazepam | | | | | | | | | | | |
| Capsules | 1 | 5 | 1 | 3 | - | - | - | - | - | - | - |
| Tablets | 20 | 23 | 24 | 19 | 34 | 32 | 26 | 21 | 23 | 9 | 10 |
| Doxylamine | - | 3 | 1 | - | 3 | 1 | 3 | 4 | - | - | - |
| Zolpidem | - | 2 | 1 | 1 | 4 | - | 3 | - | 1 | - | - |

**Source:** IDRS PWID interviews.

In contrast to trends reported for oral use of benzodiazepines, from 2006 to 2014 use of alprazolam tablets was far more common amongst those injecting benzodiazepines than was diazepam (Table 12). In contrast, amongst the 2015 and 2016 IDRS cohorts there were equivalent rates of injecting alprazolam and diazepam. Rates of injection are still low in the 2016 cohort as compared to previous years (particularly for alprazolam: 30% in 2008 to 6% in 2016).

**Table 12: Types of benzodiazepines commonly injected by PWID, 2006-2016**

| Injected in last 6 months: | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alprazolam | 27 | 25 | 30 | 20 | 14 | 22 | 24 | 21 | 8 | 9 | 6 |
| Diazepam | 10 | 6 | 12 | 11 | 6 | 5 | 4 | 5 | 1 | 9 | 1 |
| Oxazepam | 4 | 2 | 3 | 1 | 4 | - | 1 | - | - | 7 | - |
| Clonazepam | 2 | 2 | 3 | 4 | 2 | - | 2 | - | - | - | - |
| Flunitrazepam | 2 | 2 | 4 | 2 | - | - | 1 | 1 | - | - | - |

**Source**: IDRS PWID interviews
Note: N=100 2006-2011; N=106 in 2012; N=107 in 2013; N=101 in 2014; N=100 in 2015, N=99 in 2016

### 4.7.2 Alprazolam

As discussed in Section 4.7.1, injecting use of alprazolam increased to 30% of the sample 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 from 2013. Two-thirds (66%, n=65) of the 2016 IDRS cohort reported ever using any alprazolam, with one-quarter (23%, n=23) reporting use in the preceding six months, similar to in 2015 (24%). Non-prescribed alprazolam was used by 21% (n=21) of the sample in the preceding six months, at a median frequency of 5 days (range 1-168 days). Prescribed alprazolam was used by just 2% (n=2) of the sample, at a median frequency of 91 days (range 2-180 days). Reflecting the general trend of decreased benzodiazepine injection, the rate of injecting use of any alprazolam tablets in the preceding six months was lower in the 2014 cohort compared to the 2013 cohort (8% versus 21%: $\chi^2(1_{n=208})=1.96$, p=.017), with similarly low rates in the 2015 cohort (9%) and in the 2016 cohort (6%).

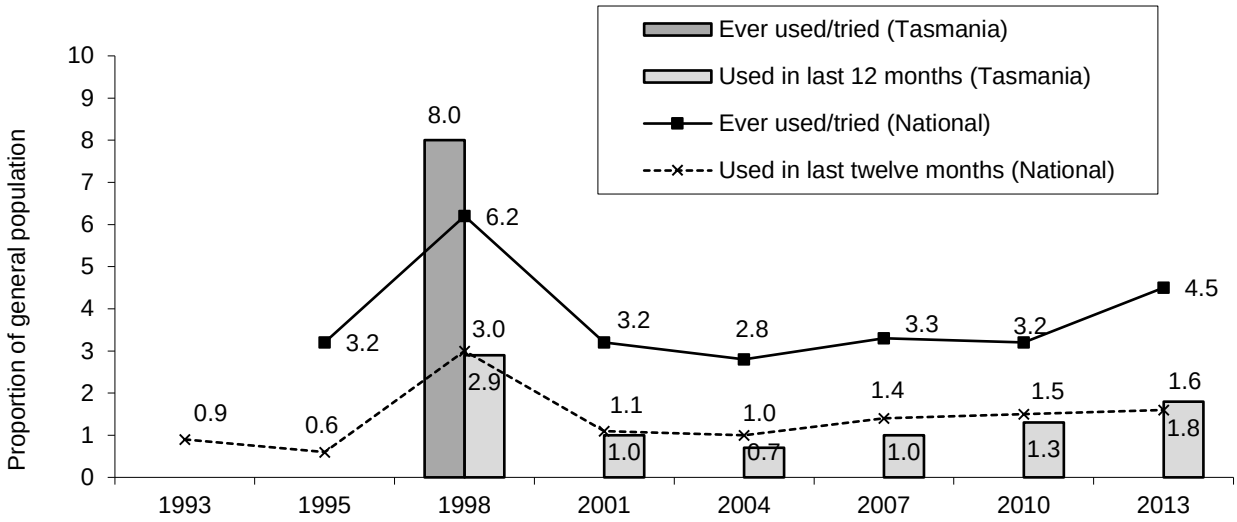
Twenty-six percent (n=26) of the sample reported ever having been prescribed alprazolam, with 10% (n=10) reporting injecting prescribed alprazolam at some stage (although none had done so in the last six months). Lifetime use of illicit alprazolam was reported by nearly three-fifths of the sample (59%, n=58), and one-quarter (26%, n=26) reported ever having injected the illicit form of the drug. Recent injecting use of illicit alprazolam was reported by 6% (n=6), at a median frequency of 7 days (range 1-48 days).

Participants who reported recent use of alprazolam were asked to comment on the predominant source of these drugs in the preceding six months (n=23), with almost all participants reporting illicitly sourced alprazolam (91%, n=21).
In previous Tasmanian IDRS studies, participants reported markedly higher rates of injection of benzodiazepines than were reported for the national sample. Between the 2006 and 2008 studies, the proportion of the PWID samples reporting recent injection of alprazolam was stable between 25% to 30%. In 2010, this rate of injection decreased to 14% ($\chi^2(1_{n=100})=6.56$, p=.010). Whilst between 2011 and 2013, this rate remained stable at a slightly higher rate (ranging between 21%-24%), in 2014 this rate decreased to 8%( $\chi^2(1_{n=210})=6.81$, p=.009) stabilising in 2016 (6%) (Table 12).

### 4.7.3 Prevalence of benzodiazepine use

In the 2013 National Drug Strategy Household Survey (AIHW, 2014) (n=1,134), 1.8% of Tasmanian respondents reported using benzodiazepines in the preceding year, a slight increase relative to 2010 (1.3%). The rates reported for Tasmania are similar to those reported nationally in 2013 (1.6%) and 2010 (1.5%) (AIHW, 2014) (Figure 32)

**Figure 32: Prevalence of benzodiazepine use in Australia and Tasmania among those aged 14 years and over, 1993-2013**




**Source:** National Drug Strategy Household Survey 1993-2013

### 4.7.4 Use in particular populations

Despite high rates of positive illicit drug urine screens showing benzodiazepines in 2004/05 (20%) and 2005/06 (16%), subsequent rates have since been quite low and declining (7% in 2007/08; 9% in 2008/09; 6% in 2009/10; 5% in 2010/11, 4% in 2011/12 and 2012/13 respectively; 1% in 2013/14). There were no positive urine screens indicating use of benzodiazepines in 2014/15 or 2015/16 (although a decline in number of tests conducted should be noted).

### 4.7.5 Benzodiazepine use among PWID

Reported use of benzodiazepines as the main drug injected by non-pharmacy NSP outlet clients has remained stable over the preceding ten years (Table 13), ranging between <0.1% and 1.2%. 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).

**Table 13: Proportion of transactions in which benzodiazepines were reported as 'drug most often injected' by Tasmanian non-pharmacy Needle and Syringe Program clients, 2005/06-2015/16**

| Year | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of transactions reporting benzodiazepines | 52 | 304 | 399 | 147 | 201 | 215 | 125 | 63 | 108 | 81 | 44 |
| Percent of total transactions reporting benzodiazepines | 0.2% | 0.9% | 1.2% | 0.4% | 0.6% | 0.7% | 0.6% | 0.4% | 0.5% | 0.4% | 0.2% |

**Source:** Population Health, Department of Health and Human Services

## 4.8 Other drugs

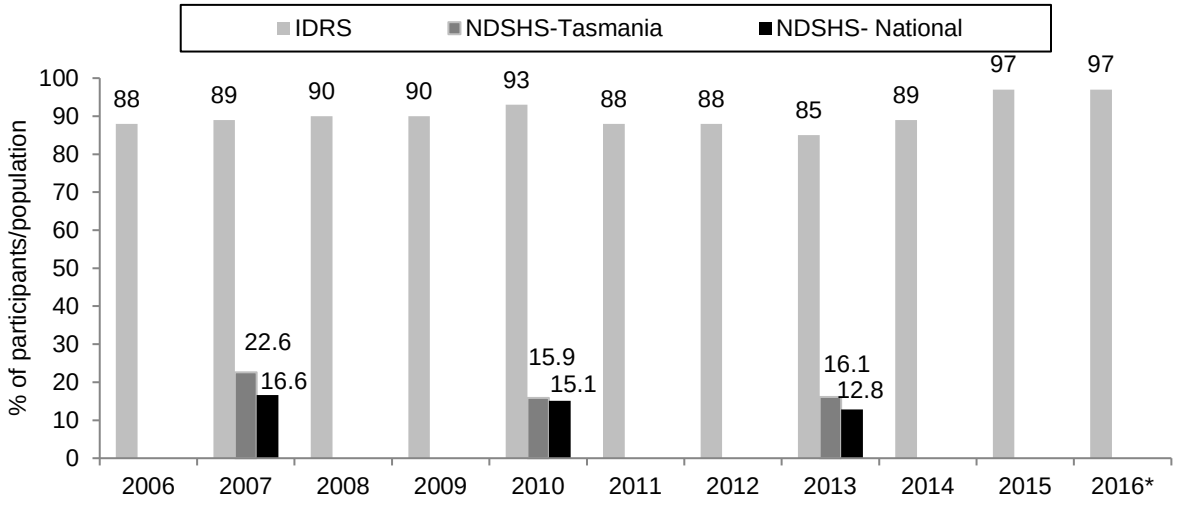
**Key Points:**

- Most of the sample (97%) reported use of tobacco in the preceding six months, with the majority smoking on a daily basis (180 days);
- Half (54%) reported use of alcohol in the preceding six months, at a median frequency of 11 days of the previous 180;
- A small proportion (15%) had recently used ecstasy, once in the past six months on average;
- One-quarter (24%) reported recent illicit use of prescription stimulants, with methylphenidate used more commonly than dexamphetamine; and
- One-tenth (9%) had used illicit quetiapine in the preceding six months, at a median frequency of eight of the past 180 days.

### 4.8.1 Tobacco

All participants in the current study reported lifetime use of tobacco (100%, n=99), with a similarly high proportion reporting use in the preceding six months (97%, n=96). The median frequency of use was 180 days (range 24-180 days), equating to daily use. Seventy percent (n=69) of the sample reported daily use of tobacco, a notably higher rate than was reported in the 2013 National Drug Strategy Household Surveys (NDSHS) (AIHW, 2014) both nationally and for Tasmania (12.8% and 16.1% respectively), and for an age-matched sub-sample (aged 30-39) from the national 2010 NDSHS (15.1%) (Figure 33). Nationally, the NDSHS has estimated prevalence of daily tobacco use as decreasing from 16.1% in 2007 to 12.8% in 2013; in Tasmania this rate also decreased, from 22.6% in 2007 to 16.1% in 2013.

**Figure 33: Rates of tobacco use amongst Australian and Tasmanian populations and Tasmanian IDRS samples, 2006-2016**

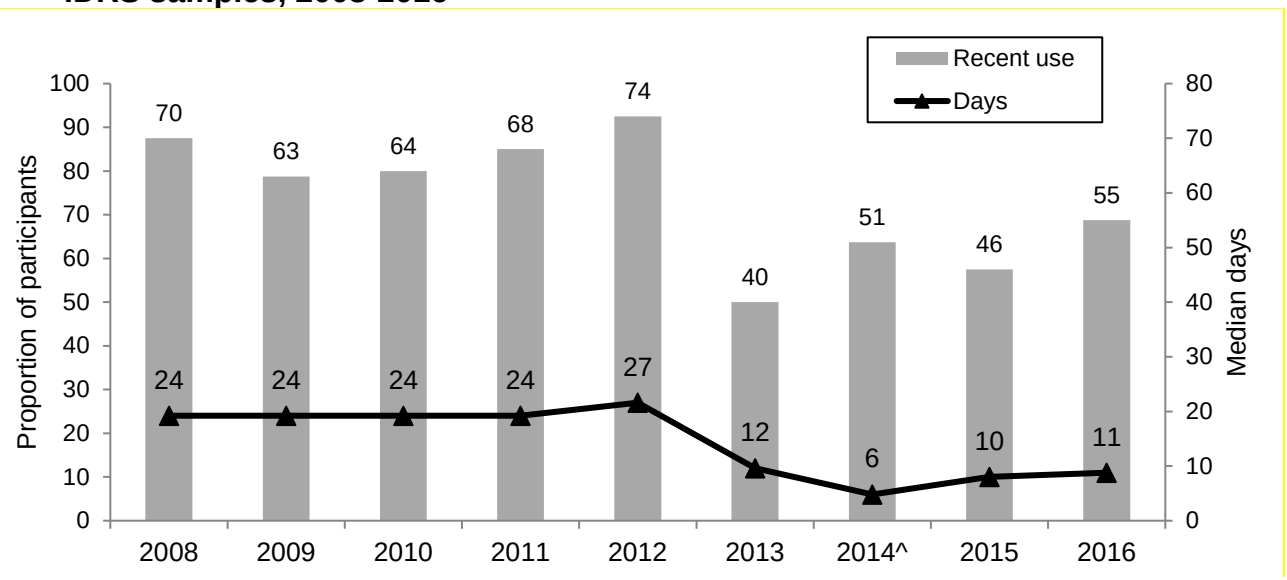



**Source:** IDRS PWID interviews, National Drug Strategy Household Surveys, 2004-2013 (AIHW, 2008a&b, 2011, 2014). *NDSHS data for 2016 was not available at the time of publication.

### 4.8.2 Alcohol

The majority of the 2016 IDRS cohort reported lifetime use of alcohol (98%, n=97), and nearly half (55%, n=54) had used alcohol in the preceding six months. The median frequency of use amongst those who had recently consumed alcohol was 11 days (range 1-180), which equates to use approximately fortnightly. Two participants reported daily alcohol use in the preceding six months preceding the interview (Figure 34).

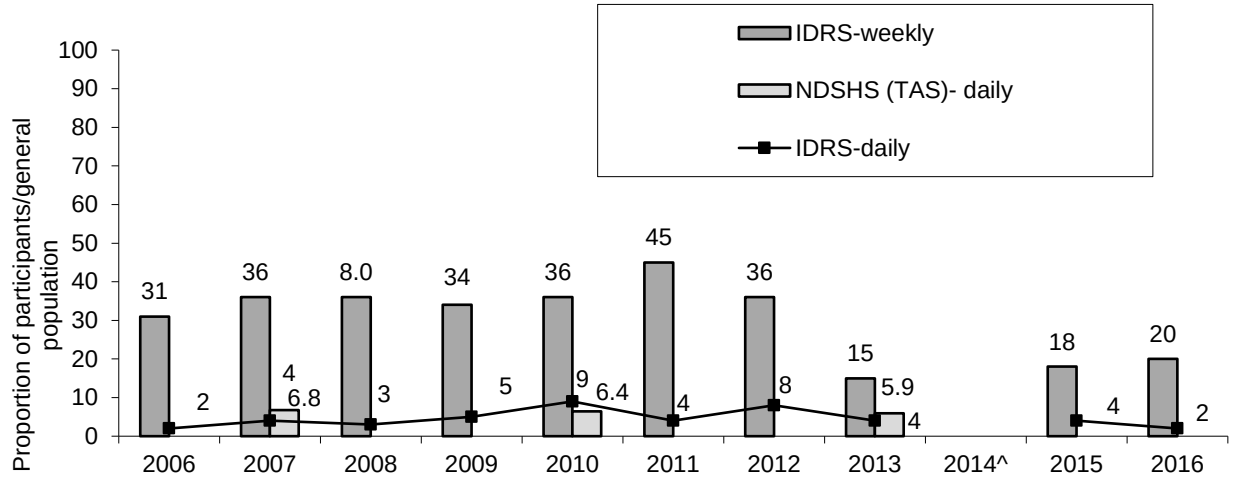
**Figure 34: Rates of alcohol use and median frequency of use amongst Tasmanian IDRS samples, 2008-2016**




**Source**: IDRS participant interviews
^ Note that there was substantial missing data for 2014 and thus these figures should be treated with caution

Based on data from the 2013 National Drug Strategy Household Survey, it was estimated (from the sample of 1,134 participants) that approximately 38.9% of Tasmanians had used alcohol on a weekly basis in the year prior to interview (Figure 35), compared with 37.3% Australians nationally (AIHW, 2013). The proportion of the Tasmanian NDSHS sample that had used alcohol daily in the year prior to interview was similar to the national estimate (5.9% versus 6.5%).

**Figure 35: Rates of alcohol use amongst Tasmanian NDSHS participants aged 14 years and older and IDRS samples, 2006-2016**




**Source:** IDRS PWID interviews, National Drug Strategy Household Surveys, 2007-2013 (AIHW, 2008b, 2011, 2014). *NDSHS data for 2016 was not available at the time of publication. ^ Rates of alcohol use for the 2014 IDRS sample were not displayed due to unreliable estimates of use based on missing data

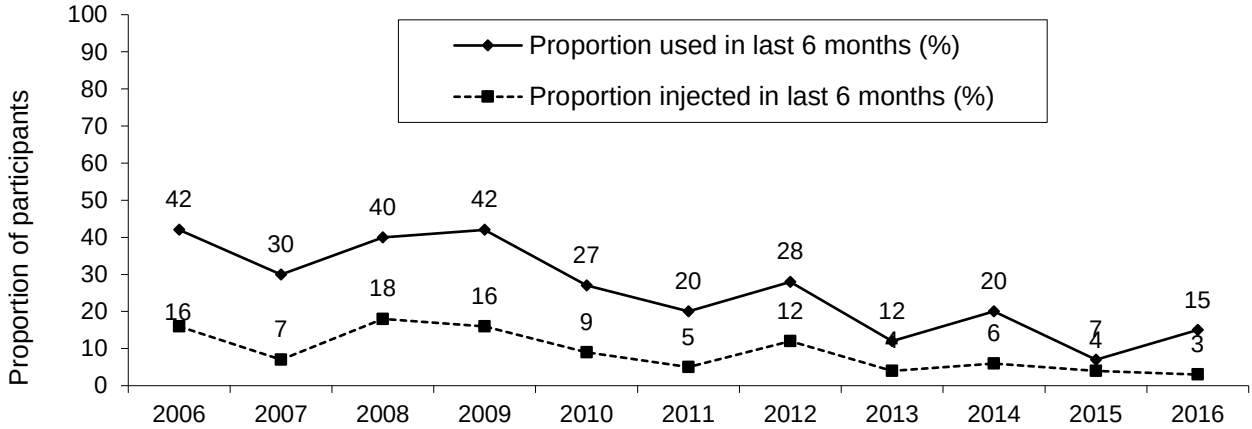
IDRS participants were also asked to complete the Alcohol Use Disorders Identification Test-C (AUDIT-C) (Bush et al., 1998), a modified version of the 10-item AUDIT questionnaire (Saunders et al., 1993; Reinert & Allen, 2002). The AUDIT-C is a brief 3-item screening scale used to identify individuals who are hazardous drinkers or who may have alcohol problems by assessing frequency of alcohol use and intake. Higher scores indicate greater likelihood of hazardous and harmful drinking; a total score of 3 or more for women and of 4 or more for men is recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence.

Amongst participants who reported use of alcohol in the preceding six months and completed the section (n=52), the overall mean AUDIT score was 5.75 (median 5; range 1-12, SD=3). Mean score amongst male participants (n=31) was 6.4 (median 7; range 1-12, SD=2.9), and 87% of these participants exceeded the cut-off indicative of hazardous use. Mean score amongst female participants (n=21) was 4.9 (median 5; range 1-10, SD=3), and 77% of these participants exceeded the cut-off indicative of hazardous use.

### 4.8.3 Ecstasy and related drugs

In the PWID sample, 69% (n=68) had used ecstasy at some stage in their lives, and 27% of the sample reported injecting at some point in their lifetime. Use of ecstasy in the previous six months was reported by 15% (n=15) at a median frequency of one day (range 1-26 days (Figure 36). Use of ecstasy has been declining amongst local IDRS cohorts: in 2008 and 2009, approximately 40% of each sample reported recent use. From 2010 to 2012 the rate of recent use decreased and relatively stabilised between 20% and 28% of the cohort. A significant decline in recent use was seen from 2012 (28%) to 2013 (12%): $\chi^2(1_{n=213})=7.65$, p=.006), with a partial resurgence in rate of use amongst the cohort from 2013 to 2014 (20%) (p=.18), with use in 2015 returning to the lower levels previously seen (7%: $\chi^2(1_{n=201})=6.02$, p=.014). In 2016, this rate was higher than in 2015, but not significantly higher (15%: $\chi^2(1_{n=199})=2.58$, p=.108). This is reflected in comments from KEs working in alcohol and drug treatment services and NSP outlets, noting reduced availability of ecstasy in 2016 relative to previous years.

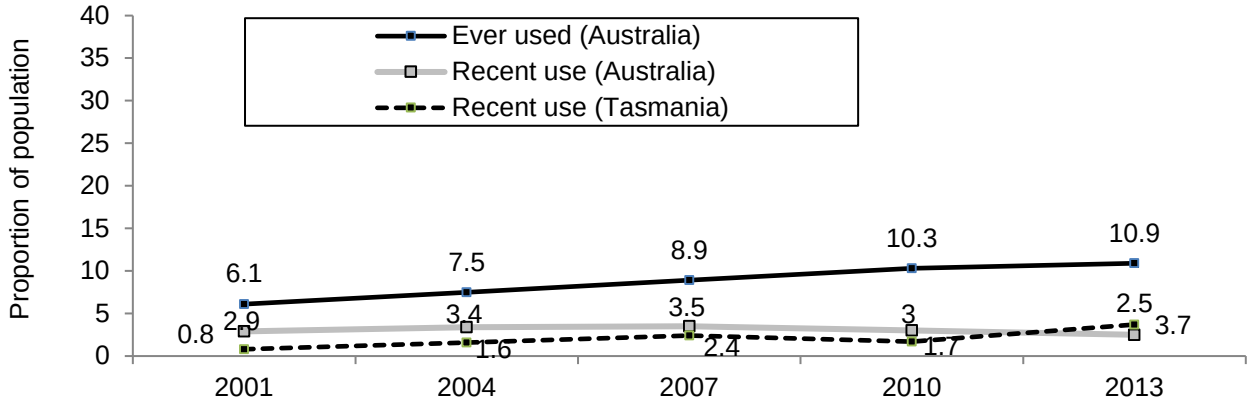
**Figure 36: Proportion of PWID reporting ecstasy use and injection in the preceding six months, 2006-2016**




**Source**: IDRS PWID interviews

Between the 2010 and 2013 National Drug Strategy Household Surveys (AIHW, 2011, 2014), a decrease in past yearly use of ecstasy for the national sample was reported (3.0% in 2010 versus 2.5% in 2013; p<.050). In Tasmania, the estimated prevalence of use increased from 1.7% in 2010 to 3.7% in 2013 ($\chi^2(1_{n=2194})=7.55$, p=.006) (Figure 37).

**Figure 37: Rates of ecstasy use amongst Tasmanian NDSHS and IDRS samples, 2001-2013**



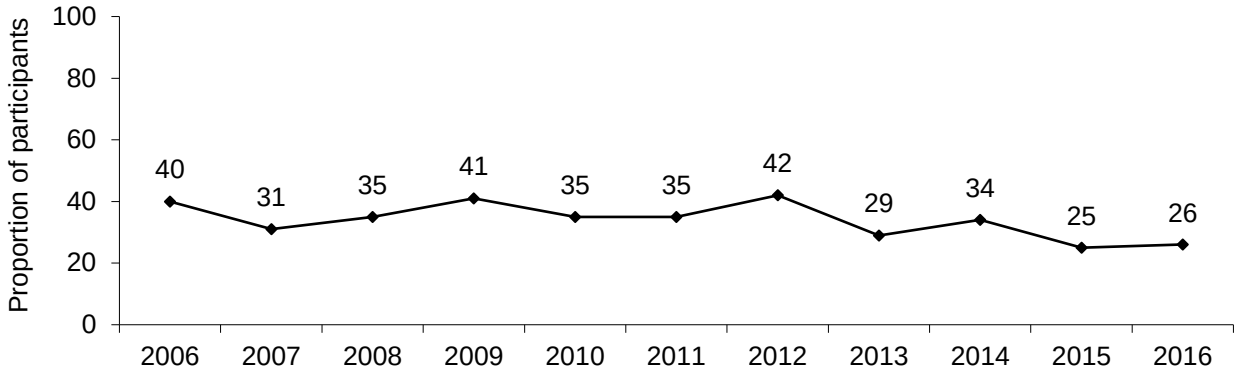

**Source:** National Drug Strategy Household Surveys, 2001-2013 (AIHW, 2002a&b, 2005a&b, 2008a&b, 2011, 2014)

### 4.8.4 Prescription stimulants (dexamphetamine, methylphenidate)

In the 2016 PWID sample, 55% (n=54) had used illicit prescription stimulants at some stage in their lives, with one-quarter (26%) using it in the last six months. Injection of these drugs was common, reported by 50% of the sample at some stage of their lives, and 26% in the preceding six months, at a median frequency of 8 days in this period (range 1-96 days), equivalent to use approximately once every three weeks. Only 6% of the sample had swallowed non-prescribed pharmaceutical stimulants in the preceding six months. Of those who commented on the main type of illicit pharmaceutical stimulant used (n=26), methylphenidate (77%) was the main form used, followed by dexamphetamine (19%).

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 only two participants reported prescription stimulants as the drug they had most commonly used in the preceding month. Looking at use of pharmaceutical stimulants over time, the proportion of participants reporting recent use was relatively stable between 2006 and 2012 (40% to 43%), with some evidence of a decline since 2013 (26% in 2016) (Figure 38).

**Figure 38: Recent use of illicit pharmaceutical stimulants amongst IDRS participants, 2006-2016**




**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, school education, employment status, relationship status,

stable accommodation, prison history, source of income, engagement in drug treatment, age first injected and duration of injecting career. However, participants reporting recent use of illicit prescription stimulants were significantly more likely to have completed post-school qualifications (73% versus 49%: ($\chi^2(1_{n=99})=4.38$, p=.036) and to inject daily (39% versus 18%: $\chi^2(1_{n=99})=4.59$, p=.032) than those who did not recently use these drugs.

### 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 from the 2011 survey onwards. Quetiapine is an antipsychotic medication, initially marketed under the name Seroquel. Almost half (44%) of the 2016 IDRS sample reported lifetime use of quetiapine, a similar proportion to in 2015 (51%), 2014 (43%) and 2013 (45%). In the preceding six months, 9% of the 2016 sample reported licit use and 9% illicit use. The median frequency of use of illicit quetiapine was just eight days (range 1-48 days, n=9). All nine of these participants reporting recent use of the illicit form of quetiapine had reported exclusively swallowing it.

### 4.8.6 Inhalants

While 27% of the PWID respondents reported ever using inhalants, three participants (3%) had used inhalants (nitrous oxide) on a median of one occasion (range 1-10 days) in the six months prior to interview.

### 4.8.7 Steroids

Two participants (2%) reported recent use of steroids, at a median of frequency of 49 days (range 8-90). Neither participant reported recent injection of steroids, with both citing oral use. Only 6% of the 2016 sample (n=6) reported lifetime use of steroids.

### 4.8.8 Hallucinogens

Twelve percent (n=12) of the PWID respondents in the current study reported use of hallucinogens in the six months prior to interview, although more than two-thirds (72%) 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 1-180 days). The types of hallucinogens most commonly used amongst this group were lysergic acid diethylamide (LSD) (n=10) and psychedelic mushrooms (n=2). These indications of use are similar to those reported in previous Tasmanian IDRS samples, with recent use remaining generally stable at around 20% or less of each cohort over this time.

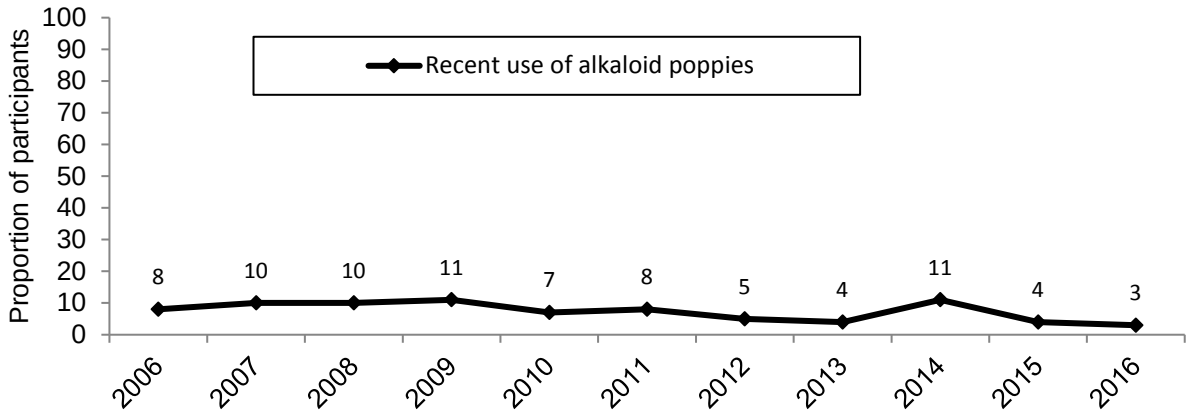
In support of this, the Ecstasy and related Drugs Reporting System – using similar methods to the IDRS but a primary ecstasy-using group as its consumer sample and conducted in Hobart (Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011; Matthews & Bruno, 2012; Matthews, Bruno & Peacock 2013; Matthews, Bruno & Nicholls, 2014; Matthews, Lusk, & Bruno, 2015, 2016; Lusk, Ney, & Bruno, 2017) – found higher levels of hallucinogen use relative to the IDRS PWID cohort (albeit also at a low frequency) among frequent ecstasy users (39% of the 100 ecstasy users interviewed reported using LSD in the six months prior to interview in 2016; and 24% reported using mushrooms). More details in regard to patterns of hallucinogen use in such demographic groups can be found in Lusk, Ney, Matthews, and Bruno (2017).

### 4.8.9 Alkaloid poppies

Of the 78 participants who commented, 3% percent (n=2) 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 remained low in recent years, between 3% and 11% between 2006 and 2016 (
Figure 39). One KE noted that there was an increasing number of people using alkaloid poppy seeds.

**Figure 39: IDRS participant use of alkaloid poppies, 2006-2016**




**Source**: IDRS PWID interviews

# 5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

## 5.1 Heroin

**Key Points:**

- Six participants were able to comment on heroin prices, purity or availability;
- Participants last paid $71 for a cap and $300 for one gram of heroin;
- Half of participants reported subjective heroin purity as high, whereas the other half reported purity to have been medium.

### 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, three participants commented on the price of one 'point' of heroin, reporting the median price to be $71 (no single mode, range $50-80, n=3), one participant commented on the price of a quarter gram purchase ($120), one reported a half-gram purchase to have cost $200 and three participants reported a median cost price of $300 for a gram of heroin (no single mode, range $250-420, n=3). Participants largely reported the price of heroin to have remained stable over the last 6 months (80%, n=4), with one participant noting that prices had decreased (20%, n=1) (Table 14). One KE reported that heroin was currently cheaper bought off the internet than on the street ($100 versus $150 per point).

**Table 14: Modal price of heroin purchased by PWID, 2006-2016**

| Descriptor | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $ | *n* | $ | $ | $ | *n* | $ | *n* | $ | *n* |
| Cap, taste, point (~0.05-0.15g) | - | *0* | - | - | - | *0* | $50 | *1* | - | *0* |
| 'Points'/'2 tastes'(~0.2g) | $200[#] | *1* | - | - | $200[#] | *1* | - | *0* | - | *0* |
| 1/4 gram (0.25g) | - | *0* | - | - | - | *0* | - | *0* | - | *0* |
| Half-weight (0.5g) | - | *0* | $150 | $150 | - | *0* | $500 | *0* | - | *0* |
| Gram (1.0g) | - | *0* | $450 | $450 | - | *0* | - | *0* | - | *0* |

**Source:** IDRS PWID interviews

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

[#] Refers to 2-3 points

~ Approximately

**Table 14: Modal price of heroin purchased by PWID, 2006-2016 (continued)**

| Descriptor | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $ | *n* | $ | *n* | $ | *n* | $ | *n* | $ | *n* | $ | *n* |
| Cap, taste, point (~0.05-0.15g) | $75 | *2* | $50 | *4* | $50 | *2* | $50 | *2* | $40 | *1* | $71 | *3* |
| 'Points'/'2 tastes'(~0.2g) | - | *0* | - | *0* | - | *0* | - | *0* | - | *0* | - | *0* |
| 1/4 gram (0.25g) | - | *0* | - | - | $250 | *1* | - | *0* | - | *0* | $120 | *1* |
| Half-weight (0.5g) | $400 | *1* | $225 | *2* | $200 | *1* | - | *0* | - | *0* | $200 | *1* |
| Gram (1.0g) | $400 | *2* | - | - | - | - | 450[*] | *2* | $100 | *1* | $300 | *3* |

**Source:** IDRS PWID interviews

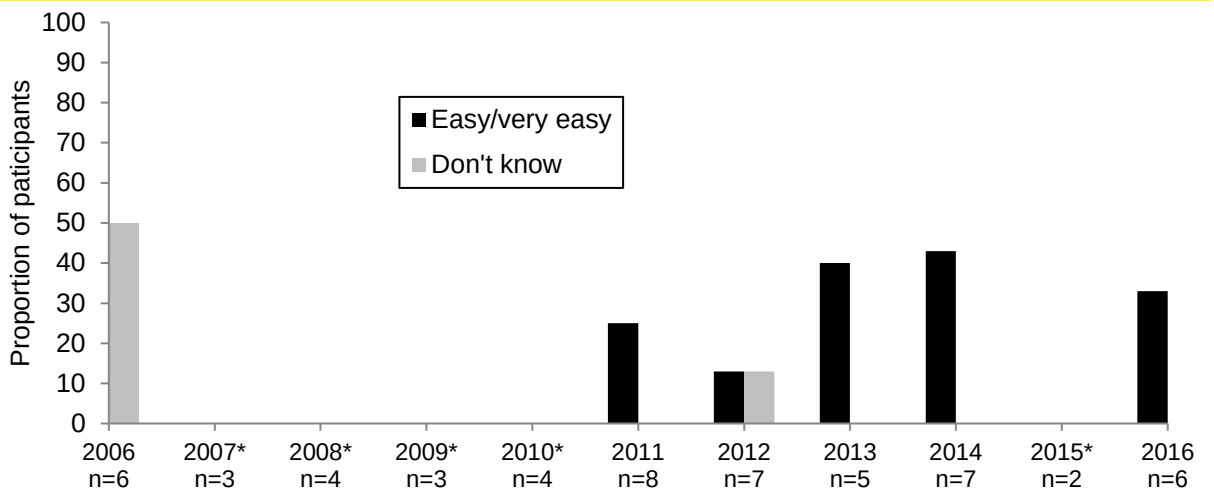
[*] Where multiple modes existed, median price was substituted

~ Approximately

### 5.1.2 Availability

Six PWID participants were able to comment on the availability of heroin: three reported it was 'difficult' (50%) to obtain while the others reported it was 'very easy' (17%, n=1), 'easy' (17%, n=1) or 'very difficult' (17%, n=1) to obtain (Figure 40). When asked to comment on the changes in availability over the six months preceding the interview, participants responded that the availability had been stable (100%, n=6). It is important to note that these responses refer only to heroin purchased in Tasmania; purchases made in other jurisdictions were not included.

**Figure 40: Participant reports of current heroin availability, of those who commented, 2006-2016**




**Source**: IDRS PWID interviews

* The estimates in 2007-2010 and 2015 were not included as they were based on an extremely small number of reports (i.e. <5 per annum)

Tasmania Police reported two heroin seizures in 2011/12. Between 2006/07 and 2010/11, and from 2012/13-2014/15, no heroin seizures were reported.

Several KE reported an increase in perceived heroin availability in Tasmania over the past year. Heroin was regarded by KE as typically imported from the mainland rather than purchased locally.

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

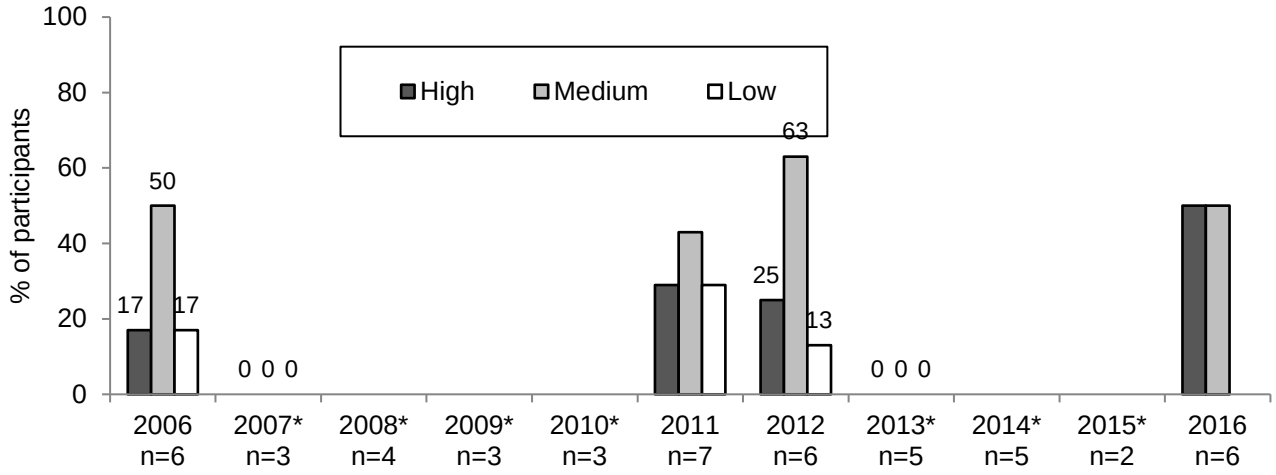
Participants were asked to comment on the subjective purity of heroin they had recently used. Half of commenting participants noted that the purity had been 'high' (50%, n=3) and the other half reported that purity had been 'medium' (50%, n=3) (Figure 41). One KE commented that the purity of heroin in Tasmania was high and just as good as the mainland. Another KE in 2016 reported that heroin purity was very high when bought off the internet.

Participants were also asked to comment on any perceived changes in heroin purity in the preceding six months. Mixed responses were reported, with the small number able to comment

noting all options (n=2 reporting increasing purity; n=2 reporting stable; n=1 decreasing and n=1 fluctuating purity).

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.

**Figure 41: Proportion of IDRS participants reporting on current heroin purity, 2006-2016**




**Source:** IDRS PWID interviews
* The estimates in 2007-2010 and 2013-2015 were not included as they were based on an extremely small number of reports (i.e. ≤5 per annum)

### 5.1.4 Trends in heroin use

While the proportion of local IDRS participants reporting recent use of heroin has remained low over several years, the median frequency of this use in the preceding six months has increased from three days in 2015 to fifteen days in 2016. 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 limited, and participant reports on subjective purity were mixed. In addition, Tasmania Police reported no seizures related to heroin in the 2014/15 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 2016.

With the high use of opioids and stable strong preference for heroin amongst the PWID sampled by the IDRS, both locally and nationally (Stafford & Breen, 2016), future trends in use of the drug continue to merit close attention.

## 5.2 Methamphetamine

**Key Points:**

*Powder form*

- The median price for 1 'point' (0.1g) of powder form methamphetamine was $50, and $250 for 1 gram. Participants generally considered that these prices had remained stable over the preceding six months;
- Availability of this form was mostly considered to be 'easy' or 'very easy', and it was perceived that this had remained unchanged over the preceding six months;
- Most purchases occurred from a friend or known dealer, with these most commonly occurring in a dealer's or friend's home; and
- Most participants who commented stated purity was low to medium and there were mixed reports in regards to changes in purity over the preceding six months.

*Base/paste form*

- Few participants (n=2) were able to comment on trends related to base/paste; as such, reported trends are not reliable but most indications suggest unchanged price and purity from previous years

*Crystal/ice*

- The median price for 1 'point' (0.1g) of crystal methamphetamine was $100, in keeping with the prices in 2013, 2014 and 2015. The majority of participants who commented considered that the price for this form had remained stable over the preceding six months;
- Participants noted availability of this form to be 'easy' or 'very easy', and that this had remained unchanged over the preceding six months;
- Most purchases occurred from a friend or known dealer, with these most commonly occurring in an agreed public location, a dealer's home or a friend's home; and
- Purity was generally considered to be 'medium' or 'high', however no clear trends regarding changes in purity over the preceding six months were evident.

### 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 will be discussed separately. However, across all forms of the drug, the majority of PWID that were able to comment on price considered that it had remained stable in the preceding six months (Table 15).

**Table 15: Participants' reports of price trends of methamphetamine in the past six months, 2016**

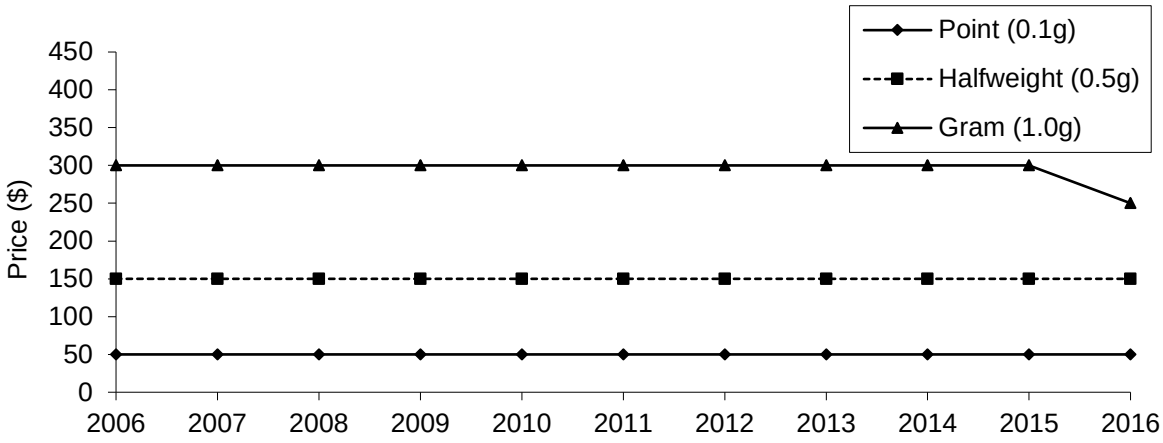
| | 2016 IDRS N=99 | | |
|---|---|---|---|
| | **Powder** | **Base/Paste** | **Crystal** |
| **Price Trend** | | | |
| Able to respond (n) | 22 | 2 | 63 |
| *Of those who responded:* | | | |
| Increasing (%) | 14 | 0 | 5 |
| Stable (%) | 68 | 100 | 79 |
| Decreasing (%) | 9 | 0 | 10 |
| Fluctuating (%) | 9 | 0 | 6 |

**Source:** IDRS PWID interviews

*Methamphetamine Powder*

PWID reported the median last purchase price of powder methamphetamine as $50 for 0.1g (modal price $50, range $25-$100, n=15); $150 for 0.5g purchases (modal price $150, range $50-350, n=7); and $250 per gram (modal price $250, range $100-350, n=6). These prices were largely consistent with the prices reported in surveys since 2006 (Table 16, Figure 42). The majority (68%, n=22) of those consumers that were able to comment reported stable prices for methamphetamine powder in the preceding six months, with a minority of PWID participants reporting perceived recent increased prices (14%, n=3).

**Figure 42: Median prices of powder methamphetamine estimated from PWID purchases, 2006-2016**

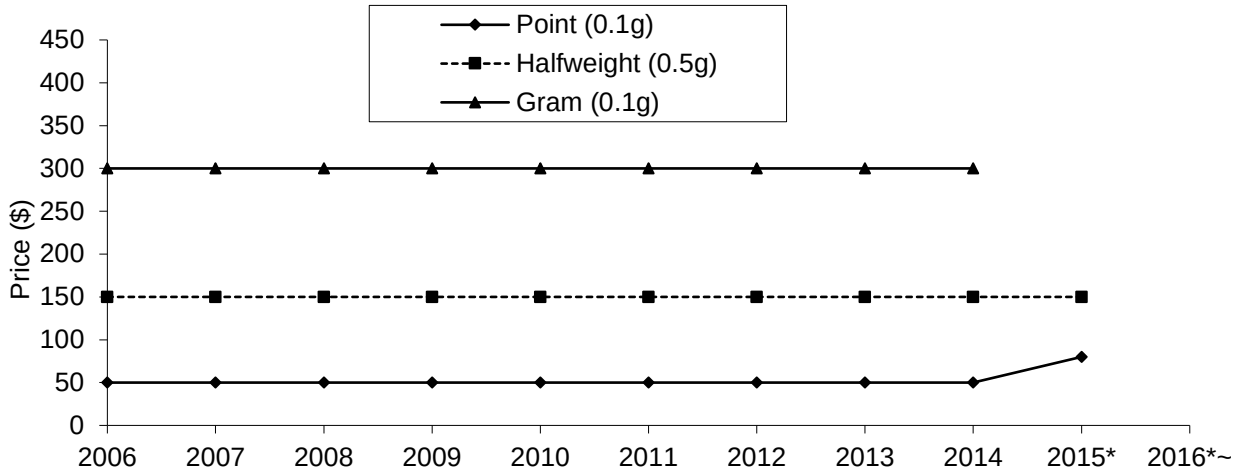



**Source:** IDRS PWID interviews

*Base/paste methamphetamine*

Only two PWID reported on prices for purchases of 'base/paste' methamphetamine, as such it is not possible to infer typical prices for this form of the drug (Table 19). No participant was able to provide feedback on the purchase price of a gram of 'base/paste' methamphetamine. Prices have, however, remained largely stable between 2006 and 2015 (Table 16; Figure 43). Similar to trends for powder methamphetamine, both consumers able to comment felt that prices for 'base/paste' methamphetamine had remained stable in the preceding six months. KE interviewed in 2016 did not comment on the price of 'base/paste' methamphetamine.

**Figure 43: Median prices of base/paste methamphetamine estimated from PWID purchases, 2006-2016**




**Source:** IDRS PWID interviews
* In 2015 and 2016, no participants reported on price for 1 gram purchase of base/paste methamphetamine
~ n<10

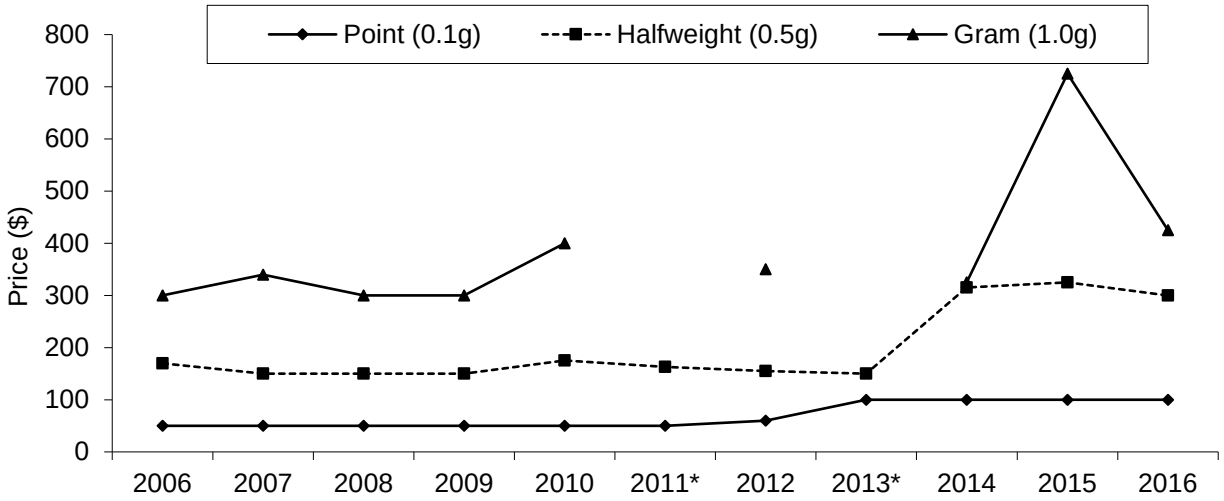
*Crystal Methamphetamine*

The median purchase price consumers reported last paying for the higher-purity crystal methamphetamine was $100 per 0.1g (modal price $100, range $40-100 n=57) which is consistent with information collected in 2014 and 2015. This confers with KE reports, which averaged to the price of $100 per point (0.1g).

The median price estimate in 2016 for 0.5g was $300 (modal price $300, range $50-600, n=13), and for one gram purchases a median price of $425 (no single mode, range $50-600, n=5), which was a decrease on the price reported for 2015 ($725 for 1g), but consistent with previous years (Table 16).

Examining overall trends in reported purchase prices for crystal methamphetamine, there have been shifts in the prices that participants reported paying. The price for 'point' purchases has been stable from 2013 to 2016 at about $100 per 'point', after an increase from a stable price of $50 from 2006-2011. Although the median price of a gram purchase was high in 2015, the median purchase price of a gram of crystal/ice methamphetamine in 2016 was lower (Table 16). These decreasing prices may reflect the increasing availability of crystal/ice methamphetamine in the current market or a particularly abnormal market in 2015, although due to low numbers of respondents commenting on gram purchases, trends should be interpreted with caution. Despite these apparent changes, the majority of participants who commented reported prices had remained stable in the preceding six months (79%, n=50) (Table 16).

**Figure 44: Median prices of crystal methamphetamine/ ice estimated from PWID purchases, 2006-2016**




**Source:** IDRS PWID interviews

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

*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 had been attained through the Australian Bureau of Criminal Intelligence (ABCI, now the ACC). During the 2014/15 financial year, Tasmania Police reported methamphetamine (non-crystal) prices as $50 per 'point' (0.1 g) (Table 17). The price for crystal methamphetamine was reported to be $100 for a point. Data for the 2015/16 reporting period was unavailable at the time of publication.

**Table 16**: **Most common amounts and prices of methamphetamine purchased by PWID, 2006-2016**

| Descriptor* | 2006 Survey Modal Price *(range in parentheses)* | *n* | 2007 Survey Modal Price *(range in parentheses)* | *n* | 2008 Survey Modal Price *(range in parentheses)* | *n* | 2009 Survey Modal Price *(range in parentheses)* | *n* | 2010 Survey Modal Price *(range in parentheses)* | *n* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Crystal methamphetamine** | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50 *($40-80)* | *13* | $50*($20-80)* | *17* | $50 *($40-50)* | *14* | $50*($35-100)* | *20* | $50*($50-80)* | *5* |
| *half-gram (0.5 g)* | $150 *($120-300)* | *25* | $150† *($120-225)* | *12* | $150 *($150-250)* | *10* | $150*($150-200)* | *7* | $175†*($100-250)* | *7* |
| *gram (1.0 g)* | $300 *($300-480)* | *7* | $340†*($300-380)* | *2* | $300 *($190-450)* | *5* | $300*($250-500)* | *4* | $400†*($250-500)* | *3* |
| **Methamphetamine base/paste** | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50 *($20-70)* | *23* | $50*($30-50)* | *30* | $50 *($20-100)* | *16* | $50*($40-80)* | *42* | $50*($40-50)* | *21* |
| *half-gram (0.5 g)* | $150 *($140-200)* | *25* | $150*($120-200)* | *23* | $150 *($150)* | *4* | $150*($100-180)* | *26* | $150*($100-250)* | *15* |
| *gram (1.0 g)* | $300 *($250-300)* | *11* | $300*($250-300)* | *3* | $300 *($300)* | *3* | $300*($250-350)* | *5* | $300*($250-400)* | *6* |
| **Methamphetamine powder** | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50 *($30-50)* | *20* | $50 *($40-50)* | *34* | $50 *($50)* | *34* | $50*($40-50)* | *38* | $50*($30-70)* | *31* |
| *half-gram (0.5 g)* | $150 *($80-200)* | *26* | $150*($150-200)* | *29* | $150 *($75-200)* | *28* | $150*($100-300)* | *37* | $150*($100-200)* | *35* |
| *gram (0.8 g)* | $300 *($250-300)* | *8* | $300*($270-300)* | *3* | $300 *($250-300)* | *9* | $300*($250-320)* | *7* | $300*($180-350)* | *18* |
| **Pharmaceutical stimulants** | | | | | | | | | | |
| *dexamphetamine (5mg)* | $5 *($2-10)* | *17* | $5 *($0.5-45)* | *20* | $5 *($1.5-10)* | *21* | $5*($4-10)* | *25* | $5*($4-7)* | *21* |
| *methylphenidate(10mg)* | $5 *($2-30)* | *12* | $5 *($2.5-13)* | *10* | $5 *($5-15)* | *13* | $10*($5-10)* | *31* | $10*($3-10)* | *8* |

**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 16: Most common amounts and prices of methamphetamine purchased by PWID, 2006-2016 *(continued)***

| Descriptor* | 2011 Survey Modal Price *(range in parentheses)* | *n* | 2012 Survey Modal Price *(range in parentheses)* | *n* | 2013 Survey Modal Price *(range in parentheses)* | *n* | 2014 Survey Modal Price *(range in parentheses)* | *n* | 2015 Survey Modal Price *(range in parentheses)* | *n* | *2016 Survey Model Price (range in parentheses)* | *n* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Crystal methamphetamine** | | | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50*($50-100)* | *15* | $50*($40-100)* | *21* | $100*($50-100)* | *30* | $100*($40-150)* | *29* | $100*($0-100)* | *39* | $100*($40-100)* | *57* |
| *half-gram (0.5 g)* | $150*($150-250)* | *4* | $150*($150-200)* | *8* | $150*($150-300)* | *8* | $150†($150-500) | *6* | $350*($200-350)* | *6* | $300*($50-600)* | *13* |
| *gram (1.0 g)* | - | *0* | $400*($190-800)* | *12* | - | *0* | $300($150-1000) | *8* | $725†*($300-1000)* | *4* | $425†*($50-600)* | *5* |
| **Methamphetamine base/paste** | | | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50*($40-70)* | *11* | $50*($40-70)* | *16* | $50*($30-100)* | *9* | $50*($50-100)* | *5* | $80†*($50-100)* | *3* | $100†*($100)* | *1* |
| *half-gram (0.5 g)* | $150*($130-200)* | *16* | $150*($120-200)* | *24* | $150*($120-150)* | *5* | $150*($150)* | *5* | $150*($150)* | *2* | $50†*($50)* | *1* |
| *gram (1.0 g)* | $300*($180-400)* | *7* | $300*($250-350)* | *18* | $300*($300)* | *1* | $300*($50-300)* | *5* | - | *0* | - | *0* |
| **Methamphetamine powder** | | | | | | | | | | | | |
| *'point' or packet (0.1 g)* | $50*($30-70)* | *21* | $50*($30-50)* | *31* | $50*($40-100)* | *35* | $50*($50-100)* | *24* | $50*($5-100)* | *33* | $100*($25-100)* | *15* |
| *half-gram (0.5 g)* | $150*($150-200)* | *23* | $150*($100-300)* | *48* | $150*($150-200)* | *22* | $150*($100-400)* | *23* | $150*($150-225)* | *23* | $150*($50-350)* | *7* |
| *gram (0.8 g)* | $300*($200-300)* | *12* | $300*($180-400)* | *25* | $300*($100-300)* | *10* | $300*($200-350)* | *9* | $300*($300-700)* | *6* | $250*($100-350)* | *6* |
| **Pharmaceutical stimulants** | | | | | | | | | | | | |
| *dexamphetamine (5mg)* | $5*($2-10)* | *19* | $10*($2.5-15)* | *23* | $5 *($3-10)* | *12* | $5 *($3-10)* | *18* | NR | | NR | |
| *methylphenidate(10mg)* | $10*($2.5-10)* | *16* | $5.50†*($2.5-10)* | *8* | $8 *($5-15)* | *11* | $10 *($3-20)* | *21* | NR | | NR | |

**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

NR: not reported

**Table 17: Methamphetamine prices in Tasmania reported by Tasmania Police Drug Investigation Services, 2006/07–2014/15**

| 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 |
| 2012/13 | $50-80 | - | $4,000-5,000 |
| 2013/14 | $50 | $300 | $4,000-5,000 |
| **2014/15** | **$50** | **$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 | - | - |
| 2012/13 | $80-100 | - | $10,000-12,000 |
| 2013/14 | $100 | $500 | $10,000-14,000 |
| **2014/15** | **$100** | **$500** | **$10,000-$14,000** |

**Source:** Australian Crime Commission (2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission, 2016
Note: Data for 2015/16 financial year were not available at the time of publication

### 5.2.2 Availability

*Methamphetamine Powder*

Most PWID who could comment on the availability of powder form methamphetamine thought that it was 'easy' or 'very easy' to obtain (70%, n=16: 'easy' 31%; 'very easy' 39%) (Figure 47) (Table 18). The majority of PWID participants also perceived the availability of powder methamphetamine to have remained stable in the preceding six months (74%, n=17). Five KE reported decreasing availability of methamphetamine powder.

*Base/Paste Methamphetamine*

Only two respondents commented in regards to 'base/paste' methamphetamine, commenting it was 'easy' and 'very easy' to obtain in the preceding six months. Both respondents perceived this level of availability to have remained stable in the six months prior to interview. Consistent with the sparsity of reports, KE who commented reported a lack of base on the Tasmanian market.

*Crystalline Methamphetamine*

In regards to crystal methamphetamine, the majority of participants (94%) who commented reported it was either 'easy' (46%, n=31) or 'very easy' (52%, n=35) for them to obtain in the preceding six months. The majority of respondents able to comment (80%, n=51) perceived availability to have remained stable in the six months prior to interview with 16% (n=10) of respondents reporting it was 'easier' to obtain. An underlying theme amongst KE reports was the increased availability of crystalline methamphetamine. KE uniformly reported perceptions that crystal had recently flooded

the market, and that many people who used other drugs were using crystal methamphetamine due lack of availability of other substances. In the 2016 IDRS, PWID reported the highest rate of participants reporting 'easy' and 'very easy' availability of crystal from 2006-2016 (Figure 47).

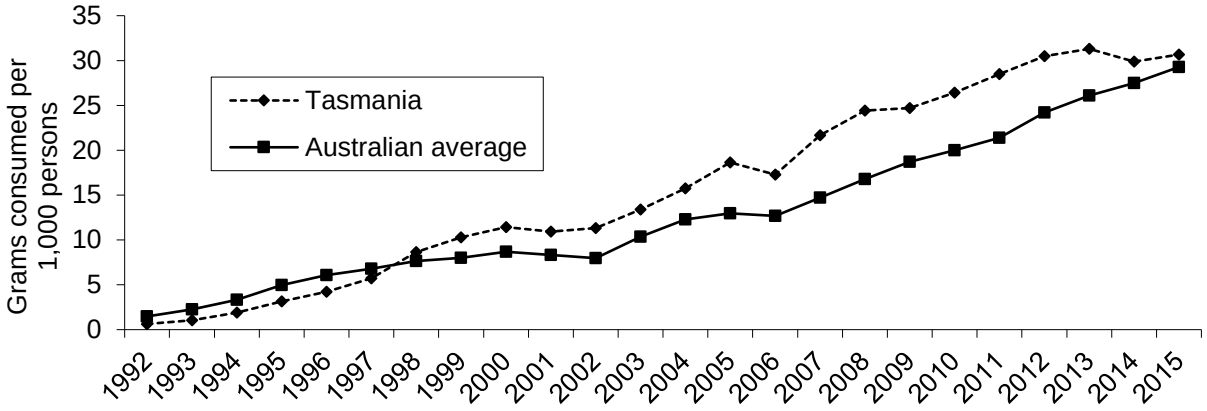
*Pharmaceutical Stimulants*

Almost half of participants who commented on availability of pharmaceutical stimulants reported these to be 'difficult' (42%) to access, with the remainder describing them as 'easy' (37%), 'very easy' (16%) or 'very difficult' (5%). Whilst over two-thirds noted that availability had remained stable in the preceding six months (68%), one-quarter noted access had become 'more difficult' over this period (26%).

Tasmanian prescription rates of methylphenidate and dexamphetamine (Figure 45; Figure 46) 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 105% of the national level in 2015), even in the context of an increasing national prescription rate.

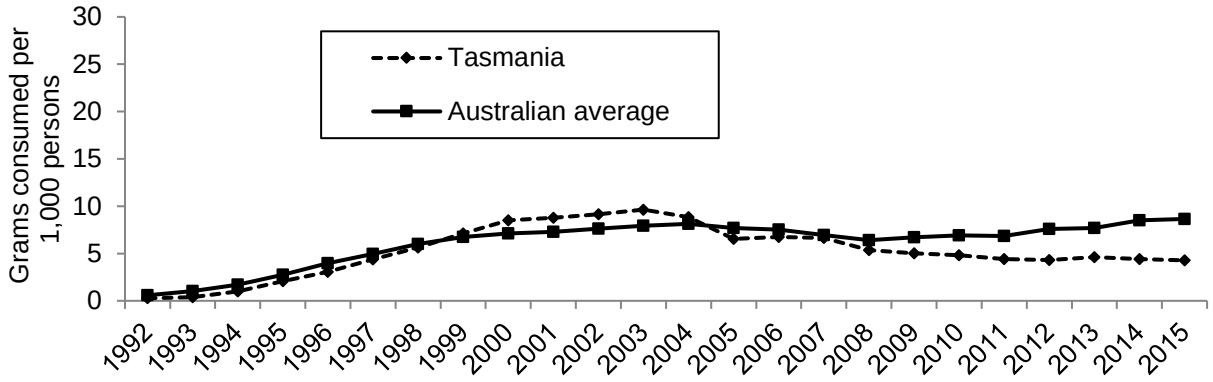
Tasmanian consumption rates of dexamphetamine were comparable to that of the national level between 1997 and 1999, rising to 120% of that of the steadily increasing Australian average between 2000 and 2003. However, in the first decline in prescription rates seen in these data, rates of dexamphetamine 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. 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 further to 49% of the national rate in 2015.

**Figure 45: Consumption of methylphenidate (Ritalin) per 1,000 persons, 1992-2015**



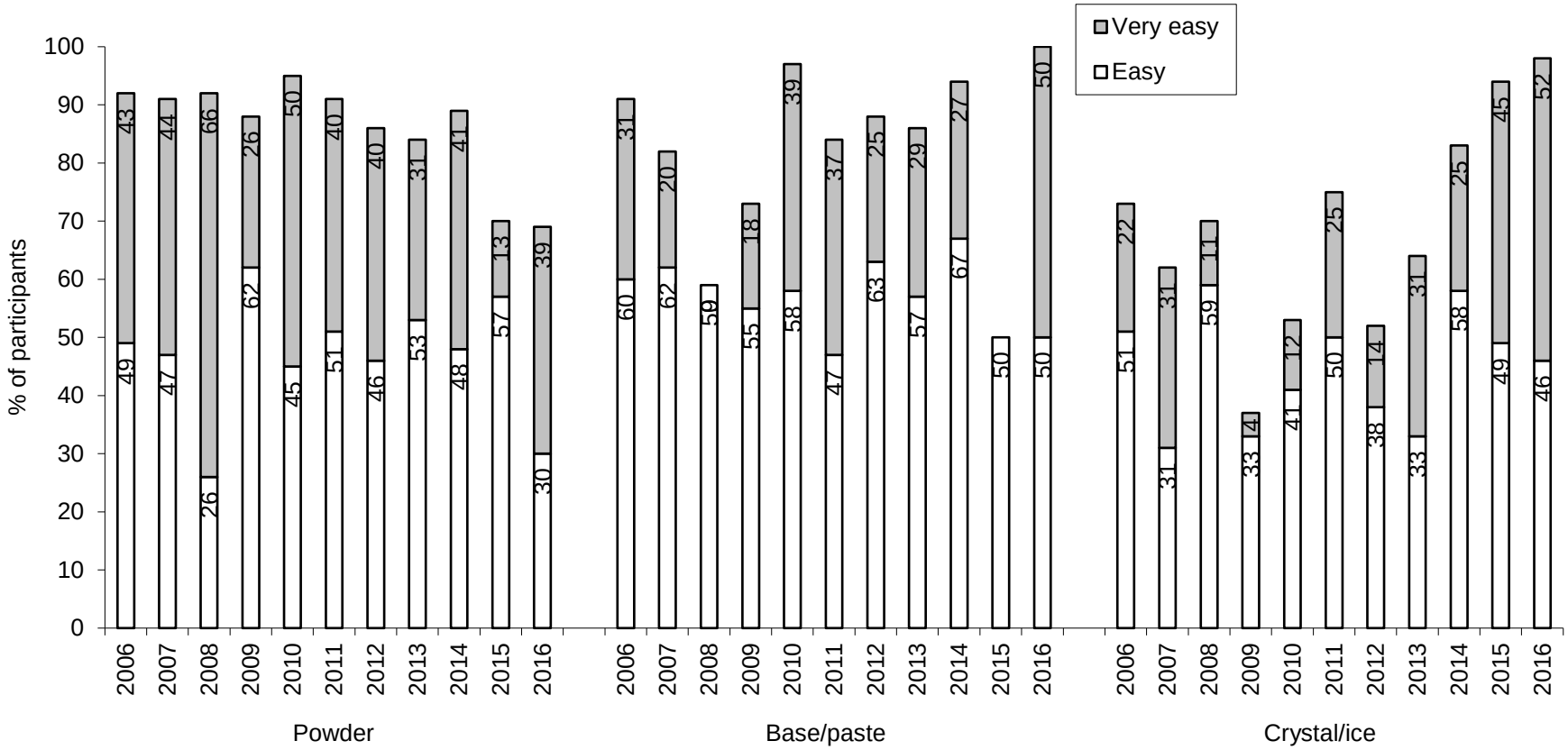

**Source:** National Drug System, Pharmaceutical Services, Department of Health and Human Services. Data for 2016 not available at time of publication.

**Figure 46: Consumption of dexamphetamine per 1,000 persons, 1992-2015**




**Source:** National Drug System, Pharmaceutical Services, Department of Health and Human Service. Data for 2016 not available at time of publication.

**Figure 47: PWID reports of ease of availability of different methamphetamine forms, amongst those who commented, 2006-2016**




**Source**: IDRS PWID interviews

**Table 18: Participants' reports of methamphetamine availability in the past six months, 2015-2016**

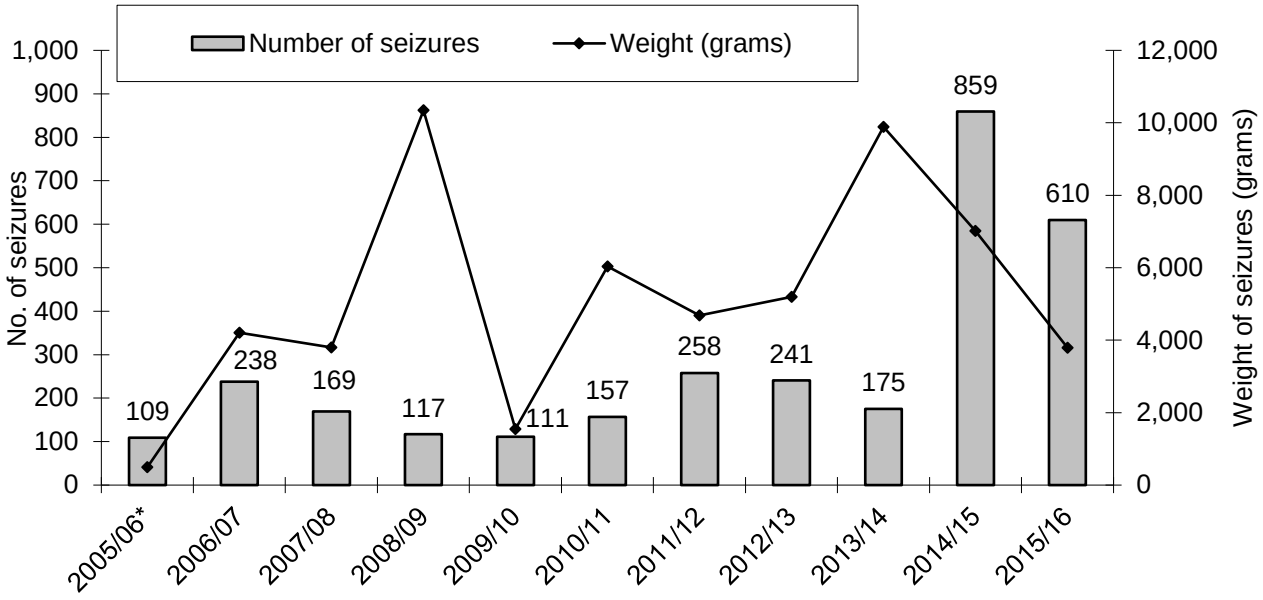
| | Powder | | Base | | Crystal/Ice | |
|---|---|---|---|---|---|---|
| | 2015 (n=100) | 2016 (n=99) | 2015 (n=100) | 2016 (n=99) | 2015 (n=100) | 2016 (n=99) |
| **Current availability** | | | | | | |
| Able to respond (%) | 40 | 23 | *4* | *2* | 49 | 68 |
| *Of those who responded:* | | | | | | |
| Very easy (%) | 13 | 39 | *0* | *50* | 45 | 52 |
| Easy (%) | 57 | 30 | *50* | *50* | 49 | 46 |
| Difficult (%) | 25 | 13 | *0* | *0* | 4 | 3 |
| Very difficult (%) | 5 | 17 | *50* | *0* | 2 | 0 |
| **Availability change over the last six months** | | | | | | |
| Able to respond (%) | 39 | 23 | *4* | *2* | 49 | 64 |
| *Of those who responded:* | | | | | | |
| More difficult (%) | 18 | 17 | *25* | *0* | 0 | 3 |
| Stable (%) | 64 | 74 | *75* | *100* | 78 | 80 |
| Easier (%) | 15 | 4 | *0* | *0* | 22 | 16 |
| Fluctuates (%) | 3 | 4 | *0* | *0* | 0 | 2 |

**Source:** IDRS PWID interviews

Tasmania Police seizures of drugs suspected to be methamphetamine have varied in recent years. 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. Between 2009/10 and 2012/13, the number of seizures increased from 111 to 241, and the weight of these seizures increased also[7]. In 2013/14, the number of seizures had decreased, with 175 reported for the financial year, although an increased weight was observed. Data for 2014/15 yielded the highest number of seizures (828) for the 2005/06 to 2015/16 period, though the weight of the seizures was not as high as in the 2013/14 period. In 2015/16, there was a decrease in both the number of seizures (610) and the weight of the seizures (2795 grams) (Figure 48). It should be noted that in 2015/16 there were an additional 21 seizures coded in units other than grams.

[7] Note: 2015/16 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.

**Figure 48: Seizures of methamphetamine by Tasmania Police, 2005/06-2015/16**




**Source:** Australian Crime Commission, State Intelligence Service, Tasmania Police
* Only part-year data were reported in 2005/06
Note: 2015/16 data were provided by Tasmania Police State Intelligence Service, include only seizures weighed in grams. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. In 2015/16 there were an additional 21 seizures coded in units other than grams.

### 5.2.3 Sources of methamphetamine purchases

*Powder methamphetamine*

Participants reported that they last purchased powder in the preceding six months through friends (48%) and known dealers (38%) (Table 19). The venues most commonly reported to be used for the last purchase of methamphetamine powder were a friend's home (48%) or a dealer's home (29%).

*Base methamphetamine*

Only two respondents commented on the purchase source of 'base/paste' methamphetamine. Friends were cited as the source for these purchases in both cases, and purchases were made at friends' houses (Table 19).

*Crystal methamphetamine*

Respondents reported known dealers (36%) and friends (40%) as the main sources of crystal methamphetamine (Table 19). Source venues included agreed public locations (26%), the dealer's home (24%), a friend's home (24%) or delivered to the participant's home (19%).

**Table 19: Source of last purchase of methamphetamine in the preceding six months, 2016**

| | Powder n=21 % | Base/Paste n=2 % | Crystal n=62 % |
|---|---|---|---|
| **Source person** | | | |
| Known dealers | 38 | 0 | 36 |
| Friends | 48 | 100 | 40 |
| Acquaintances | 5 | 0 | 8 |
| Street dealer | 5 | 0 | 10 |
| Online | 5 | 0 | 3 |
| **Source venue** | | | |
| Dealer's home | 29 | 0 | 24 |
| Agreed public location | 10 | 0 | 26 |
| Home delivery | 14 | 0 | 19 |
| Friend's home | 48 | 100 | 24 |

**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, 72% of the participants that were able to comment considered this as either 'low' or 'medium' in subjective purity (n=9 and n=6 respectively) and 19% (n=4) considered purity to be 'high' (Figure 49). Participants were divided with regard to perceived changes in subjective purity over the preceding six months: 43% reported no change in purity (n=9) while the remaining 24 respondents reported either fluctuating (29%), decreases (24%) or increasing (5%) purity.

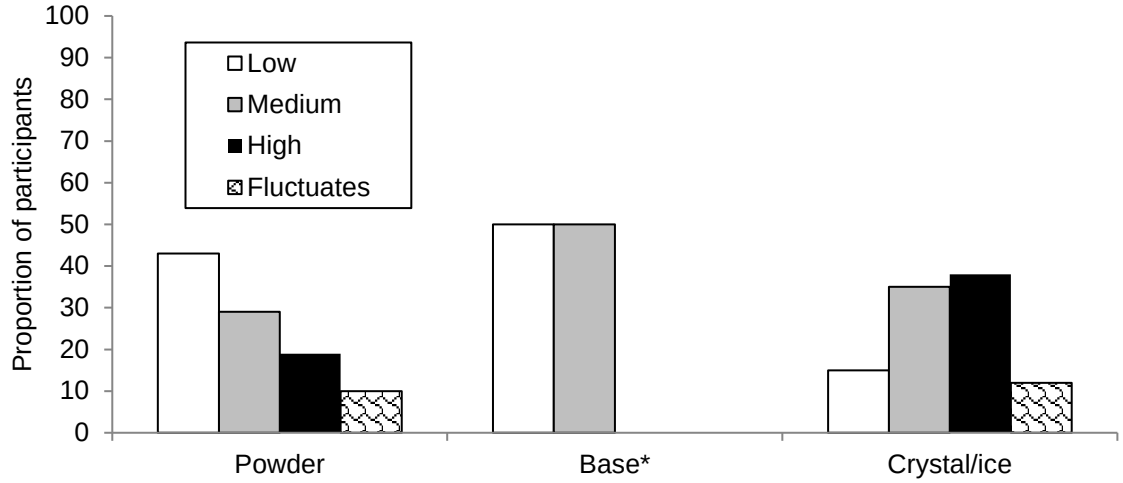
Over the last three surveys, several PWID noted the presence of crystals in powder methamphetamine. The presence of crystals in powder may represent higher purity methamphetamine, or alternatively it may be explained by the use of an adulterant (methylsulfonylmethane, MSM) in the late stages of production.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

Regarding subjective purity of base/paste methamphetamine, one of the two participants who were able to comment noted purity to be 'medium', with the remaining respondent noting purity as 'low'. Both respondents reported purity trends of base/paste as 'stable' over the past six months. Given the small numbers reporting it is difficult to infer trends in relation to base/paste methamphetamine.

Over a third of the participants who commented on purity of crystal methamphetamine reported this to be 'high' (38%, n=25), and a further third reported it to be 'medium' (35%, n=23). Again, participants were divided with regard to changes in subjective purity over the preceding six months: almost half noted purity to have not changed (27%, n=47), with the remaining noting purity had 'decreased' (26%, n=15), 'increased' (16%, n=9), or 'fluctuated' (12%, n=7).

Figure 50 displays the proportion of those reporting on purity levels of the different 'forms' of methamphetamine in the past eleven 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 2006 and 2007, 6-13% of each sample reported purity to be 'high'. In the subsequent two surveys, reports of 'high' purity of powder form decreased to 3% in 2008 and 2% in 2009. Since 2010, subjective reports of 'high' purity have increased (ranging between 8% and 21%).

**Figure 49: Participant perceptions of methamphetamine purity, among those who commented, 2016**

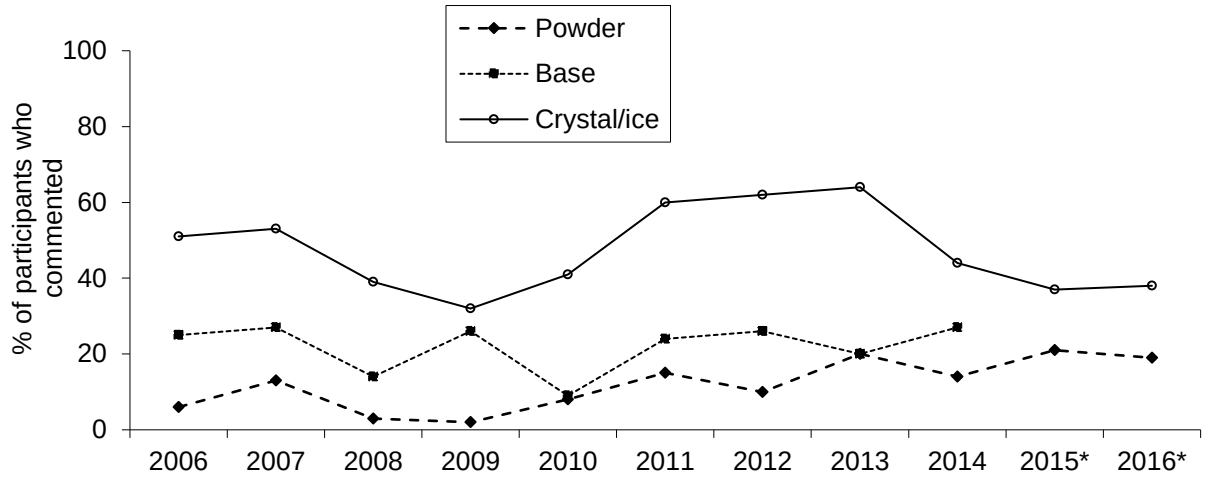



**Source:** IDRS PWID interviews
*The results for base methamphetamine purity had a low number of respondents, n=2

The reported purity of base/paste methamphetamine declined between 2006 and 2010, from 25% reporting 'high' purity to 9%. In subsequent years, reports of 'high' purity have increased slightly, ranging between 20% and 27%. Due to the small number of respondents in the 2015 (n=5) and 2016 (n=2) samples, it is not clear whether this pattern has continued.

Consumer reports on subjective purity of crystal methamphetamine have varied in recent surveys. Half of respondents considered this form as 'high' in purity in 2006 (51%), however, in the subsequent four years, reports of 'high' purity decreased to 32%. Between 2010 and 2013, this rate increased to 63%, however this trend was reversed in 2014, with the rate decreasing to 44% and remaining low in 2015 (37%) and 2016 (38%).

**Figure 50: Proportion of participants reporting powder, base and crystal/ice purity as 'high', amongst those who commented, 2006-2016**




**Source:** IDRS PWID interviews
* Results for base in 2015 and 2016 are omitted due to a low number of respondents (n=5 and n=2 respectively)

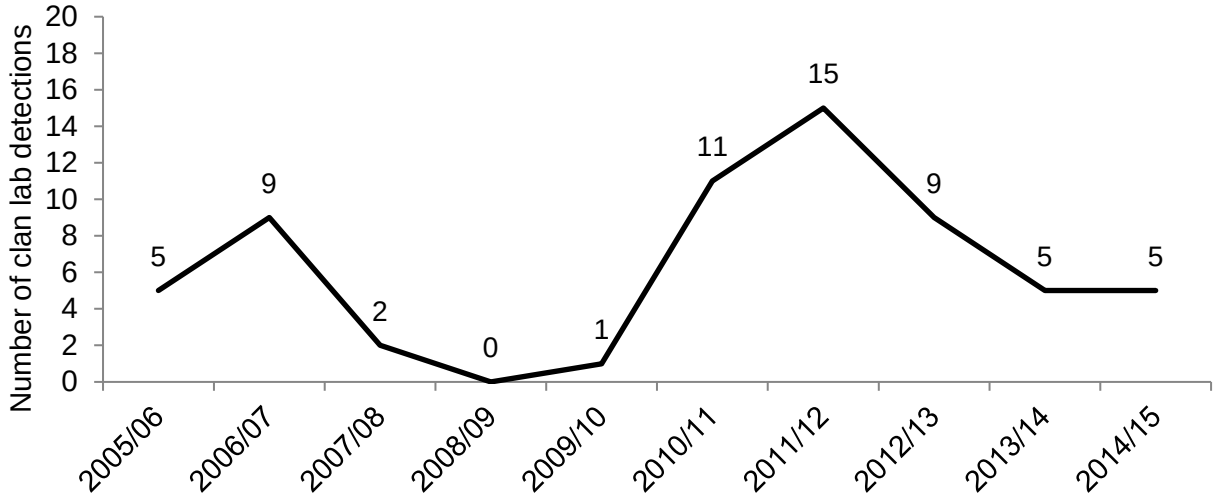
Data for purity of methamphetamine received at police analytical laboratories are presented for the 2005/06 to 2014/15 financial years (Table 20; Table 21; data for 2015/16 were not available at the

time of publication). 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. In 2014/15, 23 seizures of methamphetamine by Tasmania Police were analysed – most of which were greater than 2 grams – returning an overall median purity of 73.1%. One additional seizure by the Australian Federal Police were also analysed, with a median purity of 80.2%. This level of purity is in keeping with higher median purity levels nationally. In addition, the Tasmanian seizures analysed for purity may reflect the selection of particularly unusual seizures of the drug for analysis by police, therefore may not reflect increased purity for users.

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, with the exception of an increase in 2015 and 2016 (although similar total weight of seizures should be noted). 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. Law enforcement officials have noted cases of *"smaller scale meth cooking"* in Tasmania. Law enforcement KE in the current study noted that on average nationally, large increases in availability of crystal methamphetamine have been reported, which has resulted in an increased focus from police and health services.

These reports were supported by data regarding interceptions of illegal methamphetamine production laboratories (also called 'clan' (clandestine) or 'box' labs) (Figure 51). Between 2005/06 and 2006/07, the number of clandestine laboratory detections increased from five to nine in Tasmania. In the subsequent three financial years, the number of detections declined to between zero and two. In the last five reporting periods, this has increased, ranging between five and 15 laboratories detected (data for 2015/16 were not available at the time of publication), though appears to be stabilising based on the previous two years data. From a national perspective, detection of clandestine labs increased from 252 in 2001/02 to 667 in 2014/15 (peak of 809 clandestine labs detected in 2011/12; ACC, 2015). In 2013/14, 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 2014/2015 report states that nationally, 81.1% of these detected labs were small-scale.

**Figure 51: Number of clandestine laboratory detections in Tasmania, 2005/06-2014/15**




**Source**: Australian Bureau of Criminal Intelligence; Australian Crime Commission. Data for 2015/16 were not available at the time of publication.

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 20: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 2005/06-2014/15**

| | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---|---|---|---|---|---|---|---|---|---|
| **≤2g** | | | | | | | | | | |
| *n* | *6* | *15* | *7* | *11* | *-* | *3* | *2* | *1* | *-* | *3* |
| Median % purity | 15% | 24.6% | 7.6% | 12.6% | | 33.6% | 5.2% | 64.0% | | 78% |
| **>2g** | | | | | | | | | | |
| *n* | *3* | *23* | *32* | *9* | *5* | *50* | *21* | *6* | *17* | *20* |
| Median % purity | 6.9% | 6.5% | 8.5% | 7.8% | 4.4% | 9.3% | 7.9% | 62.2% | 64.3% | 67.2% |
| **Total** | | | | | | | | | | |
| *n* | *9* | *38* | *39* | *20* | *5* | *53* | *23* | *7* | *17* | *23* |
| Median % purity | **13.1%** | **12.4%** | **8.5%** | **9.2%** | **4.4%** | **9.3%** | **7.9%** | **64.0%** | **64.3%** | **73.1%** |
| Range in % purity | *(2-59%)* | *(2-28%)* | *(2-40%)* | *(3-14%)* | *(1-7%)* | *(1.8-36.6%)* | *(1.7-71.9%)* | *(5.7-77.6%)* | *(10.2-79.0%)* | *(31.5-79.8%)* |

**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 2012/13; one seizure detected by the Australian Federal Police in 2014/15 >2gs had a median purity of 80.2% (range 80.2%). All analysed seizures of amphetamines in this period revealed methamphetamine rather than amphetamine. Data for 2015/16 were not available at the time of publication

**Table 21: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 2006–June 2015**

| | Jul-Sep 2006 | Oct-Dec 2006 | Jan-Mar 2007 | Apr-Jun 2007 | Jul-Sep 2007 | Oct-Dec 2007 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **≤2g** | | | | | | | | | | | | | | | | | | |
| *n* | - | *14* | - | *1* | *2* | *1* | *1* | *3* | - | *1* | *3* | *7* | - | - | - | - | - | - |
| Median % purity | - | 24.6 | - | 7.3 | 12.0 | 9.7 | 7.6 | 6.6 | - | 12.1 | 6.1 | 12.9 | - | - | - | - | - | - |
| **>2g** | | | | | | | | | | | | | | | | | | |
| *n* | *3* | *8* | *1* | *12* | *6* | *6* | *13* | *7* | *5* | *1* | *3* | - | - | - | *3* | *2* | *2* | *5* |
| Median % purity | 9.9 | 2.4 | 8.4 | 7.0 | 9.6 | 8.0 | 9.1 | 7.1 | 8.3 | 11.8 | 6.1 | - | - | - | 6.2 | 1.3 | 1.9 | 11.0 |
| **Total** | | | | | | | | | | | | | | | | | | |
| *n* | *3* | *21* | *1* | *13* | *8* | *7* | *14* | *10* | *5* | *2* | *6* | *7* | - | - | *3* | *2* | *2* | *5* |
| Avg % purity | 9.9 | 24.6 | 8.4 | 7.3 | 10.1 | 8.5 | 9.1 | 6.9 | 8.3 | 12.0 | 6.3 | 12.9 | - | - | 6.2 | 1.3 | 1.9 | 11.0 |

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

- No seizures in this period

Note: 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 2015/16 was not available at the time of publication

**Table 21: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 2006-June 2015 (continued)**

| | Jan-Mar 2011 | Apr-Jun 2011 | Jul-Sep 2011 | Oct-Dec 2011 | Jan-Mar 2012 | Apr-Jun 2012 | Jul-Sep 2012 | Oct-Dec 2012 | Jan-Mar 2013 | Apr-Jun 2013 | Jul-Sep 2014 | Oct-Dec 2014 | Jan-Mar 2014 | Apr-Jun 2014 | Jul-Sep 2014 | Oct-Dec 2014 | Jan-Mar 2015 | Apr-Jun 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **≤2g** | | | | | | | | | | | | | | | | | | |
| *n* | *2* | *1* | *1* | *1* | - | - | - | - | *1* | - | - | - | - | - | *3* | - | - | - |
| Median % purity | 21.2 | 36.6 | 8.7 | 1.7 | - | - | - | - | 64.0 | - | - | - | - | - | 78 | - | - | - |
| **>2g** | | | | | | | | | | | | | | | | | | |
| *n* | *22* | *21* | *3* | *4* | *9* | *5* | - | - | *4* | - | *8* | - | *4* | *5* | *11* | *2* | *2* | *5* |
| Median % purity | 8.9 | 9.4 | 7.9 | 6.7 | 8.8 | 8.8 | - | - | 65.1 | - | 56.6 | - | 74.0 | 61.8 | 77.7 | 52.2 | 57.8 | 50.8 |
| **Total** | | | | | | | | | | | | | | | | | | |
| *n* | *24* | *22* | *4* | *5* | *9* | *5* | - | - | *5* | - | - | - | *5* | *5* | *14* | *2* | *2* | *5* |
| Avg % purity | 8.9 | 9.4 | 8.3 | 6.3 | 8.8 | 8.8 | - | - | 64.1 | | - | - | 64.1 | 61.8 | 77.8 | 52.2 | 57.8 | 50.8 |

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

- No seizures in this period.

Note: 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 2015/16 was not available at the time of publication

## 5.3 Cocaine

**Key Points:**

- Just two participants commented on the price and availability of cocaine in Tasmania, making market trends difficult to infer
- Tasmania Police reported making 25 seizures of cocaine for 2014/15; 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 on the price of cocaine in Tasmania. Just two participants were able to comment, reporting a median price for half a gram of $200 (range $200). One reported this price as 'stable' over the preceding 6 months, while the other noted an increase in price. No KE in the current study commented on the current price of cocaine.

The ACC and Tasmania Police provide price data for cocaine. In 2014/15, one gram was reported to cost $300-$500 and one ounce between $7,000 and $9,000, similar to as reported in previous years (ACC, 2015). Data from 2015/16 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

Just two participants were able to comment on the local availability of cocaine in the preceding six months, one noting it was 'easy' and the other that 'difficult' to access. The one participant who commented on changes in the ease of availability noted that access had remained unchanged in the preceding six months. Three KE commented that there has been an increase in the amount of cocaine available in Tasmania; however, that access was still difficult.

Number of cocaine seizures by Tasmania Police reported by the ACC has generally ranged between 0-7 from 2005/06 to 2013/14, with a total annual weight of between 1-64.6g where a seizure(s) has been recorded. Data for 2014/15 indicated that there were 25 seizures reported by Tasmania, totalling 273g.

**Table 22: Cocaine seizures, 2005/06-2014/15**

| Seizures | 2005 /06 | 2006 /07 | 2007 /08 | 2008 /09 | 2009 /10 | 2010 /11 | 2011 /12 | 2012 /13 | 2013 /14 | 2014 /15 |
|---|---|---|---|---|---|---|---|---|---|---|
| Number | 1 | 2 | 0 | 2 | 3 | 3 | 7 | 0 | 2 | **25** |
| Weight (g) | 1 | 7 | 0 | 7 | 46 | 28 | 64 | - | 25 | **273** |

Source: ACC and State Intelligence Services, Tasmania Police
Note: 2014/15 data were provided by Tasmania Police State Intelligence Service. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Data prior to 2014/15 were provided by the ACC.

The combination of few PWID reporting recent cocaine use (n=6) at a median frequency of use of 2 days), along with few participants being able to comment on trends relating to price, purity or availability, and the few KE 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 three participants were able to comment on subjective purity of cocaine, but both reported this to be ‘high’ purity. The ACC reported on the purity of a single seizure of cocaine in 2011/12, noting this to be 29.8% (no seizures were made in 2012/13 and 2013/14, and data for 2014/15 was not reported in the 2015 ACC 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 44% of the 2016 sample report lifetime use of cocaine. There are also indications of an increasing prevalence level of use in the general population (AIHW, 2014). As such, trends in cocaine markets in the state merit continued examination.

## 5.4 Cannabis

**Key Points:**

*Bush/outdoor-cultivated cannabis*

- The median price for a quarter ounce was $70, and the median price was $200 for an 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 had not changed in the preceding six months. It was most commonly purchased from friends; and
- Most participants reporting on subjective potency noted this to be 'medium'. The majority of participants reported that potency had not changed over the preceding six months.

*Indoor/hydroponically-cultivated cannabis*

- A quarter-ounce cost a modal price of $90 and an ounce $300. The majority of participants who commented reported that prices remained stable over the preceding six months;
- The majority of participants reporting on availability noted indoor cultivated cannabis to be either 'very easy' or 'easy' to access, and that this had not changed in the preceding six months;
- It was most commonly purchased from known dealers or friends; and
- Potency generally was considered to be 'high' or 'medium'; this had not changed over the preceding six months.

### 5.4.1 Price

*Bush/outdoor-cultivated cannabis*

Participants were asked to comment on their last purchase of bush/outdoor-cultivated cannabis (Table 25). One gram of outdoor cultivated cannabis had a median price of $25 (no single modal value, range $10-25, n=16) while the median last purchase price for a quarter-ounce of outdoor cannabis was $70 (no single modal value, range $40-90, n=9). The median last purchase price for an ounce was $200 (no single mode, range $150-250, n=3). The most common amounts of outdoor cannabis purchased by the PWID interviewed were single grams (n=16) and quarter ounces (n=9) (Table 25).

The price for a quarter ounce of outdoor cultivated cannabis has ranged between $60 and $70 since 2010. Similarly, the price for one ounce was within the $200 to $250 range that has been observed since 2008.

*Indoor/hydroponically-cultivated cannabis*

The price for a gram of indoor-cultivated cannabis was reported as having a modal cost of $25 (median $22.50, range $10-25, n=24) with quarter-ounce amounts reported to cost a modal price of $90 (median $87.50, range $60-100, n=20). The modal last purchase price for an ounce was $300 (median $295, range $25-300, n=12) (Table 26). Two KE in 2016 noted that cannabis prices were between $25 and $30 per gram.

The majority of PWID (76%, n=26 in relation to outdoor cannabis and 84%, n=46 in relation to hydroponic cannabis) reported that the price of cannabis had not changed in the last six months.

**Table 23: Modal prices and quantities of 'bush'/outdoor-cultivated cannabis purchased by PWID, 2006-2016**

| Unit | 2006 IDRS | | | 2007 IDRS | | | 2008 IDRS | | | 2009 IDRS | | | 2010 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 | $10 | 2 | 1.0g | $10 | 3 | - | - | - | 1.0g* *(0.7-1.3g)* | $10 | 2 | 1.0g | $10 | 1 |
| **$25 deal** | 1.7g* *(1.5-2.0g)* | $25 | 8 | 1.0g *(1.0-2.0g)* | $25 | 14 | 2.0g *(1.0-3.0g)* | $25 | 18 | 1.0g *(1.0-3.0g)* | $25 | 18 | 2.0g *(1.0-7.0g)* | $25 | 24 |
| **$50 deal** | 7.0g | $50 | 8 | 7.0g *(1.0-7.0g)* | $50 | 9 | 7.0g | $50 | 4 | 7.0g *(3.0-14.0g)* | $50 | 13 | 7.0g *(3.0-7.0g)* | $50 | 9 |
| **Quarter ounce** | 7.0g | $50 *($25-100)* | 28 | 7.0g | $60 *($50-90)* | 29 | 7.0g | $70 *($50-90)* | 17 | 7.0g | $50 *($50-90)* | 22 | 7.0g | $60* *($25-90)* | 23 |
| **Half ounce** | 14.0g | $130* *($120-140)* | 3 | 14.0g | $113* *($100-125)* | 2 | 14.0g | $100 *($75-100)* | 4 | 14.0g | $150 *($50-160)* | 14 | 14.0g | $100 *($75-150)* | 5 |
| **Ounce** | 28.0g | $170* *($90-250)* | 19 | 28.0g | $150 *($150-300)* | 9 | 28.0g | $200 *($75-300)* | 20 | 28.0g | $250 *($100-300)* | 20 | 28.0g | $200 *($100-300)* | 24 |

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

**Table 23: Modal prices and quantities of 'bush'/outdoor-cultivated cannabis purchased by PWID, 2006-2016 (continued)**

| Unit | 2011 IDRS | | | 2012 IDRS | | | 2013 IDRS | | | 2014 IDRS | | | 2015 IDRS | | | 2016 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 | Modal amount (grams) | Modal price | n |
| **$10 deal** | 1.0g | $10 | 1 | 1.0g *(0.5-1.0g)* | $10 | 3 | 1.0g *(1.0-4.0g)* | $10 | 4 | n/r | $10 | 0 | 1.0g^ | $25 *($20-25)* | 8 | 1.0g^ | $20**($10-25)* | 16 |
| **$25 deal** | 1.0g *(1.0-3.0g)* | $25 | 16 | 1.0g *(1.0-3.0g)* | $25 | 13 | 1.0g *(1.0-3.0g)* | $25 | 9 | 1.5g *(1.0-4.0g)* | $25 | 17 | 2.0g^ | $50 | 2 | 2.0g^ | $25**($15-40)* | 7 |
| **$50 deal** | 7.0g *(7.0-14.0g)* | $50 | 4 | 7.0g *(2.0-7.0g)* | $50 | 5 | - | - | - | 3.75g *(2.5-7.0g)* | $50 | 4 | 3.0g^ | $50* *($25-75)* | 2 | 3.0g^ | $50*($25-60)* | 6 |
| **Quarter ounce** | 7.0g | $70* *($50-80)* | 11 | 7.0g | $70 *($50-80)* | 14 | 7.0g | $60 *($60)* | 4 | 7.0g | $70* *($20-100)* | 11 | 7.0g | $80 *($50-80)* | 12 | 7.0g | $70**($40-90)* | 9 |
| **Half ounce** | 14.0g | $90* *($50-100)* | 3 | 14.0g | $120 *($100-120)* | 3 | 14.0g | $60 *($60)* | 1 | 14.0g | $90* *($80-100)* | 2 | 14.0g | $145* *($140-150)* | 2 | 14.0g | $120**($100-140)* | 3 |
| **Ounce** | 28.0g | $200* *($150-250)* | 14 | 28.0g | $200 *($150-200)* | 9 | 28.0g | $250 *($150-250)* | 8 | 28.0g | $200 *($150-250)* | 8 | 28.0g | $225* *($200-250)* | 4 | 28.0g | $200**($150-250)* | 3 |

**Source:** IDRS PWID interviews
* Median substituted, as no single mode exists
^ Questions were changed in 2015 from dollar value deals to gram based information.
Note: Range in parentheses
n/r Not reported

**Table 24: Modal prices and quantities of hydroponic/indoor-cultivated cannabis purchased by PWID, 2006-2016**

| Unit | 2006 IDRS | | | 2007 IDRS | | | 2008 IDRS | | | 2009 IDRS | | | 2010 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 *(1.0-2.0g)* | $10 | 4 | 0.8g *(0.5-0.8g)* | $10 | 4 | - | - | - | 0.5g *(0.5-0.7g)* | $10 | 3 | 0.5g | $10 | 1 |
| **$25 deal** | 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 | 1.0g *(0.8-3.0g)* | $25 | 38 | 1.2g *(2.0-7.0g)* | $25 | 15 |
| **$50 deal** | 3.0g | $50 | 2 | 3.0g *(1.0-7.0g)* | $50 | 8 | 3.0 g* *(2.0-7.0 g)* | $50 | 3 | 3.0g *(2.0-7.0g)* | $50 | 9 | 3.0g *(2.0-7.0g)* | $50 | 18 |
| **Quarter ounce** | 7.0g | $90 *($60-120)* | 43 | 7.0g | $90 *($20-120)* | 29 | 7.0g | $90 *($50-100)* | 31 | 7.0g | $90 *($50-100)* | 29 | 7.0g | $100 *($50-100)* | 33 |
| **Half ounce** | 14.0g | $160 *($120-200)* | 6 | 14.0g | $160* *($125-200)* | 4 | 14.0g | $150 *($100-160)* | 7 | 14.0g | $150 *($120-180)* | 15 | 14.0g | $160* *($100-250)* | 11 |
| **Ounce** | 28.0g | $250 *($200-450)* | 21 | 28.0g | $250* *($140-350)* | 14 | 28.0g | $300 *($200-340)* | 25 | 28.0g | $300 *($200-350)* | 22 | 28.0g | $300 *($200-400)* | 23 |

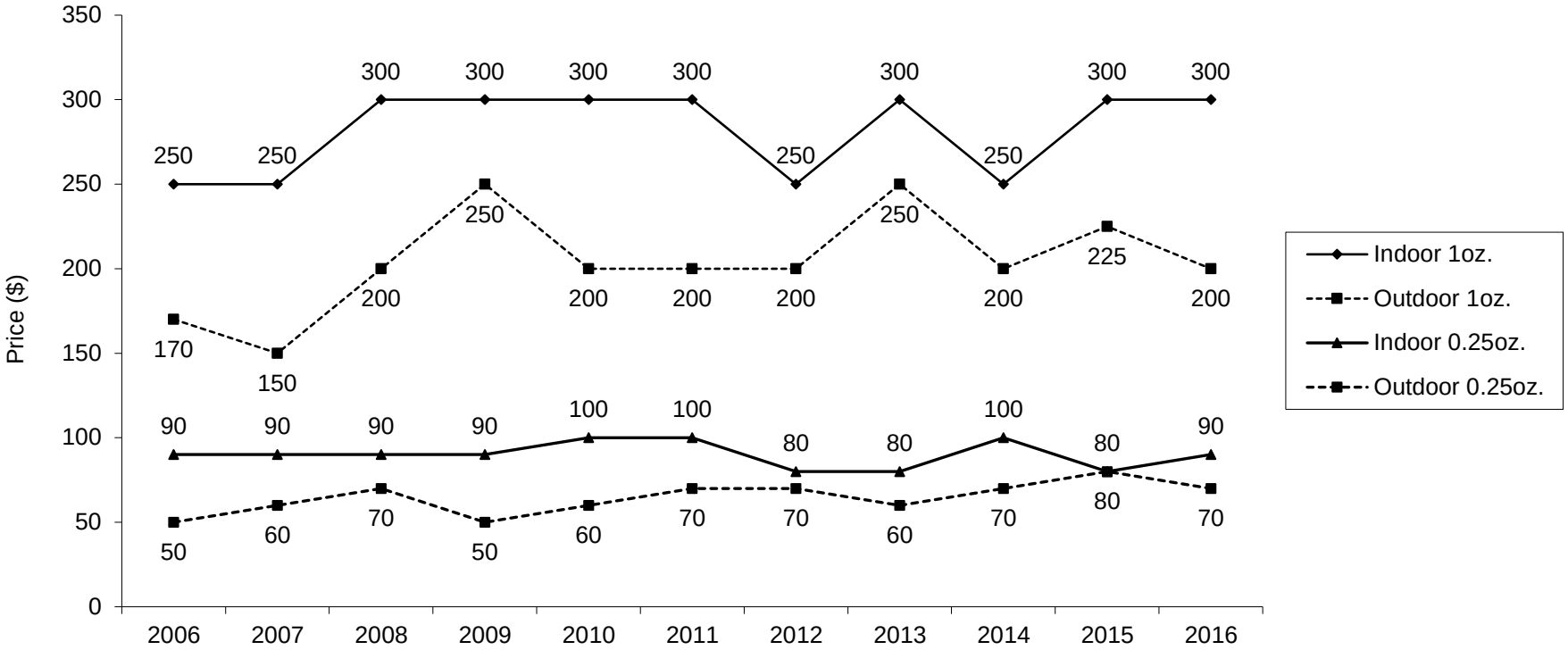
**Source:** IDRS PWID interviews
* Median substituted, as no single mode exists
Note: Range in parentheses

**Table 24: Modal prices and quantities of hydroponic/indoor-cultivated cannabis purchased by PWID, 2006-2016 (continued)**

| Unit | 2011 IDRS | | | 2012 IDRS | | | 2013 IDRS | | | 2014 IDRS | | | 2015 IDRS | | | 2016 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 | Modal amount (grams) | Modal price | n |
| **$10 deal** | 0.5g *(0.5-1.0g)* | $10 | 3 | 1.0g | $10 | 1 | 0.75*g *(0.5-1.0g)* | $10 | 2 | n/r | $10 | 0 | 1.0g^ | $25 *($20-25)* | 21 | 1.0g^ | $25*($10-25)* | 24 |
| **$25 deal** | 1.0g *(1.0-2.5g)* | $25 | 30 | 1.0g *(1.0-2.0g)* | $25 | 36 | 1.0g *(1.0-2.0g)* | $25 | 20 | 1.0g *(1.0-2.5g)* | $25 | 23 | 2.0g^ | $50 *($25-50)* | 6 | 2.0g^ | $25*($25-40)* | 8 |
| **$50 deal** | 3.0g *(2.0-6.0g)* | $50 | 6 | 3.0g *(2.0-7.0g)* | $50 | 9 | 3.0g *(3.0-7.0g)* | $50 | 5 | 3.0g *(2.0-3.0g)* | $50 | 10 | 3.0g^ | $50 *($50-75)* | 6 | 3.0g^ | $50*($3-60)* | 10 |
| **Quarter ounce** | 7.0g | $100 *($60-100)* | 18 | 7.0g | $80 *($50-100)* | 34 | 7.0g | $80* *($50-180)* | 7 | 7.0g | $100 *($50-100)* | 20 | 7.0g | $80 *($75-100)* | 22 | 7.0g | $90*($60-100)* | 20 |
| **Half ounce** | 14.0g | $150 *($140-250)* | 4 | 14.0g | $150* *($90-170)* | 8 | 14.0g | $150 | 1 | 14.0g | $150 *($85-160)* | 6 | 14.0g | $150 *(140-180)* | 9 | 14.0g | $170*($10-250)* | 5 |
| **Ounce** | 28.0g | $300 *($200-350)* | 19 | 28.0g | $250 *($150-330)* | 24 | 28.0g | $300 *($150-350)* | 15 | 28.0g | $250 *($250-300)* | 8 | 28.0g | $300 *($150-380)* | 16 | 28.0g | $300*($25-300)* | 12 |

**Source:** IDRS PWID interviews
* Median substituted, as no single mode exists
^ Questions were changed in 2015 from dollar value deals to gram based information.
Note: Range in parentheses
n/r Not reported

**Figure 52: Modal prices of quarter and one ounce purchases of indoor and outdoor cultivated cannabis, 2006-2016**




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

**Table 25: Cannabis prices in Tasmania reported to the Australian Crime Commission, 2005/06-2014/15**

| | Deal (1g approx) | | 1/4 Bag (7g) | | 1/2 Bag (14g) | | 1 Ounce (28g) | |
|---|---|---|---|---|---|---|---|---|
| | **Head** | **Hydro** | **Head** | **Hydro** | **Head** | **Hydro** | **Head** | **Hydro** |
| 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 |
| 2012/13 | $25 | $25 | $80 | - | $150 | $150 | $200-300 | $300 |
| 2013/14 | $25 | $25 | $80 | - | $150 | $150 | $200-300 | $300 |
| **2014/15** | **$25** | **$25** | **$80** | **-** | **$150** | **$150** | **$250** | **$300** |

**Source:** Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence), Tasmania Police State Intelligence Services
n/r = Not reported
Note: Data for 2015/16 not available at time of publication

Tasmania Police and the ACC provide annual reports on the price of illicit drugs (Table 25). Since 2005/06, the price of quarter-ounce purchases of cannabis head has fluctuated between $75 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 $200 and $350. Similarly, the price for a half-ounce had ranged between $100 and $150 between 2004/05 and 2014/15, with the exception of 2011/12, when the range increased to $200-250. The price for an ounce of hydro has remained relatively unchanged since 2005/06, costing between $300 and $350.

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 2014, 2015 and 2016 IDRS studies, no participants commented on the price of hashish.

### 5.4.2 Availability

Across both cannabis forms, the majority of the PWID sample who reported recent use perceived that cannabis was 'very easy' (40%) or 'easy' (48%) to obtain. The availability of cannabis remained stable (86% of reports across both cannabis forms). Trends in availability and routes of access will be discussed separately for each type of cannabis.

The majority participants who commented reported that hydroponic/indoor-cultivated cannabis had been either 'very easy' or 'easy' (43%, n=25 and 47%, n=27 respectively) for them to access in the preceding six months (Table 26). Most of these participants believed that the availability of this type of cannabis had remained stable in the preceding six months (88%, n=51).

Hydroponically-cultivated cannabis was more commonly purchased from known dealers (51%, n=25) and friends (39%, n=19) (
Table 27). Participants also commented on the last venue in which they purchased hydroponic cannabis, of which the majority purchased at either a friend's home (40%, n=21), dealer's home (23%, n=12), via home delivery (17%, n=9) or at an agreed public location (15%, n=8).

In regard to outdoor or 'bush' cannabis, most of the PWID commenting believed this to be 'very easy' or 'easy' to access in the preceding six months (36%, n=13 and 50%, n=18 respectively). The majority of participants in the current study reported that availability had remained stable in this time (83%, n=30). Most PWID reported last purchasing this type of cannabis from friends (69%, n=22). Venues in which these purchases were last made were primarily reported to be a friend's home (41%, n=13) or via home delivery (28%, n=9) (Table 27).

As depicted in Figure 53, between 2006 and 2008 there was a gradual decline in the proportion of PWID respondents who considered cannabis (any form) as 'very easy' to access (65% in 2006 vs. 38% in 2008: $\chi^2(1_{n=200})=13.53$, $p<.001$). In 2009 and 2010, this trend was temporarily reversed, with the proportion reporting 'very easy' access increasing to 75% in 2010 ($\chi^2(1_{n=284})=37.8$, $p<.001$). Since this time, this rate has been slightly lower and stable, ranging between 40% and 53% of each sample reporting 'very easy' access, with only 40% reporting this in 2016.

**Table 26: Participants' reports of cannabis availability in the past six months, 2015-2016**

| Current availability | Hydro | | Bush | |
|---|---|---|---|---|
| | 2015 (N=100) | 2016 (N=99) | 2015 (N=100) | 2016 (N=99) |
| Able to respond (%) | 50 | 59 | 21 | 36 |
| *Of those who responded:* | | | | |
| Very easy (%) | 48 | 43 | 52 | 36 |
| Easy (%) | 50 | 47 | 48 | 50 |
| Difficult (%) | 2 | 9 | 0 | 11 |
| Very difficult (%) | 0 | 2 | 0 | 3 |
| **Availability change over the last six months** | | | | |
| Able to respond (%) | 50 | 59 | 21 | 36 |
| *Of those who responded:* | | | | |
| More difficult (%) | 6 | 3 | 0 | 6 |
| Stable (%) | 86 | 88 | 95 | 83 |
| Easier (%) | 4 | 5 | 5 | 11 |
| Fluctuates (%) | 4 | 3 | 0 | 0 |

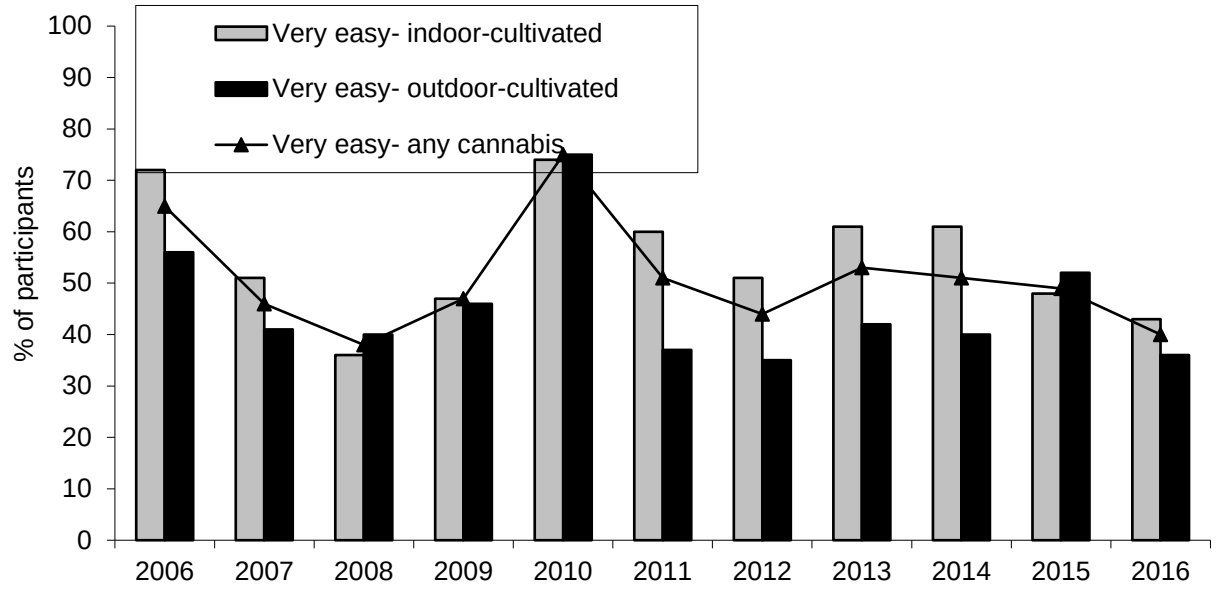
**Source:** IDRS PWID interviews

**Table 27: People and venues from which cannabis was last purchased in the preceding six months, 2016**

| | Hydroponic cannabis n=52 | Bush/outdoor cannabis n=32 |
|---|---|---|
| Friends | 64% (n=33) | 69% (n=22) |
| Known dealers | 19% (n=10) | 3% (n=1) |
| Acquaintance | 6% (n=3) | 3% (n=1) |
| Street dealer | 6% (n=3) | 6% (n=2) |
| Other | - | 9% (n=3) |
| | **Hydroponic cannabis n=53** | **Bush/outdoor cannabis n=32** |
| Friend's home | 40% (n=21) | 41% (n=13) |
| Dealer's home | 23% (n=12) | 9% (n=3) |
| Home delivery | 17% (n=9) | 28% (n=9) |
| Agreed public location | 15% (n=8) | 9% (n=3) |
| Acquaintance's home | 2% (n=1) | - |
| Other | 4% (n=2) | 13% (n=4) |

**Source:** IDRS PWID interviews
Note: Multiple responses allowed

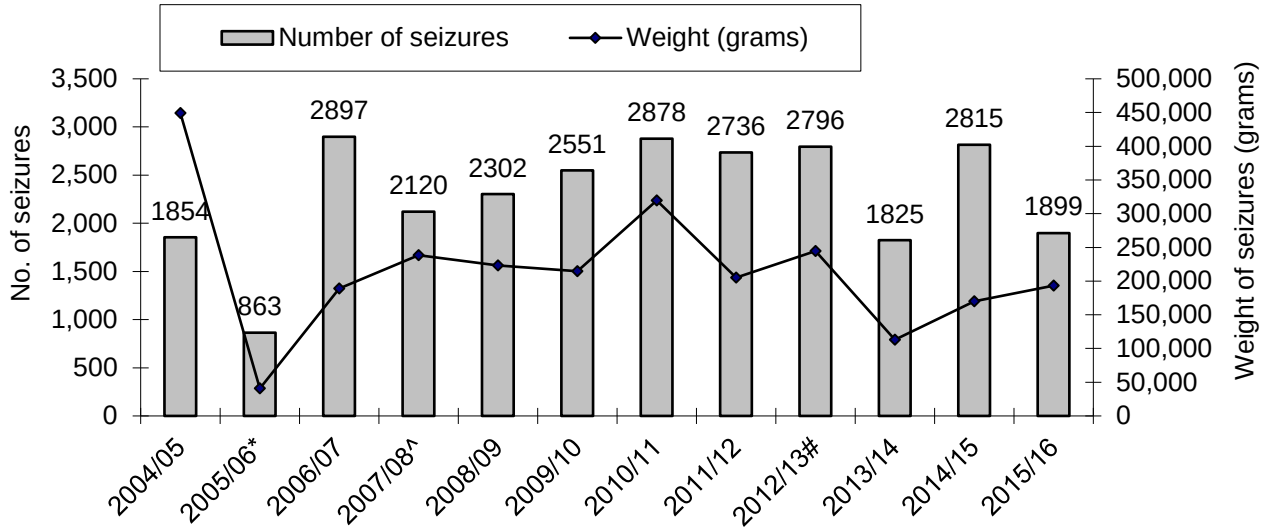
**Figure 53: Participant reports of current cannabis availability, among those who recently used cannabis, 2006-2016**




**Source:** IDRS PWID interviews

Figure 54 shows cannabis seizures made by Tasmania Police, between 2005/06 and 2015/16 (taking into account partial reporting of seizures for 2005/06). Data for 2015/16 from Tasmania Police suggests an decrease in the number of seizures (1899 seizures) but an increase in the total weight (193,430 grams) relative to 2014/15 (but similar to 2013/14). In addition to the 1,899 seizures which were coded in grams in 2015/16, Tasmania Police reported an additional 404 seizures including 285 seizures of plants (totalling 3,609 plants) and 41 seizures of seeds (totalling 479 seeds).

**Figure 54: Seizures of cannabis by Tasmania Police, 2006/07-2015/16**




**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
Note: Data in 2015/16 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

Most participants reporting on subjective potency of outdoor or ‘bush’ cultivated cannabis noted this to be ‘medium’ (70%, n=26), with smaller percentages of participants reporting ‘high’ (14%, n=5) or ‘low’ (11%, n=4), with 81% (n=29) regarding potency as having remained stable in the preceding six months.

Hydroponically-cultivated cannabis, however, was generally reported by PWID as being ‘high’ (57%, n=33) or ‘medium’ in potency (28%, n=16) and the potency was predominantly regarded as remaining stable in the preceding six months (71%, n=40). 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; and
- Illicit morphine was most commonly sourced from a friend or known dealer.

*Oxycodone*

- The median price for reformulated OxyContin was $0.50/mg (half of the price of the original formulation); the majority of participants noted that prices had remained stable over the preceding six months (one-third cited decreased price);
- Returning to levels similar to 2013, 70% of participants reported oxycodone as 'easy' or 'very easy' to access. Although the majority of participants noted the availability over the preceding 6 months as 'stable', 35% noted decreases in availability which may still reflect the effect of the reformulation introduction.
- 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;
- The majority of participants perceived availability as 'difficult/very difficult' and, although the majority of participants noted that availability had remained stable over the preceding six months, one-fifth perceived that it was becoming more difficult; and
- Illicit methadone was most commonly sourced from friends or acquaintances, and was mostly purchased at friends' houses, agreed public locations or home delivered.

*Physeptone*

- Participants who recently purchased illicit Physeptone tablets noted a modal cost of $2/mg;
- Two-thirds of participants who commented noted that Physeptone was 'difficult' or 'very difficult' to access, with three-fifths reporting 'stable' availability over the preceding six months; and
- Illicit Physeptone was most commonly sourced from friends, known dealers, and acquaintances.

### 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 $15-40, n=22), $60 per 60mg tablet (range $0-60, n=31), and $100 for a 100mg tablet (range $80-100, n=21) (Table 28). Purchase prices for Kapanol were similar: 20mg capsules cost a model price of $20 (range $10-20, n=13), 50mg capsules cost a modal price of $50 (range $30-400, n=19), and 100mg Kapanol capsules cost a modal price of $100 (range $50-100, n=7). These modal purchase prices are consistent with prices reported in the IDRS studies since 2009 (Table 28) and the majority of consumers reporting on morphine prices (85%, n=40 of those able to comment) stated that these prices had remained stable in the preceding six months.

Of those who commented on the price of morphine powder (n=6), the median price was $50 per point (range $33-50). Two-thirds (67%, n=4) of those who commented reported that the price of morphine powder had remained stable in the past six months, whereas one participant (17%) reported increasing prices and another participant reported fluctuating prices (17%). Morphine powder was reported by KE to have a price of $70-100 per point (0.1g) of powder.

*Oxycodone*

A 'tamper-resistant' reformulation of OxyContin was introduced into Australia on April 1, 2014, replacing the original product (see Section 8.2). Subsequent to this, a generic product without these tamper-resistant properties was introduced in September 2014, and placed on public subsidy in December, 2014.

Respondents reported the reformulation 'OP' (reformulated) OxyContin had a modal price of $15 for 20mg (range $0-20, n=5), and a modal price for 40mg of $20 (range $15-50, n=10) in 2016 (Table 28). In previous years (when only the original OxyContin formulation was available which did not have the tamper-resistant properties), participants typically reported that the price approximated $1/mg.

No participants commented on the price of generic oxycodone (despite the product being available and on public subsidy for this period).

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 generic or other oxycodone, over half reported the price to have remained stable (57%, n=4) with nearly a third reporting decreasing prices (29%, n=2) and one participant noting increasing prices (14%). Those who commented on the price changes for OP oxycodone reported prices as being stable (77%, n=10), increasing (8%, n=1), decreasing (8%, n=1) or fluctuating (8%, n=1).

*Methadone*

Consistent with reports in previous local IDRS studies, consumers reported the modal purchase price of methadone was $1 per mg (Table 28). The majority of participants who commented on price trends for methadone in the preceding six months indicated that the purchase price had remained stable (82%, n=27). When purchase prices for illicit syrup are compared over time, a stable trend can be seen, which shows a purchase price for $1.00 per mg (Table 28).

The modal purchase price for illicit 10mg Physeptone tablets of methadone was $20 (median=$15; range $8-20, n=18). Nine-tenths (88%) of those who commented (n=24) reported that the price of Physeptone had remained stable over the past six months.

**Table 28: Modal last purchase price for most recent purchase of pharmaceutical opioids, 2006-2016**

| Preparation | 2006 IDRS | | 2007 IDRS | | 2008 IDRS | | 2009 IDRS | | 2010 IDRS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** |
| MS Contin | | | | | | | | | | |
| *10 mg tablet* | $5 ($5-10) | *3* | $5 | *1* | $5 | *2* | $10($10-20) | *4* | $10 | *14* |
| *30 mg tablet* | $25 ($15-30) | *25* | $20($15-50) | *20* | $25 ($15-35) | *28* | $30 ($15-30) | *30* | $30($20-30) | *40* |
| *60 mg tablet* | $50 ($20-60) | *14* | $50($30-80) | *53* | $50 ($20-70) | *69* | $60 ($40-60) | *69* | $60($40-80) | *64* |
| *100 mg tablet* | $80 ($50-120) | *16* | $80($30-90) | *40* | $80 ($60-100) | *40* | $100 ($60-100) | *46* | $100($60-100) | *48* |
| Kapanol | | | | | | | | | | |
| *20 mg capsule* | $10 ($5-20) | *11* | $10($8-20) | *7* | $20 ($15-30) | *7* | $20($10-25) | *9* | $20($10-20) | *16* |
| *50 mg capsule* | $35 ($10-80) | *31* | $40($20-50) | *24* | $50 ($30-55) | *49* | $50($30-80) | *46* | $50($25-50) | *44* |
| *100 mg capsule* | $70 ($20-120) | *34* | $70($50-95) | *22* | $80 ($50-100) | *23* | $100($60-100) | *23* | $100($50-100) | *30* |
| Anamorph | | | | | | | | | | |
| *30 mg tablet* | - | *-* | - | *-* | $30 | *1* | $30($20-30) | *5* | $30 | *10* |
| OxyContin | | | | | | | | | | |
| *10 mg tablet* | $5 | *1* | $10($10-20) | *3* | $10 ($5-10) | *4* | $10($7-10) | *3* | $10($5-20) | *17* |
| *20 mg tablet* | $15*($10-20) | *5* | $20($20) | *4* | $20 ($10-20) | *20* | $20($5-20) | *12* | $20($10-25) | *27* |
| *40 mg tablet* | $25 ($5-40) | *14* | $40*($15-50) | *9* | $40 ($20-50) | *26* | $40($15-40) | *28* | $40($10-50) | *43* |
| *80 mg tablet* | $50 ($40-50) | *7* | $40($30-100) | *11* | $80 ($50-80) | *13* | $80($40-80) | *26* | $80($40-80) | *35* |
| Methadone syrup (price per mg) | $1.0($0.3-2.0) | *43* | $1.0($0.5-2.0) | *52* | $1.0 ($0.5-2.0) | *53* | $1.0($0.4-1.0) | *46* | $1.0($0.5-1.0) | *30* |
| Physeptone | | | | | | | | | | |
| *5 mg tablet* | $4.25*($3.5-5.0) | *2* | $5 | *1* | $5 | *1* | - | *0* | $5($0.5-12.5) | *9* |
| *10 mg tablet* | $10 ($7-150) | *36* | $15($5-20) | *17* | $10 ($5-20) | *35* | $12.5*($5-25) | *44* | $10($10-20) | *28* |

**Source:** IDRS PWID interviews
*Median substituted for mode, as no single mode existed
Note: Reported price range in parentheses

**Table 28: Modal last purchase price for most recent purchase of pharmaceutical opioids, 2006-2016 (continued)**

| Preparation | 2011 IDRS | | 2012 IDRS | | 2013 IDRS | | 2014 IDRS | | 2015 IDRS | | 2016 IDRS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** | **Price** | ***n*** |
| MS Contin | | | | | | | | | | | | |
| *10 mg tablet* | $10 | *1* | $10 ($10-30) | *4* | $10 ($10-15) | *3* | $10 ($10) | *8* | - | *-* | $10($10) | *1* |
| *30 mg tablet* | $30($25-40) | *13* | $30 ($20-50) | *28* | $30 ($15-35) | *18* | $30 ($25-30) | *24* | $30 ($25-$30) | *25* | $30($15-40) | *2* |
| *60 mg tablet* | $60($40-80) | *45* | $60 ($30-70) | *51* | $60 ($40-80) | *43* | $60 ($40-60) | *38* | $60 ($30-70) | *32* | | *2* |
| *100 mg tablet* | $100($70-120) | *7* | $100($50-110) | *28* | $100 (80-100) | *20* | $100 (40-120) | *40* | $100 ($70-100) | *33* | $60($0-60) | *3* |
| | | | | | | | | | | | | *1* |
| | | | | | | | | | | | $100($80-100) | *2* |
| | | | | | | | | | | | | *1* |
| Kapanol | | | | | | | | | | | | |
| *20 mg capsule* | $20($40-60) | *5* | $20 ($10-25) | *15* | $20 | *5* | $20 (20) | *11* | $20 ($20) | *7* | $20($10-20) | *1* |
| *50 mg capsule* | $50($40-60) | *18* | $50 ($25-50) | *25* | $50 ($50-60) | *20* | $50 ($35-50) | *28* | $50 ($25-50) | *21* | | *3* |
| *100 mg capsule* | $100($80-100) | *14* | $100($50-100) | *9* | $100 | *5* | $100($60-100) | *20* | $100 ($60-$100) | *9* | $50($30-400) | *1* |
| | | | | | | | | | | | | *9* |
| | | | | | | | | | | | $100($50-100) | *7* |
| Anamorph | | | | | | | | | | | | |
| *30 mg tablet* | $30 | *5* | $30 | *11* | - | *-* | $30 ($30-40) | *14* | $30 ($20-$30) | *10* | $30($20-30) | *6* |

**Table 28: Modal last purchase price for most recent purchase of pharmaceutical opioids, 2006-2016 (continued)**

| Preparation | 2011 IDRS | | 2012 IDRS | | 2013 IDRS | | 2014 IDRS | | 2015 IDRS | | 2016 IDRS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Price | *n* | Price | *n* | Price | *n* | Price | *n* | Price | *n* | Price | *n* |
| OxyContin (original) | | | | | | | | | | | | |
| *10 mg tablet* | $9.5*($9-10) | *2* | $10 | *8* | $10 ($5-20) | *13* | $10 ($10-20) | *4* | - | - | - | - |
| *20 mg tablet* | $20($20-25) | *7* | $20 ($6-30) | *22* | $20 ($20-30) | *21* | $20 ($10-25) | *13* | $20 ($10) | *1* | - | - |
| *40 mg tablet* | $40($20-60) | *15* | $40 ($20-50) | *42* | $40 ($20-60) | *26* | $40 ($25-50) | *14* | $40 ($20-40) | *3* | - | - |
| *80 mg tablet* | $80($50-100) | *22* | $80 ($40-100) | *42* | $80 ($40-120) | *28* | $80 ($65-80) | *14* | - | - | - | - |
| OxyContin (reformulated) | | | | | | | | | | | | |
| *10 mg tablet* | | | | | | | - | - | | | | |
| *20 mg tablet* | | | | | | | $10 ($10-20) | *3* | $5 ($5-10) | *3* | $10 ($10) | *1* |
| *40 mg tablet* | | | | | | | $23*($20-25) | *2* | $10 ($0-20) | *8* | $15 ($5- | *5* |
| *80 mg tablet* | | | | | | | - | *0* | $20 ($20-40) | *6* | 20) | *10* |
| | | | | | | | | | $50 ($50) | *1* | $20 ($15-50) | *1* |
| | | | | | | | | | | | $80 ($80) | |
| OxyContin (generic) | | | | | | | | | | | | |
| *10 mg tablet* | | | | | | | | | - | - | - | *0* |
| *20 mg tablet* | | | | | | | | | 10 | *1* | - | *0* |
| *40 mg tablet* | | | | | | | | | 40 | *1* | - | *0* |
| *80 mg tablet* | | | | | | | | | - | - | - | *0* |
| Methadone syrup (price per mg) | $1.0($0.7-2.0) | *25* | $1.0($0.8-1.33) | *34* | $1 ($0.63-2) | *26* | $1 ($0.8-1) | *28* | $1 ($1.0-5.83) | *8* | $1($1-2) | *8* |
| Physeptone | | | | | | | | | | | | |
| *5 mg tablet* | $5 | *2* | - | *0* | $5 | *1* | $5 | *1* | $20 ($5-20)* | *4* | $10($10) | *1* |
| *10 mg tablet* | $20($5-20) | *23* | $20 ($6-20) | *23* | $20 ($10-20) | *28* | $20 ($10-20) | *30* | $15 ($10-20) | *10* | $20($8-20) | *18* |

**Source:** IDRS PWID interviews

*Median substituted for mode, as no single mode existed

Note: Reported price range in parentheses. Bolded values for oxycodone refer to the reformulated product; prior

### 5.5.2 Availability

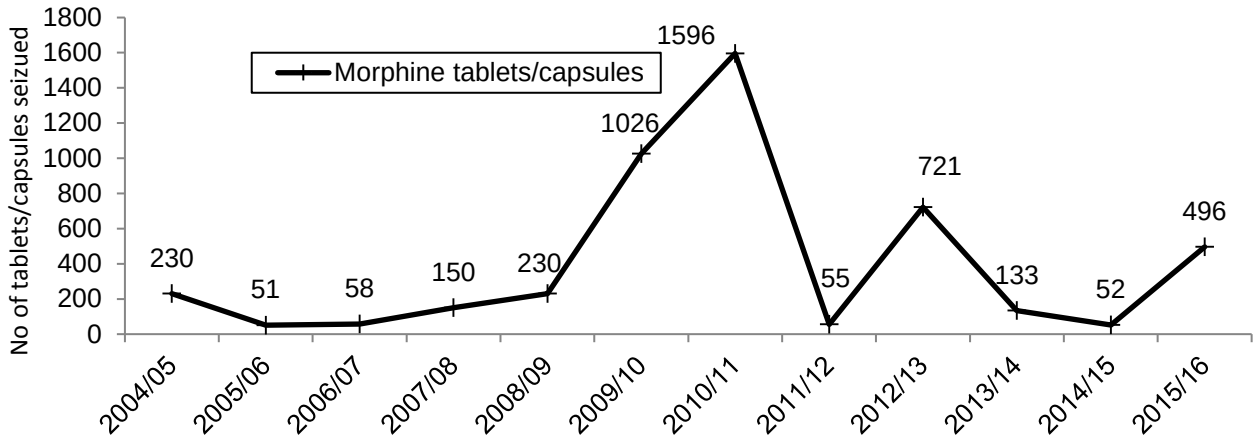
*Morphine*

The majority (76%) of the consumers interviewed who could comment on availability trends for morphine reported that morphine was 'easy' or 'very easy' for them to obtain (43% 'easy'; 33% 'very easy'), and that the availability of morphine had remained stable (65%, n=30) in the six months prior to interview. Several KE (n=4) noted recent increased availability of morphine powder to a small group of Tasmanian users. This form was reported by these KE to be of very high purity.

Among the IDRS consumer sample, participants reported last purchasing morphine from a known dealer (38%, n=17) or a friend (33%, n=15). Participants were also asked to comment on the last venue in which these recent purchases occurred: 29% (n=13) reported purchasing at a dealer's home, 29% (n=13) from an agreed public location and 27% (n=12) from a friend's home.

Seizures of morphine and other narcotic pills are reported by Tasmania Police (Figure 55). From 2005/06 to 2008/09, the number of tablets/capsules of morphine seized was between 51 and 230 annually. After this, the number of such seizures increased dramatically, with 1,026 tablets seized in 2009/10 and 1,596 tablets/capsules seized in 2010/11. The latter increase was accounted for by two large seizures, together totalling 1,076 tablets. Since this time, the number of morphine seizures has been considerably lower, with 496 tablets/capsules seized in 2015/16.

**Figure 55: Number of morphine tablets and capsules seized by Tasmania Police, 2005/06-2015/16**




**Source**: State Intelligence Services, Tasmania Police
* Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

Among those who commented, morphine powder was reported to be 'easy' (50%, n=4) or 'very easy' (25%, n=2) to obtain, with the remaining two participants reporting it to be 'difficult' to access (25%). Participants reported access to morphine powder to be either 'stable' (50%, n=3) or 'easier' (50%, n=3) over the past six months. Half of those who commented had bought morphine powder from dealers (50%, n=3), whereas a third had purchased from friends (33%, n=2) and one had bought from a stranger (17%). These purchases were made at a friend's home (33%, n=2), at an agreed public location (33%, n=2), at a dealer's home (17%, n=1) or from a stranger on a bus (17%, n=1).

*Oxycodone*

Two-thirds (67%) of participants who were able to comment (n=12) noted the reformulated 'OP' oxycodone to be 'easy' or 'very easy' to access (33% 'easy' and 33% 'very easy'). The majority of the participants who commented on this section stated that availability of 'OP' (reformulated) oxycodone had remained 'stable' over the past six months. Purchases were most often made from friends (71%), and most commonly the venue for these transactions was noted to be either friends' houses (43%) or dealers' houses (29%).

Perception of availability of generic and other oxycodone was mixed amongst those who were able to comment (n=8), with 63% believing these formulations either 'very easy' or 'easy' to obtain (25% and 38% respectively), whilst the remainder perceived availability as difficult. Most participants (63%) perceived availability to be stable over the previous six months. Generic and other oxycodone were also most commonly sourced from friends (63%), with these transactions taking place most frequently at friends' houses (50%) or agreed public locations (25%).

*Methadone*

Two-thirds of participants (66%) who were able to comment found the availability of methadone syrup to be either 'difficult' or 'very difficult' to access (47% 'difficult, 19% 'very difficult'), whilst 34% noted it to be either 'easy' or 'very easy' to access (28% and 6% respectively). Although the majority of participants reported the trend in availability as stable (73%, n=24), one-fifths of participants reporting on trends in availability of methadone syrup perceived it as 'more difficult' to obtain the preceding six months (21%, n=7). 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".*

There was a broad spread of source venues for illicit methadone syrup purchase reported with a friend's home (31%, n=8), agreed public locations (23%, n=6) and home delivery (19%, n=5) all showing similar numbers of responses (Table 29).

With regard to availability of illicit Physeptone, of those who commented (n=24) two-thirds (67%) noted this to be either 'difficult' (50%, n=12) or 'very difficult' (17%, n=4) to access; only 33% (n=8) stated that illicit Physeptone was 'easy' (29%, n=7) or 'very easy' (4%, n=1) to access. Three-fifths of participants reported stable availability of Physeptone over the preceding six months (58%, n=14), whilst 38% (n=9) noted decreasing availability. Participants most commonly purchased Physeptone through a friend (64%, n=18), known dealer (18%, n=5) or acquaintance (11%, n=3). Venues which were most commonly cited for these transactions included an agreed public location (29%, n=8), home delivery (21%, n=6), a friend's home (18%, n=5), dealer's home (14%, n=4) and a chemist (11%, n=3) (Table 29).

**Table 29: Pathways to illicit methadone access, 2016**

| | Illicit methadone syrup (n=26) | Illicit physeptone tablets (n=28) |
|---|---|---|
| **Last source person of illicit purchase*** | | |
| Friend | 65% | 64% |
| Known dealers | 12% | 18% |
| Acquaintances | 23% | 11% |
| **Last source venue for illicit purchase*** | | |
| Agreed public location | 23% | 29% |
| Friend's home | 31% | 18% |
| Street market | 8% | - |
| Home delivery | 19% | 21% |
| Acquaintance's home | 4% | 4% |
| Dealer's home | 8% | 14% |
| Chemist | 8% | 11% |

**Source:** IDRS PWID interviews

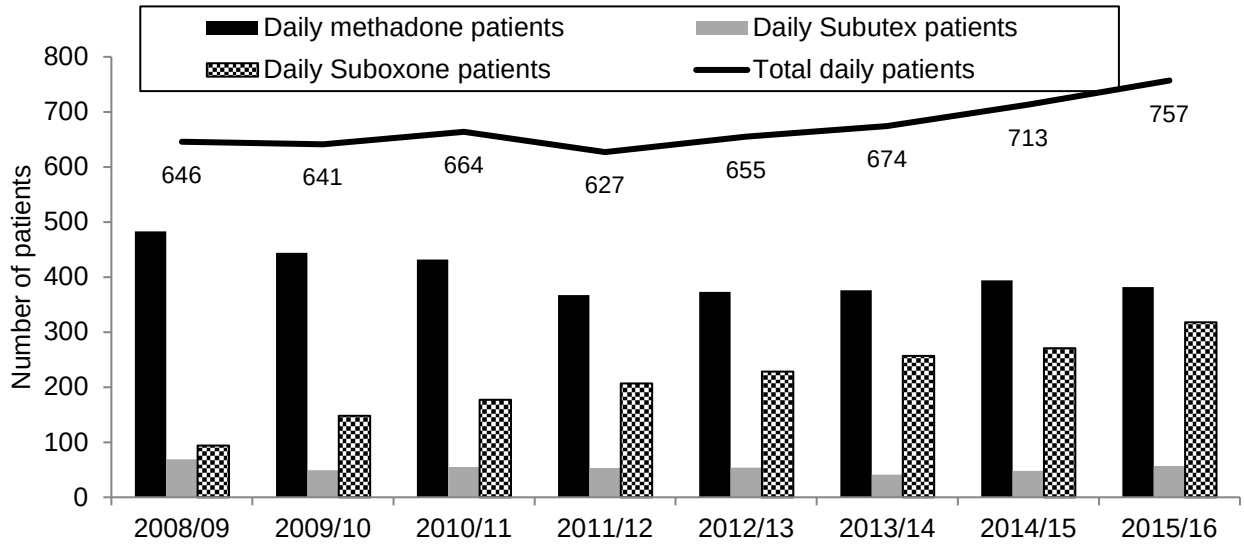
* For those reporting source

### 5.5.3 Prescription rates of opioid pharmaceuticals in Tasmania

There has been little change in the overall number of clients on Tasmania's pharmacotherapy program in recent years (Figure 56). In 2015/16, there were 767 patients, most of who were receiving methadone syrup or Suboxone. The number of patients receiving methadone has declined from 483 in 2008/09 to 390 in 2015/16. Conversely, the number of patients receiving Suboxone has increased from 94 in 2008/09 to 308 in 2015/16.

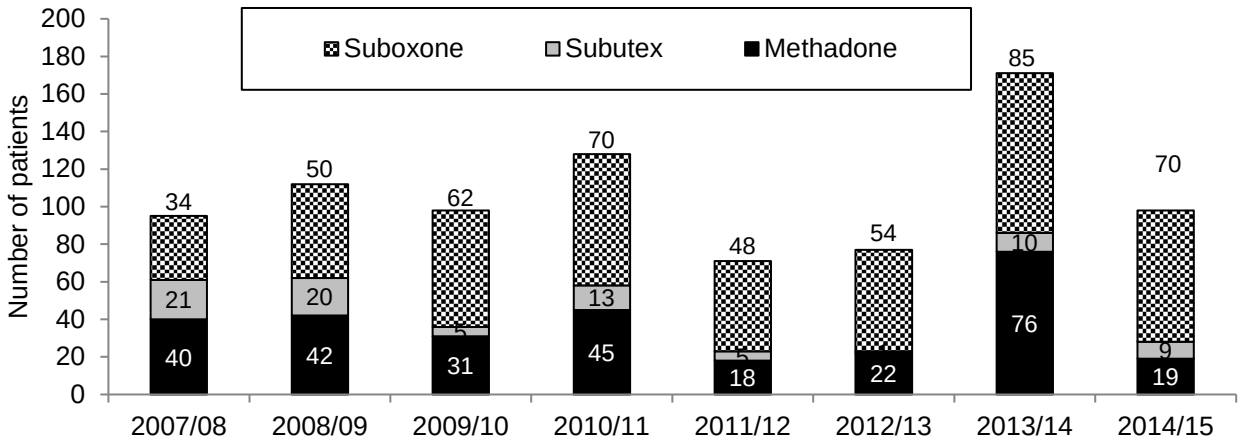
Overall, the number of new admissions to pharmacotherapy treatments was relatively stable between 2008/09 and 2012/13, with between 95 and 128 new admissions per financial year. In 2012/13, this number increased to 171 new admissions, declining again to 132 in 2014/15, and to 98 in 2015/16 (Figure 57).

**Figure 56: Clients of the Tasmanian pharmacotherapy programs, 2008/09-2015/16**




**Source:** Pharmaceutical Services, Department of Health and Human Services, Tasmania

**Figure 57: New admissions to pharmacotherapy treatments in Tasmania, 2008/09-2014/15**




**Source:** National Drug System and Pharmaceutical Services, Department of Health and Human Services, Tasmania. Data for 2015/16 was not available at the time of publication.

Tasmanian prescription rates for Schedule 8 (S8) pharmaceuticals[8] 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 has continued: in 2015, the Tasmanian rate was 95% of the national rate (Figure 58). Data for 2016 was not available at the time of publication.

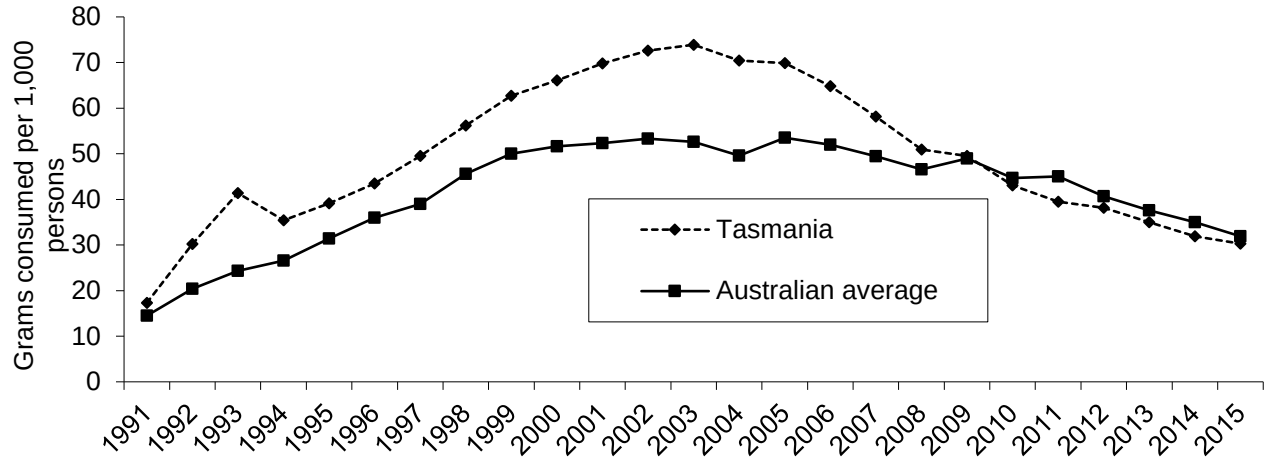
Despite consumption of morphine per 1,000 persons in Tasmania decreasing from 73.9g in 2003 to 31.9g in 2014, the number of applications received by Tasmanian Pharmaceutical Services for approval to prescribe narcotics[9] steadily increased, almost exponentially in recent years, from 351 in 1989/90 to 2,644 applications[10] in 2005/06, to 4,317 in 2006/07, and again in 2009/10 (6,439 applications). In 2011/12, 6,521 applications were received, however, in 2012/13 and 2013/14, further increases were reported, with 7,359 and 8,594 applications respectively (Figure 59). This number had stabilised in 2014/15 (8,586 applications) before again increasing in 2015/16 (9, 001 applications).

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

[9] 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.

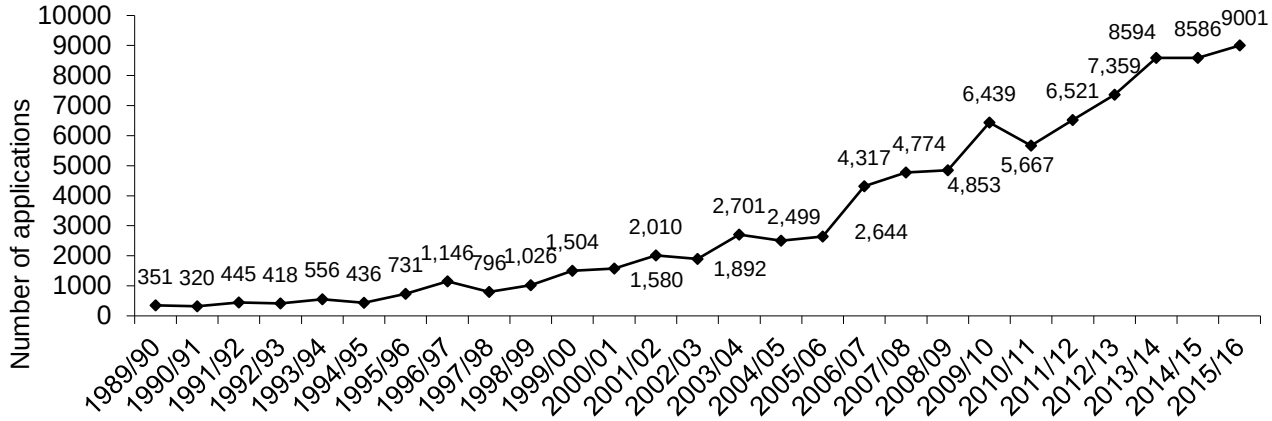
[10] It is worth noting that the level of compliance in regard to submission of applications is significantly dependent on reminders being sent to doctors, and as such these figures are unlikely to reflect the absolute number of cases requiring such a submission.

**Figure 58: Consumption of morphine per 1,000 persons, 1991-2015**




**Source:** National Drug System and Pharmaceutical Services, Department of Health and Human Services.
Note: Data for 2016 was not available at the time of publication.

**Figure 59: S22/Section 59 applications received by Pharmaceutical Services, Tasmania, 1989/90-2015/16**



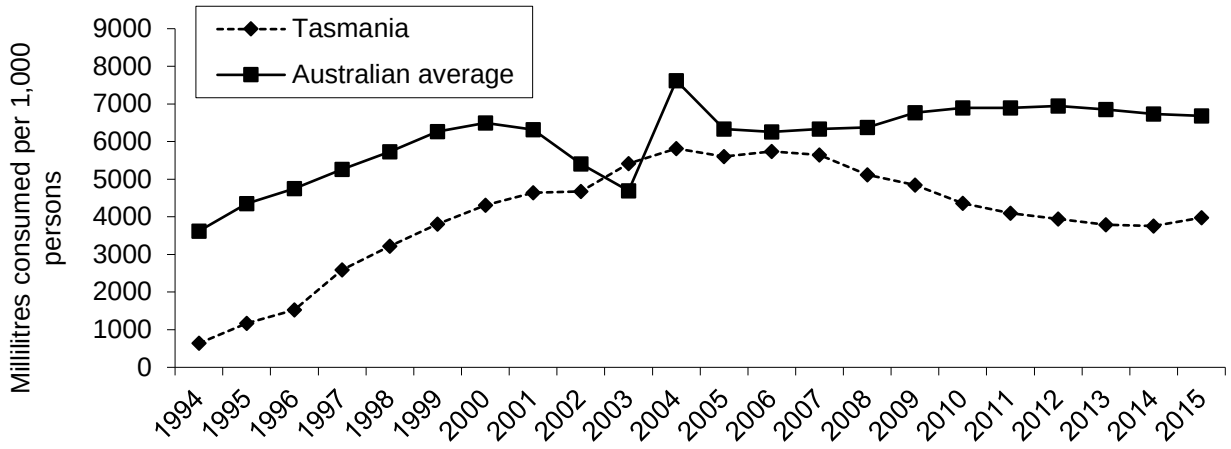

**Source:** Pharmaceutical Services, Department of Health and Human Services.
Note: Applications are for approval to prescribe narcotics to a patient for more than two months or for a person who is drug dependent.

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 60). 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 had decreased over the preceding seven years (56% of the national average in 2014), before slightly increasing again in 2015 (59.5% of the national average). Data for 2016 was not available at the time of publication.

Tasmanian consumption of methadone 10mg tablets (Physeptone), in contrast to the level of use of methadone syrup, was consistently above 200% that of the national average up until 2012 (196%). Rapid increases in use were observed in 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%). 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 189% of the national rate in 2015. Data for 2016 was not available at the time of publication.

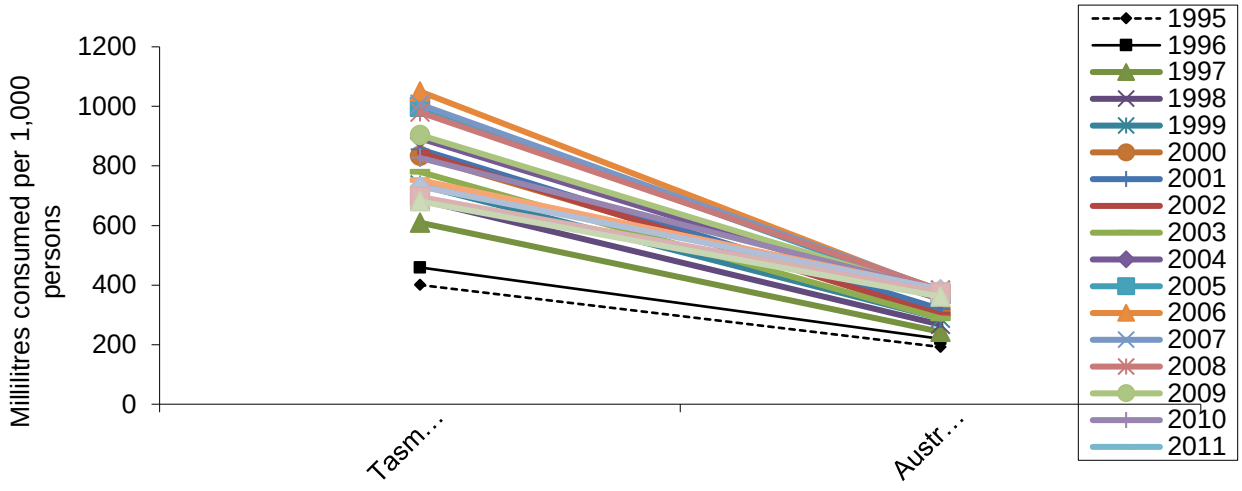
When trends across both preparations of methadone are combined, overall consumption of methadone in Tasmania remained below that of the Australian average until 2002, and in 2003 grew to 130% of the national average, due to a sharp decrease in the national rate of consumption (Figure 62). Between 2004 and 2007, the national and local rates of consumption stabilised, with Tasmanian rates approximately 110% of the national average (Figure 62). 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 2015 (72% of the national rate). Data for 2016 was not available at the time of publication.

**Figure 60: Consumption of methadone syrup per 1,000 persons, 1994-2015**



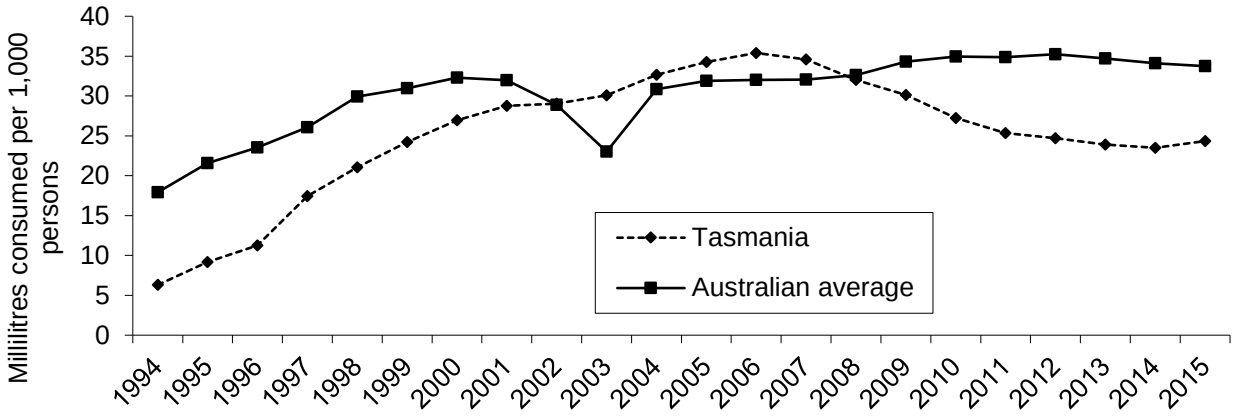

**Source:** National Drug System and Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

**Figure 61: Consumption of methadone 10mg tablets per 1,000 persons, 1995-2015**




**Source**: National Drug System and Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

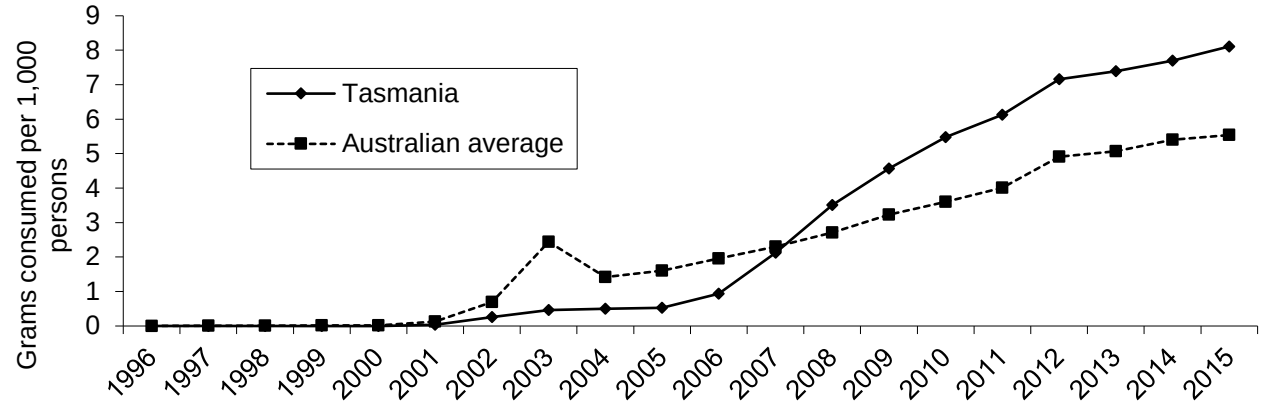
**Figure 62: Consumption of methadone per 1,000 persons, 1994-2015**




**Source**: National Drug System and Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

Tasmanian prescription rates for buprenorphine are detailed below. Following the trends in buprenorphine maintenance admissions, the rate of prescription of all forms of the drug[11] in the state increased tenfold between 2001 and 2003 from 0.04g to 0.46g per 1,000 persons, and again between 2005 and 2015, increasing fourteen-fold from 0.5g to 8.12g 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 in 2915 is greater than the national rate (146%). Data for 2016 was not available at the time of publication.

**Figure 63: Consumption of all forms of buprenorphine per 1,000 persons, 1996-2015**




**Source:** National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

Finally, prescriptions of oxycodone are detailed below. Nationally, there has been a rapid uptake in the use of this drug since 1999, with uptake in Tasmania increasing ten-fold in the fourteen years between 2000 and 2013. Tasmanian consumption rates were consistently greater than national rates until 2011, when a dramatic increase in the national rate was observed (from 73g per 1,000 persons in 2010 to 91g in 2011), resulting in the Tasmanian consumption rate falling to 86% of the national rate. In 2013, 2014, and 2015 the national rate increased more dramatically than the

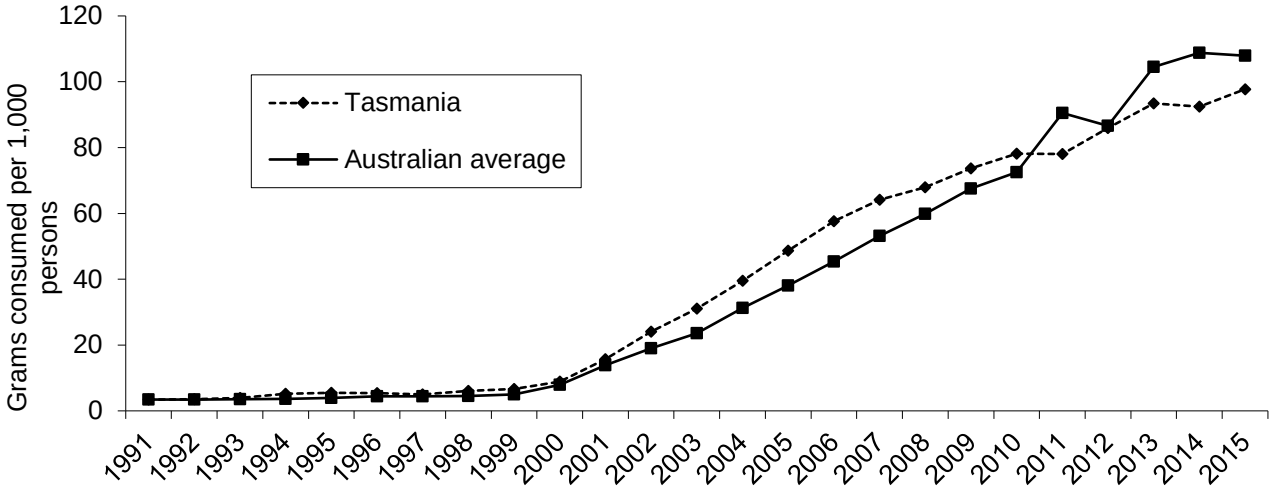
[11] This data includes both buprenorphine (Subutex, Norspan) and buprenorphine-naloxone (Suboxone) preparations.

Tasmanian rate, resulting in Tasmanian consumption being 89%, 85%, and 91% of the national rate, respectively. Data for 2016 was not available at the time of publication.

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 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). Introduction of the tamper-resistant oxycodone formulation in April, 2014, may have played some part in the decline in use in Tasmania relative to nationally, although it is important to note that the amount consumed per 1,000 persons has remained stable (for further information, see Section 8.2).

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[12] 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 64: Consumption of oxycodone per 1,000 persons, 1991-2015**




**Source:** National Drug System and Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

### 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 2006 and 2016 IDRS studies (Figure 65), several changes are notable. Firstly, in regard to morphine availability, between 2006 and 2016 there has been only slight variation in the overall proportion reporting that availability was 'easy' or 'very easy'. In 2016, the overall proportion of participants reporting 'easy' or 'very easy' access remained stable (77% in 2015 and 76% in 2016).

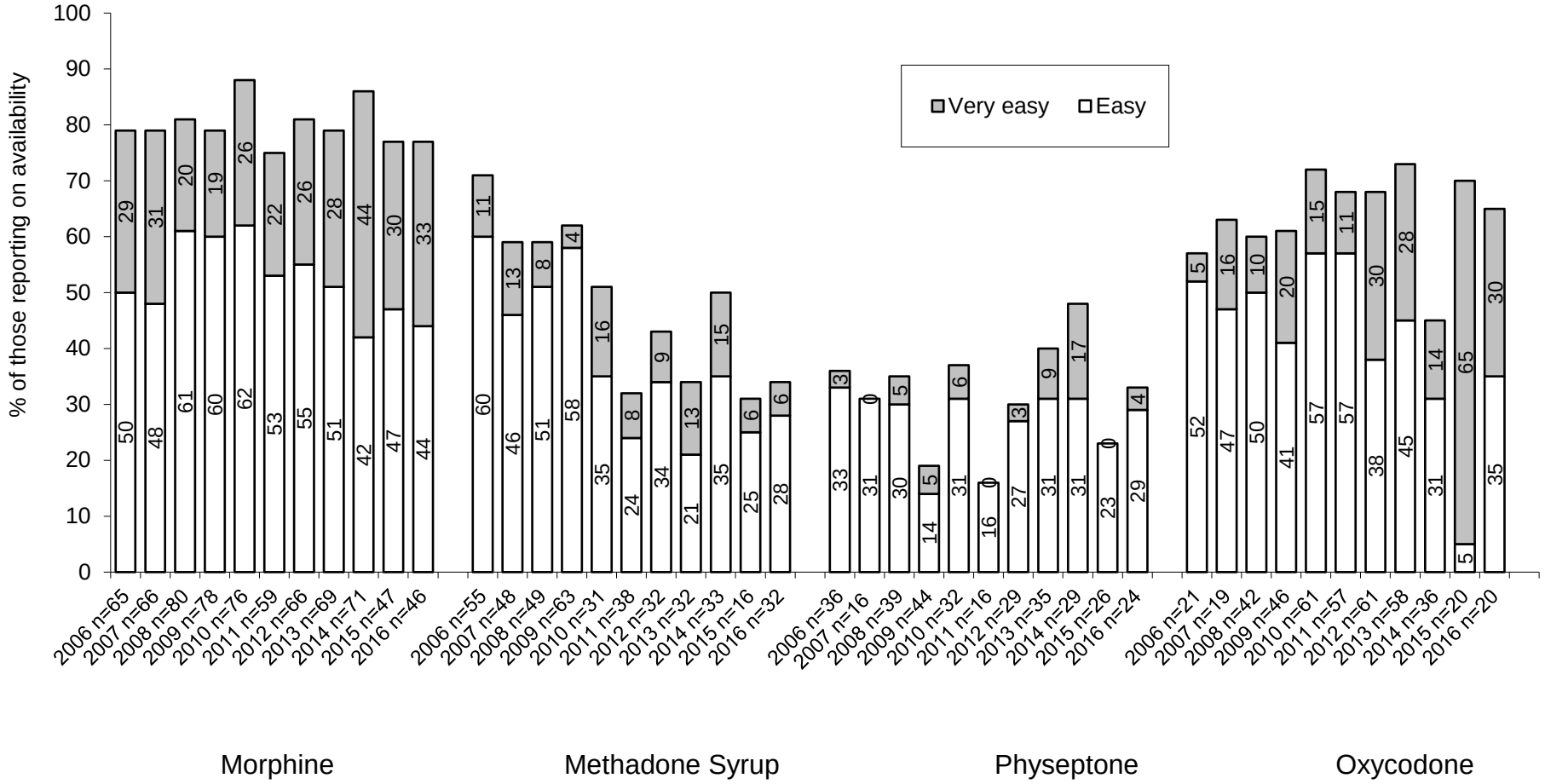
[12] During interviewing, 'licit means' was defined as having the drug prescribed directly to the individual. By this definition, doctor-shopping would be considered as 'licit means', which suggests that there is a stable illicit source of these drugs to IDU.

Availability of illicit methadone syrup has been more variable. Between 2007 and 2010, availability of methadone syrup was relatively stable: between 51% and 62% of each sample reported access to be either ‘easy’ or ‘very easy’. Since 2011, this rate has been slightly lower, ranging between 31% and 43% (with the exception of 50% in 2014).

Two-thirds (67%) of the 2016 sample stated that illicit Physeptone was ‘difficult’ or ‘very difficult’ to access. Only 33% said that Physeptone was ‘easy’ or ‘very easy’ to access.

Finally, the decrease in the perceived availability of oxycodone observed in 2014 (73% in 2013 versus 45% in 2014: p=.100) does not seem to have continued in 2015 or 2016, with 70% of participants in 2015 and 65% of participants reporting access to be ‘easy’ or ‘very easy’. However, there were further reductions in the number of participants able to comment on the availability of oxycodone, with only 20% responding to these questions.

**Figure 65: PWID reports of 'easy' or 'very easy' availability of illicit pharmaceutical opioids, 2006-2016**




**Source:** IDRS PWID interviews

## 5.6 Benzodiazepines

**Key Points:**

- Modal price for benzodiazepines was $2 for a 5mg tablet of diazepam and $15 for 5mg of Alprazolam, with half of participants who commented reporting the price over the preceding six months as stable and two-fifths reported an increase in price;
- Just over half of participants considered availability of illicit benzodiazepines to be 'difficult' (one-third considered access 'easy');
- Half of participants reported that access had remained stable over the past six months, while one-third considered access more difficult; and
- The number of patients receiving prescriptions in Tasmania for alprazolam decreased in 2015/16 (2,107 versus 2,296 in 2014/15), as did the number of patients receiving prescriptions for both alprazolam and an S8 (567 versus 590 in 2014/15).

### 5.6.1 Price

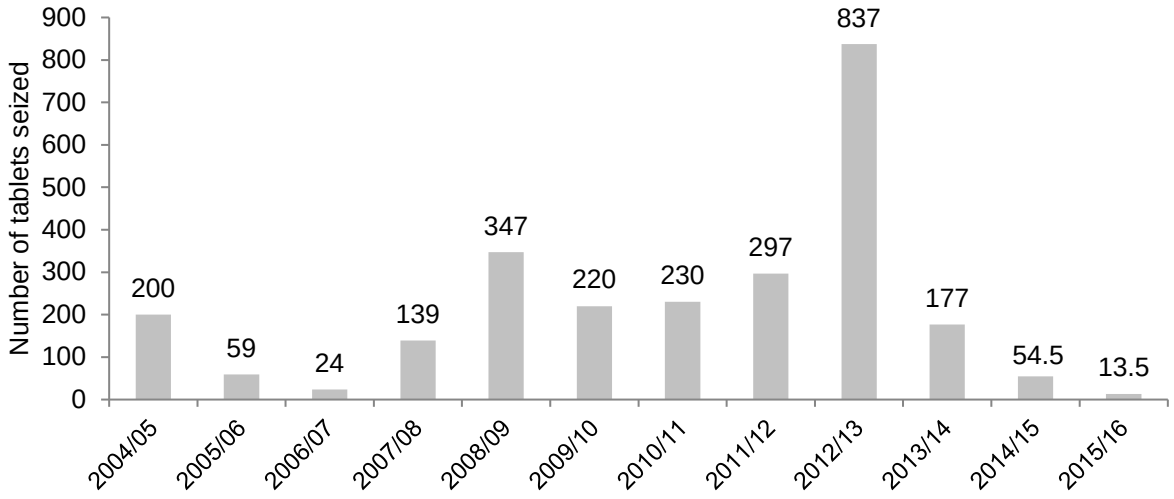
Items regarding price of benzodiazepines were included in the 2016 survey. Modal price for 5mg (diazepam) was $2 (median $2.50, range $1-$100, n=26), although it is important to note that reports of price reflect where a single tablets and multiple tablets were purchased, the latter potentially resulting in a reduced per unit price. Modal price for 5mg of Alprazolam was $15 (median $15, range $10 - $90, n=5). Of the participants who commented (n=41), over half (51%, n=21) reported that the price of illicit benzodiazepines had remained stable over the last six months, with two-fifths (39%, n=16) reporting an increase in price.

### 5.6.2 Availability and access

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. Over half of participants who commented (56%, n=23) felt that benzodiazepines were 'difficult' to access; only 32% (n=13) described access as 'easy'. More than half of this group reported access had remained stable during the six months preceding (53%, n=24), however one-third (36%) noted availability was more difficult.

Tasmania Police reports seizures of benzodiazepines. Between 2004/05 and 2006/07, the number of tablets/capsules seized decreased from 200 to 24. Since this time, the number of tablets/capsules of benzodiazepines seized by Tasmania Police had remained relatively stable, ranging between 139 and 347 per financial year (Figure 66). Exceptions include 2012/13, when 837 tablets/capsules were seized, and 2014/15, when only 54.5 tablets were seized (although an additional 8.1 grams of benzodiazepine tablets – an unspecified number - were seized). There was a decrease in the number of tablets seized in 2015/16 with only 13.5 tablets seized which reflects the decreased number of seizures in 2016 relative to 2015 (3 vs. 9 seizures).

**Figure 66: Total numbers of benzodiazepine tablets seized by Tasmania Police, 2004/05-2015/16**

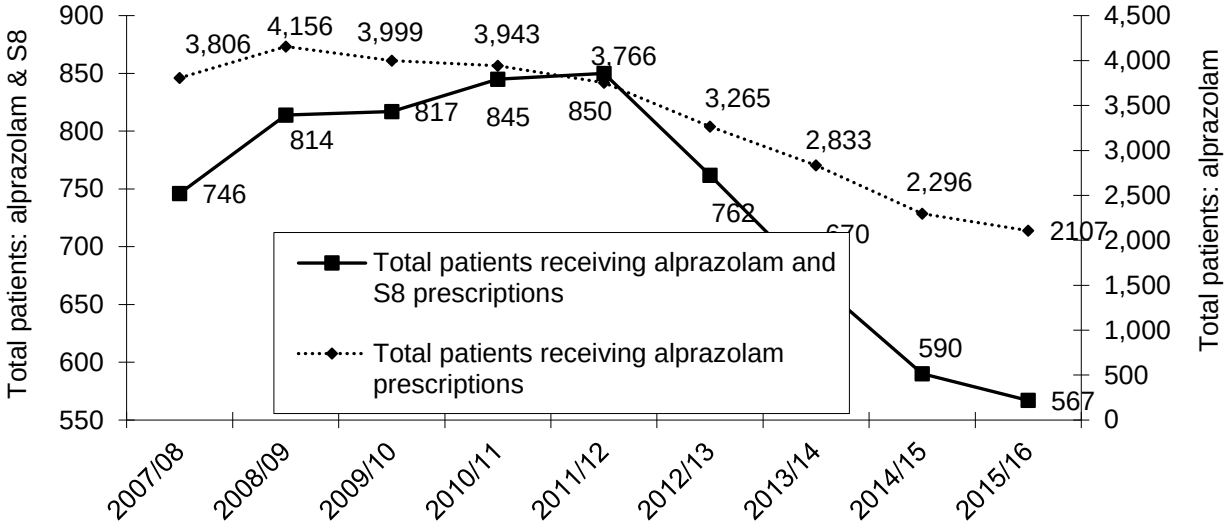



**Source**: State Intelligence Services, Tasmania Police
* 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

*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 2014/15. The total number of patients receiving prescriptions for alprazolam in the 2007/08 period was 3,806 (Figure 67). This number has gradually decreased since then, with 2,107 patients in 2015/16. 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, this has decreased to 567 patients in 2015/16.

**Figure 67: Total numbers of Tasmania patients receiving alprazolam and both alprazolam and a Schedule 8 drug, 2007/08-2015/16**

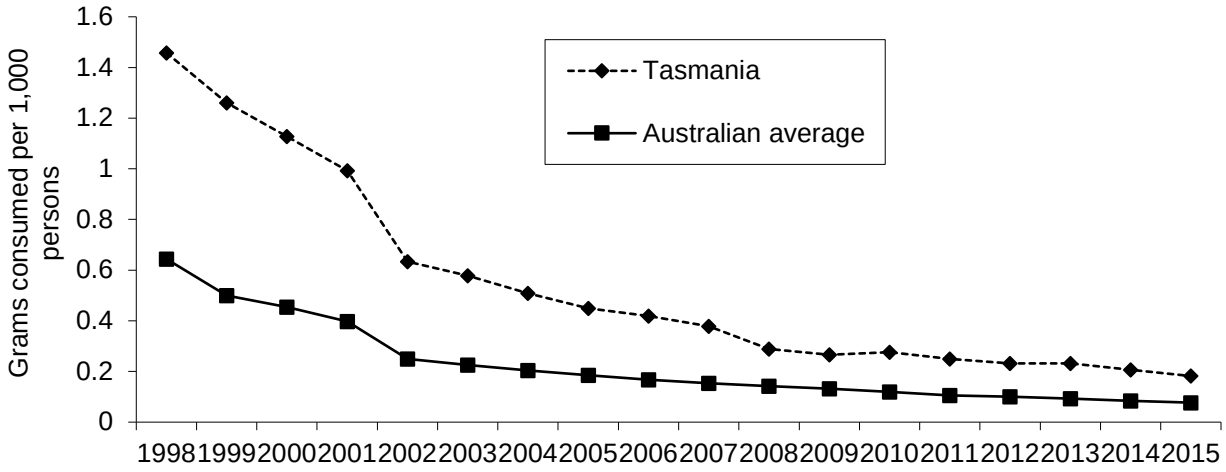



**Source:** Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

*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 68) 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 2015. Data for 2016 was not available at the time of publication.

**Figure 68: Consumption of flunitrazepam per 1,000 persons, 1998-2015**




**Source**: National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services. Note: Data for 2016 was not available at the time of publication.

## 5.7 Other drugs

**Key Points:**

*Ecstasy:*

- The Tasmanian EDRS reported the median price of ecstasy ($30) in 2016;
- Availability of ecstasy was considered by most participants to be 'easy'/'very easy';
- Subjective reports regarding purity suggested this to be 'medium' or 'fluctuating'; and
- Preliminary data from Tasmania Police suggest a similar number of seizures, but a decreased number of seized capsules/tablets in 2015/16 relative to 2014/15.

*Alkaloid poppies:*

- From 2007/08, the number of thefts of alkaloid poppies has decreased, as has the number of seizures reported by Tasmania Police; no seizures were reported for 2015/16.

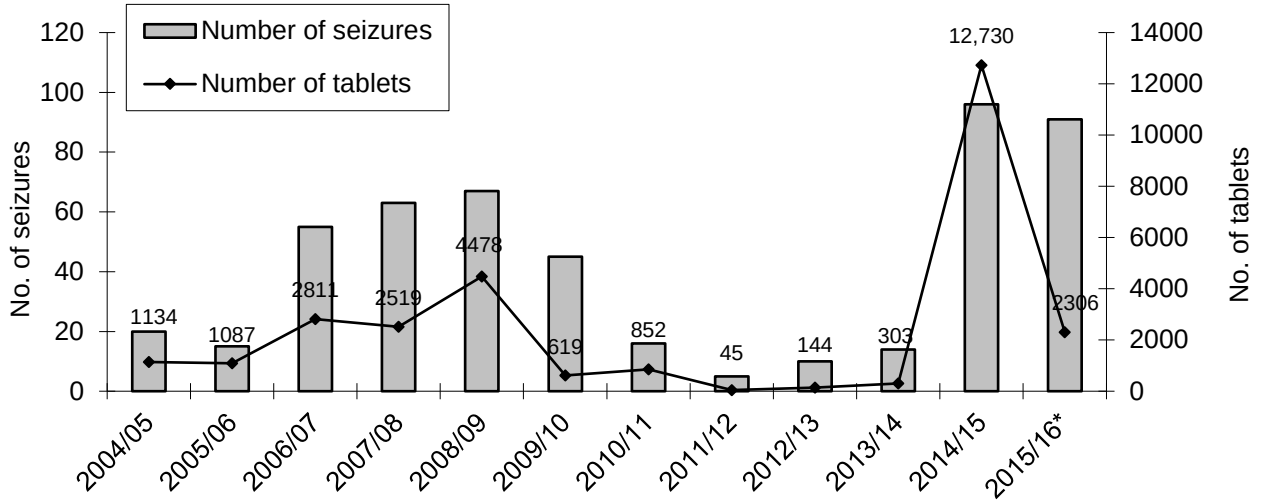
### 5.7.1 Ecstasy and related drugs

Trends in regard to price, purity and availability of ecstasy are not examined in detail within the IDRS study. However, a study using regular ecstasy users (REU) (Lusk, Ney, & Bruno, 2017) has examined trends in ecstasy and other 'party drug' use in greater depth. The EDRS study found that the median price of an ecstasy pill was $30 in 2016: similar to that reported 2012 through 2014 ($30), but slightly lower than in 2015 ($35). In 2014/15, the ACC reported the median price of a single ecstasy tablet capsule was $40-50. Data for 2015/16 was not available at the time of publication (ACC, 2016). EDRS participants noted that ecstasy was 'easy' (50%) or 'very easy' (37%) to access in 2016. Ecstasy was reported to be 'medium' (45%) or 'fluctuating' (38%) in purity in the past six months, consistent with 2015 reports.

Figure 69 shows the number of ecstasy tablets seized by Tasmania Police. The number of tablets and the number of seizures increased from 2004/05 to 2008/09 (1,134 to 4,478 tablets), decreasing from to between 45 and 303 tablets seized annually from 2011/12 to 2013/14. In 2014/15, there was a substantial increase in the number of seizures (n=96) and total capsules/tablets seized (n=12,730). There was a similar number of seizures (n=91) in 2015/16, but a notable decrease in the number of total capsules/tables seized (n=2306)[13]. Tasmania Police conducts purity analyses for some ecstasy seizures. See Matthews, Lusk, and Bruno (2016) and Lusk, Ney, Matthews, and Bruno (2017) for discussion of this.

[13] 2015/16 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.

**Figure 69: Total number of tablets suspected to contain ecstasy seized by Tasmania Police, 2004/05-2015/16**




**Source:** ACC & State Intelligence Services, Tasmania Police
* Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

### 5.7.2 Hallucinogens

No price data was reported by the ACC from 2004/05 until 2008/09, when one tab was reported to cost $40; in 2009/10, one tab was reported to cost $25; in 2011/12, this price was $20, and in 2012/13 and from 2013/2014 to 2014/2015, the price range of $10-20 was reported (ACC, 2016).

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 2014/15. In the 2014/15 period, Tasmania police reported six consumer and four provider arrests in relation to LSD, and six seizures. In 2015/16, Tasmania Police reported 19 seizures, with seven consumer and one provider arrests related to LSD[14].

### 5.7.3 Alkaloid poppies

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 30). In 2015/16[15], Tasmania Police reported no seizures of a poppy product.

The diversion rates of Tasmanian alkaloid poppy crops, shown in Table 30, indicate a decreasing amount of poppies stolen from crops in 2005/06 onwards. In 2005/06, 13 incidents of theft resulting in 10,263 poppy capsules being stolen were reported. By 2015/16, this had decreased to just 10 incidents of theft involving 516 poppy capsules.

[14] Note: Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.
[15] Note: Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

**Table 30: Tasmanian alkaloid poppy crop diversion rates, 2005/06-2015/16**

| | 2005/ 06 | 2006/ 07 | 2007/ 08 | 2008/ 09 | 2009/ 10 | 2010/ 11 | 2011/ 12 | 2012/ 13 | 2013/ 14 | 2014/ 15 | 2015/ 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of capsules stolen | 10,263 | 9,344 | 820 | 2,280 | 4,772 | 1,473 | 687 | 2,895 | 3,923 | 331 | 516 |
| Cost per hectare of securing poppy crops | $62 | $68 | $71 | $33 | $30 | $26 | $26 | $19 | n/r | n/r | $32 |
| Number of capsules stolen per hectare sown | 1.06 | 1.04 | 0.07 | 0.14 | 0.23 | 0.06 | 0.03 | 0.09 | 0.18 | 0.01 | 0.03 |
| Number of theft incidents reported | 13 | 7 | 8 | 17 | 33 | 11 | 12 | 19 | 21 | 7 | 10 |
| % of PWID sample reporting use | 8 | 10 | 10 | 11 | 7 | 8 | 5 | 4 | 11 | 4 | 3 |
| Median days used (among PWID using) | 3 (1-100) | 2 (1-45) | 7 (1-100) | 3 (1-90) | 14 (1-45) | 15 (2-30) | n/r | n/r | n/r | n/r | n/r |
| TASPOL seizures | *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* | *46 units/ counts* | *0 units* | *0 units* |

**Source:** Poppy Advisory and Control Board, Department of Justice Tasmania, Department of Justice Tasmania Annual Report, 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: 2015/16 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. n/r = Not reported

# 6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

## 6.1 Overdose and drug-related fatalities

**Key Points:**

- Over one-quarter (29%) of the sample reported ever having experienced an opioid overdose, and 4% reported this occurring in the preceding 12 months; and
- 3% of the sample reported experience of a stimulant overdose in the preceding 12 months.

### 6.1.1 Opioids

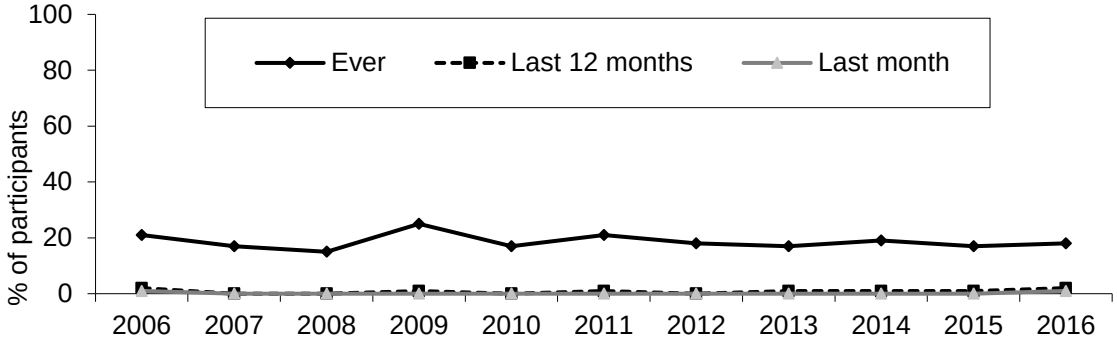
*Non-fatal overdose*

Most participants (n=95) in the 2016 IDRS cohort reported that they had used some form of opioid in their lifetime and of the 85 participants who commented, 34% (n=29) of these had ever experienced a (non-fatal) opioid overdose. Among the 29 individuals that had ever experienced an opioid overdose, 18 had overdosed on heroin, 7 on methadone, 6 with morphine and one on oxycodone (Table 31). The proportion of the sample reporting ever having overdosed on an opioid in the 2016 cohort was similar to that observed in the 2015 cohort (29% versus 28%, respectively). Three participants in the current cohort had overdosed on any opioid in the year prior to interview: two with heroin and one with morphine. Of those participants who had ever overdosed on heroin, the median number of times they had overdosed was 2 (range 1-10 times). For methadone overdose, the median number of times was 1 (1-2 times). Median number of times for morphine overdose was not assessed in the 2015/16 IDRS.

*Heroin*

Two participants in the current cohort reported experiencing a non-fatal heroin overdose in the year prior to interview, and one of these overdoses had occurred in the month prior to the interview. Examining trends in experience of heroin overdose in the IDRS PWID cohorts over time (Figure 70), 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 70: Proportion of PWID participants who had ever overdosed on heroin, overdosed in the past 12 months, and the past month, 2006-2016**




**Source:** IDRS PWID interviews

*Methadone*

Seven participants in the current cohort reported ever having experienced a non-fatal methadone overdose; none of these participants experienced this in the 12 months preceding the interview. The numbers of reports of methadone overdose are similar to those in 2015, where five participants had experienced a methadone overdose in their lifetime, and none in the 12 months prior to interview.

*Morphine*

Overall, six PWID participants in the current cohort reported ever having experienced a non-fatal morphine overdose and one participant reported such an experience in the year prior to interview. The rate of these experiences in the current cohort was similar to those in the 2015 cohort, where five participants had experienced a methadone overdose in their lifetime, and two in the past year.

*Oxycodone*

One participant in the current cohort reported ever having experienced a non-fatal oxycodone overdose, and this overdose had not occurred in the year prior to interview. Similarly, one participants from the 2015 cohort had experienced an oxycodone overdose in their lifetime, which had not occurred in the 12 months prior to the interview.

**Table 31: Reported experience of non-fatal opioid overdose among the PWID sample, 2006-2016**

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Overdosed (ever) | 32% | 34% | 26% | 40% | 29% | 36% | 25% | 32% | 30% | 28% | 29% |
| Median times ever overdosed | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Overdosed last 12 months | 1% | 7% | 4% | 11% | 4% | 7% | 6% | 8% | 5% | 3% | 4% |

**Source:** IDRS PWID interviews. Note: N=100 in 2006-11; N=106 in 2012; N=107 in 2013; N=101 in 2014; N=100 in 2015; N=99 in 2016

*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. 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, 2013 and 2014 data presented in the reports by Roxburgh and Burns (2016a, b) are projected estimates which have been based on changes that were observed in existing 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 & Burns, 2016a, b)

As supply of heroin decreased around 2000 and 2001, the number of accidental opioid-related (heroin and other opioids) deaths amongst people aged 15 to 43 declined dramatically (386 in 2001 compared to 1,115 in 1999). Up until 2007, the number of accidental opioid related deaths remained stable (ranging between 360 and 381), then increased and stabilised to between 613 and 639 in

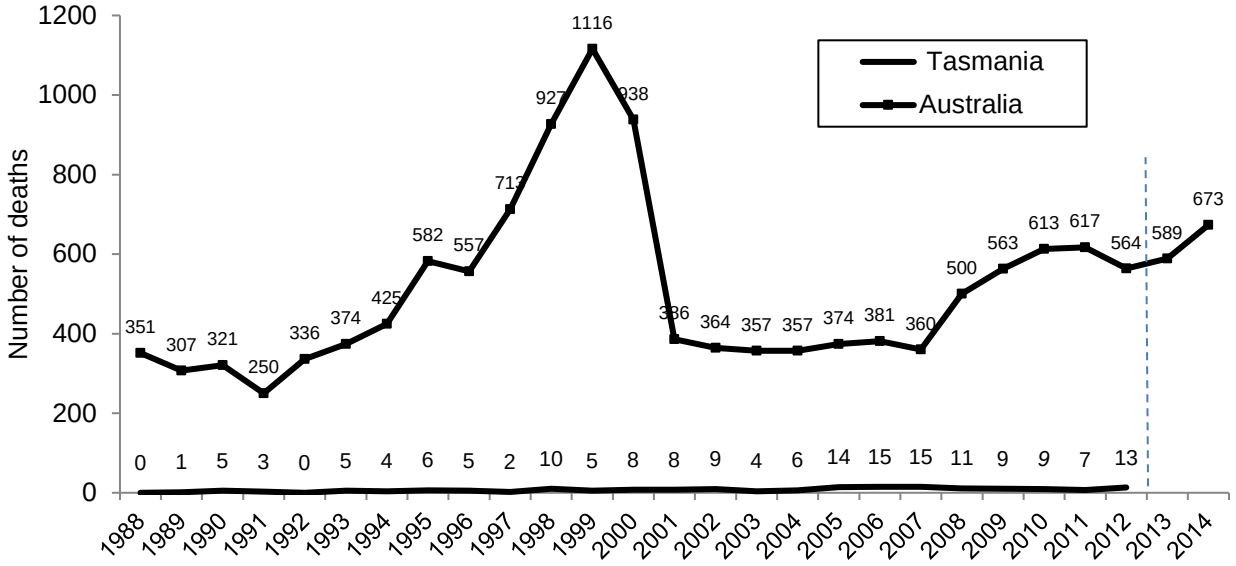
2010-2011. This number decreased somewhat in 2012 (564 deaths), though projected estimates suggest an upwards trend going into 2013 (589 deaths) and 2014 (673 deaths) (Roxburgh & Burns, 2016a) (Figure 71).

The number of accidental Tasmanian deaths that were attributable to opioids was stable between 1988 and 1997 (0 to 5 deaths per year), increasing to 15 deaths in 2006/2007 and declining to 7 deaths in 2011. Data for 2012 (13 deaths) is an increase on recent years. This increase since 2006/07 coincided with increasing reports of pharmaceutical opioid use locally (de Graaff & Bruno, 2008).

Figure 72 shows the rate of accidental opioid-related deaths per 1,000,000 persons. A dramatic increase nationally can be observed, peaking in 1999, with a rate of 101.9 deaths per 1,000,000 persons nationally, and then decreasing to a stable rate of approximately 32 deaths per 1,000,000 persons. From 2008 to 2011 this rate increased, with 44.7 deaths per 1,000,000 persons in 2012.

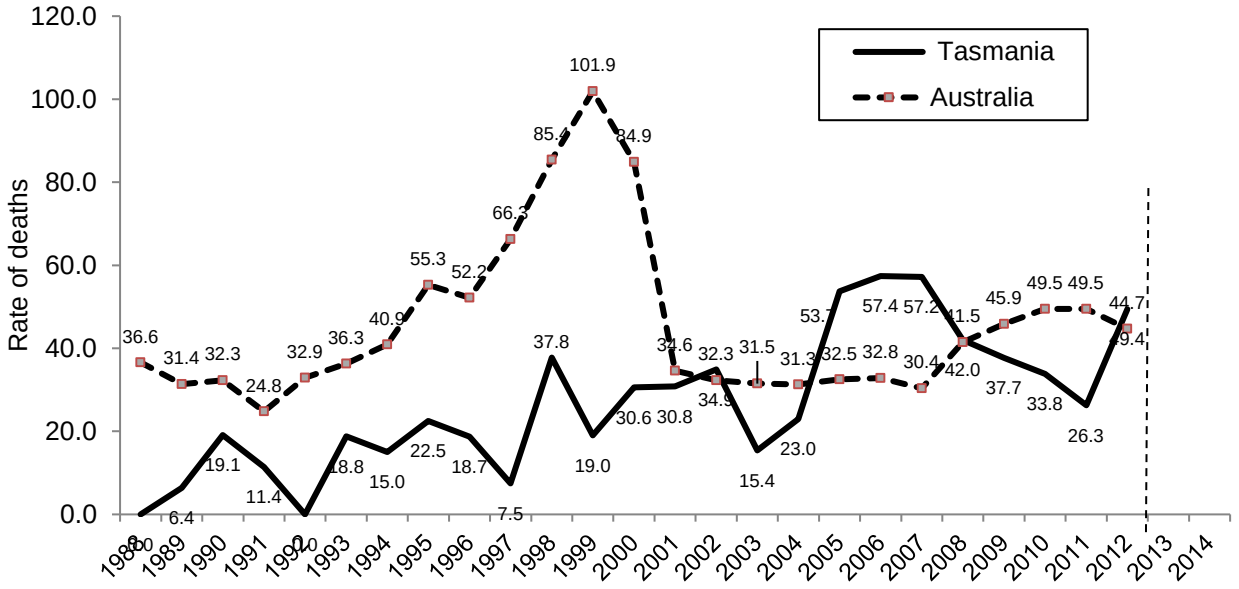
A different pattern is seen for Tasmanian rates: the dramatic increase in 1999 observed in the national rate was not observed locally, in part because Tasmania is geographically removed from the mainland heroin market. The Tasmanian rate of deaths increased notably in 2005 from a mean of 20 deaths per 1,000,000 persons (between 1990 and 2004) to 53.7 deaths per 1,000,000 persons in 2005. 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 three reporting periods, this rate decreased to 26.3 deaths per 1,000,000 persons in 2011, before returning to a higher rate of 49.4 deaths per 1,000,000 persons in 2012.

**Figure 71: Accidental deaths due to opioid use among those aged 15-54 years, 1988-2012**




**Source:** Roxburgh & Burns, 2016a
* Data for causes of death for 2013 and 2014 are projected estimates, and are likely to change with the release of the revised reports. Projected estimates were only available for national rates.

**Figure 72: Rate of accidental deaths per 1,000,000 persons due to opioid use among those aged 15-54 years, 1988-2012**




**Source:** Roxburgh & Burns, 2016a; ABS population data cubes
* Data for causes of death for 2013 and 2014 were not available

### 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, three participants reported experiencing a non-fatal methamphetamine overdose in the preceding 12 months. This is slightly higher than 2015 (1 participant reported an overdose in the past 12 months).

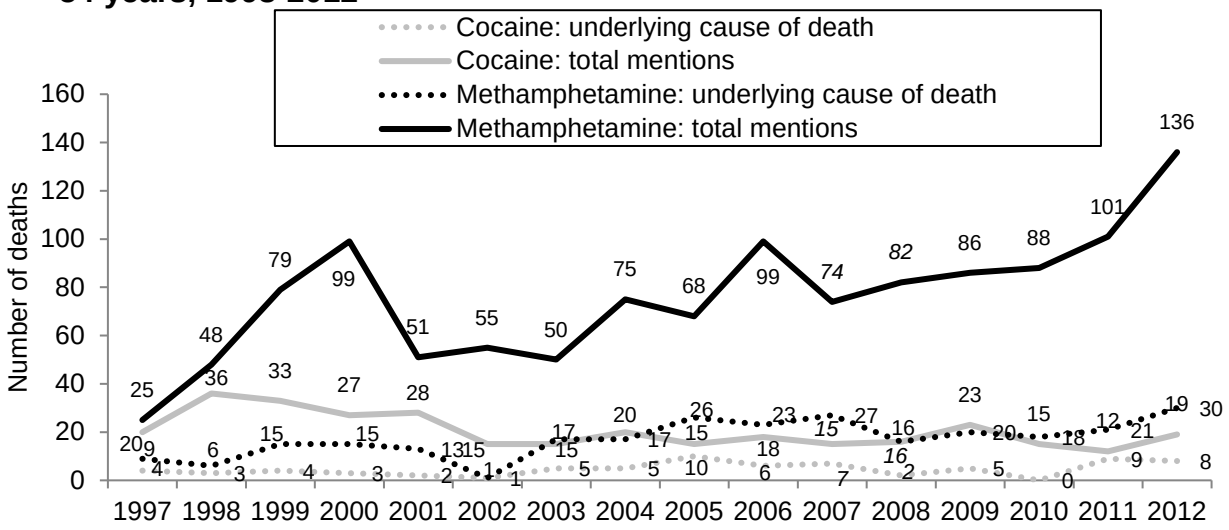
*Fatal stimulant overdoses*

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 difficult. Data for 2015 to 2016 were not available at the time of publication, and projected estimates for 2013 and 2014 are not included as they are estimated based on changes that occurred in earlier data.

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, there was an increase from 101 deaths in which methamphetamine was mentioned among those aged 15-54 years in 2011 to 136 in 2012 (Figure 73). Methamphetamine was determined to be the underlying cause of death in 30 cases in 2012, an increase on the number in 2011 (21 cases) (Roxburgh & Burns, 2016b).

Nationally, 19 drug-related deaths in which cocaine was mentioned occurred among the 15-54 year age group in 2012 (Roxburgh & Burns, 2016b). Cocaine was determined to be the underlying cause of death in 8 cases in 2012.

**Figure 73: Number of accidental deaths due to stimulant use among those aged 15-54 years, 1998-2012**




**Source:** Roxburgh & Burns, 2016b

### 6.1.3 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, particularly in the case of overdose. In Australia, naloxone has largely only been available for use by medical doctors (or those auspiced by medical doctors such as nurses and paramedics) for overdose response. In 2012 a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package. This program was shortly followed by similar programs in NSW, VIC, and WA. In early 2016, the Australian Therapeutic Goods Administration (TGA) effectively placed 'naloxone when used for the treatment of opioid overdose' on a dual listing of Schedule 3 and Schedule 4, meaning naloxone can be purchased over-the-counter (OTC) at pharmacies without a prescription (Lenton et al., 2016) but dual listing means it is still available at reduced cost via prescription.

Since 2013, the IDRS interview has included a series of questions about take-home naloxone and naloxone more broadly. Of those who commented in the 2016 cohort (n=86), 83% had heard of naloxone. Of this group, 44% reported that naloxone was used to 'reverse heroin', 16% to 're-establish consciousness' and 15% to 'help start breathing'.

Participants were then asked if they had heard about take-home naloxone programs. Among the participants who commented (n=86), 24% reported that they had heard of take-home naloxone programs while 76% had not (n=65). Only one participant had been resuscitated with naloxone by someone who had been trained through the take-home program, compared to 6% per cent nationally amongst 2016 IDRS participants.

Of the sample who commented (n=86), only 4% (n=3) had completed training in naloxone administration and received a prescription for naloxone, compared to 18% nationally. Only one participant from the Tasmanian 2016 cohort had used naloxone to resuscitate someone who had overdosed, though this participant had resuscitated two people on separate occasions.

In 2016, participants were asked if they had heard about the rescheduling of naloxone (which is now available OTC without a prescription). Of the sample who commented (n=86), only 5% reported that they had heard about the rescheduling (Table 32). Participants were then asked how much they would be willing to pay OTC at a pharmacy for naloxone in a prefilled syringe with accompanying needle and instruction materials. Thirty-six percent stated that naloxone OTC should be free and cost $0 and 35% were will to pay either $5 or $30.

Participants were then asked if they had been resuscitated with naloxone by someone who obtained naloxone OTC from a pharmacy. No participants reported that they had been resuscitated with naloxone which was obtained OTC at a pharmacy. Similarly, no participants reported that they had themselves obtained naloxone OTC without a prescription from a pharmacy.

Participants were asked: 'now that naloxone is available OTC would you purchase it from a pharmacy'? Of those who commented (n=85), 60% reported that they would purchase naloxone OTC. Participants were asked if they would (a) carry naloxone on your person? (b) administer naloxone after witnessing someone overdose? and (c) stay with someone after giving them naloxone? Ninety-four per cent of those who commented (n=50) reported that they would carry the naloxone on their person, 100% reported that they would administer naloxone after witnessing someone overdose and 100% reported that they would stay after giving the naloxone.

**Table 32: Take-home naloxone program and distribution, 2013-2016**

| | **2013 N=106 (%)** | **2014 N=94 (%)** | **2015 N=89 (%)** | **2016 N=86 (%)** |
|---|---|---|---|---|
| Heard of naloxone | 76 | 73 | 83 | 83 |
| Description of naloxone | (n=81) | (n=78) | (n=71) | (n=68) |
| Reverses heroin | 54 | 49 | 65 | 44 |
| Help start breathing | 30 | 5 | 14 | 15 |
| Re-establishes consciousness | 42 | 43 | 30 | 16 |
| Heard of take-home naloxone program | 18 | 23 | 17 | 24 |
| *If naloxone was available, would you:* | | | | |
| Carry naloxone if trained | 92 | 71 | 94 | 96* |
| Administer naloxone after overdose | 94 | 73 | 100 | 100* |
| Want peers to give you naloxone | 97 | 73 | 100 | - |
| Stay with person after giving naloxone | 96 | 73 | 100 | 100* |
| Heard of naloxone rescheduling | | | | 5 |

**Source:** IDRS PWID interviews

*Note that in 2016 these items were restricted to those participants who reported that they would be willing to take part in a take-home naloxone program (n=50).

## 6.2 Drug treatment

**Key Points:**

- The 2014/15 National Minimum Data Set - Alcohol and Other Drug treatment data (AIHW, 2016) reported that alcohol was the principal drug of concern in 40% of treatment episodes in Tasmania, similar to the national rate (38%);
- Cannabis was next most commonly reported as a drug of concern in Tasmania (29%), and this rate was significantly higher than the national rate (24%);
- Methamphetamine was reported as the principal drug of concern for 18% of treatment episodes in Tasmania, significantly lower than rates nationally (20%); and
- Morphine was reported as the principal drug of concern in 3% of treatment episodes in Tasmania, significantly greater than the national rate (0.9%).

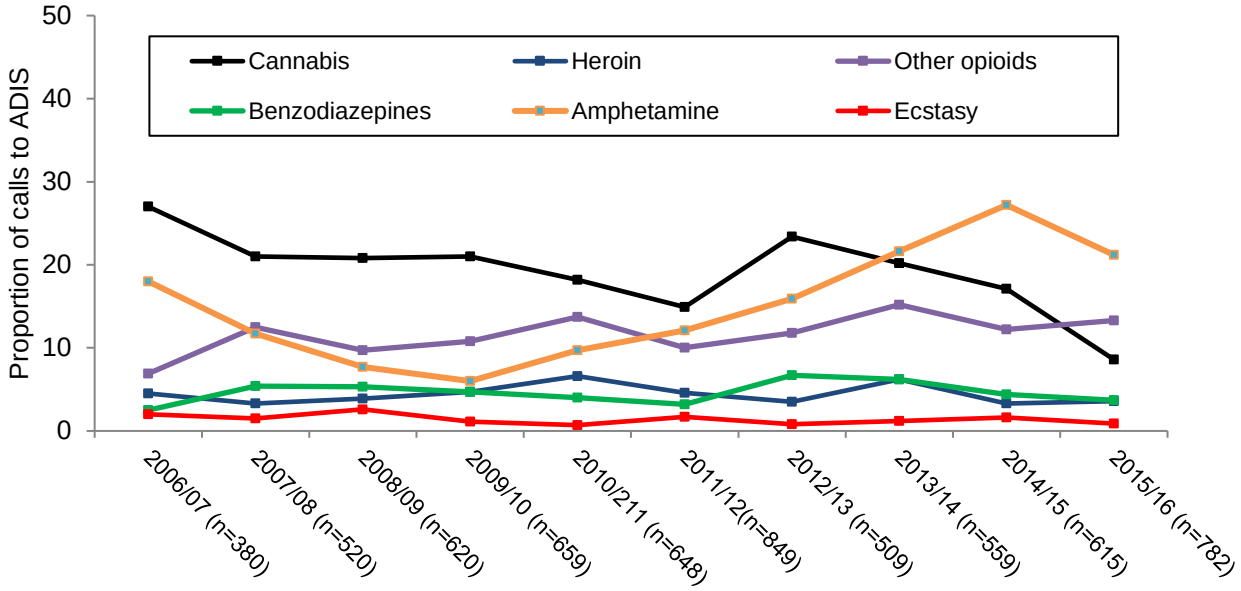
### 6.2.1 Information-seeking: Alcohol and Drug Information Service (ADIS)

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.

In 2015/16 (n=782 calls), 54% of the drug users identified in calls to ADIS related to males, a similar rate recorded in previous ADIS datasets. 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. Since 2005/06, there has been a slow shift towards an increasing age of drug consumers identified in ADIS calls: 72% of drug consumers identified in calls to ADIS in 2015/16 were identified as 25 to 44 years old.

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. Up until 2006/07, the majority of calls pertaining to illicit drugs in each year were 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’. This trend continued for the subsequent reporting periods and then reversed in 2013/14 (22% of calls related to amphetamine and 15% for opioids, including methadone, buprenorphine, and other narcotic analgesics). This reversal continued in 2014/15 and 2015/16. While alcohol was the primary drug of concern in 2015/16, (40%), 21% of calls identified amphetamine and 13% of calls identified opioids as the primary drug of concern (Figure 74). The trend beginning in 2014/15 of more calls related to amphetamine as the drug of concern as opposed to cannabis continued in 2015/16 (21% versus 9%). Further, there was a sharp decline in the number of calls with cannabis as the primary drug of concern (17% in 2014/15 to 9% in 2015/16)

**Figure 74: Percentage of calls to ADIS referring to persons using specific drugs, 2006/07-2015/16**




**Source:** ADIS Tasmania Reports, Turning Point Alcohol and Drug Centre
* 2005/06 data were only provided for amphetamines and cannabis

### 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 is reported from 2005/06 onwards here and includes data from Tasmanian government and non-government agencies across the state (Table 33). Agency data is excluded if they do not receive any public funding; provide accommodation as their main function; are located in prisons or detention centres; located in acute care or psychiatric hospitals or provide treatment only to admitted patients; or have the sole function of prescribing or providing dosing for opioid pharmacotherapy. As such, data from clients receiving only methadone maintenance treatment, and admitted patients in psychiatric hospitals or general hospital wards, are not included in these figures. In 2014/15, 19 agencies in Tasmania submitted data (843 agencies nationally). Data for 2015/16 were not available at the time of publication.

The findings from the 2014/15 data show that 72% of those receiving services were male, a similar proportion to that reported in 2013/14 (69%). Alcohol was reported as the principal drug of concern in 40% of treatment episodes, amphetamine in 18% and cannabis in 29% (Table 33).

There are several notable changes in the NMDS figures between the 2005/06 and 2013/14 datasets (Figure 75). Since 2005/06, alcohol and cannabis were the principal drugs of concern for equal proportions of treatment clients. In 2012/13, 2013/14 and 2014/15, there were a greater proportion of treatment clients with alcohol as the principal drug of concern compared to the number of treatment clients with cannabis as the principle drug of concern (2014/15: 40% versus 29%, respectively). In contrast, nicotine has reported as the primary drug of concern in 2% or less of treatment episodes since 2005/06. Specific changes in relation to other drug types are discussed separately in following sections.

**Table 33: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set, 2005/06-2014/15**

| Total Data Set | 2005/06 | 2006/07 | 2007/08* | 2008/09* | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---|---|---|---|---|---|---|---|---|---|
| n | 1,512 | 1,564 | 2,302 | 2,081 | 1,544 | 1,738 | 1,672 | 2,338 | 2,841 | 3,241 |
| % receiving service for their own use | 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) | 91% (n=2,130) | 93% (n=2,649) | 92% (n=2,972) |
| | | | | | | | | | | |
| **Sex (% male)** | 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) | 68% (n=1,449) | 69% (n=1,798) | 72% (n=2,021) |
| **Aboriginal and/or Torres Strait Islander** | 7% (n=95) | 11% (n~165) | 11% (n~232) | 10% (n=198) | 10% (n=141) | 11% (n=189) | n/r | 8% (n=167) | 8% (n=212) | 10% (n=285) |
| **Principal drug of concern** | | | | | | | | | | |
| *Alcohol* | 38%(n=515) | 36% (n=532) | 32% (n~682) | 38%(n~748) | 34% (n=500) | 39% (n~641) | 39% (n=619) | 39% (n=840) | 41% (n=1078) | 40% (n=1200) |
| *Nicotine* | 2% (n=27) | 0 | n/r | 1%(n~22) | <1% (n=4) | <1% (n~7) | 1% (n=16) | 1% (n=16) | 1% (n=15) | 1% (n=19) |
| *Cannabis* | 34% (n=462) | 39% (n=583) | 45% (n~936) | 39% (n~767) | 44% (n=644) | 39% (n~643) | 34% (n=540) | 30% (n=638) | 30% (n=784) | 29% (n=861) |
| *Amphetamine* | 12% (n=160) | 13% (n=190) | 11% (n~239) | 9% (n=167) | 6% (n=88) | 9% (n~142) | 10% (n=154) | 12% (n=263) | 11% (n=290) | 18% (n=545) |
| *Cocaine* | <1% (n=1) | 0 | 0 | 0 | <1% (n=1) | <1% (n~2) | <1% (n=1) | <1% (n=2) | <1% (n=4) | <1% (n=3) |
| *'Ecstasy'* | 1% (n=15) | 2% (n=25) | 2% (n~36) | 1% (n~26) | 2% (n=28) | <1% (n~10) | <1% (n=8) | <1% (n=4) | <1% (n=8) | 1% (n=15) |
| *Heroin* | <1% (n=11) | <1% (n=6) | <1% (n~7) | <1% (~10) | <1% (n=9) | <1% (n~8) | <1% (n=6) | 1% (n=14) | <1% (n=10) | <1% (n=6) |
| *Morphine* | 5% (n=64) | 3% (n=40) | 5% (n~97) | 6% (n~127) | 6% (n=89) | 5% (n~84) | 7% (n=102) | 5% (n=110) | 4% (n=110) | 3% (n=81) |
| *Methadone* | 3% (n=46) | 2% (n=25) | 1% (n~23) | 1% (n~26) | 1% (n=18) | 1% (n~20) | 1% (n=15) | 1% (n=29) | 1% (n=31) | 1% (n=26) |
| *Other opioids* | n/r | n/r | <1% (n~12) | 2% (n~38) | 2% (n~22) | 2% (n~36) | 4% (n=64) | 1% (n=15) | 5% (n=142) | 1% (n=22) |
| *Benzodiazepines* | 1% (n=18) | 1% (n=21) | 1% (~27) | 1% (n~28) | 1% (n~19) | 2% (n~31) | 1% (n=17) | 2% (n=45) | 2% (n=50) | 1% (n=37) |
| *Other* | 1% (n=15) | 3% (n=48) | 2% (n~36) | 0 | 3% (n~36) | <1% (n~5) | <1% (n=12) | <1% (n=5) | 1% (n=30) | <1% (n=11) |

**Source:** Australian Institute of Health and Welfare

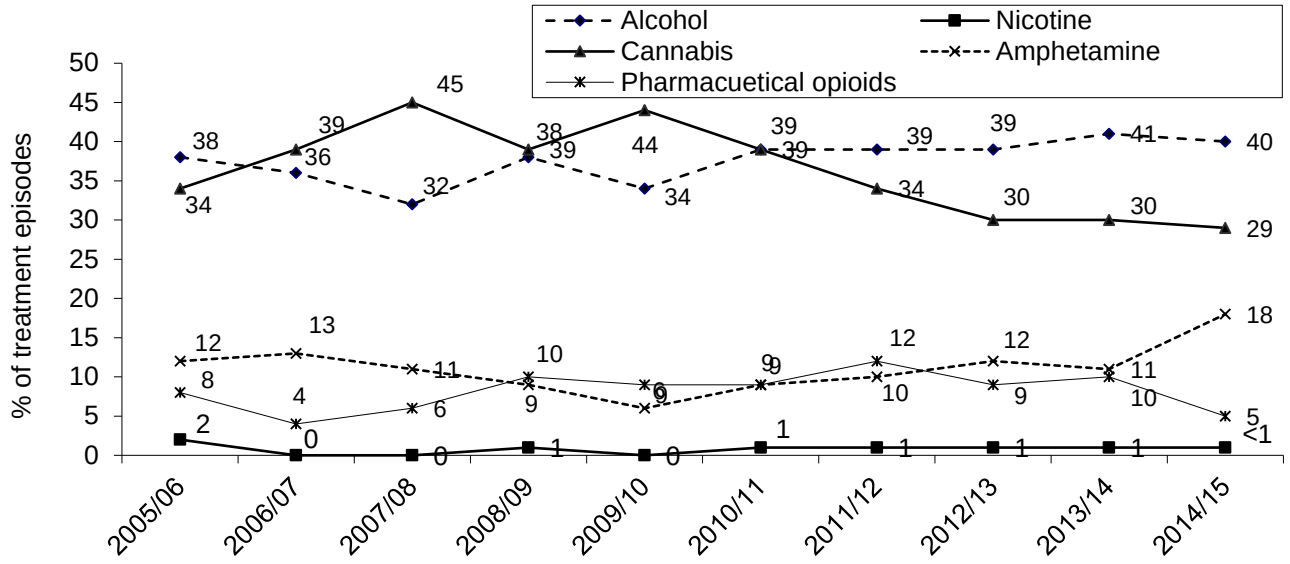
* The total number of closed treatment episodes may be undercounted because two agencies only supplied drug diversion data

n/r Not recorded

~ Approximately

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. Data for 2015/16 were not available at the time of publication.

**Figure 75: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set: Principal drug of concern, 2005/06-2014/15**




**Source**: Australian Institute of Health and Welfare. Note: Data for 2015/16 were not available at the time of publication.

*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 2005/06 (Table 33). Local rates are notably lower than those reported nationally, where 6% of treatment episodes were related to heroin as a principal drug of concern in 2014/15 ($\chi^2(1_{n=165,275})=179.30$, p<.001) (AIHW, 2016).

*Methamphetamine*

In the 2014/15 NMDS, methamphetamine was reported as the principal drug of concern for 18% of treatment episodes in Tasmania and 20% nationally (AIHW, 2016). This local rate is significantly lower than reported in nationally ($\chi^2(1_{n=165,275})=4.75$, p<.029) (Table 33). KE working in alcohol and drug treatment services reported increased rates of treatment-seeking by people who are using methamphetamine, which is reflected by an increase of recent NMDS treatment episodes in Tasmania. Further, several KE reported that crystal methamphetamine treatment episodes were exhausting resources due to their high number, and that crystal users were generally more difficult to treat than other users, due to the addictive nature of crystal methamphetamine.

*Cocaine*

In 2014/15, there was just 0.1% 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 have been consistently low over time (AIHW, 2008c, 2016). This is comparable with national figures: in 2014/15, just 0.34% of treatment episodes reported in the NMDS related to individuals whose principal drug of concern was cocaine.

*Cannabis*

In 2014/15, 29% of Tasmanian drug treatment episodes reported to the NMDS related to clients with cannabis as their principal drug of concern (AIHW, 2016). This was significantly higher than the national rate reported for cannabis (24%: $\chi^2(1_{n=165,275})=35.02$, p<.001). The proportion of treatment episodes in Tasmanian drug treatment services relating to concerns with cannabis has been between 29% and 45% since 2005/06, though since 2010/2011 seems to be on a downwards trend

(between 39% and 45% from 2006/07 – 2010/2011 to between 29% and 34% from 2011/12 – 2014/15 (Figure 75).

*Methadone*

The proportion of treatment episodes where methadone was the principal drug of concern in Tasmania was 1% in 2014/15, similar to the national rate in 2014/15 (1%; AIHW, 2016). Between 2005/06 and 2006/07, the proportion of treatment episodes in Tasmania for individuals reporting methadone as their principal drug of concern ranged between 2% and 3%, slightly higher than the 1% reported from 2007/08 onwards (noting that methadone presentations for OST specifically are excluded).

*Morphine*

During 2014/15, morphine was reported as the principal drug of concern in 3% of treatment episodes in Tasmania (AIHW, 2016). The rate nationally for 2014/15 was 0.9%, a significantly lower proportion than that reported in Tasmania ($\chi^2(1_{n=165,275})=8.54$, p=.003). The local Tasmanian rate of treatment episodes for morphine has varied between 3% and 7% since 2005/06.

*Alcohol*

In 2014/15, 40% of Tasmanian drug treatment episodes reported to the NMDS related to clients reporting alcohol as their principal drug of concern, similar to that reported nationally (38%; AIHW, 2016).

## 6.3 Hospital admissions

**Key Points:**

*Heroin and other opioids*

- Following a dramatic increase in the number of hospital admissions in 2006/07, admissions decreased in 2008/09 and 2009/10, with a slight increase in 2014/15 relative to 2013/14 (124 versus 102 versus, respectively); the rate per million population of hospital admissions in Tasmania was 101% of the national rate in 2014/15.

*Methamphetamine*

- Between 2006/07 and 2007/08, the Tasmanian rate of admissions was 130% of the national rate. This was reversed in the subsequent reporting periods; the Tasmanian rate was 48% of the national rate in 2014/15 (233 admissions per million population).

*Cannabis*

- In 2009/10, the rate of admissions per million persons in Tasmania was 83, equating to 51% of the national rate (164 per million persons). These rates recently increased to 141% and 159% and 149% of the national rate in 2011/12, 2012/13, and 2013/14, respectively. There was a slight rates increase in 2014/15 to 161% of the national rate.

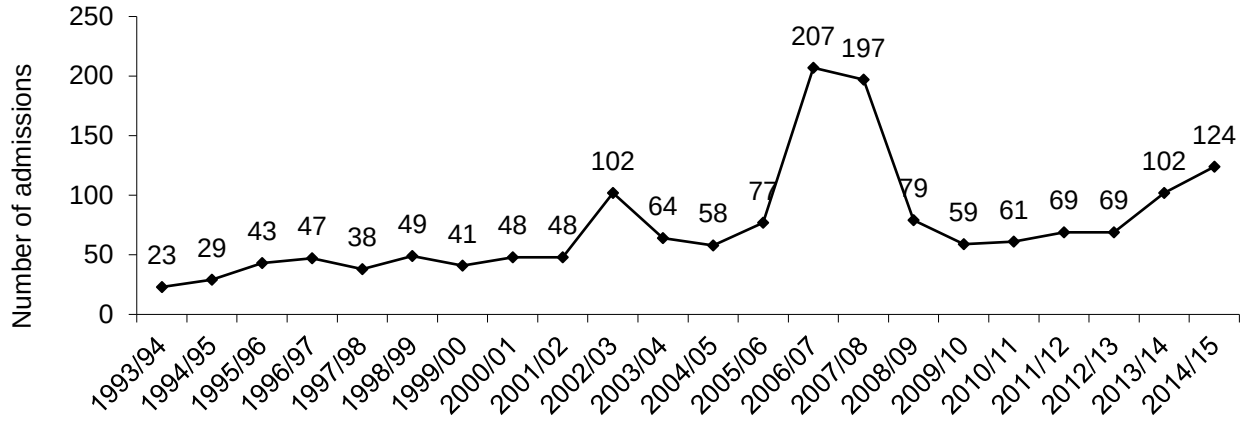
Hospital morbidity data in relation to use of drugs have been provided by the AIHW for the 1993/94 to 2014/15 financial year periods (Roxburgh & Breen, 2017). These data relate to Tasmanian public hospital admissions for individuals aged between 15 and 54 years where drug use was recorded as the 'principal 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 76. Between 1993/94 and 2005/06, primary diagnoses relating to opioid use in Tasmania had remained relatively stable – between 23 and 77 admissions per financial year, with the exception of a marked but unsustained increase when data from the state's public detoxification centre were included in these figures in July 2002 (rising from 48 admissions in 2001/02 to 102 in 2002/03, and falling to 64 in 2003/04). In 2006/07 and 2007/08, the number of hospital admissions increased dramatically to 207 and 197, respectively, however, in the subsequent reporting periods this decreased (between 61 and 79 admissions from 2008/09 to 2012/13). In 2013/14, there was an increase in number of admissions (102 admissions) although not to the level seen in 2006/07 and 2007/08 (Roxburgh & Breen, 2016).

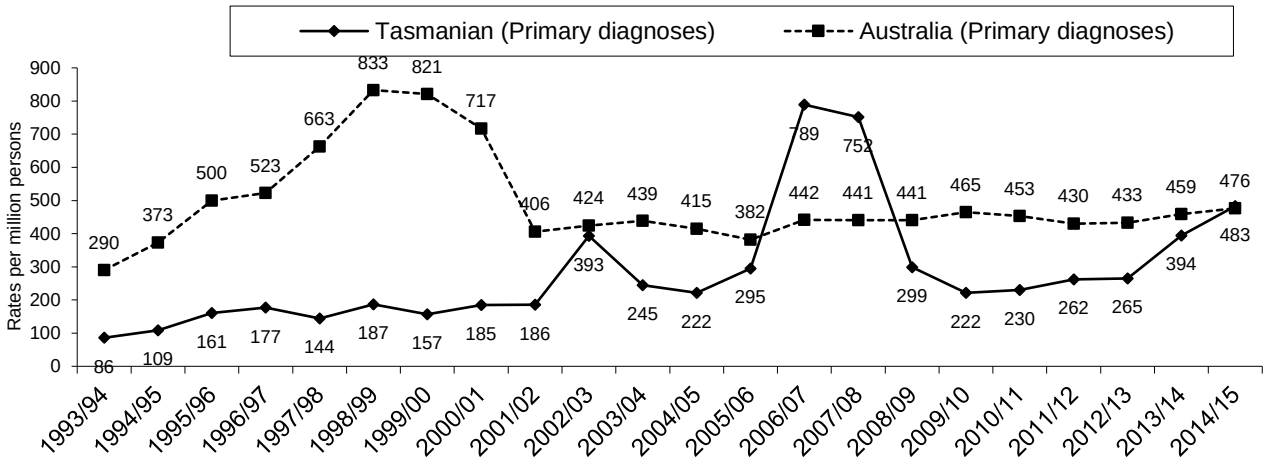
As can be seen in Figure 77, Tasmanian rate of opioid-related admissions per million population for were substantially lower when compared to that of the national Australian level until 2005/06. Prior to the inclusion of figures from the public detoxification service (July 2002), local admission rates 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 versus 424 admissions per million persons between the ages of 15 and 54 years respectively). 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 an increase (101% of the national rate) in 2014/15 (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

**Figure 76: Public hospital admissions amongst persons aged 15-54 in Tasmania where opioid use was noted as the primary factor contributing to admission, 1993/94-2014/15**




**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

**Figure 77: Public hospital admissions among persons aged 15-54 where opioids were noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1993/94-2014/15**

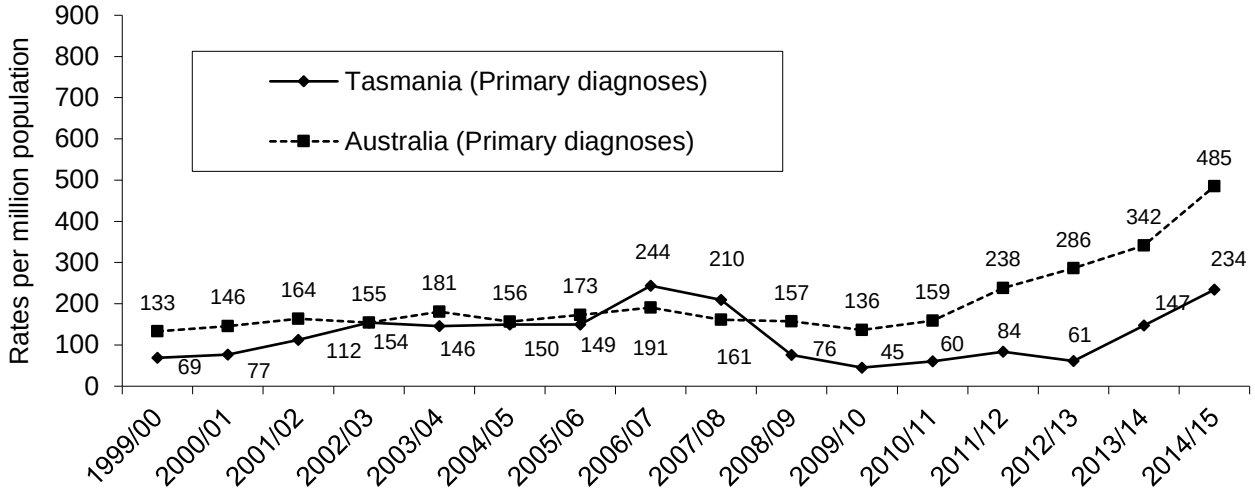



**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

### 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 78. 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 2012/13, the Tasmanian rate was between 45 and 84 admissions per million population respectively (21% of the national rate in 2012/13). Rates increased to 147 in 2013/14 (43% of the national rate; Roxburgh & Breen, 2016), and remained stable in 2014/15 (48% of the national rate; Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

**Figure 78: Public hospital admissions among persons aged 15-54 where methamphetamine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1999/00-2014/15**

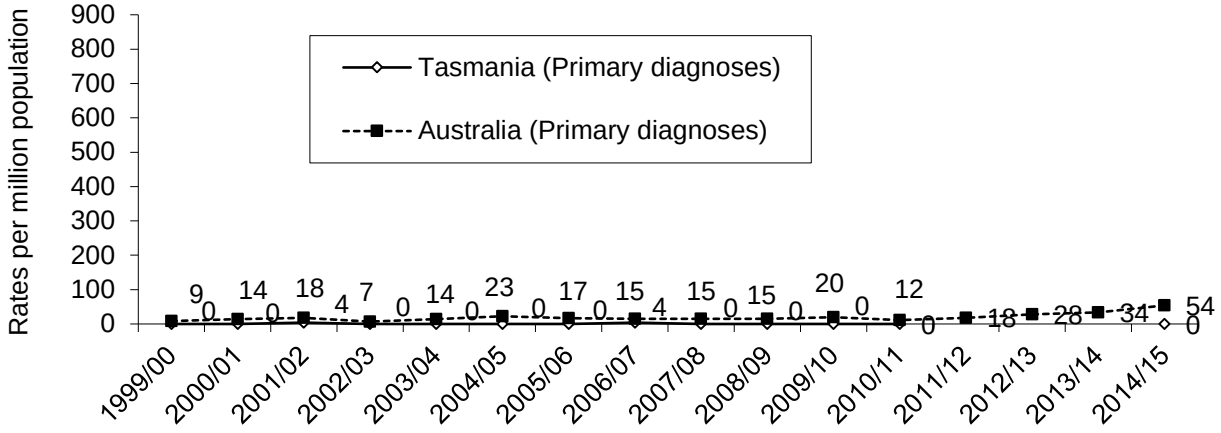



**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

### 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 2012/13) (Figure 79). When the local rates of cocaine-related public hospital admissions are compared to the national Australian rate, 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 2013/14. In 2014/15 there were no hospitalisations for cocaine in Tasmania (0% of the national rate) (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

**Figure 79: Public hospital admissions among persons aged 15-54 where cocaine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1999/00-2014/15**




**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

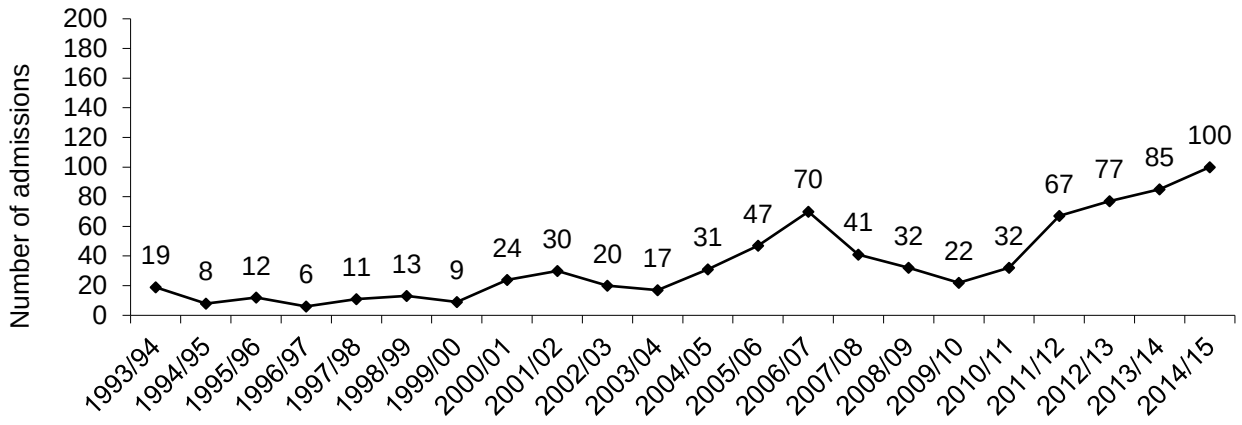
### 6.3.4 Cannabis

Tasmanian public hospital admissions where cannabis use was noted as the principal diagnosis among persons aged 15-54 years are presented in Figure 80. Examining these figures, it appears that the number of cases per annum has varied in recent years: between 1993/94 and 2004/05 there were between 6 and 31 cases per financial year. In the following two reporting periods, a spike in admission numbers occurred, with 70 reported in 2006/07. While the number of admissions had declined between 2008/09 to 2010/12 (22-32 admissions per year), since 2011/12 the number of admissions has increased to those levels evident in 2006/07, with 85 admissions in 2013/14. In 2014/15 there was again an increase to 100 admissions (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

The population-adjusted rates for cannabis-related admissions in Tasmania increased overall between 1994/95 and 2006/07, from 30 per million population to 267. In the subsequent three reporting periods, this trend reversed (156, 121 and 83 admissions per million persons reported respectively). In 2010/11, a small increase was observed, with 121 admissions per million persons at the local level and 164.

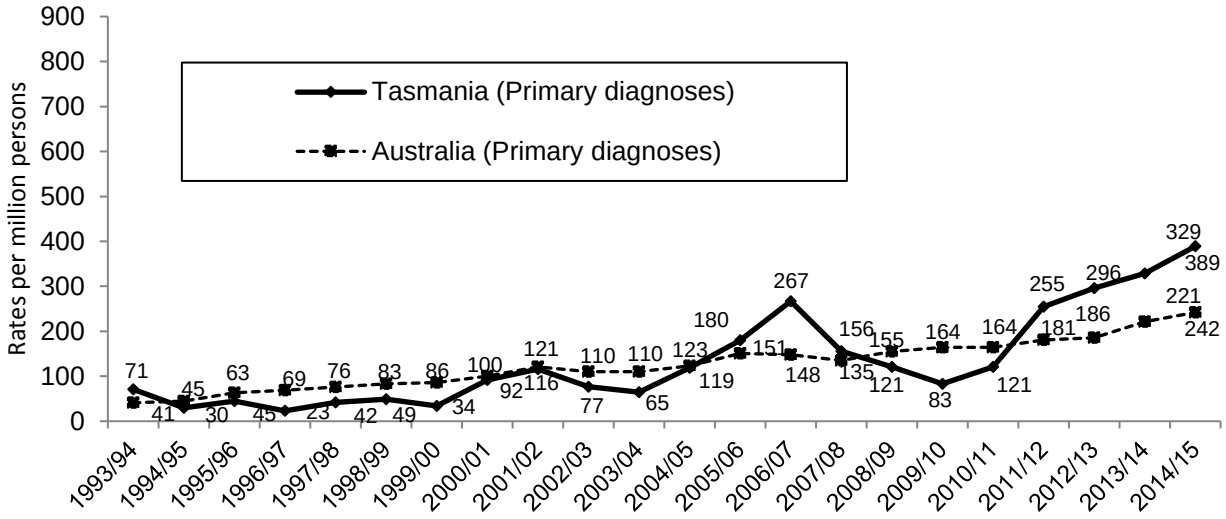
The Tasmanian admission rate per million population had been consistently lower than the national rate between 1994/95 and 2004/05, however, this trend was reversed in 2005/06 and 2006/07, with the Tasmanian admission rate increasing to 119% and 180% of the national rate, respectively. Despite lower admission rates in Tasmania between 2008/09 and 2010/11, Tasmanian admission rate were again in excess of the national rates from 2011/12 onwards, to 161% of the national rate in 2014/15 (Figure 81) (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

**Figure 80: Public hospital admissions amongst persons aged 15-54 in Tasmania where cannabis use was noted as the primary factor contributing to admission, 1993/94-2014/15**




**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

**Figure 81: Public hospital admissions among persons aged 15-54 where cannabis was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1993/94-2014/15**




**Source:** Roxburgh & Breen, 2017
Note: 2015/16 data were not available at the time of publication

## 6.4 Injecting risk behaviours

**Key Points:**

- In 2016, 3% of participants reported using another person's used needle/syringe in the preceding month, and 4% reported lending their used needle/syringe to another person in this period;
- Two-fifths of the sample (29%) reported re-using their own injecting equipment in the preceding month, most commonly 1mL barrels, followed by winged-infusion sets ('butterflies'), 3mL barrels and 10mL barrel;
- All participants had accessed sterile equipment from NSPs in the preceding six months.

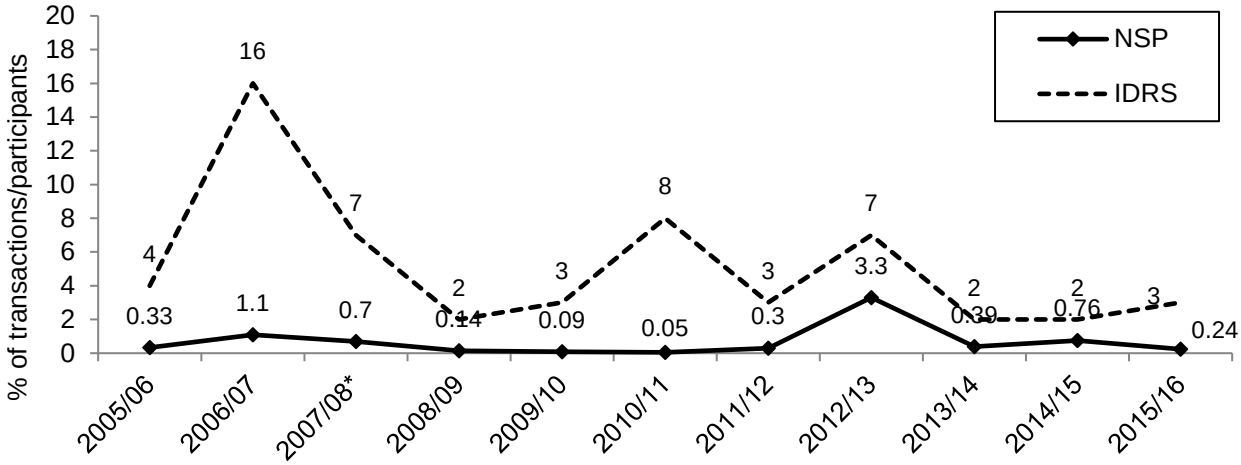
### 6.4.1 Sharing of injecting equipment

*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 (Figure 82) remained at or below 1% in all years since 2005/06, with the exception of 2012/13 (3%). Of note in 2015/16, needle/syringe sharing data was not collected from the Launceston NSP site.

**Figure 82: Reported sharing of needles and syringes by non-pharmacy Needle and Syringe Program clients and IDRS participants, 2005/06-2015/16**




**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 2016 IDRS 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 previously stable levels).

Among PWID, the proportion of respondents reporting using a needle/syringe after it had been used by someone else has remained relatively stable since 2006, ranging between 2% and 8% of each sample (except 2007 when 16% of the sample reported this behaviour), with 3% of the 2016 IDRS sample reporting this injecting behaviour (Table 34). It is noteworthy that, despite a decreased rate of sharing, this level of recent sharing among a regular injecting cohort remains greater than that reported in the NSP client data.

Two participants (2%) in the 2016 cohort reported receiving an accidental needle stick from another person's needle in the past months. Further, one participant (1%) reported re-using a needle taken from a shared container on two occasions in the past six months.

Among the 2016 IDRS PWID sample, 4% (n=4) of participants reported providing a used needle/syringe to others in the month prior to interview, similar to the rate reported in 2015 (5%) (Table 34). Three participants reported providing their used needle/syringe to others once, whereas the remaining participant in the current sample lent their equipment to others on two occasions.

Using other types of injecting equipment after someone else in the month prior to interview (such as tourniquets, water, swabs and mixing containers) was reported by 10%: 5% had shared tourniquets, 5% had shared spoon/containers, 2% had shared water and 1% had shared filters (Table 34). 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.

Of those who commented (n=90), over one-quarter (29%, n=26) reported re-using their own injection equipment in the month prior to interview: similar to the rate reported in 2015 (32%, n=29). Among the current group who reported re-use of their injecting equipment, the majority had done this on either one (38%, n=10) or two occasions (31%, n=8) in the past month, with smaller numbers doing it on three to five occasions (19%, n=5), six to ten occasions (8%, n=2) or more than ten occasions (4%, n=1) in the month preceding the interview. Two KE commented that there has been a decreasing number of people reusing injecting equipment.

The equipment most commonly re-used were 1mL syringes (38%, n=10), winged-infusion sets ('butterflies', 27%, n=7), 3ml barrels (19%, n=5) and 10ml barrels (19%, n=5). Less commonly re-used equipment were 0.5ml barrels, (4%, n=1) 5ml barrels (8%, n=2), 20ml syringes (8%, n=2) and detachable needle tips (15%, n=4).

Re-using other types of injecting equipment in the month prior to interview (such as tourniquets, water, swabs and mixing containers) was reported by 44% of those amongst the 2016 IDRS cohort who commented (n=90). Of these participants, 59% (n=24) reported re-using own tourniquet, 66% (n=23) spoons and mixing containers and 7% (n=3) water.

Of those who commented (n=78), the reasons for sharing or reusing equipment in the past six months was reported to be outlets being closed (12%), always reusing certain equipments (eg. spoon or torniquet) (5%), inability to access equipment outlets (4%), or not being 'bothered' to going to get clean equipment (4%).

**Table 34: Proportion of the PWID sample reporting sharing of injection equipment in the month prior to interview, 2006-2016**

| | Proportion of IDRS PWID in the past month | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2006 % | 2007 % | 2008 % | 2009 % | 2010 % | 2011 % | 2012 % | 2013 % | 2014 % | 2015 % | 2016 % |
| Borrowed used needles | 4 | 16 | 7 | 2 | 3 | 8 | 2 | 7 | 2 | 2 | 3 |
| Lent used needles to others | 13 | 29 | 9 | 13 | 13 | 10 | 8 | 8 | 6 | 5 | 4 |
| Shared spoons/containers | 7 | 20 | 15 | 17 | 19 | 17 | 15 | 19 | 13 | 2 | 5 |
| Shared water | 11 | 17 | 11 | 6 | 6 | 8 | 9 | 11 | 15 | 4 | 2 |
| Shared filters | 5 | 8 | 6 | 8 | 12 | 3 | 4 | 12 | 5 | 1 | 1 |
| Shared tourniquets | 16 | 22 | 11 | 16 | 14 | 10 | 11 | 13 | 5 | 3 | 5 |

**Source:** IDRS PWID interviews
Note: N=100 in 2005-2011, N=106 in 2012, N=107 in 2013, N=101 in 2014; N=100 in 2015, N=99 in 2016 multiple responses allowed

In the current study, some aspects of injection practices were examined in more detail amongst a number of participants (n=77). Despite the current PWID cohort being regular injecting drug users, nearly one-tenth (9%, n=9) reported that they did not always inject themselves. One participant (1%) stated they 'never' self-injected, three participants (3%) 'sometimes' self-injected, and three participants (3%) self-injected 'usually'. The demographic characteristics of participants that did not always self-inject were similar to participants that always self-injected in terms of sex, age, cultural background, relationship status, sexual preference, education, employment, accommodation, prison history, age of first injection, injecting career, frequency of injection, and engagement in drug treatment. The small number of participants reporting that they did not always self-inject, and consequently the lower statistical power for these comparisons, should be noted.

Of the participants who commented on the last venous site they injected into, the majority (69%, n=63) reported last injecting in their arm, with an additional 12% (n=11) last injecting into their hand/wrist. Small proportions reported last injecting into their leg (7%, n=6), neck (5%, n=5), groin (3%, n=3), and foot (2%, n=2).

### 6.4.3 Sources of new injecting equipment

Of the 92 participants who commented, all reported having accessed clean needles/syringes from a non-pharmacy NSP in the six months preceding the interview, with one-fifth of the sample (20%) accessing needles from a vending machine, and almost one-fifth (17%) accessing needles from a pharmacy (Table 5). This is consistent with the fact that the majority of participants were recruited and interviewed at non-pharmacy NSP outlet sites.

**Table 35: Source of clean needles/syringes in the preceding six months, 2016**

| Sources of needles/syringes | % (N=92) |
|---|---|
| Non-pharmacy NSP | 100% |
| Vending machine | 20% |
| Pharmacy | 17% |
| Friend | 5% |
| Partner | - |
| Dealer | - |

**Source:** IDRS PWID interviews.
Note: Multiple responses allowed

Of the 92 participants who commented in the 2016 IDRS cohort, 94% (n=86) reported that they were able to access filters. Of these participants, 66% (n=57) could access wheel filters, 42% (n=36) could access cigarette filters, whereas only 6% (n=5) could access cotton filters.

## 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 6) indicates the number of cases of BBVI recorded in the state between 2006 and 2016. Since 2006, the number of incident cases has been similar, ranging between 14 and 27 cases per annum, with the exception of 2006 (10 cases reported) (Figure 83).

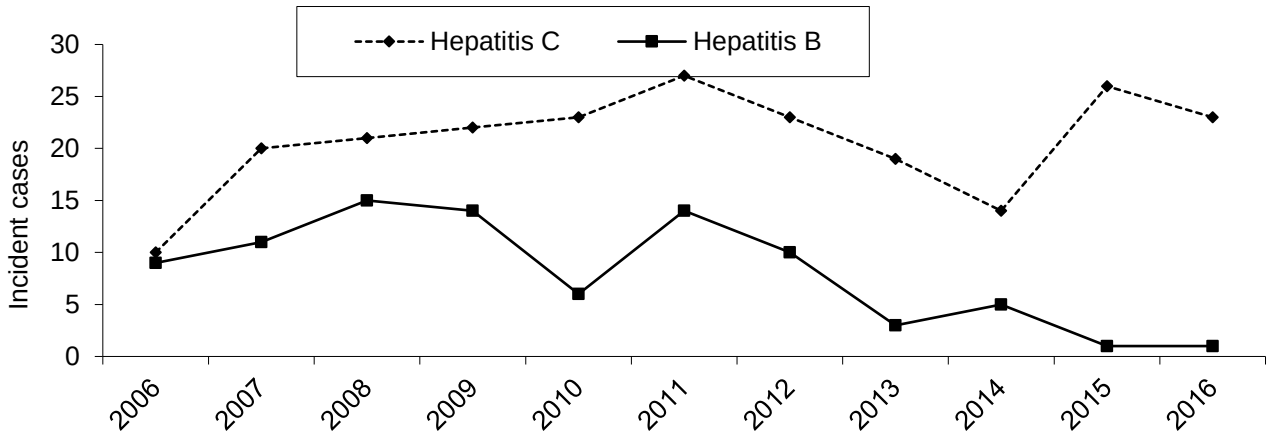
Similar to the pattern for incident cases of HCV, incident cases of HBV have remained low between 2006 and 2016 (ranging between 1 and 15 cases over this period). Reports of unspecified HBV infections (not new cases) have varied around 40 cases (32-70) per annum between 2006 and 2016, showing no clear trend in any direction.

**Table 36: Numbers of notifiable blood-borne viral infections in Tasmania, 2006-2016**

| | Blood-borne viral infections | | | |
|---|---|---|---|---|
| **Year** | **Hepatitis C (incident)** | **Hepatitis C (unspecified)** | **Hepatitis B (incident)** | **Hepatitis B (unspecified)** |
| 2006 | 10 | 261 | 9 | 44 |
| 2007 | 20 | 253 | 11 | 32 |
| 2008 | 21 | 328 | 15 | 52 |
| 2009 | 22 | 259 | 14 | 70 |
| 2010 | 23 | 244 | 6 | 49 |
| 2011 | 27 | 202 | 14 | 37 |
| 2012 | 23 | 239 | 10 | 61 |
| 2013 | 19 | 210 | 3 | 55 |
| 2014 | 14 | 217 | 5 | 55 |
| 2015 | 26 | 234 | 1 | 41 |
| 2016 | 23 | 234 | 1 | 39 |

**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 13, 2017 and subject to revision)

**Figure 83: Total notifications of incident hepatitis B and C infections in Tasmania, 2006-2016**




**Source:** Communicable Diseases Network – Australia New Zealand – National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services (data as of January 13, 2017 and subject to revision).

## 6.6 Self-reported injection-related health problems

**Key Points:**

- Two-thirds (65%) 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 rate is similar to that reported in previous years (2006 to 2015: 50% to 65%; with the exception of 2009: 80% and 2014: 70%).

Since 2012, a set of questions have been 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 & venous ulcer.

Figure 84 presents the rates of recent experience of IRID amongst the 2016 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, along with methamphetamine.

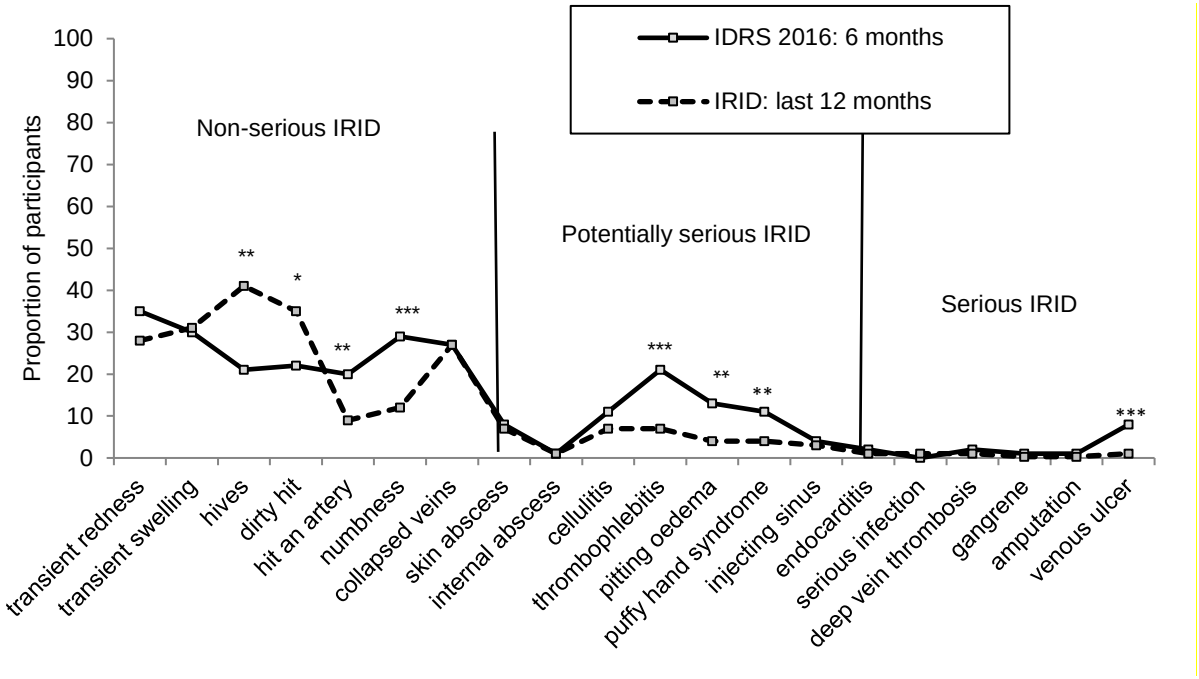
The IDRS cohort was significantly more likely to report recent nerve damage (23% versus 12%; $\chi^2(1_{n=468})=4.91$, p=.027), internal abscess (though low cell counts, 5% versus 1%; $\chi^2(1_{n=468})=4.65$, p=.031), cellulitis (15% versus 7%, $\chi^2(1_{n=468})=7.53$, p=.006), thrombophlebitis (20% versus 7%; $\chi^2(1_{n=468})=13.29$, p<.001), pitting oedema (11% versus 4%; $\chi^2(1_{n=468})=3.83$, p=.050), injecting sinus (9% versus 3%; $\chi^2(1_{n=468})=5.61$, p=.018), and venous ulcer (7% versus 1%; $\chi^2(1_{n=468})=9.79$, p=.002). The IDRS cohort were less likely to report recently experiencing hives (24% versus 41%; $\chi^2(1_{n=468})=4.90$, p=.027). It is possible that these higher rates of experience of most 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 versus 12 months) (Figure 84).

Of the 82 participants who completed this section in the 2016 IDRS cohort, three-fifths (65%, n=53) reported at least one injection-related health problem in the preceding month (Table 37). This rate of experience of injection-related health problems is similar to that observed in the 2006 to 2015 period, with between 50% and 65% of each sample reporting one or more problems – with the exception of 2009 (80%) and 2014 (70%). These statements are reflected in the IDRS cohort: the most commonly reported problems were scarring/bruising of injection sites (49%) and 'difficulty injecting' (35%), indicating vascular damage.

Experience of a 'dirty hit' – feeling physically unwell soon after injection – is commonly due to the injection of contaminants or impurities. In the 2016 cohort, eight participants reported past month experience of a 'dirty hit'. Four of these participants attributed the dirty hit to methadone, three participants reported methadone, and one participant reported methamphetamine as the responsible drug.

KE working in needle and syringe outlets reported that injection-related problems due to morphine powder were poorly understood by the public, since morphine powder needs to mixed with an acidic base. These KE reported that many of their clients were suffering problems due to mixing with inappropriate mixers (i.e., citris).

**Figure 84: Recent experience of IRID amongst IDRS (2016) and IRID (2007) study cohorts**




**Source:** IDRS PWID interviews, Dwyer et al., 2007
Note: IDRS N=75, IRID cohort, N=393
*p<.05; **p<.01; *** p<.001

**Table 35: Injection-related health problems reported by participants in the PWID survey in the month prior to interview, 2006-2016**

| | 2006 % | 2007 % | 2008 % | 2009 % | 2010 % | 2011 % | 2012 % | 2013 % | 2014 % | 2015 % | 2016 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Scarring/bruising | 29 | 33 | 31 | 71 | 51 | 38 | 42 | 40 | 52 | 47 | 49 |
| Difficulty injecting | 38 | 40 | 39 | 53 | 42 | 42 | 46 | 40 | 51 | 33 | 35 |
| Thrombosis | 5 | 3 | 4 | 10 | 9 | 4 | 3 | 1 | 13 | 1 | 4 |
| 'Dirty hit' | 15 | 15 | 9 | 17 | 12 | 14 | 14 | 17£ | 17¥ | 9 | 10 |
| Infections/abscesses | 7 | 11 | 5 | 7 | 10 | 4 | 9 | 3 | 6 | 5 | 5 |
| Overdose | 1 | 4 | 0 | 4 | 2 | 1 | 2 | 0 | 1 | 0 | 1 |
| At least one injection-related problem | 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*) | 70 (range 1-4, median 2*) | 58 (range 1-4, median 2*) | 65 (range 1-4, median 1*) |
| 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 |
| % injecting daily | 37 | 20 | 29 | 30 | 43 | 36 | 26 | 28 | 36 | 24 | 23 |

**Source:** IDRS PWID interviews.

Note: N=100 in 2006-2011; N=106 in 2012; N=95 in 2013; N=101 in 2014, however, only 87 participants completed this section in 2014; N=100 in 2015 however only 86 participants completed this section in 2015; N=99 in 2016, however, only 82 participants completed this section in 2016

* For those noting injection-related problems

## 6.7 Mental health and psychological distress

**Key Points:**

- Half (50%) of the sample self-reported experience of a mental health problem in the preceding six months, a similar rate to that reported in 2015 (53%); two-thirds of this group (68%) had recently attended a health professional for mental health issues. Depression and anxiety were most commonly cited; and
- Using a measure of psychological distress, one-quarter (26%) of the 2016 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%).

### 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 368). Of the 80 participants who commented, 50% (n=40) self-reported experiencing a mental health problem in this period, a similar rate to that reported in 2015 (53%). Two-thirds of the group reporting recent experience of a mental health problem (68%, n=27) had recently attended a health professional for mental health issues, a similar rate to that reported in preceding years (ranging between 61% and 82%) with the exception of 2012 (58%). Participants had predominantly seen a general practitioner (85%, n=23), counsellor (30%, n=8), psychologist (26%, n=7), psychiatrist (22%, n=6), and social worker (19%, n=5) for support with their mental health problems.

The most commonly reported mental health problems amongst this group of participants were depression (70%, n=28) and anxiety (65%, n=26). These have remained the predominant issues in each of the IDRS cohorts, just as they are in the general population (ABS, 2009).

Reports of depression (among those reporting recent experience of any mental health problem) have remained relatively stable between 2008 and 2016 (between 67% and 82%). Whilst the rate of anxiety was between 42% and 52% from 2007 to 2011, since 2012 three-fifths or more of the sample (57% to 71%) have reported anxiety.

Reports by participants regarding experiences of paranoia have generally remained at very low levels between 2007 and 2016 (ranging between 0% and 6%), with the exception of higher rates in 2010 (12%), 2012 (20%) and in the 2016 cohort (18%, n=7). Self-reported rates of psychosis and related problems (psychotic episodes, schizophrenia, drug-induced psychosis) have ranged between 11% and 21% between 2006 and 2016, with the exception of 2008 (7%) and 2014 (9%). Several KE working in substance use treatment settings, emergency medicine settings, and in NSPs commented on prevalent rates of paranoia, aggression and psychosis, anecdotally linked to lower opioid and greater methamphetamine use amongst PWID.

Over half (55%, n=22) of the participants self-reporting a mental health problem reported they had been prescribed medication for this in the preceding six months. Of this group, almost three-quarters (73%, n=16) had been prescribed a benzodiazepine in the preceding six months, predominantly diazepam. Three-fifths (59%, n=13) had been prescribed an antidepressant, most commonly amitriptyline and fluoxetine. Nearly one-third (32%, n=7) of participants reported having had an antipsychotic prescribed to them in the preceding six months, predominantly quetiapine.

**Table 368: Experience of mental health problems amongst IDRS PWID participants, 2007-2016**

| | 2007 IDRS | | 2008 IDRS | | 2009 IDRS | | 2010 IDRS | | 2011 IDRS | | 2012 IDRS | | 2013 IDRS | | 2014 IDRS^ | | 2015 IDRS^ | | 2016 IDRS^ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** | **%** | ***n*** |
| % self-reporting mental health problem last 6 months | 60 | *60* | 43 | *43* | 46 | *46* | 52 | *52* | 60 | *60* | 43 | *43* | 46 | *46* | 52 | *52* | 53 | *42* | 50 | *40* |
| *Of these:* | | | | | | | | | | | | | | | | | | | | |
| % attending a health prof. for a mental health problem in past 6 months | 82 | *49* | 72 | *31* | 61 | *28* | 73 | *38* | 82 | *49* | 72 | *31* | 61 | *28* | 73 | *38* | 76 | *32* | 68 | *27* |
| **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*** | **%** | ***n*** |
| *Depression* | 57 | *34* | 79 | *34* | 67 | *31* | 77 | *40* | 72 | *47* | 82 | *40* | 74 | *39* | 69 | *24* | 69 | *29* | *70* | *28* |
| *Bipolar Disorder* | 15 | *9* | 9 | *4* | 20 | *9* | 14 | *7* | 12 | *8* | 12 | *6* | 19 | *10* | 6 | *2* | 7 | *3* | *13* | *5* |
| *Anxiety* | 48 | *29* | 42 | *18* | 43 | *20* | 52 | *27* | 46 | *30* | 67 | *33* | 57 | *30* | 60 | *21* | 71 | *30* | *65* | *26* |
| *Panic* | 8 | *5* | 19 | *19* | 11 | *5* | 19 | *10* | 9 | *6* | 25 | *12* | 17 | *9* | 20 | *7* | 21 | *9* | *18* | *7* |
| *Paranoia* | 2 | *1* | - | - | 4 | *2* | 12 | *6* | 3 | *2* | 20 | *10* | 6 | *3* | 3 | *1* | 5 | *2* | *18* | *7* |
| *Schizophrenia/Psychosis* | 18 | *10* | 7 | *3* | 11 | *5* | 15 | *8* | 15 | *10* | 20 | *10* | 21 | *11* | 9 | *3* | 14 | *6* | *18* | *7* |
| *Obsessive-compulsive disorder* | 2 | *1* | - | - | - | - | 4 | *2* | 2 | *1* | 8 | *4* | 8 | *4* | - | - | 2 | *1* | *8* | *3* |
| *Personality disorder* | 5 | *3* | - | - | 7 | *3* | 10 | *5* | 5 | *3* | 14 | *7* | 8 | *4* | 3 | *1* | - | - | *5* | *2* |
| *Post-traumatic stress disorder* | 5 | *3* | - | - | 4 | *2* | 8 | *4* | 12 | *8* | - | - | 25 | *13* | 17 | *6* | 21 | *9* | *10* | *5* |

**Source:** IDRS PWID interviews

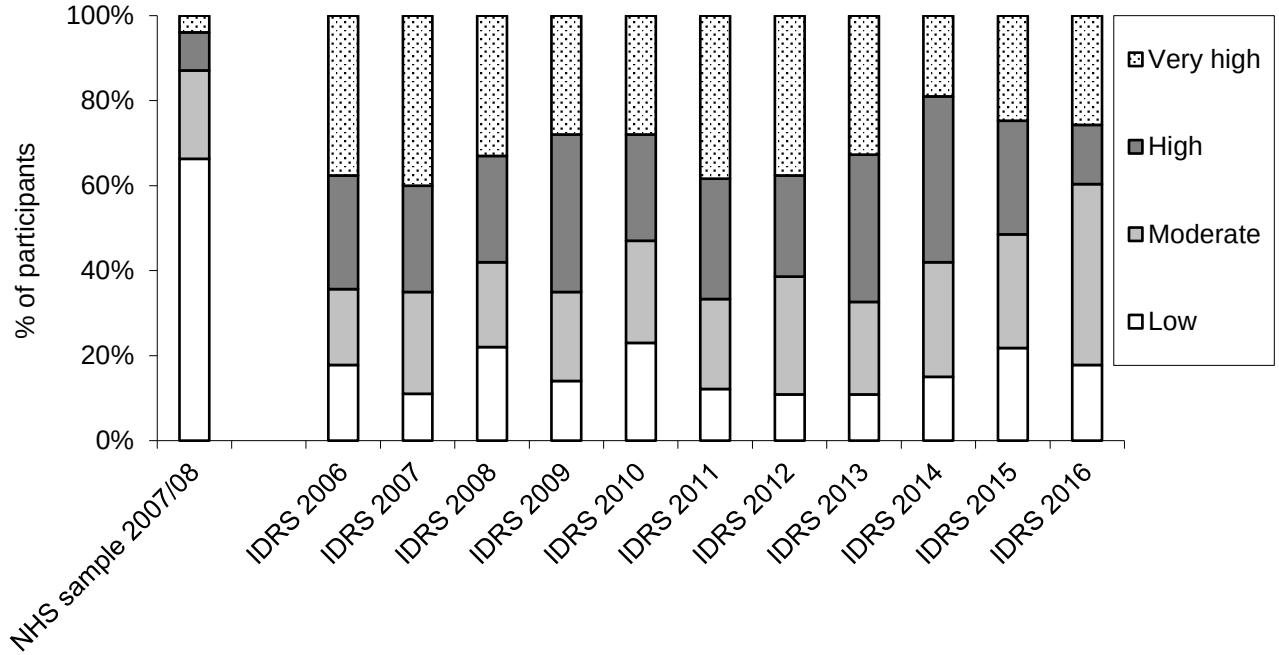
^ Only 79 participants completed this section in 2014, while only 80 completed this section in 2015 and 2016

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 et al., 2002). 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. Eighty participants in the current study completed the K10 in 2016 (Figure 85). Over three-fifths of participants (61%, n=48) scored in the 'moderate' or 'low' levels of psychological distress categories (43%, n=34 and 18%, n=14, respectively), which is a noticeably lower rate of scores in these categories than previous years. Two-fifths scored in either the 'very high' or 'high' categories of psychological distress (26%, n=21 and 14%, n=11 respectively).

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 (2007/08, which focused on a sample of 15,751 from the general population) (ABS, 2010), in which two-thirds of the participants (67%) were classified in the 'low' level of psychological distress (compared with 18% of the Tasmanian IDRS: $\chi^2(1_{n=15,834})=75.65$, $p<.001$), and just 4% were classified in the 'very high' level (compared with 25% in the IDRS: $\chi^2(1_{n=15,834})=106.55$, $p<.001$), indicative of a potential need for professional assistance (Figure 85).

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, psychosis, and difficulties with emotional regulation. Several KE working in NSPs and alcohol and other drug counselling reported increased psychiatric presentations amongst consumers of methamphetamine 'ice', paralleling the increase in use of this form amongst the 2014, 2015 and 2016 samples.

**Figure 85: Responses to the K10 questionnaire in the National Health Survey 2007/08 and Tasmanian IDRS, 2006-2016**




**Source:** IDRS PWID interviews and National Health Survey (ABS), 2007/08
Note: 83 and 80 participants completed the K10 as part of the 2015 and 2016 IDRS, respectively

## 6.8 Driving risk behaviour

**Key Points:**

- The majority (80%) of participants who reported having driven a vehicle in the preceding six months reported doing so after consuming illicit drugs

Of the 81 participants who commented from the 2016 IDRS cohort, almost half (48%, n=39) had driven a car in the preceding six months (

Table 39). The majority of these participants self-reported that they had driven after consuming illicit drugs[16] (80%, n=31). This rate is similar to reported in 2015 (79%) and higher than that reported in 2013 (57%), although it is important to note that in previous years these analyses were restricted to participants who had driven within one hour of taking drugs, whereas in 2016 participants were asked if they had driven within three hours of consuming illicit drugs.

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.

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.

[16] Note that this includes prescription drugs but only if they were not prescribed to the individual using them.

**Table 39: Proportion of PWID driving a car in the preceding six months that had driven soon after using non-prescription drugs, 2008-2016**

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* |
| Drove a vehicle in last 6 months | 64 | *64* | 65 | *65* | 59 | *59* | 63 | *60* | 64 | *68* | 55 | *54* | 58 | *53* | 57 | *48* | 48 | *39* |
| ***Of these:*** | | | | | | | | | | | | | | | | | | |
| % driven within 1 hour of consuming illicit drugs *(2007 to 2013)* | 64 | *41* | 78 | *51* | 73 | *43* | 67 | *40* | 67 | *33* | 57 | *31* | | | | | | |
| % driven after consuming illicit drugs *(2014 and 2015)* | | | | | | | | | | | | | 85 | *34* | 79 | *38* | | |
| % driven within 3 hours of consuming illicit drugs *(2016)* | | | | | | | | | | | | | | | | | 80 | *31* |
| Opioids | | | | | | | | | | | | | | | | | | |
| *Heroin* | - | - | - | - | - | - | 3 | *1* | 0 | *0* | 6 | *2* | - | - | 2 | *1* | *na* | *na* |
| *Methadone (illicit)* | 22 | *9* | 18 | *9* | 35 | *15* | 15 | *6* | 33 | *11* | 19 | *6* | 19 | *10* | 10 | *5* | *na* | *na* |
| *Morphine (illicit)* | 42 | *17* | 24 | *12* | 30 | *13* | 33 | *13* | 18 | *6* | 68 | *21* | 42 | *22* | 25 | *12* | *na* | *na* |
| Methamphetamine | | | | | | | | | | | | | | | | | | |
| (any) | 7 | *3* | 25 | *13* | 12 | *5* | 20 | *8* | 15 | *5* | 48 | *15* | 36 | *19* | 35 | *17* | *na* | *na* |
| *Powder* | 5 | *2* | 16 | *8* | 12 | *5* | 15 | *6* | 12 | *4* | 35 | *11* | 25 | *13* | 15 | *7* | *na* | *na* |
| *Base* | - | - | 10 | *5* | - | - | 3 | *1* | 3 | *1* | 6 | *2* | 4 | *2* | 4 | *2* | *na* | *na* |
| *Crystal/ice* | 2 | *1* | - | - | - | - | 3 | *1* | 0 | *0* | 29 | *9* | 19 | *10* | 29 | *14* | *na* | *na* |
| Cannabis | 56 | *24* | 51 | *26* | 37 | *16* | 35 | *14* | 58 | *19* | 65 | *20* | 23 | *12* | 23 | *11* | *na* | *na* |
| Benzodiazepines | 22 | *9* | 6 | *3* | 9 | *4* | 20 | *8* | 12 | *4* | 29 | *9* | 15 | *8* | 13 | *6* | *na* | *na* |
| Ecstasy | - | - | 2 | *4* | 2 | *1* | - | - | 0 | *0* | 6 | *2* | 2 | *1* | 2 | *1* | *na* | *na* |

**Source:** IDRS PWID interviews

Note: Participants were asked whether they had driven within 1 hour of consuming illicit drugs in the 2007-2013 IDRS interviews, whereas in the 2014 and 2015 IDRS interview participants were asked whether they had driven after consuming illicit drugs (and believed they were still under the influence), and in the 2016 IDRS interview participants were asked whether they had driven within 3 hours of consuming illicit drugs. As such, these numbers are not directly comparable. *na*: not assessed

Table40 presents the number of positive drug screens conducted by Tasmania Police for drug driving from 2012/13 to 2015/16. There was a marginal increase in the number of roadside drug tests conducted on Tasmanian roads in 2015/16 relative to 2014/15 (3,738 vs. 3,431). Of the 3,738 tests, 2,318 drivers were required to undergo a confirmatory blood test, with 1,939 drivers confirmed to be driving under the influence of a prohibited illicit drug in their system. This represented a small decrease in the proportion of tests which returned a positive result (52 % vs. 56%). Of note, at 30 June 2016, 253 blood results were still pending analysis.

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 2015/16, 2,294 (out of 3,738) OFTs and 2,179 (out of 2,318) blood tests were conducted which were positive. Cannabis was the most commonly detected drug, with 1,387 OFT and 1,430 blood tests returning positive results. Positive OFT and blood tests for amphetamine (n=931 and n=1,041 respectively) and methamphetamine (n=703 and n=1,205 respectively) were also relatively common. With respect to blood tests, the number of positive tests for methamphetamine significantly increased in 2016 relative to 2015 (55% versus 49%; $\chi^2(1_{n=4,041})=17.49$, p<.001) whereas the number of positive tests for cannabis significantly decreased in 2016 compared with 2015 (66% versus 74%; $\chi^2(1_{n=4,041})=30.29$, p<.001).

**Table 40: Tasmania Police positive roadside drug test results, 2012/13-2015/16**

| | Oral Fluid Testing | | | | Blood Testing | | | |
|---|---|---|---|---|---|---|---|---|
| | 2012/13 | 2013/14 | 2014/15 | **2015/16** | 2012/13 | 2013/14 | 2014/15 | **2015/16** |
| Drugs detected in positive tests (%) | n=480 | n=535 | n=1924 | **n=2294** | n=498 | n=650 | n=1862 | **n=2179** |
| Amphetamine | 44 | 44 | 37 | **41** | 33 | 34 | 41 | **48** |
| Cocaine | 3 | 1 | 1 | **1** | - | - | - | **<1** |
| Methamphetamine | 17 | 28 | 27 | **31** | 39 | 41 | 49 | **55** |
| Cannabis | 57 | 71 | 65 | **60** | 76 | 77 | 74 | **66** |
| Ecstasy (MDMA) | - | - | <1 | **<1** | 2 | <1 | 2 | **3** |
| Opiates | 8 | 5 | 6 | **6** | 5 | 4 | 6 | **6** |
| Benzodiazepines | n/a | n/a | n/a | **n/a** | 7 | 3 | 1 | **<1** |

**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. Multiple drugs may be indicated on one OFT.

Of the 39 participants who reported having driven a vehicle in the preceding six months, 10% (n=4) reported they had driven whilst over the legal limit for blood alcohol concentration in the preceding six months.

# 7 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

**Key Points:**

- One-quarter of participants had been arrested in the preceding 12 months, most commonly for property crimes.

*Tasmania Police arrests*

- The number of opioid-related arrests increased from 2014/15 to 2015/16 from 34 to 42 arrests;
- The number of methamphetamine-related arrests remained stable between 2014/15 to 2015/16 from 430 to 433; and
- The number of cannabis-related arrests remained stable from 1,446 in 2014/15 to 1,451 in 2015/16 (following a decrease in number of arrests prior).

*Drug-related charges in Tasmanian courts*

- The number of individuals before the Hobart Magistrates Court for alleged dealing and trafficking, cultivation, and possession charges was stable between 2014/15 and 2015/16; and
- The number of individuals incarcerated at Hobart Prison in relation to drug offences, and the number of offences amongst these individuals increased sharply between 2014/15 and 2015/16.

## 7.1 Reports of criminal activity among PWID participants

Of those 2016 IDRS participants who commented (n=91), one-quarter (26%, n=24) self-reported that they had been arrested in the preceding 12 months, which represents the lowest arrest rate in PWID samples in the past 10 years (Table41). Property crimes were the most commonly cited in the sample (7%), followed by driving offences (6%) and unspecified crimes (5%). The proportion of participants reporting a recent arrest for a property crime remained relatively stable between 2006 and 2015, ranging between 12% and 23%. The rate of reported property crime arrests in the 2016 IDRS (7%) represent a break from this trend. The rate of participants reporting recent arrest for a driving offence has remained relatively low, ranging between 4% and 15% between 2006 and 2016 (6% in 2016).

Participants were asked to comment on the frequency of any criminal activity in the month preceding the interview (n=91). Among those reporting involvement in property crimes (22%, n=20), 60% (n=12) noted such activity occurring less than weekly; 15% (n=3) once per week; 25% (n=5) more than once a week (but not daily).

One-sixth of participants reported dealing drugs in the month preceding the interview (16%, n=16). Amongst this group, participants reported dealing drugs infrequently, with 75% (n=12) doing so less than once per week. Small proportions reported dealing drugs on a weekly basis (20%, n=4), more than weekly (but less than daily) (13%, n=2) and daily (13%, n=2).

The rate of participants self-reporting involvement in any criminal activity in the month preceding the interview has remained stable between 2006-2016, ranging between 48% and 62% since 2006, with the exception of 2011 (41%) and 2015 (34%) (Figure 86). The 2016 PWID cohort was similar to 2015, with 33% (n=33) reporting any form of criminal activity in the previous month. It should be noted that fluctuations in reported rates of criminal activity over time are within the range expected for sampling variability.

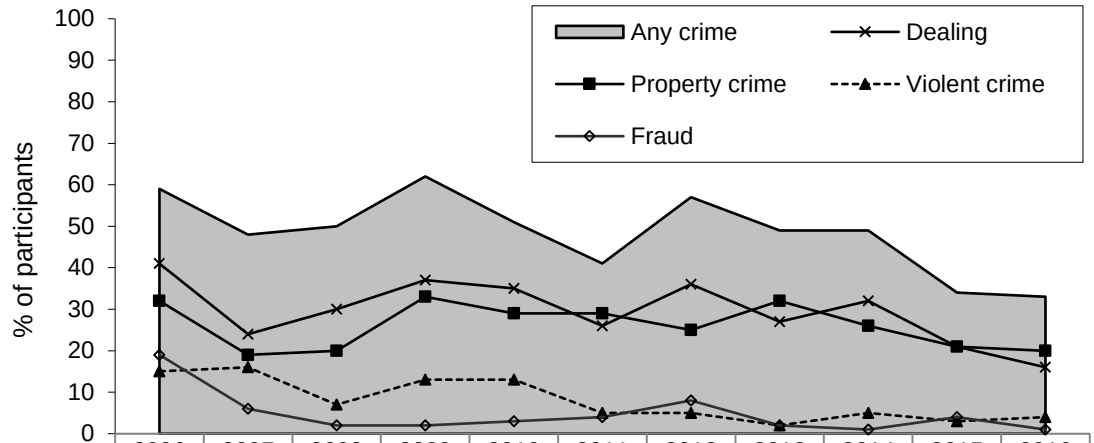
**Table 41: Self-reported arrests among PWID, 2006-2016**

| Activity | 2006 % | 2007 % | 2008 % | 2009 % | 2010 % | 2011 % | 2012 % | 2013 % | 2014 % | 2015 % | 2016 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **% arrested last 12 months** | 55 | 46 | 47 | 49 | 47 | 34 | 37 | 39 | 35 | 34 | 26 |
| *% arrested for:* | | | | | | | | | | | |
| Property crime | | | | | | | | | | | |
| Use/possession-drugs | 16 | 19 | 20 | 23 | 20 | 15 | 14 | 20 | 16 | 12 | 7 |
| Violent crime | 5 | 2 | 10 | 4 | 9 | 4 | 8 | 4 | 6 | 2 | 3 |
| Fraud | | | | | | | | | | | |
| Dealing/trafficking | 16 | 9 | 8 | 10 | 19 | 4 | 7 | 6 | 1 | 7 | 2 |
| Driving offence | 3 | 2 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Alcohol and driving | 3 | 1 | 0 | 4 | 2 | 1 | 4 | 1 | 1 | 1 | 0 |
| Drugs and driving | 10 | 6 | 10 | 12 | 6 | 7 | 11 | 15 | 4 | 8 | 6 |
| Use/possession-weapons˜ | 0 | 6 | 1 | 5 | 5 | 1 | 4 | 1 | 1 | 5 | 0 |
| Other reason | 1 | 6 | 1 | 2 | 2 | 5 | 6 | 2 | 4 | 4 | 3 |
| | - | - | 2 | 5 | 2 | 0 | 0 | 1 | 2 | 0 | 0 |
| | 22 | 17 | 11 | 9 | 6 | 5 | 5 | 5 | 6 | 4 | 5 |

**Source:** IDRS PWID interviews

˜ This response was only included in the 2008-2016 studies

**Figure 86: Self-reported criminal activity in the preceding month amongst PWID, 2006-2016**




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Any crime | 59 | 48 | 50 | 62 | 51 | 41 | 57 | 49 | 49 | 34 | 33 |
| Dealing | 41 | 24 | 30 | 37 | 35 | 26 | 36 | 27 | 32 | 21 | 16 |
| Property crime | 32 | 19 | 20 | 33 | 29 | 29 | 25 | 32 | 26 | 21 | 20 |
| Violent crime | 15 | 16 | 7 | 13 | 13 | 5 | 5 | 2 | 5 | 3 | 4 |
| Fraud | 19 | 6 | 2 | 2 | 3 | 4 | 8 | 2 | 1 | 4 | 1 |

**Source:** IDRS PWID interviews

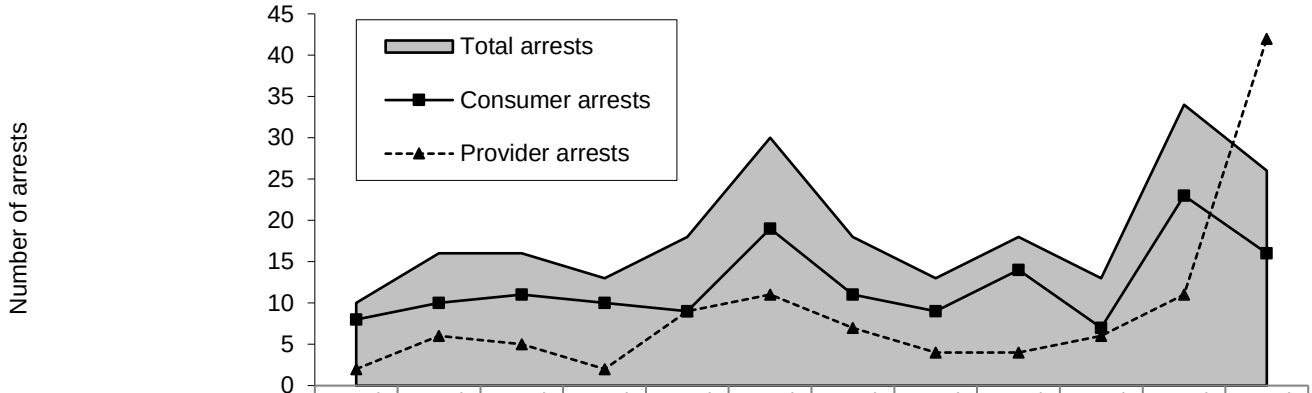
## 7.2 Arrests

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 (IDDI) are summarised in the cannabis arrests section below (Section 7.2.4).

### 7.2.1 Heroin and other opioids

From 2004/05 to 2013/14, the number of arrests relating to opioids (including heroin and other narcotics[17]) remained relatively small and stable with the number of arrests fluctuating at around 13 cases per annum (range 9-18). However representing an increase relative to previous years, in 2009/10 there were 30 such arrests whereas in 2014/15 there were 34 arrests. In 2015/16, there were 42 opioid-related arrests reported (26 consumer and 16 provider arrests), representing an increase relative to previous years, with this increase driven by a large number of morphine related arrests (Figure 87).

**Figure 87: Number of arrests for opioid-related offences in Tasmania, 2004/05-2015/16**




| | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total arrests | 10 | 16 | 16 | 13 | 18 | 30 | 18 | 13 | 18 | 13 | 34 | 26 |
| Consumer arrests | 8 | 10 | 11 | 10 | 9 | 19 | 11 | 9 | 14 | 7 | 23 | 16 |
| Provider arrests | 2 | 6 | 5 | 2 | 9 | 11 | 7 | 4 | 4 | 6 | 11 | 42 |

**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

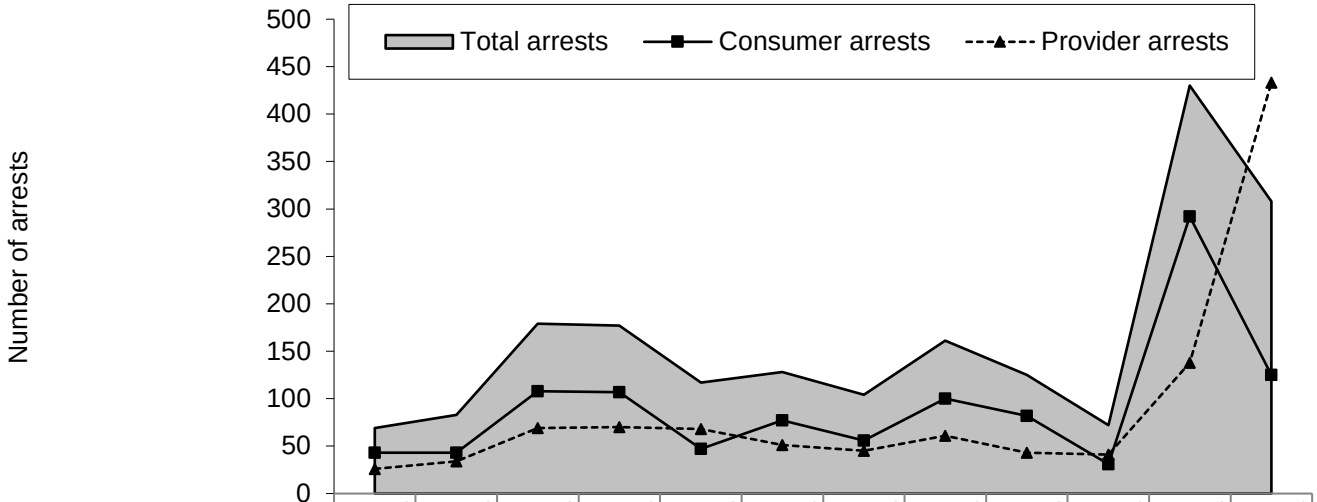
Note: Arrests for 2005/06 were only reported to the ACC for part of the financial year. Totals may differ from those reported in the Department of Police and Emergency Management annual report and ACC-IDDI due to differences in counting rules. 'Consumer' refers to persons charged with use-type offences (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. Note: Total arrests includes those offenders whose consumer/provider status was not stated, so total may exceed the sum of the consumer and provider arrests. Data in 2015/16 were provided by Tasmania Police State Intelligence Service. These data are preliminary and subject to revision.

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

### 7.2.2 Methamphetamine

While a reduced number of arrests for methamphetamine-related offences was reported between 2008/09 and 2010/11 (104-128 arrests) relative to 2006/07 and 2007/08 (177-179 arrests), an increase in the total number of arrests was reported in 2011/12 (161 arrests) (Figure 88). This increase was largely attributable to an increase in the number of consumer arrests, with 100 arrests reported compared to 56 in 2010/11. Arrests in relation to methamphetamine declined between this period and 2013/2014 (72 arrests in 2013/14). However, data for 2014/2015 indicated a substantial increase in number of arrests (430 arrests). Similar arrests rates were recorded in 2015/16 (433 arrests), with 308 consumer and 125 provider arrests.

**Figure 88: Number of arrests for methamphetamine related offences in Tasmania, 2004/05-2015/16**




| | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total arrests | 69 | 83 | 179 | 177 | 117 | 128 | 104 | 161 | 125 | 72 | 430 | 308 |
| Consumer arrests | 43 | 43 | 108 | 107 | 47 | 77 | 56 | 100 | 82 | 31 | 292 | 125 |
| Provider arrests | 26 | 34 | 69 | 70 | 68 | 51 | 45 | 61 | 43 | 41 | 138 | 433 |

**Source:** Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police
Note: 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. Data for 2015/16 were not available at the time of publication. Data in 2015/16 were provided by Tasmania Police State Intelligence Service. These data are preliminary and subject to revision.

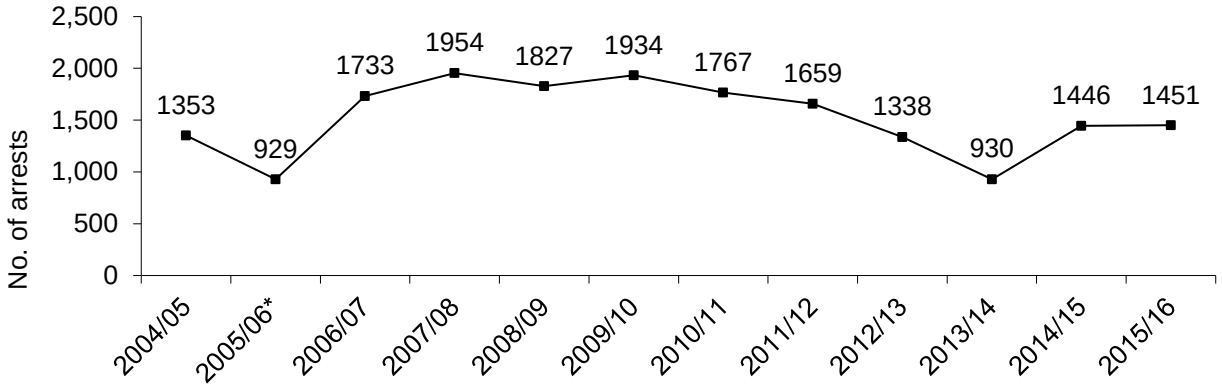
### 7.2.3 Cocaine

Arrests for cocaine-related offences in Tasmania have been infrequent. Between 2004/05 and 2013/14, the number of arrest relating to cocaine offences ranged between zero and three (Australian Bureau of Criminal Intelligence, 2001; Australian Crime Commission, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, & 2015; and State Intelligence Services, Tasmania). In 2014/2015, Tasmanian Police made 6 arrests for cocaine-related offences. In 2015/16, Tasmanian Police made 9 arrests for cocaine-related offences (six consumer and three provider arrests).

### 7.2.4 Cannabis

Figure 89 shows the number of cannabis-related arrests made by Tasmania Police between 2004/05 and 2015/16. A substantial increase in cannabis-related arrests was observed in 2006/07 (1,733 arrests) and rates remained relatively stable until 2010/11 (1,767 arrests). From this point, the number of arrests related to cannabis declined (930 cannabis-related arrests in 2013/14), increasing slightly in 2014/15 to 1,446 arrests (1,206 consumer and 240 provider arrests). A similar number of cannabis related arrests were recorded in 2015/16 with 1,451 arrests (1,291 consumer and 160 provider arrests).

**Figure 89: Number of arrests (including cautions and diversions) for cannabis-related offences in Tasmania, 2004/05-2015/16**




**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: 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 2004/05 and 2010/11 (Table 4242). A notable increase in diversions was apparent in 2007/08 (1,681 diversions) with this level maintained in the subsequent two reporting periods (1,528-1,609). There was a reduction in the total number of diversions between 2009/10 (1,609 diversions) and 2015/16 (624 diversions) and in the number of second-level and third-level diversions (to health interventions) (615 in 2009/10 versus 178 in 2015/16).

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.

**Table 42: Drug diversions or cautions issued statewide by Tasmania Police, 2004/05-2015/16**

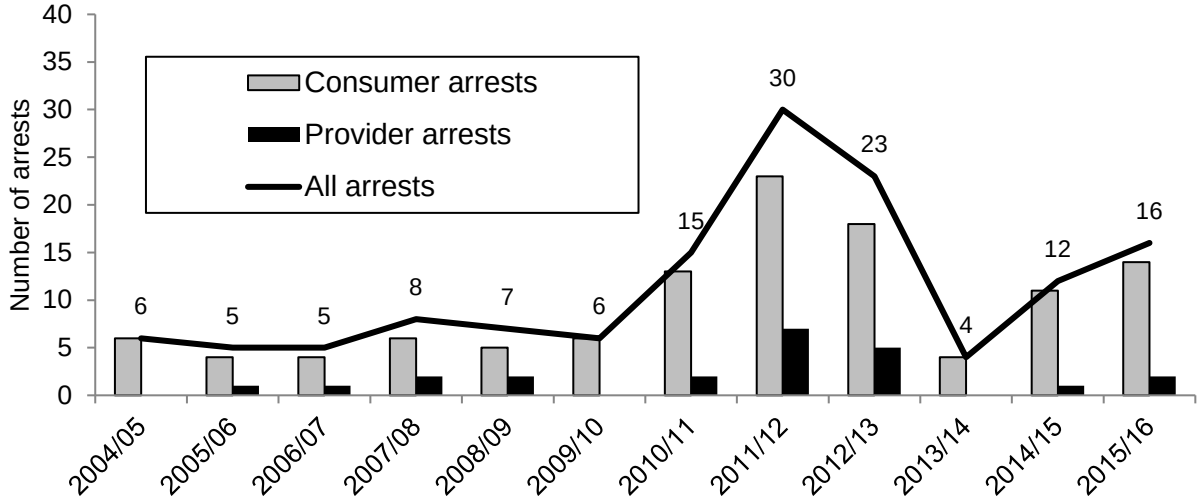
| | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number cautions/ diversions | 1,330 | 1,158 | 1,361 | 1,681 | 1,528 | 1,609 | 1,132 | 869 | 778 | 690 | 648 | 624 |
| No. diverted to health intervention | 365 | 236 | 369 | 634 | 536 | 615 | 413 | 307 | 260 | 205 | 216 | 178 |

**Source:** Alcohol and Drug Services, Tasmanian Department of Health and Human Services.
Note: Data from the second half of the 2010/11 and in subsequent years of reporting does not include persons less than 18 years of age.

### 7.2.5 Benzodiazepines

Between 2004/05 and 2011/12, police arrests related to benzodiazepines increased, albeit involving small numbers (from one arrests in 2003/04 to 30 arrests in 2011/12). Subsequently, the number of arrests has decreased, with just 12 arrests reported for 2014/15 whereas in 2015/16 there were 16 benzodiazepine related arrests (14 consumer and 2 provider). Consumer-type offences have made up the bulk of these arrests each year (Figure 90).

**Figure 90: Number of arrests for benzodiazepine-related offences in Tasmania, 2004/05-2015/16**




**Source:** Tasmania Police
Note: 2015/16 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 four years. This decline is largely due to a decrease in the number of offences relating to the possession/use of illicit drugs. In 2015/16, the number of individuals before the Hobart magistrates court (262 individuals) was stable in comparison to 2014/15 (269 individuals). Data relating to drug-related offences before the Supreme Court were not available for inclusion in the present report (Table 373).

The number of individuals incarcerated at Hobart Prison in relation to drug offences (143 individuals) was much higher than the number incarcerated in 2014/15 (72 individuals), 2013/14 (93) and 2012/13 (47 individuals). The number of offences amongst those incarcerated (430 in 2015/16) was also higher than 2013/14 and 2014/15 (217 versus 219, respectively) (Table 373).

## Table 373: Number of individuals before Tasmanian courts or imprisoned on drug charges, 2005/06-2015/16

| | 2006/ 07 | 2007/ 08 | 2008/ 09 | 2009/ 10 | 2010/ 11 | 2011/ 12 | 2012/ 13 | 2013/ 14 | 2014/ 15 | 2015 /16 |
|---|---|---|---|---|---|---|---|---|---|---|
| **HOBART MAGISTRATES COURT** | | | | | | | | | | |
| Number of individuals before the court for: | | | | | | | | | | |
| *(alleged number of offences in parentheses)* | | | | | | | | | | |
| Import/export of illicit drugs | | | | | | | | | | |
| Deal or traffic in illicit drugs commercial quantity | 0<br>21 (25) | 1 (1)<br>34 (42) | 3 (4)<br>29 (30) | 1 (1)<br>17 (24) | 3 (3)<br>24 (28) | 6 (13)<br>28 (28) | 2 (6)<br>28 (30) | 4(6)<br>26 (34) | 4(6)<br>31(31) | 4(9)<br>26(27) |
| Deal or traffic in illicit drugs non-commercial quantity | 48 (108) | 34 (68) | 68 (126) | 91 (172) | 90 (173) | 62 (128) | 37 (103) | 49 (98) | 52(96) | 49(88) |
| Manufacture of illicit drugs | | | | | | | | | | |
| Cultivation of illicit drugs | 0 | 1 (1) | 0 | 0 | 3 (4) | 1 (3) | 0 | 1 (1) | 4 (4) | 0(0) |
| Possession of illicit drug | 90 (104) | 61 (77) | 85 (100) | 89 (99) | 107 (142) | 84 (103) | 73 (88) | 71 (79) | 52(62) | 51(60) |
| Use of illicit drug | 120 (561) | 129 (494) | 151 (653) | 159 (677) | 188 (843) | 179 (746) | 116 (661) | 90 (493) | 116(521) | 120(739) |
| Other Illicit drug offences | 1 (50)<br>10 (150) | 2 (51)<br>18 (151) | 5 (71)<br>19 (184) | 3 (81)<br>16 (169) | 3 (90)<br>15 (214) | 7 (85)<br>18 (191) | 8 (93)<br>7 (150) | 3 (51)<br>5 (127) | 1(59)<br>9(138) | 4(99)<br>8(218) |
| **HOBART PRISON*** | | | | | | | | | | |
| Number of individuals incarcerated | 56 | n/p | 84 | 53 | 80 | 81 | 47 | 93 | 72 | 143 |
| Number of offences among those incarcerated | 128 | 144 | 166 | 121 | 183 | 237 | 111 | 217 | 219 | 460 |
| **OFFENCE BREAKDOWN:** | | | | | | | | | | |
| **Grow prohibited plant/substance** | | | | | | | | | | |
| Cultivate a controlled plant | 7 | 10 | 11 | 8 | 8 | 14 | 1 | 5 | 1 | 8 |
| Cultivate prohibited plant | 6 | 1 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| **Possession/use** | | | | | | | | | | |
| Possess a controlled drug | 7 | 12 | 18 | 14 | 25 | 32 | 10 | 28 | 31 | 77 |
| Possess a prohibited plant | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Possess controlled plant or its products | 41 | 42 | 38 | 30 | 56 | 70 | 44 | 87 | 76 | 125 |
| Possess prohibited substance | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Possess restricted substance | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 1 | 0 |
| Possess/Use/Administer a controlled drug | 2 | 5 | 0 | 1 | 2 | 10 | 8 | 13 | 15 | 51 |
| Possess narcotic substance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Use a controlled drug | 3 | 9 | 7 | 16 | 16 | 16 | 9 | 21 | 20 | 49 |
| Use prohibited substance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Possess thing used for administration of controlled drug | 15 | 15 | 10 | 12 | 22 | 30 | 12 | 0 | 28 | 46 |

**Sources:** Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice

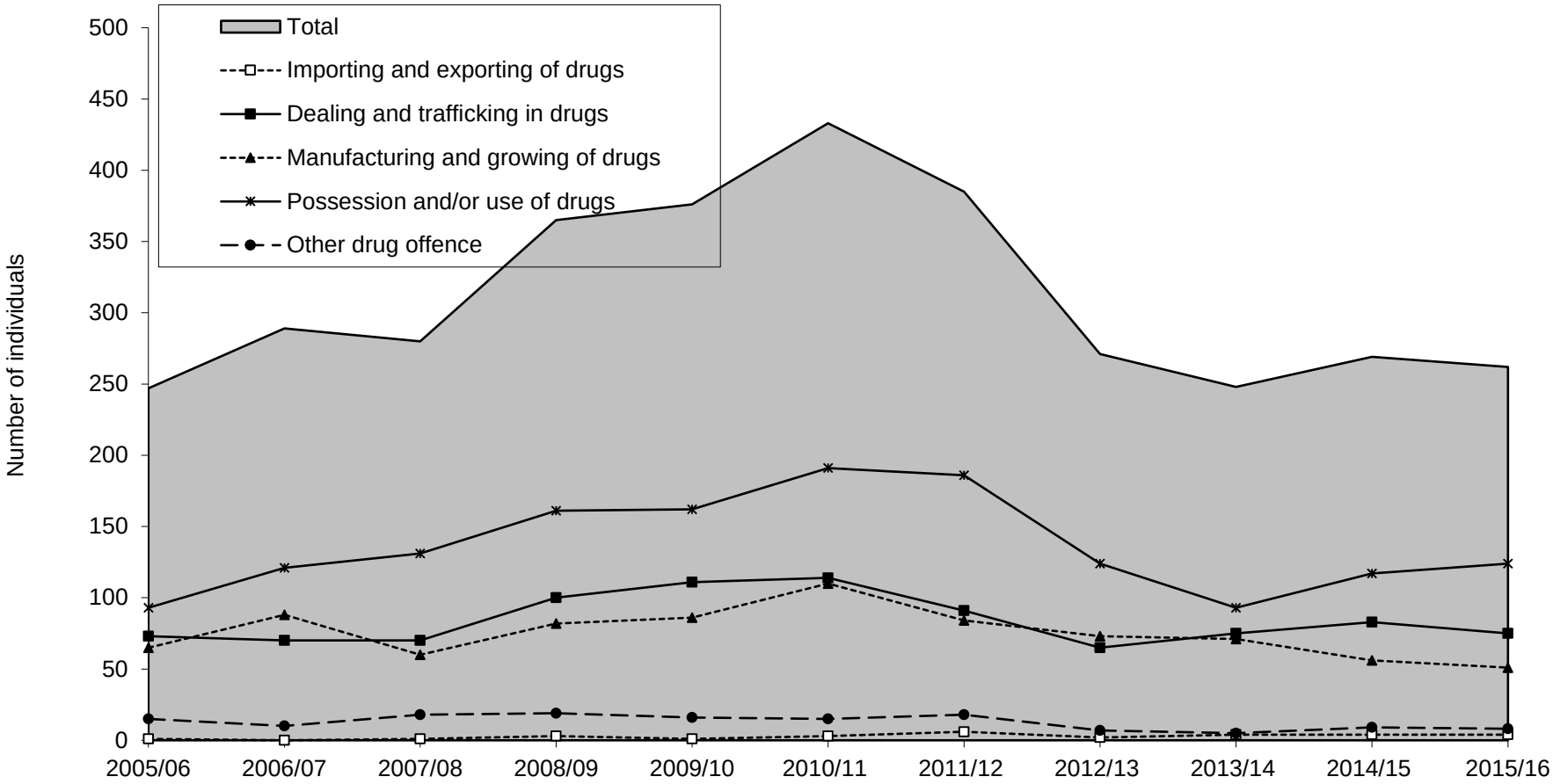
***** This includes all indictable charges under the *Misuse of Drugs Act 2001*, which includes manufacturing a controlled drug for sale, cultivating a controlled plant for sale, possession of thing used in manufacture of a controlled substance for sale, possession of thing used for cultivation of a 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 43: Number of individuals before Tasmanian courts or imprisoned on drug charges, 2005/06-2015/16 (continued)**

| | 2006/ 07 | 2007/ 08 | 2008/ 09 | 2009/ 10 | 2010/ 11 | 2011/ 12 | 2012/ 13 | 2013/ 14 | 2014/ 15 | 2015/ 16 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Prescription offences** | | | | | | | | | | |
| Possess a prescription knowing it to be forged or unlawfully altered | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unlawfully alter a prescription | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unlawfully possess blank prescription form | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Utter a prescription knowing it to be forged or unlawfully altered | 1 | 1 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 |
| **Sell/supply narcotic substance** | | | | | | | | | | |
| Supply or Sell raw narcotic or narcotic substance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Selling/Supplying controlled drug | 3 | 8 | 5 | 10 | 13 | 5 | 7 | 8 | 7 | 35 |
| **Sell/supply prohibited substance/plant** | | | | | | | | | | |
| Make, refine, prepare, sell or supply a prohibited substance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sell prohibited substance | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sell or supply controlled plant | 4 | 4 | 5 | 10 | 12 | 8 | 12 | 8 | 12 | 21 |
| Sell prohibited plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivate a controlled plant for sale | 1 | 5 | 2 | 0 | 2 | 0 | 0 | 3 | 5 | 0 |
| Possessing thing intended for use in cultivation of controlled plant for sale | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 |
| **Traffic in controlled/prohibited/narcotic substance** | | | | | | | | | | |
| Traffic narcotic substance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trafficking in controlled substance | 36 | 52 | 22 | 23 | 17 | 13 | 20 | 24 | 20 | 39 |
| **Traffic prohibited plant** | | | | | | | | | | |
| Traffic in a prohibited plant | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Manufacture a controlled drug for sale** | | | | | | | | | | |
| Manufacturing a controlled drug for sale | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Manufacturing controlled drug | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Possessing thing intended for use in manufacture of controlled substance for sale | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Other** | | | | | | | | | | |
| Fail to comply with *Poisons Act* provisions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Possess implement Contrary to the Act | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Supplying controlled drug to a child | 2 | 0 | 0 | 0 | 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 91: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2005/06-2015/16**




**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 384). This shows that nearly half of the cohort (53%) spent money on illicit drugs the day prior to the interview. The average amount of money spent by the total sample was $45 (SD=$67, range $0-400, median $15). Amongst the group that did spend money on illicit drugs on the day prior to the interview, the average expenditure was $85 (SD=$72, range $5-400, median $80).

**Table 384: Amount spent on illicit drugs on the day prior to interview, 2007-2016**

| Amount spent on day prior to interview | 2007 N=100 % | 2008 N=100 % | 2009 N=96 % | 2010 N=89 % | 2011 N=98 % | 2012 N=106 % | 2013 N=106 % | 2014 N=101 % | 2015 N=100 % | 2016 N=99 % |
|---|---|---|---|---|---|---|---|---|---|---|
| Nothing | 49 | 46 | 34 | 30 | 52 | 29 | 43 | 37 | 53 | 46 |
| <$20 | 4 | 2 | 5 | 5 | 3 | 5 | 2 | 6 | 7 | 3 |
| $20-$49 | 19 | 18 | 15 | 15 | 13 | 15 | 15 | 12 | 15 | 13 |
| $50-$99 | 13 | 15 | 24 | 21 | 15 | 16 | 16 | 19 | 10 | 13 |
| $100-$199 | 12 | 17 | 18 | 21 | 11 | 22 | 17 | 16 | 7 | 20 |
| $200-$399 | 2 | 2 | 4 | 6 | 4 | 8 | 6 | 10 | 6 | 2 |
| ≥$400 | 1 | 0 | 0 | 2 | 0 | 6 | 1 | 1 | 2 | 1 |

**Source**: IDRS PWID interviews

# 8 SPECIAL TOPICS OF INTEREST

## 8.1 Homelessness

A notable proportion of people who are homeless experience higher rates of mental health disorders compared to the general population. Specifically, substance use disorders have been repeatedly recorded as the most common mental health diagnosis amongst homeless populations throughout Western countries (Fazel et al., 2008). Whilst research examining substance use among homeless populations has been undertaken, very few studies have looked at the relationship of homelessness amongst heavy substance users, including PWID. The aim of this module was to obtain information on the lifetime and recent homelessness experiences amongst PWID.

In 2014, the IDRS included a module on homelessness which revealed the high lifetime (76%) and recent (23%) prevalence of homelessness among the IDRS participants. To better understand the risk factors associated with different degrees of homelessness severity, four questions from the 2014 module were repeated in 2016.

Among those who commented (n=77), the lifetime prevalence of homelessness among the 2016 PWID sample was 83% (Table 45). Of those PWID with a homelessness history, 18% were currently homeless at the time of interview. It is clear that the rate of homelessness among PWID is notably higher than the general Australian population estimate of 0.5% (Australian Bureau of Statistics, 2012). For those PWID who were currently homeless, the mean duration of their current episode of homelessness was reported to six years (range: <1-8 years).

**Table 45: Homelessness history among Tasmanian PWID, 2014 and 2016**

| | 2014 N=57 | 2016 N=77 |
|---|---|---|
| **% Lifetime homelessness history** | **72** | **83** |
| **% Length of time since last homeless episode*** | **(n=32)** | **(n=67)** |
| Currently homeless | 6 | 18 |
| In the past six months | 19 | 8 |
| 7-12 months | 6 | 2 |
| 1-2 years | 6 | 10 |
| 2-5 years | 16 | 19 |
| More than 5 years | 47 | 43 |
| **% Total duration of homelessness over lifetime*** | **(n=34)** | **(n=67)** |
| Less than six months | 12 | 31 |
| 6-11 months | 5 | 10 |
| 1-2 years | 32 | 27 |
| 3-5 years | 24 | 16 |
| 6-10 years | 0 | 8 |
| More than 10 years | 18 | 8 |

Source: IDRS participant interviews
* Among those with a homelessness history.

Table 46 shows within the subsample of PWID with a homeless history the proportion that have experienced various states of homelessness in their lifetimes and in the past six months. The most

commonly experienced forms of homelessness during both lifetime and the past six months were couch surfing (91%; 30% respectively), sleeping rough (75%; 22% respectively), boarding rooms/hostels (41%; 9% respectively) and crisis accommodation (49%; 6% respectively).

**Table 46: Different forms of homelessness of Tasmanian PWID (lifetime and last six months), 2014 and 2016**

| | 2014 N=41 | 2016 N=67 |
|---|---|---|
| **% Lifetime** | | |
| Slept rough | 63 | 75 |
| Crisis or emergency accommodation | 17 | 49 |
| Medium or long term accommodation | 22 | 22 |
| Lived with relatives, friends or acquaintances (couch surfing) | 85 | 91 |
| Boarding or rooming houses or hostels (other than on holiday) | 29 | 41 |
| Caravan park (other than on holiday) | 27 | 38 |
| **% Last six months** | | |
| Slept rough | 13 | 22 |
| Crisis or emergency accommodation | 2 | 6 |
| Medium or long term accommodation | 10 | 9 |
| Lived with relatives, friends or acquaintances (couch surfing) | 22 | 30 |
| Boarding or rooming houses or hostels (other than on holiday) | 7 | 9 |
| Caravan park (other than on holiday) | 0 | 0 |

Source: IDRS participant interviews.

## 8.2 Unfair Treatment

Being discriminated against is a common event for people who use illicit drugs, particularly those who inject drugs. The IDRS provided an opportunity to obtain important insights into the multiple origins and impacts of unfair treatment against PWID.

The questions included in the IDRS aimed to clarify the relationships between unfair treatment, mental and physical health issues and quality of life as well as help to inform policy and improve the quality of services. The questions also aimed to identify the location in which PWID are most likely to experience unfair treatment to help reduce future occurrences of this.

The 'Unfair Treatment' questions are based on previous 2013 IDRS questions, developed in conjunction with the Australian Injecting and Illicit Drug Users League (AIVL) (Stafford and Burns, 2014), and two validated and well-accepted scales. The personal well-being index (PWI-A) (International Wellbeing Group, 2013) has been previously used in the IDRS and was well-accepted by participants, while the DISC-12 has been used to evaluate discrimination against people with mental health disorders (Thornicroft et al., 2009).

In 2016, 20% of those who commented (n=75) reported that they had 'never' been unfairly treated, and 24% reported that they had not experienced unfair treatment in the last 12 months. However, 20% did report unfair treatment 'monthly', 19% 'weekly but not daily' and 17% experienced unfair treatment 'daily or more'(Table 47).

Between one-quarter and one-third of those who were treated unfairly reported that they had been treated unfairly in the last 12 months by the police, by family, when getting help for physical health

problems, in keeping or making friends and by people in the neighbourhood. A public location was reported as the venue at which most of the unfair treatment occurred; mainly by the general public, police or family member (Table 47).

**Table 47: Unfair treatment reported by Tasmanian PWID, 2016**

| | 2016 N=75 |
|---|---|
| **% Treated Unfairly** | |
| Never | 20 |
| Not in the last 12 months | 24 |
| Monthly | 20 |
| Weekly but not daily | 19 |
| Daily or more | 17 |
| **% Treated unfairly last 12 months:** | **(n=60)** |
| In making or keeping friends | 25 |
| By people in neighbourhood | 18 |
| In housing | 18 |
| By your family | 20 |
| By the police | 35 |
| When getting help for physical health problems | 32 |
| In getting welfare/disability benefits | 12 |
| In school/education | 3 |
| At work/in your career | 7 |
| **% Most frequent venue treated unfairly:** | **(n=57)** |
| Public location | 35 |
| Employment/work place | 9 |
| Pharmacy | 19 |
| General Practitioner practice | 4 |
| Other health care service | 16 |
| Government institution | 4 |
| Home | 5 |
| Other | 9 |
| **% Mainly treated unfairly in venue by:** | **(n=59)** |
| Police | 9 |
| Family member | 10 |
| Member of public | 22 |
| Pharmacist | 15 |
| General Practitioner | 14 |
| Other service provider | 7 |
| Other | 23 |

Source: IDRS participant interviews

## 8.3 Blood donations

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

In 2014 the Australian Red Cross Blood Service commissioned the Burnet Institute to conduct a review of international literature and guidelines to evaluate the appropriateness of their current eligibility criteria around blood donation and injecting drug use. One of the review's main outcomes was the paucity of data on prevalence of lifetime blood donation among PWID, which precludes calculations of estimates of the risk associated with changing the exclusion/deferral period from permanent to a reduced timeframe (e.g., 5 years).

Of those who commented (n=76), 12% (n=9) reported that they had given blood in their lifetime; two of these participants (22%) had commenced injecting drug use before donating blood.

# 9 IMPLICATIONS

The findings of the Tasmanian 2016 IDRS suggest the following areas for further investigation and possible consideration in policy.

### 1. Responding to the shifts in the methamphetamine market

It is apparent that there has been no real change in the proportion of the PWID samples interviewed over the past 5 years that have reported recent methamphetamine use, with this rate remaining around three-quarters of the sample. This is lower than rates seen a decade prior (four fifths or more in 2006 and 2007). However, it is clear that there the past three survey waves have seen both an increase toward use of the higher-potency crystalline methamphetamine and an increase in the average frequency of consumption. While rates of reported daily use remains rare, with increased frequently of use of increased potency of the drug, the impact of this drug on consumer health is also greater.

While the increased level of use has not generalised to other Tasmanian consumer samples (e.g. frequent psychostimulant consumers interviewed in the EDRS), Tasmania Police do report increased numbers of arrests in relation to the drug and market indicators point to increased availability. Notably, half of those PWID interviewed for the IDRS that had used methamphetamine screened positive to likely methamphetamine dependence, but only half had accessed some form of drug treatment – and this treatment was largely not oriented toward methamphetamine dependence (largely opioid substitution treatment). As such, while primary prevention interventions remain important components of a response to methamphetamine, it is important that both harm reduction interventions to support consumer health and increasing access to treatment are included in community responses to these shifts in the market. Harm reduction interventions are likely best placed as partnership projects between health agencies and consumer bodies. Treatment responses need to both increase the availability of treatment but may also benefit from better understanding the barriers that may exist for consumers in relation to accessing treatment.

### 2. Supporting naloxone programs 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. Similar programs have now been rolled out in other Australian states and territories, with evidence of positive outcomes in regards to reducing mortality (Olsen et al., 2015). At the time the 2015 IDRS interviews were conducted, individuals who participated in these programs required a prescription for the dispensing of naloxone, creating barriers to access and use in the community.

Since the conduct of the 2015 IDRS interviews, the Australian Therapeutic Goods and Administration (TGA) have created a new listing for naloxone so that it can now be dispensed over-the-counter (OTC; i.e., without a prescription), creating a new listing under Schedule 3 for OTC naloxone and keeping the original listing under Schedule 4 (requiring prescription) (Lenton, Dietze, & Jauncey, 2016). The TGA have specified that OTC naloxone must be provided with comprehensive instructions for use by laypersons, and provided within a context of broader overdose prevention knowledge. Whilst research has pointed to no significant differences between trained and untrained laypersons in using naloxone for managing an overdose (Doe-Simkins et al., 2014), participation in education programs is recommended or, at a minimum, provision of educational materials and directions to other training resources, with naloxone dispensing (Lenton et al., 2016). It is also important to note that rescheduling naloxone to Schedule 3 still requires dispensing by a doctor or pharmacists, with attendant costs for the individual. It is also important to note that while a prescription for naloxone was not required at the time of the 2016 IDRS interviews,

only 5% of the participants were aware of this. In February 2017, it was announced that naloxone will be subsidised in Australia, which removes a significant barrier to its access for consumers.

At the time of the 2016 IDRS interviews, there were no take-home naloxone training programs in Tasmania, despite one-quarter (29%) of those IDRS participants who had ever used an opioid reporting an overdose, and high rates of awareness of naloxone (83% of participants). Given the rescheduling of naloxone to OTC and the subsidised access to this drug, it is critical that the Tasmanian Department of Health and Human Services, in conjunction with NGOs, ensures the establishment of such a program in Tasmania as a matter of priority or, at a minimum, priorities the development of information resources and other awareness and education campaigns to maximise uptake and effective use of naloxone in the community. The ACT, New South Wales, Western Australia and Victoria have made progress in this direction, establishing their own take-home naloxone programs, and existing and pending evaluations of these programs (as well as such programs internationally) can go some way to informing progress in this direction in Tasmania.

### 3. Monitoring the impact of introducing a tamper-resistant oxycodone formulation and other pharmaceutical opioid formulations intended to reduce misuse

Alongside morphine, oxycodone is one of the main pharmaceutical opioids illicitly used and injected by IDRS cohorts. However, there has been a trend towards a decline in recent illicit oxycodone use since 2013 (2013: 61%; 2014: 47%; 2015: 27%; 2016: 28%), coupled with a lower frequency of use (median of 6, 5, and 4 days in the past six months in 2014, 2015, and 2016, respectively versus 15 days in 2013) and lower rates of injection (2014: 46%, 2015: 26%, 2016: 24%), respectively versus 59% in 2013).

A 'tamper-resistant' controlled release oxycodone product was released in Australia as of April 1, 2014, replacing the original product which did not have such properties. Post-marketing surveillance monitoring of short-term outcomes (i.e., until approximately August, 2014) indicated a decline in national pharmacy sales of 80mg product (the dose most commonly used and injected among people who inject drugs), as well as a reduction in prevalence of overall use and injection, street price and attractiveness for misuse via tampering among a prospective cohort of people who tamper with pharmaceutical opioids (Degenhardt et al., 2015). As noted above, data from the IDRS supported these findings, with lower rates of use and injection amongst the 2014 IDRS Tasmanian sample (interviewed two months post-introduction of the reformulation).

Subsequently, on September 1st, 2014, a generic formulation of controlled-release oxycodone was made available, comprising similar tablet sizes to the original formulation, and lacking the tamper-resistant properties of the reformulated product. This product was listed for public subsidy in December, 2014, and thus had been available for over eighteen months at the time of the 2016 IDRS interviews.

The decline in use evident amongst the 2014 IDRS sample could have reflected an early shift in the drug market and patterns of use in response to the reformulated product. However, data from the 2016 (28%) and 2015 (28%) IDRS sample aligns with these findings, showing even lower rates of oxycodone use in general relative to 2014 (49%). While there was a significant increase in the uptake of the reformulated product from 2014 to 2015 (14% versus 28%, respectively), these numbers are still low overall relative to prior rates of use. Notably, uptake of the generic formulation was particularly low (5%), although rates of prescribing and dispensing need to be assessed to determine the availability of this product for use in Tasmania, with anecdotal reports from KE indicating a lack of familiarity with this product amongst consumers, or awareness but acknowledged challenges of accessing the generic form.

Across both the 2014, 2015, and 2016 studies, there was no significant increase in the number of participants reporting recent use of heroin or other pharmaceutical opioids, suggesting that the introduction of the reformulation had not forced greater uptake of other drugs. Indeed, the 2015 and

2016 data suggested a decrease in use of other opioid formulations, including morphine and methadone syrup, in the preceding six months, with consistently low rates of use of heroin – in the context of the stable majority of respondents reporting opioids as their drug of choice. There was also no change in self-reported treatment engagement, although it is important to note that the IDRS sample might not be fully representative of local trends.

KE reports aligned with these findings, noting continued decreased oxycodone use and injection amongst clients, and low uptake of the generic formulation. Given the high rates of pharmaceutical opioid misuse (particularly oxycodone misuse) amongst the Tasmanian IDRS cohort and the potential impact of a tamper-resistant formulation, continued monitoring of oxycodone use and tampering and other pharmaceutical opioid use is crucial to determine the longer-term efficacy of this strategy and ensure timely responses to any unanticipated consequences of this change in the drug market. Lack of reporting of prices (and variability in those prices reported) provided suggest that the illicit oxycodone market may still be stabilising, and uptake of the generic formulation (which does not have tamper-resistant properties) requires continued monitoring given the lack of clarity regarding availability of this product in Tasmania.

Injecting-related risk behaviours and harms will also be important to monitor long-term. The reformulated tablets are designed to be bioequivalent to the original formulation, but employ a controlled release technology (that makes them difficult to crush) with a hydro-gelling matrix (so the tablet develops into a viscous gel when dissolved in water) (Sellers et al., 2013). Frontline workers need to continue to be aware of these issues and to implement harm reduction interventions with potential injecting consumers of this drug, as the acute and long-term consequences of tampering with the reformulated product in regards to injecting-related injuries and diseases are not known. Given that a number of participants report successfully injecting these tablets, we can conclude that they may be successful in reducing, but not eliminating, tampering with this product.

However, continued monitoring of misuse of all pharmaceutical opioids is critical given an ever-increasing number of products available. Currently, there is an emphasis on developing products which pharmacologically are considered low abuse liability, or which are manufactured in such a way as to reduce attractiveness for tampering (e.g., with physical barriers, chemical barriers, agonist-antagonist combinations, drug release/delivery systems which are difficult to tamper with, or prodrug delivery systems). As these products are released on to the market, there is a need to monitor their uptake, as well as the ramifications for use of other pharmaceutical opioids and associated harms, and to ensure that the balance of pain relief versus risk of dependence and harm is managed.

## 4. Monitoring and application of region-specific drug trend information

In regional Tasmania, as in many other rural and regional jurisdictions nationally, there have been many anecdotal reports regarding increased use and availability of crystal methamphetamine. Through media and public meetings, calls have been made for enhanced treatment services and increased policing, with the goal of reducing use of this drug and harms associated with it. However, to date, there has been a lack of any rigorous research conducted in these regional areas of Tasmania to support these claims.

The IDRS methodology was developed to identify new and emerging trends in drug markets and associated harms, so is well placed to inform the public debate regarding increasing use of crystal methamphetamine in these areas. Pilot studies extending the IDRS into the north and north-west regions of Tasmania were conducted in 2003 and 2006 (Bruno, 2004a; de Graaff & Bruno 2007b), which identified trends in use, availability and purity of drugs that were divergent from trends reported for Hobart. The IDRS is well-placed to identify drug use trends and related harms in these regions of Tasmania in a timely manner, which would contribute substantially to the ongoing debate regarding the ‘ice epidemic’. Ongoing monitoring across the state becomes all the more critical given the gradual shift in drug use amongst the IDRS sample.

## 5. 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 2016 Tasmanian IDRS, injecting use of morphine and oxycodone have continued (although rates have slightly decreased, potentially attributable to the introduction of reformulated tamper-resistant oxycodone). In addition, new formulations of drugs, such as Suboxone sublingual film and tamper-resistant oxycodone, 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.

## 6. Evaluation of the impact of, and further targeting of, drug driving interventions among regular drug consumers, with particular emphasis on exploring trialling a drink-driving court

A substantial proportion of the consumers interviewed in the IDRS study reported driving while affected by drugs (80% of those who had driven in the past six months). This has remained stable across the past eight IDRS PWID cohorts, despite the implementation of roadside drug-testing by Tasmania Police and associated driver education campaigns. 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. In late 2013, the Chief Magistrate initiated a project to explore alternative therapeutic justice options such as the establishment of Drink Driving Courts (DDC). Since that time a working group has considered the policy and operational aspects associated with establishing a DDC within Tasmania, with recommendations of trialling such a process. Continued monitoring by the IDRS project of driving under the influence of substances, particularly alcohol, will assist in building evidence regarding the effectiveness of the DDC.

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