TASMANIAN DRUG TRENDS 2002

Findings from the Illicit Drug Reporting System (IDRS)

Raimondo Bruno[#]* & Stuart McLean*

#School of Psychology, and *School of Pharmacy, University of Tasmania

NDARC Technical Report No. 148

ISBN 1 877027 332

TABLE OF CONTENTS

LOCATION OF TABLES

LOCATION OF FIGURES

ACKNOWLEDGEMENTS

This research was funded by the Commonwealth Department of Health and Ageing and the National Drug Law Enforcement Research Fund, and co-ordinated by the National Drug and Alcohol Research Centre, University of New South Wales. The authors wish to thank these organizations for their support, and in particular Dr Jeanette Packer and Mr. Roger Nicholas from the National Drug Law Enforcement Research Fund for their efforts in facilitating funding for the IDU component of this study.

The authors wish to thank the following people for their contributions to this project:

Courtney Breen, Bridget Barker, Amanda Roxburgh and Dr Louisa Degenhardt from the National Drug and Alcohol Research Centre for their assistance throughout the project.

The members of the 2002 IDRS Steering Committee: Steve Wood (Australian Customs Service), Lianne Barden (The Link Youth Health Service), Stephen Biggs (Tasmania Police), Richard Bingham (Department of Justice and Industrial Relations), Chrissie Hall-Pascoe (NUFIT), Jack Johnston (Tasmania Police), Cecile MeKeowen (Alcohol and Drugs Service, Department of Health and Human Services), Kim Oakley and Iris Ritt (Tasmanian Council on AIDS and Related Diseases), Angela Reddy and Anthony Speed (Population Health, Department of Health and Ageing), Mary Sharpe (Pharmaceutical Services, Department of Health and Human Services), and Anne Sheehan (Sexual Health, Department of Health and Human Services).

Jackie Hallam, who conducted the majority of the interviews of injecting drug users and provided assistance throughout the project.

The staff of services who very generously provided the researchers with space and support for interviewing participants: NUFIT, the Tasmanian Council on AIDS, Hepatitis and Related Diseases, and the Link Youth Health Service, as well as the community pharmacies who distributed information about the research to their clients.

The many key informants who willingly provided their time, effort and experience to contribute to the IDRS process.

The following local organizations and persons who generously provided indicator data: Tasmania Police (Stephen Biggs, David Old, Jane Lockley & Eileen Rushton); Tasmanian Department of Health and Human Services divisions: Pharmaceutical Services (Mary Sharpe), Sexual Health (Anne Sheehan), Alcohol and Drug Services (Cecile McKeown, & Andrew Foskett); and Justice Department of Tasmania Divisions: Magistrates Court (Paul Huxtable), Supreme Court (Tim Ellis), Poppy Board (Terry Stuart), Prisons (Jackie Campbell).

Finally, the authors wish to thank the people who participated in the IDU survey.

LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
ASSAD	Australian School Students' Alcohol and Drugs survey
COTSA	Clients of Treatment Service Agencies
DACAS	Drug and Alcohol Clinical Advisory Service
DHHS	Department of Health and Human Services
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user
KI	Key Informant
KIS	Key Informant Study
MMT	Methadone Maintenance Therapy
NDARC	National Drug and Alcohol Research Centre, University of New South Wales
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NSP	Needle and Syringe Program
NAP	Needle Availability Program
OTHER	Refers to other (secondary) indicators
SIS	State Intelligence Services, Tasmania Police
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences
SSRI	Specific Serotonin Reuptake Inhibitor
TASPOL	Tasmania Police
TCA	Tricyclic Antidepressant

EXECUTIVE SUMMARY

In 1998, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Family Services (now the Department of Health and Ageing) 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.

The 1999, the Tasmanian component of the national IDRS gathered information on drug trends using two methods: key informant interviews with professionals working in drug-related fields, and an examination of existing indicators. For the 2000 IDRS, funding was provided by the National Drug Law Enforcement Research Fund to expand this methodology and include a survey of people who regularly inject illicit drugs in addition to the methods employed previously. This funding and methodology was continued in 2001 and into 2002.

Injecting Drug User survey

One hundred people that regularly injected illicit drugs (IDU) 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 informant study

Thirty 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 informants' (KI) included needle availability program staff, drug treatment workers, health workers, youth and outreach workers, and staff from police and community corrections. Of these informants, 16 reported on groups that predominantly used opioids (diverted pharmaceuticals), 6 on cannabis and 8 on groups primarily using methamphetamine.

Other indicators

In order to complement and validate the key informant 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 C incidence data, data from the 1998 and 2001 National Drug Household Studies, data from clients of the State's Needle Availability and Pharmacotherapy programs, as well as drug and alcohol treatment services.

Summary of drug trends in Tasmania

The 2002 IDRS detected a number of trends during the preceding six to twelve months. Table A below provides a summary of the trends in price, availability and prevalence of use of the major drug types examined in the current study:

Table A: Price, availability, purity and prevalence of use of heroin, methamphetamine, cannabis, methadone and morphine

	Heroin	Methamphetamine		Cannabis	Morphine	Methadone
		Powder	Paste			
Price						
1 mg	-	-	-	-	$1, stable	$1, stable
0.1 gram	$100, stable/↑	$50, stable	$50, stable	-	$80, stable	-
Gram	$350, stable/↑	$80, stable	$400, stable	$25, stable	-	-
Ounce	-	-	-	$250, stable	-	-
Availability	Mixed reports Stable	Very easy Stable	Very easy Stable	Very easy Stable	Very easy Stable	Easy Stable
Purity*	Mixed reports Stable	Low-medium Fluctuating	Medium-high Fluctuating	High Stable	Pharmaceutical	Pharmaceutical
Prevalence of use	Possible decrease	Possible decrease	Possible increase	Stable	Stable	Increase in use of Physeptone

**Note: based on IDU and key informant estimates of purity/potency*

Heroin

While the availability of heroin in the state appeared to have been slowly increasing during 1999 and 2000, data from the past two IDRS studies has suggested that the drug has been becoming increasingly difficult to access in recent years. Use of heroin among both IDRS IDU respondents and clients of the State's Needle Availability program have steadily declined in the past three years, despite the drug remaining popular as a drug of choice among IDU. Additionally, IDU reported purchase prices of heroin ($50-100/'taste':0.05-0.15g and $350/gram) appear to be slightly higher than modal prices reported in 2001 ($50/'taste' and $300/gram), despite the majority opinion of IDU that prices had remained stable in the preceding six months.

Methamphetamine

It is clear that the increased availability of higher-purity methamphetamine, identified as an emerging trend in the 2000 Tasmanian IDRS, has further stabilised and expanded into 2002. The relatively high potency and ease of access to the drug appears to have made use of methamphetamine increasingly attractive among IDU, with almost all of those surveyed using the drug in the six months prior to interview, despite the participants predominantly preferring opioids.

The majority of IDU reported most commonly using the waxy, sticky gel/powder 'base/paste' form of methamphetamine that appears to be very easily available locally, although its potency and presentation fluctuates substantially. Despite the declining popularity of the traditional low-purity powder methamphetamine amongst IDU respondents over the past three years of the IDRS, reports from Tasmania Police suggest that this form remains the most common preparation of methamphetamine in the Tasmanian market.

The sustained, ready availability of relatively high potency methamphetamine was regarded as being responsible for anecdotal descriptions of an increasing number of people using methamphetamine, and continued suggestions of the drug attracting opiate users away from that market. These suggestions of increases in use of the drug were matched by increases in both

seizures and arrests related to methamphetamine in the past year. With these indications of expanding levels of use, careful monitoring of both the methamphetamine market and the impacts on the physical and mental health of users is warranted in the coming years.

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. Only a very small proportion of the sample reported recent use of the drug (12%), which locally is almost exclusively a crystalline powder. IDU considered cocaine as difficult to access, a situation that had remained stable in recent months. Such patterns do not appear to have changed over the past few years, however, it is noteworthy that, between 2000 and 2002, increasing proportions of the Tasmanian IDU sample have reported lifetime use (39% and 47%, respectively) and recent use (6% and 12%, respectively) of cocaine.

Cannabis
Most aspects of the cannabis market and patterns of use appear to be relatively stable, despite the continued expansion of the Illicit Drug Diversion Initiative within the State, indicating that any perceived lessening of the potential personal cost associated with possession of small amounts of cannabis has not had any negative impact in terms of expansion of the local cannabis market. Most users surveyed reported a preference for using hydroponic cannabis head, and, in concert with this, intelligence reports from Tasmania police indicate an increasing trend toward hydroponic or indoor cultivation of the drug.

Opioids
Overall, patterns of use and availability of other opioids such as morphine and methadone seem to have generally remained stable since the 2000 IDRS. However, reported frequency of use of morphine had decreased among the 2002 IDU cohort in comparison to previous years, matched by an increase in frequency of use of methadone. This change reflects an increased use of Physeptone tablets of methadone rather than any substantial increase in the diversion of methadone syrup. In support of this, the majority of those accessing methadone by illicit means reported primarily using Physeptone tablets.

MS Contin remains the most commonly used formulation of morphine, although reported use of Ordine, a liquid preparation of the drug, has steadily been increasing over the past three years. Virtually all of those using morphine or methadone tablets had accessed these substances solely from illicit sources in the six months prior to interview, indicating that access to these products is primarily not coming via doctor shopping from the users themselves.

Continuing the trend seen in the 2001 IDRS, both use of preparations of alkaloid poppies and the number of poppy crop thefts remained low in 2002, marking a sustained reduction from levels seen in 2000.

Finally, buprenorphine, recently adopted as a maintenance treatment option for opioid addiction in the state, appears to have made little impact on the illicit opioid market, with only one individual participating in the 2002 survey reporting illicit use of the drug (and using it only once). However, given that substantial levels of diversion have occurred in jurisdictions where buprenorphine maintenance treatment is more common, careful monitoring of this issue is clearly warranted as Tasmania's buprenorphine program expands, particularly given the existing culture of use of pharmaceutical products among local IDU.

Benzodiazepines

There appears to have been a stabilisation or reduction in the rates of use and injection of benzodiazepines among IDU in 2002. While both the proportion of the IDU sample reporting oral and intravenous use of benzodiazepines in the preceding six months was highly similar to the proportions seen in the 2001 study, the frequency of use among the 2002 respondents was substantially lower. Moreover, since policy changes removing the PBS subsidy on gel capsule formulations of temazepam (the benzodiazepine form most favoured for injection) were introduced in May 2002, IDU have reported this formulation as more difficult to get via licit means. While it appears that harm reduction efforts, by front-line workers, medical practitioners and policy changes, may have had a considerable impact on patterns of benzodiazepine use, there remains a relatively high level of benzodiazepine injection within Hobart when compared to other jurisdictions. This is a particular concern given the serious psychological and physical sequale associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within the local IDU community, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to merit very close attention.

Other drugs

There are clear indications of an increase in the local availability of tablets marketed as 'ecstasy' in Hobart. However, this drug appears to be used primarily in demographic groups other than those accessed via the IDRS methodology. Intelligence reports from Tasmania Police indicate that much of the 'ecstasy' available in Tasmania is imported from Victoria, and, from extrapolation from markings on seized tablets in both jurisdictions, are often comprised of compressed methamphetamine with additives of caffeine or ketamine rather than MDMA.

Drug-related issues

Both indicator data and reports from those surveyed in the current study suggest relatively low rates of sharing of needles/syringes and other injection equipment (around 10% or less among those surveyed), with indications of more appropriate practices with other injection equipment (such as water and mixing containers) among some IDU. Comparing reported rates of injection related harms among the 2001 and 2002 Tasmanian IDRS participants, considerable decreases were shown in rates of self-reported experience of both 'dirty hits' and thrombosis, with the latter likely to be associated with a decrease in recent injection of benzodiazepines. Overall, however, a substantial level of injection-related health problems continues to be experienced by local injecting-drug users, at a relative rate considerably higher than IDU in other jurisdictions. This is reflective of the increased harms associated with the injection of pharmaceutical preparations of drugs that have been designed for oral consumption, which is substantially more common in Tasmania than other jurisdictions. However, local IDU experienced a much lower rate of overdose than users in other jurisdictions, due to the greater control over the dose of the drug afforded by use of standardised pharmaceutical preparations.

Implications

The findings of the Tasmanian 2002 IDRS suggest the following areas for further investigation and possible consideration in policy:

- As Tasmanian illicit drug use culture has been consistently shown to substantially differ from other jurisdictions (with regard to, for example, patterns of use of pharmaceutical products rather than substances such as heroin, due the low local availability of this drug), drug education programs and harm minimisation information campaigns need to be tailored to the particular needs and types of substances used within the state.

- Extension of a drug trend monitoring framework into other regions within the state (such as Launceston and the North-West coast) as there has been almost no specific research examining patterns of drug use within these areas, and due to their access to air and sea ports, and establishment of organised motor cycle group headquarters, availability and use of illicit substances may differ substantially in these regions from patterns seen in Hobart.

- Continued emphasis on, and support for, targeted strategies to further reduce the rates of sharing of needles/syringes and other injection equipment (such as tourniquets, filters and mixing containers) among IDU, as well as to minimise the harms associated with poor injecting practice through improving awareness and adoption of safe injection techniques and vein care among IDU.

- Investigation into the factors associated with the experience of 'dirty hits' among local IDU and development of strategies to reduce this occurrence.

- Continuing monitoring of the expanding methamphetamine market and patterns of methamphetamine use.

- Research into the composition of the differing forms of the higher-potency preparations of methamphetamine, both to determine whether there are any particular injection-related harm risks associated with any of its common constituent chemical impurities, and to determine whether these forms are similar to that reported variously as 'crystal meth', 'paste' or 'base' in other jurisdictions.

- Continued monitoring of the availability and potency of heroin available locally, particularly given that mainland heroin markets appear to have returned to a relatively easy availability of the drug in 2002.

- With the firm establishment of a culture of injection of methadone syrup locally (although this remains predominantly within individuals enrolled in the state methadone maintenance program injecting their own methadone), continued consideration of pragmatic harm reduction approaches to such use is warranted: either at the level of the consumer, with use of butterflies and biological filters; and/or at the policy level, requiring use of sterile water for dilution of methadone doses or switching to Biodone syrup, as this preparation does not contain the preservative agent sorbitol, which can cause irritation and harm to the venous system.

- Use of liquid preparations of morphine (Ordine) has continued to rise over the past three years of the IDRS. This is of some concern as the drug is typically sold 'preloaded' in syringe barrels, and it is often unclear to the user if the injection equipment or the solution is free from infection or contamination. Approaches to reducing the potential harms of this situation, such as increasing the awareness of the risk of this situation among users, or varying prescription practices to reduce the availability of larger containers of the drug, merit consideration as use expands.

- Given that injection of buprenorphine carries with it a substantial degree of risk for the development of abscesses, careful monitoring of diversion of the drug is warranted as Tasmania's buprenorphine program expands. If, as has been seen in other jurisdictions with larger buprenorphine maintenance programs, injection of the drug becomes an issue locally, IDU should be made aware of 'safe' injection techniques for the drug through front-line harm reduction workers.

- Research into factors that would reduce the harms associated with the intravenous use of the pharmaceutical preparations of morphine, methadone and benzodiazepines commonly used within the local IDU population, and dissemination of this information to users through continued training of Needle Availability Program staff and peer groups.

- Continued monitoring of the intravenous use of benzodiazepines, particularly to assess the impact of the recently changed status of Normison (temazepam) on patterns of misuse of other benzodiazepines or related substances.

- Characterisation and potency testing of cannabis cultivars to investigate continuing reports of high or increasing potency of cannabis.

- While there were clear indications of an increasing availability of tablets marketed as 'ecstasy' in Hobart, this drug was primarily used in demographic groups not well tapped via the IDRS methodology. As such, specific research examining the extent of use, demographic profiles of users, and analysis of the composition of the tablets sold locally as 'ecstasy' is required in order to better understand the potential harms faced by local users. Better understanding of the demographics of people using this drug will facilitate the targeted and successful delivery of any appropriate harm reduction information about this product.

- Research examining the extent of use, and demographic profiles of (mis)users of drugs such as anabolic steroids, inhalants, and pharmaceutical amphetamines in the state, as these populations are not well accessed within the methodology of the IDRS.

1 INTRODUCTION

In 1998, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Family Services (now the Department of Health and Ageing) to begin a national trial of the Illicit Drug Reporting System (IDRS), following a successful pilot study of the methods in New South Wales in 1996 (Hando, O'Brian, Darke, Maher & Hall, 1997) and a multi-state trial of the methodology in New South Wales (Hando & Darke, 1998), South Australia (Cormack, Faulkner, Foster-Jones & Greaves, 1998) and Victoria (Rumbold & Fry, 1998) the following year.

The intention of the IDRS is to provide a co-ordinated approach to the monitoring of trends associated with the use of methamphetamine, opioids, cannabis and cocaine, in order that this information could 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 individuals who have regular first-hand contact with groups of people who use illicit drugs ('key informants'), 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, 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 key informant interviews and examination of secondary data sources only. The National Drug Law Enforcement Research Fund has provided these states with additional funding to expand data collection to the full IDRS methodology for 2000 through to the current year.

The 2002 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 informant 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 (Bruno & McLean, 2000), 2000 (Bruno & McLean 2001), 2001 (Bruno & McLean, 2002) and state comparisons (McKetin et al., 2000; Topp et al, 2001, Topp et al, 2002), are available as technical reports from the National Drug and Alcohol Research Centre, University of New South Wales.

1.1 Study Aim

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

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 (IDU), a key informant study of professionals working in the illicit drug (or related) field 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 data set are provided below. Previous work with the IDRS methodology has found that injecting drug users are a good sentinel group for detecting illicit drug trends due to their high exposure to many types of illicit drugs. This group also posses' first-hand knowledge of the price, purity and availability of illicit drugs. Key informant 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 IDU and key informant surveys (McKetin, Darke & Kaye, 1999).

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 trends. Findings from the 2002 Tasmanian IDRS are also compared with findings from the previous Tasmanian studies (Bruno & McLean, 2000; Bruno & McLean, 2001; Bruno & McLean, 2002) to determine any changes in drug trends over time.

2.1 Injecting Drug User (IDU) Survey

The IDU survey was completed during June and July 2002, and consisted of face-to-face interviews with 100 people who regularly inject 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 availability program outlets (NAPs), pharmacies (through flyers included with injection equipment) or health services, and snowball methods (recruitment of friends and associates through word of mouth). Participants were interviewed at places convenient to them, such as health services, NAPs or, where invited by the participant, private homes. Three agencies: NUFIT; The Link Youth Health Service; and the Tasmanian Council on AIDS, Hepatitis and Related Diseases (TASCAHRD) assisted the researchers by participating as recruitment and interview sites for IDRS participants. The major location for recruitment and subsequent interview was Hobart city, although one third of the sample was recruited and interviewed in Glenorchy city (in the northern suburbs of Hobart).

A standardised interview schedule used in previous IDRS research (Hando & Darke, 1998; McKetin et al., 1999; Topp, Hando & Darke, 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 drug trends. Participants were screened for appropriateness both by referring staff members of the recruitment sites and the interviewers, the latter through a series of questions designed to elicit participant's knowledge of injecting drug use practice. Both the University of New South Wales and University of Tasmania institutional Ethics Committees granted ethical approval for the survey. Participants were given an

information sheet describing the interview content prior to commencement (subsequent to screening), allowing them to make a more 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 25 and 40 minutes (ranging from 20 to 75 minutes), and participants were reimbursed $30 for their time and out-of-pocket expenses.

Data analysis was conducted using SPSS for windows, release 11.0.1 (SPSS Inc, 2002).

2.2 Key Informant Study

Thirty key informants who were working with illicit drug users in the greater Hobart area participated in face-to-face interviews between July and September 2001. Thirteen (43%) participants were recruited from the pool of key informants that had taken part in the 2001 IDRS (Bruno & McLean, 2002), while 9 (30%) had also participated in the 2000 IDRS (Bruno & McLean, 2000), with 6 (20%) participating in the 1999 IDRS. All other participants in the current study were identified and recruited either as replacements for the 2001 IDRS participants drawn from the same agencies or on the basis of referrals from the Tasmanian IDRS steering committee or professionals in the field.

Key informants included youth workers (n=3), members of the department of justice (n=2), and pharmacists (n=3), with the remainder working specifically in the drug and alcohol field, comprising psychologists/counsellors (n=4), outreach/street workers (n=3), general practitioners prescribing methadone or specialising in alcohol and other drug treatment (n=4), and other health professionals working in a variety of more general roles in the drug and alcohol field, including assessment, nursing, needle and syringe availability, and advocacy (n=11).

Entry criteria for inclusion in the study were, at least, weekly contact with illicit drug users in the past 6 months and/or contact with 10 or more illicit drug users in the last 6 months. All key informants satisfied these criteria: the median number of days contact with illicit drug users in the past 6 months was 3 days per week (mode 5 days per week, range 1 - 5), and almost half (47%) reported contact with more than 50 illicit drug users in the past week (all but one key informant reported contact with more than 10 users in the week prior to interview).

Forty-two percent were males. Key informants predominantly rated that they were very certain of the information they provided in the interviews (60%), or at least moderately so (100%). Although the key informants predominantly came from generic services (70%, n=22), many worked with special populations, including youth (23%, n=7) and injecting drug users (7%, n=2).

Key informants were asked to specify the main illicit drug used by the drug users they had most contact with in the past 6 months. The majority of key informants reported on the use of opioids (n=16), with the remainder reporting on groups of primary methamphetamine (n=8) or cannabis (n=6) users. This breakdown is a slight shift to that in the 2000 and 1999 Tasmanian IDRS surveys, where there was a more even proportion of key informants reporting on the use of methamphetamines and of opioids. However, this is unlikely to indicate a substantial change in the illicit-drug using patterns of the individuals tapped in the key informant survey, as most informants were referring to predominantly poly-substance using populations, with substantial levels of methamphetamine use seen in all groups categorised as being primary opioid-using groups.

While many informants found it difficult to determine a single main illicit drug to focus on due to the predominantly poly-substance using nature of the populations they were working with, key informants reporting on users of opioids found it particularly difficult to single out a main illicit drug, as many people they were reporting on were using both morphine and methadone regularly, and, to a lesser extent, heroin. When pressed to describe the more commonly used drug for their group, 5 indicated morphine, 10 methadone, and 1 still could not separate the two.

The 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 120 minutes to administer. Notes were taken during the interview and subsequently transcribed in full. Open-ended responses were analysed using a word processor, sorting for recurring themes across respondents. Single reports from key informants have been presented where they were deemed reliable by the interviewer, and where the information provided contributed to the explanation of particular trends. Closed-ended questions were analysed using SPSS for Windows, release 11.0.1 (SPSS Inc, 2001).

2.3 Other Indicators

To complement and validate data collected from the key informant study and IDU survey, a range of secondary data sources was examined, including survey, 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. 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 (several key services are in the process of adopting computerised or more systematic information storage and retrieval systems), 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 as follows:

- *Needle Availability Program Data*

The Needle Availability Program (NAP) 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 90 outlets participating in the program, and for participating non-pharmacy outlets, data is collected regarding age, sex, equipment shared since last visit, last drug used, and disposal methods for each client transaction. The data provided represents responses from 25,880 occasions of service in the 2001/02 financial year. It should be noted that data is not necessarily collected systematically for all data fields – for example, while there are 25,880 recordings for gender of client, there are only 20,213 recorded for the substance used (78%[1]). Additionally, there is some inconsistencies 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

[1] However, this is a marked improvement in the data recording rate – in 2000/01, only 44% of the 32,507 occasions of service included information regarding principle drug used.

inject" more useful for health intervention purposes), which may impede clear comparisons of trends across years for this dataset.

- *Prevalence of last drug injected by IDU 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 viruses such as Hepatitis B and C). The data provided here represent the last drug reported to be injected by survey respondents in Tasmania each year from 1995 to 2001 (1995 n=6; 1996 n=18; 1997 n=23; 1998 n=51; 1999 n=25; 2000 n=27; 2001 n=28: MacDonald & Zhou, 2002).

- *The 1998 and 2001 National Drug Strategy Household Surveys*

This survey represents a prevalence study of drug use amongst the general community, surveying 1,031 individuals in Tasmania in the 1998 study, and 1,349 individuals in 2001, who were over 14 years of age, could speak English, and who lived in private dwellings (Australian Institute of Health and Welfare, 1999; 2002). The survey covered the following illicit drugs: 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.

- *1996 and 1999 Australian School Students' Alcohol and Drugs (ASSAD) Surveys*

This is a triennial survey on secondary school students' use of tobacco and alcohol, conducted by the Tasmanian Cancer Council, and extended by the Department of Health and Human Services to include questions on the use of other licit and illicit substances. The 1996 survey includes data from 2,553 Tasmanian students from years 7 to 12. In 1999, 2,671 Tasmanian students from years 7 to 12 were surveyed.

- *Police and Justice Department Data*

Tasmania Police State Intelligence Services, the Australian Bureau of Criminal Intelligence (ABCI, now the Australian Crime Commission, ACC), and the state Justice Department have provided information on drug seizures, charges, and costs. State Intelligence Services have been producing detailed monthly summaries of such information since July 1999, while information from the other sources is presented in annual figures. Data on the purity of drugs seized is also provided through the ABCI, however, drugs are only analysed by Tasmania Police Forensic Services in seizures where the person involved denies that the powder in question contains illicit substances. Hence, for the 2001/02 financial year, a very small number of samples of methamphetamine were analysed for purity.

- *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 reasonably steadily over 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).

- *Blood borne virus surveillance data*

Blood borne viruses, and, in particular HIV/AIDS and hepatitis B and C 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 and hepatitis B and C in Tasmania, and, where possible, records the relevant risk factors for infection that the person may have been exposed to. There are limitations to the interpretation of this dataset in terms of monitoring trends in the spread of these viruses. For example, many injecting drug users who have been exposed to hepatitis C 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.

- *Tasmanian Pharmacotherapy Program Data*

Pharmaceutical Services in the Department of Health and Human Services maintains a database that records all methadone and buprenorphine program registrations in Tasmania. The number of annual new admissions to the program, and information regarding the number of active daily clients are presented.

- *Coronial Findings On Illicit Drug-Related Fatalities*

Mortality data regarding illicit drug related deaths prior to 2000 was obtained from the state coroners office. Data provided contains a summary of the toxicology analysis for each case. More recent figures in this report were provided by Australian Bureau of Statistics annual reports on fatal opioid overdoses among 14 to 44 year olds (Degenhardt, 2001; 2002).

- *Doctor Shopping Data*

Data regarding patterns of doctor shopping in the State was examined due to the high level of use of pharmaceutical products among Tasmanian IDU noted in previous IDRS reports. The Health Insurance Commission identifies people as "doctor shoppers" if, in one year, a person: 1) sees 15 or more general practitioners; 2) has 30 or more Medicare consultations, and 3) obtains more Pharmaceutical Benefits Scheme (PBS) prescriptions that appears to be clinically necessary. Data is broken down by the type of drugs accessed by each identified "doctor shopper" during each financial year period.

- *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 has been provided by the Poppy Board of the Tasmanian Justice Department, as this is a useful indicator of potential illicit use of opium or poppy tar.

- *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. Additionally, at that same time a new information service, the Drug and Alcohol Clinical Advisory Service (DACAS) was established to provide health professionals assistance with the clinical management of drug and alcohol problems. Turning point systematically record data for each call received, which comprised 2208 and 63 calls to ADIS and DACAS respectively during the 2000/01 financial year, and 2129 and 94 calls to the respective services in 2001/02.

3 AN OVERVIEW OF THE SAMPLE OF INJECTING DRUG USERS

3.1 Demographics

A total of 100 individuals were interviewed. The demographic characteristics of the IDU sample are presented in Table 1 below. The mean age of participants was 28.3 years (SD = 7.7, range 15-46), with 71% being male. There was no significant difference in the mean age of males and females participating in the survey (males 28.7 years, females 27.4 years, Mann-Whitney U = 916, p=0.39).

Table 1: Demographic characteristics of the injecting drug user (IDU) sample (n=100)

Characteristic	
Mean age (years)	28.3 (range 15 – 46)
Sex (% male)	71
Ethnicity (%):	
English speaking background	100
Non-English speaking background	0
Aboriginal or Torres Strait Islander	11
Employment (%):	
Not employed	66
Full time	5
Part time / casual	8
Student	11
Home Duties	10
Accommodation (%):	
Own house/flat	68
Parent's/family house	19
Boarding house/hostel	1
Friends/house-sitting	9
No fixed address/homeless	3
School education (mean years)	10.0 (range 4 – 12)
Tertiary education (%):	
None	74
Trade / technical	20
University	6
Prison History (%)	33
Treatment History (%):	
Not currently in treatment	44
Methadone maintenance therapy	50
Buprenorphine maintenance therapy	3
Drug & alcohol counselling	3

Among those sampled, there was a mean of 10.0 years (SD = 1.6, range 7-14) of school education, with twenty percent of participants having trade or technical qualifications and six percent having university qualifications. The majority of the sample (66%) were not currently employed, with a further 10% involved in home duties, and 11% enrolled students, while 8%

were working on a casual basis, and 5% working full-time. When asked about their main source of income, the majority (87%) reported this as a government pension, allowance or benefit, with 9% reporting this as a wage, 2% as from family members, and 2% as being via criminal activity. The sample was drawn from 29 suburbs within the northern, eastern, southern, and inner city areas of Hobart, with the bulk of participants either living in close proximity to Hobart city (28%) or Glenorchy city (23%)[2].

One third of the sample (33%) of participants had been imprisoned at some stage in their lives, with males not being significantly more likely than females to have been so, as 38% of males and 21% of females had a previous prison history: $\chi^2(1, n=100) = 2.8$, $p = 0.11$.

Just over half (56%) of the sample were in some form of drug treatment at the time of interview, with the majority (50% of the sample) reporting methadone maintenance therapy as their primary treatment. Mean duration of time on methadone maintenance was 35 months (median= 24 months, SD = 31 months, range 1-144 months). Three individuals each were currently receiving primary treatment via buprenorphine maintenance therapy (mean duration = 1.7 months, range 1-3 months) or drug counselling (mean duration = 9 months[3]). Nine of the individuals currently receiving methadone maintenance therapy were also involved in drug counselling, and 3 had been through detoxification in the six months prior to interview. One of the people receiving buprenorphine was also receiving counselling. Additionally, in the six months prior to interview, 2 individuals reported leaving the methadone maintenance program, and 2 reported leaving the buprenorphine maintenance program, and were not receiving any treatment when interviewed. Similarly, of those that were not involved in treatment at the time of interview, six had tried counselling and four had tried detoxification in the preceding six months. A further 3 individuals currently receiving methadone maintenance, and 1 person currently receiving buprenorphine maintenance had switched between maintenance programs in the six months prior to interview. Only one participant reported using naltrexone in the six months prior to interview, and did not state its source.

3.2 Drug Use History Of The IDU Sample

The mean reported age at first injection of a drug was in the late teens (18.5 years, SD = 4.8 years), ranging from 12 to 37 years. There was no significant difference between age of first injection for males and females in the sample (18.5 and 18.6 years respectively).

As previous IDRS reports in Tasmania and other states (McKetin, Darke & Kaye, 2000) and local key informants have indicated that there may have been a fall in the age of initial injection among new recruits to injecting, the sample was dichotomised (using a median split[4]) into those currently aged 25 years or younger, and those aged more than 25 years. The younger group were, on average, four years younger at initial injection than the older IDU (16.2 vs. 20.5 years respectively: Mann-Whitney U = 566.5, $p<0.001$). However, when the sample was divided according to the length of individual injection careers (into those that started injecting within the past seven years, and those who started injecting more than seven years ago) there was no

[2] A more detailed breakdown, on the basis of local council areas, is as follows: Hobart City n=43; Glenorchy City n=26; Clarence n=23; Brighton n=2; Kingborough n=3; no fixed address n=3.

[3] Only one of the three individuals concerned could recall the duration of their involvement in drug counselling.

[4] In the current study, median age was 27 years, but a split as detailed has been used for consistency with the 2000 and 2001 Tasmanian IDRS reports. The current split leaves 46 people in the younger group. The same results hold at either division of the data.

difference in the age of initial injection (18.6 vs. 18.4 years respectively[5]). Taken together, these results may be interpreted as indicating that while young people may indeed be taking up injection of drugs at a younger age, new recruits to injecting are not simply restricted to younger individuals.

There was considerable variation in the length of participant's injecting drug use careers, with the mean length of time since first injection being 9.8 years, ranging from less than a year to 28 years (median = 8 years). There were no sex differences with regard to length of injection career, with mean injection career for males (10.2 years) not significantly longer than for the females sampled (8.8 years).

Methamphetamine was the first drug injected by 50% of respondents, with 27% reporting morphine, 15% reporting heroin, 5% methadone, and 4% other substances (including cocaine, benzodiazepine, codeine and ketamine: Table 2). Unlike age of initial injection, there was a significant length of injection career-related difference in first drug injected. Those participants who had first injected within the past seven years had a larger proportion of people reporting pharmaceutical opioids as first drug injected (36% methamphetamine, 49% morphine, 4% methadone, 6% heroin, 2% benzodiazepine), in comparison to the older group, where methamphetamine, and, to a lesser extent, heroin, were more predominant (60% methamphetamine, 7.5% morphine, 23% heroin and 6% methadone): $\chi^2(7, n=100)=27.3$, $p < 0.001$. Of the 50 respondents that reported methamphetamine as their first drug injected, 35 (70%) had most often injected opioids in the month prior to interview (15 participants reporting morphine, 19 methadone, 1 heroin).

Heroin was the reported drug of choice for the majority of participants (40%), followed by methamphetamine (23%), as indicated in Table 2 below. Despite this high preference for heroin, only two participants reported it as their last drug injected, and only 3% as the drug most often injected in the month prior to interview. The drugs most commonly used were methadone (39%), morphine (30%), and methamphetamine (27%).

Table 2: Drug of initiation into injecting, drug of choice and current injection patterns for IDU in the current study (n=100)

	First drug injected %	Drug of choice* %	Last drug injected* %	Drug most often injected in last month %
Heroin	15	40	2	3
Methadone	5	13	36	39
Morphine	27	13	25	30
Methamphetamine	50	23	32	27
Cocaine	1	5	0	0
Ecstasy	0	2	1	1
Benzodiazepines	1	0	2	0
Other	2	5	0	0

**One participant reported their drug of choice as cocaine and heroin, and one reported their last drug injected as methadone and a benzodiazepine (in the same barrel). These have been recorded in both the relevant cells, hence proportions in these columns sum to 101%.*

[5] For consistency with the 2000 IDRS report, where the median split was at an injecting career of 5 years, the same results hold.

Frequency of injection by IDU during the month prior to interview (Table 3) was varied, with most injecting more than once per week (91%), and 29% injecting at least once per day. There was no difference in the frequency of injection between younger and older IDU.

Table 3: Frequency of injection during the last month (IDU survey, N=100)

Frequency of injection during the last month	%
Not in the last month	0
Weekly or less	9
More than weekly	62
Once a day	10
Two to three times per day	14
More than three times per day	5

Respondents were asked how much they had spent on illicit drugs on the day before the interview. The responses to this question are summarised in Table 4. This indicates that just over half of the sample (56%) had spent money on illicit drugs on the day before the interview, and that this was most commonly between $20 and $99. The average amount of money spent amongst the sample was $41 (SD $66, range $0-410, median = $20). Amongst only those 56 participants who had spent money on illicit drugs on the day prior to interview, the average amount of money spent was $72 (SD $73, range $5-410, median = $52.50)

Table 4: Amount spent on illicit drugs on day prior to interview (IDU survey, N=100)

Amount spent on day prior to interview	%*
Nothing	43
Less then $20	6
$20-49	16
$50-99	20
$100-199	10
$200-399	3
$400 or more	1

**One participant declined to respond to this question, hence proportions in this column sum to 99%*

Respondents reported the drugs they used on the day prior to their interview (Table 5). Only 6% had not used any drugs, with two-thirds (68%) using cannabis on the day before their interview. Methadone (47%, although only used by eight people who were not currently enrolled in methadone maintenance therapy), benzodiazepines (27%), methamphetamine (20%) and morphine (18%) use were also common.

Polydrug use was widespread, with 80% of those reporting using drugs taking more than one drug on the day prior to interview, and the median number of drugs used was two (37%). Multiple studies have clearly established that the risk of overdose increases when central nervous system depressants are used in addition to opioids (see Warner-Smith, Lynskley, Darke & Hall, 2000), with concomitant use of alcohol or benzodiazepines with opioids proving especially prominent in opioid overdose fatalities. Of concern then was the finding that 26% of the IDU

sample reported using an opioid in conjunction with either benzodiazepines (17%) or alcohol (9%) or both (2%) on the previous day.

Table 5: Drugs taken on the day prior to interview among the IDU sample (N=100)

Drug	N=100
Cannabis	68%
Methadone	47%
Benzodiazepines	27%
Morphine	18%
Methamphetamine: powder	9%
Methamphetamine: base/paste	10%
Methamphetamine: crystal	1%
Amphetamine: pharmaceutical	5%
Heroin	0%
Cocaine	0%
Alcohol	22%
Antidepressants	10%
Other	4%
Did not take any drugs	6%

**Note: could list more than one drug*

Participants were also asked about their usual place of injection and where they had last injected. These responses are summarised in Table 6 below, indicating that the majority of the sample tend to inject in private homes (89% usually, 80% last time they injected), while much smaller proportions tend to inject in public places (11% usually, 20% last time).

Table 6: Location in which respondents usually injected in the month prior to interview, and location of last injection (IDU survey, N=100)

Location	Usual %	Last %
Private Home	89	80
Public Toilet	6	12
Car	2	5
Sewers (under Hobart city)	2	3
Bush	1	0

Drug use histories of the IDU respondents are summarised in Table 7 below. There was a substantial level of polydrug use among this group, as almost all individuals had used methadone, morphine, methamphetamine, hallucinogens, benzodiazepines, alcohol, cannabis and tobacco at some stage in their lives. Subjects had used a median of 13 (mean = 12.7, sd = 2.6, range 7-18) drug classes in their lives, and 7 (mean = 7.6, sd = 2.3, range 4-14) in the preceding six months.

A median of 7 drug classes had been injected over their lifetimes (mean = 7.0, sd = 2.3, range 3-13), and 3.5 (mean = 3.9, sd = 1.9, range 1-10) in the preceding six months[6].

The demographic characteristics of the Tasmanian 2002 IDU sample are generally very similar to the 2001 and 2000 IDU samples (Bruno & McLean, 2002; 2001), with the exception of a significant increase in age for the 2002 participants (mean age 2001 = 26.0 years, mean age 2002 = 28.3 years: F (1,198)=5.4, p=0.02). This is despite only a minority of those IDU respondents being involved in previous studies: of the 100 participants in the 2002 study, 39 participated in the 2001 study, and 16 in the 2000 IDRS (11 participated in both); of the 100 participants in the 2001 study, only 15 also participated in 2000. Notable discrepancies between the 2002 IDU and previous IDU samples are discussed in subsequent sections of this report.

[6] These figures appear substantially greater than previous Tasmanian IDRS reports, due to the inclusions of buprenorphine and homebake new drug classes in the 2002 study, along with the division of methamphetamine into four sub-groups. When these new classes are collapsed back to be comparable with previous Tasmanian IDRS studies, the relevant figures become: median of 11 (mean = 11.1, sd = 2.0, range 6-14) drug classes used in their lives, and 7 (mean = 6.9, sd = 1.9, range 3-12) in the preceding six months. A median of 5 drug classes had ever been injected (mean = 5.6, sd = 1.9, range 2-10), and 3 (mean = 3.3, sd = 1.5, range 1-8) in the preceding six months. These median figures are exactly the same as those noted in the 2001 and 2000 IDRS cohorts.

Table 7: Drug use history of the IDU sample (N=100)

Drug Class	Ever used %	Ever Injected %	Injected last 6 months %	Ever Smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever Swallowed %	Swallowed last 6 months %	Used last 6 months %	Median number of days used in last 6 months by those using the drug
1. Heroin	74	73	21	22	0	16	0	12	0	21	6
2. Methadone	94	87	76					87	71	80	24*
3. Morphine	98	96	73	4	0	3	1	58	22	76	24
4. Homebake	24	21	5	2	0	0	0	5	1	6	3
5. Other opiates	73	11	2	32	4	0	0	65	14	16	2
6. Speed powder	86	85	34	8	0	42	3	40	6	35	6
7. Amphet. liquid	13	13	0					0	0	0	0
8. Base/point/wax	89	89	74	4	1	14	3	22	11	74	22
9. Ice/shabu/crystal	45	43	19	5	2	3	1	6	3	20	3
10 Cocaine	47	35	11	13	0	30	4	8	0	12	2
11 Hallucinogens	86	32	2	8	1	1	0	86	16	16	2
12 Ecstasy	51	37	13	2	0	11	4	45	20	36	3
13 Benzodiazepines	96	63	38	12	4	5	0	94	80	83	30
14 Alcohol	100	8	0					100	69	69	12
15 Cannabis	100									91	180
16 Anti-Depressants	48	4	3					48	28	28	180
17 Inhalants	42									3	7
18 Tobacco	98									94	180
19. Buprenorphine	8	0	0	0	0	0	0	8	7	7	1*
Polydrug use *(median drug classes used)*	13	7	3.5							7	

* for those not currently in maintenance treatment with these drugs

4 HEROIN

Approximately one quarter of respondents on the IDU survey were able to comment confidently on the price, purity or availability of heroin (n=21). Of the key informants reporting on groups that predominantly used opioids (n=16), none reported that the group they had most contact with had primarily used heroin in the past six months.

Among the IDU sample, 74% reported they had tried heroin at some stage in their lives, and almost all of these had injected heroin (73% of sample). Twenty-one percent had used heroin in the past six months, all injecting the drug.

The demographics of the group that had used heroin in the past six months was similar to that of other IDU (see Section 3.0) in terms of sex, age, cultural and educational background, drug treatment and employment status, prison history, frequency of injection, and age at first injection. However, there was a difference with respect to the duration of injection career: those that reported injecting heroin in the preceding six months had a significantly longer injecting career than those that did not (13.4 years and 8.9 years respectively): Mann-Whitney U = 523.5, p = 0.009. This finding may fit with anecdotal reports (discussed below) that heroin is only sporadically available at 'street-level' locally, and it is the better-connected, more established IDU that are more likely to be able to negotiate more regular access to the drug.

Of those IDU surveyed who had used heroin in the past six months (n=21), 62% regarded heroin as their drug of choice, 19% methamphetamine, and 5% each of methadone, opium, cocaine and ecstasy. Only 3% of the entire IDU sample indicated that heroin was the drug they had most often used in the month prior to interview, despite 40% reporting it as their drug of choice. When asked to clarify the reasons for this discrepancy, 28 respondents (70%) reported that they had not recently used heroin due to low availability, 5 (13%) due to the high price of the drug, 2 (5%) due to low purity of the heroin available to them, and 3 (8%) reported staying away from heroin by choice due the effects of addiction to the drug.

4.1 Price

IDU who could comment on the price of heroin generally referred to purchasing it in units of 'points' (referring to 0.1g), 'packets' or 'tastes', the latter two appearing to be a generic descriptor for a varying amount of the drug. Perhaps reflecting this, IDU reports on the estimated weight of the heroin they had recently purchased were highly variable. IDU reports of price of heroin are summarised in Table 8 below.

The price of heroin was reported to be stable by the majority of IDU that could confidently comment (75%, n=9/12), with the remaining respondents reporting increasing prices (25%, n=3/12). While the reported purchase prices in Table 8 may appear to support this claim of increasing prices, with modal purchase prices for most amounts up on the prices from the 2001 survey, the number of individuals reporting prices are so small, and the amount involved (particularly in reference to the most popular purchase amount, 'cap'/'taste'/'point') so variable, that it is difficult to clearly make such an inference.

Table 8: Price of heroin purchased by IDU, 2000-2002 IDRS

	2000 IDRS		2001 IDRS		2002 IDRS		
Descriptor	**n**	**Modal Price***	**n**	**Modal Price***	**n**	**Modal Price***	**Price Range**
Last 'Cap','taste' or 'point' *(~0.05-0.15g)*	1	$50	15	$50	12	$100	$50-100
Last 2 'points' /2 'tastes' *(~0.2g)*	2	$100	8	$100	2	$92.50*	$85-100
Last 1/4 gram *(0.25g)*	1	$50	1	$100	4	$135*	$100-400
Last half-weight *(0.5g)*	0	-	1	$170	1	$250	$250
Last gram *(1.0g)*	2	$375*	2	$300	1	$350	$350

*where multiple modes existed, median price was substituted.

The Australian Bureau of Criminal Intelligence (ABCI) provides quarterly figures on the price of covert drug purchases and informant reports of prices in each Australian jurisdiction. According to these figures, a 'taste' (0.1-0.3g) of heroin cost $50, and a true gram $400-$500, in Hobart during the 2001/02 financial year (Table 9), which are reasonably consistent with IDU reports of price, and provide support for the assertion that local heroin process seem to have remained stable throughout the 2001/02 financial year, particularly as ABCI reported prices of heroin have not changed since January 2000.

Table 9: Heroin prices in Tasmania reported by the Australian Bureau of Criminal Intelligence, 1997-2002

Amount	Jul-Jun 1997/98	Jul-Jun 1998/99	Jul-Dec 1999	Jan-Jun 2000	Jul-Dec 2000	Jan-Jun 2001	Jul-Dec 2001	Jan-Jun 2002
1 Taste/Cap *(0.1-0.3 gm)*	$60-80	$50	$50	$50	$50	$50	$50	$50
1/2 Weight *(0.4 - 0.6 gm)*	$150	$100-200	$100-200	$100-200	$100-200	$100-200	$100-200	$100-200
1 Street weight *(0.6 - 0.8 gm)*	$400	$400	$400	$200-300	$200-300	$200-300	$200-300	$200-300
Full Gram	$600	$500-700	$500-600	$400-500	$400-500	$400-500	$400-500	$400-500

Source: Australian Bureau of Criminal Intelligence & Tasmania Police State Intelligence Services

4.2 Availability

Of the IDU sample that were able to comment on trends in the availability of heroin, there was a spilt in responses, with 59% (n=10) reporting it as difficult (47%) or very difficult for them to obtain (12%), while 41% (n=7) reported it as easy for them to obtain. The majority (73%, n=11) reported that the availability of heroin had remained stable over the past six months, with 13% (n=2) each reporting that heroin had become harder or easier to access in this time. Only two key informants could report on availability of heroin, with very opposing views – one (an outreach/treatment worker[7]) regarding the drug as very easily accessed by their client group, the other (a police officer) regarding it as difficult. In regard to changes in availability, two key informants reported this as remaining stable in the preceding six months, one that heroin had become more difficult to access, and one that availability fluctuated in this period. However, all but one key informant talking about patterns of heroin use amongst the groups of IDU they knew (n=8/9), referred to its use as sporadic, and limited to a small proportion of their groups.

In another indication of relatively stable limited availability of heroin locally, only 21% of the IDU sample in 2002 reported recent use of the drug, with a median frequency of use of only six times in the preceding six months. These figures are very similar to those obtained in the 2001 IDRS sample. This low level of use in a regularly injecting sample of individuals, where 40% regard heroin as their drug of choice, is a good indication that the drug is in poor supply. Furthermore, when those IDU that reported heroin as their drug of choice were asked the reasons for this not being the drug they had most often used in the past month, 28 (70%) reported that they had not recently used heroin due to low availability of the drug.

However, both Tasmania Police and two key informants indicated that there had been anecdotal reports of a brief increase in the availability of heroin during the early months of 2002 (in particular April and May). Tasmania Police suggest that it is possible that this may be associated with the visit of an organised motorcycle group to the state in February.

Most IDU reported usually purchasing heroin in the past six months from a friend (50%, n=7), with smaller proportions reporting usually accessing from a dealer's home (21%, n=3), a mobile dealer (14%, n=2), home delivery (7%, n=1) or as a gift (7%, n=1). A similar pattern emerged when people were asked who they purchased the drug from last time they bought heroin, with 46% (n=6) reporting friends, 23% (n=3) a dealer's home, 15% (n=2) a mobile dealer, 8% (n=1) a street dealer and as a 8% (n=1) gift from a friend. Median time estimated as taken to score heroin was 60 minutes (mode = 30 minutes, range 0 – 10,080 minutes, n=14) usually in the past 6 months, and also 60 minutes (mode = 30 minutes, range 0 – 5,760 minutes, n=13) for the last time scored heroin.

There were no seizures of heroin made by Tasmania police in the 2001/02 financial year, in comparison to one seizure (totalling 3 grams) in 2000/01, and five seizures (totalling approximately 18 grams) in 1999/00. No seizures of heroin were reported to the Australian Bureau of Criminal Intelligence in 1996/97 or 1997/98.

Taken together, with the exception of a possible transitory increase early in 2002, it appears that the historical pattern of limited availability of heroin locally has continued over the last six to

[7] This worker is involved with a wide range of individuals seeking treatment for drug and alcohol use, some of which have come to Tasmania from other jurisdictions. As such, it is possible that the individuals they were referring to still had established networks for supply of heroin, or were referring to their level of access in other jurisdictions.

twelve months. While some better-connected IDU appear to have reasonably stable access to the drug, the availability of heroin in the state is still relatively low, as indicated by the low level of recent use of the drug by the IDU sample.

4.3 Purity And Form

Following trends seen in previous years, most IDU that could comment on purity of heroin they had used reported it as low (39%, n=7) or medium (11%, n=2) purity, although 22% (n=4) regarded purity as high, and 28% (n=5) reported purity as fluctuating. One key informant reported that the heroin used by the group they were familiar with was of medium purity. Several IDU indicated that this low quality of heroin (at a relatively high cost) had led them to be generally wary of buying heroin for fear of being 'ripped off', and because of this, they preferred to purchase pharmaceutical morphine, as the exact quantity of drug purchased is clear. This pattern was also noted in the previous IDRS surveys.

Of the IDU sample, 9% reported use of heroin powder in the last 6 months, with 18% using rock form heroin. The majority of IDU reported heroin rock as the form they had most commonly used in the past six months (n=17 using rock, and n=4 using powder most commonly). In previous IDRS surveys, key informants and IDU have noted that, in general, heroin sold as 'rock' was actually powder, compressed to look like true 'rock' form heroin. Similar reports were made by key informants in Victorian IDRS studies (Dwyer & Rumbold, 2000). As noted in previous IDRS reports, these two forms may reflect two very different qualities of heroin available, which goes some way to reconciling the reports of purity discussed above. Anecdotal reports from several IDU and KI suggest that the powder form heroin available in the state is heavily 'cut' and very low in purity, with the purity of rock form heroin being slightly higher. In previous years, those that had most often used powder form heroin most commonly reported the purity of heroin as low, with those most often using rock form heroin commonly reporting purity as medium. However, in the 2002 IDRS there was such a small number of individuals most often using powder form heroin that provided information about purity, that it is not possible to infer such a distinction.

There was some division among IDU in regard to trends in the purity of heroin over the preceding six months, with 45% (n=5) indicating a stable purity over this time, 36% (n=4) reporting a decreasing purity, and 18% (n=2) that purity had fluctuated. Only one key informant could confidently comment on purity trends, suggesting that the purity of heroin available to the IDU they worked with had remained stable over the past six months. As there have been no seizures of heroin made by Tasmania Police or the Australian Federal Police in 2001/02 no objective purity data is available for comparison.

The only objective purity data available for heroin seized within Tasmania relates to a single seizure of less than two grams, made by the Australian Federal Police and analysed during the first quarter of 2000, which returned a measurement of 74.6% purity.

4.4 Use

4.4.1 Prevalence of heroin use

The 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999) reported that 1.8% (n=15) of Tasmanians sampled reported ever using heroin, while 0.5% (n=5) had used it in the year prior to interview. While the small numbers involved mean that meaningful inferences are difficult to draw, the figures from the 2001 survey (Australian Institute of Health and Welfare, 2002) are very similar, with 0.3% (n=4) of Tasmanians sampled reporting using heroin in the year prior to interview.

Reported use of heroin as the main drug injected by non-pharmacy Needle Availability Program (NAP) outlet clients has shown a steady decrease over the past three financial years, with reported rates of 4.3%, 2.8% and 0.7% in 1999/00, 2000/01 and 2001/02 respectively (Table 10). While there are acute limitations of the data collected from Needle Availability Program outlets (see Section 2.3), data from these years indicates a decrease in both the raw number of clients and the percent of the client group reporting heroin as the drug they most often inject over the past three years. While these trends appear solid and are consistent with trends seen in the IDRS samples over this time period, it is important to note that this data may underestimate the extent of heroin use, as different NAP 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'. As indicated previously, although 21% of the IDU sample had used heroin in the past six months, only 3% reported it as the drug they most often injected. Additionally, there was a very high level of polydrug use amongst those who reported recent use of heroin (detailed below).

Table 10: Percentage of heroin reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program outlets, 1997-2002

Year	1997/98	1998/99	1999/00	2000/01	2001/02
Number of clients reporting heroin	390	257	457	405	143
Percent of total clients reporting heroin	5.7%	2.9%	4.3%	2.8%	0.7%

Source: Sexual Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs) has reported heroin as the last drug injected of 10% or less of their Tasmanian participants for their 1996, 1997, 1998 and 1999 surveys, increasing to 22% in 2000, and declining in 2001 (Table 11). This trend is generally consistent with that seen from the NAP client data. However, given that these studies only sampled 18, 23, 51, 25, 27, and 28 clients respectively, these figures should be interpreted with caution.

Table 11: Australian Needle and Syringe Program (NSP) Survey: Prevalence of heroin within "last drug injected", 1996-2000

	1996		1997		1998		1999		2000		2001	
	n	%	n	%	n	%	n	%	n	%	n	%
Heroin	1	6	0	0	5	10	2*	8	6[#]	22	3[†]	11
Total Sample Size	18		23		51		25		27		28	

Source: National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs.

*Note: these two cases reporting heroin injection actually reported their last drug injected as heroin and morphine combined; [#]Of these 6 individuals, 3 reported their last drug injected as heroin only, 2 as a mixture of heroin, cocaine and methamphetamine, and 1 as a mixture of heroin and cocaine. [†]Of these 3 individuals, 1 reported their last drug injected as a mixture of heroin and cocaine, 1 as a mixture of heroin, morphine and methadone, and 1 as a mixture of heroin and methadone

Tasmania Police State Intelligence Services reported no arrests involving offences relating to heroin in the 2001/02 or 2000/01 financial years[8]. Due to the small numbers (n=5 in 1999/00) and lack of specificity of reporting of opioid-related arrests in previous years[9], the identification of trends from such data is difficult.

4.4.2 Current patterns of heroin use

Twenty-one percent of the IDU sample reported using heroin in the six months prior to interview. The median number of days that heroin was used in the past six months by this group was 6 (range 1-130). There was a very high level of polydrug use amongst those who had used heroin in the past six months (Table 12), predominantly of other opioids and benzodiazepines, a finding in keeping with reports from key informants that, because of fluctuating availability, primary users of opioids have to be flexible in their patterns of use, turning to other opioids or benzodiazepines if their opioid of choice is unavailable. Additionally, there was a high level of use of methamphetamine amongst this group, although it was used less frequently than other opioids.

[8] A single seizure of heroin, totalling 3g was made in the Southern region in 2000/01. This was a find of three capsules containing heroin on a nightclub dance-floor. Hence, no charges could be laid.

[9] Data specifically regarding heroin-related offences prior to 1999/00 is unavailable as the Australian Bureau of Criminal Intelligence reports offences related to all opioids (including, for example, morphine and methadone) within a single category.

Table 12: Patterns of drug use reported by those IDU who had used heroin in the past 6 months (n=21)

	% of those who had used heroin in last 6 months reporting use	Median days use for those using the drug
Methadone*	38%*	36 (range 2-180)*
Morphine	81%	24 (range 1-180)
Other opioids	29%	8 (range 1-45)
Homebake	19%	3 (range 1-6)
Benzodiazepines	91%	24 (range 10-180)
Cannabis	91%	180 (range 2-180)
Methamphetamine		
powder	48%	5 (range 1-48)
base/point	76%	23 (range 5-178)
ice/crystal	7%	3 (range 1-10)
Tobacco	91%	180 (range 170-180)
Alcohol	76%	18 (range 1-180)

*Note: these figures refer to methadone use by individuals who were not enrolled in a methadone maintenance program. If those individuals are included, the proportions increase to 86%, with a median frequency of use of 180 days (range 2-180 days).

These patterns of use reported by the IDU sample are supported by key informant reports of some low levels of heroin use amongst primary users of methamphetamine (n=4 of 9 key informants), and of other opioids (n=5 of 9 key informants). Additionally, key informants often regarded the use of heroin by the users they had contact with as rare or sporadic at best (n=8 of 9 key informants).

4.4.3 Trends in heroin use

Notwithstanding anecdotal suggestions of a brief 'spike' in availability of heroin early in 2002, the majority of indicators, and findings such as the low median rate of use of heroin (6 days in last 6 months amongst those who had used the drug) and, that of the 40% of the IDU sample that reported heroin as their drug of choice, only 33% of these had recently used heroin, indicate that the availability of the drug is still remains low, and may be gradually decreasing in the state. However, with the high use of other opioids and very stable strong preference for heroin amongst the IDU sampled by the IDRS, future trends in use of heroin in the state continue to merit close attention, particularly as heroin markets nationally and globally regain equilibrium.

4.5 Summary

Table 13: Summary of Heroin Trends

Price (mode) *'packet'/'taste'/ point (0.05-0.15g)* *gram*	• $100, stable (or increasing) • $350, stable (or increasing)
Availability	• variable among IDU: difficult to very difficult (59%); easy 41% • availability stable (73%) • IDU and other data indicate a reasonably stable availability of heroin over the past 6-12 months, with level of availability remaining generally low
Purity and form	• Both 'rock' and powder heroin used, but 'rock' used predominantly • Very mixed opinions regarding purity, with many IDU wary of purity of the drug purchased locally • Estimates of stability of purity generally stable
Use	• Used by 21% of the IDU sample in past six months, but low rate of use (median = 6 days) despite high preference as drug of choice • Use most common amongst regular users of other opioids

5 METHAMPHETAMINE & AMPHETAMINE

In previous years, IDRS reports have used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. 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. Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine[10] (rather than amphetamine) steadily increased until methamphetamine clearly dominated the market (ABCI, 1999, 2000, 2001). Across Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, base and crystal meth, are also methamphetamine. Therefore, the term methamphetamine will now be used in the IDRS to refer to the drugs available in this class.

As methamphetamine markets across the country have expanded over the past few years, it has become apparent that there is a diversity of forms of methamphetamine sold in the Australian illicit drug market. While there is some disagreement among both users and researchers as to the nature of these forms, it is clear that these are marketed differently to IDU and sold on differing price scales. As such, trends in regard to each of these forms will be discussed separately where appropriate.

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

Powder form methamphetamine[11] is the form 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, yellow, brown, orange 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 (extracted from, for example, *Sudafed* tablets). Because of its powder form, it if fairly easy to 'cut' (dilute) and is commonly sold at fairly low purity/potency. In the 2002 IDRS survey, IDU that reported using each 'form' of methamphetamine were asked to indicate what each 'form' they had purchased in the past six months most closely resembled from a series of exemplars[12], and common responses for methamphetamine powder are included in Table 14 below, although it was commonly reported as a white/light brown/purple powder.

The two other 'forms' of methamphetamine are traditionally higher in potency (due to being more difficult to 'cut') and have been increasing in availability across all Australian Jurisdictions

[10] Methamphetamine is an abbreviation of the name methylamphetamine, and as such, both terms are interchangeable.

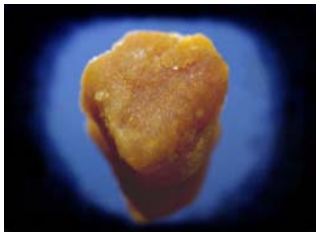
[11] Powder form methamphetamine is also referred to in National and other jurisdiction IDRS reports as 'speed'.

[12] The exemplars provided, along with a discussion of the proposed groupings of the pictures, is available at: http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.bulletins , and an article discussing evolving changes in Australian methamphetamine markets by Topp and Churchill (2002) is also accessible at the same address.

in the past few years (Topp et al, 2002). The first, referred to in some jurisdictions as 'base' or 'paste' is commonly a gluggy, oily, 'wet' powder. Although it does not seem to have a particular moniker in Tasmania, it is usually sold in units of 'points' (0.1 grams) in comparison to powder methamphetamine, which is traditionally sold in gram units at similar prices. 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). IDU survey respondents that had recently purchased this form of the drug locally reported it as appearing as a 'sticky', 'waxy','wet' gel or powder, grey or brown in colour (often not unlike ear-wax in presentation) and indicative exemplars of this form of the drug are included in Table 14.

The final form of methamphetamine, often referred to as 'ice' or 'crystal meth(amphetamine)' is the product of a careful production process, and is believed to chiefly be imported into Australia from Asian countries (Topp & Churchill, 2002). It commonly appears as clear, ice-like, crystals, and as such, is difficult to 'cut' (dilute), resulting in a relatively high-purity/potency product. While it appears that the availability of this 'form' of methamphetamine is relatively limited in Tasmania, those IDU survey respondents that had recently purchased this form locally provided exemplars as detailed in Table 14, although it was commonly reported as clear hard crystals, or as 'rock' crystals amongst a finer powder.

Table 14. Indicative methamphetamine forms reported by those using the drug in the IDU survey*

Methamphetamine powder forms			
			
Used n=23/35, used most n=6/13	*Used n=16/35, used most n=5/13*	*Used n=15/35, used most n=3/13*	
Methamphetamine 'base' or 'paste' forms			
			
Used n=20/74, used most n=10/58	*Used n=28/74, used most n=16/58*	*Used n=25/74, used most n=16/58*	*Used n=13/74, used most n=4/58*
Methamphetamine 'crystal' or 'ice' forms			
			
Used n=4/20, used most n=0/3	*Used n=11/20, used most n=0/3*	*Used n=5/20, used most n=2/3*	*Used n=4/20, used most n=0/3*

*Note: All participants reporting use of any form of methamphetamine were asked to nominate the exemplars that most closely resembled the methamphetamine they had used within each 'form'. More than one exemplar could be nominated within each 'form' of the drug. The proportion of participants thus nominating each of the most common exemplars is detailed above as 'used n'. For the 'form' of methamphetamine that had been most commonly used by each respondent, each was asked to nominate the exemplar that most closely resembled the methamphetamine they had used most often ('used most'), and could again nominate more than one exemplar if required.

Eighty-three percent of the respondents on the IDU survey were able to confidently comment on aspects of the price, purity and availability of some form of methamphetamine. For the 2002 IDRS, IDU were asked to differentiate between methamphetamine powder, 'base/paste' and crystalline methamphetamine. This distinction had a good level of face validity to those IDU surveyed, despite there often being a substantial amount of overlap in the physical form of these 'groups'. IDU reported making these distinctions on the basis of physical form, purchase cost and potency of subjective simulant effect. Five IDU were able to report distinct trends for all three 'forms' of methamphetamine, 18 reported trends on two 'forms', while the majority reported on the most commonly used 'form', 'base/paste'. Thirty IDU reported trends on methamphetamine powder, 73 reported on 'base/paste', and 13 on crystalline methamphetamine.

Eighty-nine percent of the IDU sample had used methamphetamine at some time in the six months prior to interview. Both participants that had used methamphetamine in the past six months (n=89), and those that reported methamphetamine as the drug they most often injected in the preceding month (n=27) were similar to other IDU (see section 3.0) in terms of sex, cultural background, frequency of injection, age, duration of injection career, and age at first injection. However, those IDU that had used methamphetamine in the past six months had a significantly shorter mean years of education than those that had not (9.9 years vs. 11.3 years: Mann-Whitney U = 230.5, p=0.003), however, in conjunction with this, those that had used methamphetamine in the past six months were significantly more likely to currently be involved in education (12% vs. 0%) and less likely to be in part-time work (5% vs. 36%) than those that had not: $\chi^2(1, n=100) = 16.02$, p = 0.008. Those that reported methamphetamine as the drug they most often injected in the past six months were significantly less likely to be currently receiving methadone maintenance treatment (30% vs. 58%: $\chi^2(1, n=100) = 8.98$, p = 0.033) than those that reported injecting an opioid most often in the past month.

Eight key informants reported on groups that primarily used methamphetamine. Key informants included a youth worker, a drug and alcohol counsellor, a health worker, support/outreach workers (n=2), needle/syringe outlet workers (n=2) and a police officer. Key informants were familiar with methamphetamine users from virtually the whole range of Hobart suburbs, including the northern suburbs (n=6), eastern shore (n=3), and inner city (n=2). Locations mentioned tended to be in lower socio-economic regions, although this is likely to simply reflect the nature of the services the key informants worked for, as the majority were in the public sector. All key informants described primary users of methamphetamine from an English-speaking background, covering an age range between 13 and 65. Reported modal ages matched this wide spectrum, with key informants referring to groups primarily in their 30s (n=4 KI), 20s (n=3 KI) and late teens (n=2 KI). The majority of methamphetamine users described by key informants were males, with estimates ranging from 10% to 77% of the groups discussed (mode = 70%). Education history of methamphetamine users described covered the whole range from low levels to university graduates. Key informants described methamphetamine users with high levels of unemployment, with the remainder in a range of part-time and full-time occupations.

5.1 Price

As discussed above, and indicated in previous Tasmanian IDRS reports, 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.

IDU reported the price of 'base/paste' methamphetamine as costing $50-80 per 'point' (0.1g: modal price estimate $50, range $25-100, n=71), and $400 per gram (modal price estimate $400, range $100-450, n=7). These prices are consistent with the modal estimated cost reported in the 2001 IDRS survey ($50 per 'point', $400 per gram) for the more potent forms of methamphetamine. These price estimates are consistent with the modal prices reported as actually paid for their last purchased 'point' of 'base/paste' (mode=$50, range $25-80, n=66) and last gram (mode=$400, range $100-500, n=29: Table 15).

Modal price reported by IDU for the higher-purity crystalline methamphetamine / 'ice' was again, $50-75 per 'point' (0.1g: modal price estimate $50, range $50-120, n=10), which corresponded closely with the price IDU reported as actually paying for their last 'point' of crystalline methamphetamine (mode = $50, range $20-120, n=10). Only one IDU reported buying a gram amount of this form of the drug in the preceding six months, for $400 (Table 15).

The modal price reported by IDU for the traditional white powder methamphetamine, generally quite low in quality, was $80 for approximately a gram (range $50-450, n=17), which corresponded with the price IDU reported as paying for their last gram (mode = $80, range $50-450, n=18: Table 15). The most common price IDU reported as paying for this lower-potency methamphetamine powder was $50 (n=21), for which they procured greatly varying amounts of the drug (0.05g, n=1; 0.1g, n=11; 0.2g, n=1; 0.3g n=1; 0.5g, n=3; 1.0g, n=4; mode = 0.1g), which would seem to suggest that some dealers are misrepresenting their products as the higher potency methamphetamine, which are most commonly sold in units of 'points' (0.1g) at $50 each.

IDU also provided information on costs of the last amount of pharmaceutical stimulants they purchased illicitly, reporting a modal price of $2 per 5mg dexamphetamine tablet (range $2-5, n=5).

Nine key informants could confidently comment on costs of methamphetamine to the groups that they were familiar with, reporting prices consistent to those detailed by the IDU: $3-5 per 5mg dexamphetamine tablet (or $20-50 per sheet of 20; n=2); $80 per gram of methamphetamine powder (n=1); and for the more 'potent' forms of methamphetamine, $50-80 per 'point' (n=5) or $175-200 per half-gram (n=1).

The majority of both key informants and IDU who commented on price of any form of methamphetamine reported that prices had remained stable over the preceding six months (80% of KI, n=4/5; 72% of IDU referring to powder, n=21/29; 71% of IDU referring to base, n=44/62; 100% of IDU referring to crystal methamphetamine, n=6). A minority of IDU felt that there had been price changes in regard to methamphetamine powder (14% reporting increasing prices, n=4/29; 10% fluctuating prices, n=3/29; and 3% decreasing prices, n=1/29). Similarly, a minority reported changes in 'base/paste' methamphetamine (11% reporting fluctuating prices, n=7/62; 10% increasing prices, n=6/62; and 8% reporting decreasing prices, n=5/62). However, consistent with suggestions that there has been little change in the prices of methamphetamine in the past six months, the reported prices of the last amounts of

methamphetamine purchased by IDU (Table 15 below) are congruent with prices reported in the 2001 IDRS. While the prices reported in the 2001 survey are not directly comparable with the current study, as prices for both crystalline methamphetamine and 'base/paste' were reported together, when the prices for 'base/paste' in 2002 are compared to the 2001 figures (given that 'base/paste' was the predominant methamphetamine form used by IDU – detailed below), it is clear that 2002 prices are the same as those in 2001, with the possible exception of half-grams of the drug.

Table 15: Most common amounts and prices of methamphetamine purchased by IDU

Descriptor*	2000 Survey Modal Price *(range in parentheses)*	n	2001 Survey Modal Price *(range in parentheses)*	n	2002 Survey Modal Price *(range in parentheses)*	n
Higher purity crystal/paste						
'point' or packet (0.1g: 0.05-0.1g)	$50 *($40-100)*	52	$50 *($50-80)*	34	$50 *($20-120)*	69
2 points (0.2g: 0.15-0.2g)	$80 *($70-100)*	19	$80 *($50-100)*	13	$150 *($50-150)*	8
quarter-gram (0.25g: 0.2-0.3g)	-	-	-	-	$100 *($100-180)*	5
half-gram (0.5g: 0.4-0.6g)	$250 *($150-250)*	3	$150 *($50-400)*	18	$200 *($80-400)*	34
gram (1.0g)	$350 *($280-400)*	8	$400 *($80-450)*	17	$400 *($100-500)*	29
'Cut' / low purity powder						
'point' or packet (0.1g: 0.05-0.1g)	-	-	$50 *($40-80)*	15	$50 *($50-60)*	12
half-gram (0.5g)	$50	3	$50 *($50-60)*	4	$50 *($50-800)*	10
gram (0.8g: 0.8-1.0g)	$80 *($50-100)*	6	$50 *($50-100)*	5	$80 *($50-450)*	18
Pharmaceutical stimulants						
dexamphetamine tablet (5mg)	-	-	$5 *($1-10)*	29	$2 *($2-5)*	5
methylphenidate tablet (10mg)	-	-	$5 *($2-10)*	14	-	-

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

Explosion: most common amounts and prices of 'base/paste' and 'crystal meth/ice' purchased by IDU in 2002

2002 Survey Modal Price *(range in parentheses)*	n	2002 Survey Modal Price *(range in parentheses)*	n
'Base/paste'		**'Crystal meth/ice'**	
$50 *($25-80)*	66	$50 *($20-120)*	12
$80† *($50-150)*	7	$150	1
$100 *($100-150)*	4	$180	1
$200 *($80-400)*	32	$275 *($200-275)*	3
$400 *($100-500)*	29	$400	1

†Median price was substituted where no single mode was reported.

Tasmania Police area drug bureaux gather regular information regarding current prices of illicit drugs, both through informant reports and covert drug purchases. Since July 1999, Tasmania Police State Intelligence Services has produced monthly reports of local drug seizures and these estimated costings. Prior to this, quarterly price figures were provided through the Australian Bureau of Criminal Intelligence (ABCI). According to current figures, low-purity powder methamphetamine cost $40-$50 for a 'street gram' (0.6-0.8g), and $70-$80 for a true gram, in the 2001/02 financial year (Table 16), consistent with IDU and key informant reports of prices for the lower quality methamphetamine. These reported price figures have remained stable since January 2000, consistent with IDU and key informant reports of both stability of prices over at least the preceding six months, and the current cost of the drug. Tasmania Police also report the price of 'points' (0.1g) of 'uncut' crystalline methamphetamine to have cost $40-$50 since January 2000, only changing to a price range of $40-70 since January 2002. It is possible that this change in price range may reflect the relatively greater cost of the crystalline methamphetamine form over the cost of 'base/paste', both commonly sold in 'point' amounts.

Table 16: Methamphetamine prices in Tasmania reported by the Tasmania Police Drug Bureaux, 1996-2002

	Point (~0.1g)	Street Gram (0.6-0.8g)	Full Gram (1.0g)	Ounce (28 gms)
July-Sept 1996	*price not reported*	$50-80	$100-120	$1400
Oct-Dec 1996	*price not reported*	$50-80	$100-120	$1400
Jan-Mar 1997	*price not reported*	$50-80	$100-120	$1400
April-June 1997	*price not reported*	$70-80	$100-120	$1400
July-Sept 1997	*price not reported*	$50	$100-120	$1200-1400
Oct-Dec 1997	*price not reported*	$50	$100-120	$1400-1600
Jan-Mar 1998	*price not reported*	$50	$70-100	$1400-1600
April-June 1998	*price not reported*	$50	$70	$1400-1600
July-Sept 1998	*price not reported*	*price not reported*	*price not reported*	*price not reported*
Oct-Dec 1998	*price not reported*	$50	$70-80	$1200-1400
Jan-Mar 1999	*price not reported*	$50	$70-80	$1200-1400
April-June 1999	*price not reported*	$50	$70-80	$1200-1400
July-Sept 1999	$50	*price not reported*	*price not reported*	*price not reported*
Oct-Dec 1999	$50	$50	$70-80	$1200-1400
Jan-Mar 2000	$40-50	$40-50	$70-80	$1200-1400
April-June 2000	$40-50	$40-50	$70-80	$1200-1400
July-Sept 2000	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec 2000	*price not reported*	$40-50	$70-80	$1200-1400
Jan-Mar 2001	$40-50	$40-50	$70-80	$1200-1400
April-June 2001	$40-50	$40-50	$70-80	$1200-1400
July-Sept 2001	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec 2001	$40-50	$40-50	$70-80	$1200-1400
Jan-Mar 2002	$40-70	$40-50	$70-80	$1200-1400
April-June 2002	$40-70	$40-50	$70-80	$1200-1400

Source: Australian Bureau of Criminal Intelligence, Tasmania Police State Intelligence Services

5.2 Availability

Across all 'forms' of methamphetamine, most KI and IDU reporting on availability suggested that the drug was easy or very easy to obtain (IDU: very easy 52%, easy 35%; KI: very easy 53%, easy 47%), and that availability of the drug had remained stable in the preceding six months (IDU: 75%; KI: 57%). Trends for each 'form' of the drug are discussed separately below.

Almost all IDU sampled who could comment on the availability of low-purity methamphetamine thought it was easy or very easy to obtain (83%, n=25), with the majority (43%, n=13) reporting that it was very easy to access. The clear majority also reported that the availability of powder methamphetamine had remained stable in the preceding six months (67%, n=20/30), with small proportions reporting an increase (17%, n=5/30), or decrease (13%, n=4/30), in availability.

In regards to 'base/paste' forms of methamphetamine, remarkably similar trends were reported, with 59% (n=42/71) of IDU reporting it as very easy to obtain, and 35% (n=25/71) regarding this form as easily accessed. Just 6% (n=4/71) suggested that is had been difficult for them to access 'base/paste' methamphetamine in the preceding six months. Again, most regarded this level of availability as remaining stable during this time (77%, n=53/69), with 13% (n=9/69) reporting increased availability, 6% (n=4/69) decreased availability, and 4% that availability had fluctuated. All key informants reporting trends in availability of methamphetamine reported it as being easily or very easily accessed by their groups (very easy 53%, easy 47%)[13], with the majority regarding this level of availability as remaining stable in the preceding six months (60%, n=3/5, with single KI reporting increases and decreases in availability).

Trends were slightly different for the less commonly used crystalline methamphetamine, with almost equal numbers of IDU regarding the availability of this form as very easy (27%, n=3/11), easy (18%, n=2/11), difficult (27%, n=3/11) and very difficult (27%, n=3/11) for them to access. The majority (87%, n=7/8) regarded this level of availability as remaining stable in the preceding six months, with only one IDU reporting a fluctuating availability of this form of methamphetamine in this time.

As further support for a stability of availability of methamphetamine, Tasmania Police seizures (Table 17) have remained reasonably stable, or slightly increased, over the past two financial years, with 2241g of methamphetamine powder seized in 1999/00, 3130g in 2000/01, and 3211g seized in 2001/02.

There does not appear to be a substantial street-based methamphetamine scene, with the majority of IDU purchasing the drug (over all forms) from dealer's homes (20%), friends (27%) or mobile dealers (31%), and most commonly taking between 30-60 minutes to 'score' the drug (Table 18).

[13] As 'base/paste' methamphetamine was the most commonly used 'form' of the drug in the IDU sample, where key informants did not specify a particular 'form' of the drug in their discussion of availability trends, it was assumed that they were referring to 'base/paste'. This is likely to be appropriate as most KI were involved with groups very similar to those responding to the IDU survey. Of the 13 key informants reporting trends, only 3 specified that they were referring to 'base/paste'.

Table 17. Tasmania Police data for methamphetamine July 1999-June 2002

	Jul-Sept 1999	Oct-Dec 1999	Jan-Mar 2000	Apr-Jun 2000	Jul-Sept 2000	Oct-Dec 2000	Jan-Mar 2001	Apr-Jun 2001	Jul-Sept 2001	Oct-Dec 2001	Jan-Mar 2002	Apr-Jun 2002
Methamphetamine Powder Seized (g)												
South	289	1011	310	287	987	126	34	8	12	14	605	127
North	4	49	8	70	13	4	0	0	5	8	0	0
West	57	48	68	40	30	1043	8	21	0	704	3	10
total	350g	1108g	386g	397g	1030g	1173g	42g	29g	17g	726g	608g	137g
% within southern region	*83%*	*91%*	*80%*	*72%*	*96%*	*11%*	*81%*	*28%*	*71%*	*2%*	*99%*	*93%*
Unknown Powder Seized, Believed To Be Methamphetamine (g)												
South	*Prior to January 2001, all seized powder was classified as Methamphetamine for statistical purposes*						16	272	181	262	295	50
North							16	70	19	38	1	0
West							7	375	39	79	181	578
total							39g	817g	239g	379g	477g	628g
% within southern region							*3%*	*33%*	*76%*	*69%*	*62%*	*8%*
Methamphetamine Tablets Seized												
South	24	5	13	80	2	0	0	0	1	0	1	0
North	0	0	12	0	2	2	17	0	0	0	0	0
West	8	0	0	0	0	0	0	0	0	0	42	0
total	32	5	25	80	4	2	17	0	1	0	43	0
% within southern region	*75%*	*100%*	*52%*	*100%*	*50%*	*0%*	*0%*	*0%*	*100%*	*0%*	*2%*	*0%*
Price in Southern District												
Taste	$50	$50	$50	$40-50	$40-50	$40-50	$40-50	$40-50	$40-50	$40-50	$40-70	$40-70
Gram	$80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80	$70-80

IDU reported that methamphetamine powder was most commonly purchased at a dealer's home (34%), via a mobile dealer (28%), or through a friend (21%), with only 10% reporting most commonly purchasing this form of methamphetamine from a street dealer. Similar patterns were reported for 'base/paste' methamphetamine, with 32% most commonly purchasing via a mobile dealer, 26% via a friend, and 17% from a dealer's home, with 17% most commonly purchasing 'base/paste' from a street dealer. Crystalline methamphetamine was reported as most commonly being purchased through a friend (45%) or via a mobile dealer (36%), with only one IDU reporting most commonly purchasing the drug from a street dealer (n=1) in the past six months (9%).

Table 18: Pathways to access of methamphetamine by IDU

	Methamphetamine form			
	Powder (n=29)	**'Base/paste' (n=69)**	**'Ice'/Crystal (n=11)**	**All Forms (n=109)**
Usual Access				
Street Dealer	10% *(n=3)*	17% *(n=12)*	9% *(n=1)*	15% *(n=16)*
Dealer's Home	34% *(n=10)*	17% *(n=12)*	-	20% *(n=22)*
Friend	21% *(n=6)*	26% *(n=18)*	45% *(n=5)*	27% *(n=29)*
Mobile Dealer	28% *(n=8)*	32% *(n=22)*	36% *(n=4)*	31% *(n=34)*
Home Delivery	3% *(n=1)*	7% *(n=5)*	9% *(n=1)*	6% *(n=7)*
Gift	3% *(n=1)*	-	-	1% *(n=1)*
Modal Time To Access	30 min *(range 2-180 min)*	30 min *(range 0-210 min)*	30 min* *(range 0-120 min)*	30 min* *(range 0-210 min)*
Last Time Purchased				
Street Dealer	10% *(n=3)*	17% *(n=12)*	9% *(n=1)*	33% *(n=36)*
Dealer's Home	31% *(n=9)*	16% *(n=11)*	-	18% *(n=20)*
Friend	24% *(n=7)*	29% *(n=20)*	45% *(n=5)*	29% *(n=32)*
Mobile Dealer	28% *(n=8)*	30% *(n=21)*	36% *(n=4)*	30% *(n=33)*
Home Delivery	3% *(n=1)*	7% *(n=5)*	9% *(n=1)*	6% *(n=7)*
Gift	3% *(n=1)*	-	-	1% *(n=1)*
Modal Time To Access	15 min *(range 2-720 min)*	30 min *(range 0-150 min)*	60 min *(range 0-120 min)*	30 min *(range 0-720)*

** Median substituted, as no single mode exists*

5.3 Form And Purity

Eighty-nine percent of the IDU sample reported using some form of methamphetamine in the six months prior to interview, with the drug predominantly being injected by this sample. Median frequency of use of any form of methamphetamine was 25 days in the preceding six-month period (which is approximately once weekly), ranging between 2 and 180 days in this time. These rates are highly similar to those reported in the 2001 (85% using, median frequency of use = 24 days) and 2000 (83% using, median frequency of use = 25 days) IDRS surveys.

IDU reports of the forms of methamphetamine they had used in the previous six months clearly show that a wide range of forms and potencies of the drug are available to the IDU community. Thirty-nine percent of those recently using methamphetamine reported using the traditional low-potency white powder form (n=35), while a small proportion had used pharmaceutical stimulants either according to a medical practitioner's prescription (i.e. licitly: 3%, n=3), or using illicit/diverted tablets (49%, n=44) in the previous six months.

The physical presentation of the other 'forms' of methamphetamine purchased by IDU are described in Section 5.0 above, with exemplars displayed in Table 14. The grey/yellow/brown waxy/wet/gel 'base/paste' methamphetamine was by far the most commonly used form of the drug in the 2002 IDRS sample, used in the past six months by 83% (n=74) of IDU that had used the drug. Similar to 2001, there were anecdotal reports of this form of the drug being sold in a wide variety of colours (blue, red, orange, purple, green, pink), which two key informants thought may simply be food dye added to the drug. Crystalline methamphetamine (commonly, 'rock' crystals amongst a finer powder or simply clear, hard, crystals) was used by 22% of methamphetamine-using IDU (n=20) in the past six months. No IDU reported use of true liquid form methamphetamine (often known as 'ox blood') in the previous six months.

When asked to describe the form of methamphetamine that they had used most often in the preceding six months, 65% (n=58) reported 'base'/'paste', with most frequent use of lower-potency methamphetamine powder (15%, n=13), diverted pharmaceutical stimulants (15%, n=13), crystalline methamphetamine (3%, n=3) and licit pharmaceutical stimulants (2%, n=2) substantially less common.

When asked to describe the purity of powder form methamphetamine, IDU predominantly regarded it as low (43%, n=13), with substantial minorities reporting that purity of this form was medium (20%, n=6), or had fluctuated in the preceding six months (23%, n=7). There was some dissention in regard to the stability of this level of purity, with 32% (n=9) IDU reporting that purity had fluctuated over the past six months, 28% believing it had decreased (n=8), and 28% (n=8) that purity had remained stable.

The purity of 'base/paste' methamphetamine appears to be quite variable, with 34% (n=25) reporting purity to have fluctuated in the preceding six months, 25% (n=18) reporting that this form was high and medium purity respectively, and 16% (n=12) that 'base/paste' was quite low in purity. When asked about the stability of the purity of 'base/paste' methamphetamine, again 30% (n=20) reported that this fluctuated, although 42% (n=28) reported purity as having remained stable, with 19% (n=13) reporting that purity had increased, and 9% (n=6) that purity had decreased, in this time.

Crystalline methamphetamine was generally regarded as high (61%, n=8) or medium (39%, n=5) in purity by IDU, again with some dissention regarding the stability of this level of purity over

the preceding six months: 67% (n=4) regarding purity as stable, 33% (n=2) believing purity to have fluctuated in this time.

Eleven Key Informants felt confident in reporting on the purity of methamphetamine available to the groups they were familiar with, and these reports were similar to those from IDU: the majority reporting a fluctuating level of purity (64%, n=7/11), with smaller numbers reporting purity as low (27%, n=3/11) and as medium (9%, n=1/11, with this KI specifically referring to 'base/paste' methamphetamine). As would be expected, when asked about the stability of methamphetamine purity in the preceding six months, the majority of Key Informants reported that purity had fluctuated (80%, n=8/10), with single reports of stable and of decreasing purity of the drug in this time.

Data for purity of methamphetamine received at police analytical laboratories has been provided for the 1997/98 to 2001/02 financial years (Table 19, Table 20). Drugs seized by Tasmania Police are only tested for composition and purity if the alleged offender pleads not guilty to the associated charge. Hence, purity data for drug seizures in the state are minimal. This very restricted sample size renders it difficult to make inferences about trends in purity of methamphetamine. However, the data does seem to suggest that the level of purity of consumer-type amounts of methamphetamine seized in Tasmania has remained relatively stable over the period 1997/98 to 2000/01. The apparent sharp 'jump' in purity of analysed methamphetamine samples between 2000/01 and 2001/02 may simply reflect the analysis of a more representative sampling of methamphetamine seizures (afforded by the greater sample size). These purity figures are in line with IDU and KI reports of 'medium' purity levels of the drug. Anecdotal reports from three key informants suggest that the higher potency forms of methamphetamine available in the state are not as pure as those available in Eastern mainland jurisdictions.

Table 19. Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1997/98 – 2001/02

	1997/98	1998/99	1999/00	2000/01	2001/02
<=2 g					
n	*4*	*31*	*9*	*10*	*20*
avg % purity	5 %	5 %	7.4 %	10.4%	26.6%
> 2g					
n	*2*	*8*	*11*	*14*	*28*
avg % purity	7 %	21 %	6.6 %	3.6 %	19.2%
Total					
n	*6*	*39*	*20*	*24*	*48*
avg % purity	**6 %**	**8 %**	**7 %**	**6.4 %**	**22.2%**
Range in % purity	3-8%	2-59%	2-26%	0.5-50%	0.1-70.6%

Source: Australian Bureau of Criminal Intelligence; Tasmania Police State Intelligence Services
Note: No seizures made by the Australian Federal Police in the state were analysed during this period. All analysed seizures of amphetamines in this period revealed methylamphetamine rather than amphetamine.

Table 20. Purity of Tasmanian seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 1999-June 2002

	Jul-Sep 1999	Oct-Dec 1999	Jan-Mar 2000	Apr-Jun 2000	Jul-Sep 2000	Oct-Dec 2000	Jan-Mar 2001	Apr-Jun 2001	Jul-Sep 2001	Oct-Dec 2001	Jan-Mar 2002	Apr-Jun 2002
<=2 g												
n	*2*	*1*	*6*	-	-	-	*9*	*1*	*1*	*6*	*12*	*1*
median % purity	15.3%	3.0%	6.0%	-	-	-	3.2%	5.2%	9.0%	31.1%	26.0%	6.7%
> 2g												
n	*1*	*2*	*8*	-	-	-	*12*	*2*	*6*	*7*	*13*	*2*
median % purity	6.0 %	2.5%	6.0%	-	-	-	3.8%	3.1%	5.5%	30.1%	20.0%	18.5%
Total												
n	*3*	*3*	*14*	-	-	-	*21*	*3*	*7*	*13*	*25*	*3*
avg % purity	6.0%	2.5%	6.0%	-	-	-	3.4%	4.3%	6.8%	30.1	24.9%	6.7%

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

Note: No seizures made by the Australian Federal Police in Tasmania were submitted for purity testing in this period. All analysed seizures of amphetamines in this period revealed methylamphetamine rather than amphetamine. Figures represent the purity of seizures received at the laboratory within the relevant quarter, and the interim between the date of seizure by police and the date of receipt at the laboratory may vary between one day and several months.

Tasmania Police report that the majority of methamphetamine in the Tasmanian illicit drug market is imported into the state, most commonly by members of organised motorcycle groups or particular criminal groups, via post or domestic sea or air terminals. Several key informants supported this view. While Police have received reports of multiple illegal methamphetamine production laboratories operating within the state, only one was detected in 2000/01. In 2001/02 three such 'box labs' were detected, which were not believed to be related to organised motorcycle groups. Police intelligence suggests that the methamphetamine produced in local methamphetamine 'laboratories' is based on pharmaceutical pseudoephedrine, and have noted an increase (although still small in total number) in organised groups coming to the state specifically to purchase pseudoephedrine from pharmacies, as Tasmanian pharmacies currently have different identification requirements when purchasing this medication. Additionally, police reported that local methamphetamine laboratories are more often using pharmacy-grade reagents (iodine in particular) in the production of the drug, often purchased via the internet.

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 support of this, several IDU reported that the presentation (colour and consistency as well as potency) of the 'form' of methamphetamine available from their regular 'dealer' would fluctuate regularly, with some dealers having two or more different presentations of the drug available for sale at one time.

5.4 Patterns Of Methamphetamine Use

5.4.1 Prevalence of methamphetamine use

The most recent survey of methamphetamine use within the general community of Tasmania was undertaken within the 2001 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2002), which sampled 1349 Tasmanian residents. Results indicated that 2.1% (n=28) had used the drug in the 12 months prior to interview. This is a slight increase from the 1.6% of those sampled in the 1998 Household Survey (Australian Institute of Health and Welfare, 1999; sample size = 1,031) reporting use of the drug in the preceding 12 months. Lifetime prevalence of methamphetamine use is not available from the 2001 Survey, but the 1998 survey indicated that 6.3% of those sampled reported ever using methamphetamine. The 2001 survey estimates 3,700 injecting drug users aged 14 years and over in the state, with amphetamine being the predominant drug injected amongst these individuals (86% of recent injecting drug users injecting methamphetamine, 41% injecting other opiates – morphine or methadone). In comparison, all of the respondents in the 1998 Survey that reported injecting illicit drugs (n=6) in the 12 months prior to interview had injected methamphetamine.

The Australian School Students Alcohol and Drugs (ASSAD) Survey (Cancer Council of Tasmania, 1997) sampled 2,553 students in years 7 to 12 from schools across Tasmania during the 1996 school year, and 2,671 students in 1999 (Cancer Council of Tasmania, 2001). Results were divided between 12-15 year olds, and 16-17 year olds. Within the younger age group, in the 1996 study, 6% of those sampled reported ever using methamphetamine, with 4% reporting lifetime use of the drug in the 1999 study. In regard to recent use, 2% of those interviewed in 1996 and 3% of those interviewed in the 1999 study reported use in the month prior to interview. Reported lifetime use among 16-17 year olds surveyed was slightly higher, with 5% of those surveyed in 1996 and 7% of those surveyed in 1999 ever using methamphetamine, but 3% of those sampled in both studies reported using the drug in the month prior to interview. These

rates are generally consistent with those found in the 2001 and 1998 National Drug Strategy Household Surveys, and there were no significant changes in patterns of methamphetamine use between the 1996 and 1999 ASSAD surveys.

The Australian Needle and Syringe Program Survey (National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs) has reported methamphetamine as the last drug injected of around 30% of their Tasmanian participants for their 1997 and 1998 surveys, and a slightly lower proportion reporting methamphetamine (20%) in their 1999 survey, rising to 41% in 2000, and falling again to 25% in 2001. However, these studies only sampled 23, 51, 25, 27 and 28 clients respectively, with such small sample sizes rendering it difficult to make any reliable inferences regarding trends in use.

Arrest data for methamphetamine-related offences indicate a marked increase in the number of arrests between 1998/99 and 2000/01, continuing into 2001/02 (Table 21). The main increase has come from those charged with 'consumer'-type offences (such as use and possession), consistent with reports of increased availability and use of methamphetamines (discussed below).

Table 21: Consumer and provider arrests for methamphetamine and related substances, 1996/97-2001/02

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Consumers						
Female	3	5	0	4	9	18
Male	15	9	4	14	51	53
Unknown	0	1	2	2	0	0
Total	18	15	6	20	60	71
Providers						
Female	0	0	0	0	1	6
Male	2	0	1	7	9	12
Unknown	0	0	0	1	0	0
Total	2	0	1	8	10	18
Total Arrests	20	15	7	28	70	89

Source: Australian Bureau of Criminal Intelligence and State Intelligence Services, Tasmania Police
Note: "Consumer" refers to persons charged with use-type offences (e.g. possession, administration), while "provider" refers to persons charged with supply-type offences (e.g. supply, cultivation or manufacture). Where a person has been charged with multiple offences within a category, that person is only counted once in these statistics. Data from 2001/02 is based on SIS data and is preliminary only.

Since 1997, clients of non-pharmacy Needle Availability Program (NAP) outlets have been asked which drug they mostly inject. Methamphetamine has been the most commonly reported single drug used for the past 5 years, at 56%, 46%, 45%, 31%, 30% and 37% during 1996/97, 1997/98, 1998/99, 1999/00, 2000/01 and 2001/02 respectively (Figure 1). This data should be interpreted with caution, however, as these patterns of use were reported by only around 40% of total needle and syringe outlet clients prior to 2001/02, rising to almost 80% in 2001/02, because data was previously collected inconsistently across services due to staff time limitations. As such, the apparent increase in proportions of NAP clients reporting methamphetamine use in

2001/02, in contrast to trends over preceding years, may simply reflect this more consistent level or reporting across NAP outlets.

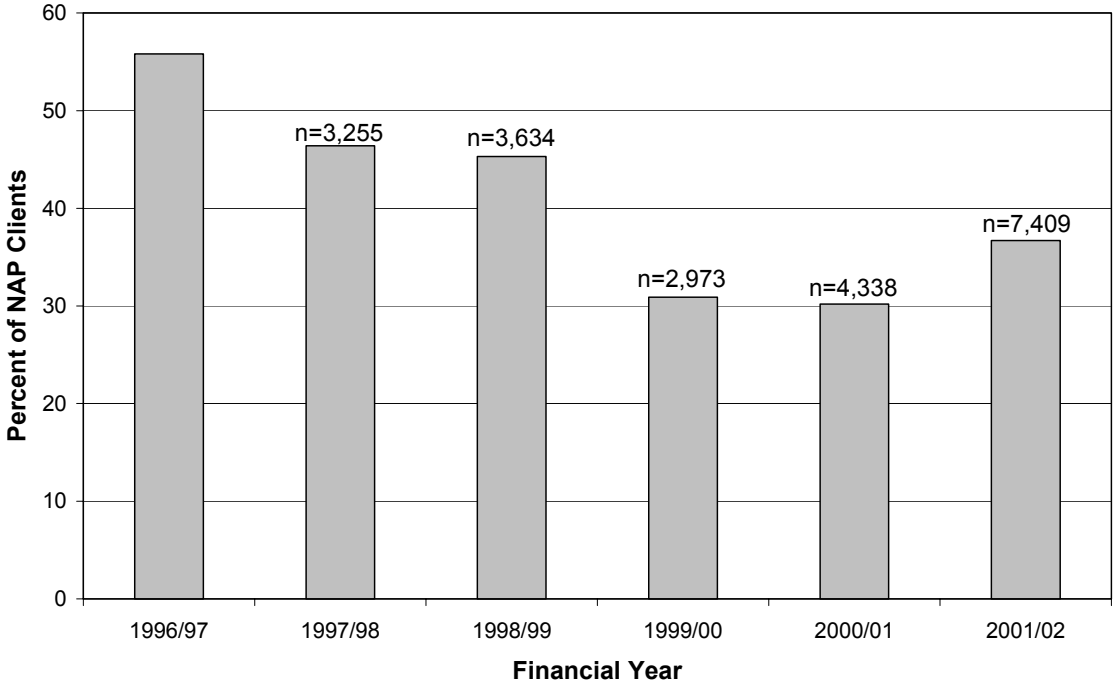


Figure 1: Percentage of methamphetamine reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program clients, 1996/97-2001/02
Source: Sexual Health, Department of Health and Human Services

Data from urine screens of Tasmanian prisoners revealed a very low rate of sympathomimetic amines among positive tests, accounting for 3% or less of all positive tests between 1995/96 and 2001/02. These figures may underestimate the level of use amongst this group however, due to the relatively rapid elimination of this drug from the body.

5.4.2 Current patterns of use

Of the IDU surveyed, 100% had used some form of methamphetamine at some time in their lives, with 89% using some form in the past 6 months, however, only 23% of the sample indicated that methamphetamine was their drug of choice. These patterns are highly similar to those surveyed in the 2001 and 2000 Tasmanian IDRS. Of the 23 IDU that reported methamphetamine as their drug of choice, the majority (70%, n=16/23) reported methamphetamine as the drug they had most often injected in the month prior to interview. Of these seven IDU that had not used their drug of choice most often in the preceding month, 4 instead most commonly injected morphine, 2 methadone and one MDMA, with three of this group citing the reason for this discrepancy as due to difficulties accessing methamphetamine, two due to the price of the drug, one due to concerns over purity of methamphetamine, and one due to concerns of the (mental) health impact of the drug.

For those IDU that had primarily used any form of methamphetamine in the past 6 months (n=27), the drug was used for a median of 69 days in that period (range 16-180). In the 59 IDU that had most frequently used another illicit (all but one were primary users of some form of

opioid) and had used methamphetamine recently, it had been used a median 15 days (range 2-180) in the past 6 months. Taken together, it is clear that a moderate level of methamphetamine use is common amongst primary users of other drugs, which was supported by comments from key informants reporting on primary users of either cannabis or opioids that some form of methamphetamine was occasionally used by the people with whom they were in contact with (n=14/16 of primary opiate-using groups; n=5/6 of primary cannabis-using groups). Most recreational users of methamphetamine in these groups were noted by key informants to use intravenously. The majority of these key informants were not able to differentiate between forms of methamphetamine used by these groups (n=16/22), although those that could make such a distinction indicated that methamphetamine powder and 'base/paste' were used more commonly than crystalline methamphetamine.

Key informant reports suggested that the most common other drug used by primary methamphetamine users was cannabis, with moderate to high levels of use of benzodiazepines, both often being used functionally to help users 'come down' from their methamphetamine use. Key informants also reported opioid use in a small percentage of primary methamphetamine users, and that substantial proportions of primary methamphetamine users were also using ecstasy recreationally.

5.4.3 Trends in patterns of methamphetamine use

It is clear that the availability of better quality methamphetamine, identified as an emerging trend in the 2000 IDRS has further stabilised and expanded into 2001 and 2002. Likewise, the trends associated with this market have also continued, with an increase in the number of users of methamphetamine, in particular, the higher purity 'base/paste', in the previous six months noted by 18 IDU. Eighteen IDU also noted that they had seen primary users of opioids change to being primary users of methamphetamine in the preceding six months, with 6 IDU attributing this to an increased availability of better-quality methamphetamine, 3 IDU due to easy access/stability of supply, 2 due to decreases in price and 5 due to increased quality of the drug. In conjunction with this, an increase in the frequency of use of methamphetamine by existing users was noted by 9 IDU, most directly attributing this to the better quality of methamphetamine available.

Changes in the demographics of those using the higher-purity methamphetamine were also noted: with both IDU (n=16) and key informants (n=1) reporting an increase in younger people injecting the drug, most commonly among teenagers (around late high-school/college age); with more females using methamphetamine noted by one key informant and one IDU; and five IDU and one key informant noting more 'straight'/middle-class, or 'working' people injecting the drug in the past six months.

5.4.4 Methamphetamine-related issues

One key informant in the health sector noted a recent case where an individual was admitted to hospital with severe problems due to multiple emboli (object causing blockage in the bloodstream) in the central nervous system due to methamphetamine use, believed to be due to a cutting agent not dissolving or not remaining in solution following injection.

Two key informants also noted reports of adrenaline being mixed with methamphetamine by some IDU.

One IDU also noted a brief (two-month) availability of Kat, an injectable, amphetamine-related euphoric/stimulant in the six months prior to interview.

5.5 Summary of Methamphetamine Trends

Table 22: Summary of trends in methamphetamine use

	Methamphetamine 'Powder'	'Base/Paste' Methamphetamine	Crystalline Methamphetamine
Price (mode) *'point'/ packet (~0.1g)* *gram*	• $50, stable • $80, stable	• $50, stable • $400, stable	• $50, stable • $400, stable
Availability	• Very easy to obtain • Availability stable	• Very easy to obtain • Availability stable	• Mixed reports (50% easy, 50% difficult) • This pattern reasonably stable
Purity and form	• IDU reports of low-medium, fluctuating purity • ~6% from the small number of methamphetamine seizures analysed, stable between 1997/98 –2000/01 • Form: white/yellow/brown powder	• IDU reports of medium to high purity, quality stable or fluctuating • Purity estimated around 20-30% by Tasmania Police • Form: waxy/sticky/wet grey/brown/yellow gel or powder	• IDU reports of medium to high purity, quality stable or fluctuating • Form: clear, hard crystals or 'rock' crystals among finer powder
Use	• Used by one third (35%) of the IDU sample, but uncommon as the form of methamphetamine predominantly used	• Used by a large proportion of the IDU sample recently (74%), despite being the drug of choice for only a small section of the group • Most common form of methamphetamine used by IDU	• Appears to be less commonly available, used by 20% of the IDU sample in the past six months
Other trends	▪ IDU and key informant reports of increasing number of users, increase in younger users (14-18 years) and use in increasing frequency and amount by existing users. IDU reports of continuation of trend noted in 2001, with increasing numbers of IDU shifting from being predominant users of opioids to becoming predominant users of methamphetamine. These trends generally associated with the 'base/paste' form of methamphetamine ▪ One report of hospitalisation due to sequale of emboli associated with methamphetamine injection		

6 COCAINE

Similar to the patterns in the 2000 and 2001 Tasmanian IDRS surveys, only a very small number of IDU (n=5) could comment on price, purity or availability of cocaine. However, 47% of the sample indicated that they had tried cocaine at some stage in their lives, with 12 respondents reporting that they had used cocaine in the six months prior to interview (11 had injected and 4 had snorted the drug), although the median frequency of use was only twice in this period (range 1-12 times). The cocaine that these participants had used was almost exclusively powder, with one IDU reporting use of cocaine in a crystalline powder form (not smokeable crystals). Due to the extremely small number of respondents who were able to provide information on cocaine, the information provided in this section should be interpreted with caution. With this noted, however, the reported extent of recent use of the drug is slightly higher than in previous years (2000: n=6; 2001, n=8).

Only five IDU reported cocaine as being their drug of choice, and none reported this as the drug they had most often injected in the preceding month (instead, most commonly injecting methadone, n=3; or methamphetamine, n=2). When asked the reasons for this discrepancy, 2 IDU put this down to low availability of the drug, and one each reporting this as due to the high price of cocaine, low purity of cocaine, and in response to deleterious (mental) health effects of the drug.

6.1 Price

Only four IDU and a single key informant, a youth worker, could provide information on the price of cocaine, with IDU reporting modal purchase prices of $100 for approximately 0.3g (n=1), $150 for approximately 0.5g (n=1), and $200 for a gram (n=3, range $200-300). The single key informant indicated that one of their clients had been offered a 'point' (0.1g) of cocaine for $200. These prices, particularly gram prices, are reasonably equivalent to those reported in eastern seaboard jurisdictions in 2002 (Breen, Degenhardt & Roxburgh, 2002). Tasmania Police have been unable to report prices of cocaine from either informant reports or covert bust operations between 1995/96 and 1999/00, however, in 2001 Southern Drug Investigation Services estimated the price of cocaine as $250 per gram, on the basis of an informant report, and the price reported by Tasmania Police has remained stable since this period.

6.2 Availability

For those IDU that could comment on the availability of cocaine, one (20%) reported it as being easy for them to access the drug, three (60%) that the drug was difficult to access, and one (20%) that it was very difficult for them to access cocaine in the preceding six months. Similarly, a single key informant could comment on the availability of cocaine, reporting that it was difficult for the group they were associated with to access the drug in this period. In regard to stability of the availability of the drug, two IDU (66%) reported that it had become easier to access cocaine in the preceding six months, while one (33%) indicated that availability had remained stable.

Of the five IDU reporting cocaine trends, two (40%) reported usually purchasing the drug from a dealer's home, two (40%) through friends, and one from a workmate that also dealt in the

drug. All reported purchasing the drug via these same methods last time they bought cocaine. Median time reported to 'score' the drug was 180 minutes both usually (range 10-100,080 minutes, no single mode, n=5) and for the last time they purchased cocaine (range 3-100,080 minutes, no single mode, n=5). The extremely long top end of this range reflects an individual that had the drug sent down from the mainland.

While there had been no seizures of cocaine made by Tasmania Police made between 1995/96 and 1999/00, two seizures, totalling 29g were made in 2000/01, both by Western Drug Intelligence Services in November, 2000. One seizure of cocaine was made from a person intercepted upon arrival into the state, who was also in possession of a number of tablets of ecstasy. The other seizure resulted from a search of the home of a member of an organised motor-cycle gang. There were no seizures of cocaine made by Tasmania Police in 2001/02.

Three key informants (all working with large numbers of clients through needle availability outlets) reported rarely hearing about use of cocaine among their groups, and were dubious to whether these individuals were using cocaine or simply higher purity methamphetamine.

Taken together, these reports, and the small number of respondents who had used cocaine in the past six months (n=12) and that were able to report on trends (n=5), it would seem that there is a very low availability of cocaine in Tasmania, at least among the demographic sampled in this survey.

6.3 Purity

IDU that had used cocaine recently were mixed in their appraisal of the purity of the drug, with three (60%) reporting it as high purity, one (20%) reporting it as low purity, and one (20%) reporting that purity had fluctuated in the preceding six months. Additionally, one IDU reported that purity had increased, and one believed purity to have remained stable in this period. There had been one sample of cocaine, of an amount of less than two grams, seized by Tasmania Police analysed for purity during the first quarter of 2001, at 44.6%. One seizure of cocaine, of less than two grams in amount and seized by Tasmania Police, was analysed during the first quarter of 2002 at 44.0% purity.

6.4 Use

6.4.1 Prevalence of cocaine use

According to the findings of the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999) 2.3% of surveyed Tasmanian residents (n=29) reported ever trying cocaine, while only 0.1% (n=3) had used it in the 12 months prior to interview. Findings of the 2001 survey (Australian Institute of Health and Welfare, 2002) were very similar, with 0.2% of those sampled reporting using the drug in the preceding year.

Of the 2,553 year 7 to 12 students sampled from Tasmanian schools in 1996 by the Australian School Students Alcohol and Drugs (ASSAD) Survey (Cancer Council of Tasmania, 1997), 3% indicated they had ever tried cocaine. Among the 2,671 students surveyed in 1999 (Cancer Council of Tasmania, 2001), 5% reported ever trying the drug. There were no significant changes in patterns of reported cocaine use between the 1996 and 1999 studies.

Only 0.1% of clients of non-pharmacy Needle Availability Program clients in 2001/02 indicated that cocaine was the drug they most often injected. This figure has been reasonably stable over

the past three financial years (Table 23), relating to around 20 clients each year, primarily presenting to outlets in the southern region. However, it is important to note that, despite there being some discrepancy between NAP outlets in the question asked (some asking 'what is the drug you most often inject', while others prefer 'what is the drug you are about to inject'), it is likely that the question 'what is the drug you most often inject' will tend to underestimate the extent of use of cocaine, as none of the IDU sampled in the IDRS survey reported it as the drug they most often used in the preceding month, despite 12% recently using the drug and 5% indicating that it was their drug of choice.

Table 23: Percentage of cocaine reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program clients, 1997/98-2001/02

Year	1997/98	1998/99	1999/00	2000/01	2001/02
Number of clients reporting cocaine	12	28	19	13	20
Percent of total clients reporting cocaine	0.2%	0.3%	0.2%	0.1%	0.1%

Source: Sexual Health, Department of Health and Human Services

None of the participants in any of the 1995, 1996, 1997, 1998 or 1999 Australian Needle and Syringe Program Survey (National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs, 2002) has reported cocaine as the last drug they injected, although in 2000, one participant reported last using a combination of heroin and cocaine, with the same report occurring again in 2001. However, since these studies only sampled 6, 18, 23, 51, 25, 27 and 28 clients respectively, they were of very limited power for the detection of low frequency occurrences (such as the injection of cocaine).

6.4.2 Trends in cocaine use

Of the twelve IDU that reported using cocaine in the past six months, the median amount of use was two days in the last six months (range 1-12 days).

Six key informants made mention of cocaine use among the users they had the most contact with, although this was often contextualised by key informants reporting use as very rare (n=4), while people were in other jurisdictions, or that they were dubious as to whether the drug used was actually cocaine (n=2). One key informant indicated that there had been a brief 'spike' in cocaine availability early in 2002, although this ended quickly. The majority of key informants (n=24) indicated that there was no current use of cocaine amongst the groups they came into contact with.

6.5 Summary

In summary, it appears that the availability and use of cocaine in Hobart is very low, at least within the populations surveyed in the current study or accessing government services. The cocaine that is used by Tasmanian IDU appears generally to be imported from mainland states.

These patterns seem to have remained reasonably stable over the past few years, however, it is noteworthy that increasing proportions of the Tasmanian IDU sample over the past three years have reported lifetime use (39%, 39%, and 47% in the 2000, 2001 and 2002 surveys respectively) and recent use (6%, 8%, and 12% in the 2000, 2001 and 2002 surveys respectively) of cocaine.

7 CANNABIS

Among the IDU respondents, cannabis was the most commonly used illicit drug, with 100% of the sample using it at some time in their lives, and 91% using in the six months prior to interview. The majority (92% of the sample) could comment confidently on aspects of price, potency and availability. All key informants reported, or suspected (some did not directly discuss cannabis use due to the nature of their professional roles) some level of cannabis use within the populations they had contact with.

Six key informants reported on groups that were primary users of cannabis. Key informants included three youth workers, two drug and alcohol counsellors/psychologists, and a worker associated with justice/police. Key informants were familiar with cannabis users from all suburbs of Hobart. The groups of cannabis users described by key informants were predominantly from an English-speaking background, with various levels of education backgrounds and current employment. Cannabis users that key informants were familiar with ranged in age from teenagers to 50 years, although the majority were in their late teens, and those currently in treatment primarily in their twenties.

7.1 Price

The modal price reported by the IDU for an ounce of cannabis was $250 (range $100-$350), $25 (range $15-25) for a gram, and $60-75 (range $50-75) for a quarter ounce (7g), which was reasonably consistent with prices reported by the key informants. While there was good agreement that these were the 'market prices' for cannabis, most IDU did not report paying these prices for the last amounts of cannabis they purchased.

For their last purchases, a $25 'deal' was reported to contain 0.8-7.0g (mode=1.0g) cannabis, with 2g-28g (mode=7g) in a $50 'deal'[14]. When asked the average weight of a ($25) cannabis 'deal', the majority of IDU reported 1.0g (35%, n=25), although substantial proportions reported a 'deal' as being a higher weight of the drug: 11% (n=8) 1.2g; 21% (n=15) 1.5g; and 14% (n=10) 2.0g. The most common amount of the drug purchased by IDU, as seen in previous IDRS surveys, was quarter-ounce (7g) amounts (n=70), with the modal last purchase price for this amount being $80 (range $10-120). IDU reported paying widely varying amounts for their last ounce of cannabis purchased, dependant on quality and their relationship with the seller, with prices ranging between $50 and $390 (mode $250). The modal prices of cannabis reported by IDU are summarised in Table 24 below.

The majority of IDU (72%, n=61) and key informants (100%, n=5) reported that the price of cannabis had not changed in the last six months. It should be noted that while most of those interviewed regarded the price of cannabis as remaining stable in the preceding six months, there are slight changes, such as downward shifts in the price ranges for quarter ounce (range $40-150 in 2001 and $10-120 in 2002), and ounce amounts of cannabis ounce (range $100-400 in 2001 and $50-390 in 2002), and increases in the modal amount of cannabis sold for $50 (3g in 2001, 3.5g/7g in 2002).

[14] This amount is likely to be skewed by a substantial number of IDU purchasing quarter-ounce amounts for $50. The most common amount of cannabis purchased other than the reported mode was 3.5g, which is more consistent with IDU reports of the amount commonly received if asking specifically for a $50 'deal'.

Table 24: Modal prices of cannabis in Hobart purchased by IDU

	2000 IDRS			2001 IDRS			2002 IDRS		
Unit	**Modal amount (grams)**	**Modal Price**	**n**	**Modal amount (grams)**	**Modal Price**	**n**	**Modal amount (grams)**	**Modal Price**	**n**
$10 deal	-	-	-	-	-	-	1.0g *(range 0.5-7.0g)*	$10	5
$25 deal	1.0g *(range 1.0-2.5g)*	$25	37	1.5g *(range 1.0-2.5g)*	$25	39	1.0g *(range 0.8-7.0g)*	$25	18
$50 deal	2.0g *(range 2.0-7.0g)*	$50	13	3.0g* *(range 2.0-7g)*	$50	22	7.0g† *(range 2.0-28.0g)*	$50	23
Quarter ounce	7g	$90 *(range $50-120)*	55	7g	$80 *(range $40-150)*	71	7g	$80 *(range $10-120)*	70
Half ounce	14g	$150 *(range $100-250)*	17	14g	$150 *(range $70-180)*	30	14g	$150 *(range $40-225)*	56
Ounce	28g	$280* *(range $100-350)*	16	28g	$250 *(range $100-400)*	50	28g	$250 *(range $50-390)*	62

** Median substituted, as no single mode exists; † This amount is likely to be skewed by a substantial number of IDU purchasing quarter-ounce amounts for $50. The most common amount of cannabis purchased other than the reported mode was 3.5g, which is more consistent with IDU reports of the amount commonly received if asking specifically for a $50 'deal'.*

Table 25: Cannabis prices in Tasmania, 1996-2001

	Deal (1 gm approx)			1/4 Bag (7 gms)		1/2 Bag (14 gms)		1 Ounce (28 gms)	
	Leaf	Head	Hydro*	Head	Hydro*	Head	Hydro*	Head	Hydro*
Jan-Mar 1996	$15	$30-40	-	-	-	-	-	$300-450	-
April-June 1996	$15	$25-50	-	-	-	-	-	$250-500	-
July-Sept 1996	$15	$25-50	-	-	-	-	-	$350-450	-
Oct-Dec 1996	$10	$25-50	-	-	-	-	-	$350-450	-
Jan-Mar 1997	$10	$25-50	-	-	-	-	-	$350-450	-
April-June 1997	$10	$25	$50	$80	$100	$175	$200	$350-450	$450
July-Dec 1997	$10	$25	$50	$80	$100-120	$150-175	$200-250	$350-450	$450
Jan-Mar 1998	$10	$25	$50	$80	$100-120	$160	$200-250	$400	$450
April-June 1998	$10	$25	$50	$80	$100-120	$160	$200-250	$250-350	$350-450
Oct-Dec 1998	$10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300-350	$350-450
Jan-June 1999	$10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300-350	$350-450
Oct-Dec 1999	$5-10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300	$350-400
Jan-June 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-400
July-Sept 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-400
Oct-Dec 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-350
Jan-Mar 2001	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-350
April-June 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
July-Sept 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
Oct-Dec 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
Jan-Mar 2002	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
April-June 2002	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350

Source: Australian Bureau of Criminal Intelligence, Tasmania Police State Intelligence Services

**Note: Reporting criteria were expanded in April 1997 to provide separate data for (outdoor) cannabis head and hydroponically grown cannabis or "skunk". Thus, definitions of what constitutes cannabis "leaf" and "head" may have changed during this time period*

Tasmania Police provide quarterly figures on the price of covert drug purchases and reports by informants. According to prices reported to the ABCI, in June 2001, one gram of cannabis cost $20-$25 and one ounce cost $200-$350, similar to prices nominated by IDU and key informants (Table 25). Prices reported by Tasmania Police have remained stable since April 2001, again consistent with IDU and key informant reports of price stability. Tasmania Police also report the price of one gram of cannabis hash/resin as $30-50 in the 2001/02 financial year. No IDU reported prices for this form of the drug in the 2002 IDRS.

7.2 Availability

The majority of the IDU sample who commented on trends in cannabis availability reported that cannabis was very easy (87%, n=79) or at least easy (11%, n=10) to obtain, and that the availability of cannabis had remained stable (92%, n=83) in the preceding six months. Key informants echoed these reports, with all (100%, n=10) reporting that cannabis was very easily available to the groups that they worked with, and that this level of availability had remained stable (100%, n=11) in the six months prior to interview.

Most IDU reported usually purchasing cannabis in the past six months from a friend (44%, n=38), or from a dealer's home (29%, n=25), with smaller proportions reporting usually accessing from 'street dealers' (13%, n=11), mobile dealers (3%, n=3) or through home delivery (1%, n=1). Only 9% (n=8) reported usually growing their own cannabis in the preceding six months. A similar pattern emerged when people were asked who they purchased the drug from last time they used cannabis, with 46% (n=40) reporting friends, 35% (n=30) a dealer's home, 9% (n=8) from a 'street dealer', 2% (n=2) from a mobile dealer, and 1% through home delivery. Again, only a small proportion (6%, n=5) used cannabis they had grown themselves last time they used the drug. Median time estimated as taken to score cannabis was 15 minutes (mode = 30 minutes, range 0 – 720 minutes, n=86) usually in the past 6 months, and 10 minutes (mode = 30 minutes, range 0 – 60 minutes, n=86) for the last time scored cannabis.

In 2002, IDU were asked about the source of the cannabis that they used last time they used the drug. The majority (64%, n=45) believed it to have been grown by small-time 'backyard' user/growers, with 28% (n=20) believed it to have been grown by a larger scale cultivator/supplier (such as a crime syndicate, or organised motor-cycle group), and 7% (n=5) growing their own cannabis. The majority of these IDU were very sure (80%, n=56), or at least moderately sure (13%, n=9), of the reported source of their cannabis[15].

7.3 Form and potency

The cannabis used in the past six months by those participating in the IDU survey was marijuana head (the flowering top sections of the female plant), with most cannabis-using IDU reporting some use of both hydroponically-grown (95%) and outdoor crops (or 'bush buds', 86%). Most reported a preference for hydroponically grown head, which was borne out by the finding that 71% reported this as the form of cannabis that they had most often used in the last six months, in comparison to 27% reporting predominant use of outdoor crops, and 1% reporting predominant use of hash oil. Reports made by key informants were in line with these patterns,

[15] Removing those IDU who did not report being very or moderately sure of the source of their cannabis, the proportions change to: 66% (n=43) small-time user/grower; 26% (n=17) large scale cultivator/supplier; 8% (n=5) grew own cannabis.

and use of cannabis leaf was almost non-existent among the groups the key informants were familiar with. Nineteen percent of the IDU sample had used hash, and 9% had used hash oil in the preceding six months, with one IDU reporting a brief period of increased availability of hash oil in mid 2002.

In concert with the reporting of predominant use of hydroponically grown cannabis, in 2001 Tasmania Police reported an increasing trend toward hydroponic, or indoor,[16] production of the drug. In 1999/00, approximately 12,700 Indian hemp plants were seized by Tasmania Police, of which 16% were grown hydroponically. In comparison, during 2000/01, 10,500 plants were seized, of which 38% were hydroponically cultivated, with this trend being continued into 2001/02, with 41% of the 12,000 plants seized in this period being hydroponically cultivated. Additionally, intelligence reports in 2001 from the three state Drug Investigation Services branches suggested that outdoor plantations of cannabis seem to be on the decrease.

All key informants reporting use of cannabis among their groups stated that the predominant method of cannabis use was smoking through 'buckets' or 'bongs' (water pipes) rather than 'joints' (cannabis cigarettes), although one indicated that use of 'buckets' was more common amongst younger users, and that 'joints' were more common amongst older users.

The potency of cannabis was generally rated as 'high' (61%, n=54; medium = 20%, n=18; fluctuating = 16%, n=14) by the IDU sample, with most respondents indicating that potency had remained stable (68%, n=58), had fluctuated (15%, n=13) or had been increasing (11%, n=9) over the preceding six-month period. Key informant reports were in concert with those of the IDU, indicating the potency of cannabis to be 'high' (100%, n=5) and stable (80%, n=4) or increasing (20%, n=1).

Seizures of cannabis by Tasmania Police are not analysed for potency, and as such no empirical data is available to examine trends in potency.

7.4 Patterns of cannabis use

7.4.1 Prevalence of cannabis use

The 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), which sampled 1031 Tasmanian residents, indicated that 37.5% had ever used cannabis, while 15.8% had used the drug in the 12 months prior to interview. These patterns were stable for both urban and rural survey participants. Of those urban respondents who had ever used cannabis, 6% reported using daily, 8% weekly, 11% monthly or every few months, and 13% used cannabis less often, with 56% not using during the 12 months prior to interview. Of those currently using cannabis, 55% obtained it from friends or acquaintances. Ten percent of participants further indicated that cannabis was their favourite drug (from a selection which also included tobacco and alcohol). Following a similar trend to the rest of the country, around 22% of Tasmanian participants indicated that they had been offered cannabis in this period.

Findings of the 2001 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2002) indicated a decline in the proportion of participants reporting recent use of cannabis, with 11.9% of the 1349 participants sampled reporting use of the drug in the year prior

[16] For the purpose of reporting, Tasmania Police record all cannabis plants seized that had been grown indoors as hydroponically cultivated, rather than just those plants that are grown without the use of soil.

to interview, down from 15.8% in the 1998 survey. Prevalence of cannabis use in the 12 month period prior to survey was estimated to be 22.1% in people aged between 14-24 (24.3% in males, 19.8% in females), 22.9% in 25-39 year olds (29.8% in males, 16.7% in females), and 3.4% in those aged 40 and above (4.3% males, 2.6% females).

The 1996 Australian School Students Alcohol and Drugs (ASSAD) Survey (Cancer Council of Tasmania, 1997) sampled 2,553 students in years 7 to 12 from schools across Tasmanian during the 1996 school year. Results indicated that 34% of 12-15 year olds (37% males, 31% females), and 54% of 16-17 year olds (57% males, 50% females) reported using cannabis at some stage in their lives. Eighteen percent of the 12-15 year olds, and 25% of the 16-17 year olds surveyed reported smoking cannabis in the month prior to interview. Within the 1999 sample of 2,671 students (Cancer Council of Tasmania, 2001), 30% of 12-15 year-olds (31% males, 28% females), and 48% of the 16-17 year olds surveyed (52% males, 42% females) surveyed reported using cannabis at some stage in their lives. In terms of recent use, 17% of the 12-15 year olds surveyed and 19% of the 16-17 year olds surveyed reported using cannabis in the month prior to interview. The main difference between the findings of the 1996 and 1999 studies was a statistically significant reduction in reported rates of both lifetime and recent use of cannabis between these samples. The rates of use reported in these surveys are somewhat elevated in comparison to the prevalence estimates reported in the 2001 National Drug Strategy Household Survey, but this may be expected given the more experimental nature of these younger age groups in comparison to the wider age range sampled in the Household survey.

Cannabis has made up the vast majority of positive urine screen tests amongst Tasmanian prison inmates since the inception of such screens in 1993. The proportion of all positive urine screens indicating cannabis use has remained at around 70-80% between 1997/98 and 2001/02, despite the number of positive tests more than doubling (from 97 in 1997/98, to 215 in 2000/01, although dropping to 136 in 2001/02) during this period. It should be noted that cannabis remains detectable for a longer period of time than most other drugs, and as such is the most likely drug to be identified in such screening procedures.

7.4.2 Current patterns of cannabis use

While cannabis was reported as the drug of choice for only 3% of the IDU sample, 91% of the entire sample reported some use of cannabis in the preceding six months. Of those who had used cannabis, the median frequency of use in the past six months was 180 days (range 1-180), which equates to daily use of the drug. The majority of cannabis users described by key informants also smoked cannabis daily, although younger cannabis users were regarded as using whenever available, which most likely reflects their more limited capacity to pay for the drug.

Many of the cannabis users who were known to the key informants were polydrug users. Other drugs that were used included ecstasy, benzodiazepines, amphetamines, morphine and methadone, although use was generally sporadic and limited to a small percentage of these groups. All key informants reported or suspected some level of cannabis use within the populations they had contact with.

7.4.3 Reported trends in patterns of cannabis use

While unlikely to be indicative of a trend, eight IDU reported that many of their friends had shifted from predominantly using cannabis towards injectable drugs such as methamphetamine in the preceding six months. Similarly, one key informant, a drug and alcohol counsellor, noted an increase in benzodiazepine use among the primary cannabis users they were working with.

7.4.4 Other trends

Following reports in previous years, one key informant, a police officer, noted anecdotal reports of cannabis dealers dipping cannabis head in battery acid prior to sale, with the rationale that it gave the cannabis a purple, resin-like appearance, and hence marketable as a particularly potent crop. However, there is no objective information available to support such reports.

7.4.5 Cannabis-related issues

Most key informants reported that there had been little change in trends within cannabis users over the past six months. However, key informants involved in drug treatment noted a continuing trend for a decreasing age of people seeking help for their cannabis use (n=1), an increase in people presenting with more complex problems, such as psychosis or 'personality disorders' (n=1), or that it appeared that an increasing number of individuals were seeking help for substance abuse due to secondary issues associated with cannabis use such as depression (anhedonia), anxiety (n=1) or relationship problems (n=1). One such key informant also noted an increasing number of females identifying their cannabis use as problematic.

Eight IDU and one key informant also noted an apparent increase in 'busts' of cannabis dealers by police in the six months prior to interview.

7.5 Summary

Table 26: Summary of cannabis trends

Price *Gram* *Quarter-Ounce* *Ounce*	 • $25, stable • $80, stable (most common purchase amount) • $250, stable
Availability	• Very easy to obtain • Stable availability
Potency	• High (based on IDU and key informant estimates) • Stable
Use	• Most widely used illicit drug • Indications of decreasing prevalence of use of cannabis in the State from two large studies (NSDS and ASSAD) • High level of daily use among IDU sample and groups discussed by key informants • Hydroponically-grown head increasingly preferred by users • Predominantly smoked using 'buckets' and 'bongs' (water pipes)
Other Trends	• Continuing trend of decreasing age and increasing complexity of presenting problems of cannabis users presenting for treatment

8 OPIOIDS

Sixteen key informants reported on groups of people who were primarily users of opioids; that is, populations that were using both diverted pharmaceutical morphine and methadone; either at equal frequency, or using one preferentially, but also regularly using the other depending on availability. When pressed to describe an illicit drug that was predominantly used among members of their group, five key informants indicated morphine, ten methadone, and one could still not separate the two opioids into a predominant and secondary drug within their group. Similar trends were noted among the IDU sample, with there being a large overlap between people reporting recent use of these drugs – of those who reported use of morphine in the six months prior to interview, 83% also reported use of methadone (Table 27). Additionally, of those who had used morphine in the six months prior to interview, 33% reported methadone as the drug they most often injected in the past month (39% reporting this as being morphine: Table 28). Because of this substantial level of overlap, trends for these drugs are discussed together here.

Table 27: Use of other drugs by those reporting use of morphine in the past six months (n=76)

Drug	% of morphine users reporting use	Median days used by those who had used the drug
Heroin	22%	6 (1-130)
Other Opioids	19%	2 (1-45)
Benzodiazepines	87%	30 (1-180)
Cannabis	93%	180 (1-180)
Methadone	83% (53% on MMT)	20* (those not on MMT) (1-180)
Methamphetamine *(any)*	85%	25 (2-180)
Powder	35%	5 (1-180)
Base/paste	67%	15 (1-180)
Crystal	21%	3 (1-72)
Homebake	7%	3 (1-6)

**Note: 'MMT' refers to methadone maintenance therapy*

Table 28: Drug of choice and drug most often injected among those reporting use of morphine in the past six months (n=76)

	Drug of choice	Drug most often injected
Heroin	42%	4%
Methadone	12%	33%
Morphine	17%	39%
Methamphetamine	18%	24%
Benzodiazepine	0%	0%

Key informants reporting on the use of opioids included needle and syringe outlet staff (n=4), youth workers (n=2), drug treatment nurses (n=3) and doctors (n=4), and pharmacists (n=3).

Key informants were familiar with users of opioids from all Hobart suburbs, but they were often from inner-city suburbs, or lower socio-economic areas from the eastern shore or northern suburbs. The majority of key informants described opioid users from a predominantly English-speaking background, ranging in age between 12 and 55 years, although most were in their twenties (early twenties in particular). A slight preponderance of males was noted among these groups. Most opioid users described by key informants had completed 9 to 10 years of schooling (although a wide range of education history was noted) and were currently unemployed.

Of the IDU sample, 98% reported they had tried morphine at some stage in their lives, and all but two of these had injected morphine. Seventy-six percent had used morphine in the past six months, with all but three injecting the drug in this time, and recent oral use only reported by 22% of the sample. Similar patterns of use were found for methadone, with 94% of the sample ever using the drug, almost all having injected (87 of 94 respondents). Of the 80 people reporting use of methadone in the past six months, almost all had injected the drug recently (76% of the sample), with a smaller proportion swallowing (71% of the sample).

The demographics of the group that had used opioids in the past six months was similar to that of other IDU (see Section 3.0) in terms of sex, age, cultural and educational background, treatment and employment status, prison history, frequency of injection and age of first injection. Participants who had used either drug in the past six months were more likely to report an opioid as their drug of choice than those who had not used an opioid, and those that were currently in methadone maintenance therapy were more likely to nominate methadone as the drug they most often injected in the past month.

Eighty-nine participants in the IDU sample could comment on aspects of price, purity and availability of morphine, with 67 respondents providing information on methadone trends.

8.1 Price

8.1.1 Morphine

Both key informants and IDU reported the market price of morphine as around $1 per milligram, the same price reported in previous IDRS reports. However, as indicated in Table 26 below, the modal price that users paid for their most recent purchase of the drug was generally lower than this figure. The majority of both IDU (66%, n=52) and key informants (86%, n=6) believed that these prices had remained stable over the preceding six months, although substantial proportions also reported a decrease in price during this period (22% of IDU, n=17; 14% of KI, n=1). Comparison of the modal prices for most recent purchases of the drug amongst the 2001 and 2002 IDRS survey respondents support reports of stable prices, although there may have been some decrease in price of 30mg MS Contin tablets, and a drop in the lowest price in the price range for 100mg MS Contin tablets and 50mg Kapanol capsules (Table 29). One key informant noted a clear difference in prices between different locations, with cheaper prices in Hobart and Glenorchy city in comparison to areas such as Clarence Plains, the latter reportedly adhering more strictly to the $1 per milligram price structure.

Table 29: Market prices of morphine reported by IDU and modal price for most recent purchase of particular forms of the drug (reported price range in parentheses).

	2000 IDRS		2001 IDRS		2002 IDRS	
Preparation	**Price**	**n**	**Price**	**n**	**Price**	**n**
Morphine $ per mg	$1	20	$1	8	$1	15
Morphine $ per 100mg	$80	2	$80	5	$75*	3
MS Contin						
10mg tablet	$8 ($3-15)	9	$5 ($5-10)	3	$7.50 ($5-10)	2
30mg tablet	$25 ($8-40)	41	$25 ($10-35)	42	$20 ($10-30)	45
60 mg tablet	$50 ($13-60)	62	$40/$50 ($18-60)	74	$50 ($18-60)	86
100mg tablet	$80 ($15-100)	54	$80 ($50-100)	68	$80 ($20-100)	73
Kapanol						
20mg capsule	$15 ($10-20)	16	$10 ($5-25)	14	$20 ($10-20)	14
50mg capsule	$40 ($15-50)	36	$40 ($25-50)	40	$40 ($15-50)	43
100mg capsule	$80 ($60-100)	12	$80 ($50-90)	31	$80 ($50-100)	36
Anamorph						
30mg tablet	$25 ($15-30)	29	$25 ($15-30)	26	$25 ($10-30)	44
Oxycontin						
40mg tablet	-	-	-	-	$15	1

**Median substituted for mode, as no single mode existed.*

8.1.2 Methadone

Both key informants and IDU reported the price of methadone as around $1 per milligram, the same price reported in previous IDRS reports. However, prices that IDU respondents reported paying for the were highly variable, and, as indicated in Table 27 below, the modal price that users paid for their most recent purchase of larger amounts of the drug was generally lower than the $1 per milligram figure. Since the nature of access to the drug does not easily allow for standard purchase amounts to be made, IDU were asked to report the amounts and costs of their most recent purchase of methadone, and these were divided into purchases of less than 80mg or 80mg and above, on the basis of a clear split in the data. Among those purchases of less than 80mg, the modal price paid by IDU was $1 per milligram, while modal prices for amounts 80mg and above were approximately 80 cents per milligram (Table 30). Although this appears to represent an increase in modal purchase prices for amounts greater than 80mg, it is likely that this fluctuation is more a reflection of the small sample size reporting on such amounts in 2001, as the modal price in 2001 reflected a smaller number of cases (n=15). The majority of IDU (68%, n=40) believed that these prices had remained stable over the preceding six months (15% increasing, n=9; 12% fluctuating, n=7), with single key informant reports of stable and decreasing prices in this time.

Table 30: Market prices of methadone reported by IDU and modal price for most recent purchase of particular forms of the drug (reported price range in parentheses).

	2000 IDRS		2001 IDRS		2002 IDRS	
Preparation	**Price**	**n**	**Price**	**n**	**Price**	**n**
Methadone $ per mg	$1	40	$1 ($0.4-1)	49	$1 ($0.5-1)	49
Methadone syrup						
Amounts less than 80mg	$1.0/mg ($0.5-1.0)	30	$1.0/mg ($0.5-1)	11	$1.0/mg ($0.4-1)	19
Amounts greater than 80mg	$0.8/mg ($0.5-1.2)	23	$0.55/mg ($0.3-1)	15	$0.8/mg ($0.4-0.9)	24
All purchase amounts	$1.0/mg ($0.5-1.2)	53	$1.0/mg ($0.3-1.0)	26	$1.0/mg ($0.4-1.0)	43
Physeptone						
5mg tablet	-	0	$7*($5-10)	3	$5	1
10mg tablet	$10 ($4-12)	17	$10 ($2-15)	53	$10 ($5-15)	53

8.2 Form

8.2.1 Morphine

IDU respondents were asked to nominate the preparation of morphine they had most often used in the preceding six months, 86% nominating MS Contin, 12% Kapanol, and 2% liquid morphine (Ordine[17]). This pattern was supported by eight key informants (with a further KI reporting Kapanol as more freely available to the IDU they worked with than MS Contin), and is in concert with the patterns reported in previous IDRS reports. In 2000, availability of Anamorph was noted as increasing, and was the third most commonly used pharmaceutical morphine by the IDU sample. However, Kapanol was noted as decreasing in availability in the 2001 IDRS, a trend that appears to have continued into 2002, with Ordine taking its place in this hierarchy or morphine availability. All but one of the 76 IDU that had used morphine in the six months prior to interview had accessed this from illicit sources, with only three using licitly-accessed morphine in this period. All but two of the IDU using morphine reported they had predominantly accessed morphine from illicit[18] sources in the past six months.

8.2.2 Methadone

Seventy-five percent of the IDU sample had reported use of methadone syrup in the past six months, the majority of whom had been on a methadone maintenance program within this time (n=55, 73%). Of those that had used methadone syrup, 73% had accessed this licitly, with 60% purchasing diverted methadone syrup at some stage in the preceding six months. However, the majority of people using methadone syrup had most commonly accessed the drug licitly in the preceding six months (68% most commonly accessed licit methadone syrup, 15% most commonly accessed diverted syrup).

Use of the tablet preparation of methadone, Physeptone, was reported in a lower percentage of the sample (56% of the sample, and 70% of those reporting recent use of methadone) in the

[17] Ordine is morphine.hydrochloride in aqueous (water) solution, and contains sugar as a preservative.
[18] During interviewing, 'licit means' was defined as having the drug prescribed directly to the individual, whether appropriate or otherwise. By this definition, doctor shopping would be considered as 'licit means'.

preceding six months. Of the 56 individuals who reported use of Physeptone tablets, this was primarily accessed illicitly (by 52 individuals), with only 5 IDU accessing the drug via licit means. This level of recent use of Physeptone, by 56% of the sample, represents a continuation of an increasing trend noted in 2001, where 42% of the sample reported use of the drug, up from 30% in 2000.

When asked to describe the form of methadone they had predominantly used in the preceding six months, 63% (n=51) indicated licit methadone syrup, 14% (n=11) illicit methadone syrup, 20% (n=16) illicit physeptone tablets, and 3% (n=2) licit physeptone tablets.

8.3 Availability

8.3.1 Morphine

The majority of the IDU sample who commented on trends reported that morphine was easy or very easy to for them to obtain (92%: 43% easy, 49% very easy), and that the availability of morphine had remained stable (72%) in the past six months (with minorities reporting decreasing availability: 12%; increasing availability: 8%; and fluctuating availability: 7%). In line with IDU reports, all key informants thought that morphine was easy or very easy to obtain (86% very easy, n=11/13), and that this availability had remained stable (79%, n=11) or become easier to access (21%, n=3) during the past six months. Three key informants also reported an increase in availability of liquid morphine (Ordine) in the preceding six months.

Among this sample, IDU reported usually purchasing morphine in the past six months from a friend (30%, n=22), with slightly smaller proportions reporting usually accessing from a dealer's home (26%, n=19), a mobile dealer (24%, n=18), or a street dealer (20%, n=15). A similar pattern emerged when people were asked who they purchased the drug from last time they bought morphine, with 31% (n=23) reporting via friends, 26% (n=19) through a mobile dealer, 23% (n=17) from a dealer's home, and 20% (n=15) from a street dealer. Median time estimated as taken to score morphine was 30 minutes (mode = 30 minutes, range 0 – 1,440 minutes, n=75) usually in the past 6 months, but just 15 minutes (mode = 30 minutes, range 0 – 1,440 minutes, n=74) for the last time scored morphine.

Seizures of morphine and other narcotic pills by Tasmania Police have remained reasonably stable between 1999/00 and 2001/01: 215 tablets (100 of these being morphine) in 1999/00; 322 tablets in 2000/01 (21 morphine tablets); and 254 tablets (63 morphine) in 2001/02, a finding in support of IDU reports of stable availability of these drugs over these years.

8.3.2 Methadone

The majority of the IDU respondents regarded methadone as easy or very easy for them to obtain (62%: easy 33%, very easy 28%), although such easy access would be expected given the high proportion of IDU currently involved in methadone maintenance therapy, and hence receiving the drug via licit means. However, counter-intuitively, those IDU that had not been involved in methadone maintenance treatment were more likely to report availability of the drug as very easy (52% of those not in treatment, 14% of those receiving treatment). The majority of the IDU sample reporting trends (66%) believed that the availability of methadone had remained stable over the past six months, although 27% indicated that it was more difficult to access. Key informants reported similar trends, with 5 reporting that it was easy (n=4) or very easy (n=1) to access, and that availability was stable (n=2), with one key informant reporting availability had

decreased and increased respectively. Specifically referring to trends in the availability of physeptone, there were single key informant reports of easy and very availability of this form of methadone, with three key informants noting that availability of Physeptone had increased in the preceding six months (one reporting a decreased availability).

Most IDU reported usually purchasing methadone in the past six months from a friend (68%, n=40), with smaller proportions reporting usually accessing from a street dealer (19%, n=11), a dealer's home (10%, n=6), or through a mobile dealer (3%, n=2). A similar pattern emerged when people were asked who they purchased the drug from last time they bought methadone, with 75% (n=41) reporting friends, 13% (n=7) a street dealer, 7% (n=4) a dealer's home, and 5% (n=3) through a mobile dealer. IDU reported usually taking 60 minutes to score methadone in the preceding six months (mode = 120 minutes, range 0 – 2,880 minutes, n=57) usually in the past 6 months, but just 30 minutes (mode = 30 minutes, range 0 – 2,880 minutes, n=56) the last time they scored methadone. IDU respondents were also asked what their usual source of methadone was, with the majority reporting that they usually purchased 'takeaway'[19] doses (85%), although of concern is the finding that 15% did not know the source of their methadone. However, none had knowingly purchased other person's doses that had been spat out, and were often quite adamant that they would not do so. In contrast to this, one key informant, who was in regular contact with a large number of IDU, indicated that there continued to be some purchasing and use of spat out doses of methadone amongst their client group.

In the 2001 IDRS, one key informant, a user group representative, and two IDU, reported a trading system amongst a group of IDU on the methadone program, where, when people picked up two or three 'takeaway' doses of methadone, some people would give the doses not required for that day to friends, with the expectation of reciprocation later in the week. This system protects users from 'bingeing' and using all their takeaway doses in one day, thus having to find a replacement opioid to hold them until their next methadone dose. Such a system is also beneficial in that it does not involve selling of takeaway methadone doses, which may otherwise give people who were not on the program access to the drug. Similar 'in kind' and pre-organised systems were described in 2002, and this may be reflected in the comparisons of pathways to access of illicit methadone (Table 31) between those involved in methadone treatment and those who were not: almost all methadone patients reported accessing their last illicit methadone through a friend, while purchases through 'street dealers' – most commonly methadone program clients approached outside a pharmacy for their takeaway dose – were more common among those not currently receiving methadone maintenance.

It is also worth noting that the majority of those who were not in the methadone program (60%) reported that the form of methadone that they had predominantly used in the preceding six months was Physeptone tablets, rather than diverted methadone syrup (Table 31).

[19] Within the Tasmanian Methadone Maintenance Program, individuals predominantly receive their daily doses in a supervised manner. However, where appropriate, prescribers may authorise a limited number of 'takeaway' doses, where daily doses can be picked up in advance and consumed as is convenient for the individual.

Table 31: Pathways to illicit methadone access

	Methadone Maintenance Patients* (n=55)	Not in Methadone Maintenance (n=25)
Illicit purchase		
Illicit methadone syrup	45% (n=25)	80% (n=20)
Illicit Physeptone tablets	60% (n=33)	76% (n=19)
Methadone form most commonly used in last six months		
Licit methadone syrup	93% (n=51)	-
Illicit methadone syrup	2% (n=1)	40% (n=10)
Licit Physeptone tablets	-	8% (n=2)
Illicit Physeptone tablets	5% (n=3)	52% (n=13)
Source of last illicit syrup#		
Take-away dose	90% (n=26)	79% (n=15)
Didn't know source	10% (n=3)	21% (n=4)
Usual source of illicit purchase#		
Friend	70% (n=26)	64% (n=14)
Street dealer	14% (n=5)	26% (n=6)
Dealer's home	14% (n=5)	5% (n=1)
Mobile dealer	2% (n=1)	5% (n=1)
Median time to 'score'	60 min (range 5-2,880 min)	30 min (range 0-1,440 min)
Last source of illicit purchase#		
Friend	82% (n=28)	62% (n=13)
Street dealer	6% (n=2)	24% (n=5)
Dealer's home	9% (n=3)	5% (n=1)
Mobile dealer	3% (n=1)	9% (n=2)
Median time to 'score'	30 min (range 0-2,880 min)	30 min (range 0-1,880 min)
Use		
Injected methadone in past 6 months	95% (n=52)	96% (n=24)
Median days used methadone	180	24

**at any time in the preceding six months; #for those reporting source*

8.4 Patterns Of Opioid Use

8.4.1 Prevalence of opioid use

Of the 1031 Tasmanian residents participating in the 1988 National Drug Household Survey (Australian Institute of Health and Welfare, 1999), 0.7% (n=4) reported ever using methadone, with only 0.6% (n=3) of respondents reporting use of this drug in the 12 months prior to interview. Similarly, in the 2001 National Drug Household Survey (n=1,349: Australian Institute of Health and Welfare, 2002), 0.1% (n=1) of respondents reported using methadone for non-maintenance purposes, and 0.7% (n=9) reported using other opiates for non-medical purposes in the year prior to interview. These low rates of users make it difficult to meaningfully detect trends in use.

Data from clients of non-pharmacy Needle Availability Program outlets reporting an opioid as the drug they most often inject have been highly variable over the past six years (Figure 2), due primarily to clients nominating the catch-all 'opiates-narcotics' category rather than specifying a specific single drug. When this data is collapsed, a trend to increasing levels of opioid use becomes clearer, with the percentage of clients reporting opioids (excluding heroin) as the drug they most often injected steadily increasing from 32.1% in 1996/97, 40.4% in 1997/98, 43.1% in 1998/99, 46.8% in 1999/00 to 56.6% in 2000/01, and stabilising in 2001/02 to 53.0%. Also noteworthy is the indication that, although injection of morphine had consistently been reported as more popular than injection of methadone to 1998/99, popularity of both drugs was equivalent in 1999/00, and in 2000/01, methadone was more commonly reported substance, a trend continuing into 2001/02. These, however, may not be new trends, as responses in the opiates/narcotics category may have masked the true level of injection of methadone in previous years.

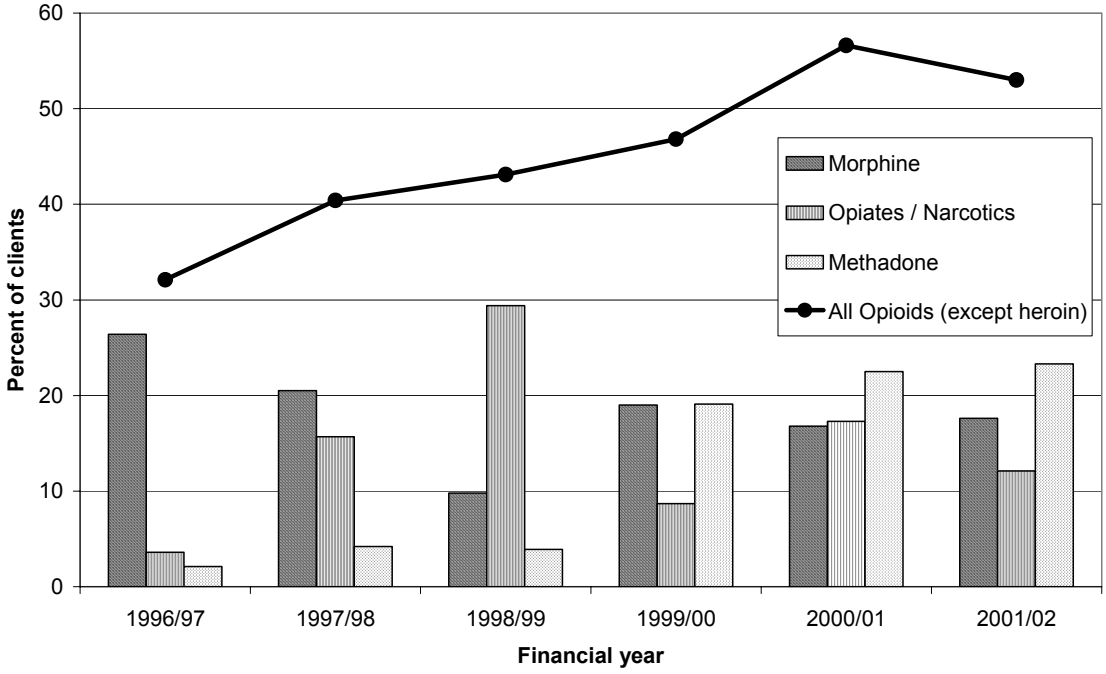


Figure 2: Percentages of opioids reported as 'drug most often injected' by Tasmanian Needle Availability Program clients, 1996/97-2001/02

Source: Sexual Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs) has reported opioids as the last drug injected of 50% or more of their Tasmanian participants for their 1996-2001 surveys (Table 32). However, given that these studies only sampled 18, 23, 51, 25, 27 and 28 clients respectively, these figures should be interpreted with caution.

Table 32: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within "last drug injected", 1996-2001

	1996		1997		1998		1999*		2000*		2001*	
	n	%	n	%	n	%	n	%	n	%	n	%
Heroin	1	6	0	0	5	10	2	4	6	22	3	11
Methadone	5	28	10	43	17	33	11	46	9	33	11	39
Morphine	6	33	4	17	10	20	5	26	8	30	11	39
Total Sample Size	18		23		51		25		27		28	

Source: National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs.

*Note: during the 1999 and 2000 surveys 16% (n=4), 11% (n=3) and 18% (n=5) participants respectively reported using some combination of opioids, and percentages have been adjusted accordingly to reflect this.

There has been a steady growth in the number of clients on Tasmania's methadone maintenance program since 1995. Currently there are around 480 daily recipients of methadone, more than treble the number on the program in 1995. However, this increase in numbers is likely to primarily reflect the long-term nature of methadone maintenance therapy, as the number of new applications for the program has remained consistent between 1997-2001 (approximately 200 new applications per annum). In 2001/02, there was a drop in this number of new admissions to methadone maintenance to 148 (Figure 4), the difference partially accounted for by the number of new admissions to buprenorphine maintenance (n=23 in 2001/02), which was made available as a treatment option for the first time in 2000/01. Figure 4 indicates an apparent increase in new admissions to maintenance pharmacotherapies in 2000/01, but this primarily reflects an influx of individuals that were previously receiving treatment with methadone switching to buprenorphine.

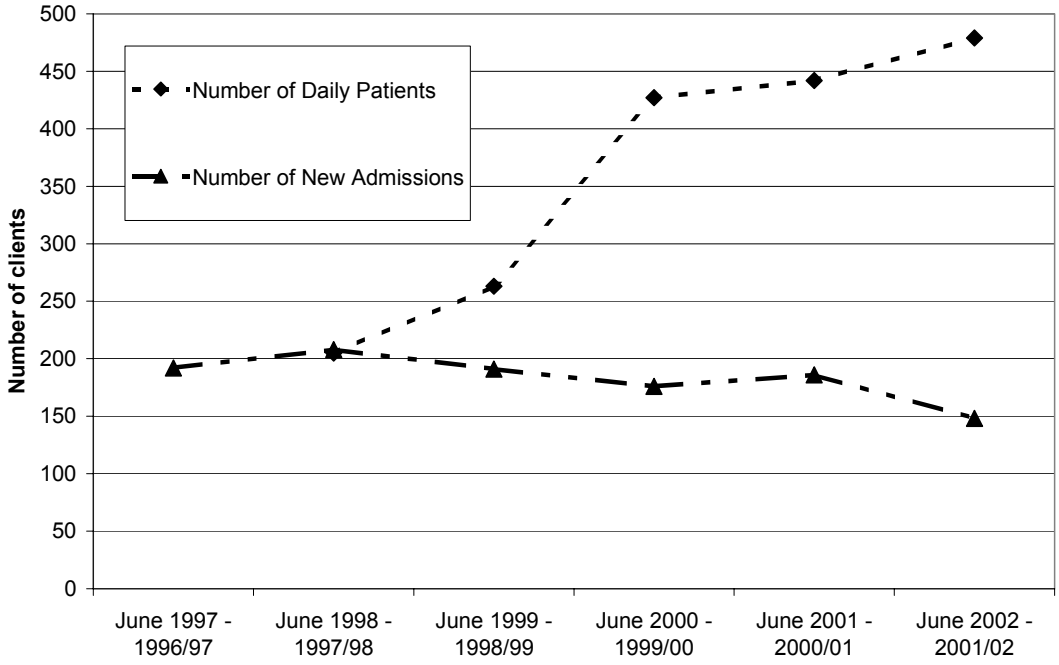


Figure 3: Growth of the Tasmanian methadone maintenance program, 1995-2002

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

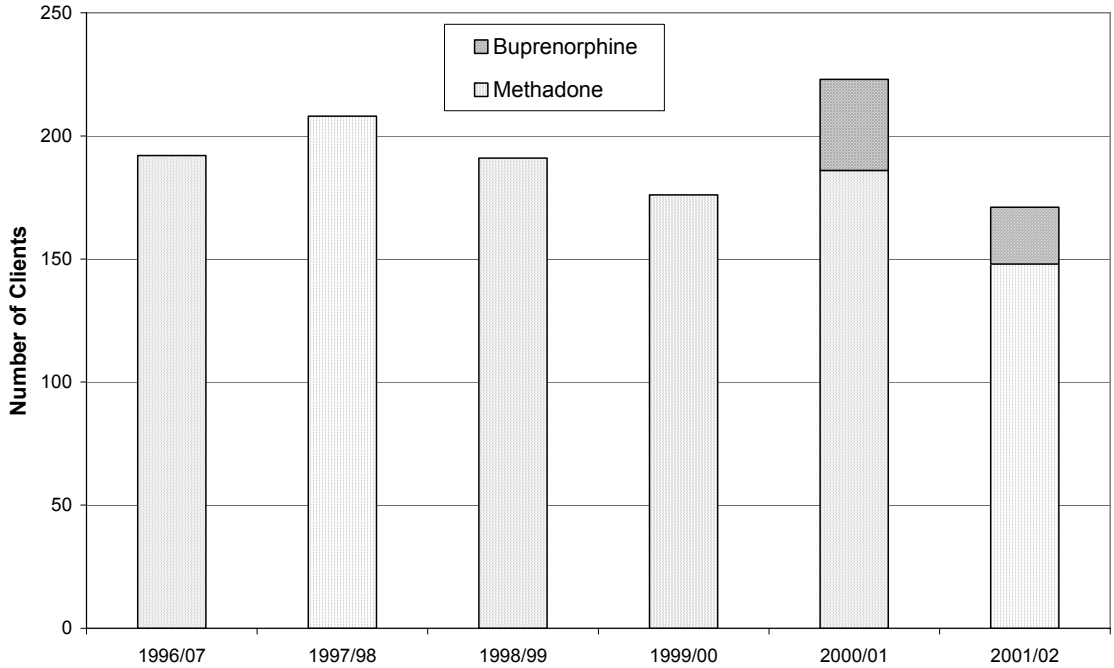


Figure 4: New admissions to maintenance pharmacotherapy treatments in Tasmania, 1995-2002

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

Tasmanian prescription rates for Schedule 8 pharmaceuticals[20] since 1991 were also provided by Pharmaceutical Services (DHHS). During this time, Tasmanian consumption of morphine has been consistently 120% or more of the national average, and increasing over recent years to 133% in 2001, while national use has stabilised (Figure 5). Following this trend of increasing prescription of morphine within the state, the number of applications received by Tasmanian Pharmaceutical Services for approval to prescribe narcotics[21] has steadily increased from 351 in 1989/90 to over 2000 applications in 2001/02[22] (Figure 6).

In contrast, despite the use of methadone syrup amongst a large proportion of the IDU sample in all three Tasmanian IDRS studies, local rates of consumption of methadone syrup has been continuously below that of the national average in the past ten years (Figure 7). These proportions are distorted, however, by the high numbers of methadone maintenance patients in New South Wales. Noteworthy also is the sharp decline in consumption of methadone syrup nationally in 2001, possibly associated with the wide introduction of buprenorphine maintenance treatment. In contrast to the trend for use of methadone syrup, Tasmanian consumption of methadone 10 mg tablets has been consistently above 200% that of the national average since 1992 (Figure 8) with a rapid increase over the past few years. It is worth noting that increasing numbers of IDU surveyed in the Tasmanian IDRS studies have reported recent use of 10mg Physeptone (methadone) tablets (30% in 2000, 42% in 2001, 56% in 2002), following this general trend. When these two trends are combined, overall rates of consumption of methadone in the state remain consistently below that of the Australian average (although the gap has been progressively decreasing over time - Figure 9).

While a proportion of these differences in consumption rates can be accounted for by prescription practices and the aging nature of the Tasmanian population, it does, however, indicate a certain willingness to prescribe tablet opioids among Tasmanian doctors. This said, these practices do not seem to apply to the injecting drug user population, as a near-negligible proportion of IDU reported accessing opioids via licit means[23] in the six months prior to interview: with the exception of methadone as part of a maintenance program, only 8 IDU reported accessing morphine or methadone tablets via licit means in this time.

[20] Pharmaceuticals classed under Schedule 8 are variously classed as narcotic substances or drugs of addiction / dependence in differing jurisdictions.

[21] 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

[22] 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.

[23] 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.

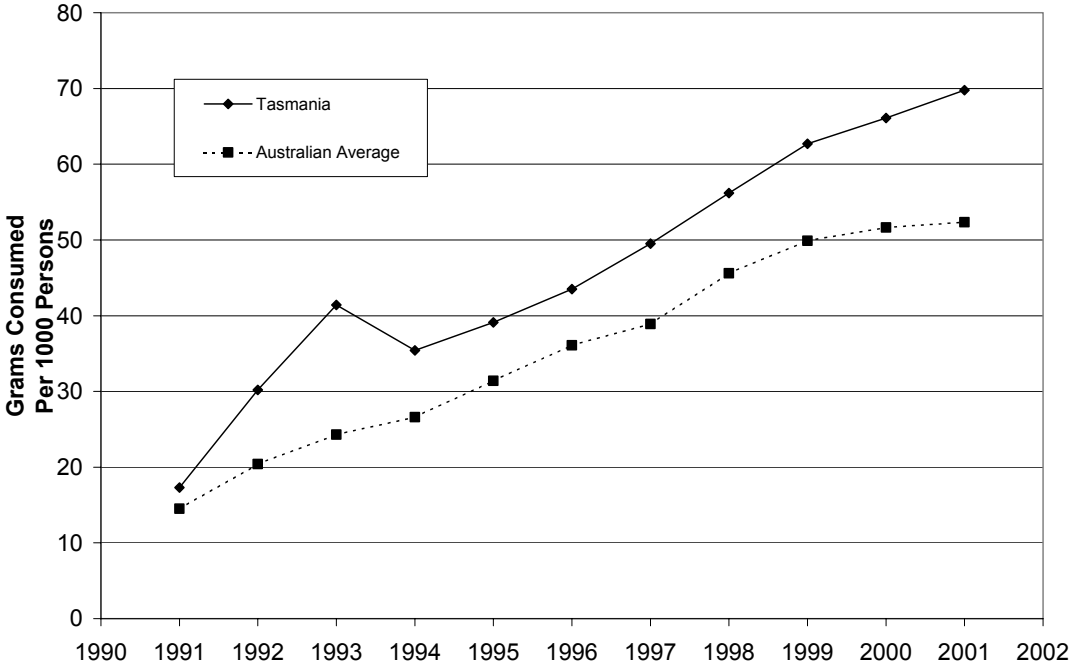


Figure 5: Consumption of morphine per 1000 persons, 1991-2001

Source: Pharmaceutical Services, Department of Health and Human Services

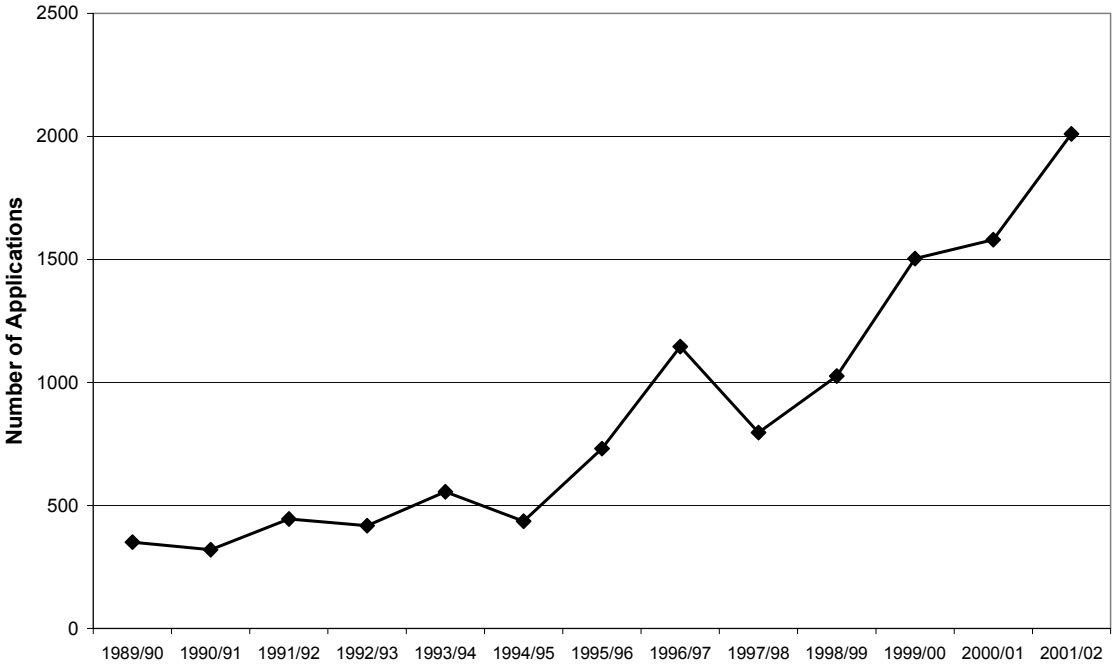


Figure 6: S22 applications received by Pharmaceutical Services, Tasmania: 1989-2001

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

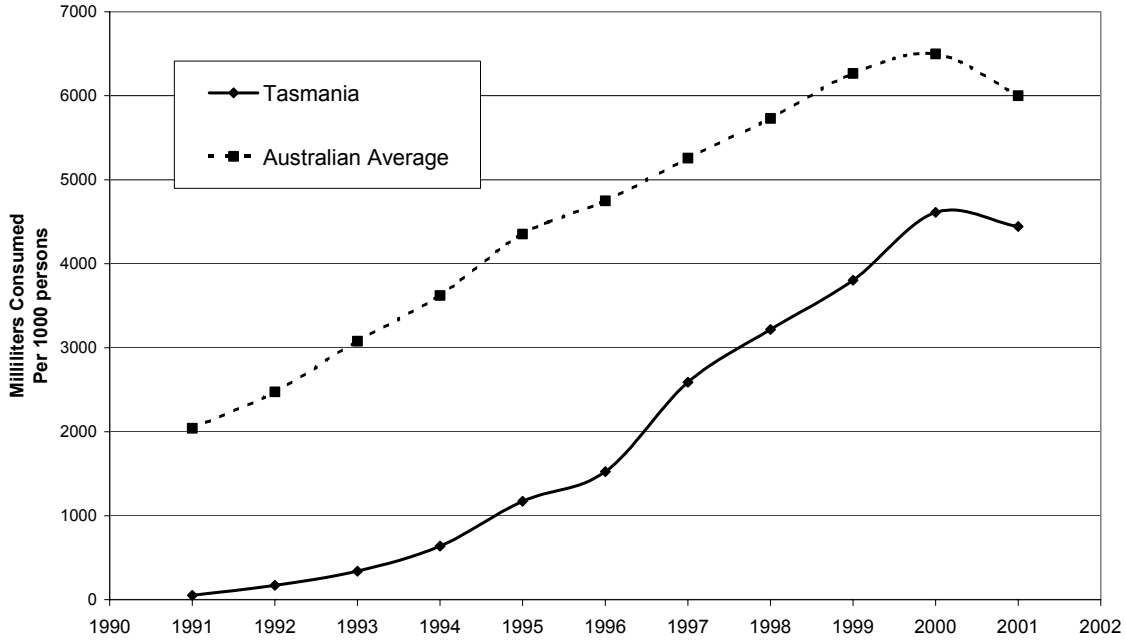


Figure 7: Consumption of methadone syrup per 1000 persons, 1991-2001
Source: Pharmaceutical Services, Department of Health and Human Services

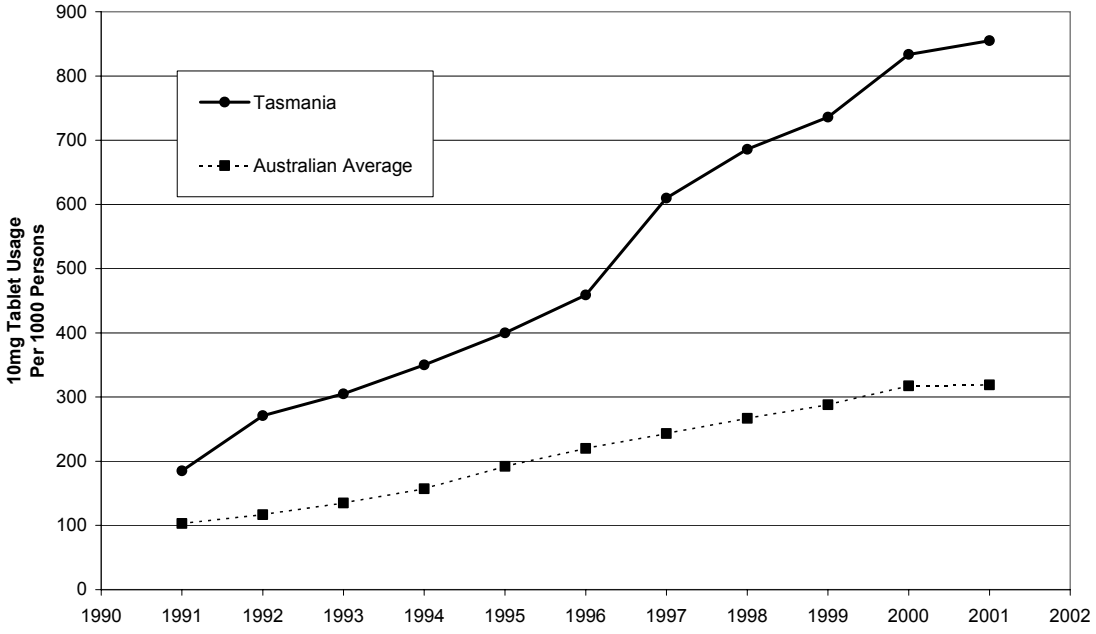


Figure 8: Consumption of methadone 10mg tablets per 1000 persons, 1991-2001
Source: Pharmaceutical Services, Department of Health and Human Services

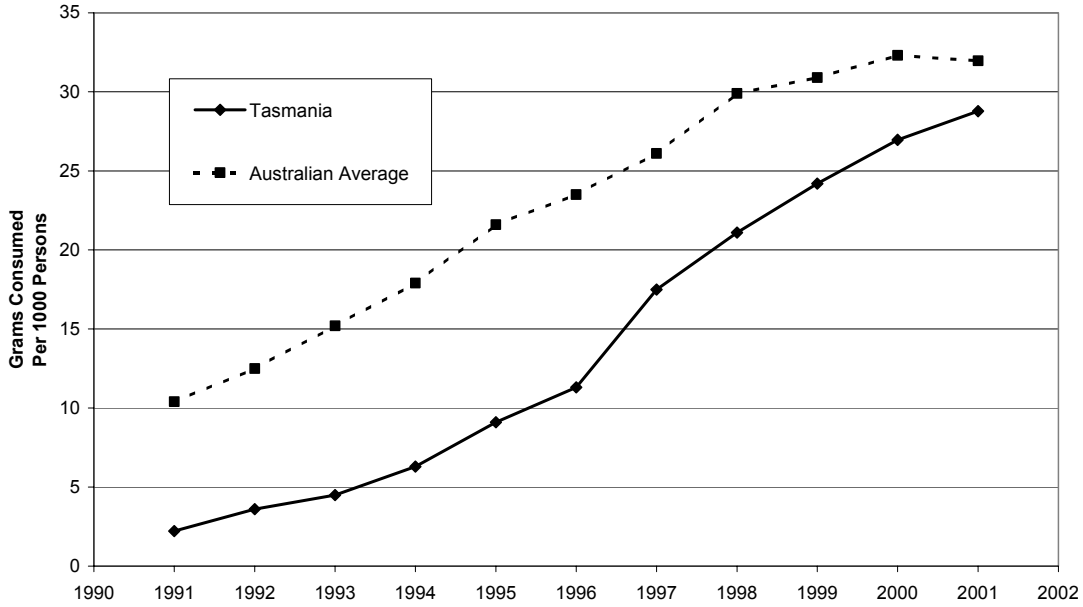


Figure 9: Consumption of methadone per 1000 persons, 1991-2001
Source: Pharmaceutical Services, Department of Health and Human Services

In the 2001/02 financial year, 34 arrests (23 consumers, 11 providers) were made by Tasmania Police involving offences relating to opioids (including heroin and other narcotics[24]), a pattern which appears reasonably stable in comparison to 17 arrests (13 consumers, 4 providers) in 2000/01[25], 19 arrests (14 consumers, 5 providers), in 1999/00, 25 arrests (24 consumers, 1 provider) in 1998/99, 16 arrests (15 consumers, 1 provider) in 1997/98 and 28 arrests (24 consumers, 5 providers) in 1996/97.

8.4.2 Current patterns of opioid use

Morphine

Morphine was reported as the drug of choice of 13% of the IDU sample, with 76% of the entire sample reporting some use of morphine in the preceding six months. Of those who had used morphine, the median frequency of use in the past six months was 24 days (range 1-180), which equates to slightly less than weekly use of the drug. Morphine was reported as the last drug injected prior to interview for 25% of the IDU sample, and as the drug most injected for 30% in the past month. These figures are quite closely comparable to those seen among the 2001 IDRS sample, with the exception of a slightly lower median days of use (31 days in the preceding six months for the 2001 sample) and an increased proportion of the sample reporting it as the drug they had most often injected in the preceding month (20% in 2001).

[24] For recording purposes, Tasmania Police class any Schedule 8 drug as 'Narcotic'. Schedule 8 drugs are "Drugs of Addiction".
[25] Arrest data quoted here may differ slightly from figures reported in the ABCI annual 'Australian Illicit Drug Reports', as some opioid-related data may be classified there under 'other drugs'. Data here reflects that provided by Tasmania Police State Intelligence Services.

Methadone

Methadone was reported as the drug of choice of 13% of the IDU sample, with 80% of the entire sample reporting some use of methadone in the preceding six months. Of those who had used methadone and were not currently in methadone maintenance therapy, the median frequency of use in the past six months was 24 days (range 1-180), while those on the program were generally using methadone daily. Methadone was reported as the last drug injected prior to interview for 35% of the IDU sample, and as the drug most injected for 39% in the past month. These proportions all represent slight decreases in comparison to those sampled in the 2001 survey, with the exception of the median frequency of use of methadone (24 days in 2002, 6 days in 2001). This upward trend in frequency is likely to reflect the increased availability and use of Physeptone tablets rather than any substantial increase in diversion of methadone syrup, particularly when the fact that 60% of those using methadone but not involved in methadone maintenance treatment had predominantly accessed Physeptone tablets rather than methadone syrup (Table 31), and moreover that the median days used methadone was 48 (range 1-180) within this group, in comparison to 18 days (range 4-153) within those that had predominantly used illicit methadone syrup in the preceding six months and were not enrolled in a methadone maintenance program.

Methadone was injected in the preceding six months by almost all of those reporting use of the drug in this time (95%: n=76/80), and, while non-significant, a trend was shown (p=0.1) indicating that the mean age of those that had recently injected the drug (27.6 years) may be lower than those that had used, but not injected, methadone (33.5 years).

Primary users of opioids were reported by key informants to have a high level of polydrug use, with regular use of cannabis, methamphetamine, and benzodiazepines. While oral use of benzodiazepines was predominant among these groups, key informants also reported substantial levels of intravenous use of benzodiazepines, especially of Normison (temazepam, n=4). These reports are supported by the substance use trends seen in the IDU sample (see Table 27 and 28).

8.4.3 Trends in patterns of opioid use

Multiple trends in opioid use were noted by both key informants and IDU respondents. Six IDU reported an increase in the number of people using morphine; while 8 IDU reported an increase in the number of people they were associated with starting to use methadone or going into methadone maintenance therapy, and 9 IDU noted more of their friends shifting from regular morphine use to starting on methadone maintenance. An increase in the number of younger users of both morphine (13-18 year olds, reported by 7 IDU and 2 key informants) and methadone (people 17-20, reported by 5 IDU and 2 key informants) was also commonly noted. Use in greater amounts or at greater frequency was reported by four key informants in relation to both morphine and methadone users respectively, however, four IDU also noted decreases in the amount of morphine used. Twelve IDU further noted more of their associates shifting from primary opioid use to primary methamphetamine use, due to the quality and easy availability of the drug, and in two cases, due to problems with accessing methadone.

8.4.4 Opioid-related issues

Two key informants and one IDU noted an increase in poly-substance use among opiate-using IDU (switching between methadone, morphine, benzodiazepines, alcohol and cannabis depending on availability, or using these to 'top up' the effects of another drug), which is of concern given the increased risk of overdose when alcohol or benzodiazepines are used in conjunction with opioids. Consistent with this, five IDU noted that they had witnessed non-fatal overdoses in the preceding six months that were associated with combinations of opioids and benzodiazepines.

Two key informants, both needle availability program workers, reported with some concern a continuation of the 'shake and bang' process among some users of Physeptone tablets, where IDU simply shake the pills in a syringe filled with warm water, and rapidly inject this product. This process is highly likely to cause vascular damage to the user. Five key informants noted a stable rate of injection-related problems among the opiate-using injecting drug users that they were working with, but were pleased to note that there had been a decrease in the numbers of severe problems they had seen in the preceding six months (although these were still occurring). One key informant, a methadone prescriber with a large client base, noted an increasing number of people feeling 'sick' from injection of methadone syrup, possibly due to the increased dilution of these doses in the past 12 months (8 IDU reported experiencing such a 'dirty hit' in the month prior to interview).

Three key informants noted an increase in hassling of methadone maintenance patients for their take-away doses of the drug, both inside and outside pharmacies. Finally, nine IDU reported an increase in 'busts' of morphine dealers in the preceding six months, with a further two noting an increase in 'busts' of people selling methadone in this time.

8.5 Summary

Table 33: Summary of trends in opioid use

	Morphine	Methadone
Price	• $1/mg, stable or decreasing • $80/100mg, stable or decreasing	• $1/mg, stable • $80/100mg, stable
Availability	• Easy to very easy • Stable	• Easy to very easy • Stable
Form	• MS Contin predominant • Ordine use may be increasing	• Physeptone tablets the predominant form used among those not in methadone maintenance treatment • Increasing use of Physeptone tablets
Use	• Relatively stable patterns of use over both classes of opioids (comparing 2001 and 2002 IDRS surveys) • Increase in younger people (teen-age) using opioids	
Other trends	• Anecdotal reports suggesting many users changing from being primary users of opioids to being primary users of methamphetamine • Some concern with injection practice of some IDU using Physeptone	

9 BENZODIAZEPINES

Almost all (96%) of the IDU sample had used benzodiazepines at some stage in their lives. Similarly, 94% had ever swallowed benzodiazepines, with 80% swallowing in the past six months. While this indicates a particularly high level of use of these drugs amongst IDU, of particular note is the fact that 63% of the sample had ever injected benzodiazepines, with 38% injecting in the six months prior to interview. Similar rates of injection were seen in the 2001 and 2000 Tasmanian survey participants (67% and 61% ever injected, 37% and 37% in the six months prior to interview respectively in 2001 and 2000), and are very high in comparison to benzodiazepine injection rates reported in other jurisdictions (in the 2001 IDRS, recent injection of benzodiazepines over all those surveyed nationally was 24%, with only 41% ever injecting the drug: Topp et al, 2002).

Demographic patterns of those that had used benzodiazepines in the past 6 months were generally similar to those of other IDU (see Section 3.1), in terms of age, sex, cultural background, education, treatment and prison history, employment status, age of first injection and frequency of injection. However, those that had used benzodiazepines were more likely to report a central nervous system depressant as their drug of choice or as the drug they most often injected in the past month. Similar trends were found in comparisons between individuals who had injected benzodiazepines in the six months prior to interview and those that had not, with the exception that those that reported recently injecting benzodiazepines had a significantly greater number of years of education (10.5 years vs. 9.7 years respectively: Mann-Whitney U = 875.0, p=0.027) and were significantly *less* likely to have a prison history (15.8% vs. 43.5% had a prison history respectively: χ^2 (1, n=100) = 7.0, p=0.008, after correction for continuity) than those who had not used or had only swallowed benzodiazepines. These trends again held in comparisons between benzodiazepine users that had recently injected the drug and those that had not[26]. Frequency of use of benzodiazepines was a median of 30 days in the past six months among those using the drug (range 1-180), slightly reduced when compared to the median frequency of use amongst the 2001 IDRS sample (48 days, range 1-180).

High levels of oral benzodiazepine use in the last six months were seen among those IDU who had most often injected methadone (85%), morphine (87%) and methamphetamine (67%), with injection of benzodiazepines more common among regular users of methadone and morphine (Table 34). Key informants reported similar patterns of use among the groups they had most contact with, reporting use among primary users of cannabis (n=2 of 6 key informants), where use of the drug was predominantly oral; and use among primary users of methamphetamine (n=6 of 8 key informants), reporting some intravenous use, but it was still predominantly swallowed, particularly for 'coming down' from methamphetamine use. Key informants also noted relatively high levels of injection of benzodiazepines among primary opioid users (n=11 of 16 key informants), with several key informants indicating that people in this group would often use benzodiazepines as a second-line drug if their opioid of choice were unavailable.

[26] Those that reported recently injecting benzodiazepines had a significantly greater number of years of education (10.5 years vs. 9.7 years respectively: Mann-Whitney U = 620.5, p=0.027) and were significantly *less* likely to have a prison history (16.0% vs. 40.0% had a prison history respectively: χ^2 (1, n=100) = 4.76, p=0.029, after correction for continuity) than those who had only swallowed benzodiazepines.

Table 34: Patterns of use of benzodiazepines amongst primary users of other drugs in the IDU sample *(n=100, number of respondents in parentheses)*

Drug most injected in the past month	Swallowed benzodiazepines in past 6 months	Injected benzodiazepines in the past 6 months
Methadone (n=39)	85% (n=33)	49% (n=19)
Morphine (n=30)	87% (n=26)	37% (n=11)
Methamphetamine (n=27)	67% (n=18)	26% (n=7)

When asked to nominate the main type of benzodiazepine used in the past six months, diazepam (Valium, 59%) and temazepam (24%: Normison, 16%, Temaze, 8%) were most common, with lower levels of primary use of oxazepam (5%: Serepax, 4%; Alepam 1%), alprazolam (Xanax, 2%), nitrazepam (3%: Mogadon, 2%; Alodorm, 1%) and flunitrazepam (6%: Rohypnol, 4%, Hypnodorm, 2%). Examination of Table 35 clearly indicates that, as per trends in 2001, Valium (diazepam) is the most commonly used benzodiazepine among those swallowing the drug (used by 78% of those swallowing a benzodiazepine in the preceding six months). However, Normison and other brands of temazepam in gel capsule formulations was more commonly used among those injecting benzodiazepines (53% injecting Normison, 47% Temaze, 24% Euhypnos, in comparison to only 16% injecting Valium: Table 36). This pattern fits with reports from key informants that temazepam continued to be the most commonly injected benzodiazepine, while diazepam was the most commonly used benzodiazepine overall.

Table 35: Recent oral benzodiazepine use

Benzodiazepine	Proportion using this benzodiazepine/brand orally in the preceding six[#] months	
	2001 IDRS (n=74)	2002 IDRS (n=80)
Kalma (*alprazolam)*	-	8% *(n=6)*
Xanax (*alprazolam)*	16% *(n=12)*	14% *(n=11)*
Lexotan *(bromazepam)*	-	3% *(n=2)*
Paxam (*clonazepam)*	-	3% *(n=2)*
Rivotril (*clonazepam)*	8% *(n=6)*	8% *(n=6)*
Antenex (*diazepam)*	12% *(n=9)*	19% *(n=15)*
Diazemuls (*diazepam)*	3% *(n=2)*	-
Ducene (*diazepam)*	8% *(n=6)*	5% *(n=4)*
Valium (*diazepam)*	84% *(n=62)*	73% *(n=58)*
Hypnodorm (*flunitrazepam)*	5% *(n=4)*	10% *(n=8)*
Rohypnol (*flunitrazepam)*	24% *(n=18)*	-
Alodorm (*nitrazepam)*	1% *(n=1)*	5% *(n=4)*
Mogadon (*nitrazepam)*	34% *(n=25)*	20% *(n=16)*
Alepam (*oxazepam)*	1% *(n=1)*	5% *(n=4)*
Murelax (*oxazepam)*	5% *(n=4)*	1% *(n=1)*
Serepax (*oxazepam)*	36% *(n=27)*	31% *(n=25)*
Euhypnos* (*temazepam)*	4% *(n=3)*	5% *(n=4)*
Normison* (*temazepam)*	45% *(n=33)*	21% *(n=17)*
Temaze* (*temazepam)*	18% *(n=13)*	30% *(n=24)*
Temtabs (*temazepam)*	-	9% *(n=7)*

**signifies those benzodiazepines available in gel capsule formulation; [#]2002 data is for the five-month period Jan-April, and June, 2002*

Table 36: Recent intravenous benzodiazepine use

Benzodiazepine	Proportion using this benzodiazepine/brand intravenously in the preceding six[#] months	
	2001 IDRS (n=38)	2002 IDRS (n=38)
Kalma (*alprazolam)*	-	3% *(n=1)*
Xanax (*alprazolam)*	11% *(n=4)*	8% *(n=3)*
Antenex (*diazepam)*	-	5% *(n=2)*
Valium (*diazepam)*	8% *(n=3)*	16% *(n=6)*
Hypnodorm (*flunitrazepam)*	3% *(n=1)*	5% *(n=2)*
Rohypnol (*flunitrazepam)*	5% *(n=2)*	-
Alepam (*oxazepam)*	-	3% *(n=1)*
Serepax (*oxazepam)*	3% *(n=1)*	5% *(n=2)*
Euhypnos* (*temazepam)*	8% *(n=3)*	24% *(n=9)*
Normison* (*temazepam)*	82% *(n=31)*	53% *(n=20)*
Temaze* (*temazepam)*	24% *(n=9)*	47% *(n=18)*
Temtabs (*temazepam)*	-	5% *(n=2)*

**signifies those benzodiazepines available in gel capsule formulation; [#]2002 data is for the five-month period Jan-April, and June, 2002*

Key informants generally found it difficult to separate licit and illicit use of benzodiazepines amongst their groups, as often there was a substantial amount of overlap in use, with, for example, some people receiving diverted medications as a gift from friend, or others bingeing on a benzodiazepine prescription then having to purchase diverted benzodiazepines to maintain their usual base level of use. Such reports were not necessarily supported by the patterns of access reported by the IDU respondents, with 40 of the 75 IDU reporting recent use of benzodiazepine accessing the drug via licit means in the past six months, 56 accessing illicitly. There was also a reasonably even split in regard to individual's predominant mode of access to the drug, with 47% reporting they had primarily used illicitly-accessed benzodiazepines in the preceding six months, and 53% predominantly accessing via licit means. As per trends noted in the 2001 IDRS study, the most common mode of illicit access to benzodiazepines was though friends (59% of those accessing the drug illicitly in the January-April period: Table 37), with much smaller proportions purchasing the drugs from a 'dealer' (28%), swapping drugs for benzodiazepines (12%), accessing them through their family (8%) or doctor shopping (8%).

Table 37: Methods of obtaining benzodiazepines in the six[#] months prior to interview: 2001 and 2002 IDRS

Mode of access	2001 IDRS		2002 IDRS	
	All methods used (n=69)	Primary method used (n=69)	All methods used (n=75)	Primary method used (n=75)
Doctors (genuine symptoms)	57% *(n=39)*	45% *(n=31)*	53% *(n=40)*	47% *(n=35)*
Doctors (fake symptoms)	9% *(n=6)*	9% *(n=6)*	8% *(n=6)*	1% *(n=1)*
Forged prescriptions	0% *(n=0)*	0% *(n=0)*	0% *(n=0)*	0% *(n=0)*
Altered existing prescriptions	0% *(n=0)*	0% *(n=0)*	0% *(n=0)*	0% *(n=0)*
Friends (gift or purchase)	67% *(n=46)*	42% *(n=29)*	59% *(n=44)*	35% *(n=26)*
Family	3% *(n=2)*	1% *(n=1)*	8% *(n=6)*	3% *(n=2)*
Dealer / street (purchased)	23% *(n=16)*	3% *(n=2)*	28% *(n=21)*	13% *(n=10)*
Dealer / street (swap drugs)	4% *(n=3)*	0% *(n=0)*	12% *(n=9)*	1% *(n=1)*

[#]*Note: 2002 data refers to a four-month period of accessing benzodiazepines (January-April 2002), due to the nature of the survey questions.*

Perhaps reflecting the multiple paths to access of benzodiazepines by IDU (for example, licit prescription, gifts, trade for other items or drugs, as well as illicit purchase), IDU provided highly varying accounts of the cost of their last purchase of diverted benzodiazepines. Most common prices reported were in the range of $2.50-$5 per 2mg alprazolam (Xanax or Kalma) tablet, $1 per 5mg diazepam (Valium) tablet, $2.50-$5 per 1-2mg flunitrazepam (Rohypnol) tablet, $1-$5 per 5mg nitrazepam (Mogadon) tablet, $1-$2 per 30mg oxazepam (Serepax) tablet, $1-$3.50 per 10mg temazepam (Euhypnos, Normison or Temaze) gelcap, and $3-$5 per 20mg temazepam gelcap (Table 38). Most of these prices were regarded by IDU as remaining stable over the preceding six months, with the exception of temazepam and flunitrazepam, where there were indications of increasing prices.

The majority of IDU that could confidently comment regarded it as easy or very easy to access both gel capsule formulation (85%) and tablet formulation (83%) benzodiazepines through licit channels between January and April 2002. Similarly, the majority considered it easy to very easy to access both formulations via illicit means (79% and 93% of those reporting on the availability of gel capsule and tablet formulations respectively) in this period.

In May, 2002, changes were made to the Pharmaceutical Benefits Scheme (PBS) that meant that it was no longer possible to receive subsidised prescriptions of gel capsule formulations of benzodiazepines. When asked about ease of access of gel capsule formulations from doctors in the month prior to interview (referring to April or June, 2002), the majority of IDU commenting believed it difficult or very difficult to access these formulations (64%), and that it had become harder to access these forms from a doctor in the past month (67%). However, most regarded it as easy or very easy (80%) to access tablet formulations of benzodiazepines from a doctor, and that this had remained stable in the preceding month. These trends did not necessarily follow in regard to illicit access of benzodiazepines: the majority of IDU reporting trends believed that it was very easy or easy (67%) to access gel capsule formulations illicitly in the month prior to interview. However, there were mixed opinions about the stability of availability, with 35% reporting that gel capsules had become more difficult to access illicitly in this time, and 45% reporting that availability had remained stable. Tablet formulations were again reported as being easy or very easy to access (88%) and that there had been no changes in availability via illicit means (88%) in the preceding month.

Table 38: Modal price per tablet of last purchase of diverted benzodiazepines

Benzodiazepine	2001 IDRS N	2001 IDRS Modal Price (per tablet)	2001 IDRS Price Range (per tablet)	2002 IDRS N	2002 IDRS Modal Price (per tablet)	2002 IDRS Price Range (per tablet)	2002 IDRS Reported Trend (= stable; ↑ increasing; ↓ decreasing)
Kalma (*alprazolam)*							
2mg	-	-	-	1	$2.50	-	-
Xanax (*alprazolam)*							
2mg	7	$5	$2-5	2	$4.25#	$3.50-5	=
Rivotril (*clonazepam)*							
2mg	5	$2.50	$1-5	-	-	-	-
Antenex (*diazepam)*							
5mg	-	-	-	1	$1	-	-
Diazemuls (*diazepam)*							
5mg	1	$1.25	-	-	-	-	-
Valium (*diazepam)*							
5mg	30	$1	$0.5-5	14	$1	$0.75-3	=
Hypnodorm (*flunitrazepam)*							
1mg	-	-	-	1	$2.50	-	=
2mg	2	$5	-	2	$4.50#	$4-5	= / ↑
Rohypnol (*flunitrazepam)*							
1mg	-	-	-	5	$5	$1-5	=
2mg	22	$5	$1.25-5	1	$2.50	-	=
Alodorm (*nitrazepam)*							
5mg	1	$1.25	-	-	-	-	-
Mogadon (*nitrazepam)*							
5mg	9	$2	$1-5	4	$2	$1-5	=
Murelax (*oxazepam)*							
15mg	1	$1	-	-	-	-	-
Serepax (*oxazepam)*							
15mg	3	$2.50#	$1-5	-	-	-	-
30mg	11	$2.25#	$1-5	4	$1	$1-2	=
Euhypnos (*temazepam)*							
**10mg*	-	-	-	1	$1.50	-	=
**20mg*	3	$4#	$1.25-10	4	$4.50#	$3-10	=
Normison (*temazepam)*							
10 mg tablet	-	-	-	4	$3.50#	$1-5	= / ↑
**10mg capsule*	30	$2	$0.8-5	1	$2.50	-	↑
**20mg capsule*	12	$4#	$2-10	12	$3.50#	$1-10	= / ↑
Temaze (*temazepam)*							
10 mg tablet	-	-	-	2	$2.50#	$1-4	=
**10mg capsule*	5	$2	$1-5	2	$2.25#	$1-3.50	= / ↑
**20mg capsule*	-	-	-	1	$3	-	↓
Temtabs (*temazepam)*							
10mg	-	-	-	1	$1	-	=

** signifies gel capsule formulation, # signifies cases where multiple modes existed – in these cases, median prices are reported*

9.1.1 Prevalence of benzodiazepine use

Of the Tasmanians surveyed in the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), 7.9% (n=75) indicated that they had ever tried benzodiazepines for non-medical purposes, and 2.9% (n=28) reported use in the year prior to the survey. However, in the 2001 National Drug Household Survey (n=1,349: Australian Institute of Health and Welfare, 2002), only 1.0% (n=13) of respondents reported using benzodiazepines for non-medical purposes in the year prior to interview. While these are low base rates of reported benzodiazepine users, this does seem to indicate a slight reduction in the prevalence of benzodiazepine use in this three-year period.

Benzodiazepines have consistently comprised approximately 10-16% of all positive urine screens among Tasmanian prisoners between 1996/97 and 2000/01, despite markedly increasing numbers of positive urine screens during this period. However, in 2001/02, the proportion of positive urine screens indicating use of benzodiazepines had dropped to 7% (n=9), the lowest proportion since 1995/96 (6%).

Reported use of benzodiazepines as the main drug injected by non-pharmacy Needle Availability Program outlet clients has undergone massive changes in the past four years: with an increase from 0.3% to 13.5% of clients between 1998/99 and 1999/00, returning to more modest levels (3.5%) in 2000/01. This proportion remained reasonably stable at 3.8% in 2001/02 (Table 39). While there are limitations with this dataset (see Section 2.3), it would appear that any trend toward a major increase in benzodiazepine injection amongst Hobart IDU has clearly been stabilised. Certainly, the proportion of those IDU sampled who reported recent injection of benzodiazepines has not changed during the three local IDRS surveys (37% in 2000 and 2001, 38% in 2002). This turnaround is likely to reflect the combined impacts of the decreased availability (both from the efforts of prescribers and the changes to PBS subsidies) and the education efforts of many of the local needle availability outlet staff, as six key informants noted a decrease in injection of temazepam amongst their groups, two associating this change as potentially due to their education efforts with IDU.

Table 39: Percentage of benzodiazepines reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program clients, 1996-2002

Year	1997/98	1998/99	1999/00	2000/01	2001/02
Number of clients reporting benzodiazepines	18	24	1294	505	761
Percent of total clients reporting benzodiazepines	0.3%	0.3%	13.5%	3.5%	3.8%

Source: Sexual Health, Department of Health and Human Services

Trends from Tasmania Police in regard to benzodiazepines appear to have remained relatively stable between 2000/01 and 2001/02, with seizures of 2,511 pills and 78 arrests (72 consumers, 6 providers) associated with Schedule 4 drugs in 2001/02, in comparison to 2,374 pills and 93 arrests (84 consumers, 9 providers) in 2000/01.

9.1.2 Trends in benzodiazepine use

Six key informants noted that rates of benzodiazepine injection had declined over the past six to twelve months. While such a reduction is a positive sign, there remains a high rate of benzodiazepine use within the Hobart IDU sample in comparison to other jurisdictions. This is a significant issue, as intravenous benzodiazepine use has been linked to higher rates of injecting risk behaviour, psychopathology, reduced health and social functioning, and greater risk of opioid overdose among IDU. Benzodiazepine injection (particularly of temazepam gelcaps) is of significant clinical concern as it may cause severe vascular damage leading to limb amputation due to venous thrombosis and ensuing ischaemia (Fry & Bruno, 2002).

Whether this reduction in benzodiazepine injection is primarily a function of decreased availability is worthy of continued attention, as six key informants, all medical practitioners or pharmacists, noted an increase in requests for private prescriptions of 20mg temazepam gel capsules since the changes to the PBS subsidy for these preparations in May. One key informant, also a medical practitioner, noted an increase in the popularity of the quick-acting, long-lasting alprazolam (Xanax) amongst IDU.

9.2 Summary:

There seems to have been a stabilisation or reduction in the injection of benzodiazepines among IDU in recent months, following an apparent rapid increase during 1999/00. While it appears that harm reduction efforts, by front-line workers, medical practitioners and policy changes may have had a considerable impact on patterns of benzodiazepine use, there remains a relatively high level of benzodiazepine injection within Hobart when compared to other jurisdictions, despite a reduction in the availability of temazepam gel capsules. This is a particular concern given the serious psychological and physical sequale associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within local IDU, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

10 OTHER DRUGS

10.1 Prescription Stimulants (dexamphetamine, methylphenidate)

Five key informants noted some use of prescription stimulants (predominantly dexamphetamine) among the groups they were familiar with, two of which were predominantly opiate-using groups, two predominantly methamphetamine-using groups, and one from a primary cannabis-using group. Key informants in previous IDRS studies have suggested that such prescription stimulants are more commonly used by younger (predominantly school-age) people. This was somewhat supported by the finding of a trend nearing significance, showing that those that had used diverted prescription stimulants in the preceding six months were younger than those that had used other forms of amphetamine in this time (26.8 vs. 30.0 years respectively: Mann-Whitney $U = 669.5$, $p=0.057$).

Use of diverted prescription stimulants was noted by 44% of the IDU sample (54% of those using stimulants), double the amount reporting use of these drugs in the 2001 study (22%). Three IDU also reported licitly accessing prescription stimulants in the preceding six months. However, only 13 IDU reported illicit, and 2 licit, pharmaceutical stimulants, as the form of stimulant they had used most often in the preceding six months.

IDU that could comment reported modal prices of their most recent purchases of $2 per 5mg dexamphetamine tablet (range $2-5, n=5), slightly lower than the price reported in the 2001 IDRS ($5 per 5mg tablet, range $1-10). Two key informants reported similar prices ($3-5 per 5mg dexamphetamine tablet, $20-50 per sheet of 20).

Tasmanian prescription rates of methylphenidate and dexamphetamine (Figures 10 and 11) provide some context for these key informant reports. Over the past decade, prescriptions of these stimulants have steadily grown nationally, most markedly for dexamphetamine. Tasmanian consumption rates of methylphenidate had been consistently below that of the Australian average until 1998, and rose to 128% that of the national average in 1999. Tasmanian consumption rates of dexamphetamine have also overtaken a steadily increasing national rate of prescription. Tasmanian prescription rates of methylphenidate and dexamphetamine were 131.1% and 120.3% that of the Australian average in 2001.

While these generally increasing trends indicate an escalating utilisation of methylphenidate and dexamphetamine by Australian doctors, these increasing prescription rates do not necessarily indicate an increase in abuse of these medications. However, these rates do reflect an increasing amount of these drugs used within the local community, which brings with it an increasing potential for abuse of these drugs.

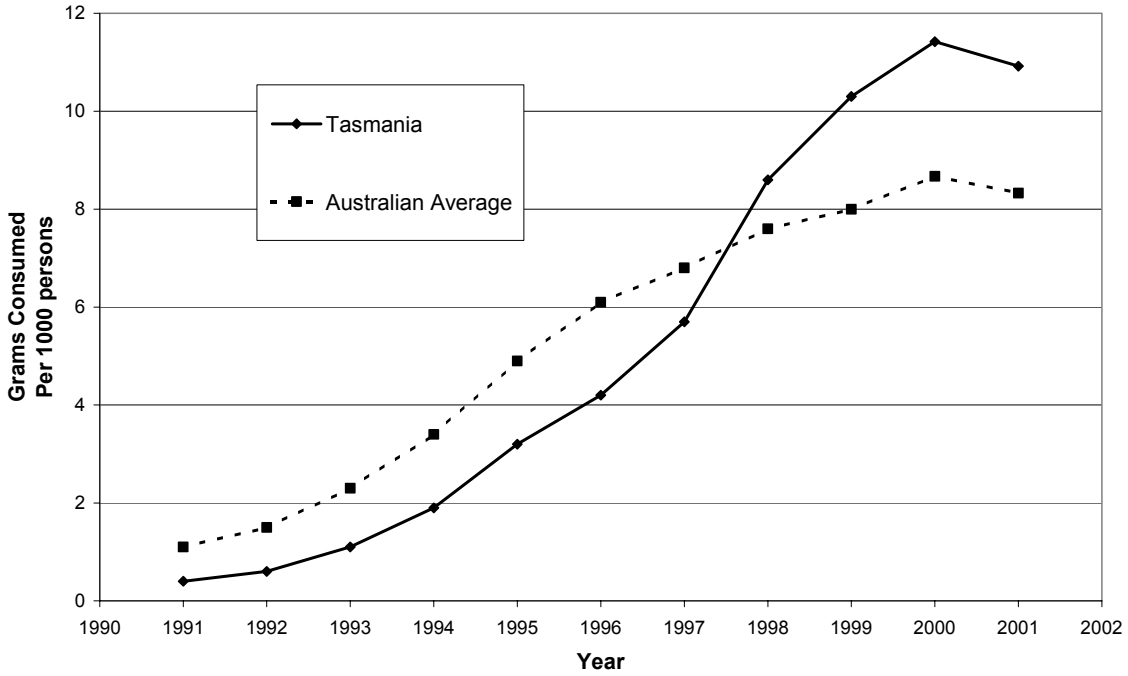


Figure 10: Consumption of methylphenidate (Ritalin) per 1000 persons, 1991-2001

Source: Pharmaceutical Services, Department of Health and Human Services

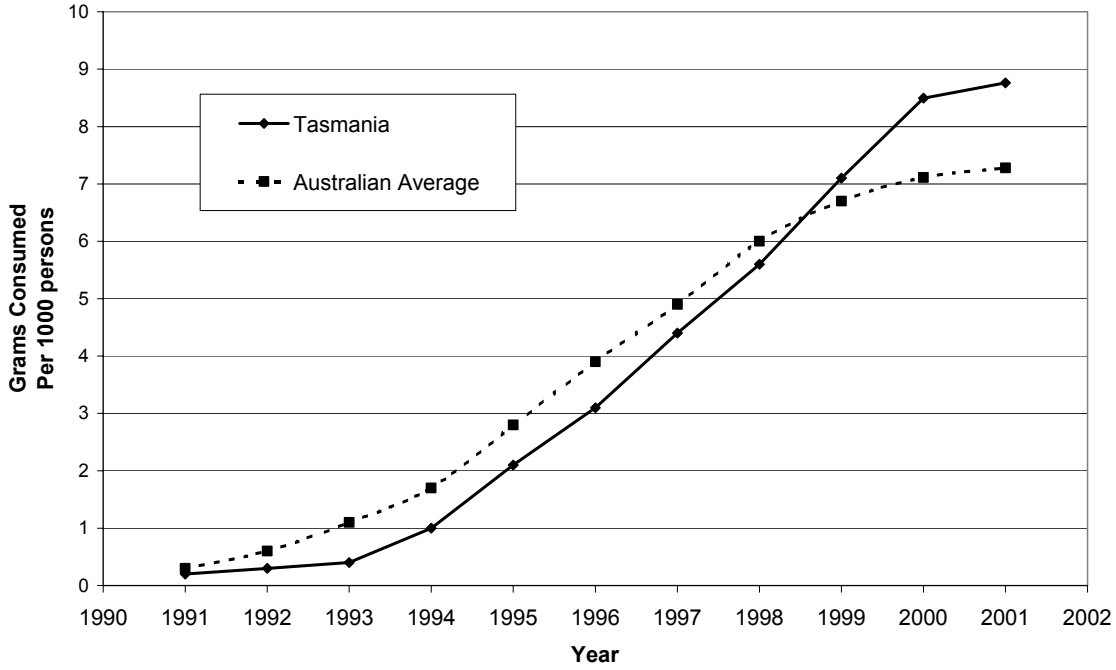


Figure 11: Consumption of dexamphetamine per 1000 persons, 1991-2001

Source: Pharmaceutical Services, Department of Health and Human Services

10.2 Ecstasy

Key informants reported low levels of mainly recreational use of 'ecstasy'[27] among users of other illicit drugs, most common amongst primary users of methamphetamine (noted by 6 of the 8 key informants reporting on primary methamphetamine groups), with some use among primary cannabis users and primary users of opioids (noted by 2/6 and 6/16 of the cannabis and opioid key informants respectively).

From the 1998 National Drug Strategy Household Survey for Tasmania (Australian Institute of Health and Welfare, 1999), 2.4% of those surveyed reported ever using ecstasy (n=28), while 0.7% (n=8) had used in the year prior to the survey. A very similar rate (0.8%, n=10) reported use of ecstasy in the year prior to interview in the 2001 National Drug Household Survey (n=1,349: Australian Institute of Health and Welfare, 2002). Such low base rates of use render trends difficult to identify, but the similarity of the figures would suggest a stable prevalence of ecstasy use between these two surveys.

In the IDU sample, 51% had used ecstasy at some stage in their lives. Swallowing of the drug was most common, reported by 45% of the sample at some stage of their lives, and 20% in the preceding six months. Injection of ecstasy was reported by 37% of the sample at some stage in their lives, while 13% had injected the drug in the past six months. In total, 26% of the sample reported using ecstasy in the past six months, with a median frequency of use of three days (range 1-48 days) in this period. All these indications of use represent increases over the proportions reported in the 2001 IDRS sample, where recent swallowing was reported by 15%, recent injection by 12%, with 20% using the drug in total, at a median frequency of use of two days (range 1-48 days) in the six months preceding interview.

Demographics of those who had used ecstasy in the past six months did not differ from those of the larger IDU sample (see Section 3.1), with the exception that those who had recently used ecstasy had a significantly greater number of years of education (10.6 years vs. 9.8 years respectively: Mann-Whitney U = 681.0, p=0.023), were significantly more likely to have completed courses post-secondary education (35% vs. 23% had completed such courses respectively: χ^2 (2, n=100) = 15.5, p<0.001), were significantly less likely to be unemployed (54% vs. 70% respectively were unemployed at the time of interview: χ^2 (4, n=100) = 14.2, p<0.001), and were more likely to have been involved in some form of counselling for substance use in the preceding six months (35% vs. 14% had received counselling respectively: χ^2 (1, n=100) = 4.3, p<0.039). Such differences are consistent with reports from five key informants that ecstasy use generally was more common in a slightly different demographic to the bulk of their IDU clients.

Data from Tasmania Police report the street price of 'ecstasy' from the final quarter of 2000/01 as $50-$70 per tablet. This is an increase from the $50-60 reported from the final quarter of 2000/01 onwards, the $15-$60 reported in third quarter 2000/01 and from the $15-$25 per tablet reported from 1998/99 to the second quarter of 2000/01. In line with the slightly increasing indications of use between the 2001 and 2002 Tasmanian IDRS samples, three key informants and five IDU reported an increase in the availability and use of 'ecstasy'. In partial support of increased availability, during 2001/02, Tasmania Police seized 305 'ecstasy' tablets, slightly up from the 268 seized in 2000/01, and a marked increase from 1999/00, in which 3 pills

[27] As detailed below, intelligence reports from Police suggest that much of the tablets sold as 'ecstasy' are likely to contain very little MDMA. In this section, the term 'ecstasy' will be used to refer to tablets or powder sold under that name.

were located. No seizures of ecstasy tablets were reported by Tasmania Police to the ABCI between 1995/96 and 1998/99.

Five key informants reported ecstasy use being more common among students and middle and upper glass groups, than regular IDU. This may be partially due to the nature of the contents of the pills marketed as 'ecstasy', as three key informants reported that the 'ecstasy' used by their groups was low in quality and predominantly methamphetamine based. As such, regular IDU may preferentially use higher-purity 'base/paste' methamphetamine, which is sold for a similar price.

Intelligence reports from Tasmania Police indicate that much of the ecstasy available in Tasmania is imported from Victoria, and from extrapolation from seized tablet markings, are often comprised of compressed methamphetamine with additives of caffeine or ketamine (on the basis of Victorian analyses), rather than MDMA.

10.3 Inhalants

While 42% of the IDU respondents reported ever using inhalants, only 3% had used them in the six months prior to interview. Two of those reporting use of inhalants had used nitrous oxide (one using the drug on seven days, the other 24 days in the preceding six months), while one had used amyl nitrate (twice in the past six months). Similarly, most key informants were not aware of any recent use of inhalants amongst the drug users they had contact with, regarding current use as rare (n=3) or non-existent (n=20), although several (n=5) believed that their groups had used inhalants at some stage in their drug use careers, primarily in adolescence. One key informant reported that the IDU they were associated with were extremely negative toward use of inhalants, regarding it as a 'primary school thing'.

10.4 Hallucinogens

Sixteen percent of the IDU respondents reported use of hallucinogens in the six months prior to interview, although almost all (86%) had used something from this class of drugs at some stage in their lives. The current frequency of use was rare, with only a median of two days use in the past six months among those whom reported use of the drug (range 1-35 times). These indications of use are all similar to those reported in the 2001 IDRS sample, with the exception of a substantially reduced proportion of the sample reporting recent hallucinogen use (26% in 2001, 16% in 2002).

Key informant reports followed a similar theme, with 4 key informants noting irregular, recreational use of hallucinogens amongst a small proportion of the users they had contact with, and use being more common amongst younger, more experimental users. Fourteen key informants noted no current use of hallucinogens amongst the IDU they worked with, and four noted that use of such drugs appeared to be declining in recent years.

Among the IDU sample, 11 individuals reported use of LSD in the preceding six months, and 7 people noted using mushrooms in this time (3 individuals had used both). Two key informants each noted use of LSD and mushrooms among the users that they were working with. In the 2001 IDRS, two key informants noted that hallucinogen use and availability was primarily seasonal, maximising during the summer months for LSD and winter for mushrooms.

Tasmania Police reported prices of LSD tablets as $20-$25 during the 2001/02 and 2000/01 financial years, a potential decrease on the $15-$30 reported during 1999/00. Key informant reports of reduction of availability over the past few years were supported by the fact that Tasmania police seized only 5 tabs of LSD during 2001/02 (all during December, 2001), and 8 tabs during 2000/01 (all during August 2000), compared to 109 tabs during the 1999/00 financial year, all during the summer October-December 1999 quarter.

10.5 Alkaloid Poppies

In the IDU sample, 73% reported using some opioid other than morphine, methadone or heroin at some stage in their lives. Use of such opioids in the six months prior to interview was only reported by 16% of the sample. Of these, 14 reported predominant use of some preparation of alkaloid poppies (described by the IDU as opium, opium tar or poppy 'tea'), with the remainder reporting use of pethidine (a pharmaceutical analgesic). This level of recent use of alkaloid poppies (14%) is highly similar to that reported within the 2001 IDRS sample (13%), and represents a continued, substantial drop from the proportions reporting use of alkaloid poppy presentations in the 2000 survey (34%). Within the 2002 sample, median frequency of use of an alkaloid poppy preparation was four days in the preceding six months (range 1-45 days).

The demographics of those who had used some preparation of alkaloid poppies in the past six months did not differ from those of the larger IDU sample in terms of age, sex, years of education, cultural background, current employment status, prison history or frequency of injection (see Section 3.1), with the exception that those who had recently used some preparation of alkaloid poppies were significantly less likely to have completed courses post-secondary education (0% vs. 35% had completed such courses respectively: χ^2 (2, n=100) = 5.8, p<0.049).

No key informants specifically noted any recent use of alkaloid poppy preparations amongst the groups they had contact with.

Tasmania Police State Intelligence Services have reported stable prices of $10 and $20 per 'ball' of poppy tar between January 2000 and June 2001, but have not reported price information for alkaloid poppy preparations during 2001/02. During 2000/01, Tasmania Police reported seizing 3,522 capsules of alkaloid poppies, a similar amount to the 3,933 capsules and 50g of poppy tar seized in the 1999/00 financial year. Tasmania Police seized 382 individual capsules plus 9.319 Kg of capsules in 2001/02 (Table 40), this mixture of reporting rendering it difficult to identify trends in seizure data.

The diversion rate of Tasmanian alkaloid poppy crops, shown in Table 40 below, had been in steady decline between 1995 and 1998. Contrary to this trend, however, 1998/99 and 1999/00 saw a substantial amount of poppies stolen from crops. It should be noted that a small number of particularly large hauls were largely responsible for these rates of diversion (in one case, a single haul of approximately 50,000 capsules were stolen). In concert with trends suggesting a decline in alkaloid poppy use amongst IDU during 2001, there has been a major decrease in the numbers of poppies stolen during 2000/01 when compared to the previous two financial years (7,765 capsules in comparison to over 60,000 in previous years). The past financial year saw a doubling of the number of stolen poppy capsules (15,946) in comparison to the previous year, but this level of diversion remains substantially lower than the annual number of capsules stolen between 1996/97 and 1999/00. Tasmania Police report that this decline in diversion is likely to be attributed both to a more pro-active approach by Tasmania Police poppy task forces and the decision by producers not to specifically identify thebaine poppy crops. This is a substantial

deterrent to illicit use, as thebaine poppies are physically identical to morphine-producing crops, with the exception that thebaine acts as a central nervous system stimulant (morphine behaves in the opposite way, and is a central nervous system depressant), causing adverse strychnine-like convulsions after high doses. In support of this, in 2001, one key informant, a user group representative, noted negative experiences with thebaine-based diverted poppies amongst the IDU they were familiar with, with the individuals concerned not returning to use of poppy preparations.

Table 40: Tasmanian alkaloid poppy crop diversion rates, 1996-2002.

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Number of capsules stolen	42,426	30,424	66,013	62,700	7,765	15,946
Cost per hectare of securing poppy crops	$45	$39	$33	$27	$28	$28
Number of capsules stolen per hectare sown	3.95	2.44	4.41	2.99	0.39	0.81
Number of theft incidents reported	46	38	34	39	20	27
% of IDU sample reporting use	-	-	-	34	13	14
Median days used among IDU using	-	-	-	6 (1-151)	6 (1-81)	4 (1-45)
TASPOL seizures	-	-	-	3,933 capsules*; 50g tar	3,522 capsules*	382 capsules*; plus 9319g of capsules

*Source: Poppy Board, Justice Department of Tasmania; *May be an overestimate of seizures as Tasmania Police data is an amalgamation of plants, capsules and weight of seizures. Data reported here is the best estimate of seizure quantity*

10.6 Other Substances

Homebake

Following identification of homebake as a re-emergent issue in the 2001 West Australian IDRS (Hargreaves & Lenton, 2002), 2002 is the first year of the national study that has included specific questions on use of homebake. 'Homebake' is a term used to describe the end product of an illicit drug manufacturing process, typically conducted within domestic kitchens, using codeine-based pharmaceuticals to make morphine and/or heroin. The manufacturing process involves the initial extraction of codeine from these pharmaceuticals, which is converted to morphine. Subsequent reactions convert morphine to heroin in the form of a dark paste, which requires dilution to be injected. Depending on the skill of the 'cook', the end result is usually a combination of heroin, morphine and codeine, although varying amounts of unwanted chemicals used in the manufacturing process (pyridine hydrochloride, chloroform) may also be present (Hargreaves & Lenton, 2002).

While no key informants noted any use of homebake amongst the groups they had contact with, 24% of the 2002 IDU sample reported they had used homebake at some stage in their lives. Injection of the drug was most common, reported by 21% at some stage in their lives, and 5% in the preceding six months. Lifetime use of homebake by smoking (2%) and swallowing (5%) was much less common, with only 1% reporting swallowing the drug in the six months prior to interview. In total, 6% of the IDU sample reported some use of homebake in the past six months, with a median frequency of use of only 3 days (range 1-6 days) in this period.

Antidepressants

Almost half (48%) of the IDU sample had used antidepressants at some stage in their lives. Injection of antidepressants was rare, reported by only 4% of the sample at some stage in their lives and 3% in the preceding six months. All 48 of those who had ever used antidepressants had swallowed the drug at some stage, with 28% of the sample reporting swallowing of antidepressants in the past six months. Of those that had recently used the drug, the majority were receiving antidepressants for legitimate reasons (86%, n=24/28), while only four had accessed the drug illicitly in this period. Only one of the three IDU reporting recent injection of antidepressants had accessed the drug illicitly. IDU that reported recent use of antidepressants were no more likely to be currently involved in treatment for their substance use than those that had not used the drug. Median frequency of use of benzodiazepines was 180 days in the preceding six months (range 1-180) among those receiving antidepressants for legitimate reasons, and only 2 days in this period (range 1-10 days) among those accessing the drug illicitly. There was no clear pattern in the types of antidepressants reported, with both tricyclic antidepressants (TCA) and specific serotonin reuptake inhibitors (SSRI) used (25% TCA: amitriptyline, n=3; dothiepin, n=2; doxepin, n=2; 57% SSRI: citalopram, n=3; fluvoxamine, n=5; paroxetine, n=4; sertraline, n=2; venlafaxine, n=2; 18% unknown type/could not recall).

These patterns of use were very similar to those reported in the 2001 IDRS survey participants, where 52 had ever used antidepressants, 25% using in the preceding six months (4% illicitly), with a median frequency of use of 180 days (range 4-180) among those receiving the drug for legitimate reasons and 16 days amongst those predominantly using illicitly-accessed antidepressants.

Buprenorphine

With the advent of buprenorphine as a maintenance treatment option for opioid addiction, trends in buprenorphine use were examined for the first time in the 2002 IDRS survey. In this cohort of IDU, only 8 reported ever using buprenorphine, with only 7 using the drug in the preceding six months, with all of these only ever reporting swallowing the drug. A single IDU respondent reported illicit use of buprenorphine in the six months prior to interview, only using the drug once in this time. The other 6 IDU reporting use of the drug had been receiving buprenorphine as a maintenance treatment in this time.

A single key informant, a needle availability program outlet worker seeing a large number of IDU, reported hearing of injection of buprenorphine amongst a very small proportion of the individuals they had contact with. As such, trends in use of buprenorphine merit close attention as the drug is more widely adopted as a treatment option in the coming years.

Adrenaline

Two key informants noted recent use of adrenaline amongst small proportions of the individuals that they had contact with. One noted that it had been injected mixed with methamphetamine, with IDU attracted to such use due to the intense "rush" following injection.

Ketamine

Use of liquid ketamine was noted by 1 key informant and 5 IDU in the preceding six months. Two IDU reported the price of the drug as $50 per mL, but had been purchasing the drug from a friend for $10 or $20 per mL in the past six months. No use of ketamine had been noted in any of the other local IDRS surveys.

10.7 Summary of Trends for Other Drugs

The IDRS methodology is not particularly well-suited to gathering data regarding trends in use of other illicit drugs such as ecstasy, hallucinogens and inhalants, as these populations often do not come into contact with the services key informants are involved with, or they do not meet the criteria for inclusion in the IDU survey. As such, trends identified here should be interpreted with due caution and may merit further investigation using more appropriate methodologies.

The main trends identified for these categories of drugs were:

- An increase in abuse of dexamphetamine and methylphenidate, predominantly amongst adolescent groups, although almost half of the IDU sample had used the drug in the past six months
- Increased availability and use of tablets marketed as ecstasy (actually compressed methamphetamine), although increased use does not seem to marked be among the IDU demographic.
- Continuing low rates of diversion and use of alkaloid poppies
- Limited use of diverted buprenorphine among the 2002 IDRS IDU cohort

11 DRUG-RELATED ISSUES

11.1 Treatment

11.1.1 Census of Clients of Treatment Service Agencies (COTSA)

In May 2001, all services identified nationally as providing face-to-face specialist treatment for alcohol and other drug problems were surveyed and asked to report the characteristics of the clients they treated during a 24-hour period. In Tasmania, 15 agencies were identified, and all contributed data to the census. Of the 147 clients reported on, 134 were substance users themselves (the remainder were individuals affected by other's substance use), with an average age of 32 years (SD 11.6 years). Thirty percent of substance-using clients were female, and 4.8% of clients identified as Aboriginal or Torres Strait Islanders. In terms of employment, 18% were currently employed, 31% unemployed, 21% pensioners, 7% students and 10% prisoners. Client's main drug problems (as reported by the agency) are summarised in Table 41, with alcohol use (35%), opioid use (30%) and cannabis use (16%) most common. When compared to the patterns of problem drugs from the 1995 COTSA census, there appears to have been a seismic shift in the types of problems treatment agencies are required to address, with the proportion of clients receiving treatment for alcohol-related problems dropping from 63% in 1995 to 35% in 2001, and an increasing prevalence of opioid- and amphetamine- related clients (increases of 10% to 30% and 4% to 9% respectively).

Table 41: Census of Clients of Treatment Service Agencies (Tasmanian and National Data) 1995 and 2001

	Tasmania		National	
	1995	**2001**	**1995**	**2001**
Alcohol	63.3%	35.1%	49.3%	35.1%
Opioids*	10.1%	29.9%	33.6%	39.1%
Amphetamines	3.8%	9.0%	6.5%	8.3%
Cannabis	13.9%	15.7%	6.7%	9.3%
Benzodiazepines		1.4%		2.3%
Cocaine		0%		0.7%
Polydrug including opioids	2.5%	2.2%	7.4%	7.1%
Polydrug excluding opioids	0%	11.2%	3.5%	5.1%
Injecting drug use		*30.6%*		*45.7%*
Clients		*147*		*5304*

*Note: *includes polydrug including opioids. Source: Shand and Mattick (2001)*

11.1.2 Tasmanian Alcohol and Other Drug Treatment Minimum Dataset

The National Minimum Data Set for Alcohol and other Drug Treatment Services was developed as a nationally consistent response to data collection for alcohol and other drug treatment services. Data collection began on July 1, 2000, and data from Tasmanian government and non-government agencies across the state is presented in Table 42 below. Data from clients receiving only methadone maintenance treatment, and admitted patients in psychiatric hospitals or general hospital wards are not included in these figures.

The findings from the 2001/02 data are generally consistent with the findings of the 2001 COTSA census, with 66% of those receiving services being male, an average age of 33.6 years (SD 12.3 years), and a small proportion (7%) identifying as being Aboriginal or Torres Strait Islanders. Some history of injecting drug use was noted in 29.7% of clients in the 2001/02 dataset, with 18.4% reporting injecting drug use in the three months prior to data collection. Figures for the reported principal drug of concern again reflect the predominance of treatment for alcohol (36.7%), with treatment for cannabis (24.7%), nicotine (16.6%) and amphetamine (9.5%) also common. However, in stark contrast to the findings of the 2001 COTSA census, only 9.6% of clients in the 2001/02 treatment data had an opiate as their principal drug of concern (both datasets excluded clients receiving methadone maintenance treatment only from their figures).

There appears to have been little substantial change in either the reported demographics or the presenting drugs of concern between the 2000/01 and the 2001/02 datasets. However, it is difficult to make clear inferences as there is currently some inconsistency in the recording of data, and in those cases where some changes are suggested (such as increases in the number of individuals treated overall and increase in treatment where nicotine was the principal drug of concern) it is unclear whether these reflect real changes or simply an increase in participating agencies or consistent data recording processes.

Table 42: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set, 2000/01-2001/02

	2000/01	2001/02
Total Data Set		
n	1404	1735
% receiving service for own use	91% (n=1279)	97% (n=1691)
For those receiving service for own use		
Sex (% male)	65% (n=826)	66% (n=1116)
Mean Age (years)	31.8 (SD=11.6)	33.6 (SD=13.3)
Aboriginal or Torres Strait Islander	8% (n=103)	7% (n=123)
Injecting Drug Use History		
Current (0-3 months prior)	23.8% (n=304)	18.4% (n=311)
Recent (3-12 months prior)	5.2% (n=66)	5.4% (n=92)
Historical (>12 months prior)	5.2% (n=66)	5.9% (n=100)
None	28.4% (n=363)	38.7% (n=654)
Not Stated	37.5% (n=480)	31.5% (n=534)
Principal drug of concern		
Alcohol	38.8% (n=496)	36.7% (n=620)
Nicotine	2.4% (n=31)	16.6% (n=280)
Cannabis	22.7% (n=290)	24.7% (n=418)
Amphetamine	12.1% (n=155)	9.5% (n=161)
Cocaine	0.2% (n=3)	0.0% (n=0)
Other Stimulants	0.9% (n=11)	0.6% (n=10)
'Ecstasy' and related	0.1% (n=1)	0.3% (n=5)
Heroin	2.3% (n=30)	1.1% (n=18)
Morphine	6.6% (n=84)	7.2% (n=121)
Methadone	6.0% (n=77)	0.2% (n=3)
Other Opiates/Analgesics	4.1% (n=53)	1.1% (n=19)
Benzodiazepines	2.9% (n=37)	1.7% (n=29)
Other	0.8% (n=10)	0.4% (n=7)
Method of use of principal drug of concern		
Ingest	48.1% (n=615)	40.9% (n=691)
Smoke	24.7% (n=316)	40.4% (n=684)
Inject	21.3% (n=273)	16.6% (n=281)
Sniff	0.2% (n=3)	0.2% (n=3)
Inhale	0.2 (n=2)	0.1% (n=1)
Other/Not reported	5.5% (n=70)	1.8% (n=31)
Other drugs of concern		
Alcohol	9.8% (n=125)	6.8% (n=115)
Nicotine	4.1% (n=52)	6.9% (n=115)
Cannabis	18.3% (n=234)	13.9% (n=235)
Amphetamine	9.3% (n=119)	6.6% (n=111)
Cocaine	1.2% (n=15)	0.3% (n=5)
Other Stimulants	0.4% (n=5)	0.6% (n=10)
'Ecstasy' and related	1.6% (n=21)	0.8% (n=14)
Heroin	2.7% (n=35)	0.9% (n=15)
Morphine	4.9% (n=63)	3.4% (n=57)
Methadone	2.9% (n=37)	1.2% (n=21)
Other Opiates/Analgesics	0.7% (n=9)	0.4% (n=7)
Benzodiazepines	9.3% (n=119)	3.5% (n=60)
Other	1.6% (n=21)	1.4% (n=24)

Note: multiple presentations of the same individual excluded.

11.1.3 Alcohol and Drug Information Service Data

The Tasmanian Alcohol and Drug Information Service (ADIS), previously administered by Department of Health and Human Services staff at Hobart's detoxification service, was transferred to Turning Point Alcohol and Drug Centre in Victoria in mid-May 2000. Turning Point systematically record data for each call received, which was not possible in previous years due to high demands on Department of Health and Human Services staff time. However, during 1998/99, staff were able to record data for 840 calls to ADIS (not all calls to the service were recorded). The primary drug mentioned in the call was noted in the majority of cases (Figure 12). During this period, the majority of calls pertaining to illicit drugs were regarding cannabis (18%), followed by opioids (13%) and methamphetamine (7%). A trend toward a slight increase in opioid-related inquiries was noted during this period. Data from previous years was unavailable, rendering it difficult to make comparisons.

Data from calls made to the Turning Point-administered ADIS from May 15, 2000 to June 30, 2002 were provided, with 2422 calls being made between May 15, 2000 and June 30, 2001, 2208 over the 2000/01 financial year and 1827 over the 2001/02 financial year. For calls regarding specific persons using drugs (either from the person themselves or about them from parents, partners, etc), information regarding the drug or drugs used is detailed in Figure 13. While this follows similar patterns to 1998/99 ADIS data, due to its more systematic recording and its referral to a specific sub-group of calls, the two data sets are not directly comparable, and as such have been displayed in separate figures.

Due to the fact that this data reflects only the second year of Turning Point's operation of the ADIS telephone service, and that quarterly data is not available, it is difficult to make clear inferences regarding trends, however, in all sets of ADIS data the bulk of calls pertaining to illicit drugs were regarding cannabis use, followed by opioids and methamphetamine. The makeup of the calls in regards to people using specific drugs during 2000/01 and 2001/02 were very similar, with the only notable changes being a decrease in calls regarding heroin, and an increase in calls regarding cannabis.

Demographic characteristics of drug users identified in calls to ADIS during the 2000/01 financial year indicate that the majority of drug users identified were aged between 22 and 40 years of age (59%), although a sizeable proportion of calls related to people in the 16 to 18 year age group (15.5%). There appeared to be a slight upward shift in the age of drug users identified in ADIS calls during 2001/02, as, while the majority were again aged between 22 and 40 years (56.4%), calls related to people in the 16 to 18 year age group had decreased by 5% (to 10.2%), while calls relating to people more than 40 years of age increased 6% (to 19% of calls).

Among the calls relating to people using drugs in the 2000/01 year, there was an approximately equal gender distribution (50.1% male), which was particularly noteworthy given that statistics from similar services in Victoria have consistently demonstrated a preponderance of male drug users in calls to their services, usually in the order of 60% male. In 2001/02, the drug users identified in calls to ADIS fell more closely to this 'traditional' bias, with 58% of calls relating to males.

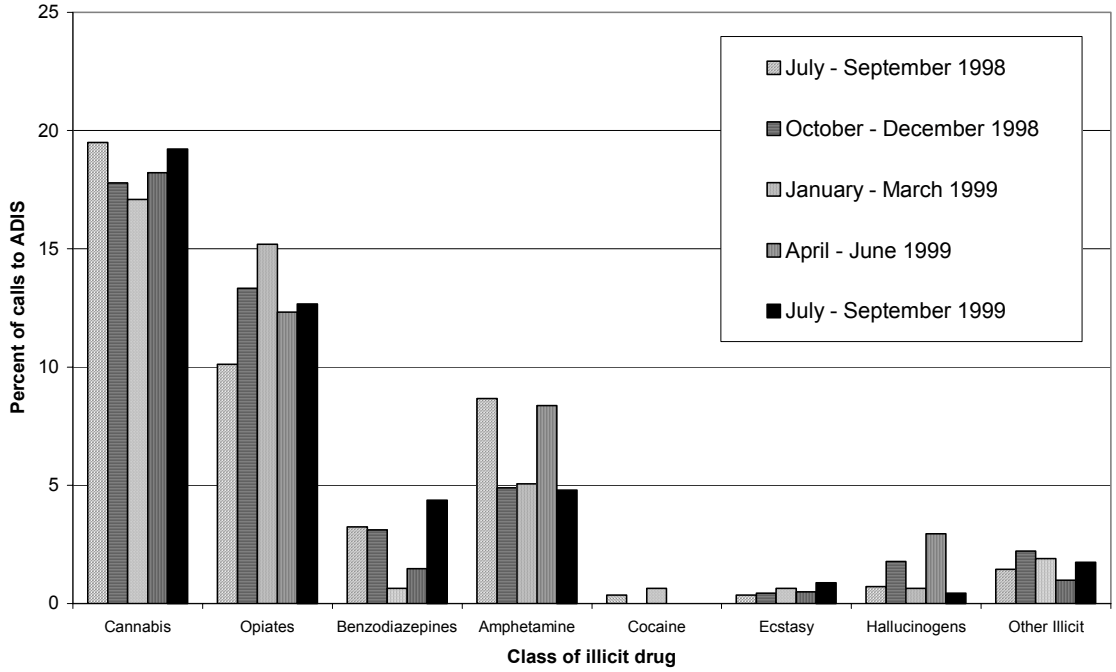


Figure 12: Percentage of calls to ADIS by drug type (1998/99)

Source: Alcohol and Drug Services, Department of Health and Human Services

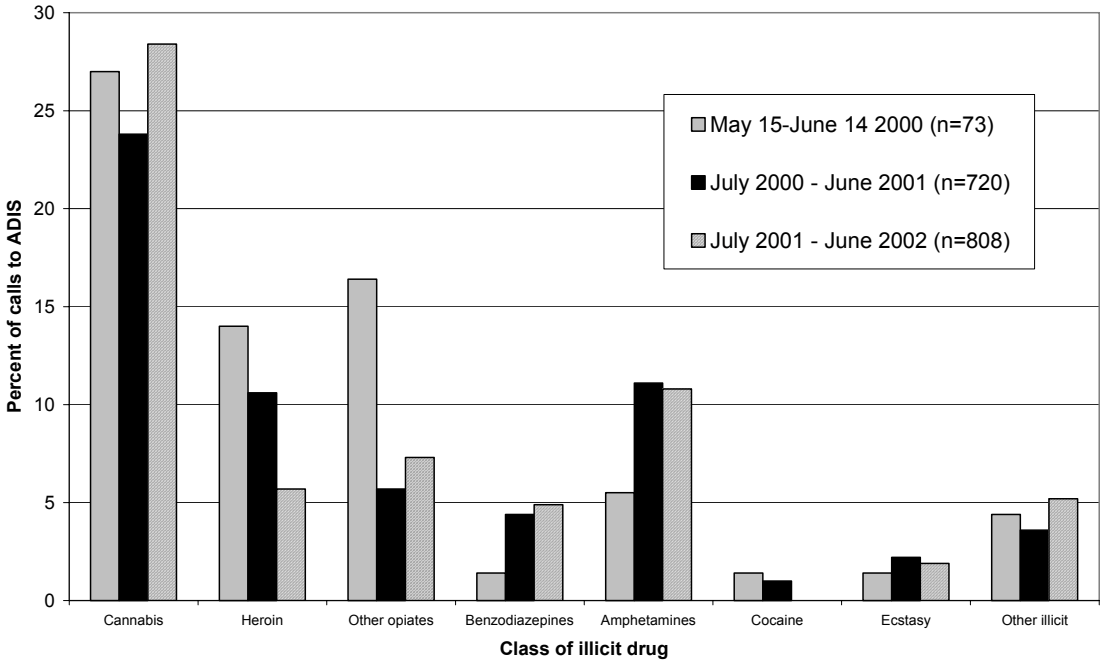


Figure 13: Percentage of calls to ADIS referring to persons using specific drugs, May 15-June 14, 2000 and July 2000-June 2002

Source: ADIS Tasmania Reports, Turning Point Alcohol and Drug Centre

Turning Point also provide a specialist alcohol and drug telephone service targeted specifically to health professionals to assist with clinical management of drug and alcohol problems: the Drug and Alcohol Clinical Advisory Service (DACAS). Of the 63 calls to the service in the 2000/01 financial year, the majority were from medical practitioners (69.4%) although there was also a sizeable level of utilisation of the service by nurses (12.2%), general drug and alcohol staff (10.2%) and youth/welfare workers (6.1%). In line with the patterns of problem drug use identified within the COTSA study (Table 41), the majority of calls were regarding opioids (50%: prescription opioids 25%, methadone 15.4%, heroin 9.6%), with a substantial proportion of consultations regarding psychostimulants (such as methamphetamine: 15.4%), benzodiazepines (9.6%) and cannabis (9.6%).

Very similar patterns were seen among the 59 calls made to DACAS in the 2001/02 financial year. Again, the majority of calls were made by medical practitioners (68.8%), with some utilisation by pharmacists (8.3%), nurses (6.3%), social workers (2.1%), and general drug and alcohol staff (2.1%). The majority of calls again related to opioids (40.7%: methadone 22.0%, prescription opioids 6.8%, heroin 6.8%, buprenorphine 2.1%), with a lower proportion of calls relating to psychostimulants (11.8%), benzodiazepines (11.9%), and cannabis (6.8%).

11.2 Overdose

While all but one person included in the IDU sample reported that they had ever used some form of opioid, only one third (33%) had ever experienced an opioid overdose (30 of these 33 individuals experiencing an overdose associated with heroin use, and 5 experiencing an overdose due to morphine), with only 7% having overdosed in the previous year (Table 43). Of those who had ever overdosed, the median number of times they had overdosed was once (range 1-10), and the median time since last overdose was three years prior to interview (range 0-192 months). These overdose rates are substantially lower than those reported in other jurisdictions, with the proportion of IDU ever experiencing an opiate overdose in the 2002 IDRS over the national study sample (n=929) being 47% (47% on heroin, 3% on morphine), with 12% experiencing at least one overdose in the six months prior to interview (11% on heroin, 2% on morphine). This discrepancy most likely reflects the different patterns of drug use in Hobart in comparison to these other states – while heroin use in the past six months was reported by around a fifth of the current IDU sample, use of pharmaceutical preparations of opioids was much more common (recently used by 92% of the sample), and this preference for pharmaceutical opioids where the dose of the drug is known reduces the likelihood of accidental overdose.

Table 43: Reported experience of opioid overdose among the IDU sample (N=100)

	% of IDU in past month		
	2000 IDRS	**2001 IDRS**	**2002 IDRS**
Overdosed (ever)	31%	25%*	33%: *30% heroin; 5% morphine*
Median times ever overdosed	twice	once	once *(heroin or morphine)*
Overdosed (in last 12 months)	10%	8%	7%: *4% heroin; 3% morphine*
Administered naloxone (ever)	14%	13%	21% *(20% heroin)*
Administered naloxone *(in last 12 months)*	7%	3%	3% *(all heroin)*
Witnessed an overdose (ever)	50%	54%	61%
Median times ever witnessed an overdose	twice	twice	twice
Witnessed an overdose *(in last 12 months)*	24%	51%	26%

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

Of note is that only two-thirds of those who indicated they had ever had an opioid overdose had ever been administered Narcan (64%). Narcan (naloxone) is a fast-acting opioid antagonist given to reverse the effects of opioids in the event of an overdose. Only three of the seven IDU who reported an opioid overdose in the past 12 months had been administered Narcan in this period. Overall, those who had been administered Narcan reported a median period of 48 months since they were last administered the drug (range 6-120 months), similar to the figures for reports of experience of opioid overdose generally.

Sixty-one percent of the IDU respondents reported ever witnessing one or more overdoses (median = twice). Those respondents that had ever witnessed an overdose reported a median period of 24 months since they last experienced such an event (range 1-204 months). More than a quarter of the IDU sample (26%) reported witnessing an overdose in the 12 months prior to interview.

The number of opioid related fatalities among those aged 15-44 years noted by the State Coroners office has remained quite small during the period 1988-2001 (Figure 14), these minimal figures rendering analysis of trends difficult. To 1999, there was approximately an even sex distribution among these victims of opioid-related fatalities, although in 2000 the five fatalities related to four males and a single female, and in 2001 the figures reflect the death of two males and three females. With the exception of a single fatal overdose clearly associated with heroin use, the cases to 1999 largely relate to methadone or morphine. Benzodiazepines were also present in many of these cases[28].

[28] Toxicological and demographic detail for cases in 2000 and 2001 was not provided to the authors.

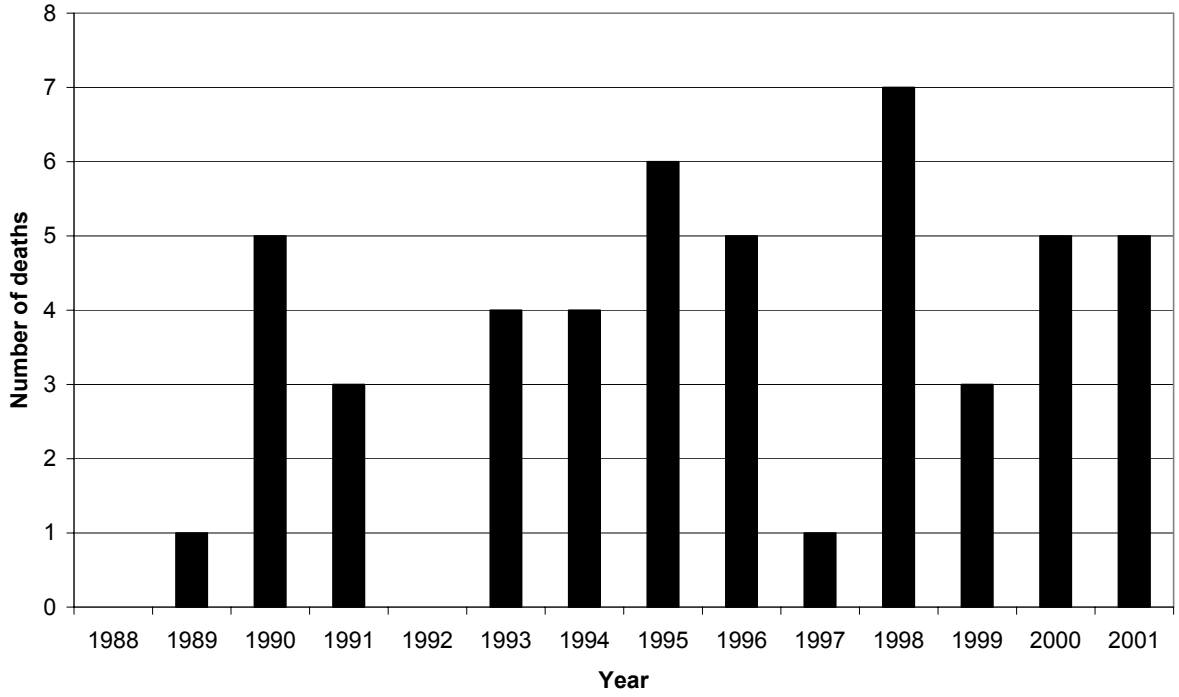


Figure 14: Number of opioid overdose deaths among those aged 15-44 years, 1988-2001
Source: Degenhardt (2001; 2002) and State Justice Department Coroners Office

11.3 Injection-Related Problems

There was a substantial rate of injection-related problems reported by the IDU surveyed, with 72% reporting at least one such problem in the preceding month (Table 44). This rate of experience of injection-related health problems is commensurate with those identified across the national sample of IDU in the 2002 IDRS (n=929), despite the lower frequency of injection of the Tasmanian IDU sample in comparison to these states (only 29% of the Tasmanian IDU sample reported injecting once a day or more frequently, in comparison to 47% of IDU in the 2002 national sample). This is likely to reflect the increased harms associated with the injection of pharmaceutical products by Tasmanian IDU, relative to drugs such as heroin, which are more freely available in these other states. Pharmaceutical products such as morphine tablets are often covered with a waxy film that cannot be completely removed in the preparation of the drug for injection, such waxy build-ups potentially damaging injection sites, and other pharmaceuticals such as Normison (temazepam) have been specifically designed to not be amenable for injection. Accordingly, the most commonly reported problems among the Tasmanian IDU were scarring/bruising of injection sites and difficulty injecting, indicating vascular damage. Noteworthy in this data is that reported rates of thrombosis (coagulation of blood in a blood vessel) which have been reported as greater amongst Tasmanian IDU samples than the national sample in 2000 and 2001, dropped to a level beneath the national average in 2002 (5% in Tasmanian IDU, 9% in the 2002 national sample). However, perhaps a relative benefit of the Tasmanian culture of injection of pharmaceutical products is the low rate of experience of overdose in comparison with other jurisdictions (0% in the 2000-2002 Tasmanian samples, in comparison to 10% of the 2000 national sample, and 3% of the 2002 national sample) due to the fact that users can be more confident about the purity and quantities of opioids they are using, and hence can tailor their use according to their level of tolerance.

Table 44: Injection-related health problems reported by participants in the IDU survey in the month prior to interview (n=100)

Injection-related health problems	% experiencing the problem in the last month			
	Tasmanian IDRS 2000 (n=100)	Tasmanian IDRS 2001 (n=100)	Tasmanian IDRS 2002 (n=100)	National IDRS 2002 (n=929)
Scarring/bruising	59%	42%	53%	48%
Difficulty injecting	50%	48%	48%	42%
Thrombosis	18%	21%	5%	9%
"Dirty Hit"	15%	31%	18%	16%
Infections/abscesses	9%	9%	8%	10%
Overdose	0%	0%	0%	3%
At least one injection-related problem	78% (range 1-5, median 2*)	72% (range 1-5, median 2*)	72% (range 1-5, median 2*)	68% (range 1-5, median 2*)
Median injection frequency	More than once per week	More than once per week	More than once per week	Once per day
% injecting daily	31%	29%	29%	47%

*for those noting injection-related problems

Comparing rates of recent injection-related problems for the 2001 and 2002 Tasmanian IDU samples, most levels appear to have remained relatively stable, with a few notable exceptions. An increase in the reported rate of scarring/bruising (42% vs. 53%) was apparent, with the 2002 figures returning to levels similar to those reported in 2000 (59%). Scarring and bruising at injection sites is reflective of injection practices, the type of substances injected (relating to the size of the needle used), and the level of use of injection sites (rotating injection sites allows more time for healing). As there appears to be little substantial change in the substances used between the two studies, with the possible exception of increases in use of 'base/paste' methamphetamine and Physeptone tablets, and there is no difference in the median injection frequency or duration of injection careers (9.8 years in 2002, 8.5 years in 2001, $t(1) = 1.59$, $p=0.11$) between the samples, it is possible that this change is reflective of slight declines in injection practices among IDU. However, positive changes were seen in the rates of experience of thrombosis (21% vs. 5%) which may reflect changes in frequency of injection of benzodiazepines, and also a decrease in the rates of experience of 'dirty hits' (31% vs. 18%), with the 2002 figures returning to levels similar to those reported in 2000 (15%). 'Dirty hits' are commonly due to the injection of contaminants or impurities. This experience does not appear to be particularly closely associated with the use of any one substance (such as reflecting the use of a particular cutting agent): of the 18 IDU reporting recent experience of 'dirty hits', 8 reported this to have been associated with the injection of methadone, 6 with morphine, and 4 with methamphetamine. However, one key informant, a methadone prescriber with a large client base, noted an increasing number of people feeling 'sick' from injection of methadone syrup, which they suggested as possibly due to the increased dilution of these doses in the past 12 months

Five key informants noted a stable rate of injection-related problems in the preceding six months among the injecting drug users that had contact with, but were pleased to note that there had

been a decrease in the numbers of severe problems they had seen in this time (although these were still occurring). Two key informants, both needle availability program workers, reported a continuation of the 'shake and bang' process among some users of Physeptone tablets, where IDU simply shake the pills in a syringe filled with warm water, and rapidly inject this product, a process which highly likely to cause vascular damage to the user. The other particularly noteworthy recent case of injection related harm was associated with methamphetamine use, where an individual was admitted to hospital with severe problems due to multiple emboli (object causing blockage in the bloodstream) in the CNS, believed to be due to a cutting agent not dissolving or not remaining in solution following injection.

11.4 Injection Equipment Sharing

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 viruses such as HIV and hepatitis B and C. Clients of non-pharmacy needle and syringe outlets are routinely asked whether they have shared needles and syringes or other injection equipment since their last visit to the service. Reported sharing of both injection equipment and needles/syringes by these clients has shown a reasonably steady decline since 1995/96 (Figures 15 and 16). While this is simply self-report data, and hence may underestimate the true level of sharing of injection equipment, there is some support for the reported decline in sharing by the fact that there has been a continual increase in the amount of equipment ordered through the Needle and Syringe Availability program since its inception, at a rate much higher than the increases in the reported number of occasions of service.

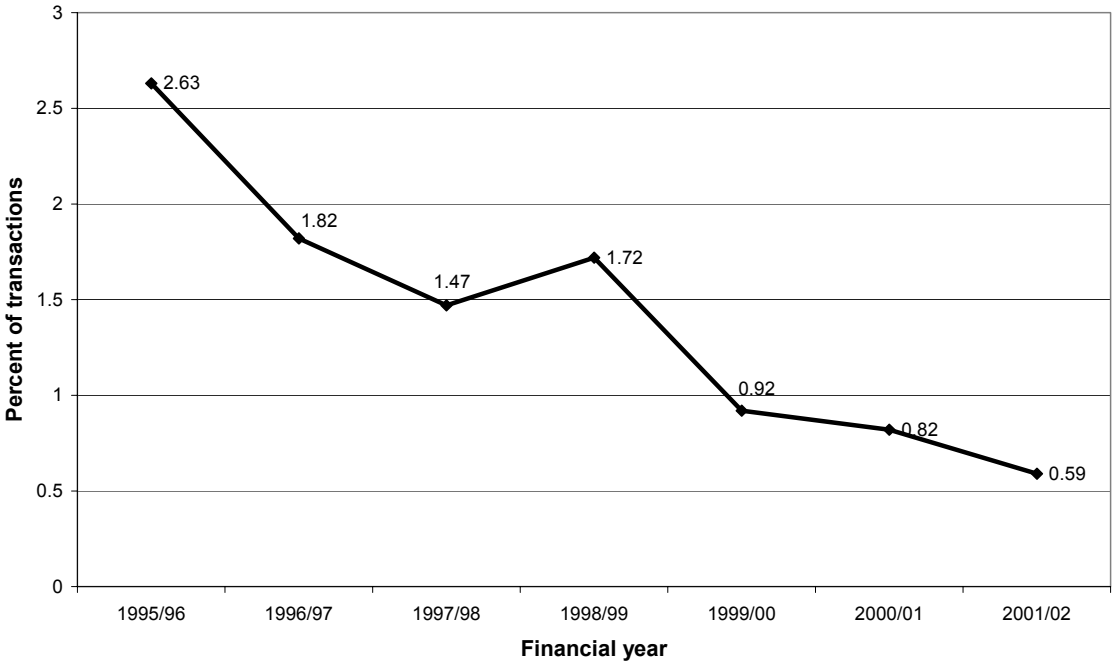


Figure 15: Reported sharing of needles and syringes by non-pharmacy Needle Availability Program clients 1995/96-2001/02

Source: Sexual Health, Department of Health and Human Services

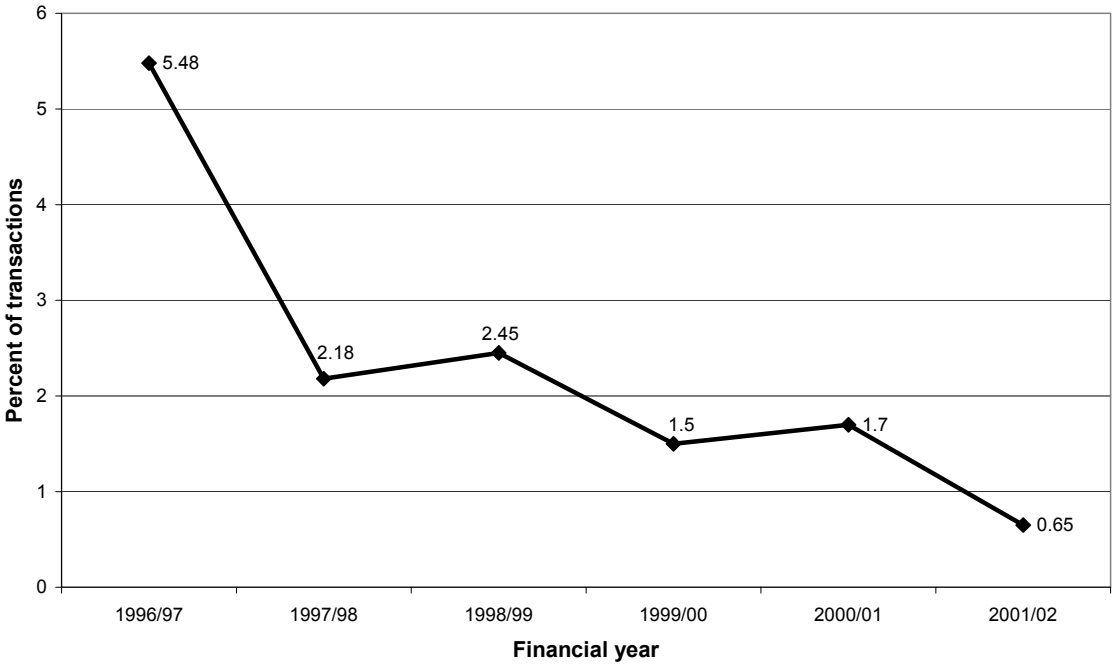


Figure 16: Reported sharing of other injection equipment by non-pharmacy Needle Availability Program clients 1995/96-2001/02

Source: Sexual Health, Department of Health and Human Services

Among the IDU sample, only a single respondent reported lending a used needle/syringe to others in the month prior to interview, while 10% reported using a needle/syringe after it had been used by someone else (Table 45). All of those who had injected with a used needle/syringe reported that only one other person had used the syringe prior to them. People who had used the syringe previously were reported primarily to be a regular sexual partner (n=6), with 1 IDU reporting re-using a close friend's needle/syringe. Notably, three respondents indicated that they had re-used an acquaintance's needle/syringe in the month prior to interview.

Similar to the reported sharing of needles/syringes, respondents reported quite a low rate of sharing of other types of injecting equipment, with 85% not sharing any form of injection equipment in the month prior to interview. By far, tourniquets were the most commonly shared item (14%), with single IDU reporting sharing spoons/mixing containers, filters, tourniquets, or water. While sharing of any equipment during the injection process puts IDU at risk of exposure to blood-borne viruses, these low reported rates of sharing of both needles and other equipment indicate a good awareness of safe injection practices amongst IDU.

When the reported rates of sharing of injection equipment for the 2000 and 2001 Tasmanian IDU samples are compared, there appears to have been a substantial drop in sharing between these groups. While a portion of this change may be due to a change in definition of 'sharing' between the two surveys[29], the continuation of this decline into the 2002 study adds weight to the veracity of the indications of a reduction in risky injection practices among IDU.

[29] In the 2000 IDRS survey, interviewers recorded practices such as individuals using the same mixing container but drawing from it using individual sterile syringes as 'sharing' as such behaviour is not recommended as part of safest injection practice. In 2001, interviewers only recorded sharing if there was clear risk of exposure to blood-borne viruses – for example, the aforementioned scenario would not be classified as sharing, but double-dipping in a shared injection mix or using another person's uncleaned tourniquet or spoon would be classified as sharing.

Table 45: Proportion of the IDU sample (n=100) reporting sharing of injection equipment in the month prior to interview

Injection equipment sharing	% of IDU in past month		
	2000 IDRS	2001 IDRS	2002 IDRS
Borrowed used needles	10%	10%	10%
Lent used needle to others	12%	6%	1%
Shared spoons/mixing container	53%	5%	1%
Shared water	35%	7%	1%
Shared filters	32%	3%	1%
Shared tourniquets	29%	10%	14%

11.5 Blood-Borne Viruses

Blood borne viruses, and in particular HIV/AIDS and hepatitis B and C 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 and hepatitis B and C in Tasmania, and, where possible, records the relevant risk factors for infection the person may have been exposed to. Table 46 indicates the number of cases of blood-borne virus infection recorded in the state between 1991 and 2002. In regards to the markedly increased incident (new) cases of hepatitis C infection between 1997 and 1998, this is likely to simply reflect improvement in the surveillance system. However, while the number of reported unspecified (not recent infections) cases of hepatitis C have been steadily increasing since 1995, there are some possible indications of a decrease in reported incident cases of hepatitis C in 2001 and 2002, a turnaround from the increases seen in previous years. All incident cases of hepatitis C between 1996 and 2000 had injecting drug use as a recent risk factor for infection[30]. However, no cases of HIV infection in the past seven years have had relatively recent injecting drug use as a risk factor for acquiring the infection.

Key informants in all three Tasmanian IDRS studies believed there to be a high level of hepatitis C infection among the IDU they worked with. The figures presented here do not necessarily support this suggestion, however it should be noted that many IDU are reluctant to find out their hepatitis infection status, and as such these figures here are likely to under-represent the level of infection within the community. Three key informants (two of which were medical staff) reported that they believed hepatitis C rates to have remained stable within the groups they were most familiar with, and there was a single KI report (by a medical practitioner) of declining hepatitis C rates amongst the clients they were working with.

[30] Such detailed information was not available to the authors for cases identified in 2001 or 2002.

Table 46: Rates of notifiable blood-borne viruses in Tasmania 1991-2002

Year	Blood-Borne Virus			
	Hepatitis C (incident)	Hepatitis C (Unspecified)	Hepatitis B (Incident)[#]	HIV (Incident)
1991	*n/a*	*n/a*	0	6
1992	*n/a*	*n/a*	0	10
1993	*n/a*	*n/a*	0	1
1994	*n/a*	*n/a*	0	5
1995	1	274	7	2
1996	5	291	8	7
1997	2	234	1	2
1998	18	275	5 (5)	2
1999	18	310	6 (5)	0
2000	31	335	18 (5)	1
2001	7	381	21	0
2002	14	394	20	*n/a*

[#]Number of incident cases of hepatitis B infection where illicit drug use was present as a risk factor for acquiring the infection are presented in parentheses. 'n/a' refers to cases where either no data is available or where recorded data was not specifically broken into incident and unspecified cases. *Source: Communicable Diseases Network - Australia New Zealand - National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services; National Centre in HIV Epidemiology and Clinical Research (2002).*

11.6 Mental Health

As there exists a substantial body of work identifying increased rates of mental health issues among those who use illicit drugs, in 2002, IDU respondents were asked if they had attended a health professional for a mental health problem (other than drug dependence) in the six months prior to interview. One quarter of respondents (25%) had done so, most commonly presenting to a general practitioner (n=16, 64%), psychiatrist (n=8, 32%), psychologist (n=5, 20%) or counsellor (n=4, 16%), with single reports of attendance to a hospital emergency department, psychiatric ward, neurologist, social worker, mental health nurse, or welfare worker. The most common, self-reported, reason for seeking support was depression (n=17, 68%: unipolar 60%; bipolar 8%), although anxiety-related issues were also common (n=8, 32%: anxiety 16%; panic attacks 12%; obsessive-compulsive disorder 4%). Psychosis (n=5, 20%: schizophrenia 4%; drug-induced psychosis 4%; paranoia 4%; other psychosis 8%) and personality 'disorders' (n=3, 12%: borderline personality disorder 4%; unspecified disorder 8%) were also reasons for presentation. Two individuals each had presented to mental health staff for treatment of anger management issues and attention deficit disorder respectively, and one for issues associated with frontal lobe syndrome.

11.7 Crime

11.7.1 Expenditure on drugs

IDU survey respondents were asked to evaluate the amount they had spent on illicit drugs on the day prior to interview, and responses are summarised in Table 4 (Section 3). The average amount of money spent amongst the sample was $41 (SD $66, range $0-$410, median = $20). Just over half (56%) of the sample had spent money on illicit drugs on the day prior to interview, with the most common amount being between $20 and $99 (36%). Only 33% of the sample reported spending $50 or more, and 14% spent more than $100 on the day prior to interview. This level

of spending on illicit drugs was much lower than that reported in most other jurisdictions in the 2001 IDRS IDU surveys, with 46% of the national sample (n=910 Topp et al, 2002) spending $50 or more, and 32% more than $100 in the day prior to interview.

11.7.2 Criminal activity

Half (50%) of the IDU respondents reported involvement in some type of criminal activity in the preceding month (Table 47), a level that is commensurate to that reported by IDU in previous IDRS studies (52% of IDU in the 2001 national sample, n=910, Topp et al, 2001). The most commonly reported crimes were dealing of drugs (34%) and property crime (28%), with relatively few respondents reporting involvement in violent crime (6%) or fraud (2%). Most IDU reporting involvement in criminal activity in the month prior to interview indicated that they had engaged in such activities less than once per week. However, substantial proportions reported more frequent recent involvement in dealing (5% daily, 7% more than once per week, 5% weekly, 17% less than weekly) and property crimes such as stealing or shoplifting (3% daily, 1% more than once per week, 10% once per week, 14% less than once per week). Forty-one percent of IDU respondents had been arrested in the previous twelve months. The most common grounds for arrest were property crime (25%), violent crimes (14%), or use/possession (9%), although 10% had been arrested on driving charges (2% alcohol and driving, 3% drugs and driving, 5% general driving offence). On examination of rates of reported criminal activity in the 2000 and 2001 Tasmanian IDRS samples (Table 47), there appears to have been little change in crime rates between these surveys, with the exception of increased reported rates of arrest for violent crime, and steadily escalating proportions reporting both engaging in, and being arrested for, property crimes (both increasing by around 10% between the 2000 and 2002 samples). In support of this, several key informants noted increases in both violent crime (n=5) and property crime (n=2), among the substance-using groups they were familiar with, although many other key informants did not note any change in rates of property crime (n=3), dealing (n=2), fraud (n=3) or violent crime (n=3) among their groups.

Table 47. Reported criminal activity among IDU (n=100)

Activity	2000 IDRS	2001 IDRS	2002 IDRS
Crime (% in last month)			
Dealing	49%	41%	34%
Property crime	18%	23%	28%
Violent crime	10%	4%	6%
Fraud	5%	4%	2%
Any crime	*64%*	*56%*	*50%*
Arrested last 12 months (%)	*43%*	*41%*	*41%*
Arrested for property crime	16%	13%	25%
Arrested for use/possession	9%	1%	9%
Arrested for violent crime	6%	9%	14%
Arrested for fraud	2%	0%	0%
Arrested for dealing/trafficking	1%	2%	1%
Arrested for driving offence	*	4%	5%
Arrested for alcohol and driving	*	2%	2%
Arrested for drugs and driving	*	0%	3%
Arrested for other reason	10%	17%	8%

**Note: Comparable data for these cells was not gathered in the 2000 IDRS study*

11.7.3 Perceptions of police activity

Respondents were asked a number of questions regarding their perceptions of changes in police activity in the past six months and the impact of these changes (Table 48). Among those IDU that felt confident in providing a response, 59% believed that police activity had remained stable, and 34% reported an increase in police activity in this time. However, most had not experienced any changes in the number of their friends that had been arrested recently (70%), and their ability to purchase drugs had not been reduced by any recent changes in local police activity (82%). A substantial proportion (29%) did report an increase in arrests recently, with 20 IDU and 1 key informant reporting an increase in busts of dealers in recent months (specifically mentioning busts of cannabis dealers, n=10; morphine dealers, n=10; speed dealers, n=9; users, n=2).

Table 48: Perceptions of police activity among IDU

Have there been changes in police activity in the last six months?	
More activity	21%
Stable	36%
Less activity	3%
Don't know	39%
Has police activity made it more difficult to buy drugs recently?	
Yes	16%
No	82%
Don't know	2%
Has there been an increase in arrests lately?	
More arrests	29%
Stable	70%
Less arrests	1%

Key informants reported similar perceptions of police activity, with a substantial proportion of those that could confidently comment (36%, n=5) reporting no recent changes in police activity toward the users they came into contact with. Several key informants noted an increase in police activity in recent months (n=4), particularly in regards to police targeting antisocial behaviour within the central business district of Hobart city. Similar to trends noted in previous years, four key informants noted an increase in a more 'community policing' approach to substance users, with police preferring to educate or counsel users than involve them further in the criminal justice system, and tailoring their approach to help support positive behaviours by IDU (such as entry into treatment and return of used injection equipment to outlets).

Such an approach by police is likely to reflect their investment in early intervention to help deflect first time offenders away from the criminal justice system. In July 1998, Tasmania Police introduced a Cannabis Cautioning Program, which gave police officers the discretion to caution first-time minor cannabis offenders. Following a successful trial of the program, the eligibility criteria for cautioning were expanded to include consideration of non-first time offenders (ABCI, 2001). In March 2000, under a series of initiatives funded by the Council of Australian Governments, the program was further adapted within the Tasmanian Early Intervention and

Diversion Framework. This current diversion model now extends to cover 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 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). This initiative appears to be increasingly well supported by Tasmania Police, as there has been a steady rise in the number of cautions or diversions issued since the inception of the new diversion system (Table 49).

Table 49: Drug diversions or cautions issued by Tasmania Police 1999-2002

	Jul-Sep 1999	Oct-Dec 1999	Jan-Mar 2000	Apr-Jun 2000	Jul-Sept 2000	Oct-Dec 2000	Jan-Mar 2001	Apr-Jun 2001	Jul-Sept 2001	Oct-Dec 2001	Jan-Mar 2002	Apr-Jun 2002
Number of cautions / diversions statewide	46	61	68	151	161	147	213	243	242	238	274	224
% diversions in Southern district	67%	39%	65%	47%	52%	39%	54%	44%	42%	36%	39%	43%
Number diverted to health intervention statewide	*n/a*	*n/a*	*n/a*	40*	20	30	46	55	*n/a*	*n/a*	*n/a*	*n/a*
% health intervention diversions in South	*n/a*	*n/a*	*n/a*	28%*	20%	50%	39%	56%	*n/a*	*n/a*	*n/a*	*n/a*

Source: Tasmania Police State Intelligence Services Statewide Illicit Drug Reports; Alcohol and Drug Service
*Note: These figures may differ from data submitted to the Australian Bureau of Criminal Intelligence if the decision to charge persons was altered to a caution after the figures were forwarded to State Intelligence Services. *This data refers to the period March-June 2000. 'n/a' refers to cases where the relevant data was not provided to the authors*

Data pertaining to drug-related arrests in Tasmania in between 1995/96 and 2001/02 are shown below in Table 50. This data illustrates a marked increase in arrests for methamphetamine-related offences for 2000/01 and 2001/02 in comparison to previous years, a trend consistent with IDU and key informants of increasing availability and use of methamphetamine in the state. The apparent increase in cannabis-related arrests may simply reflect the increase in utilisation of 'official' cautions and diversions by Tasmania police (which are included in these statistics) over 'unofficial' warnings, which would not be recorded in these statistics. In partial support of this, there has been a general decline in the number of persons before the Hobart Magistrates Court on possession or use type offences between 1999/00 and 2001/02 in comparison to the years prior to the instigation of the diversion system (for example, 1997/98 and 1998/99: Table 52).

Table 50: Number of arrests (including cautions and diversions) for cannabis, methamphetamine, opioid and cocaine related offences in Tasmania, 1995/96-2000/02

Type of offence	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Cannabis	2518	1079	1196	736	799	1050	1540
Methamphetamine	42	20	15	7	28	70	89
Opioids	41	28	16	25	9	9	34
Cocaine	0	0	0	0	0	4	1

Source: Australian Illicit Drug Reports 1995/96-2000/01, Australian Bureau of Criminal Intelligence, and Tasmania Police State Intelligence Services Statewide Illicit Drug Reports.

Note: 2001/02 data is provisional and is based on data provided to State Intelligence Services, which may differ from official statistics and counting rules used by the Australian Crime Commission (formerly ABCI)

Table 51 below indicates that the proportion of arrests for offences relating to the possession or use of illicit drugs (consumer offences) as opposed to supply-type (provider) offences appears to have decreased in 2001/02 across all drug types, in comparison both to figures in 2000/01 and the average proportions over the preceding five financial years (Table 52). These figures are reflective of Tasmania Police's focus toward suppliers. This is mirrored in the increasing number of persons before the Hobart Magistrate's Court on dealing or trafficking type offences, in the contrary direction to trends for possession and use-type offences.

Table 51: Consumer arrests (including cautions and diversions) for cannabis, methamphetamine and opioid-related offences as a proportion of all drug-related arrests in Tasmania 1996/97-2000/02

	% consumers					
Drug Type	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Cannabis	49%	76%	93%	88%	96%	72%
Methamphetamine	90%	100%	86%	71%	86%	79%
Opioids	86%	94%	96%	78%	89%	68%

Source: Australian Illicit Drug Reports 1995/96-2000/01, Australian Bureau of Criminal Intelligence, and Tasmania Police State Intelligence Services Statewide Illicit Drug Reports.

Note: 2001/02 data is provisional and is based on data provided to State Intelligence Services, which may differ from official statistics and counting rules used by the Australian Crime Commission (formerly ABCI)

Table 52: Number of individuals before Tasmanian courts or imprisoned on drug charges, 1996-2002

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
Supreme Court of Tasmania						
Number of individuals convicted of selling or trafficking in dangerous drugs	22	18	22	27	14	15
Hobart Magistrates Court						
Number of individuals before the court for:						
dealing and trafficking in drugs	*n/p*	30 *(40)*	28 *(33)*	23 *(28)*	42 (47)	39 *(48)*
importing and exporting of drugs	*n/p*	4 *(5)*	7 *(8)*	5 *(8)*	2 (2)	0 *(0)*
manufacturing and growing of drugs	*n/p*	201 *(260)*	164 *(189)*	101*(124)*	144 *(163)*	142 *(194)*
possession and/or use of drugs	*n/p*	469 *(928)*	342 *(654)*	195*(428)*	263*(544)*	277 *(542)*
other drug offences	*n/p*	229 *(284)*	178 *(251)*	105*(169)*	113*(155)*	102 *(104)*
(alleged number of offences in parentheses)						
Hobart Prison*						
Number of individuals incarcerated	21	42	26	29	*n/p*	16
Number of offences among those incarcerated	33	77	50	44	25	27
Offence breakdown						
Grow prohibited plant / substance	3	6	3	4	0	2
Possession / use	16	30	20	22	13	18
Prescription offences	3	7	6	0	0	0
Sell / supply narcotic substance	1	1	1	2	0	1
Sell / supply prohibited substance	1	6	4	0	6	4
Traffic in narcotic substance	1	1	1	6	1	1
Traffic prohibited substance	4	7	2	4	1	1
Traffic prohibited plant	0	5	4	2	1	0
Other	4	14	9	5	3	0

*Note that numbers of incarcerations refer to cases presented before both the Supreme and Magistrates courts; '*n/p*' refers to cases where data was not provided to the authors

Sources: Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court Data); Corrective Services (Prison data), Department of Justice and Industrial Relations

11.8 Pharmacy Break-ins

Available data provided by Tasmania Police regarding pharmacy break-ins involving theft of pharmaceuticals or potential drugs of abuse indicate that, in the southern region of Tasmania, there has been a steady decline in such occurrences, with 17 such incidents in 1998/99, 10 in 1999/00, 2 in 2000/01 and 4 in 2001/02. Although the products stolen were not detailed in all cases, benzodiazepines were the most commonly stolen drug, featuring in at least 12 of the 17 incidents in 1998/99, 8 of the 10 1999/2000 burglaries, and 1 of the 4 incidents in 2001/02[31]. Notably, temazepam was the most commonly reported benzodiazepine stolen. Traditionally, theft of pseudoephedrine-based products (usually for conversion to amphetamine) is common amongst pharmacy break-ins, and it is noteworthy that this did drug not figure highly amongst those taken in break-ins in the south of the state where products stolen were detailed in 1998/99 and 1999/00 (although it was present in one of the two burglaries in 2001/02 where the products stolen were detailed).

Table 53 below seems to indicate that there has been a trend towards a decreased value of products stolen from pharmacy break-ins over the past few years (data from 2000 is incomplete). This trend may partially reflect the increased awareness of security amongst pharmacists, which was also noted in the 1999 report. It should be noted that these figures include costs associated with damage to property, not simply the value of goods stolen.

Table 44: Insurance claims for Tasmanian pharmacy break-ins, 1997-2000

	1997	1998	1999	2000*
Number of Claims	44	62	47	10
Total Cost of Goods Stolen and Damage to Property	$43,504	$38,706	$32,610	$13,149

*To October 11, 2000
Source: Pharmacy Guild Insurance

11.9 Doctor Shopping

Since a significant proportion of illicit drug use in Tasmania involves abuse of pharmaceutical products, patterns of doctor shopping in the state were reviewed. The Health Insurance Commission identifies people as "doctor shoppers" if, in one year, a person: 1) sees 15 or more different general practitioners; 2) has 30 or more Medicare consultations, and 3) obtains more Pharmaceutical Benefits Scheme (PBS) prescriptions than appears to be clinically necessary.

Following national trends, the number of identified doctor shoppers in the state has declined over the past five financial years, from 184 in 1995/96 to 134 in 2000/01 (Table 54). Amongst the group of identified doctor shoppers in 2000/01, benzodiazepines were the most commonly accessed medication, followed by codeine-based compounds and narcotic analgesics. It is notable that the number of identified doctor shoppers accessing each of these drug types increased between 2000/01 in comparison to the numbers accessing in 1999/00. It is unclear at this stage whether this represents a trend toward increases in doctor shopping or if this simply relates to

[31] Data from 2000/01 pharmacy break-ins does not provide details of the medications stolen.

changes in identification or reporting processes, and as such is an issue that merits attention in coming years.

The largest number of scripts obtained by identified doctor shoppers was also for benzodiazepines. However, it should be noted that, while the median number of scripts for both benzodiazepines and codeine compounds obtained by Tasmanian doctor shoppers has remained fairly stable over the past four financial years (or have possibly declined, in the case of benzodiazepines), the median number of prescriptions for narcotic analgesics per doctor shopper has been steadily increasing. Since 1995/96, median prescriptions for narcotic analgesics has more than doubled from 9 scripts per doctor shopper, to 22 in 2000/01, with a concomitant increase in the range of the number of scripts accessed (Table 54).

Table 54: Doctor shopping patterns in Tasmania 1995/96-2000/01

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
Number of doctor shoppers enrolled nationally	9,931	10,296	9,738	9,348	8,780	8,179
Number of doctor shoppers enrolled in Tasmania	184	183	162	146	104	134
Benzodiazepines						
Number of Tasmanian doctor shoppers accessing	173	169	155	140	98	127
Median scripts per doctor shopper	13	14	30	37	27	29
25-75 percentile of accessed scripts	*5-30*	*7-31*	*14-56*	*20-62*	*12-54*	*11-48*
Narcotic Analgesics						
Number of Tasmanian doctor shoppers accessing	96	95	101	81	61	79
Median scripts per doctor shopper	9	8	15	16	26	22
25-75 percentile of accessed scripts	*4-29*	*3-17*	*3-52*	*4-50*	*11-63*	*4-52*
Codeine Compounds						
Number of Tasmanian doctor shoppers accessing	155	148	133	113	81	105
Median scripts per doctor shopper	9	9	14	14	9	12
25-75 percentile of accessed scripts	*3-20*	*4-21*	*5-37*	*4-37*	*4-31*	*4-37*

Source: Professional Review Division, Health Insurance Commission
2001/02 data was not available at the time of printing.

11.10 Summary Of Drug-Related Issues

The main drug-related issues to emerge from the 2002 IDRS study are summarised in Table 55 below. The trends that are of most concern relate to injection-related health problems and safe injection practices amongst local IDU.

Table 55: Summary of drug-related issues

Health Issues
• Alcohol remains the principal drug of concern amongst the largest proportion of clients at Tasmanian Alcohol and Other Drug Treatment agencies, followed by cannabis, although there has been a shift towards increasing proportions of clients with opiate or amphetamine-related issues since 1995.
• Calls to the Alcohol and Drug Information Service in regard to use of specific drugs are predominantly in reference to cannabis use. Calls in regard to cannabis use have increased between 2000/01 and 2001/02, while calls about heroin use have decreased in this period.
• Low rates of both fatal and non-fatal opioid overdose amongst IDU (particularly in comparison to other Australian jurisdictions)
• A substantial proportion of IDU experience injection-related health problems, at a rate relatively greater than those seen amongst IDU in other jurisdictions, possibly due to the increased harms associated with the injection of pharmaceuticals
• Steady improvement in rates of sharing of injection equipment, although rates of sharing of needles/syringes (predominantly with sexual partners) have remained stable at 10% of the sample in the month prior to interview across the past three Tasmanian IDRS studies
• Some indication of a possible decrease in incident hepatitis C infections amongst cases reported to Public Health, although there appears to remain a high level of hepatitis C infection amongst IDU generally
Crime and Police Activity
• Continuing level of criminal activity among some groups of injecting drug users (primarily drug dealing and, to a lesser extent, property crime), with a steadily increasing proportion of IDU participating in the IDRS reporting both engaging in, and being arrested for, property crime
• Expansion and support for cautioning and drug diversion programs by Tasmania Police is evident, with steadily increasing utilisation of diversion as a sanction
• Amongst drug-related arrests, there has been an increase in the proportion relating to providers, and a consequent decrease in the proportion relating to use-type offences. These trends are also reflected in cases before the Hobart Magistrates Court
• Low levels of pharmacy break-ins in the state, with theft of benzodiazepines and pseudoephedrine-based products being the medications most commonly stolen in these few cases
• The numbers of identified doctor shoppers in the state appear to have increased slightly in 2000/01, although the median number of scripts for benzodiazepines and codeine-based compounds have remained stable. However, the median number of prescriptions for narcotic analgesics per doctor shopper has been steadily increasing over the past few years

12 COMPARISON OF DATA FROM DIFFERENT SOURCES

The following section provides a summary of the main findings of the 2002 IDRS and the degree of convergent support for these trends from the three data sources: the injecting drug user study (IDU), the key informant survey (KI) and secondary indicator data (OTHER). There was a congruency of information between the three sources, with most findings supported by at least two of the sources. The lower number of trends supported by the secondary indicator data (OTHER) reflects both the paucity of available data and the lack of sensitivity of such data for the purposes of the current study.

Table 56: Trends in methamphetamines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

GENERAL METHAMPHETAMINE TRENDS	IDU	KI	OTHER
Continua of forms of higher-potency methamphetamine available (from crystals to 'paste' like slurry)	✓	✓	
Increase in numbers of people using methamphetamine	✓	✓	✓
Increase in amount or frequency of methamphetamine use	✓	✓	
Higher-potency methamphetamine attracting users away from other drugs	✓	✓	
Purity of methamphetamine 'medium', around 20%	✓	✓	✓
POWDER METHAMPHETAMINE TRENDS			
Price of powder methamphetamine stable ($80 per gram)	✓	✓	✓
Availability stable and very easy to obtain	✓	✓	
'BASE/PASTE' METHAMPHETAMINE TRENDS			
Price of paste methamphetamine stable ($50 per point)	✓	✓	✓
Availability stable and very easy to obtain	✓	✓	
Most common form used by regular IDU	✓	✓	
CRYSTAL METHAMPHETAMINE TRENDS			
Price of paste methamphetamine stable ($50 per point)	✓	✓	✓
Availability variable and most difficult form to obtain	✓	✓	

Table 57: Trends in heroin endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

HEROIN TRENDS	IDU	KI	OTHER
Price of heroin stable at $100 per 'packet' (0.05-0.15g)	✓		
Availability easy to very easy for well 'connected' users, difficult for other IDU	✓	✓	
Availability generally low and stable over past 6 months	✓	✓	✓
Both powder and 'rock' (compressed powder) forms available, but 'rock' used predominantly	✓	✓	✓
Predominantly used by regular users of other opioids	✓	✓	

Table 58: Trends in cannabis endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

CANNABIS TRENDS	IDU	KI	OTHER
Price of cannabis stable: $20-$25 per gram, $250 per ounce	✓	✓	✓
Availability stable and very easy	✓	✓	
Potency high (based on unverified estimates) and stable	✓	✓	
Hydroponically-grown cannabis head preferred among users	✓	✓	
Increasing hydroponic cultivation of cannabis			✓
Use of cannabis widespread through broad cross-section of the community	✓	✓	✓
High level of daily use among IDRS sample	✓	✓	

Table 59: Trends in cocaine endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

COCAINE TRENDS	IDU	KI	OTHER
Very low availability and use of cocaine by Tasmanian IDU, stable	✓	✓	✓
Cocaine that is used by local IDU generally imported from mainland states (rather than purchased locally)	✓	✓	

Table 60: Trends in opioids endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

OPIOID TRENDS	IDU	KI	OTHER
Flexible use of different types of opioids (heroin, morphine, methadone) among regular users due to fluctuating availability	✓	✓	
High level of benzodiazepine use among opioid users (both IV and oral)	✓	✓	
Injection-related harms associated with poor injecting practices among some opioid injectors	✓	✓	
MORPHINE TRENDS			
Price stable or decreasing ($1 per mg, $80 per 100mg)	✓	✓	
MS Contin predominant form of morphine used	✓	✓	
Increasing use of liquid morphine (Ordine)	✓	✓	
Availability of morphine easy to very easy and stable	✓	✓	
METHADONE TRENDS			
Price stable ($1 per mg), although fluctuates for larger purchase amounts	✓	✓	
Availability of methadone stable	✓	✓	
Increase in use of Physeptone tablets	✓	✓	

Table 61: Trends in benzodiazepines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

BENZODIAZEPINE TRENDS	IDU	KI	OTHER
High use of benzodiazepines among IDRS sample	✓	✓	
IV benzodiazepine use more common amongst regular users of other opioids	✓	✓	
Temazepam most commonly injected benzodiazepine	✓	✓	
Rates of IV use of benzodiazepines stable	✓	✓	✓

Table 62: Trends in other drugs endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

TRENDS IN OTHER DRUGS	IDU	KI	OTHER
Hallucinogens and/or ecstasy used occasionally by IDRS sample	✓	✓	
Indications of increasing availability of methamphetamine-based 'ecstasy' tablets	✓	✓	✓
Decrease in availability and/or use of hallucinogens		✓	✓
Increase in abuse of dexamphetamine and methylphenidate (predominantly amongst adolescent age groups)	✓	✓	
Continuing low rates of use and diversion of alkaloid poppy crops	✓	✓	✓

Table 63: Trends in drug-related issues endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

DRUG-RELATED ISSUES	IDU	KI	OTHER
Low rates of fatal and non-fatal opioid overdose amongst IDU (particularly in comparison to other jurisdictions)	✓	✓	✓
Substantial levels of injection-related health problems among IDU	✓	✓	
Low rates of needle and other injection equipment sharing amongst IDU	✓	✓	✓
Continuing transmission of hepatitis C through injecting drug use		✓	✓
Continuing moderate level of criminal activity among some injecting drug users (primarily drug dealing, and to a lesser extent, property crime)	✓	✓	
Expansion of cautioning and drug diversion programs by Tasmania Police		✓	✓

13 SUMMARY AND CONCLUSIONS

13.1 Summary Of Main Findings

As a whole, the patterns of drug use identified in the 2002 IDRS generally reflected continuations or stabilisations of those identified in the 2001 report (Bruno & McLean, 2002). Summaries of major trends for each drug class are reported below by drug type.

Methamphetamine

It is clear that the increased availability of higher-purity methamphetamine, identified as an emerging trend in the 2000 Tasmanian IDRS, has further stabilised and expanded into 2002. The relatively high potency and ease of access to the drug appears to have made use of methamphetamine increasingly attractive among IDU, with almost all of those surveyed using the drug in the six months prior to interview (89%), despite the participants predominantly preferring opioids (66%).

The majority of IDU reported most commonly using the waxy, sticky gel/powder 'base/paste' form of methamphetamine, that appears to be very easily available, although its potency and presentation fluctuates substantially. Despite the declining popularity of the traditional low-purity powder methamphetamine amongst IDU respondents over the past three years of the IDRS, reports from Tasmania Police suggest that this form remains the most common preparation of methamphetamine in the Tasmanian market. Use of prescription stimulants, such as dexamphetamine and methylphenidate, was increased among the 2002 IDU sample, up to 44% from only 22% in the 2001 study. Crystalline methamphetamine, unlike the other forms of the drug, appears still to be reasonably difficult to access in the State, with use among the IDU sample low.

The sustained, ready availability of relatively high potency methamphetamine was regarded as being responsible for anecdotal descriptions of an increasing number of people using methamphetamine, an increase in younger users of the drug, and use in increasing amount by existing methamphetamine users in recent months. These suggestions of increases in use of the drug were matched by increases in both seizures and arrests related to methamphetamine in the past year. With these indications of expanding levels of use, along with continued anecdotal suggestions of the drug attracting opiate users away from that market, careful monitoring of both the methamphetamine market and the impacts on the physical and mental health of users is warranted in the coming years.

Heroin

While the availability of heroin in the state appeared to have been slowly increasing during 1999 and 2000, data from the past two IDRS studies has suggested that the drug has been becoming increasingly difficult to access in recent years. Use of heroin among both IDRS IDU respondents and clients of the State's Needle Availability program have steadily declined in the past three years, despite the drug remaining very popular as a drug of choice among IDU. Additionally, IDU reported purchase prices of heroin of $50-100 per 'taste' (0.05-0.15g) and $350 per gram appear to be slightly higher than modal prices reported in 2001 ($50/'taste' and $300/gram), despite the majority opinion of IDU that prices had remained stable in the preceding six months.

In the 2002 survey, 'rock' heroin was the form predominantly used, a change from previous years, where use of both this and the more heavily 'cut' powder form were reasonably equal. As powder was the form of heroin that traditionally filtered down to 'street' level trades, this, and the complete absence of reported purchase of the drug through 'street' deals amongst the 2002 participants are further evidence of heroin's declining availability locally.

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. Only a very small proportion of the sample reported recent use of the drug (12%), which locally is almost exclusively a crystalline powder. By the few IDUs who could comment on trends in availability, cocaine was considered difficult to access, a situation that was considered stable in the preceding six-month period. Single seizures of cocaine were analysed by Tasmania Police in 2000/01 and 2001/02, both yielding 44% purity levels. These patterns seem to have remained reasonably stable over the past few years, however, it is noteworthy that, between 2000 and 2002, increasing proportions of the Tasmanian IDU sample have reported lifetime use (39% and 47%, respectively) and recent use (6% and 12%, respectively) of cocaine.

Cannabis

Most aspects of the cannabis market and patterns of use appear to be relatively stable, despite the continued expansion of the Illicit Drug Diversion Initiative within the state, indicating that any perceived lessening of the potential personal cost associated with possession of small amounts of cannabis has not had any negative impact in terms of expansion of the local cannabis market (an argument often levelled at similar programs in other jurisdictions). Among the IDU surveyed, cannabis use continued to be almost ubiquitous, with 96% using the drug in the preceding six months, and the majority of these individuals using the drug daily. Reported purchase prices similarly appear to have remained stable in 2002 ($25 per gram, $80 per quarter-ounce).

Hydroponically-cultivated cannabis head remains the form most commonly smoked by IDU, (71% of those who used cannabis), although substantial proportions reported using both hydroponically-grown (95%) and outdoor cannabis (85%) in the preceding six months. In concert with this, intelligence reports from Tasmania police indicate an increasing trend toward hydroponic cultivation of the drug, with increasing proportions of cannabis seizures being indoor or hydroponic in origin, and reports from all three state Drug Investigation Services branches suggesting that outdoor plantations of cannabis seem to be on the decrease.

IDU reported most commonly purchasing cannabis through friends, and, in alignment with this, when asked about the cultivator of their purchases, the majority (66%) believed it to have been grown by small-time 'backyard' user/growers, rather than cultivated by larger scale suppliers (for example, a 'crime syndicate': 26%).

Opioids

Overall, patterns of use and availability of other opioids such as morphine and methadone seem to have generally remained stable since the 2000 IDRS, with 76% of the IDU sample using morphine and 80% methadone in the six months prior to interview. Median frequency of use of opioids in the preceding six months within the 2002 IDU sample did show a slight shift from the previous survey, with use of morphine dropping slightly from 31 days in 2001 to 24 days in the current cohort, and median frequency of methadone use (amongst the 25 individuals using the drug who were not methadone maintenance patients) increasing from 6 days in the 2001 sample to 24 in this period. As the reported use of methadone (Physeptone) tablets had also increased in

2002 (used by 56% of the sample, up from 42% in 2001 and 30% in 2000), the upward trend in frequency of methadone use is likely to reflect the increased availability and use of Physeptone tablets rather than any substantial increase in the diversion of methadone syrup. In support of this, the majority of those accessing methadone by illicit means reported primarily using Physeptone tablets.

MS Contin remains the most commonly used formulation of morphine, although reported use of Ordine, a liquid preparation of the drug, has steadily been increasing over the past three years of the IDRS. Virtually all of those using morphine or methadone tablets had accessed these substances from illicit sources in the six months prior to interview, indicating that access to these products is primarily not coming via doctor shopping from the users themselves.

Continuing the trend seen in the 2001 IDRS, both use of preparations of alkaloid poppies and the number of poppy crop thefts remained low in 2002, marking a sustained reduction from levels seen in 2000. In 2002, only 14% IDUs reported using some alkaloid poppy preparation, with 16,000 poppy capsules stolen, in comparison to the 34% reporting use and 62,500 capsules stolen in 2000.

Buprenorphine, recently adopted as a maintenance treatment option for opioid addiction in the state, appears to have made little impact on the illicit opioid market, with only one individual participating in the 2002 survey reporting illicit use of the drug (and only once). However, given that substantial levels of diversion have occurred in jurisdictions where buprenorphine maintenance treatment is more common, careful monitoring of this issue is clearly warranted as Tasmania's buprenorphine program expands, particularly given the existing culture of use of pharmaceutical products among local IDU.

Benzodiazepines

There appears to have been a stabilisation or reduction in the rates of use and injection of benzodiazepines among IDU in 2002. While both the proportion of the IDU sample reporting oral (80%) or intravenous (38%) use of benzodiazepines in the preceding six months was highly similar to the proportions seen in the 2001 study (85% and 37% respectively), the median frequency of use in this time fell from 48 days in the 2001 cohort to 30 days among the 2002 respondents. Moreover, since policy changes removing the PBS subsidy on gel capsule formulations of temazepam (the benzodiazepine form most favoured for injection) were introduced in May 2002, IDU have reported this formulation as more difficult to get via licit means.

While it appears that harm reduction efforts, by front-line workers, medical practitioners and policy changes, may have had a considerable impact on patterns of benzodiazepine use, there remains a relatively high level of benzodiazepine injection within Hobart when compared to other jurisdictions. This is a particular concern given the serious psychological and physical sequale associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within the local IDU community, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

Ecstasy

Key informant reports, rising seizures, and an increasing prevalence of use (20% vs. 26% in 1001 and 2002, respectively) by IDU suggest an increase in the availability of tablets marketed as 'ecstasy' in Hobart. However, this drug appears to be predominantly used in demographic groups other than those accessed via the IDRS methodology. Intelligence reports from Tasmania Police indicate that much of the 'ecstasy' available in Tasmania is imported from Victoria, and, by extrapolation from markings on seized tablets in both jurisdictions, are often comprised of compressed methamphetamine with additives of caffeine or ketamine rather than MDMA.

Drug-related issues

Both indicator data and reports from those surveyed in the current study suggest relatively low rates of sharing of needles/syringes and other injection equipment (around 10% or less among those surveyed), with indications of more appropriate practices with other injection equipment (such as water and mixing containers) among some IDU. Comparing reported rates of injection related harms among the 2001 and 2002 Tasmanian IDRS participants, substantial decreases were shown in rates of experience of 'dirty hits' (31% vs. 18% in 2001 and 2002) and thrombosis (21% vs. 5%), with the latter likely to be associated with a decrease in recent frequency of injection of benzodiazepines. Overall, however, a substantial level of injection-related health problems continues to be experienced by local injecting-drug users, at a relative rate considerably higher than IDU in other jurisdictions. This is reflective of the increased harms associated with the injection of pharmaceutical preparations of drugs, which is substantially more common in Tasmania than other jurisdictions. However, local IDU experienced a much lower rate of overdose than users in other jurisdictions, due to the greater control over the dose of the drug afforded by use of standardised pharmaceutical preparations.

13.2 Methodological Considerations

The aim of the IDRS is to gather evidence of emerging drug trends in illicit drug use and related problems within the community. The IDRS methodology is heavily dependant on the perceptions of individuals involved in, and exposed to, the illicit drug use 'scene' (both individuals who inject drugs and professionals working with these groups). While these subjective impressions are combined with other, more objective, indicator data where possible to support and substantiate these reports, given the inherently covert nature of illicit drug use, available indicator data is limited and often insensitive to the trends of interest in this study.

The focus of the IDRS on surveying professionals in drug and alcohol-related fields, and often those people accessing their services, has meant that the study over-represents low educational and socio-economic groups, given that the charter of the majority of these agencies is to provide services to these populations. As such, the methodology leaves the major group of illicit drug users – those who use substances occasionally and non-problematically – largely untapped. Due to this gap, it would be inappropriate to regard the IDRS as providing a representative overview of illicit drug use or the demographics of those who use illicit drugs. Importantly, this methodology in its current form does not adequately tap accurate information about drugs that are more commonly used recreationally (for example, ecstasy) and more focal research within different demographic groups is required to provide better information in these areas.

It is important to note that the purpose of the IDRS is simply to detect trends that warrant further investigation, not to explore and verify such trends. As such, the concurrent use of the three data sets included in this study, each with their own inherent strengths and limitations, affords an efficient and appropriate approach to achieving the aims of the study. In subsequent

years, the validity of the IDRS will be further enhanced by the development of more systematic data sets (e.g. for drug and alcohol counselling services, ambulance and coroner data), and the incorporation of the results of several projects currently underway in the state (e.g. those funded by the National Illicit Drug Strategy).

13.3 Implications

The findings of the Tasmanian 2002 IDRS suggest the following areas for further investigation and possible consideration in policy:

- As Tasmanian illicit drug use culture has been consistently shown to substantially differ from other jurisdictions (with regard to, for example, patterns of use of pharmaceutical products rather than substances such as heroin, due the low local availability of this drug), drug education programs and harm minimisation information campaigns need to be tailored to the particular needs and types of substances used within the state.

- Extension of a drug trend monitoring framework into other regions within the state (such as Launceston and the North-West coast) as there has been almost no specific research examining patterns of drug use within these areas, and due to their access to air and sea ports, and establishment of organised motor cycle group headquarters, availability and use of illicit substances may differ substantially in these regions from patterns seen in Hobart.

- Continued emphasis on, and support for, targeted strategies to further reduce the rates of sharing of needles/syringes and other injection equipment (such as tourniquets, filters and mixing containers) among IDU, as well as to minimise the harms associated with poor injecting practice through improving awareness and adoption of safe injection techniques and vein care among IDU.

- Investigation into the factors associated with the experience of 'dirty hits' among local IDU and development of strategies to reduce this occurrence.

- Continuing monitoring of the expanding methamphetamine market and patterns of methamphetamine use.

- Research into the composition of the differing forms of the higher-potency preparations of methamphetamine, both to determine whether there are any particular injection-related harm risks associated with any of its common constituent chemical impurities, and to determine whether these forms are similar to that reported variously as 'crystal meth', 'paste' or 'base' in other jurisdictions.

- Continued monitoring of the availability and potency of heroin available locally, particularly given that mainland heroin markets appear to have returned to a relatively easy availability of the drug in 2002.

- With the firm establishment of a culture of injection of methadone syrup locally (although this remains predominantly within individuals enrolled in the state methadone maintenance program injecting their own methadone), continued consideration of pragmatic harm reduction approaches to such use is warranted: either at the level of the consumer, with use of butterflies and biological filters; and/or at the policy level,

requiring use of sterile water for dilution of methadone doses or switching to Biodone syrup, as this preparation does not contain the preservative agent sorbitol, which can cause irritation and harm to the venous system.

- Use of liquid preparations of morphine (Ordine) has continued to rise over the past three years of the IDRS. This is of some concern as the drug is typically sold 'preloaded' in syringe barrels, and it is often unclear to the user if the injection equipment or the solution is free from infection or contamination. Approaches to reducing the potential harms of this situation, such as increasing the awareness of the risk of this situation among users, or varying prescription practices to reduce the availability of larger containers of the drug, merit consideration as use expands.

- Given that injection of buprenorphine carries with it a substantial degree of risk for the development of abscesses, careful monitoring of diversion of the drug is warranted as Tasmania's buprenorphine program expands. If, as has been seen in other jurisdictions with larger buprenorphine maintenance programs, injection of the drug becomes an issue locally, IDU should be made aware of 'safe' injection techniques for the drug through front-line harm reduction workers.

- Research into factors that would reduce the harms associated with the intravenous use of the pharmaceutical preparations of morphine, methadone and benzodiazepines commonly used within the local IDU population, and dissemination of this information to users through continued training of Needle Availability Program staff and peer groups.

- Continued monitoring of the intravenous use of benzodiazepines, particularly to assess the impact of the recently changed status of Normison (temazepam) on patterns of misuse of other benzodiazepines or related substances.

- Characterisation and potency testing of cannabis cultivars to investigate continuing reports of high or increasing potency of cannabis.

- While there were clear indications of an increasing availability of tablets marketed as 'ecstasy' in Hobart, this drug was primarily used in demographic groups not well tapped via the IDRS methodology. As such, specific research examining the extent of use, demographic profiles of users, and analysis of the composition of the tablets sold locally as 'ecstasy' is required in order to better understand the potential harms faced by local users. Better understanding of the demographics of people using this drug will facilitate the targeted and successful delivery of any appropriate harm reduction information about this product.

- Research examining the extent of use, and demographic profiles of (mis)users of drugs such as anabolic steroids, inhalants, and pharmaceutical amphetamines in the state, as these populations are not well accessed within the methodology of the IDRS.

REFERENCES

Australian Bureau of Criminal Intelligence (1997). *Australian Illicit Drug Report 1995-96*. Canberra: ABCI

Australian Bureau of Criminal Intelligence (1998). *Australian Illicit Drug Report 1996-97*. Canberra: ABCI

Australian Bureau of Criminal Intelligence (1999). *Australian Illicit Drug Report 1997-98*. Canberra: ABCI

Australian Bureau of Criminal Intelligence (2000). *Australian Illicit Drug Report 1998-99*. Canberra: ABCI

Australian Bureau of Criminal Intelligence (2001). *Australian Illicit Drug Report 1999-00*. Canberra: ABCI

Australian Bureau of Criminal Intelligence (2002). *Australian Illicit Drug Report 2000-01*. Canberra: ABCI

Australian Crime Commission. (in press) *Australian Illicit Drug Report 2001-02*. Canberra: Australian Crime Commission.

Australian Institute of Health and Welfare (1999). *1998 National Drug Strategy Household survey: First Results.* AIHW cat. no. PHE 15. Canberra: AIHW (Drug Statistics Series).

Australian Institute of Health and Welfare (2002). *2001 National Drug Strategy Household survey: First Results.* AIHW cat. no. PHE 35. Canberra: AIHW (Drug Statistics Series).

Australian Institute of Health and Welfare (2002). *2001 National Drug Strategy Household survey: State and Territory Supplement.* AIHW cat. no. PHE 37. Canberra: AIHW (Drug Statistics Series).

Breen, C., Degenhardt, L. & Roxburgh, A. (2002). Findings from the Illicit Drug Reporting System, 2002. *Drug Trends Bulletin, December, 2002.*

Bruno, R. & McLean, S. (2000). *Tasmanian Drug Trends 1999: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 84. Sydney: University of New South Wales

Bruno, R. & McLean, S. (2001). *Tasmanian Drug Trends 2000: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 109. Sydney: University of New South Wales

Bruno, R. & McLean, S. (2002). *Tasmanian Drug Trends 2001: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 135. Sydney: University of New South Wales

Cancer Council of Tasmania (1997). *Prevalence of substance use among Tasmanian secondary school students in 1996*. Hobart: Cancer Council of Tasmania

Cancer Council of Tasmania (2001). *Prevalence of substance use among Tasmanian secondary school students in 1999*. Hobart: Cancer Council of Tasmania

Chesher, G.B. (1993). Pharmacology of the sympathomimetic psychostimulants. In: D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 9-30). Canberra: Australian Government Publishing Service.

Communicable Diseases Network Australia, *National Notifiable Diseases Surveillance System*. Available at: http://www.health.gov.au/pubhlth/cdi/nndss/nndss2.htm

Cormack, S., Faulkner, C., Foster Jones, P. & Greaves, H. (1998). *South Australian Drug Trends 1997: Findings From the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report. Sydney: University of New South Wales

Darke, S., Topp, L., & Kaye, S. (2001). Findings from the Illicit Drug Reporting System, 2001. *Drug Trends Bulletin, December, 2001*. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L. (2001). *Opioid Overdose Deaths in Australia.* Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L. (2002). *Opioid Overdose Deaths in Australia.* Sydney: National Drug and Alcohol Research Centre.

Dwyer, R. & Rumbold, G. (2000). *Victorian Drug Trends 1999: Findings From the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 89. Sydney: University of New South Wales

Fry, C. & Bruno, R. (2002). Recent trends in benzodiazepine use among injecting drug users in Victoria and Tasmania. *Drug and Alcohol Review, 21*, 363-367.

Hando, J., O'Brian, S., Darke, S., Maher, L. & Hall, W. (1997). *The Illicit Drug Reporting System Trial: Final Report*. National Drug and Alcohol Research Centre Monograph. Sydney: University of New South Wales.

Hando, J. & Darke, S. (1998). *New South Wales Drug Trends 1997: Findings From the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 56. Sydney: University of New South Wales

Hargraves, K. & Lenton, S. (2002). *WA Drug Trends 2001: Findings From the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 134. Sydney: University of New South Wales

MacDonald, M. & Zhou, J. (2002). *Prevalence of HIV, HCV and injecting and sexual behaviour among IDU at Needle and Syringe Programs: Australian NSP survey national data report 1995-2001.* Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

McKetin, R., Darke, S., & Godycka-Cwirko, K. (1999). *New South Wales Drug Trends 1998: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 72. Sydney: University of New South Wales

McKetin, R., Darke, S., & Kaye, S. (2000). *New South Wales Drug Trends 1999: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 86. Sydney: University of New South Wales

McKetin, R., Darke, S., Humeniuk, R., Dwyer, R., Bruno, R., Fleming, J., Kinner, S., Hargraves, K. & Rysavy, P. (2000). *Australian Drug Trends 1999: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Monograph No. 43. Sydney: University of New South Wales

National Centre in HIV Epidemiology and Clinical Research (2002). *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2002.* Sydney: University of New South Wales National Centre in HIV Epidemiology and Clinical Research.

Rumbold, G., & Fry, C. (1998). *Victorian Drug Trends 1997: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report No. 59. Sydney: University of New South Wales

Shand, F. & Mattick, R. (2002). *Census of Clients of Treatment Service Agencies (COTSA) 2001.* Sydney: University of New South Wales

SPSS Inc. (2001). SPSS for Windows, Release 10.1.4, Standard Version.

Topp, L. & Churchill, A. (2002). *Australia's Dynamic Methamphetamine Markets.* Drug Trends Bulletin, June, 2002. Sydney: National Drug and Alcohol Research Centre.

Topp, L., Hando, J. & Darke, S. (2001). *Procedure Manual for the 2001 Illicit Drug Reporting System (IDRS).* Sydney: National Drug and Alcohol Research Centre.

Topp, L. Darke, S., Bruno, R., Fry, C., Hargreaves, Humeniuk, R., McAllister, R., O'Reilly, B. & Williams, P. (2001). *Australian Drug Trends 2000: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Monograph No. 47. Sydney: University of New South Wales

Topp, L., Kaye, S., Bruno, R., Longo, M., Williams, P., O'Reilly, B., Fry, C., Rose, G. & Darke, S. (2002). *Australian Drug Trends 2001: Findings From the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Monograph No. 48. Sydney: University of New South Wales.

Warner-Smith, M., Lynskey, M., Darke, S., & Hall, W. (2000). *Heroin overdose: Prevalence, correlates, consequences and interventions.* National Drug and Alcohol Research Centre Monograph No. 46. Sydney: University of New South Wales

Wardlaw, G. (1993). Supply reduction (law enforcement) strategies pertaining to illicit use of psychostimulants. In: D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia*. Canberra: Australian Government Publishing Service.