

# Tasmanian Drug Trends 2000



Findings from the  
Illicit Drug Reporting System  
(IDRS)

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# TABLE OF CONTENTS

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LOCATION OF TABLES.....	iii
LOCATION OF FIGURES.....	v
ACKNOWLEDGEMENTS.....	vi
LIST OF ABBREVIATIONS.....	vii
EXECUTIVE SUMMARY.....	viii
1 INTRODUCTION.....	1
1.1 STUDY AIM.....	1
2 METHOD.....	2
2.1 INJECTING DRUG USER (IDU) SURVEY .....	2
2.2 KEY INFORMANT STUDY .....	3
2.3 OTHER INDICATORS .....	4
3 AN OVERVIEW OF THE SAMPLE OF INJECTING DRUG USERS .....	8
3.1 DEMOGRAPHICS .....	8
3.2 DRUG USE HISTORY OF THE IDU SAMPLE .....	9
4 HEROIN .....	13
4.1 PRICE .....	13
4.2 AVAILABILITY .....	14
4.3 PURITY AND FORM .....	15
4.4 USE .....	15
4.5 SUMMARY OF HEROIN TRENDS.....	18
5 AMPHETAMINE .....	19
5.1 PRICE.....	19
5.2 AVAILABILITY .....	21
5.3 FORM AND PURITY .....	21
5.4 PATTERNS OF AMPHETAMINE USE.....	23
5.5 SUMMARY OF AMPHETAMINE TRENDS.....	27
6 COCAINE .....	28
6.1 PRICE .....	28
6.2 AVAILABILITY .....	28
6.3 PURITY .....	28
6.4 USE .....	28
6.5 SUMMARY OF COCAINE TRENDS.....	29
7 CANNABIS .....	30
7.1 PRICE.....	30
7.2 AVAILABILITY .....	32
7.3 FORM AND POTENCY .....	32
7.4 PATTERNS OF CANNABIS USE.....	33
7.5 SUMMARY OF CANNABIS TRENDS.....	35

8	OPIOIDS .....	36
8.1	PRICE.....	38
8.2	FORM .....	39
8.3	AVAILABILITY.. .....	39
8.4	PATTERNS OF OPIOID USE.....	41
8.5	SUMMARY OF OPIOID TRENDS.....	46
9	BENZODIAZEPINES.....	47
9.1	SUMMARY OF BENZODIAZEPINE TRENDS.....	49
10	OTHER DRUGS .....	50
10.1	PRESCRIPTION STIMULANTS .....	50
10.2	ECSTASY.....	51
10.3	ANABOLIC STEROIDS .....	52
10.4	INHALANTS .....	52
10.5	HALLUCINOGENS .....	52
10.6	ALKALOID POPPIES .....	53
10.7	SUMMARY OF TRENDS FOR OTHER DRUGS .....	54
11	DRUG-RELATED ISSUES .....	55
11.1	TREATMENT .....	55
11.2	OVERDOSE .....	60
11.3	INJECTION-RELATED PROBLEMS .....	62
11.4	INJECTION EQUIPMENT SHARING .....	62
11.5	BLOOD-BORNE VIRUSES .....	66
11.6	CRIME .....	67
11.7	PHARMACY BREAK-INS .....	71
11.8	DOCTOR SHOPPING .....	71
11.9	SUMMARY OF DRUG-RELATED ISSUES .....	73
12	COMPARISON OF DATA FROM DIFFERENT SOURCES .....	74
13	SUMMARY AND CONCLUSION .....	79
13.1	SUMMARY OF MAIN FINDINGS .....	79
13.2	METHODOLOGICAL CONSIDERATIONS .....	80
13.3	IMPLICATIONS .....	81
14	REFERENCES .....	83

## LOCATION OF TABLES

---

Table A: Price, availability, purity and prevalence of use of heroin, amphetamine, cannabis, methadone and morphine .....	ix
Table 1: Demographic characteristics of the injecting drug user (IDU) sample.....	8
Table 2: Drug of initiation into injecting, drug of choice and current injection patterns for IDU in the current study .....	9
Table 3: Frequency of injection during the last month (IDU survey) .....	10
Table 4: Amount spent on illicit drugs on day prior to interview (IDU survey).....	10
Table 5: Drugs taken on the day prior to interview among the IDU sample.....	10
Table 6: Location in which respondents had last injected (IDU survey).....	11
Table 7: Drug use history of the IDU sample .....	12
Table 8: Price of heroin purchased by IDU.....	13
Table 9: Heroin prices in Tasmania reported by the Australian Bureau of Criminal Intelligence, 1997-2000 .....	14
Table 10: Percentage of heroin reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1997-2000 .....	16
Table 11: Australian Needle and Syringe Program (NSP) Survey: Prevalence of heroin within “last drug injected”, 1995-99 .....	16
Table 12: Patterns of drug use reported by those IDU who had used heroin in the past 6 months .....	17
Table 13: Summary of Heroin Trends .....	18
Table 14: Most common amounts and prices of amphetamine purchased by IDU.....	20
Table 15: Amphetamine prices in Tasmania reported by the ABCI, 1996-2000.....	20
Table 16: Tasmania Police data for amphetamine July 1999-September 2000.....	21
Table 17: Purity of Tasmanian seizures of methamphetamine received for laboratory testing, 1997/98 – 1999/00 .....	22
Table 18: Consumer and provider arrests for amphetamine and related substances, 1996/97-1999/00 .....	24
Table 19: Summary of trends in amphetamine use.....	27
Table 20: Percentage of cocaine reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1996-2000 .....	29
Table 21: Modal prices of cannabis in Hobart purchased by IDU .....	30
Table 22: Cannabis prices in Tasmania, 1995-2000 .....	31
Table 23: Summary of cannabis trends .....	35
Table 24: Use of other drugs by those reporting use of morphine in the past six months (n=75) .....	36
Table 25: Drug of choice and drug most often injected among those reporting use of morphine .....	36
Table 26: Market prices of morphine reported by IDU and modal price for most recent purchase of particular forms of the drug .....	38
Table 27: Market prices of methadone reported by IDU and modal price for most recent purchase of particular forms of the drug .....	38
Table 28: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within “last drug injected”, 1995-99 .....	42
Table 29: Summary of trends in opioid use .....	46
Table 30: Patterns of use of benzodiazepines amongst primary users of other drugs in the IDU sample.....	47

Table 31: Percentage of benzodiazepines reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1996-2000 .....	48
Table 32: Tasmanian alkaloid poppy crop diversion rates, 1995-2000 .....	53
Table 33: Drug use of inpatients presenting for detoxification services in Hobart .....	55
Table 34: Summary of drug-related presentations to Royal Hobart Hospital Department of Emergency Medicine, July-December 1999 and February-October 2000 .....	58
Table 35: Summary of drug-related separations from Tasmanian Public Hospitals 1998-1999 .....	59
Table 36: Reported experience of opioid overdose among the IDU sample .....	60
Table 37: Injection-related health problems reported by participants in the IDU survey in the month prior to interview .....	62
Table 38: Proportion of the IDU sample (n=100) reporting sharing of injection equipment in the month prior to interview .....	64
Table 39: Specific blood-borne virus transmission risk behaviours performed by Hobart IDU (n=80) in the month prior to interview in the 1998 Tasmanian Users Health and Support League Hepatitis C Risk Assessment and Peer Education Project (Clarke & Siddins, 1998) .....	65
Table 40: Rates of notifiable blood-borne viruses in Tasmania 1991-2000 .....	66
Table 41: Reported criminal activity among IDU .....	67
Table 42: Perceptions of police activity among IDU .....	68
Table 43: Drug diversions or cautions issued by Tasmania Police 1999-2000 .....	68
Table 44: Number of arrests (including cautions and diversions) for cannabis, amphetamine, opiate and cocaine related offences in Tasmania, 1995/96-1999/00 ...	69
Table 45: Consumer arrests (including cautions and diversions) for cannabis, amphetamine and opiate-related offences as a proportion of all drug-related arrests in Tasmania 1996/97-1999/00 .....	69
Table 46: Number of individuals before Tasmanian courts or imprisoned on drug charges, 1996-2000 .....	70
Table 47: Insurance claims for Tasmanian pharmacy break-ins, 1997-2000.....	71
Table 48: Doctor shopping patterns in Tasmania 1996/97-1999/00 .....	72
Table 49: Summary of drug-related issues .....	73
Table 50: Trends in amphetamines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	74
Table 51: Trends in heroin endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	75
Table 52: Trends in cannabis endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	75
Table 53: Trends in cocaine endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	76
Table 54: Trends in opioids endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	76
Table 55: Trends in benzodiazepines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	77
Table 56: Trends in other drugs endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	77
Table 57: Trends in drug-related issues endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER) .....	78

## LOCATION OF FIGURES

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Figure 1: Percentage of amphetamine reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1996-2000 .....	25
Figure 2: Percentages of opioids reported as ‘drug most often injected’ by Tasmanian needle exchange clients, 1996-2000 .....	41
Figure 3: Growth of the Tasmanian methadone maintenance program, 1995-2000.....	24
Figure 4: Consumption of morphine per 1000 persons, 1991-1998 .....	43
Figure 5: Consumption of methadone 10mg tablets per 1000 persons, 1991-1998 .....	43
Figure 6: Consumption of methadone per 1000 persons, 1991-1998 .....	44
Figure 7: Consumption of methylphenidate (Ritalin) per 1000 persons, 1991-1999 .....	50
Figure 8: Consumption of dexamphetamine per 1000 persons, 1991-1999 .....	51
Figure 9: Percentage of calls to ADIS by drug type (1998/99) .....	57
Figure 10: Percentage of calls to ADIS referring to persons using specific drugs, May 15-June 14, 2000 and July-September 2000 .....	57
Figure 11: Number of opioid overdose deaths among those aged 15-44 years, 1988-1999	61
Figure 12: Reported sharing of needles and syringes by non-pharmacy Needle and Syringe Availability Program clients .....	63
Figure 13: Reported sharing of other injection equipment by non-pharmacy Needle and Syringe Availability Program clients .....	63

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## LIST OF ABBREVIATIONS

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<b>ADIS</b>	Alcohol and Drug Information Service
<b>ABCI</b>	Australian Bureau of Criminal Intelligence
<b>AFP</b>	Australian Federal Police
<b>ASSAD</b>	Australian School Students' Alcohol and Drugs survey
<b>DHHS</b>	Department of Health and Human Services
<b>IDRS</b>	Illicit Drug Reporting System
<b>IDU</b>	Injecting drug user
<b>KI</b>	Key Informant
<b>KIS</b>	Key Informant Study
<b>MMT</b>	Methadone Maintenance Therapy
<b>NDARC</b>	National Drug and Alcohol Research Centre, University of New South Wales
<b>NSAP</b>	Needle and Syringe Availability Program
<b>NSP</b>	Needle and syringe program
<b>OTHER</b>	Refers to other (secondary) indicators
<b>SIS</b>	State Intelligence Services, Tasmania Police
<b>SPSS</b>	Statistical Package for the Social Sciences

## **EXECUTIVE SUMMARY**

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In 1998, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Family Services 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 co-ordinated approach to the monitoring of data associated with the use of heroin, cocaine, amphetamines 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 the drug field, 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.

### **Injecting Drug User survey**

One hundred people that regularly injected illicit drugs 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-five key informants, including professionals recruited from health, law enforcement, research and outreach, were interviewed on a range of illicit drug use patterns in clients they had direct contact with. Of these informants, 12 reported on groups that regularly used opioids (diverted pharmaceuticals), 9 on cannabis and 14 on amphetamines.

### **Other indicators**

In order to complement and validate the key informant interview data, a range of drug use indicator data was sought, including health and law enforcement data. 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 National Drug Household Study, and data from clients of the needle and syringe availability program, detoxification and methadone maintenance programs.

## Summary of drug trends in Tasmania

The 2000 IDRS detected a number of trends during the preceding six to twelve months. Table A 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, amphetamine, cannabis, methadone and morphine**

	<b>Heroin</b>	<b>Amphetamine</b>	<b>Cannabis</b>	<b>Morphine</b>	<b>Methadone</b>
<b>Price</b> <i>1 mg</i> <i>0.1 gram</i> <i>Gram</i>  <i>Ounce</i>	\$50, stable \$300, stable	\$50, stable \$80 (cut), stable \$300-350 (pure)	\$20-25, stable  \$250-300, stable	\$1, stable \$80	\$1, stable \$80
<b>Availability</b>	Mixed reports Stable	Very easy Stable/easier	Very easy Stable	Very easy Stable	Mixed reports Stable
<b>Purity*</b>	Variable	Medium-high Increasing	High Stable	Pharmaceutical	Pharmaceutical
<b>Prevalence of use</b>	Possible increase	Increasing	Stable	Possible increase	Possible increase

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

### *Heroin*

The availability of heroin in Hobart seems to have continued to increase, a trend that has remained over at least the past eighteen months. However, its availability remains relatively low in comparison to other states, with a large proportion of users finding it difficult to access despite it being a sought-after drug. Both low-purity heroin powder and higher purity 'rock' form heroin appear to be available in the state, and the price of these appears to have remained stable over the past six months.

### *Amphetamines*

There appears to have been an increase in the availability of more pure amphetamine (in a wet, crystalline powder form, in comparison to the traditional powder-form amphetamine). This change was regarded as being responsible for an increasing number of people using amphetamine, and use in increasing amount by existing users in recent months. There were also reports of the emergence of very high purity forms of amphetamine, such as 'ice' (crystalline methamphetamine) or liquid amphetamine, although the availability of these forms of the drug was very limited. With increased use of these potent stimulants, there was reports in changes in the mental health of some users, including the emergence of acute psychosis.

### *Cocaine*

Cocaine appears to remain virtually unobtainable in Hobart, with a very small number of people surveyed reporting recent use of the drug, and indications that what is used is purchased and imported from mainland states.

### *Cannabis*

Most aspects of the cannabis market and patterns of use appear to be relatively stable, despite recent changes in Tasmania Police policy to allow possession of small amounts of cannabis to attract a 'caution' notice rather than a criminal charge. There have, however, been some indications of an increasing availability and preference for hydroponically-grown cannabis.

### *Opioids*

Patterns of use and availability of other opioids such as morphine, methadone and opium seem to have generally remained stable. However, there are some indications of an increasing number of people using opioids, morphines in particular, and there has been a shift to a more even balance between the numbers of clients of the state's Needle and Syringe Availability program reporting morphine and those reporting methadone as the drug they most often inject. There was also some indication of an increasing amount of people using or trying to use preparations of alkaloid poppies, and an increasing popularity of the injection of the combination of methadone and Normison (temazepam).

### *Benzodiazepines*

There has been a marked increase in the intravenous use of benzodiazepines, most commonly amongst regular users of opioids. This is of concern because concurrent use of benzodiazepines and opioids can increase the risk of overdose, and the benzodiazepine most commonly injected, Normison (temazepam) can cause significant harm to users.

## **Drug-related issues**

While most users reported good practices with regard to use of clean needles/syringes, there are indications that many continue to engage in risky practices with other injection equipment, which may lead to transmission of blood-borne viruses. Additionally, a substantial level of injection-related health problems was found amongst local injecting-drug users, at a level commensurate with users in the 1999 VIC and NSW IDRS, despite these groups having a much greater frequency of injection. 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 states.

## **Implications**

The findings of the Tasmanian 2000 IDRS suggest the following areas for further investigation and possible consideration in policy:

- Implementation of strategies to increase awareness of the risks associated with the sharing of injection equipment other than needles/syringes (for example, tourniquets, filters, and mixing containers) and to reduce the occurrence of this behaviour among IDU.
- Research into factors that would reduce the harms associated with intravenous use of methadone, morphine and benzodiazepines (of Normison in particular), and dissemination of this information to users through training of Needle and Syringe Availability Program staff and peer groups.
- Provision of some reduction of the availability of Normison (temazepam) to injecting drug users through focussed awareness campaigns amongst the medical and pharmaceutical communities.

- Continuing monitoring of the intravenous use of benzodiazepines, particularly of Normison.
- With the increased availability and use of more potent amphetamines, and the emergence of acutely psychotic clients presenting to drug and alcohol staff, it would be recommended that there be some training of drug and alcohol staff regarding strategies for dealing with acutely psychotic clients and what services are available for such crisis situations. Staff members of the state Mental Health Service's new Crisis Assessment Triage and Treatment (CATT) team would be well-placed to provide such training, as these staff have extensive experience in this area and will be the first point of contact in the mental health system for any such clients. Moreover, information needs to be provided to users of amphetamines and their associates information regarding 'warning signs' of potential psychotic episodes and what services are available to help.
- Research into the composition of the emerging more potent forms of amphetamine ('ice', liquid amphetamine), and moreover into the composition of the wet, crystalline powder amphetamine more readily available in the state to determine whether this is similar to that reported as 'ice' or 'crystal meth' in other states.
- Continuing monitoring of the amphetamine market and patterns of use.
- Research examining the extent of use of preparations of alkaloid poppies and the appropriateness or need for development of harm reduction strategies surrounding use of these preparations.
- Research examining the extent of use, and demographic profiles of users, of drugs such as ecstasy and anabolic steroids in the state.
- Characterisation and potency testing of cannabis cultivars to investigate continuing reports of high or increasing potency of cannabis.

# 1 INTRODUCTION

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In 1998, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Family Services to begin a national trial of the Illicit Drug Reporting System (IDRS), following a 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 amphetamines, 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, providing direction for issues which may require more detailed data collection or are important from a policy perspective.

The full IDRS methodology involves a three-pronged approach to data collection on drug trends, involving standardised surveys of people who regularly inject illicit drugs, a qualitative survey of people who have regular contact with groups of people that 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, 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. For the 2000 IDRS all states and territories were funded to employ the full IDRS methodology.

The 2000 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 that regularly inject illicit drugs, key informant interviews with professionals working with people that 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), and state comparisons (McKetin et al., 2000; Topp et al, in preparation), 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 which require further investigation

## 2 METHOD

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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 that regularly inject illicit drugs (IDU), a key informant study of professionals working in the illicit drug (or related) field that have regular contact with people that 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 possesses 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 2000 Tasmanian IDRS are also compared with findings from the 1999 study (Bruno & McLean, 2000) to determine any changes in drug trends over time.

### 2.1 Injecting Drug User (IDU) Survey

The IDU survey was completed during August 2000, and consisted of face-to-face interviews with 100 people that regularly inject illicit drugs. Inclusion criteria for participation in the study were that the individual must have injected at least monthly in the six months prior to interview, and have resided in Hobart for at least the past twelve months. Participants were recruited using a variety of methods, including advertisements distributed through needle syringe program outlets (NSPs), 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 public parks, health services, NSPs or, where invited by the participant, private homes. Four agencies: Your Place, Inc; the Tasmanian Council on AIDS and Related Diseases (TASCARD); The Link Youth Health Service and the Bridgewater Urban Renewal Project (BURP) assisted the researchers by participating as recruitment and/or interview sites for IDRS participants. The major location for recruitment and subsequent interview was Hobart city.

A standardised interview schedule used in previous IDRS research (Hando & Darke, 1998; McKetin et al., 1999) 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 and recent changes in injecting equipment provided through the state's Needle and Syringe

Availability Program. Ethical approval for the survey was granted by both the University of New South Wales and University of Tasmania institutional Ethics Committees. 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 participation. 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 they so wished. Interviews generally lasted between 30 and 50 minutes, and participants were reimbursed \$30 for their time and out-of-pocket expenses.

Data analysis was conducted using SPSS for windows, release 10.0.7 (SPSS Inc, 2000).

## **2.2 Key Informant Study**

Thirty-five key informants who were working with illicit drug users in the greater Hobart area participated in face-to-face interviews between July and August 2000. Seventeen (49%) participants were recruited from the pool of key informants that had taken part in the 1999 IDRS (Bruno & McLean, 2000). All other participants in the current study were identified and recruited either as replacements for 1999 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 police/nightclub security personnel (n=4), representatives of user groups/dealers (n=3), youth workers (n=6), with the remainder working specifically in the drug and alcohol field, comprising methadone/detox doctors (n=4), psychologists/counsellors (n=6), outreach/streetworkers (n=3), 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=9).

Entry criteria for inclusion in the study was 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 5 days per week (range 1 - 7), and 40% reported contact with more than 20 illicit drug users in the past week (89% reported contact with more than 10 users in the week prior to interview).

Fifty-one percent (n=18) were males. Key informants predominantly rated that they were very certain of the information they provided in the interviews (68%), or at least moderately so (97%). Although the key informants predominantly came from generic services (45%), many worked with special populations, including youth (37%), injecting drug users (9%), and prisoners (9%).

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 amphetamines (n=14), with the remainder reporting on the use of cannabis (n=9) or opioids (n=12). Many informants found it difficult to determine a single main illicit drug, due to the predominantly poly-substance using nature of the populations they were working with. With the exclusion of cannabis, which was common to all groups, key informants reporting on users of opioids found it most difficult to single out a main illicit drug, as most people they were reporting on were using both morphine and methadone regularly, and, to a lesser extent, heroin. When pressed to describe an illicit of choice for their group, 9 indicated

morphine, 2 methadone, and one heroin. It should be noted that in the 1999 Tasmanian IDRS, only 5 of the 33 key informants interviewed reported on primary users of amphetamine, and 17 reported on primary users of opioids. Several of the key informants participating in both studies changed from reporting on primary users of opioids in 1999, to primary users of amphetamine in 2000, despite the informants essentially retaining the same position in their services.

The interview schedule was a structured instrument which included sections on drug use patterns, drug availability, criminal behaviour and health issues. Interviews took between 30 and 90 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, Version 10.0.7 (SPSS Inc., 2000).

### **2.3 Other Indicators**

To complement and validate data collected from the key informant study and IDU survey, a range of secondary data sources were 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.

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 which fulfil the majority of these criteria and have been included in this report are:

- *Data from the Needle and Syringe Availability Program*

The Needle and Syringe Availability Program (NSAP) 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 24,725 occasions of service in the 1999/00 financial year.

- *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. The data provided here represents the last drug reported to be injected by survey respondents in Tasmania each year from 1995 to 1999 (1995 n=6; 1996 n=18; 1997 n=23; 1998 n=51; 1999 n=25).

- *The 1998 National Drug Strategy Household Survey*

This survey represents a prevalence study of drug use amongst the general community, surveying 1031 individuals in Tasmania who were over 14 years of age, could speak English, and who lived in private dwellings (Australian Institute of Health and Welfare, 1999). The survey covered the following illicit drugs: cannabis, amphetamines, 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 Australian School Students' Alcohol and Drugs (ASSAD) Survey*

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. Data from the 1999 survey was not published in time for inclusion in this report.

- *Police and Justice Department Data*

Tasmania Police State Intelligence Services, the Australian Bureau of Criminal Intelligence (ABCI), 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 1999/00 financial year, only one seizure of heroin, and 20 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).

- *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 data set 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 determine whether notifications represent new cases or those that have been established for some time.

- *Data relating to the Tasmanian Methadone Maintenance Program*

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

- *Coroners data regarding illicit drug-related fatalities*

Mortality data regarding illicit drug related deaths was obtained from the state coroners office. Data provided contains a summary of toxicology analysis for each case. It should be noted that this data only includes cases that have been completed by the coroner, and there are a number of cases outstanding which may date back to 1998. Figures included in this report are commensurate with those provided by the Australian Bureau of Statistics.

- *Doctor Shopping Data*

Data regarding patterns of doctor shopping in the state was examined because of 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.

- *Data relating to Tasmanian Alkaloid Poppy Crops*

Tasmania has had a commercial opiate alkaloid industry for several 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.

- *Tasmanian Morbidity Patient Data*

Tasmanian Morbidity Patient Data reports on drug-related separations (patient presentations) from Tasmanian public hospitals during the 1998/99 financial year. Data was collected for patients with a drug-related principal or additional diagnosis. A primary diagnosis is usually the reason for admission to hospital, while secondary diagnosis is often an additional relevant medical feature of the patient or a complicating factor in treatment (for example, early onset of labour being a primary diagnosis, with cannabis dependence as an additional diagnosis). While much of the data provides specific detail of drugs involved, some cases do not provide such information, for example in regard to drug induced mental disorders.

- *Data from the Department of Emergency Medicine (Royal Hobart Hospital)*

Data from drug-related presentations to the Royal Hobart Hospital Department of Emergency Medicine has been provided for the periods of July to December 1999 and February to June 2000. Data from presentations during January 2000 was not available due to the implementation of a new data system within the service. Additionally, because of changes in coding procedures, the data from these two periods are not necessarily directly comparable and hence have been presented separately.

### 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 26.3 years (SD = 6.8, range 15-50), with 73% being male. There was no significant difference in the age of male and female participants (26.9 and 24.6 years respectively). The majority of the sample (65%) were not currently employed, and the sample had a mean of 10.2 years (SD = 1.7, range 5-13) of school education. Twenty-eight percent of participants had trade or technical qualifications and 6% had university qualifications. The sample was drawn from 15 suburbs within the northern, eastern, southern, and inner city areas of Hobart, with the bulk of participants living in close proximity to Hobart city (44%).

Only 34% of participants had been imprisoned, with males being significantly more likely than females to have been so, as 40% of males had a previous prison history as compared with 18% of females:  $\chi^2(1) = 3.95$ ,  $p = 0.047$ .

The majority of the sample (57%) were not currently in any form of drug treatment. Of the 43 participants that were in treatment, 36 were in methadone maintenance, and had been so for 29.5 months, on average (median = 21 months, SD = 25.3 months, range 2-96 months), and 7 were in some form of counselling (mean duration of treatment 15.3 months, median = 24, SD = 11, range 1-24 months). Only one participant had used naltrexone in the 6 months prior to interview, prescribed by a doctor in Melbourne.

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

Characteristic	
Mean age (years)	26 (range 15 – 50)
Sex (% male)	73
Ethnicity (%):	
English speaking background	100
Non-English speaking background	0
Aboriginal or Torres Strait Islander	10
Employment (%):	
Not employed	65
Full time	3
Part time / casual	6
Student	16
Home Duties	10
School education (mean years)	10.2 (range 5 – 13)
Tertiary education (%):	
None	66
Trade / technical	28
University	6
Prison History (%)	34
Treatment History (%):	
Not currently in treatment	57
Methadone maintenance therapy	36
Drug & alcohol counselling	7

### 3.2 Drug Use History Of The IDU Sample

The mean reported age at first injection of a drug was in the late teens (17.8 years), ranging from 8 to 34 years. There was no significant difference between age of first injection for males and females in the sample (17.3 and 17.9 years respectively). As both previous IDRS reports in 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) into those 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 (15.9 vs. 20.0 years respectively:  $F(1, 98) = 28.38, p < 0.001$ ). There was considerable variation in the length of participant's injecting drug use careers, with the mean length of time since first injection being 8.5 years, ranging from less than a year to 33 years.

Amphetamine was the first drug injected by 61% of respondents, with 18% reporting morphine, 17% reporting heroin, 3% benzodiazepines, and 1% other substances. As with age of initial injection, there was a significant age-related difference in first drug injected. The younger group of subjects had a larger proportion of people reporting other opiates as first drug injected (57% amphetamines, 32% other opiates, 9% heroin) in comparison to the older group, where heroin was more frequent (65% amphetamine, 2% other opiates, 26% heroin;  $\chi^2(4) = 17.9, p = 0.001$ ). Of the 61 respondents that reported amphetamine as their first drug injected, 39 (64%) had most often injected opioids in the month prior to interview (19 participants reporting morphine, 19 methadone, 1 heroin).

Heroin was the reported drug of choice for the majority of participants (36%), followed by morphine (23%), and amphetamine (20%), as indicated in Table 2 below. Despite this high preference for heroin, only 4% reported it as last drug injected, and 2% as drug most often injected in the month prior to interview. The drugs most commonly used were morphine (39%), amphetamine, and methadone (both 29%).

**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	17	36	4	2
Methadone	0	11	24	29
Morphine	18	23	35	39
Amphetamine	61	20	31	29
Cocaine	0	1	1	0
Ecstasy	0	1	0	0
Benzodiazepines	0	1	5	1
Other	1	7	0	0

Frequency of injection by IDU during the month prior to interview (Table 3) was varied, with the majority injecting more than once per week (91%), and 31% 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)**

<b>Frequency of injection during the last month</b>	<b>%</b>
Not in the last month	1
Weekly or less	8
More than weekly	60
Once a day	20
Two to three times per day	11
More than three times per day	0

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 the sample had spent money on illicit drugs on the day before the interview, and that this was most commonly between \$20 and \$99.

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

<b>Amount spent on day prior to interview</b>	<b>%</b>
Nothing	45
Less than \$20	10
\$20-49	21
\$50-99	19
\$100-199	4
\$200-399	1
\$400 or more	0

Respondents reported the drugs they used on the day prior to their interview (Table 5). Only 11% had not used any drugs, with more than half (62%) using cannabis on the day before their interview. Methadone (used by all those on maintenance therapy), benzodiazepine (23%) and morphine (21%) use were also common. Polydrug use was common, with 70% 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 (45%).

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

<b>Drug</b>	<b>N=100</b>
Cannabis	62%
Methadone	35%
Benzodiazepines	23%
Morphine	22%
Amphetamine	12%
Heroin	4%
Cocaine	1%
Alcohol	17%
Did not take any drugs	10%

*\*Note: could list more than one drug*

Participants were also asked where they had last injected. These responses are summarised in Table 6 below, indicating that the majority of the sample (81%) had last injected in a private home, while only 19% last injected in a public place.

**Table 6: Location in which respondents had last injected (IDU survey, N=100)**

<b>Location</b>	<b>%</b>
Private Home	81
Public Toilet	5
Street/park or beach	5
Car	7
Other (e.g. car park)	2

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, amphetamines, hallucinogens, benzodiazepines, alcohol, cannabis and tobacco at some stage in their lives. Subjects had used a median of 11 (mean = 10.9, sd = 2.2, range 6-14) drug classes in their lives, and 7 (mean = 7.3, sd = 1.9, range 2-12) in the preceding six months. A median of 5 drug classes had been injected over their lifetimes (mean = 5.1, sd = 1.8, range 1-10), and 3 (mean = 3.3, sd = 1.4, range 1-7) in the preceding six months.<sup>1</sup>

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<sup>1</sup> Previous IDRS reports in other states include a single category to cover use of 'other opiates', which would include drugs such as morphine, opium, and poppy tar. Due to the particular characteristics of the Tasmanian illicit drug scene, with a high level of use of morphine and the local alkaloid poppy industry, a specific question on use of morphine was included in the Tasmanian IDRS, which increases the number of possible drug classes and may deteriorate from comparisons with other states participating in the IDRS. For consistency with other states, the additional question has been collapsed back into the 'other opiates' category, to produce the following figures: subjects had used a median of 10 (mean = 10.3, sd = 1.9, range 6-13) drug classes in their lives, and 7 (mean = 7.0, sd = 1.7, range 2-11) in the preceding six months. A median of 5 drug classes had been injected over their lifetimes (mean = 5.1, sd = 1.8, range 1-9), and 3 (mean = 3.3, sd = 1.4, range 1-7) in the preceding six months.

**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	70	68	37	29	8	18	1	10	1	38	7
2. Methadone	89	85	74					68	50	80	10*
3. Morphine	93	93	77					40	22	77	52
3a. Other Opiates	66	2	0	24	10	0	0	57	28	34	6
4. Amphetamines	98	98	82	23	6	57	9	51	14	83	25
5. Cocaine	39	30	5	7	0	26	2	6	0	6	4
6. Hallucinogens	88	24	3	4	0	0	0	84	30	31	2
7. Ecstasy	55	35	17	1	0	7	2	44	16	25	2
8. Benzodiazepines	94	61	37	7	3	3	0	86	73	81	26
9. Steroids	8	3	0					6	1	1	183
10. Alcohol	98	13	1					94	70	70	26
11. Cannabis	99									90	183
12. Anti-depressants	53									21	183
13. Inhalants	51									9	2
14. Tobacco	92									88	183
Polydrug use (median drug classes used)	11	5	3							7	

\* for those not currently in treatment

## 4 HEROIN

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Thirty-three percent of respondents on the IDU survey were able to comment confidently on the price, purity or availability of heroin. Of the key informants reporting on groups that predominantly used opioids (n=12), only one, a user group representative, reported the group they had most contact with had predominantly used heroin in the past six months.

Of the IDU sample, 70% reported they had tried heroin at some stage in their lives, and almost all of these had injected heroin (68% of sample). Thirty-eight percent had used heroin in the past six months, again, almost all had injected the drug (37 of the 38 respondents). 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, treatment and employment status and prison history. However, those that had used heroin in the last six months were significantly younger at first injection than those who had not (16.7 years vs. 18.5 years respectively:  $F(1,98) = 4.011$ ,  $p = 0.048$ ), and were injecting more frequently than those who had not recently used heroin ( $\chi^2(4)=10.2$ ,  $p = 0.036$ ). It should be noted that this may simply indicate that people who have a greater amount of exposure to illicit drugs were more likely to come across, and use, heroin.

Of those IDU surveyed who had used heroin in the past six months, 60% regarded heroin as their drug of choice, 22% other opiates, and 18% amphetamines or cocaine. Only 2% of the entire IDU sample indicated that heroin was the drug they had most often used in the month prior to interview.

### 4.1 Price

IDU who could comment on the price of heroin indicated that it was commonly sold in units of 'packets', which seemed 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. It should be noted that these prices (with the exception of 'caps') are generally commensurate with Melbourne prices reported in the 1999 IDRS (Dwyer & Rumbold, 2000), which seems consistent with reports from one police key informant that the most local heroin was sourced from Victoria (this was also supported by several IDU).

The price of heroin was reported to be stable by the majority of IDU and key informants (57%, n=16/28 and 50%, n=2 respectively) that could confidently comment, with mixed reports from the remaining respondents (14% of the IDU reporting each of increasing, decreasing and fluctuating prices).

**Table 8: Price of heroin purchased by IDU**

Descriptor	Gram weight estimates (mode)	Modal price
Cap	~0.05g	\$45 (range \$45-60)
\$50 packet	~0.1g (0.05g – 0.15g)	\$50
\$100 packet	0.1-0.2g	\$100
Gram	1 g	\$300 (range \$300-450)

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-\$600, in the 1999/00 financial year (Table 9), which are reasonably consistent with IDU reports of price, and indicate a slight drop in the price of larger quantities of heroin (grams and street weights) between the first and second halves of the 1999/00 financial year.

**Table 9: Heroin prices in Tasmania reported by the Australian Bureau of Criminal Intelligence, 1997-2000**

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

*Source: Australian Bureau of Criminal Intelligence*

## 4.2 Availability

Of the IDU sample that were able to comment on trends in the availability of heroin, there was a split in responses on the availability, with 47% (n=15) reporting it as difficult for them to obtain, while 49% (n=16) reporting it as easy or very easy for them to obtain. The majority (68%, n=21) reported that the availability of heroin had remained stable over the past six months. Four key informants indicated that heroin was difficult to access for the groups they came into contact with (n=4), but others indicated that heroin had become easier to access (n=6) or that availability had fluctuated (n=3) in the past six months. Most IDU had purchased heroin either from a friend (42%, n=14) or a dealer's home (36%, n=12), while only 12% reported usually purchasing from a street dealer.

Five seizures of heroin have been made by Tasmania police in the past eighteen months, including 1 cap in the Northern district in July 1999, two seizures totalling 14 grams in October 1999, one gram in the Western district in December 1999 and, in May 2000, 3 grams were seized in the Southern district. In comparison, no seizures of heroin were reported to the Australian Bureau of Criminal Intelligence in 1996/97 or 1997/98.

Taken together, these findings would seem to indicate that there has been an increase in the availability of heroin in the state over the last eighteen months, continuing a trend noted in the 1999 IDRS report, with some more well-connected IDU having reasonably stable access to the drug. However, as indicated by the low level of recent use of heroin by the IDU sample, on the whole, the availability of heroin in the state is still relatively low.

### 4.3 Purity And Form

As with the data on availability of heroin, there was quite a divide among IDU that could comment on purity of heroin they had used, with 58% (n=19) reporting low purity, but 42% reporting medium or high purity (24%, n=8 and 15%, n=4 for medium and high respectively). Four key informants commented on the purity of heroin, with two indicating high purity, one medium, and one informant believing purity of the heroin available to their group as being low.

Of the IDU sample, 23% had used heroin powder in the last 6 months, and 30% had used rock form heroin. As per trends noted in the 1999 IDRS report, it would seem that these forms reflect two very different qualities of heroin available, which goes some way to reconciling the apparently disparate purity trends above. Three IDU reported that the powder form was very low in purity, *estimated* at around 5% by these users. 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 noted by several key informants in the 1999 IDRS survey.

Rock form heroin was reported by IDU as being higher quality than the powder forms available. IDU noted that, in general, heroin sold as 'rock' was actually compressed powder made to look like true 'rock' form heroin. Similar reports were made by key informants in the 1999 Victorian IDRS study (Dwyer & Rumbold, 2000). One IDU that had used both 'true' rock form heroin and the compressed powder (or 'washed rock') form indicated that the latter form more readily dissolves in water than true 'rock' form heroin.

The majority of IDU (52%, n=14) indicated that there had been a stable purity of heroin over the past six months, with 22% (n=6) reporting decreasing purity, and 15% (n=4) stating that purity had fluctuated. Similarly, three key informants indicated a stable purity of heroin to the users they had contact with, although two reported increasing purity of heroin. A single seizure of heroin of less than 2 grams in weight, made by the Australian Federal Police (AFP) between January and March 2000, has been analysed at 74.6% purity (Australian Bureau of Criminal Intelligence, in preparation), a level within the range of purity of seizures made by the AFP in Victoria during 1999/00.

### 4.4 Use

#### *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 had ever used heroin, while 0.5% (n=5) had used it in the year prior to interview. Reported use of heroin as the main drug injected by non-pharmacy needle and syringe outlet clients has fluctuated over the last 4 years, with reported rates of 7.3%, 5.7%, 2.9% and 4.3% for the 1996/97, 1997/98, 1998/99, and 1999/00 periods respectively (Table 10). While there are acute limitations of the data collected from needle and syringe outlets (see section 2.3), a comparison of 1998/99 and 1999/00 data indicates an increase in both the raw number of clients and the percent of the client group reporting heroin as the drug they most often inject. This data may also underestimate the extent of heroin use among this group, as the question asked is 'what is the

drug you most often inject’, as opposed to other needle and syringe data sets which ask ‘what is the drug you last injected’. As indicated previously, although 38% of the IDU sample had used heroin in the past six months, only 2% 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 and syringe clients, 1997-2000**

Year	1997/98	1998/99	1999/00
Number of clients reporting heroin	390	257	457
Percent of total clients reporting heroin	5.7%	2.9%	4.3%

*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 (Table 11). However, given that these studies only sampled 18, 23, 51 and 25 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”, 1995-99**

	1995		1996		1997		1998		1999	
	Number	%	Number	%	Number	%	Number	%	Number	%
Heroin	2	33	1	6	0	0	5	10	2*	8
Total Sample Size	6		18		23		51		25	

*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

Tasmania Police State Intelligence Services reported six arrests involving offences relating to heroin in the 1999/00 financial year. Of these, three people were arrested on ‘consumer’-type offences such as possession or use (1 male, 2 females) and three males were charged with supply-type offences. Data specifically regarding heroin-related offences from previous years is unavailable as the Australian Bureau of Criminal Intelligence reports offences related to all opiates (including, for example, morphine and methadone) within a single category. This lack of specificity renders the identification of trends from such data difficult.

### *Current patterns of heroin use*

Thirty-eight 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 7 (range 1-137). 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 opiates, a finding in keeping with reports from key informants that, because of fluctuating availability, primary users of opiates have to be flexible in their patterns of use, turning to other opiates or benzodiazepines if their opiate of choice is unavailable. Additionally, there was a high level of use of amphetamines amongst this group, although it was used less frequently than other opiates.

**Table 12: Patterns of drug use reported by those IDU who had used heroin in the past 6 months**

	<b>% of those who had used heroin in last 6 months reporting use</b>	<b>Median days use for those using the drug</b>
Methadone	84%	91 (range 2-183)
Morphine	76%	30 (range 1-183)
Other opiates	58%	10 (range 1-151)
Benzodiazepines	84%	13 (range 1-183)
Cannabis	87%	183 (range 2-183)
Amphetamine	95%	21 (range 2-183)
Tobacco	84%	183 (range 92-183)

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 amphetamine (n=9 of 12 key informants), opiates (n=9 of 11 key informants) and cannabis (n=9 of 11 key informants).

### *Trends in heroin use*

An increase in the use of heroin was reported by five key informants and one IDU respondent, while there were several reports of changes to the demographics of those using heroin by IDU, for example more people using the drug (n=2), more younger people using (n=1), and a wider cross-section of people using (n=2).

Despite trends indicating an increasing availability and use of heroin in Tasmania over the past few years, findings such as the low median rate of use of heroin (7 days in last 6 months amongst those who had used the drug) and that of the 36% of the IDU sample that reported heroin as their drug of choice, only 64% of these had recently used heroin, indicate that the availability of the drug is still relatively low in the state. However, with the high use of other opioids and high preference for heroin amongst the IDU sampled, future trends in use of heroin in the state merit close attention, particularly as markets in mainland states begin to saturate.

## 4.5 Summary

**Table 13: Summary of Heroin Trends**

Price (mode) <i>'packet' (0.05-0.15g)</i> <i>'packet' (0.1-0.2g)</i> <i>gram</i>	<ul style="list-style-type: none"><li>• \$50, stable</li><li>• \$100, stable</li><li>• \$300, stable</li></ul>
Availability	<ul style="list-style-type: none"><li>• variable among IDU: easy to very easy (50%); difficult (50%)</li><li>• availability stable</li><li>• KI and other data indicate an increased availability of heroin over the past 18 months, but this level of availability remains generally low</li></ul>
Purity and form	<ul style="list-style-type: none"><li>• powder, low purity (IDU)</li><li>• 'rock' (compressed powder), medium-high purity (IDU)</li><li>• purity stable</li></ul>
Use	<ul style="list-style-type: none"><li>• Used by 38% of the IDU sample in past six months, but low rate of use (median = 7 days) despite high preference as drug of choice</li><li>• Use most common amongst regular users of other opioids</li></ul>

## 5 AMPHETAMINE

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Seventy-seven percent of the respondents on the IDU survey were able to confidently comment on aspects of price, purity and availability of amphetamines, while 83% of the sample had used amphetamine at some time in the last six months. Respondents that had reported amphetamine as the drug they most often used in the preceding month (n=29) were similar to other IDU (see Section 3.0) in terms of sex, age, cultural and educational background, employment status and prison history, but were less likely to be in some form of drug treatment (72% of regular amphetamine users vs. 50% of other IDU were currently not in treatment, with 17% and 44% on methadone maintenance respectively,  $\chi^2(2) = 6.57$ ,  $p = 0.037$ ).

Fourteen key informants reported on groups that primarily used amphetamine. Key informants included two youth workers, two police officers, a NSP worker, a user group representative and specific drug and alcohol counsellors/psychologists (n=3), outreach/street workers (n=2), health workers (n=2). Key informants were familiar with amphetamine users from virtually the whole range of Hobart suburbs, including the northern suburbs (n=4), eastern shore (n=5), and inner city (n=5). Locations mentioned tended to be in lower socio-economic regions, although this may 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 amphetamines from an English-speaking background, the majority aged in their twenties. The majority of amphetamine users described by key informants were males, with estimates ranging from 40% to 90% of the groups discussed (median = 75%). Education history of amphetamine users described covered the whole range from low levels to university graduates. Key informants described amphetamine users with high levels of unemployment, with the remainder in a range of part-time and full-time occupations.

In the following section the term ‘amphetamine’ refers to illicit street amphetamine (commonly called “speed”) which is comprised of either amphetamine or methamphetamine.

### 5.1 Price

As indicated in the 1999 Tasmanian IDRS (Bruno & McLean, 2000), there seems to be two main ‘preparations’ of amphetamine available in Hobart, each with separate pricing schedules. The median prices reported by IDU for the traditional white powder amphetamine, generally quite low in quality, was \$50 for approximately half a gram, and \$80 for a true gram. More ‘pure’ forms of amphetamine were generally bought by IDU in units of ‘points’ (approximately 0.1g) at a modal price of \$50. The 6 key informants who could comment confidently on costs reported prices consistent with IDU reports (\$50-\$70 0.5-0.8g; \$80 true gram; \$50-\$60 ‘point’).

The majority of both key informants and IDU who commented on price of amphetamines reported that this had remained stable over the previous six months (56% of IDU, 88% of key informants). Eighteen percent of IDU indicated that the price of amphetamine had increased in the previous six months, however, the reported prices of the last amounts of amphetamine purchased by IDU (Table 14 below) are consistent with prices reported in the 1999 IDRS study.

**Table 14: Most common amounts and prices of amphetamine purchased by IDU**

<b>Descriptor</b>	<b>Estimated Gram Weight</b>	<b>Modal Price</b>
'point' or packet ('pure')	0.1g (0.05g to 0.1g)	\$50 (range \$40-\$100)
2 points ('pure')	0.2g	\$80 (range \$70-\$100)
Half gram (cut)	0.5g	\$50
Gram (cut)	0.8g (0.8g to 1.0g)	\$80 (range \$50 to \$120)
Gram ('pure')	1.0g	\$300-350 (range \$280 to \$500)
Eightball	1/8 oz (3.5g)	\$200 (range \$200 to \$250)

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 'street gram' (0.6-0.8g) cost \$40-\$50, and a true gram \$70-\$80, in the 1999/00 financial year (Table 15), consistent with IDU and key informant reports of prices for the lower quality amphetamine. Since July 1999, Tasmania Police State Intelligence Services has produced monthly reports of drug seizures and costs estimated by informants (Table 16). This data indicates that prices have generally remained stable or have dropped slightly during the 1999/00 financial year, reporting \$40-\$50 for a 'taste' and \$70-\$80 per gram of amphetamine. These figures are again consistent with IDU and key informant reports of price.

**Table 15: Amphetamine prices in Tasmania reported by the ABCI, 1996-2000**

	<b>Street Gram*</b>	<b>Full Gram</b>	<b>Ounce (28 gms)</b>
July-Sept 1996	\$50-80	\$100-120	\$1400
Oct-Dec 1996	\$50-80	\$100-120	\$1400
Jan-Mar 1997	\$50-80	\$100-120	\$1400
April-June 1997	\$70-80	\$100-120	\$1400
July-Sept 1997	\$50	\$100-120	\$1200-1400
Oct-Dec 1997	\$50	\$100-120	\$1400-1600
Jan-Mar 1998	\$50	\$70-100	\$1400-1600
April-June 1998	\$50	\$70	\$1400-1600
July-Sept 1998	<i>price not reported</i>	<i>price not reported</i>	<i>price not reported</i>
Oct-Dec 1998	\$50	\$70-80	\$1200-1400
Jan-Mar 1999	\$50	\$70-80	\$1200-1400
April-June 1999	\$50	\$70-80	\$1200-1400
July-Sept 1999	<i>price not reported</i>	<i>price not reported</i>	<i>price not reported</i>
Oct-Dec 1999	\$50	\$70-80	\$1200-1400
Jan-Mar 2000	\$40-50	\$70-80	\$1200-1400
April-June 2000	\$40-50	\$70-80	\$1200-1400

Source: Australian Bureau of Criminal Intelligence

\*Note: Quantity referred to by a "street gram" was not reported in ABCI statistics, however, on the basis of key informant reports this would refer to a quantity of 0.6 - 0.8 gm.

**Table 16. Tasmania Police data for amphetamine July 1999-September 2000**

	<b>Jul-Sept 1999</b>	<b>Oct-Dec 1999</b>	<b>Jan-Mar 2000</b>	<b>Apr-Jun 2000</b>	<b>Jul-Sept 2000</b>
<b><u>Amphetamine Powder Seized (g)</u></b>					
<i>South</i>	289	1011	310	287	987
<i>North</i>	4	49	8	70	13
<i>West</i>	57	48	68	40	30
<b>total</b>	350g	1108g	386g	397g	1030g
<b>% within southern region</b>	83%	91%	80%	72%	96%
<b><u>Amphetamine Tablets Seized</u></b>					
<i>South</i>	24	5	13	80	2
<i>North</i>	0	0	12	0	2
<i>West</i>	8	0	0	0	0
<b>total</b>	32	5	25	80	4
<b>% within southern region</b>	75%	100%	52%	100%	50%
<b>Price in Southern District</b>					
<i>Taste</i>	\$50	\$50	\$50	\$40-50	\$40-50
<i>Gram</i>	\$80	\$70-80	\$70-80	\$70-80	\$70-80

## 5.2 Availability

Almost all IDU sampled who could comment on the availability of amphetamine thought it was easy or very easy to obtain (92%, n=69), with the majority (68%, n=51) reporting that it was very easy to access. Likewise, all 13 key informants that reported on availability of amphetamine reported it as being easy or very easy to obtain, with 77% reporting it to be very easily accessed. Both IDU and key informants thought that this availability had remained stable (49% of IDU, 50% of key informants) or that it had become easier to access amphetamines (46% of IDU, 44% of key informants) in the last six months.

Purchase of amphetamine from a street dealer was rare among IDU (11%). Nearly half (47%) purchased from a dealer's home, 26% from friends, and 15% by telephoning the dealer or mobile delivery.

## 5.3 Form And Purity

Fourteen percent of the participants in the IDU survey reported swallowing amphetamines in the preceding six months and 82% reported having injected the drug in this period. Those who had used the drug reported a median of 25 days of use in the last six months. The amphetamine used in the last six months was primarily in a powder form, reported by 77 of the 83 participants (93%) that had recently used amphetamine. While powder form was most common, this seemed to fall into two main types. IDU reported a poor quality white powder (that sold for \$80 per gram), while the better quality amphetamine was generally reported to be a slightly 'wet' crystalline powder, yellow or beige in colour. One key informant, a user group representative, indicated that some of the poorer quality powder may contain pharmaceutical dexamphetamine, based on its physical effects. Two IDU indicated that they believed this poor quality powder to be manufactured from pseudoephedrine. In partial support of this, Tasmania Police seized 36,000 pseudoephedrine-based decongestant tablets from a single location in the north-west of the state during January 2000.

Notable is that small numbers of IDU participants had injected liquid amphetamine (n=8) and had smoked 'ice' or smokable crystals (n=6) in the preceding 6 months. Three key informants had noted the use of 'ice' or crystal form amphetamine, while one was aware of use of liquid amphetamine. Use of these forms of amphetamine was not noted by key informants in the 1999 IDRS. While more pure forms of powder methamphetamine are similar in form to smokable methamphetamine crystals (McKetin, Darke & Kaye, 2000) it should be noted that all participants noting the use of 'ice' had indeed reported that they smoked the drug.

The majority of respondents on the IDU survey considered the purity of street amphetamine to be medium (45%) to high (32%), while 20% regarded purity as low. This split in responses between IDU may reflect the difference between the types of amphetamine available, as the better quality amphetamine seemed to be more readily available around the suburbs surrounding Hobart city, while the poorer quality powder seemed more common in the more distal northern suburbs. Those key informants that could comment on purity (n=13) reported purity to be medium (38%) to low (38%). Both IDU and key informants generally reported that the purity of amphetamine seemed to have increased (41% of IDU, 44% of key informants) or remained stable (24% of IDU, 25% of key informants) in the past six months. Of the remainder, the majority (20% of IDU, 25% of key informants) believed purity to have fluctuated over the preceding six months.

Data for purity of methamphetamine received at police analytical laboratories has been provided for the 1997/98 to 1999/00 financial years (Table 17). Drugs seized by the 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 methamphetamine seized in Tasmania has remained relatively stable over the period 1997/98 to 1999/00.

**Table 17. Purity of Tasmanian seizures of methamphetamine received for laboratory testing, 1997/98 – 1999/00**

	1997/98	1998/99	1999/00
<b>&lt;=2 g</b>			
<i>n</i>	4	31	9
<i>avg % purity</i>	5 %	5 %	7.4 %
<b>&gt; 2g</b>			
<i>n</i>	2	8	11
<i>avg % purity</i>	7 %	21 %	6.6 %
<b>Total</b>			
<i>n</i>	6	39	20
<i>avg % purity</i>	6 %	8 %	7 %
<i>Range in % purity</i>	3-8%	2-59%	2-26%

Source: Australian Bureau of Criminal Intelligence

## 5.4 Patterns Of Amphetamine Use

### *Prevalence of amphetamine use*

The most recent survey of amphetamine use within the general community of Tasmania was undertaken within the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), which sampled 1031 Tasmanian residents. Results indicated that 6.3% had ever used amphetamines, while 1.6% had used it in the 12 months prior to interview. Only 4% indicated that they had been offered amphetamines in this period. Of the respondents that indicated they had injected illicit drugs (n=6) in the 12 months prior to interview, all had injected amphetamine. These low rates and the small sample size of illicit drug users make it difficult to meaningfully analyse the data by gender or age, or to detect further trends in amphetamine use.

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 Tasmania during the 1996 school year. Results indicated that approximately 5% of males and 3% of females had used amphetamines at some stage in their lives, while 3.5% had used amphetamines in the 12 months prior to interview. These rates are generally consistent with those found in the 1998 National Drug Strategy Household Survey

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 amphetamine as the last drug injected of around 30% of their Tasmanian participants for their 1997 and 1998 surveys, and a slightly lower proportion reporting amphetamine (20%) in their 1999 survey. However, these studies only sampled 23, 51 and 25 clients respectively, such small sample sizes rendering it difficult to make any reliable inferences regarding trends in use.

Arrest data for amphetamine-related offences indicate a marked increase in the number of arrests between 1998/99 and 1999/00 (Table 18). 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 amphetamines.

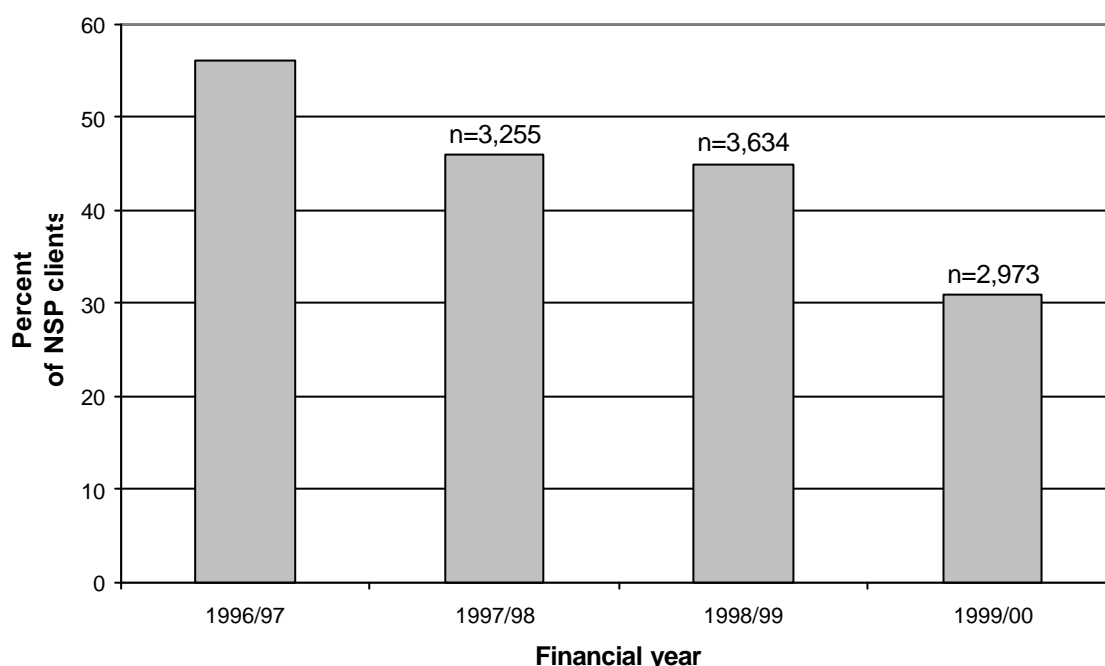
**Table 18: Consumer and provider arrests for amphetamine and related substances, 1996/97-1999/00**

	1996/97	1997/98	1998/99	1999/00
<b><u>Consumers</u></b>				
Female	3	5	0	8
Male	15	9	4	52
Unknown	0	1	2	0
<b>Total</b>	18	15	6	60
<b><u>Providers</u></b>				
Female	0	0	0	9
Male	2	0	1	0
Unknown	0	0	0	0
<b>Total</b>	2	0	1	9
<b>Total Arrests</b>	20	15	7	69

*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 1999/00 is based on SIS data and is preliminary only.*

Since 1997, clients of non-pharmacy needle exchange outlets have been asked which drug they mostly inject. Amphetamine has been the most commonly reported single drug used for the past 4 years, at 56%, 46%, 45%, and 31% during 1996/97, 1997/98, 1998/99 and 1999/00 (Figure 1). This data should be interpreted with caution, however, as these patterns of use are reported by only around 40% of total needle and syringe outlet clients, because data is collected reasonably inconsistently across services due to staff time limitations. Given that the total number of clients providing self-reported use data has steadily increased over the 1996-2000 period, and the number of people reporting use of amphetamine has decreased, this data would seem to indicate that less IDU are using amphetamine as their primary drug. Alternatively, it would seem that amphetamine is losing its grip on the market share of illicit drugs used by IDU.



**Figure 1: Percentage of amphetamine reported as 'drug most often injected' by Tasmanian non-pharmacy needle and syringe clients, 1996-2000**

*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. These figures may underestimate the level of use amongst this group however, due to the relatively rapid elimination of this drug from the body.

### ***Current patterns of use***

Of the IDU surveyed, 98% had used amphetamine at some time in their lives, and 83% had used in the past 6 months, however, only 20% of the sample indicated that amphetamine was their drug of choice. For those IDU that had primarily used amphetamine in the past 6 months (n=29), the drug was used for a median of 78 days in that period (range 4-183). In the 59 IDU that had most frequently used another illicit (all were primary users of some form of opioid) and had used amphetamine, it had been used a median 13 days (range 1-121) in the past 6 months. Taken together, it is clear that a moderate level of amphetamine use is

common amongst primary users of other drugs, which was supported by comments from 19 key informants reporting on primary users of either cannabis or opioids that amphetamines were occasionally used by the people with whom they were in contact with. Most recreational users of amphetamine in these groups were noted by key informants to use intravenously.

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

### ***Trends in patterns of amphetamine use***

The clearest trend in amphetamine use was an increased availability of better quality amphetamine in the past six months. This seems to have had a reasonable impact on usage patterns of drugs in Hobart, as 14 IDU and 3 key informants indicated that there had been an increase in the number of users of amphetamine in the past 6 months, most directly attributing this to the better quality of amphetamine available. Similarly, three IDU and 2 key informants had noted some people changing from being predominant users of 'slows' (opioids and benzodiazepines) to being primary amphetamine users. An increase in the amount of amphetamine used by existing users was also noted by both IDU and key informants.

### ***Amphetamine-related issues***

Both IDU and key informants reported an increasing level of use of better quality amphetamines in the past six months. Associated with this, two key informants noted a decline in general health amongst amphetamine users. Of most concern is that six key informants noted a change in mental health among some amphetamine users they came into contact with, and four informants reported that they had recently had their first experience with an acutely psychotic client. Three of the informants reported not knowing how to deal with the client or what services were available to help acutely psychotic clients (these workers came from drug information, needle/syringe outlets and support/advocacy services), which is concerning because such clients pose significant challenges and potential risks to staff and other clients of the service as well as themselves.

## 4.5 Summary of Amphetamine Trends

**Table 19: Summary of trends in amphetamine use**

Price (mode) <i>'point' (0.1g, 'pure')</i> <i>gram ('cut')</i> <i>gram ('pure')</i>	<ul style="list-style-type: none"> <li>• \$50, stable</li> <li>• \$80, stable</li> <li>• \$300-\$350</li> </ul>
Availability	<ul style="list-style-type: none"> <li>• Easy to very easy to obtain</li> <li>• Availability stable or easier to obtain</li> </ul>
Purity and form	<ul style="list-style-type: none"> <li>• 7% from the small number of methamphetamine seizures analysed, stable over the last three years</li> <li>• IDU reports of medium to high purity, quality increasing</li> <li>• Many reports of increased availability of more pure amphetamine (wet, crystalline powder) and several reports of use of new forms of amphetamine being available ('ice', liquid amphetamine)</li> </ul>
Use	<ul style="list-style-type: none"> <li>• Used by a large proportion of the IDU sample recently, despite being the drug of choice for only a small section of the group</li> <li>• IDU and key informant reports of both increasing number of users and use in increasing amount by existing users</li> </ul>
Other trends	<ul style="list-style-type: none"> <li>• Reports of changes in mental health amongst some users, with three services noting their first contact with acutely psychotic clients in the past six months</li> </ul>

## 6 COCAINE

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Only a single member of the IDU sample could comment on price, purity and availability of cocaine. However, 39% of the sample indicated that they had tried cocaine at some stage in their lives, with only 6 respondents indicating that they had used cocaine in the past 6 months (5 had injected, 2 had snorted). The cocaine that these participants had used was almost exclusively powder, with one reporting use of 'crack' cocaine. In all cases the drug was reported as being sourced from the mainland. 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.

### 6.1 Price

Five IDU respondents could provide information on the price of cocaine, reporting \$50 per 'cap' (n=1), \$80 per 'point' (~0.1g, n=1), \$100 for 2 points (n=1), \$300 per gram (n=1), and \$400 for 1.9g (n=2). These prices are similar to those reported in the 1999 New South Wales IDRS report (McKetin, Darke & Kaye, 2000), and most respondents noted that the cocaine was sourced from this state. No information on price of cocaine in Tasmania has been reported by either Tasmania Police State Intelligence Services (during 1999/00) or the Australian Bureau of Criminal Intelligence (between 1995/96 and 1999/00).

### 6.2 Availability

The single IDU who could comment on availability of cocaine indicated that it was easy for them to access, that this had been stable over the past six months, and that he purchased from a friend (in a mainland state). There have been no seizures of cocaine made by Tasmania Police made between 1995/96 and 1999/00. Due to this and the small number of respondents who had used cocaine in the past six months (n=6) and that were able to report on trends (n=1), 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

The single IDU that could comment indicated that the purity of the cocaine they had used in the past six months was high, and that this had remained stable during this period. Because there have been no seizures of cocaine made by police in Tasmania, no purity data is available.

### 6.4 Use

#### *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) had ever tried cocaine, while only 0.1% (n=3) had used it in the 12 months prior to interview. 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.

Only 0.2% of clients of non-pharmacy needle and syringe clients in 1999/00 indicated that cocaine was the drug they most often injected. This figure has been reasonably stable over the past three financial years (Table 20), relating to around 20 clients each year, almost exclusively presenting to outlets in the southern region.

**Table 20: Percentage of cocaine reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1996-2000**

Year	1997/98	1998/99	1999/00
Number of clients reporting cocaine	12	28	19
Percent of total clients reporting cocaine	0.2%	0.3%	0.2%

*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) has reported cocaine as the last drug they injected. However, since these studies only sampled 6, 18, 23, 51 and 25 clients respectively, they were of very limited power for the detection of low frequency occurrences (such as the injection of cocaine).

### ***Trends in cocaine use***

Of the six IDU that reported using cocaine in the past six months, the median amount of use was 4 days in the last six months (range 1-20 days).

Three key informants made mention of cocaine use among the users they had the most contact with. Key informants referring to primary users of amphetamine indicated that there had been an increase in talk about cocaine recently, but that they hadn’t come across any use (n=1), and an increase in people with cocaine use in their drug use history (n=1). A key informant working in an inner-city needle exchange with a primary methadone using group indicated that only two clients reported using it in the past 16 months. The majority of key informants (n=28) 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, and that the cocaine that is used by Tasmanian IDU is generally imported from mainland states. These trends seem to have been stable over the past few years, however, it is noteworthy that one third of the IDU sample had tried cocaine at some stage in their drug use careers.

## 7 CANNABIS

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Among the IDU respondents, cannabis was the most commonly used illicit drug, with 99% of the sample using it at some time in their lives, and 90% using in the six months prior to interview. The majority (81%) could comment confidently on aspects of price, potency and availability. All 35 key informants reported some level of cannabis use within the populations they had contact with.

Nine key informants reported on the use of cannabis. Key informants included 3 youth workers, two drug and alcohol counsellors/psychologists, one general drug and alcohol worker, 2 police/security officers and a dealer of cannabis. 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 the key informants were familiar with ranged in age from teenagers to 50 years, although the majority were in their late teens.

### 7.1 Price

The median price reported by the IDU for an ounce of cannabis was \$300, and \$25 for a gram, which was consistent with the 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 1g-2.5g (mode=1.8g) cannabis, with 2.5g-3g (mode=2.5g) in a \$50 'deal'. 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 \$100 and \$350 (mode \$250-\$310). The modal prices of cannabis reported by IDU are summarised in Table 21 below. The majority of IDU (77%) and key informants (80%, n=8) reported that the price of cannabis had not changed in the last six months.

**Table 21: Modal prices of cannabis in Hobart purchased by IDU**

<b>Purchased amount</b>	<b>Metric conversion</b>	<b>Modal price*</b>
Gram	1 gram	\$20 - \$25
2 Gram	2 grams	\$50 (25-50)
Quarter ounce	7 grams	\$90 (50-120)
Half ounce	14 grams	\$150 (100-250)
Ounce	28 grams	\$250 - \$300 (100-400)

*\*Lower prices within these ranges refer to 'lower potency' cannabis (e.g. outdoor)*

The ABCI provides quarterly figures on the price of covert drug purchases and reports by informants in each Australian jurisdiction. According to ABCI figures, one gram of cannabis cost \$20-\$25 and one ounce cost \$300-\$400, similar to prices nominated by IDU and key informants (Table 22).

**Table 22: Cannabis prices in Tasmania, 1995-2000**

	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 1995	\$20	\$40	-	-	-	-	-	\$400	-
April-June 1995	\$20	\$40	-	-	-	-	-	\$300-350	-
July-Sept 1995	\$15	30-40	-	-	-	-	-	\$250-350	-
Oct-Dec 1995	\$25	\$50	-	-	-	-	-	\$350-400	-
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-Sept 1997	\$10	\$25	\$50	\$80	\$100-120	\$150-175	\$200-250	\$350-450	\$450
Oct-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-Mar 1999	\$10	\$20-25	\$25	\$80-90	\$90-110	\$160-180	\$180-230	\$300-350	\$350-450
April-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-Mar 2000	\$5	\$25	\$25	\$80-90	\$90-110	\$150-160	\$170-220	\$300	\$300-400
April-June 2000	\$5	\$25	\$25	\$80-90	\$90-110	\$150-160	\$170-220	\$300	\$300-400

*Source: Australian Bureau of Criminal Intelligence*

*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*

## **7.2 Availability**

The majority of the IDU sample who commented on trends reported that cannabis was very easy (79%) or at least easy (17%) to obtain, and that the availability of cannabis had remained stable (78%) or that it had become easier to obtain (16%) in the preceding six months. Among this sample, cannabis was predominantly obtained from a dealer's home (45%), or from a friend (33%), with only 13% usually purchasing from a street dealer. In line with IDU reports, most key informants (82%, n=9) thought that cannabis was very easy to obtain. There was some dissent among key informants regarding changes in cannabis availability, with 7 (54%) reporting stable ability, but 6 (46%) indicating an increased availability during the past six months.

Two key informants reported further information about trends in availability, with one, a police officer, reporting an increase in availability of hydroponically grown cannabis, and that more people are growing cannabis following the recent adoption of the Illicit Drug Diversion Initiative in the state, allowing the possession of small amounts of cannabis for personal use to attract a 'cannabis caution' or diversion into treatment rather than a criminal charge in appropriate cases. In support for this, another key informant, a seller of cannabis, indicated that in recent months, supply had outstripped demand.

## **7.3 Form and potency**

The main form of 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 reporting a preference for hydroponically grown head over outdoor crops (or 'bush buds'). Reports made by key informants were in line with these patterns, and use of cannabis leaf was almost non-existent among the groups the key informants were familiar with. Fourteen percent of the IDU sample had used hash, and 11% had used hash oil in the preceding six months, with both one key informant and one IDU respondent indicating that there had been a brief availability of hash during April 2000.

All nine key informants reported that the preferred method of cannabis use was smoking through 'buckets' or 'bongs' rather than 'joints' (cannabis cigarettes).

The potency of cannabis was generally rated as 'high' (65%, medium = 31%) by the IDU sample, with most respondents indicating that potency had remained stable (63%) or had been increasing (23%) 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' (90%, n=9) and stable (80%, n=8).

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**

### ***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 it 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% were 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.

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 Tasmania during the 1996 school year. Results indicated that approximately 44% of males and 37% of females had used cannabis at some stage in their lives, while 36% had used cannabis in the 12 months prior to interview. These rates are generally consistent with those found in the 1998 National Drug Strategy 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 80% between 1997/98 and 1999/00, despite the number of positive tests nearly doubling (from 97 to 173) 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.

### ***Current patterns of cannabis use***

Cannabis was reported as the drug of choice of 5% of the IDU sample, with 90% of the entire sample reporting 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 183 days (range 1-183), 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 tended to use 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 benzodiazepines, amphetamines, morphine and methadone, although use was generally sporadic and limited to a small percentage of these groups. All 35 key informants reported some level of cannabis use within the populations they had contact with.

### ***Trends in patterns of cannabis use***

There were single key informant reports of increased use of *Datura* and prescription drugs such as codeine or pseudoephedrine among younger cannabis users, and an increase of injection of other illicit drugs within this group. A single report also indicated that there had been a change in the last six months to use being increasingly of hydroponically grown cannabis (rather than outdoor).

### ***Other trends***

Three key informants (including 2 police officers) and one IDU respondent that there had recently been a trend to spraying fly spray on mature cannabis buds just prior to harvest to make them appear like they contained more resin, thus increasing their sale price. Four key informants and two IDU also reported that there had been some 'laced' cannabis for sale in recent months, variously reporting opiate-laced (n=3), amphetamine-laced (n=1) and Rohypnol (flunitrazepam)-laced (n=1) cannabis. However, there is no objective information available to support these reports.

### ***Cannabis-related issues***

Most key informants reported that there had been little change in trends within cannabis users over the past six months. However, five key informants noted an increase in 'dually diagnosed' people among the groups they had most contact with. Dual diagnosis refers to people with co-morbid mental health and substance abuse problems, and key informants reported the most common issues amongst their groups to be depression and psychosis. A decrease in general health and self-care amongst primary users of cannabis was also noted by two key informants. Both these trends seem to be continuations of those noted in the 1999 Tasmanian IDRS.

## 7.5 Summary

**Table 23: Summary of cannabis trends**

Price	<ul style="list-style-type: none"><li>• \$20-25, stable</li><li>• \$250-300, stable</li></ul>
Availability	<ul style="list-style-type: none"><li>• Very easy to obtain</li><li>• Stable availability</li></ul>
Potency and form	<ul style="list-style-type: none"><li>• High (based on IDU and key informant estimates)</li><li>• stable</li></ul>
Use	<ul style="list-style-type: none"><li>• Most widely used illicit drug</li><li>• High level of daily use among IDU sample and groups discussed by key informants</li><li>• Hydroponically-grown head increasingly preferred by users</li><li>• Predominantly smoked using ‘buckets’ and ‘bongs’</li></ul>
Other Trends	<ul style="list-style-type: none"><li>• Reports of adulteration of cannabis with fly sprays by some dealers</li></ul>

## 8 OPIOIDS

Twelve key informants reported on groups of people that were primarily users of opioids; that is, populations that were using both diverted pharmaceutical morphine and methadone; either at equal frequency or one preferentially, but regularly use the other depending on availability. When pressed to describe an illicit drug that was predominantly used among members of their group, 9 indicated morphine, 2 methadone, and one heroin. 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, 87% also reported use of methadone (Table 24). Additionally, of those who had used morphine in the six months prior to interview, 30% reported methadone as the drug they most often injected in the past month (51% reporting this as being morphine: Table 25). Because of this substantial level of overlap, trends for these drugs are discussed together here.

**Table 24: Use of other drugs by those reporting use of morphine in the past six months (n=75)**

Drug	% of morphine users reporting use	Median days used by those who had used the drug
Heroin	38%	6 (1-137)
Other Opiates	36%	4 (1-151)
Benzodiazepines	84%	26 (2-183)
Cannabis	91%	183 (1-183)
Methadone	87% (39% on MMT)	9* (those not on MMT) (1-92)
Amphetamine	81%	20 (1-183)

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

**Table 25: Drug of choice and drug most often injected among those reporting use of morphine**

	Drug of choice	Drug most often injected
Heroin	36%	1%
Methadone	13%	30%
Morphine	29%	51%
Amphetamine	12%	18%
Benzodiazepine	1%	0%

Key informants reporting on the use of opioids included general drug and alcohol workers (n=5), a drug and alcohol counsellor/psychologist, a youth worker, and four medical practitioners that were registered to prescribe methadone. Key informants were familiar with users of opioids from all Hobart suburbs, but they were often from inner-city suburbs. The majority of key informants described opioid users from a predominantly English-speaking background, ranging in age between 16 and 50 years, although most were in their twenties. 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, 93% reported they had tried morphine at some stage in their lives, and all of these had injected morphine. Seventy-eight percent had used morphine in the past six months, again, all had injected the drug, with recent oral use only reported by 22% of the sample. Similar patterns of use were found for methadone, with 89% of the sample ever using the drug, almost all had injected (85 of 89 respondents). Of the 80 people reporting use of methadone in the past six months, almost all had injected the drug recently (74% of the sample), with a smaller proportion swallowing (50% 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 that had used either drug in the past six months were more likely to report an opiate 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.

Seventy-seven participants in the IDU sample could comment on aspects of price, purity and availability of morphine, with 53 respondents providing information on methadone trends.

## 8.1 Price

### *Morphine*

Both key informants and IDU reported the price of morphine as \$1 per milligram, the same price reported in the 1999 IDRS report. 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 (73%) and key informants (67%, n=4) believed that these prices had remained stable over the preceding six months.

**Table 26: 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).**

Preparation	Price
Morphine \$ per mg	\$1
MS Contin	
10mg tablet	\$8 (\$3-\$15)
30mg tablet	\$25 (\$8-\$40)
60 mg tablet	\$50 (\$13-\$60)
100mg tablet	\$80 (\$15-\$100)
Kapanol	
20mg capsule	\$15 (\$10-\$20)
50mg capsule	\$40 (\$15-\$50)
100mg capsule	\$80 (\$60-\$100)
Anamorph	
30mg tablet	\$25 (\$15-\$30)

### *Methadone*

Both key informants and IDU reported the price of methadone as \$1 per milligram, the same price reported in the 1999 IDRS report. 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 the drug was generally lower than the \$1 per milligram figure. Respondents reported that their last amounts of methadone purchased for \$50 contained 55-100mg (mode = 60 mg), and that \$80 had bought them 80-100 mg (mode = 100 mg). The majority of both IDU (76%) and key informants (83%, n=5) believed that these prices had remained stable over the preceding six months.

**Table 27: 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).**

Preparation	Price
Methadone \$ per mg	\$1
Methadone syrup	
60 mg (55-100)	\$50
100 mg (80-120)	\$80
Physeptone	
10mg tablet	\$10 (\$4-\$12)

## **8.2 Form**

### ***Morphine***

IDU respondents were asked to nominate the preparation of morphine they had most often used in the preceding six months, 82% nominating MS Contin, 13% Kapanol, and 5% Anamorph. This pattern was supported by two key informants, and is in concert with the pattern reported by key informants in the 1999 IDRS report.

### ***Methadone***

Seventy-nine percent of the IDU sample had reported use of methadone syrup in the past six months, although only around half (n=36) were on a methadone maintenance program. Use of the tablet preparation of methadone, Physeptone, was reported in a much lower percentage of the sample (30% of the sample, and 38% of those reporting recent use of methadone) in the preceding six months.

## **8.3 Availability**

### ***Morphine***

The majority of the IDU sample who commented on trends reported that morphine was easy or very easy to for them to obtain (84% - 47% easy, 37% very easy), and that the availability of morphine had remained stable (60%). Among this sample, morphine was predominantly obtained from friends (35%), dealer's homes (29%), or street dealers (28%), with only 8% purchasing from a mobile dealer. In line with IDU reports, all key informants thought that morphine was easy or very easy to obtain (88% very easy, n=7), and that this availability had remained stable during the past six months (62%, n=8).

### ***Methadone***

There was some disagreement among the IDU respondents regarding the availability of methadone, with 48% reporting that it was easy or very easy to obtain, and 48% that it was difficult for them to access. These trends were the same among those who were currently in methadone maintenance therapy and those who were not. The majority of the IDU sample (63%) believed that the availability of methadone had remained stable over the past six months, although 21% indicated that it was more difficult to access. Key informants reported similar trends, with 2 reporting that it was easy or very easy to access (one reporting that it was difficult for their group to access), and that availability was stable (n=4) or had become easier (n=4), although some indicated methadone had become more difficult for their group to access in the preceding six months (n=3).

Among the IDU sample, methadone was predominantly accessed through friends (68%), with some purchasing from street dealers or at dealers' homes (16% each). IDU respondents were also asked what their usual source of methadone was, with the majority reporting that they usually purchased 'takeaway' doses (88%), although of concern is the finding that 10% did not know the source of their methadone, and 2% reported purchasing other person's doses that had been spat out.

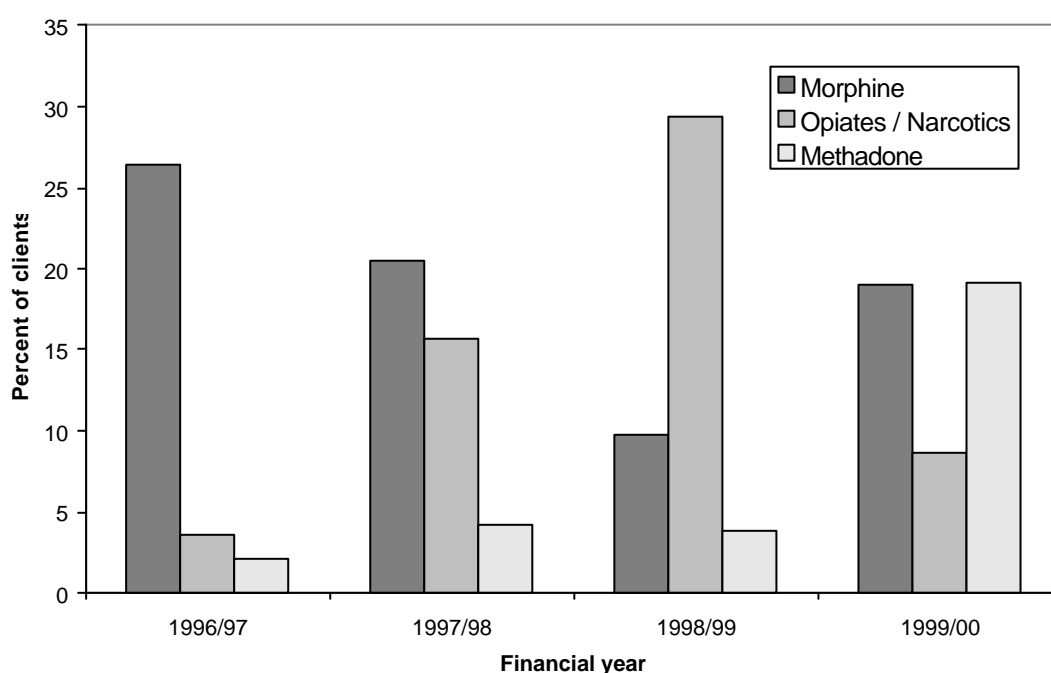
One key informant, a user group representative, reported a trading system amongst a group of IDU on the methadone program, where, when people picked up two or three 'takeaway' doses of methadone, some people would give the doses not required for that day to friends, with the expectation of reciprocation 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 opiate 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.

## 8.4 Patterns Of Opioid Use

### *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. These low rates of users make it difficult to meaningfully detect trends in use.

Data from clients of non-pharmacy needle/syringe outlets reporting the drug they most often inject have been highly variable over the past four 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 has steadily increased from 32.1% in 1996/97, 40.4% in 1997/98, 43.1% in 1998/99 to 46.8% in 1999/00. 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. Indeed, among clients in the Southern region of the state, the rate of methadone reported as the drug most often injected was greater than that of morphine. 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 exchange clients, 1996-2000**

*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, 1997 and 1998 surveys (Table 28). However, given that these studies only sampled 18, 23 and 51 clients respectively, these figures should be interpreted with caution.

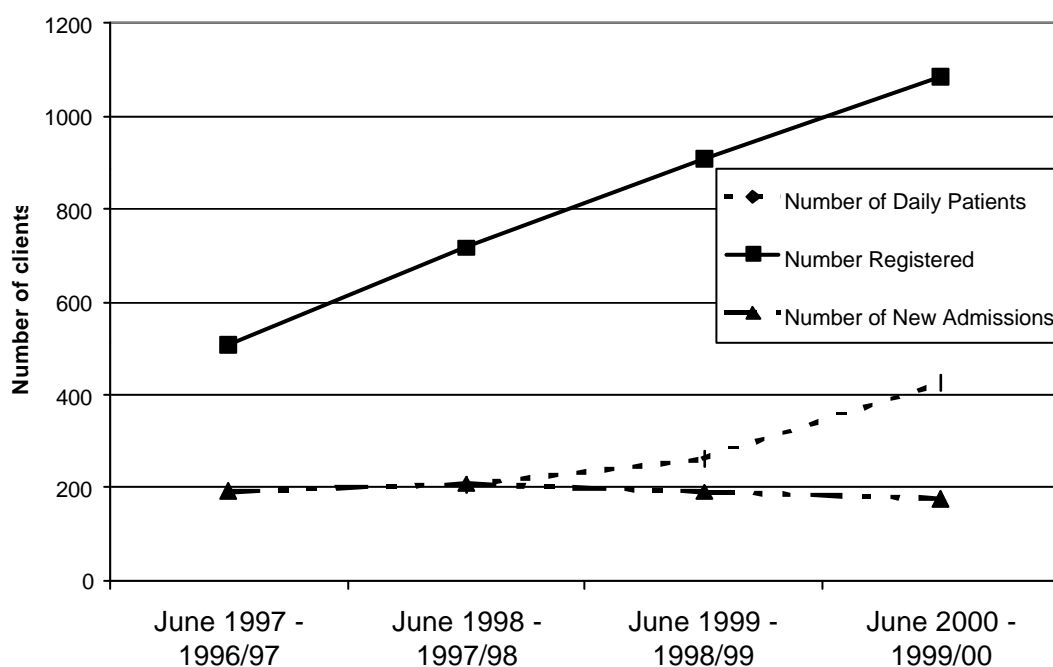
**Table 28: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within “last drug injected”, 1995-99**

	1995		1996		1997		1998		1999*	
	Number	%	Number	%	Number	%	Number	%	Number	%
Heroin	2	33	1	6	0	0	5	10	2	4
Methadone	0	0	5	28	10	43	17	33	11	46
Morphine	2	33	6	33	4	17	10	20	5	26
Total Sample Size	6		18		23		51		25	

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

\*Note: during the 1999 survey 16% (n=4) participants reported using some combination of opiates, and percentages have been adjusted accordingly to reflect this.

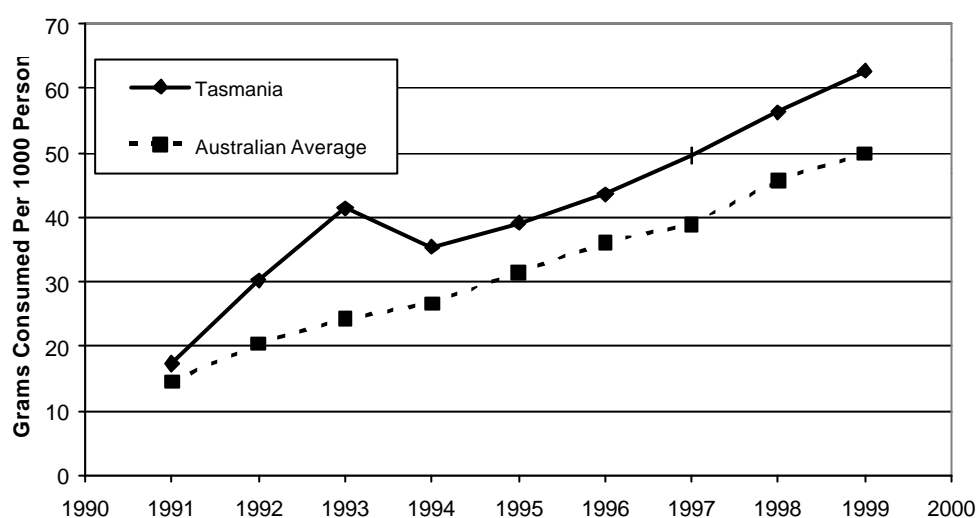
There has been a steady growth in the number of clients on the state’s methadone maintenance program since 1995. Currently there are around 430 daily recipients of methadone, more than treble the number on the program in 1995. However, this increase in numbers is likely to primarily reflect the long-term nature of methadone maintenance therapy, as the number of new applications for the program has remained consistent from 1997-2000 (approximately 200 new applications per annum).



**Figure 3: Growth of the Tasmanian methadone maintenance program, 1995-2000**

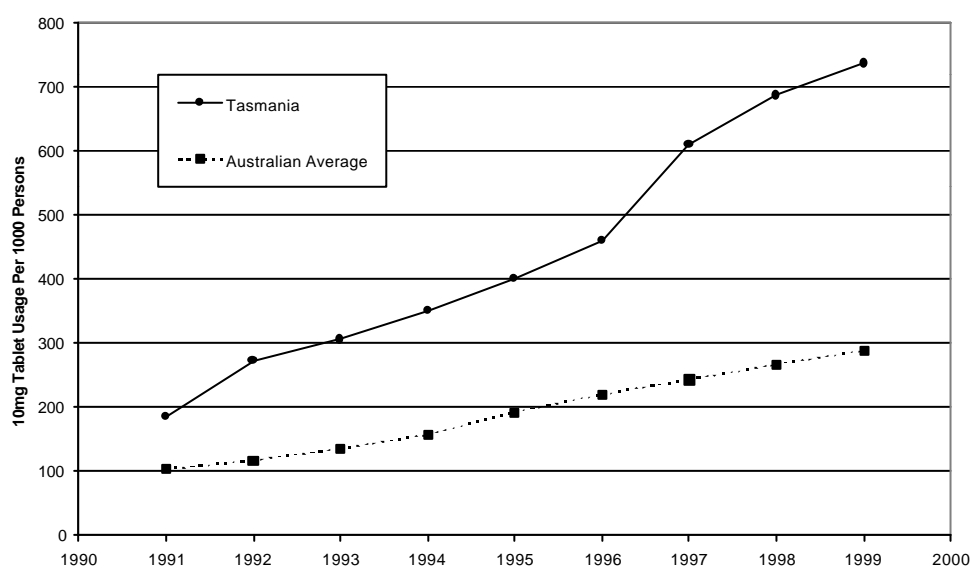
*Source: Pharmaceutical Services, Department of Health and Human Services, Tasmania*

Tasmanian prescription rates for Schedule 8 pharmaceuticals since 1991 were also provided by Pharmaceutical Services (DHHS). During this time, consumption of morphine has been consistently 120% or more of the national average (Figure 4). Similarly, consumption of methadone 10 mg tablets has been consistently above 200% that of the national average since 1992 (Figure 5). However, overall rates of consumption of methadone in the state have been consistently below that of the Australian average (although the gap has been progressively decreasing over time - Figure 6). As such, a proportion of these differences in consumption rates can be accounted for by prescription practices and the aging nature of the Tasmanian population, however it does indicate a certain willingness to prescribe opioids among Tasmanian doctors.



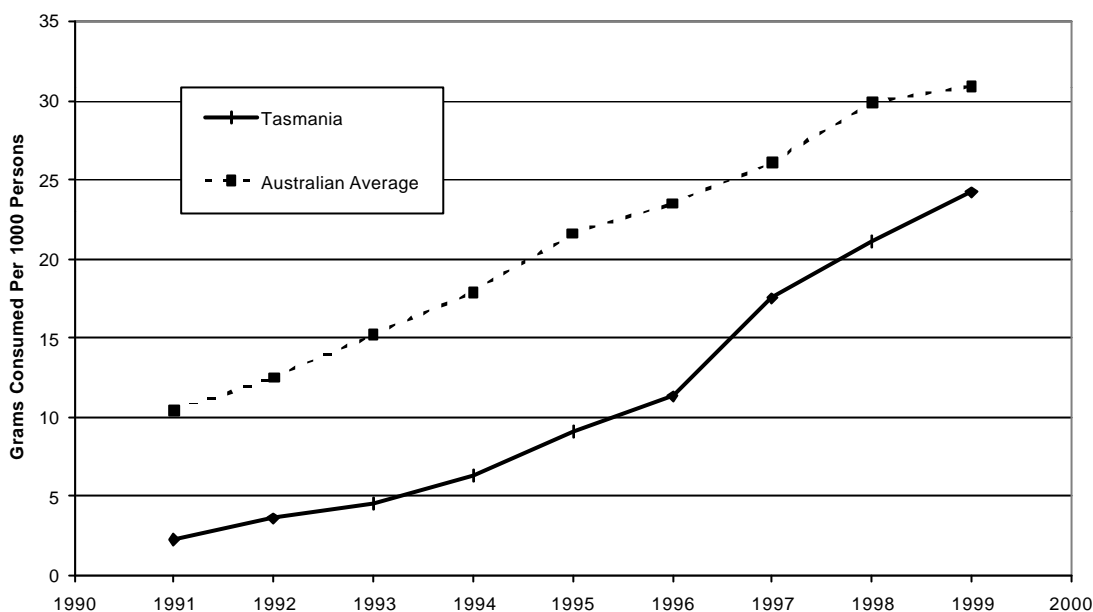
**Figure 4: Consumption of morphine per 1000 persons, 1991-1998**

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



**Figure 5: Consumption of methadone 10mg tablets per 1000 persons, 1991-1998**

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



**Figure 6: Consumption of methadone per 1000 persons, 1991-1998**

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

Opiates have consistently comprised approximately 10% of all positive urine screens among Tasmanian prisoners between 1994/95 and 1999/00, despite markedly increasing numbers of positive urine screens during this period.

In the 1999/00 financial year, 19 arrests (14 consumers, 5 providers) were made by Tasmania police involving offences relating to opioids (including heroin), in comparison to 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.

### ***Current patterns of opioid use***

#### ***Morphine***

Morphine was reported as the drug of choice of 23% of the IDU sample, with 77% 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 52 days (range 1-183), which equates to twice weekly use of the drug. Morphine 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.

#### ***Methadone***

Methadone was reported as the drug of choice of 11% 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 10 days (range 1-121), while those on the program were using methadone daily. Methadone was reported as the last drug injected prior

to interview for 24% of the IDU sample, and as the drug most injected for 29% in the past month.

Primary users of opioids were reported by key informants to have a high level of polydrug use, with regular use of cannabis, amphetamines, and very high levels of intravenous use of benzodiazepines, especially of Normison (temazepam, n=9). These reports are reflected by the IDU sample (see table 24 and 25).

### ***Trends in patterns of opioid use***

Multiple trends in opioid use were noted by both key informants and IDU respondents. Three key informants and fifteen IDU reported an increase in the number of people using opioids, with 5 IDU reporting that people were also using more frequently. An increase in younger people using opioids was noted by one key informant and sixteen members of the IDU sample. There were single reports of opioid use spreading to different demographics of people, such as college and university students, people from higher socio-economic backgrounds, and 'feral' types. A relative increase in the use of Anamorph was reported by one key informant and an IDU respondent.

### ***Opiate-related issues***

Two key informants noted the purchase and injection of spat out doses of methadone, a very high infection-risk practice, among the clients they had contact with, particularly in areas where methadone takeaways were difficult to access. Two further key informants noted a decline in general health, and an increase in child-bearing mothers amongst the opiate users they had contact with. There is anecdotal support for the latter report, with local media reporting (subsequent to these interviews) an increase in the number of drug-dependent children born in Hobart (although the numbers are small - in the order of 40 children in 2000). *It should be stressed that the authors of this report have been unable to locate any official data to date to confirm this report or otherwise.*

Two key informants also noted improvements in the injection practices adopted by the opiate users they had contact with, noting an increase in use of butterfly equipment for the injection of methadone (possibly due to increased availability of such equipment) and a change from 2mL to 5mL syringes for the injection of morphine (reflecting an increased dilution of the injected solution).

## 8.5 Summary

**Table 29: Summary of trends in opioid use**

	<b>Morphine</b>	<b>Methadone</b>
Price	<ul style="list-style-type: none"> <li>• \$1/mg, stable</li> <li>• \$80/100mg</li> </ul>	<ul style="list-style-type: none"> <li>• \$1/mg, stable</li> <li>• \$80/100mg (more variable)</li> </ul>
Availability	<ul style="list-style-type: none"> <li>• Very easy</li> <li>• Stable</li> </ul>	<ul style="list-style-type: none"> <li>• Mixed reports (easy/difficult)</li> <li>• Stable</li> </ul>
Form	<ul style="list-style-type: none"> <li>• MS Contin predominant</li> <li>• Anamorph use may be increasing</li> </ul>	<ul style="list-style-type: none"> <li>• Methadone syrup predominant</li> <li>• Some use of Physeptone</li> </ul>
Use	<ul style="list-style-type: none"> <li>• High level of regular use</li> <li>• Increasing numbers using</li> </ul>	<ul style="list-style-type: none"> <li>• Combination with Normison increasingly popular</li> </ul>
Other trends	<ul style="list-style-type: none"> <li>• Increase in the proportion of NSP clients reporting opiates as the drug they most often inject</li> <li>• Change to even proportion reporting morphine and methadone as the drug they most often inject (previously morphine was more predominant)</li> </ul>	

## 9 BENZODIAZEPINES

Almost all (94%) of the IDU sample had used benzodiazepines at some stage in their lives. Similarly, 86% had ever swallowed benzodiazepines, with 73% 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 61% of the sample had ever injected benzodiazepines, with 37% injecting in the six months prior to interview. While use of benzodiazepines amongst people using illicit drugs was noted by key informants in the 1999 IDRS, these rates of recent injection are quite high in comparison to drug usage patterns from other states (32% ever injected, 19% injected in past 6 months for the 1999 VIC IDRS: Dwyer & Rumbold, 2000; 22% ever injected and 16% in past 6 months in the NSW 1999 IDRS: McKetin, Darke & Kaye, 2000).

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 and prison history, employment and treatment status, age of first injection and frequency of injection. Frequency of use of benzodiazepines was a median of 26 days in the past six months, among those using the drug (range 1-183).

There was high levels of benzodiazepine use in the last six months among those who had most often injected methadone (90%), morphine (85%) and amphetamine (69%), with injection of benzodiazepines more common among regular users of methadone and morphine (Table 30). Key informants reported similar patterns of use among the groups they had most contact with, reporting use among primary users of cannabis (n=8 of 9 key informants), where use of the drug was predominantly oral; and use among primary users of amphetamines (n=11 of 13 key informants), reporting some intravenous use, but it was still predominantly swallowed, particularly for 'coming down' from amphetamine use. Key informants also noted high levels of injection of benzodiazepines among primary opioid users (n=9 of 11 key informants), with two key informants indicating that people in this group would often use benzodiazepines as a second-line drug if their opioid of choice were unavailable.

**Table 30: 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
Heroin (2)	50% (1)	0
Methadone (29)	79% (23)	45% (13)
Morphine (39)	77% (30)	44% (17)
Amphetamine (29)	62% (18)	21% (6)

When asked to nominate the main type of benzodiazepine used in the past six months, temazepam (Normison, 39%) and diazepam (Valium, 37%) were most common, with lower levels of primary use of oxazepam (Serepax, 8%), alprazolam (Xanax, 6%), and flunitrazepam (Rohypnol, 5%). Nitrazepam (Mogadon), oxazepam (Murelax), clonazepam

(Rivotril) and temazepam (Temaze) preparations were each reported as the primary benzodiazepine used by 1% of those using the drug in the past six months. Normison was more often reported as the main benzodiazepine used among those who had injected the drug in the past six months (63%), while Valium was most common among those who had used but not injected benzodiazepines recently (44%).

### ***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.

Benzodiazepines have consistently comprised approximately 10-15% of all positive urine screens among Tasmanian prisoners between 1994/95 and 1999/00, despite markedly increasing numbers of positive urine screens during this period.

Reported use of benzodiazepines as the main drug injected by non-pharmacy needle and syringe outlet clients has undergone a massive increase between 1998/99 and 1999/00 (Table 31), from 0.3% to 13.5% of clients. While there are limitations with this dataset (see section 2.3), the magnitude of this trend clearly indicates a change in patterns of use among IDU. The majority of people reporting benzodiazepines as the drug they most often injected were clients of southern region needle outlets, where it was almost as commonly reported as morphine (18.5%) and methadone (23%), and reported far more often than heroin (4%).

**Table 31: Percentage of benzodiazepines reported as ‘drug most often injected’ by Tasmanian non-pharmacy needle and syringe clients, 1996-2000**

<b>Year</b>	<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>
Number of clients reporting benzodiazepines	18	24	1294
Percent of total clients reporting benzodiazepines	0.3%	0.3%	13.5%

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

### ***Trends in benzodiazepine use***

Both key informants and IDU reported an increase in benzodiazepine use in the last six months (11 key informants, 6 IDU), most particularly in the injection of Normison (temazepam: 9 key informants, 5 IDU). One key informant, a general practitioner, indicated an increased demand for Normison, which he believed was related to the decreased availability of flunitrazepam (Rohypnol) since its re-classification from a Schedule 4 to a Schedule 8 drug. Two key informants also indicated a decrease in the availability of Rohypnol among the groups they came into contact with.

Use of methadone syrup in combination with Normison among IDU was reported by four key informants and one IDU. This combination is used by IDU because the reported resulting sensations are very similar to that following injection of heroin.

Intravenous use of Normison is of particular concern because these capsules contain an oil-based liquid that is insoluble in water or blood. If injected, globules of the oil form in the blood stream, which may block small blood vessels, particularly in hands or feet. This can cause gangrene and lead to loss of fingers and toes. Injection of benzodiazepines can also cause substantial damage to veins, and increase the risk of overdose if combined with opiates.

Three key informants reported an increase in vein and other health problems associated with the injection of Normison, with two informants reporting on cases of male users injecting into their penis due to vein damage in other injection sites.

In concert with the noted increasing use of benzodiazepines, one key informant with extensive experience working with clients on remand noted an increase in people coming to the attention of police due to disinhibited behaviour associated with benzodiazepine use.

### **9.1 Summary:**

There seems to have been a marked increase in the injection of benzodiazepines among IDU in recent months, particularly of Normison (temazepam). In concert with this, an increase in health problems associated with the injection of benzodiazepines, and increased numbers of people coming to the attention of police due to benzodiazepine-induced disinhibited behaviour was noted by key informants.

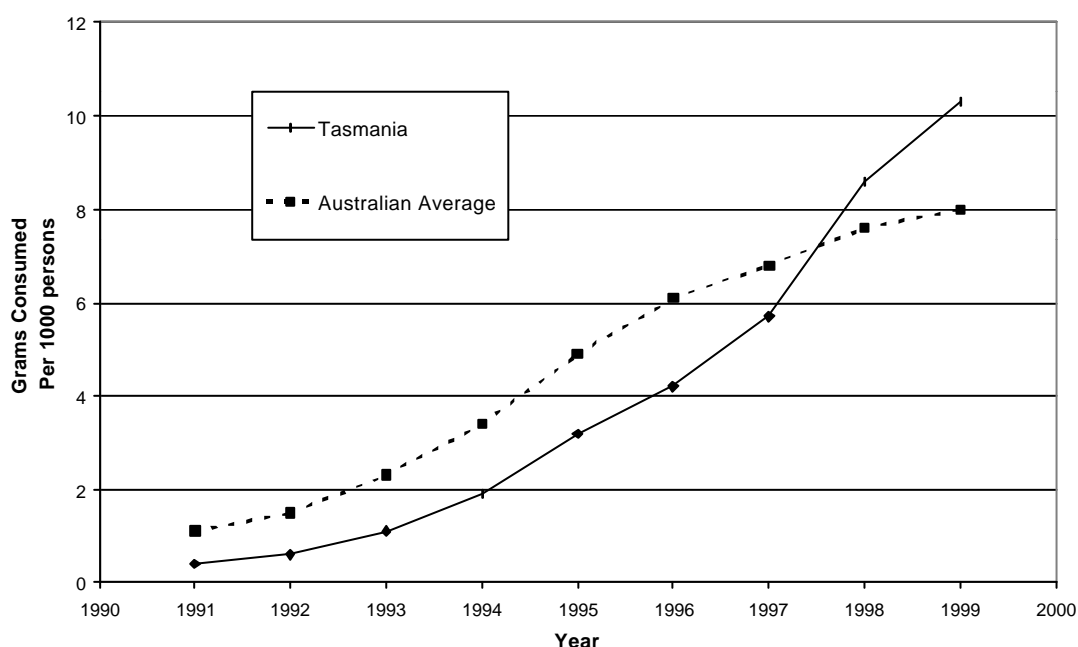
Given the harms associated with intravenous use of Normison, this trend towards increasing use of the drug amongst IDU requires very close attention in the coming months.

## 10 OTHER DRUGS

### 10.1 Prescription Stimulants (dexamphetamine, methylphenidate)

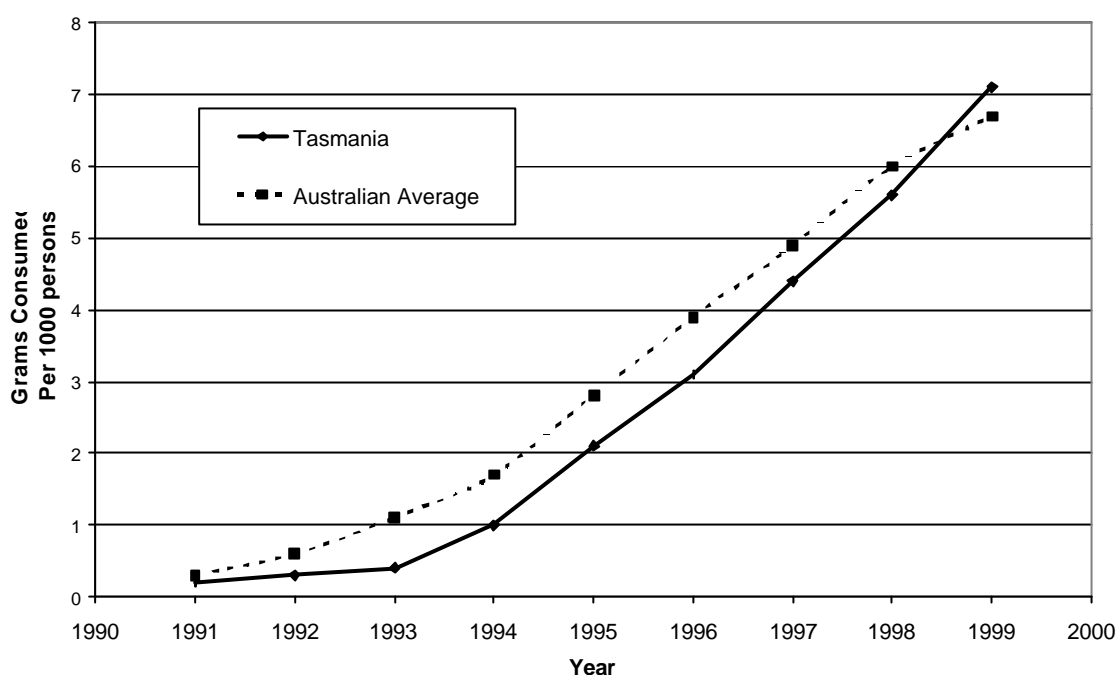
Eight key informants noted an increase in abuse of dexamphetamine or methylphenidate (Ritalin) tablets, predominantly amongst younger (secondary school age) people, who were usually swallowing or injecting 3-4 ground tablets in one hit. IDU that could comment on the price of dexamphetamine indicated that it sold for \$2-\$6 per 5mg tablet, with methylphenidate (Ritalin) costing \$2-\$4 for a 10 mg tablet, whereas two key informants estimated prices at \$5-\$10 per tablet of either drug. Thirty-eight percent of the IDU sample reported use of prescription amphetamine in the past six months.

Tasmanian prescription rates of methylphenidate and dexamphetamine (Figures 7 and 8) 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, however, have remained on a par with the steadily increasing national prescription rate. While these trends indicate an increasing 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 7: Consumption of methylphenidate (Ritalin) per 1000 persons, 1991-1999**

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



**Figure 8: Consumption of dexamphetamine per 1000 persons, 1991-1999**

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

## 10.2 Ecstasy

Key informants reported low levels of mainly recreational use of ecstasy among users of other illicit drugs, most common amongst primary users of amphetamines, with some use among primary cannabis users, and very low levels amongst primary users of opioids.

In the IDU sample, 55% had used ecstasy at some stage in their lives. Swallowing of the drug was most common, reported by 44% of the sample at some stage of their lives, and 16% in the preceding six months. Injection of ecstasy was reported by 35% of the sample at some stage, while 17% had injected the drug in the past six months. In total, 25% of the sample reported using ecstasy in the past six months, with a median frequency of use of two days (range 1-52 days) in this period. 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)

One key informant reported the price of ecstasy as \$20 per tablet. This is comparable with data from Tasmania Police State Intelligence Services, which reported prices between \$15 and \$25 per tablet over the January-July 2000 period. Data provided by the Australian Bureau of Criminal Intelligence (ABCI) indicates that the prices for ecstasy in the state have remained reasonably stable over the past two years, with reported costs of \$15 to \$25 per tablet during the 1998/99 and 1999/00 periods, a clear drop from 1996/97 and 1997/98 periods (\$70 - \$80 and \$60 - \$80 respectively). Only one seizure of ecstasy tablets was made by Tasmania Police in the 1999/00 financial year, being three tablets in the Southern district during January 2000.

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.

There were single key informant reports of an increasing availability of ecstasy, and of it appearing in pink, blue or white tablet form, or as a tablet incorporating a skull and crossbones design.

### **10.3 Anabolic Steroids**

Only 8% of the IDU sample had ever used steroids, with only one respondent reporting use during the six months prior to interview (of the adrenal steroid hormone prednisolone). Similarly, only two key informants noted recent users of steroids amongst the groups they came into contact with. One of these key informants had worked with two adolescent IDU who had experimented with injecting bovine steroids. Anecdotal reports from needle/syringe outlet staff indicate that there are a small number of regular users of steroids accessing their services, although their attendance is sporadic and often centres around particular events. However, it would seem that such users are not well tapped by the IDRS methodology.

A single seizure of 10, 50 mL bottles of Stanazol steroid was made by Tasmania Police within the northern district in October 1999. The offender noted that the steroid had a 'street value' of \$250 per bottle. No seizures of steroids were made in the state during the 1997/98 or 1998/99 periods, although 3 were made in 1996/97.

### **10.4 Inhalants**

While 51% of the IDU respondents reported ever using inhalants, only 9% had used them in the six months prior to interview. Amyl nitrate was the most commonly reported inhalant used recently, and most of those that had used inhalants reported only doing so once or twice in the past six months (n=5). Similarly, most key informants were not aware of any recent use of inhalants amongst the drug users they had contact with, although most believed that their groups had used inhalants at some stage in their drug use careers, primarily in adolescence.

### **10.5 Hallucinogens**

Almost a third (31%) of the IDU respondents reported use of hallucinogens in the past six months, and almost all (88%) had used the drug at some stage in their lives. However, the frequency of use of the drug was rare, with only a median of two days use in the past six months among those whom reported use of the drug. Key informant reports followed a similar theme, with 13 key informants noting irregular, recreational use of hallucinogens amongst a small proportion of the users they had contact with, with use more common amongst younger, more experimental users. Two key informants further noted that hallucinogen use and availability was primarily seasonal, maximising during the summer months.

One key informant reported prices of \$15-\$35 per tab for LSD, in concert with price estimates of \$15-\$30 reported by Tasmania Police State Intelligence Services. Tasmania police seized 109 tabs of LSD during the 1999/00 financial year, all during the summer October-December 1999 quarter.

## 10.6 Alkaloid Poppies

In the IDU sample, 66% had used some preparation of alkaloid poppies at some stage in their lives. Swallowing of the drug was most common, reported by 57% of the sample at some stage of their lives, and 28% in the preceding six months. Smoking of the drug was reported by 24% of the sample at some stage, while 10% had smoked the drug in the past six months. In total, 34% of the sample reported using some preparation of alkaloid poppies in the past six months, 26 people reporting use of opium, and 8 of poppy tar. Median frequency of use was six days (range 1-151 days) in this period among those using the drug. 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 sex, cultural background, current employment status, prison history or frequency of injection (see section 3.1). However, those that had used some preparation of alkaloid poppies in the past six months had a significantly higher number of years of education (10.8 years vs. 9.9 years,  $F(1,98)=6.4$ ,  $p=0.013$ ) and were significantly older (28.7 years vs. 25.1 years,  $F(1,98)=6.26$ ,  $p=0.014$ ) than those who had not. This is consistent with key informant reports in the 1999 IDRS of use of opium amongst older, longer-term users.

Two key informants noted seasonal use (in the early months of the year) of poppy tar among primary users of morphine, while two reported an increase in the use of opium tar and the smoking of opium among the groups they had contact with. One IDU respondent and key informant reported the price of opium as \$150 per ounce. Tasmania Police State Intelligence Services, reported prices between \$10 and \$20 per 'ball' of poppy tar over the January-July 2000 period. Tasmania police seized 3933 caps of alkaloid poppies and 50g of poppy tar in the 1999/00 financial year.

The diversion rate of Tasmanian alkaloid poppy crops, shown in Table 32 below, had been in steady decline between 1995 and 1998. Contrary to this trend, however, the number of capsules reported stolen in the 1998/99 financial year was more than double that of the previous period. It should be noted that a large haul of approximately 50,000 capsules from a single property was largely responsible for this increase. However, this trend had been maintained, as a similar number of capsules were reported stolen in the 1998/99 and 1999/00 financial years. As there has been a large expansion in the number of poppy crops sewn in the 1999/00 financial year, the ratio of stolen poppy capsules per crop has declined.

**Table 32: Tasmanian alkaloid poppy crop diversion rates, 1995-2000.**

	1995/96	1996/97	1997/98	1998/99	1999/00
Number of capsules stolen	68,724	42,426	30,424	66,013	62,700
Cost per hectare of securing poppy crops	\$46	\$45	\$39	\$33	\$27
Number of capsules stolen per hectare sown		3.95	2.44	4.41	2.99
Number of theft incidents reported		46	38	34	39

*Source: Poppy Board, Justice Department of Tasmania*

## **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, and they often 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
- Primarily seasonal use and availability of hallucinogens, maximising during summer months
- Seasonal use (in early calendar months) of poppy tar amongst primary users of other opioids
- Some indications of increasing numbers of people trying or using some preparation of alkaloid poppies

## 11 DRUG-RELATED ISSUES

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### 11.1 Treatment

Currently, data regarding the primary drug problem of clients presenting at drug treatment services is not available in any systematically collated form. This situation is likely to change in future years with the adoption in mid-2000 of the National Minimum Dataset for Alcohol and Drug Treatment Services, and of new database systems in Tasmanian Public Hospitals.

#### *Detoxification client data*

Three six-monthly surveys of clients presenting for detoxification in Hobart have been performed since 1998 (Table 33). Only the two more recent surveys are presented because the first was based on retrospective data. These surveys indicate a stable number of clients presenting to the service, and a reasonably stable pattern of problem drug use (around 60-70% alcohol, 25% opioids) during this period. Data from more recent surveys was not available at the time of completion of this report.

**Table 33: Drug use of inpatients presenting for detoxification services in Hobart**

	October 1998		May 1999	
	Presenting problem drug	Other drugs used	Presenting problem drug	Other drugs used
Alcohol	58%	4%	70%	0%
Opioids	28%	7%	22%	2%
Amphetamines	2%	0%	2%	2%
Cannabis	6%	4%	0%	7%
Polydrug	6%	15%	7%	9%
Benzodiazepines	0%	2%	0%	13%
None	-	68%	-	50%
<i>Clients</i>	46		46	

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

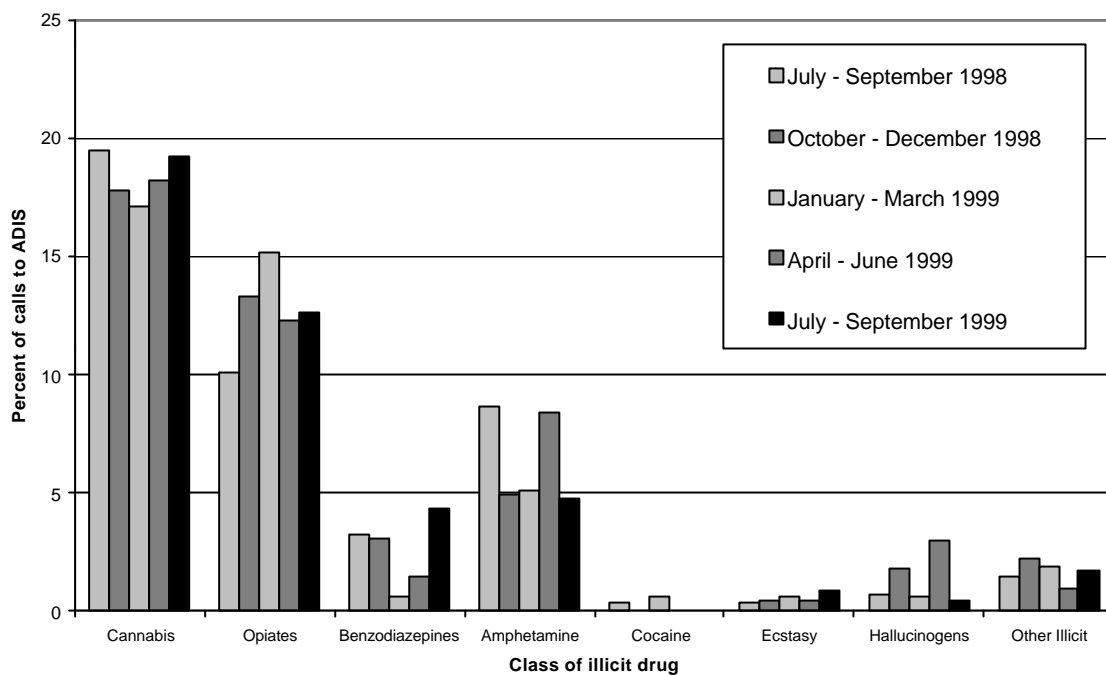
#### *Alcohol and Drug Information Service Data*

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 9). During this period, the majority of calls pertaining to illicit drugs were regarding cannabis (18%), followed by opioids (13%) and amphetamines (7%). A trend

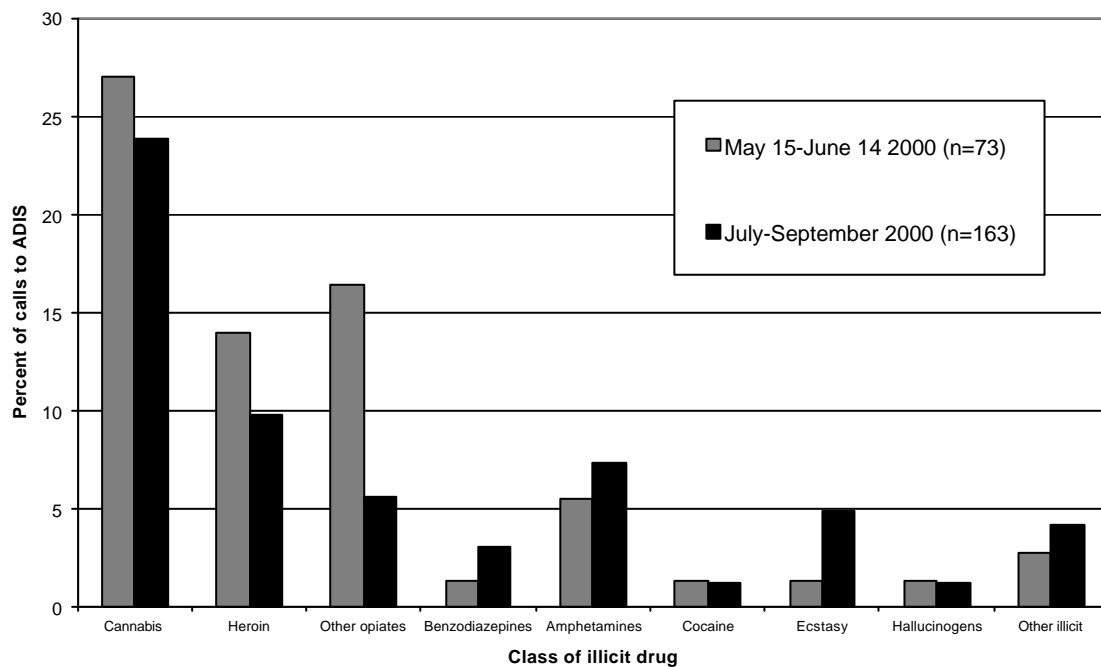
toward a slight increase in opioid-related inquiries was noted during this period. Data from previous years was unavailable, rendering it difficult to make comparisons.

Data from calls made to the Turning Point-administered ADIS from May 15, 2000 to September 30, 2000 were provided, with 744 calls being made within this period, 530 being made over the July-September 2000 quarter. 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 10. While this follows similar patterns to 1998/99 ADIS data, due to its more systematic recording and its referral to a specific subgroup of calls, the two data sets are not directly comparable, and as such have been displayed in separate figures.

Due to small sample sizes and the fact that this data reflects the first quarter of Turning Point's operation of the ADIS telephone service, it is difficult to make inferences regarding trends, however, in both sets of ADIS data the bulk of calls pertaining to illicit drugs were regarding cannabis, followed by opioids and amphetamines. Demographic characteristics of drug users identified in calls to ADIS during the July – September 2000 quarter indicate that the majority of drug users identified were aged between 22 and 35 years of age (53%), with an approximately equal gender distribution (47.9% female). It is noteworthy 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, 40% female.



**Figure 9: Percentage of calls to ADIS by drug type (1998/99)**  
*Source: Alcohol and Drug Services, Department of Health and Human Services*



**Figure 10: Percentage of calls to ADIS referring to persons using specific drugs, May 15-June 14, 2000 and July-September 2000**  
*Source: ADIS Tasmania Reports, Turning Point Alcohol and Drug Centre*

## Hospital Data

Data from the Royal Hobart Hospital Department of Emergency Medicine (DEM) indicate that there were 255 drug-related presentations to DEM between July and December 1999, and 408 between February and October 2000. It should be noted that these figures refer to *all* drug-related presentations and not simply to the result of illicit drug use or of licit drugs used illicitly. Indeed, a large proportion of these presentations are made up by alcohol intoxicification and adverse reactions to paracetamol or antidepressant medications. Data on those presentations most relevant to the current report are included below in Table 34, and while the different time periods in the samples render identification of trends difficult, overdose or adverse reactions to benzodiazepines seems over-represented among these presentations, a finding in keeping with the benzodiazepine use trends identified in Section 9.

**Table 34: Summary of drug-related presentations to Royal Hobart Hospital Department of Emergency Medicine, July-December 1999 and February-October 2000**

	Jul-Dec 1999	Feb-Oct 2000
<b>Intoxification</b>		
<i>Stimulant</i>	-	1
<i>Opioid</i>	-	1
<i>Cannabis</i>	-	6
<i>Sedative/hypnotic</i>	2	2
<i>Hallucinogen</i>	-	4
<i>Multiple &amp;/or unknown drug(s)</i>	4	8
<b>Withdrawal/dependence syndrome</b>		
<i>Benzodiazepines</i>	2	-
<i>Narcotics</i>	4	9
<i>Multiple/other drugs</i>	7	17
<b>Poisoning*</b>		
<i>Amphetamine or psychostimulant</i>	5	2
<i>Benzodiazepine</i>	33	45
<i>Narcotic</i>	9	12
<i>Mushroom toxicity</i>	-	3
<b>Psychotic disorder due to psychoactive substance(s)</b>	8	15

*\*Note: The term 'poisoning' refers to both adverse reactions and overdoses; also that the cases in this table do not necessarily refer solely to illicit drugs or licit drugs used inappropriately.*

Available hospital data indicate that there were 958 admissions in Tasmanian public hospitals in 1998-1999 where patients either had a drug-related principal (n=464) or additional (n=494) diagnosis. As with the data from the Department of Emergency Medicine, it should be noted that these figures refer to *all* drug-related presentations and not simply to the result of illicit drug use or of licit drugs used illicitly, and the majority of the principal

drug-related admissions related to adverse reactions or overdoses of psychotropic agents such as antidepressants (59%). Data on those presentations most relevant to the current report are included below in Table 35. Of note is the number of cases where opioid dependence was noted as an additional diagnosis (n=110, in comparison to cases where opioid dependence was the principal diagnosis, n=15) indicating that people with opioid dependence problems were more likely to come into contact with hospital services for reasons other than their drug use, a pattern that was common for people with diagnosis of dependence on all drug types. For those cases (n=371) where drug dependence or harmful use of unsanctioned drugs was noted as an additional diagnosis, there were no commonalities among their principal diagnoses, and these were often unrelated to drug use.

**Table 35:**  
**Summary of drug-related separations from Tasmanian Public Hospitals 1998-1999**

	Drug-related principal diagnosis	Drug-related additional diagnosis (but no drug-related principal diagnosis)
<b>Withdrawal/dependence syndromes</b>		
<i>Drug withdrawal syndrome</i>	9	5
<i>Opioid dependence</i>	15	110
<i>Barbiturate/sedative/hypnotic dependence</i>	3	35
<i>Cannabis dependence</i>	2	19
<i>Amphetamine and other psychostimulant dependence</i>	3	10
<i>Other drug dependence</i>	4	79
<i>Harmful use of unsanctioned drugs</i>	-	113
<b>Poisoning*</b>		
<i>Accidental poisoning by opiates and related narcotics</i>	16	11
<i>Accidental poisoning by sedatives and hypnotics</i>	4	-
<i>Accidental poisoning by psychotropic agents</i>	83	14
<b>Drug-induced mental disorder</b>		
<i>Organic delusional syndrome</i>	20	5
<i>Hallucinosi</i>	7	2
<i>Delirium</i>	15	8
<i>Other drug induced mental disorder</i>	36	11

*\*Note: The term 'poisoning' refers to both adverse reactions and overdoses. Cases where attempted suicide was recorded as the intent of the poisoning have been excluded from these figures.*

Slightly over half of the individuals admitted to Tasmanian public hospitals over this period were males (53%), and the majority were admitted in the southern region of the state (67%). In concert with indications from other datasets, the largest proportion of patients admitted for drug-related diagnoses (56%) were in the 20 to 40 year age range (27% and 29% for the 20-29 and 30-39 age groups respectively).

## 11.2 Overdose

While all but two people included in the IDU sample reported that they had ever used some form of opiate, less than a third (31%) had ever experienced an opioid overdose, with only 10% having overdosed in the previous year (Table 36). Of those who had ever overdosed, the median number of times they had overdosed was twice (range 1-20), and the median time since last overdose was two years prior to interview (range 0-180 months). These overdose rates are substantially lower than those reported in other states, with approximately 50% of the IDU sampled in the 1999 IDRS for both the Sydney and Melbourne studies ever having overdosed, and around 25% experiencing at least one overdose in the six months prior to interview. 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 third of the current IDU sample, use of pharmaceutical preparations of opioids was much more common (recently used by approximately 80% of the sample), and this preference for pharmaceutical opioids where the dose of the drug is known reduces the likelihood of accidental overdose. In support of this, in the Tasmanian IDU sample, those who had ever used heroin (70%) had experienced significantly more overdoses than among those who had never used heroin (1.9 times vs. 0.1 times respectively,  $F(1, 98) = 5.3, p=0.023$ ).

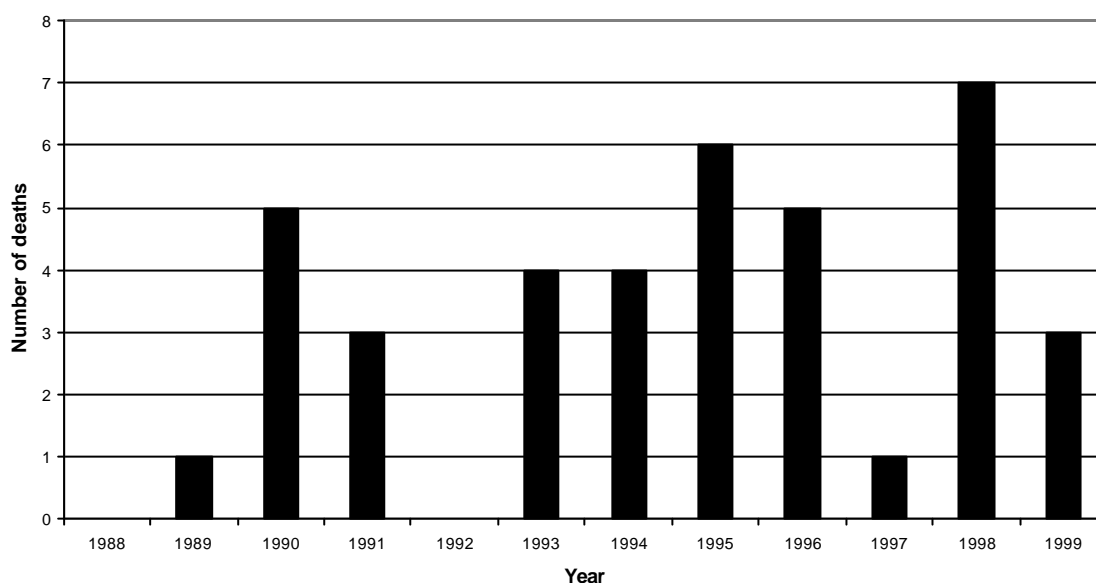
**Table 36: Reported experience of opioid overdose among the IDU sample (N=100)**

Opioid Overdose Experience	N=100
Overdosed (ever)	31% (median = twice ever overdosed)
Overdosed (in last 12 months)	10%
Administered naloxone (ever)	14%
Administered naloxone (in last 12 months)	7%
Witnessed an overdose (ever)	50% (median=twice)
Witnessed an overdose (in last 12 months)	24%

Of note is that slightly less than half of those who indicated they had ever had an opioid overdose had ever been administered Narcan (14%). Narcan (naloxone) is a fast-acting opioid antagonist given to reverse the effects of opioids in the event of an overdose. Seven of the ten IDU who reported an opioid overdose in the past 12 months had been administered Narcan in this period. This much higher proportion of Narcan administration among recent opioid overdose cases may reflect changes in the treatment response to such situations by local health staff. Those who had been administered Narcan reported a median period of 12 months since they were last administered the drug (range 0-120 months).

Half of the IDU respondents reported ever witnessing one or more overdoses (median = twice). Of these 50 participants, 32 were asked where they were when they witnessed the overdose, and just over half (56%) reported being in a mainland state at the time. Such a finding is consistent with the relatively low overdose rate among Tasmanian IDU. Those respondents that had ever witnessed an overdose reported a median period of 12 months since they last experienced such an event (range 1-144 months). Almost a quarter of the IDU sample (24%) 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 1988-1999 (Figure 11), these minimal figures rendering analysis of trends difficult. There was approximately an even sex distribution among these victims of opioid-related fatalities. With the exception of a single fatal overdose clearly associated with heroin use, these cases largely relate to methadone or morphine. Benzodiazepines were also present in many of these cases. It should also be noted that there remain several cases yet to be brought before the coroner for the 1998 and 1999 periods and that these are not included in the data presented here.



**Figure 11: Number of opioid overdose deaths among those aged 15-44 years, 1988-1999**

*Source: Australian Bureau of Statistics 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 77% reporting at least one such problem in the preceding month (Table 37). This rate of experience of injection-related health problems is commensurate with those identified in the IDU samples of the Victorian and New South Wales 1999 IDRS studies, despite the lower frequency of injection of the Tasmanian IDU sample in comparison to these states (only 31% of the Tasmanian IDU sample reported injecting once a day or more, in comparison to 77% and 80% of the Victorian and NSW IDU respectively). 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 which 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). Additionally, reported rates of thrombosis (coagulation of blood in a blood vessel) amongst the Tasmanian IDU sample were slightly higher (18%) than those reported amongst Victorian IDU (8%) in the 1999 IDRS study.

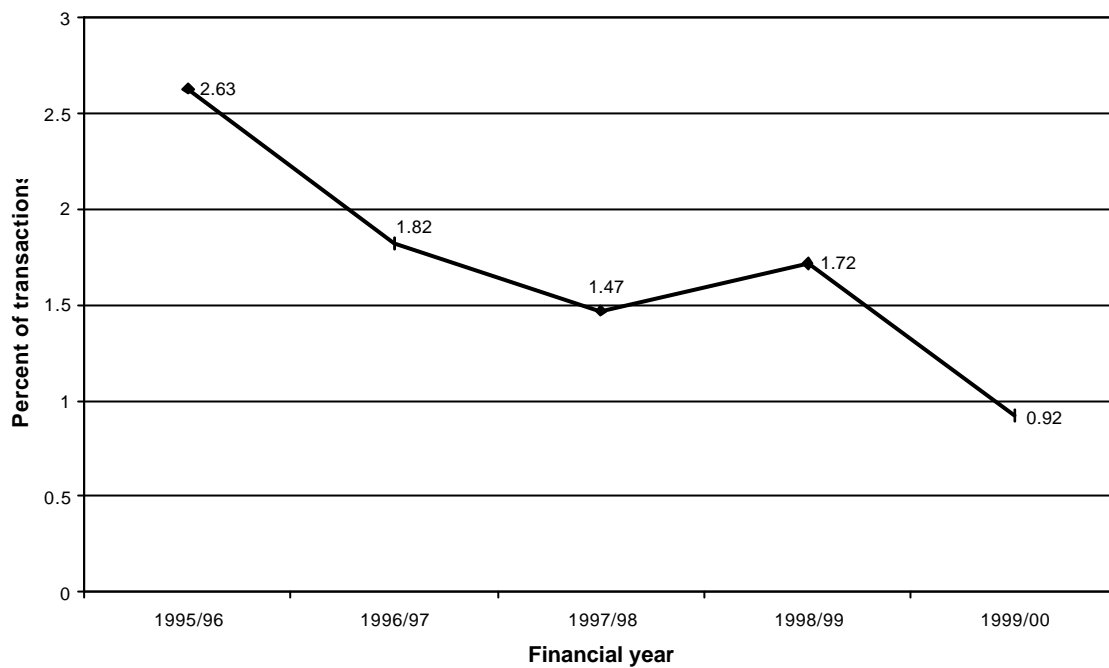
**Table 37: Injection-related health problems reported by participants in the IDU survey in the month prior to interview (n=100)**

Injection-related health problems	% in last month experiencing the problem
Scarring/bruising	59%
Difficulty injecting	50%
Thrombosis	18%
“Dirty Hit”	15%
Infections/abscesses	9%
Overdose	0%
At least one injection-related problem	78% (range 1-5, median = 2*)

\*for those noting injection-related problems

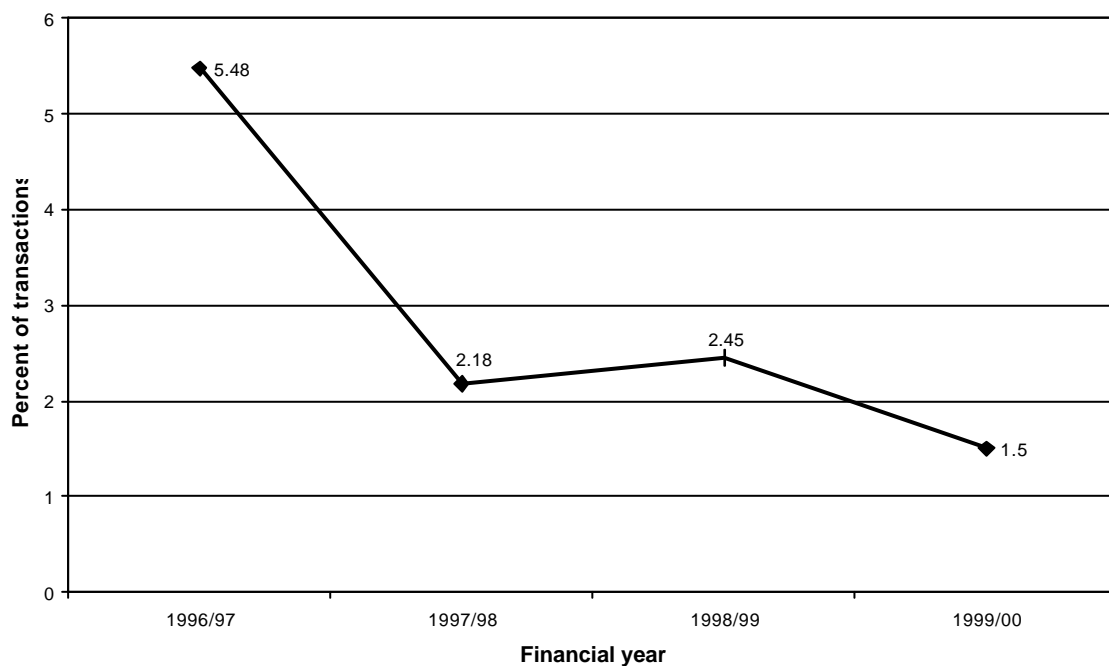
### 11.4 Injection Equipment Sharing

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 steady decline since 1995/96 (Figures 12 and 13). 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 12: Reported sharing of needles and syringes by non-pharmacy Needle and Syringe Availability Program clients**

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



**Figure 13: Reported sharing of other injection equipment by non-pharmacy Needle and Syringe Availability Program clients**

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

Among the IDU sample, only 12% reported lending a used needle/syringe to others in the month prior to interview, and 10% reported using a needle/syringe after it had been used by someone else (Table 38). Almost all (8/10) of those who had injected with a used needle/syringe reported that only one other person had used the syringe prior to them, the remainder reporting two people had used the needle/syringe. People who had used the syringe previously were reported primarily to be a regular sexual partner (n=6) or close friend (n=2). The majority (7/10) reported that they had only borrowed a used needle/syringe once in the past month, with the remainder borrowing two or three times.

In comparison to the reported sharing of needles/syringes, the respondents reported a much higher rate of sharing of other types of injecting equipment, with only 38% not sharing any form of injection equipment in the month prior to interview. The most commonly shared equipment was spoons or other mixing containers (53%), water (35%) or filters (32%), although most respondents specified that all parties had used clean needles when sharing this equipment, indicating an awareness of the importance of clean needles. However, 29% had used another person's tourniquet in the past month which is not safe injection practice. These findings are of concern as it is possible that Hepatitis C transmission may occur through sharing of equipment other than needle/syringes. It is noteworthy that these findings were similar to those from the 1998 Tasmanian Users Health and Support League Hepatitis C Risk Assessment and Peer Education Project (Clarke & Siddins, 1998) where 80 Hobart IDU were interviewed regarding injection practices in the month prior to interview (Table 39). This may indicate that while local users may be well educated about the risks associated with sharing needles/syringes, they may be less informed about risks associated with sharing of other injection equipment. Such an aspersion was supported by key informant reports that while the IDU they had contact with were being increasingly responsible with the use of clean needles/syringes (n=12) there were some that were less careful with the use of other injection equipment (n=4).

**Table 38: Proportion of the IDU sample (n=100) reporting sharing of injection equipment in the month prior to interview**

<b>Injection equipment sharing</b>	<b>% of IDU in past month</b>
Borrowed used needles	10%
Lent used needle to others	12%
Shared spoons/mixing container	53%
Shared water	35%
Shared filters	32%
Shared tourniquets	29%

**Table 39: Specific blood-borne virus transmission risk behaviours performed by Hobart IDU (n=80) in the month prior to interview in the 1998 Tasmanian Users Health and Support League Hepatitis C Risk Assessment and Peer Education Project (Clarke & Siddins, 1998)**

<b>RISK BEHAVIOURS</b>	<b>Percent (%)</b>
<b><i>INJECTING PRACTICES</i></b>	
Handled another person's used needle/syringe at a time when they had cuts, sores or lesions on their fingers or hands.	<b>56</b>
Sucked or licked left-over drugs from a spoon which had been used by another person.	<b>20</b>
Injected a drug which had been filtered through another person's filter.	<b>34</b>
Injected a drug that was prepared in another person's spoon.	<b>39</b>
Injected a drug prepared with water which had been used by another person.	<b>30</b>
Injected a drug they had prepared after assisting another person with injecting	<b>35</b>
Injected a drug that was prepared by another person who had already injected or assisted in someone else's injection	<b>35</b>
Injected by another person who had already injected or assisted in someone else's injection	<b>38</b>
Injected with a needle/syringe which had been handled by another person who had already injected	<b>39</b>
Injected with another person's used needle/syringe	<b>13</b>
Injected with a syringe that was scored preloaded (eg. home-bake, methadone).	<b>18</b>
Touched their own injection site soon after assisting another person with their injection	<b>40</b>
Another person touched their injection site	<b>36</b>
Touched someone's injection site when they had sores on their hands.	<b>31</b>
Used a tourniquet which had been used by another person.	<b>35</b>
<b><i>OTHER PRACTICES</i></b>	
Came into contact with another person's blood (eg. fights, accidents, blood sports, occupational, pimples, blood nose).	<b>51</b>
Used another person's personal hygiene equipment (eg. nail file, scissors, clippers, tweezers, comb, brush).	<b>46</b>
Engaged in unprotected vaginal sex with another person during menstruation.	<b>23</b>

## 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 40 indicates the number of cases of blood-borne virus infection recorded in the state between 1991-August 2000, showing an increase in reported cases of hepatitis C since 1997. 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. All incident cases of hepatitis C since 1996 had injecting drug use as a recent risk factor for infection. However, no cases of HIV infection in the past six years have had relatively recent injecting drug use as a risk factor for acquiring the infection.

Key informants in both the 1999 and 2000 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 amongst the community.

**Table 40: Rates of notifiable blood-borne viruses in Tasmania 1991-2000\***

Year	Blood-Borne Virus			
	Hepatitis C (incident)	Hepatitis C (Unspecified)	Hepatitis B (Incident) <sup>#</sup>	HIV (Incident)
<b>1990</b>	n/a	n/a	n/a	9
<b>1991</b>	0	33	0	6
<b>1992</b>	0	112	0	10
<b>1993</b>	0	161	2	2
<b>1994</b>	0	53	2	2
<b>1995</b>	1	268	7	6
<b>1996</b>	6	291	8	3
<b>1997</b>	2	236	1	1
<b>1998</b>	17	265	5 (5)	3
<b>1999</b>	19	305	6 (5)	3
<b>2000*</b>	21	191	7 (5)	1

\*2000 data is current to August 01, 2000

<sup>#</sup>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.

Source: Communicable Diseases Network - Australia New Zealand - National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services

## 11.6 Crime

### *Expenditure on drugs*

IDU survey respondents were asked how much they had spent on illicit drugs on the day before the interview, and responses are summarised in Table 4 (Section 3). Just over half (55%) of the sample had spent any money on illicit drugs on the day prior to interview, with the most common amount being between \$20 and \$99 (40%). Only 25% of the sample reported spending \$50 or more, and only 5% spent more than \$100 on the day prior to interview. This level of spending on illicit drugs was much lower than that reported by Victorian IDU in the 1999 IDRS study (Dwyer & Rumbold, 2000) where 57% of the sample had spent \$50 or more, and 36% more than \$100 in the day prior to interview.

### *Criminal activity*

The majority (64%) of the IDU respondents reported involvement in some type of criminal activity in the preceding month (Table 41), a level that is commensurate to that reported by Victorian and NSW IDU in previous IDRS studies. The most commonly reported crimes were dealing (49%) and property crime (18%), with relatively few respondents reporting involvement in violent crime or fraud. Most IDU reporting crimes other than dealing reported that they engaged in such activities less than once per week, while the majority of those involved in dealing were doing so at least once per week or with greater frequency (32 of the 49 persons). Forty-three percent of the IDU had been arrested in the previous twelve months. The most common grounds for arrest were property crime (16%) and use or possession of a prohibited drug (9%).

**Table 41. Reported criminal activity among IDU**

Activity	N=100
<b><i>Crime (% in last month)</i></b>	
Dealing	49%
Property crime	18%
Violent crime	10%
Fraud	5%
<i>Any crime</i>	64%
<b><i>Arrested last 12 months (%)</i></b>	43%
Arrested for property crime	16%
Arrested for use/possession	9%
Arrested for violent crime	6%
Arrested for fraud	2%
Arrested for dealing/trafficking	1%
Arrested for other reason	10%

### *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 42). The majority of respondents (63% of those providing a response) believed that police activity had remained stable over this period, and similarly most reported that there had been no changes in the number of their friends that had been arrested recently (90% of those providing a response). Likewise, 76% of those that provided an answer reported that their ability to obtain drugs had not been reduced by any recent changes in local police activity.

**Table 42: Perceptions of police activity among IDU**

<b><i>Have there been changes in police activity in the last six months (%)</i></b>	
More activity	20%
Stable	35%
Less activity	1%
Don't know	44%
<b><i>Has police activity made it more difficult to buy drugs recently?</i></b>	
Yes	17%
No	68%
Don't know	11%
<b><i>Have there been an increase in arrests lately?</i></b>	
More arrests	10%
Stable	86%
Less arrests	0%
Don't know	4%

Key informants reported similar perceptions of police activity, with the majority (60%, n=21) reporting no recent changes in police activity toward the users they came into contact with. There were, however, a few key informants (n=4, one of whom was a police officer) reporting a change toward more of a 'community policing' approach among police, especially in relation to cannabis use, where police were preferring to educate or counsel users than involve them further in the criminal justice system. This has arisen out of the Illicit Drug Diversion Initiative, where appropriate consumers caught by police are cautioned or provided with drug education or counselling interventions in place of a criminal charge. This initiative appears to be well supported by Tasmania Police, as has been a dramatic increase in the number of cautions or diversions issued in recent months (Table 43).

**Table 43: Drug diversions or cautions issued by Tasmania Police 1999-2000**

	<b>Jul-Sep 1999</b>	<b>Oct-Dec 1999</b>	<b>Jan-Mar 2000</b>	<b>Apr-Jun 2000</b>	<b>Jul-Sept 2000</b>
Number of cautions	46	61	68	151	161

*Source: Tasmania Police State Intelligence Services Statewide Illicit Drug Reports.*

*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*

Data pertaining to drug-related arrests in Tasmania in 1999/00 are shown below in Table 44. This data illustrates a marked increase in arrests for amphetamine-related offences for 1999/00 in comparison to previous years, a trend consistent with IDU and key informants of increasing availability and use of amphetamines 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 support of this, there has been a steady decline in the number of persons before the Hobart Magistrates Court on possession or use type offences between 1997/98 and 1999/00 (Table 46).

**Table 44: Number of arrests (including cautions and diversions) for cannabis, amphetamine, opiate and cocaine related offences in Tasmania, 1995/96-1999/00**

Type of offence	1995/96	1996/97	1997/98	1998/99	1999/00
Cannabis	2518	1079	1196	736	1142
Amphetamine	42	20	15	7	69
Opiates	41	28	16	25	19
Cocaine	0	0	0	0	0

*Source: Australian Illicit Drug Reports 1995/96-1998/99, Australian Bureau of Criminal Intelligence, and Tasmania Police State Intelligence Services Statewide Illicit Drug Reports.*

*Note: 1999/00 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 ABCI*

Table 45 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 has remained reasonably stable over the past four financial years. Similarly, the numbers of persons involved with the justice system for supply-type offences has remained reasonably stable through this period (Table 46). The apparent increase in the proportion of consumer arrests for cannabis may again reflect an increase in use of official cautions utilised by Tasmania Police, which are included in these statistics and unfortunately cannot be partialled out.

**Table 45: Consumer arrests (including cautions and diversions) for cannabis, amphetamine and opiate-related offences as a proportion of all drug-related arrests in Tasmania 1996/97-1999/00**

	% Consumers			
Drug Type	1996/97	1997/98	1998/99	1999/00
Cannabis	49%	76%	93%	90%
Amphetamine	90%	100%	86%	86%
Opiates	86%	94%	96%	74%

*Source: Australian Illicit Drug Reports 1996/97-1998/99, Australian Bureau of Criminal Intelligence, and Tasmania Police State Intelligence Services Statewide Illicit Drug Reports.*

*Note: 1999/00 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 ABCI. The category of ‘opiates’ includes heroin, opium poppy plant/tar, morphine and other narcotic-related arrests.*

**Table 46: Number of individuals before Tasmanian courts or imprisoned on drug charges, 1996-2000**

	1996/97	1997/98	1998/99	1999/00
<b>Supreme Court of Tasmania</b>				
Number of individuals convicted of selling or trafficking in dangerous drugs	22	18	22	27
<b>Hobart Magistrates Court</b>				
<i>Number of individuals before the court for:</i>				
dealing and trafficking in drugs		30 (40)	28 (33)	23 (28)
importing and exporting of drugs		4 (5)	7 (8)	5 (8)
manufacturing and growing of drugs		201 (260)	164 (189)	101 (124)
possession and/or use of drugs		469 (928)	342 (654)	195 (428)
other drug offences		229 (284)	178 (251)	105 (169)
<i>(alleged number of offences in parentheses)</i>				
<b>Hobart Prison*</b>				
Number of individuals incarcerated	21	42	26	29
Number of offences among those incarcerated	33	77	50	44
<b><u>Offence breakdown</u></b>				
Grow prohibited plant / substance	3	6	3	4
Possession	16	30	20	22
Prescription offences	3	7	6	0
Sell / supply narcotic substance	1	1	1	2
Sell / supply prohibited substance	1	6	4	0
Traffic in narcotic substance	1	1	1	6
Traffic prohibited substance	4	7	2	4
Traffic prohibited plant	0	5	4	2
Other	4	14	9	5

\*Note that numbers of incarcerations refer to cases presented before both the Supreme and Magistrates courts

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

## 11.7 Pharmacy Break-ins

Available data provided by Tasmania Police regarding pharmacy break-ins involving theft of potential drugs of abuse indicate that, in the southern region of Tasmania, there were 17 such incidents in 1998/99 and 10 in 1999/00. Although the products stolen were not detailed in all cases, benzodiazepines were the most commonly targeted drug, featuring in at least 12 of the 17 incidents in 1998/99 and 8 of the 10 1999/2000 burglaries. 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.

Table 47 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 47: Insurance claims for Tasmanian pharmacy break-ins, 1997-2000**

	1997	1998	1999	2000*
<b>Number of Claims</b>	44	62	47	10
<b>Total Cost of Goods Stolen</b>	\$43,504	\$38,706	\$32,610	\$13,149

\*To October 11, 2000

Source: Pharmacy Guild Insurance

## 11.8 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 have steadily declined over the past four financial years, from 172 in 1996/97 to 106 in 1999/00 (Table 47). Amongst the group of identified doctor shoppers in 1999/00, all accessed prescriptions for benzodiazepines, narcotics/analgesics and codeine-based compounds. It should be noted that while the number of individual doctor shoppers has decreased between 1998/99 and 1999/00, the mean number of scripts accessed by these individuals has increased (from 75 to 102 respectively). The largest number of scripts obtained by identified doctor shoppers were for benzodiazepines, although the average number of scripts for both benzodiazepines and codeine compounds obtained by Tasmanian doctor shoppers has remained fairly stable over the past four financial years. There has been a notable increase in the mean number of narcotic/analgesic prescriptions accessed between 1998/99 and 1999/00, with mean prescriptions more than doubling from a mean of 16 (standard deviation = 27) scripts in 1998/99 to 39 (standard deviation = 26) in 1999/00.

**Table 48: Doctor shopping patterns in Tasmania 1996/97-1999/00**

	1996/97	1997/98	1998/99	1999/00
<b>Number of doctor shoppers enrolled nationally</b>	10,114	9,515	8,626	8,780
<b>Number of doctor shoppers enrolled in Tasmania</b>	172	158	136	106
<b><u>Benzodiazepines</u></b>				
<b>Number of Tasmanian doctor shoppers accessing</b>	169	157	136	106
<b>Mean (SD) scripts per doctor shopper</b>	39 (41)	39 (35)	40 (31)	41 (26)
<b><u>Narcotics/Analgesics</u></b>				
<b>Number of Tasmanian doctor shoppers accessing</b>	169	157	136	106
<b>Mean (SD) scripts per doctor shopper</b>	14 (14)	19 (31)	16 (27)	39 (26)
<b><u>Codeine Compounds</u></b>				
<b>Number of Tasmanian doctor shoppers accessing</b>	169	157	136	106
<b>Mean (SD) scripts per doctor shopper</b>	25 (32)	23 (34)	19 (27)	22 (9)
<b><u>All target drugs*</u></b>				
<b>Number of Tasmanian doctor shoppers accessing</b>	169	157	136	106
<b>Mean (SD) scripts per doctor shopper</b>	78 (64)	81 (63)	75 (52)	102

Note: \* All target drugs refers to benzodiazepines, narcotics/analgesics and codeine compounds;

SD = standard deviation

Source: Professional Review Division, Health Insurance Commission

## 11.9 Summary Of Drug-Related Issues

The main drug-related issues to emerge from the 2000 IDRS study are summarised in Table 48 below. The trends that are of most concern relate to injection-related health problems and safe injection practices amongst local IDU.

**Table 49: Summary of drug-related issues**

<b>Health Issues</b>
<ul style="list-style-type: none"><li>• Over-representation in complications associated with benzodiazepine use among emergency hospital presentations</li></ul>
<ul style="list-style-type: none"><li>• Low rates of both fatal and non-fatal opiate overdose amongst IDU (particularly in comparison to other Australian states)</li></ul>
<ul style="list-style-type: none"><li>• High proportion of IDU experiencing injection-related health problems, possibly due to the harms associated with the injection of pharmaceuticals</li></ul>
<ul style="list-style-type: none"><li>• Low rates of sharing of needles/syringes, but indications of less appropriate practices with other injection equipment among some IDU</li></ul>
<ul style="list-style-type: none"><li>• Continuing transmission of hepatitis C through injecting drug use</li></ul>
<b>Crime and Police Activity</b>
<ul style="list-style-type: none"><li>• Continuing level of criminal activity among some groups of injecting drug users (primarily drug dealing and, to a lesser extent, property crime)</li></ul>
<ul style="list-style-type: none"><li>• Expansion of cautioning and drug diversion programs by Tasmania Police is evident</li></ul>
<ul style="list-style-type: none"><li>• Steady decline in the number of persons before the courts for 'consumer'-type offences</li></ul>
<ul style="list-style-type: none"><li>• Reduction in number of doctor shoppers in the state, but an increase in the number of prescriptions accessed by these shoppers</li></ul>

## 12 COMPARISON OF DATA FROM DIFFERENT SOURCES

The following section provides a summary of the main findings of the 2000 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 50: Trends in amphetamines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>AMPHETAMINE TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Price of powder amphetamine stable (\$80 per gram)	✓	✓	✓
Availability of more 'pure' amphetamines, at a stable price of \$50 per 'point' (0.1g)	✓	✓	✓
Availability very easy and stable or more easily accessed	✓	✓	
Increased availability of the more pure forms of amphetamine (wet, crystalline powder)	✓	✓	
Reports of limited availability of high purity liquid amphetamine and 'ice' (crystal amphetamine)	✓	✓	
Purity of seizures of amphetamine stable and low			✓
Increase in numbers of people using amphetamines	✓	✓	
Increase in amount or frequency of amphetamine use	✓	✓	
Change in mental health among some users		✓	

**Table 51: Trends in heroin endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>HEROIN TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Price of heroin stable at \$50 per 'packet' (0.05-0.15g)	✓	✓	✓
Availability easy to very easy for better 'connected' users, difficult for other IDU	✓	✓	
Availability generally low and stable over past 6 months	✓	✓	
Both low purity powder and higher-purity 'rock' (compressed powder) forms available	✓	✓	
Predominantly used by regular users of other opioids	✓	✓	

**Table 52: Trends in cannabis endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>CANNABIS TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Price of cannabis stable: \$20-\$25 per gram, \$250-\$300 per ounce	✓	✓	✓
Availability stable and very easy	✓	✓	
Potency high (based on unverified estimates) and stable	✓	✓	
Hydroponically- grown cannabis head preferred among users	✓	✓	
Use of cannabis widespread through broad cross-section of the community	✓	✓	✓
High level of daily use among IDRS sample	✓	✓	
Reports of adulteration of cannabis with fly sprays by some dealers	✓	✓	

**Table 53: Trends in cocaine endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>COCAINE TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
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 54: Trends in opioids endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>OPIOID TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Flexible use of all types of opioids (heroin, morphine, methadone, opium, poppy tar) among regular users due to fluctuating availability	✓	✓	
High level of benzodiazepine use among opioid users (both IV and oral)	✓	✓	
Price of morphine and methadone stable (\$1 per mg, \$80 per 100 mg)	✓	✓	✓
<b>MORPHINE TRENDS</b>			
MS Contin predominant form of morphine used	✓	✓	
Increasing use of Anamorph	✓	✓	
Availability of morphine easy to very easy and stable	✓	✓	
Increase in numbers of people using morphine	✓	✓	
Increase in frequency of morphine use by existing users	✓	✓	
<b>METHADONE TRENDS</b>			
Mixed reports of availability of methadone (easy or difficult) perhaps reflecting a tightening of the market	✓	✓	
IV combination of methadone and Normison increasingly popular	✓	✓	

**Table 55: Trends in benzodiazepines endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).**

<b>BENZODIAZEPINE TRENDS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
High use of benzodiazepines among IDRS sample	✓	✓	
IV benzodiazepine use more common amongst regular users of other opioids	✓	✓	
Normison most commonly injected benzodiazepine	✓	✓	
Increasing IV use of benzodiazepines	✓	✓	✓
Increase in health problems associated with IV benzodiazepine use	✓	✓	
IV combination of methadone and Normison increasingly popular	✓	✓	

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

<b>TRENDS IN OTHER DRUGS</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Hallucinogens and/or ecstasy used occasionally by IDRS sample	✓	✓	
Primarily seasonal use and availability of hallucinogens, maximising during summer months		✓	✓
Increase in abuse of dexamphetamine and methylphenidate (predominantly amongst adolescent age groups)		✓	
Seasonal use (early calendar months) of poppy tar, primarily amongst regular users of other opioids	✓	✓	
Increasing numbers of people trying or using some preparation of alkaloid poppies		✓	

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

<b>DRUG-RELATED ISSUES</b>	<b>IDU</b>	<b>KI</b>	<b>OTHER</b>
Low rates of fatal and non-fatal opiate overdose amongst IDU (particularly in comparison to other jurisdictions)	✓	✓	✓
Substantial levels of injection-related health problems	✓	✓	
Low rates of needle sharing amongst IDU	✓	✓	✓
Less careful practice with other injection equipment among some 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		✓	✓
Reduction of the number of doctor shoppers, but an increase in the number of prescriptions accessed by these shoppers			✓

## SUMMARY AND CONCLUSION

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### 13.1 Summary Of Main Findings

The major trends that emerged from the 2000 IDRS concerned changes in the use of amphetamine and benzodiazepines.

Amphetamine had been used by the majority of the injecting drug users sampled in the study, despite being the reported drug of choice for only a small proportion of the group. There were reports of an increased availability of more pure amphetamine (being a wet, crystalline powder), and this change was regarded as being responsible for an increasing number of people using amphetamine, and use in increasing amount by existing users in recent months. There were also reports of the emergence of very high purity forms of amphetamine, such as 'ice' (crystalline methamphetamine) or liquid amphetamine, although the availability of these forms of the drug was very limited. With increased use of these potent stimulants, there was reports in changes in the mental health of some users, including the emergence of acute psychosis.

A marked increase in the injection of benzodiazepines was indicated by data from the state's Needle and Syringe Availability Program, most commonly amongst regular users of opioids. While this is of concern because concurrent use of benzodiazepines and opioids can increase the risk of overdose, of particular note is that the benzodiazepine preparation most commonly injected was Normison (temazepam). This preparation has been specifically designed to deter injection, and contains an oil-based solution which is insoluble in water or blood, which can congeal in the bloodstream and lead to occlusions of small blood vessels, producing substantial damage to veins and potential loss of digits. Use of this drug is already causing significant harm among users, with an increase in associated health problems noted by several professionals working with these persons.

The availability of heroin in Hobart seems to have continued to increase, a trend that has remained over at least the past eighteen months. However, its availability remains relatively low in comparison to other states, with a large proportion of users finding it difficult to access despite it being a sought-after drug. Both low-purity heroin powder and higher purity 'rock' form heroin appear to be available in the state.

Cocaine appears to remain virtually unobtainable in Hobart, with a very small number of people surveyed reporting recent use of the drug, and indications that what is used is purchased and imported from mainland jurisdictions.

There were no substantial changes in patterns of cannabis use or its associated harms identified amongst the groups surveyed, despite recent changes by Tasmania Police policy to allow possession of small amounts of cannabis to attract a 'caution' notice or diversion into treatment programs for appropriate persons rather than a criminal charge. This provides some support for the continuation of this program, as use does not seem to have increased following its initiation (an argument often levelled at programs in other states) and persons involved in the court system for 'consumer'-type offences has decreased. There have, however, been some indications of an increasing availability and preference for

hydroponically-grown cannabis. There was continuing concern regarding mental health and cannabis use.

Patterns of use and availability of other opioids such as morphine, methadone and opium seem to have generally remained stable. However, there are some indications of an increasing number of people using opioids, morphines in particular, and there has been a shift to a more even balance between the numbers of clients of the state's Needle and Syringe Availability program reporting morphine and those reporting methadone as the drug they most often inject. There was also some indication of an increasing amount of people using or trying to use preparations of alkaloid poppies, and an increasing popularity of the injection of the combination of methadone and Normison.

Finally, two important trends regarding injection of illicit drugs were noted. Firstly, while most users report good practices with regard to use of clean needles/syringes, there are indications that some may not be taking as much care with other injection equipment. While these practices are less risky, they can still produce transmission of blood-borne viruses. Secondly, a substantial level of injection-related health problems was found amongst the injecting-drug users interviewed in this survey. The level of injection related problems identified in the Tasmanian sample was commensurate with those identified among users in the 1999 NSW and Victorian IDRS studies, despite these groups having a much greater frequency of injection. This is likely to reflect the increased harms associated with the injection of pharmaceutical preparations of drugs, which is substantially more common in Tasmania than other states.

### **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. Inclusion of the injecting drug user survey to the Tasmanian IDRS has greatly improved the reliability and validity 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 2000 IDRS suggest the following areas for further investigation and possible consideration in policy:

- Implementation of strategies to increase awareness of the risks associated with the sharing of injection equipment other than needles/syringes (for example, tourniquets, filters, and mixing containers) and to reduce the occurrence of this behaviour among IDU.
- Research into factors that would reduce the harms associated with intravenous use of methadone, morphine and benzodiazepines (of Normison in particular), and dissemination of this information to users through training of Needle and Syringe Availability Program staff and peer groups.
- Provision of some reduction of the availability of Normison (temazepam) to injecting drug users through focussed awareness campaigns amongst the medical community.
- Continuing monitoring of the intravenous use of benzodiazepines, particularly of Normison.
- With the increased availability and use of more potent amphetamines, and the emergence of acutely psychotic clients presenting to drug and alcohol staff, it would be recommended that there be some training of drug and alcohol staff regarding strategies for dealing with acutely psychotic clients and what services are available for such crisis situations. Staff members of the state Mental Health Service's new Crisis Assessment Triage and Treatment (CATT) team would be well-placed to provide such training, as these staff have extensive experience in this area and will be the first point of contact in the mental health system for any such clients. Moreover, information needs to be provided to users of amphetamines and their associates information regarding 'warning signs' of potential psychotic episodes and what services are available to help.
- Research into the composition of the emerging more potent forms of amphetamine ('ice', liquid amphetamine), and moreover into the composition of the wet, crystalline powder amphetamine more readily available in the state to determine whether this is similar to that reported as 'ice' in other states.
- Continuing monitoring of the amphetamine market and patterns of use.
- Research examining the extent of use of preparations of alkaloid poppies and the appropriateness or need for development of harm reduction strategies surrounding use of these preparations.

- Research examining the extent of use, and demographic profiles of users, of drugs such as ecstasy and anabolic steroids in the state.
- Characterisation and potency testing of cannabis cultivars to investigate continuing reports of high or increasing potency of cannabis.

## 14 REFERENCES

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- 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 Institute of Health and Welfare (1999). *1998 National Drug Strategy Household survey: First Results*. AIHW cat. no. PHE 15. Canberra: AIHW (Drug Statistics Series).
- 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
- Cancer Council of Tasmania (1997). *Prevalence of substance use among Tasmanian secondary school students in 1996*. Hobart: Cancer Council of Tasmania
- Clarke, K., & Siddins, J. (1998). *Results of the 1998 Tasmanian Users Health and Support League Hepatitis C Risk Assessment and Peer Education Project*. Unpublished data.
- 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
- 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
- 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
- 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
- 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
- SPSS Inc. (2000). SPSS for Windows, Release 10.0.7, Standard Version.
- Topp, L. *et al.* (2001). *Australian Drug Trends 2000: Findings From the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Monograph. In preparation.