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TASMANIAN DRUG TRENDS 2005
Findings from the Illicit Drug Reporting System (IDRS)

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ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
ASSAD	Australian School Students Alcohol and Drugs survey
BBVI	Blood-borne viral infections
COAG	Council of Australian Governments
COTSA	Clients of treatment service agencies
DACAS	Drug and Alcohol Clinical Advisory Service
DHHS	Department of Health and Human Services
EDRS	Ecstasy and related Drug Reporting System (previously the Party Drug Initiative)
HIV	Human immunodeficiency virus
IDDI	Illicit Drug Diversion Initiative
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user
KE	Key expert(s) (previously referred to as key informant)
KE	Key Expert Study (previously referred to as Key Informant Study)
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MMT	Methadone Maintenance Therapy
N	(or n) Number of participants
NAP	Needle Availability Program
NDARC	National Drug and Alcohol Research Centre, University of New South Wales
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NMDS	National Minimum Data Set (for Alcohol and Drug Treatment Services)
NSP	Needle and Syringe Program
PDI	Party Drug Initiative (now Ecstasy and related Drug Reporting System)
PBS	Pharmaceutical Benefits Scheme
SD	Standard deviation
SIS	State Intelligence Services, Tasmania Police
SPSS	Statistical Package for the Social Sciences
SSRI	Specific Serotonin Reuptake Inhibitor
TASCAHRD	Tasmanian Council on AIDS, Hepatitis and Related Diseases
TASPOL	Tasmania Police
TCA	Tricyclic anti-depressant

EXECUTIVE SUMMARY

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

In 1999, the Tasmanian component of the national IDRS gathered information on drug trends using two methods: key expert interviews with professionals working in drug-related fields, and an examination of existing indicators. For the 2000 IDRS, funding was provided by the National Drug Law Enforcement Research Fund to expand this methodology and include a survey of people who regularly inject illicit drugs, in addition to the methods employed previously. This funding and methodology was continued in 2001 and into 2005.

Injecting drug user (IDU) survey

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

Key expert (KE) survey

Thirty-three professionals working with substance-using populations provided information about a range of illicit drug use patterns in clients they had direct contact with. These 'key experts' (KE) included Needle Availability Program staff, drug treatment workers, health workers, youth and outreach workers, and staff from police and justice-related fields. Of these individuals, 8 reported on groups that predominantly used opioids (diverted pharmaceuticals), 8 on cannabis, 12 on groups primarily using methamphetamine, and 4 on groups whose substance use varied greatly depending on availability.

Other indicators

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

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

Demographic characteristics of injecting drug users

Demographic characteristics of the regular injecting drug user participants interviewed were generally very similar to those interviewed in previous Hobart IDRS studies. Participants were predominantly male (62%), and had an average age of thirty-one years. On average, participants had completed 10 years of education, and two-thirds (64%) were currently unemployed. One-third of participants had a previous prison history. A slightly lower proportion of the 2005 IDU

participants were involved in some sort of drug treatment at the time of interview, compared with the 2004 cohort (65% vs. 55%), with 43% currently enrolled in a methadone maintenance program.

The majority of participants (62%) were injecting a few times per week, but not every day, with 30% injecting at least once per day. In a slight change from previous Tasmanian IDU samples, where opiates were the predominant drug of choice (70% in 2004), just over half (54%) of the current cohort reported an opiate as their drug of choice. Similarly, while in previous years, opioids were predominantly reported as the drug most commonly injected by IDU participants (69% in 2004), in the current cohort there was a relatively equal proportion nominating opioids (51%) and methamphetamine (47%) as the drug most commonly injected in the month prior to interview.

Patterns of drug use among IDU

The 2005 IDRS detected a number of trends during the preceding six to twelve months. The major trends identified relate to indications of emerging changes in the local methamphetamine market and culture amongst consumers; the changing patterns of pharmaceutical opiate use amongst local IDU; and the continuing trend toward coincident opioid and benzodiazepine (particularly alprazolam) use. Table A below provides a summary of the trends in price, availability and prevalence of use of the major drug types examined in the current study:

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

	Heroin	Methamphetamine		Cannabis	Morphine	Methadone
		Paste	Crystal	Bush/Hydro		
Price						
1 mg	-	-	-	-	$0.7, stable/↑	$1, stable
0.1 gram	$100, stable	$50, stable	$50, stable	-	$70, stable/↑	$80, stable
Gram	$360, stable	$325, stable	$340, stable/↑	$25, stable	-	-
Ounce	-	-	-	$200/= | $290/=	-	-
Availability	Very difficult Stable	Very easy Stable	Easy Stable	Very easy Stable/↑	Easy-Very easy Stable	Easy (l) | Difficult (t) Stable/↓ (l & t)
Purity*	Low-medium Mixed reports	Medium-high Stable/~	High Stable/↑	Medium/High Stable	*Pharmaceutical*	*Pharmaceutical*
Prevalence of use	Very low, stable since 2004	Increased in frequency	Slight decrease	Slight decline over time	↓ number, ↓ frequency	Decreasing use of both forms

Source: IDRS IDU and KE Interviews, and drug use indicator data

*Note: based on IDU and key expert estimates of purity/potency; (l) = methadone syrup; (t) = Physeptone tablets

Heroin

Very few of the IDU consumers interviewed in the 2005 Tasmanian IDRS could report on local trends in price, purity, or availability of heroin. Consistent with patterns seen in previous studies, only a small proportion of the cohort (19%) reported using the drug in the preceding six months, with this use being very infrequent (6 of the previous 180 days), despite a high preference for heroin as a drug of choice. Similarly, use of heroin among clients of the state's Needle Availability Program remained below 2% of all non-pharmacy client transactions in 2004/05.

The price of heroin purchased within the state was reported as $100 per 'packet' (0.05-0.2g) and $360 per gram, and considered stable in recent months by the very small number of consumer reports on use (n=8). Consistent with trends noted in previous years, the majority of IDU considered heroin as 'difficult' or 'very difficult' to access, and that this situation had not changed in recent months. In further support of this, half of those reporting on availability had accessed

the drug through having it sent directly to them from another jurisdiction, rather than being able to access the drug locally.

Consumers predominantly used rock-form heroin and considered the drug as 'low' to 'medium' in subjective purity in the preceding six months. Consumers were very mixed in their reports of changes in purity, and – as there was only a single seizure of heroin in Tasmania in 2004/05 (of 0.2g), and none in the preceding three years – there is no objective purity data to compare consumer reports against.

The majority of indicators, such as a steadily declining proportion of use of heroin among clients of the state's Needle Availability Program, and a low level of heroin use in the IDU cohort despite a high preference as a drug of choice, indicate that the low availability of heroin in the state, identified in earlier IDRS studies, has continued in 2005.

Methamphetamine

Over the past four years of the IDRS in Hobart, higher-purity forms of methamphetamine have generally increased in availability in the state. This easy availability of high-potency forms of the drug may have made use of methamphetamine particularly attractive among IDU, with almost all of those surveyed in the current study using some 'form' of the drug in the six months prior to interview (95%), despite just one-third (34%) nominating it as their drug of choice. Moreover, the proportion of clients of the state's Needle Availability Program reporting predominant use of methamphetamine has steadily increased from 31% of recorded transactions (almost 3,000 cases) in 1999/00 to 59% in 2004/05 (more than 24,000 transactions).

The market prices locally for all three presentations of methamphetamine appear to have remained relatively stable since those reported in the 2004 IDRS study, particularly in relation to the most common purchase amount, a 'point' (0.1g) of the drug at $50 for any form. Modal purchase prices for larger amounts of powder and 'base/paste' methamphetamine remained stable since 2004 at $300 per gram. However, there were some indications of a decrease in median prices for grams of crystal methamphetamine, falling from $400 in 2004 to $340 in the 2005 survey.

IDU reports on subjective purity of powder methamphetamine were 'low' to 'medium' and fluctuating toward decreased purity in recent months. 'Base' was considered by consumers as 'medium' to 'high' in subjective purity, with potency fluctuating in recent months. Consumers considered crystalline methamphetamine used locally as 'high' in subjective purity, with this remaining stable or trending toward increased purity in the preceding six months. Only a small number of methamphetamine seizures were analysed in the 2004/05 financial year (n=10), and the median purity of these samples was 32% (range 19-36%).

Consumers regarded both powder and 'base'/'paste' forms of methamphetamine as 'easy' to 'very easy' to access, with availability stable (or increasing for powder) in recent months. In contrast, equal proportions of consumers found crystal methamphetamine 'easy' and 'difficult' to access, and while most noted no recent change in availability, decreasing levels of use between the 2004 and 2005 surveys suggest a further decrease in local availability of crystal methamphetamine.

Around three-quarters of the cohort had recently used powder form or 'base'/'paste' methamphetamine, and the median frequency of such use increased between the 2004 and 2005 cohorts, with the median frequency of use of any form of the drug more than doubling to 48 days out of the previous 180 in the 2005 sample, compared to a steady rate of between 20 and 25

out of the previous 180 days in the previous 5 years of the IDRS locally. Indeed, there have been indications of increasing use of methamphetamine both amongst recent IDRS cohorts and amongst clients of the state's Needle Availability Program, with Tasmania Police also reporting an increase in identification of local clandestine methamphetamine laboratories (although remaining small in number), and an increase in the number of arrests and weight of seizures relating to methamphetamine in 2004/05 compared to 2003/04.

Consumers noted a change in the local drug culture developing, with methamphetamine being used at greater frequency, and the drug increasingly used among different demographic groups – previous predominant consumers of opioids, younger teen-aged groups, and young females, as well as into a wider range of socio-economic groups. Service providers also noted the impact of increasing polydrug use and extended methamphetamine binges on clients seeking their services, and noted concern about the limited range of treatment options available for this client group within the state.

Cocaine

It appears that the availability and use of cocaine in Hobart continues to be very low, at least within the populations surveyed in the current study or accessing government services, with use of the drug amongst clients of the state's Needle Availability Program virtually non-existent. Only a very small proportion of the IDRS IDU participants reported recent use of the drug (8%), which was exclusively in powder form. By the very few consumers that could comment on trends in availability, cocaine was considered very difficult to access, a situation that was considered stable in the preceding six month period. The cocaine that is used by Tasmanian IDU appears generally to be directly imported by consumers from dealers or contacts in other jurisdictions. Tasmania Police have made no seizures of cocaine in the past four financial years. These patterns of low levels of availability and use in these cohorts appear to have remained reasonably stable over the past few years. However, it is noteworthy that there has been an increase in the level of use of the drug in different local consumer populations (Matthews & Bruno, 2006) which may provide early indications of emerging changes in local markers for the drug.

Cannabis

Among the IDU consumers surveyed, cannabis use continued to be almost ubiquitous, with 87% using the drug in the preceding six months, and the majority of these individuals using the drug daily.

Consistent with prices reported in 2004, consumers reported purchasing a mode of 1g of indoor- or outdoor-cultivated cannabis in a traditional $25 'deal' of the drug. When accessing outdoor-cultivated cannabis, consumers typically purchased in quarter-ounce (median $70) or ounce (median $200) amounts. While prices for ounces were similar in 2004 and 2005, the median cost for a quarter-ounce had increased $10 between the studies. Prices for indoor-cultivated cannabis were higher, at a median of $80 per quarter-ounce and $290 per ounce, with the most common purchase prices reflecting increases in the cost for indoor-cultivated cannabis since those reported in the 2004 study.

Consumers reported that both indoor- and outdoor- cultivated cannabis was 'easy' or 'very easy' to obtain, with this situation remaining stable in recent months. However, there were indications of somewhat increased availability in comparison to the trends identified in the 2004 IDRS survey, following indications of relatively decreased availability between 2003 and 2004. Tasmania Police report a slow shift back toward preferential outdoor cultivation of cannabis, also noting the use of imported seed or of multiple cannabis strains within single crops.

Similar to previous years, consumers described the subjective potency of outdoor-cultivated cannabis as 'medium' to 'low', with this level generally considered stable in the preceding six months. Indoor-cultivated cannabis was regarded as 'medium' to 'high' in subjective potency by consumers, with this level regarded as stable or increasing in recent months. Cannabis-consuming IDU interviewed generally reported using both indoor- and outdoor-cultivated cannabis in the preceding six months, although indoor-cultivated cannabis was the form most commonly smoked. While cannabis remains the most commonly used illicit drug, both in the IDU sample and in the state, there are indications of decreasing levels of use, both from the National Drug Strategy Household Survey (suggesting that use of cannabis in the previous year in local samples has declined from 15.8% in 1998, and 11.9% in 2001 to 10.9% of those aged 14 and over), and a slowly decreasing rate of use in the IDRS IDU samples, particularly in regard to the proportion of daily cannabis smokers.

Use of illicit pharmaceuticals

Morphine

Morphine was reported to cost $70 per 100mg, or $50 per 60mg, consistent with prices identified in the 2004 survey, and considered by respondents as being stable in recent months. Morphine was considered 'easy' to 'very easy' to obtain by consumers, and reported as remaining stable or increasing in availability in recent months. MS Contin® remains the predominant preparation used by this group, used by 53% of the sample as a whole, and was the form used predominantly by three-quarters of those reporting recent morphine use, with Kapanol® the next commonest preparation (used by one-third of the sample), and smaller proportions reporting using Anamorph® or MS Mono® in the preceding six months. The median frequency of use of morphine amongst local IDRS IDU cohorts, and, in recent years, the proportion of consumers reporting recent use, has steadily declined over time: falling from 77% of the 2000 IDRS sample using at a median frequency of 52 of the last 180 days to 58% of the 2005 sample using at a median frequency of 11 days in the preceding six months. Similar trends are also apparent in data from the state's Needle Availability Program. There are continuing reports, both from consumers and key experts, that morphine is being increasingly rejected by users in favour of methamphetamine and other pharmaceutical opioids.

Illicit methadone

Diverted methadone syrup was reported to cost a median of approximately $0.80 per milligram in 2005, a price lower than that to the 2004 participants ($1 per mg) but considered as stable in recent months by the consumers. A steadily declining proportion of consumers have found the drug easily accessed in recent years (82% in 2003, 74% in 2004 and 56% in 2005), with consumers reporting stable or decreasing availability of this drug in the preceding six months. Both IDU consumers and key experts note that the drug is generally only available where there is a standing arrangement with a person on the program, and is almost uniformly reported as being obtained from friends (82%). Moreover, the majority of the use of diverted methadone syrup comes from individuals themselves receiving methadone maintenance, with key experts noting clients purchasing small amounts of the drug to avoid physical withdrawal if they had precipitously used their takeaway doses, or traded it due to, or to avoid, 'standover' threats and aggression from others. However, there have been increasing reports of consumers injecting combinations of alprazolam and methadone syrup in the past three IDRS studies, a practice that carries an increased risk of overdose, injection-related harms, and adverse social or legal consequences from the particular disinhibitive effects of this combination, which both consumers and key experts noted as concerns in regard to this trend.

Diverted Physeptone® tablets of methadone were regarded as costing a mode of $10 per 10mg (as has been reported in the past five years of the IDRS), with prices regarded by consumers as stable or increasing in recent months. Physeptone® was regarded as difficult to access, with the level of availability remaining stable or declining somewhat in the preceding six months. Consistent with this, the proportion of the consumer sample reporting recent Physeptone® use has continued to decline in local IDRS studies, falling from 64% in 2003, to 52% in 2004 and 41% in 2005.

Illicit Buprenorphine

Buprenorphine, recently adopted as a maintenance treatment option for opioid addiction in the state, appears to have made little impact on the illicit opioid market, with only five individuals participating in the 2005 survey reporting illicit use of the drug (two of whom were also receiving legitimate buprenorphine prescriptions). All of those who had accessed buprenorphine illicitly in the preceding six months had injected the drug, but this use was infrequent (a median of three times in the preceding 180 days). However, given that substantial levels of diversion have occurred in jurisdictions where buprenorphine maintenance treatment is more common, careful monitoring of this issue is clearly warranted as Tasmania's buprenorphine program expands, particularly given the existing culture of use of pharmaceutical products among local IDU.

Other opioids

Oxycodone use among local IDU samples appears to have risen in recent years, with one-third of the current cohort reporting use of the drug, predominantly OxyContin® tablets, in the preceding six months. Despite their higher relative potency than morphine tablets, these drugs are sold locally at lower comparative prices ($0.50 per milligram for 40 and 80mg oxycodone tablets), with consumers reporting stable prices in recent months. While the drug remains predominantly 'difficult' for consumers to access currently (a situation regarded as stable by IDU), there are indications that oxycodone use may expand within the local market, which, given the high relative potency of oxycodone and its possible synergistic effects with other opiates, is an issue that merits continued careful monitoring.

One-fifth of the 2005 IDU consumer sample reported using some preparation of alkaloid poppies in the preceding six months, although such use was infrequent (a median of 3 days out of the preceding 180). This represents an increase in the proportion of the IDU consumer sample reporting such use when compared to recent IDRS studies (12-14% in the local studies between 2001 and 2004). However, the rates of use amongst the current consumer cohort were less than that seen in the 2000 IDRS survey (when one-third had recently used some alkaloid poppy preparation, at a median frequency of use twice that of the current sample), and the number of poppy thefts in 2004/05 were a quarter of those in that year (63,000 capsules stolen in 1999/00 compared to 16,000 in 2004/05). Moreover, the number of thefts from poppy crops has fallen one-third from the previous financial year (from 24,000 capsules in 2003/04 to 16,000 in 2004/05).

Benzodiazepines

There are clear indications that, following a reduction of the injection of benzodiazepines among IDU between 2002 and 2003 – arising from the restriction and eventual removal of the preferred temazepam gel capsules from the market – injection of benzodiazepines remains an ongoing part of the local drug culture, with local IDU consumers continuing to inject at rates relatively higher in comparison to that identified in other Australian jurisdictions. As noted in the 2003 and 2004 studies, it is also clear that alprazolam (Xanax in particular) appears to have largely replaced the

local illicit market for temazepam gel capsules among those IDU particularly interested in benzodiazepine injection, with this drug being used in similar ways to temazepam capsules by consumers, such as in simultaneous combination with methadone syrup or other opioids. Between the 2003 and 2005 studies, both the proportion of the IDU samples reporting recent injection of alprazolam, and the frequency of such use in the preceding six months, had increased (11%, median frequency of 20 days in the preceding six months among the 2003 IDU cohort, to 19% and a median frequency of 24 days in 2005), and there are anecdotal reports of increased demand for alprazolam locally. This is a particular concern given the serious psychological and physical harms associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within local IDU, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

Associated harms

Self-reported rates of sharing of needles or syringes among clients of non-pharmacy Needle Availability Program outlets have steadily declined over time from 2.6% of all transactions in 1995/96 to 0.5% in 2004/05. However, all IDRS studies in Hobart have suggested that 5-10% of these cohorts share used needles or syringes at least once in a month. Additionally, there are indications of increasing sharing rates in the past two IDRS surveys (using the proxy measure of whether consumers had 'lent' their used needles to another consumer in the preceding month, reported by 14% of the 2005 participants). Similar to the improving trends for sharing of needles and syringes, self-reported rates of sharing of other injection equipment (such as water, tourniquets and mixing containers) has steadily decreased among clients of non-pharmacy Needle Availability Program outlets (5.5% in 1996/97 to 0.5% in 2004/05). However, a more stringent examination of such practices in the IDRS study suggests that there is still the potential for blood-borne viral infections (BBVI) in the injection practices adopted by a substantial proportion of those regular consumers interviewed, with two-fifths sharing some sort of injecting equipment in the preceding month (most commonly sharing mixing containers, 26%; water, 27%; or tourniquets' 15%; albeit in most cases in situations where both people were using sterile injection equipment).

Almost two-thirds of the consumers interviewed reported re-using their own injection equipment in the month prior to interview, with the majority of these participants re-using on multiple occasions in this time. This is not a recommended practice as repeated use of needles leaves them blunt, which could cause damage to the venous system, and use of non-sterile equipment can lead to the introduction of bacteria into the bloodstream, which can lead to infections, septicaemia or endocarditis. 'Butterflies' and 1mL insulin syringes were the equipment most commonly re-used, and this was typically reported as being due to NSP outlets being inaccessible (either due to distance or equipment being required outside of business hours).

In more targeted examination of injection practices in the current IDRS study, two notable points for health education interventions were identified. Firstly, in the current cohort, despite being regular injecting drug users, one-fifth of the 2005 IDU cohort did not always self-inject, with those that did not always self inject being significantly younger and more likely to be female. Secondly, half of the IDU participants had injected others in the month prior to interview, most commonly on occasions where they were also injecting themselves, although in almost half of these cases participants did not report washing their hands between injections – clearly a behaviour that increases the exposure risk to blood-borne viral infections.

A substantial proportion of IDU surveyed experienced injection-related health problems, at a relative rate greater than those seen amongst IDU in other jurisdictions, possibly due to the increased harms associated with the injection of pharmaceuticals, which is less common in other jurisdictions. Scarring, difficulties finding veins to inject into (indicative of vascular damage) and experience of 'dirty hits' (feeling physically unwell soon after injection, often associated with the injection of contaminants or impurities) were the commonest injection-related problems experienced by the current IDRS IDU cohort. Multiple key experts noted recent increases in experiences of bacterial infections associated with injecting drug use in recent months, likely related to injection of non-sterile solutions or of re-use of injection equipment.

In 2005, 6% of the consumers interviewed reported experiencing a non-fatal opioid overdose in the preceding year, and one-quarter of the sample had witnessed such an overdose in this time. This rate of overdose experience is a decline from that seen amongst the 2004 cohort. However, multiple key experts and consumers provided anecdotal reports of an increase in the numbers of overdoses in the preceding six months, which were attributed in particular to coincident use of multiple CNS depressant drugs (opioids and benzodiazepines in particular).

More than two-fifths of the IDRS IDU participants reported presenting to a health professional for a mental health issue in the preceding six months. This rate of presentations is substantially greater than that seen in the general population. In comparison to reports in earlier local IDRS IDU surveys, there has been a steadily increasing rate of individuals presenting for anxiety-related issues (consistent with an increasing use of methamphetamine in these cohorts over time).

Implications

The findings of the Tasmanian 2005 IDRS suggest the following areas for further investigation and possible consideration in policy:

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

2. Extension of a regular drug trend monitoring framework into other regions within the state (such as Launceston and the North-West coast), as there has been little specific research examining patterns of drug use within these areas, and – due to their access to air and sea ports, and establishment of organised motor cycle group headquarters – availability and use of illicit substances may differ substantially in these regions from patterns seen in Hobart. An initial study in 2003 has provided evidence suggesting that there are clear distinctions between the drug markets in these regions (Bruno, 2004b *[unreleased]*). As such, it may not be appropriate to infer similarity between drug trends and emergent issues identified in Hobart-based studies to these regions.

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

4. As use and availability of the higher potency forms of methamphetamine appear to be steadily increasing, clear and practical harm-reduction information for use of these forms of the drug should be accessed and distributed to consumers and health intervention workers. It is important to note also that there are indications that these drugs are increasingly being used by populations other than regular injecting drug users, such as

primary ecstasy-using groups, that may not be accessing traditional health/health information services (Matthews & Bruno, 2005; 2006). Additionally, since increased levels of use of such high-potency methamphetamine may increase the level of experience of the negative effects of excessive methamphetamine use, development and implementation of practical strategies and training for dealing with such affected individuals should be considered for frontline health intervention workers and emergency services workers. Moreover, as noted by several key experts in the sector interviewed in the current study, investigation of the requirement for specialist treatment programs and/or services for primary consumers of these drugs is warranted.

5. With the firm establishment of a local culture of injection of methadone syrup (although this remains predominantly within individuals enrolled in the state methadone maintenance program injecting their own methadone), continued consideration of pragmatic harm reduction approaches to such use is warranted: either at the level of the consumer, with use of butterflies and biological filters; and/or at the policy level, requiring use of sterile water for dilution of methadone doses or switching to Biodone syrup, as this preparation does not contain the agent sorbitol, which can cause irritation and harm to the venous system. Given the level of recent experience of 'dirty hits' associated with methadone syrup injection among the current IDU cohort, these issues merit continued attention.

6. Oxycodone prescriptions both locally and nationally have continued a rapid increase in recent years. With diverted oxycodone use increasing amongst local IDU consumers, but still infrequent, it may be the case that knowledge of the drug amongst the consumer community is still developing. Reviews of opioid equianelgesic dose ratios suggest that oxycodone is between 1.5-2.0 times the potency of morphine (Piereira, Lawlor, Vigano, Dorgan & Bruera, 2001). Moreover, oxycodone reaching systemic circulation after injection is more than twice that of after oral or rectal administration (Leow, Smith, Watt, Williams & Cramond, 1992). Consumers need to be made aware that oxycodone, although similar in presentation and trade name (e.g. morphine – MS Contin; oxycodone – OxyContin) is more potent that morphine, and that caution needs to be exercised in its use. Further, given the talc content of the tablets, careful preparation and filtering of the drugs is required to avoid granulomas (Roberts, 2002). Frontline workers need to be aware of these issues and to implement harm reduction interventions with potential illicit consumers of this drug.

7. Research into factors that would reduce the harms associated with the intravenous administration of tablet preparations of morphine, methadone and benzodiazepines commonly used within the local IDU population, and dissemination of this information to users through continued training of Needle Availability Program staff and peer groups. For example, despite clear evidence that injection of tables are associated with the development of granulomas in internal organs (Roberts, 2002; Gotway et al, 2002), there has been no research into the effectiveness of commercially available pill or biological filters on reducing the harms associated with intravenous use of these drugs. As an interim harm reduction measure, however, given the existing evidence in support of the potential benefit offered by such filters in regard to the use of other drugs (Scott, 2005), it would be recommended that pill filters become more widely available, and their use promoted by frontline workers to local IDU consumers.

8. Research examining misuse of pharmaceutical products in populations other than IDU, as this has been a demographic identified in both key expert interviews in the current

study and in associated local research (Fry, Smith, Bruno, O'Keefe & Miller, 2004; Bruno, 2004c) but not accessed within the methodology of the IDRS, and this population has, to date, been largely invisible in research or other data collections.

9. Continued monitoring of the intravenous use of benzodiazepines, particularly in terms of the combined injection of alprazolam and methadone syrup, as this is a practice that substantially increases the risk of overdose. There is considerable concern about this practice amongst consumers and service providers alike, and a targeted campaign to increase awareness of the potential harms of this combination, as well as provision of accurate, non-judgemental harm reduction information, would be timely and likely to lead to improved health outcomes for consumers.

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

11. Continued emphasis on, and support for, targeted strategies to further reduce the rates of sharing of needles/syringes and other injection equipment (such as tourniquets, filters and mixing containers) among IDU, as well as to minimise the harms associated with poor injecting practice through improving awareness and adoption of safe injection techniques and vein care among IDU. It was identified in the current study that there are a substantial proportion of regular injecting drug users that do not always self-inject, and, similarly, large proportions of consumers that inject others but do not always maintain a vigilant cleanliness routine when doing so, and both these groups would be appropriate targets for a focused health education campaign from frontline NAP workers, or indeed peer groups, in order to maintain downward pressure on exposure to al infections among IDU.

12. Re-use of injection equipment is an issue that has not previously been examined in the IDRS or in studies from the Needle Availability Program. The rate of re-use of injection equipment identified in the current study was surprisingly high (almost two-thirds of the participants in the month prior to interview). Given the identification of infections, septicaemia and endocarditis both among the current IDU sample and by key experts interviewed in the current study, all of which are associated with the introduction of bacteria into the bloodstream (which is possible through the use of non-sterile injecting equipment), this is clearly an emerging issue which requires attention. The high level of re-use of injection equipment demands the attention of the Needle Availability Program to identify whether there are systemic barriers hampering access to sterile injecting equipment. In the short-term, information on procedures for cleaning injection equipment, and the harms associated with use of non-sterile equipment, should be more actively provided to consumers.

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

14. While self-reported rates of experience of mental health issues are likely to under-represent the true extent of these issues, more than two-fifths of the IDU sample reported recently attending a health professional for mental health concerns, a level substantially greater than that seen in the general population. As such, the increasing systemic focus in the state toward development and implementation of interventions for such co-morbid populations is clearly warranted, and continued enhancement of

partnerships between the mental health and alcohol and other drug sectors is crucial to meet the needs of this group.

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

1.0 INTRODUCTION

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

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

The full IDRS methodology involves a triangulated approach to data collection on drug trends, involving standardised surveys of people who regularly inject illicit drugs, a qualitative survey of individuals who have regular first-hand contact with groups of people who use illicit drugs ('key experts'), and an examination of existing available data sources or indicators relevant to drug use in each state. Following a replication of the IDRS process in 1998 in New South Wales, Victoria and South Australia, the IDRS was expanded nationally, with these states continuing to follow the full methodology, while Western Australia, Northern Territory, the Australian Capital Territory, Queensland and Tasmania examined drug use trends using an abbreviated design, utilising key expert interviews and examination of secondary data sources only. The National Drug Law Enforcement Research Fund has provided these states with additional funding to expand data collection to the full IDRS methodology for 2000 through to the current year.

The 2005 Tasmanian Drug Trends Report summarizes the information gathered in the Tasmanian component of the national IDRS using the three methods outlined above: a survey of people who regularly inject illicit drugs, 'key expert' interviews with professionals working with individuals who use illicit drugs, and an examination of existing indicators relating to drugs and drug use in the state. The methods are intended to complement and supplement each other, with each having its various strengths and limitations. Results are summarized by drug type to provide the reader with an abbreviated picture of illicit drug usage in Hobart and recent trends. Reports detailing Tasmanian drug trends from 1999 through to 2004 (Bruno & McLean 2000, 2001, 2002, 2003; 2004; Bruno, 2005) and state comparisons (McKetin et al., 2000; Topp et al, 2001; Topp et al, 2002; Breen et al., 2003; Breen et al, 2004; and Stafford et al, 2005) are available as technical reports from the National Drug and Alcohol Research Centre, University of New South Wales[1].

1.1 Study aims

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

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

2.0 METHOD

The IDRS is essentially a convergent validity study, where information from three main sources, each with its own inherent advantages and limitations, is compiled and compared to determine drug trends. The three components of the IDRS are: a survey of people who regularly inject illicit drugs (IDU, or, alternatively referred to as 'consumers'), a 'key expert' study of professionals working in the illicit drug (or related) field that have regular direct contact with individuals who use illicit drugs, and an examination of existing indicator data on drug-related issues. Details of each dataset 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 has first-hand knowledge of the price, purity and availability of illicit drugs. Key expert 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 expert surveys (McKetin, Darke & Kaye, 2000).

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

2.1 Survey of injecting drug users (IDU)

The IDU survey was conducted during June and July 2005, and consisted of face-to-face interviews with 100 people who regularly inject illicit drugs. Inclusion criteria for participation in the study were that the individual must have injected at least once monthly in the six months prior to interview, and have resided in Hobart for the past twelve months or more. Participants were recruited using a variety of methods, including advertisements distributed through Needle Availability Program (NAP) outlets, pharmacies (through flyers included with injection equipment) or health services, and snowball methods (recruitment of friends and associates through word of mouth). Participants were interviewed at places convenient to them, such as health services, NAPs or, where invited by the participant, private homes. Two agencies, the Link Youth Health Service; and the Tasmanian Council on AIDS, Hepatitis and Related Diseases (TasCAHRD, in their Hobart and Glenorchy sites) assisted the researchers by participating as recruitment and interview sites for IDRS participants. The major location for recruitment and subsequent interview was Hobart city, although approximately one-third of the sample was recruited and interviewed in Glenorchy city (in the northern suburbs of Hobart).

A standardised interview schedule used in previous IDRS research (Hando & Darke, 1998; McKetin et al., 1999; Topp, Hando & Darke, 2001) was administered to participants. The interview schedule contained sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking, health and general drug trends. Participants were screened for appropriateness both by referring staff members of the recruitment sites and the interviewers, the latter through a series of questions designed to elicit participants' knowledge of injecting drug use practice. Both the University of New South Wales and University of Tasmania institutional Ethics Committees granted ethical approval for the survey. Participants were given an information sheet describing the interview content prior to commencement (subsequent to screening), allowing them to make a more informed decision about their involvement.

Information provided was entirely confidential, and participants were informed they were free to withdraw from participation without prejudice or to decline to answer any questions if they so wished. Interviews generally lasted between 30 and 45 minutes (averaging 35 minutes, and ranging from 20 to 80 minutes), and participants were reimbursed $30 for their time and out-of-pocket expenses.

Data analysis was conducted using SPSS for windows, release 12.0.1 (SPSS Inc, 2003).

2.2 Survey of key experts (KE)

Thirty-three key experts who were working with illicit drug users in the greater Hobart area participated in face-to-face interviews between July and September 2005 (42% were males). Fifteen (55%) participants were recruited from the pool of key experts that had taken part in the 2004 IDRS (Bruno, 2005), while 14 (42%) had also participated in the 2003 IDRS (Bruno & McLean, 2004), 15 (55%) had contributed in 2002, 8 (18%) in 2001 and 2000 respectively, and 3 (9%) in the 1999 study (Bruno & McLean, 2003, 2002, 2001, 2000). All other participants in the current study were identified and recruited either as replacements for the 2004 IDRS participants drawn from the same agencies or on the basis of referrals from the Tasmanian IDRS steering committee or professionals in the field.

Key experts included youth workers and counsellors (n=6), members of the department of justice (police n=3), emergency health workers (n=3: ambulance officers n=2, emergency department clinical staff n=1), a publican (n=1), with the remainder working specifically in the drug and alcohol field, comprising counsellors (n=4), needle and syringe outlet workers (n=3), outreach/street workers (n=2), medical practitioners prescribing methadone or specialising in alcohol and other drug treatment (n=2), and other health professionals working in a variety of more general roles in the drug and alcohol field, including assessment, nursing, education, detoxification and advocacy (n=9).

Several key experts were interviewed for their expert opinions on specific issues (for example, drug-related violence) or on other particular areas (such as advocacy or dealing and production of illicit drugs). The remaining key experts were interviewed in regards to their direct work with drug consumers, with entry criteria for inclusion in this aspect of the study being at least weekly contact with illicit drug users in the past 6 months and/or contact with 10 or more illicit drug users in the last 6 months. These 23 individuals had a median of 5 days per week contact with consumers in the preceding six months (mode 5 days per week, range 1 - 7), with all but two reporting contact with more than 10 consumers in this period (with two-thirds seeing more than 20 such people in the preceding six months, and half seeing 50 or more in this time). Although the key experts predominantly came from generic services (76%, n=25), many worked specifically with special populations, including youth (18%, n=13) and injecting drug users (6%, n=2).

Key experts 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 experts reported on groups that predominantly used methamphetamine/psychostimuants (n=12), with eight reporting on primary cannabis consumers, and three on groups where methadone was the main drug consumed (all of these three experts were working with patients on the methadone maintenance program). The remainder of the experts referred to groups of consumers best characterised as polydrug consumers, where the predominant drug used varied greatly or depended on the relative availability of particular drugs (n=4) or those that regularly consumed multiple types of opiates (morphine or methadone, dependant on availability: n=5).
This breakdown of the primary drug used by the groups that key experts were most familiar with has changed somewhat over the course of the IDRS in Tasmania, despite the makeup of the key

experts remaining relatively stable: in the 1999 and 2000 surveys, there was a relatively even proportion of key experts referring to groups primarily using methamphetamines and of those predominantly using opioids; in the 2001 and 2002 surveys, the majority of key experts reported on primary users of opioids; while from 2003 to the present study, methamphetamine has more commonly been the drug that key experts predominantly were aware of in the consumer groups they were working with. However, such distinctions do not themselves necessarily indicate a substantial change in the illicit-drug using patterns of the individuals tapped in the key expert survey, as most participants in all years were referring to predominantly poly-substance using populations.

The interview schedule was a structured instrument that included sections on drug use patterns, drug availability, criminal behaviour and health issues. Half (52%, n=17) of the respondents were rated by interviewers as being extremely knowledgeable in most areas of the interview, with the remainder moderately knowledgeable in most areas of the interview schedule (n=13, 39%) or having discrete pockets of knowledge (n=3, 9%). Interviews took between 20 and 60 minutes to administer (median = 45 minutes). 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 experts have been presented where they were deemed reliable by the interviewer, and where the information provided contributed to the explanation of particular trends. Closed-ended questions were analysed using SPSS for Windows, release 12.0.1 (SPSS Inc, 2003).

2.3 Other indicators

To complement and validate data collected from the key expert study and IDU survey, a range of secondary data sources was examined, including survey, health, and law enforcement data. The pilot study for the IDRS (Hando et al., 1997) recommended that such data should be available at least annually; include 50 or more cases; provide brief details of illicit drug use; be collected in the main study site (Hobart or Tasmania for the current study); and include details on the four main illicit drugs under investigation (heroin, cannabis, cocaine and methamphetamine). However, due to the relatively small size of the illicit drug-using population in Tasmania (in comparison to other jurisdictions involved in the IDRS), and a paucity of available data (several key services are in the process of adopting computerised or more systematic information storage and retrieval systems), the above recommendations have been used as a guide only. Indicators not meeting the above criteria should be interpreted with due caution and attention is drawn to relevant data limitations in the text.

Data sources that fulfil the majority of these criteria and have been included in this report are as follows:

Needle Availability Program data

The Needle Availability Program has been operating in Tasmania since the introduction of the HIV/AIDS Preventive Measures Act in 1993. Staff record the number of needle/syringes ordered from all outlets participating in the program (around 90 outlets), and for participating non-pharmacy outlets; data are collected regarding age, sex, equipment shared since last visit, last drug used, and disposal methods for each client transaction. The data provided represent responses from 45,588 occasions of service in the 2004/05 financial year. It should be noted that data are not necessarily collected systematically for all data fields – for example, while there are 45,588 recordings for gender of client, there are only 41,612 recorded for the substance used

(91.3% of the recorded cases[2]). Additionally, there is some inconsistency between outlets in the wording of questions asked of clients, most notably in the question regarding substance used (the majority of services ask "what is the drug you most often inject" while some find that asking "what is the drug you are about to inject" more useful for health intervention purposes), which may impede clear comparisons of trends across years for this dataset.

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

The Australian NSP survey has been carried out over one week each year since 1995. During a designated survey week, NSP staff ask all clients who attend to complete a brief, self-administered questionnaire and provide a finger-prick blood sample (for testing the presence of blood-borne viral infections such as hepatitis B and C). The data provided here represent the last drug reported to be injected by survey respondents in Tasmania each year from 1995 to 2004 (1995 n=6; 1996 n=18; 1997 n=23; 1998 n=51; 1999 n=25; 2000 n=27; 2001 n=28; 2002 n=151; 2003 n=118; 2004 n=107: Buddle, Zhou, & MacDonald 2003; Thein, Maher & Dore, 2004; Thein, White, Shourie & Maher, 2005).

The 1998, 2001 and 2004 National Drug Strategy Household Surveys

This survey represents a prevalence study of drug use amongst the general community, surveying 1,031 individuals in Tasmania in the 1998 study, 1,349 individuals in 2001, and 1,208 in 2004 who were over 14 years of age, could speak English, and who lived in private dwellings (Australian Institute of Health and Welfare, 1999, 2002, 2005). The survey covered the following illicit drugs: cannabis, methamphetamine, hallucinogens, cocaine, ecstasy/designer drugs and heroin. Respondents were asked whether they had ever used these drugs and whether they had used them within the past twelve months.

Police and Justice Department data

Tasmania Police State Intelligence Services, the Australian Crime Commission (ACC, previously the Australian Bureau of Criminal Intelligence, ABCI), and the state Justice Department have provided information on drug seizures, charges, and costs. Data on the purity of drugs seized are also provided through the ACC; however, drugs are only analysed by Tasmania Police Forensic Services in seizures where the person involved denies that the seizure in question contains illicit substances. Hence, for the 2004/05 financial year, a very small number of drug seizures 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, although the 2003/04 figures are a difference to this trend (1995/96 n=111; 1996/97 n=283; 1997/98 n=253; 1998/99 n=267; 1999/00 n=359; 2000/01 n=541; 2001/02 n=561; 2002/03 n=467; 2003/04 n=261). In the 2004/05 financial year, multiple methods of drug screening were utilised by the Justice Department, with 416 screens conducted in total during this period. Although the majority of

[2] However, there has been a steady improvement in the data recording rate in recent years – in 2000/01, only 44% of the 32,507 occasions of service included information regarding principle drug used, while in 2001/02, the relevant rate was 78%, rising to 87.5% in 2002/03 and further still to 90.7% in 2003/04.

these remained urine screens (n=398), there were 15 breath tests conducted (for the presence of alcohol) and a further 6 using the insta-testing system for the presence of drugs.

Blood-borne viral infections surveillance data

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

Tasmanian Pharmacotherapy Program data

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

Coronial findings on illicit drug-related fatalities

Mortality data regarding illicit drug-related deaths prior to 2000 were obtained from the state coroners office. Data provided contain a summary of the toxicology analysis for each case. More recent figures in this report were provided by Australian Bureau of Statistics annual reports on fatal opioid overdoses among 15 to 44 year olds (Degenhardt, 2001, 2002, 2003; Degenhardt, Roxburgh & Black, 2004). Data in relation to illicit drug-related fatalities in Tasmania in 2004 and 2005 were not available at the time of completion of this report.

Hospital morbidity data

Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare for the 1999/00 to 2003/04 financial year periods. These data relate to public hospital admissions, for individuals aged between 15 and 54 years, where drug use was recorded as the 'principal diagnosis'; namely, where the effect of a drug was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

Tasmanian alkaloid poppy crop data

Tasmania has had a commercial opiate alkaloid industry for many years, where farmers are licensed to grow the poppy (*Papaver somniferum*) for production of codeine and related products by pharmaceutical companies. The Tasmanian Government has international obligations under the United Nations Convention on Narcotic Drugs to ensure licensing of crops and that there is limited diversion, as some of the poppy strains grown can be converted into opium. Data on

diversion rates of Tasmanian poppy crops have been provided by the Poppy Board of the Tasmanian Justice Department, as they are a useful indicator of potential illicit use of opium or poppy tar.

Telephone advisory services data

Tasmania has two 24-hour alcohol - and drug-related telephone information services. In mid-May 2000, Turning Point Alcohol and Drug Centre in Victoria took over responsibility for administration of the Tasmanian Alcohol and Drug Information Service (ADIS), a confidential drug and alcohol counselling, information and referral service. Additionally, at that same time, a new information service, the Drug and Alcohol Clinical Advisory Service (DACAS), was established to provide health professionals assistance with the clinical management of drug and alcohol problems. Turning Point systematically record data for each call received, which comprised 2208 and 63 calls to ADIS and DACAS respectively during the 2000/01 financial year; 2129 and 94 calls to the respective services in 2001/02; with 1984 and 48 calls to the respective services in 2002/03; 1554 and 44 calls respectively during 2003/04; and 1332 calls to ADIS, and 42 calls to DACAS in the 2004/05 financial year.

3.0 RESULTS

3.1 Overview of the IDU sample

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 in the 2005 study was 30.7 years (SD = 8.6, range 15-50). This is one year older than the average age of the cohort examined in the previous year of the IDRS in Hobart, a trend that has continued over the past three years. Sixty-two percent of the current cohort was male. This has been steadily declining over time in the local study (71% in 2002, 70% in 2003, 65% in 2004). Female participants were significantly younger than males participating in 2005 (males 32.0 years, SD=8.5; females 28.7 years, SD = 8.6: Mann-Whitney U = 896.0, p=0.045), consistent with the findings in the 2004 study.

Table 1: Demographic characteristics of the IDU sample, 2004-2005

Characteristic	2004 n=100	2005 n=100
Age (mean years)	29.6 (range 18-54)	30.7 (range 15-50)
Sex (% male)	65	62
Aboriginal and/or Torres Strait Islander (%)	10	11
Employment (%):		
Not employed	76	64
Full-time	5	5
Part-time/casual	8	13
Home duties	8	10
Student	3	8
Sex work	-	-
Accommodation (%):		
Own house/flat	76	68
Parent's/family house	9	18
Boarding house/hostel/caravan	10	4
Friends/house-sitting	-	2
No fixed address/homeless	5	8
Heterosexual (%)	-	87
School education (mean years)	10.0 (range 6-12)	9.8 (range 5-12)
Tertiary education (%):		
None	59	69
Trade/technical	37	24
University/college	4	7
Treatment history (%):		
Not currently in treatment	35	45
Methadone maintenance therapy	54	43
Buprenorphine maintenance therapy	4	4
Drug and alcohol counselling	3	6
Other treatment	4	2
Prison history (%)	25	34

Source: IDRS IDU Interviews

The majority of participants described themselves as heterosexual (87%), with smaller proportions identifying as homosexual- (4%) or bisexual – (9%). In terms of relationship status, one-third reported being single at the time of interview (39%), with 25% having one or more regular partners, 29% married or in a de facto relationship, and 5% currently separated and 2% divorced.

English was the dominant language for all participants. Among those interviewed in 2005, there was a mean of 9.8 years (SD = 1.5, range 5-12) of school education, similar to that of cohorts in previous years. The majority of participants interviewed in the IDRS had not completed tertiary studies, and this proportion had increased slightly between the 2004 and 2005 cohorts (59% and 69% respectively), with this change reflecting a lower proportion of participants in 2005 that had attained trade or technical qualifications (37% in 2004, 24% in 2005). However, slightly more of the 2005 participants had completed university degrees than the previous year's participants (4% in 2004, 7% in 2005).

The majority of the 2005 sample (64%) were not currently employed (a notable decrease from the 76% of the 2004 IDU sample), with a further 10% involved in home duties, and 8% enrolled students, while 13% were working on a casual basis, and 5% working full-time. When asked about their main source of income, the majority (83%) reported this as a government pension, allowance or benefit, with 8% reporting this as a wage, and 9% as being via criminal activity. In terms of all sources of income, 93% had received some income from a government pension, allowance, or benefit in the past month, 25% from a wage or salary, 21% from some form of criminal activity, 10% from child support and 4% respectively from sex work.

The sample was drawn from 34 suburbs within the northern, eastern, southern, and inner city areas of Hobart, with the bulk of participants either living in close proximity to Hobart city (29%) or Glenorchy city (29%). A more detailed breakdown, on the basis of local council areas is as follows: Hobart City (33%); Glenorchy City (33%); Clarence (14%); Brighton (5%); Kingborough (2%); Derwent Valley (2%); Sorell (2%); no fixed address (9%). The majority of participants lived in their own (rented or owned) house or flat (68%), with 18% living in their family home, while 4% were living in temporary accommodation at the time of interview (boarding house, hostel, caravan park).

One-third of the sample (34%) of participants had been imprisoned at some stage in their lives (a somewhat greater proportion than the one-quarter of participants interviewed in 2003 and 2004), with the proportion of males and females reporting a prison history being equal (34% respectively).

Just over half of the sample (55%) was in some form of drug treatment at the time of interview. This is a notable decrease from the characteristics of the 2004 cohort, where 65% were involved in treatment, and largely relates to a smaller number of individuals involved in methadone maintenance therapy in the current cohort (54% in 2004, 43% in 2005). For the 2005 cohort, the mean duration of time on methadone maintenance was 64 months (SD = 44, range 5-180 months). Four individuals were currently receiving primary treatment via buprenorphine maintenance therapy (mean duration = 16 months, SD = 11 months, range 1-24 months), and six receiving primary treatment via drug counselling (mean duration = 18 months, SD = 27 months, range 1-72 months). Two other individuals were currently receiving other forms of treatment, including pharmacotherapy for stimulant addiction (n=1) and opioid treatment as part of a pain management program (n=1). Of those currently receiving methadone maintenance, 7 had received counselling at some stage in the previous six months. Two participants reported terminating methadone maintenance in the preceding six months, and one had switched between

methadone and buprenorphine maintenance in this time. One of those currently receiving buprenorphine maintenance had previously received counselling at some stage in the preceding six months, and one individual had terminated buprenorphine maintenance in the previous six months. No participant reported using naltrexone in the six months prior to interview.

3.1.1 Demographic differences between the 2004 and 2005 IDRS IDU cohorts

The demographic characteristics of the Tasmanian 2005 IDU sample are largely similar to the previous Tasmanian IDU samples (Bruno, 2005; Bruno & McLean 2004, 2003, 2002, 2001). There have been substantial overlaps in those participating in the IDRS studies over time: of the 100 participants in the 2005 study, more than half (52%) has previously participated in some IDRS study, 33 participated in the 2004 study, 32 in 2003, 17 in 2002, 12 in 2001 and 4 in 2004. This is consistent with previous IDRS samples: in 2004, 42% had participated in the previous year's study, while in 2003, 37%, and in 2002, 39% had participated for at least two studies in a row. As could be expected, with a noteworthy overlap in participants across these annual samples, the mean participant age in the Tasmanian IDU cohorts has steadily increased between 2002 and 2005 (mean age 28 years in 2002, 31 years in 2005). However, an increasing age of IDU has also been seen in other jurisdictions conducting the IDRS where there is less participant overlap between samples (Stafford et al, 2006) and amongst consumers of the Tasmanian Needle Availability Program (NAP: Figure 1). Similarly, the trend of slowly decreasing male predominance in the IDRS IDU cohorts (70% male in 2003, 65% in 2004, 62% in 2005) is also mirrored in the patterns seen amongst Tasmanian NSP clients (Figure 2).

Figure 1: Age of clients of non-pharmacy Needle Availability Program outlets in Tasmania, 2000/01-2004/05

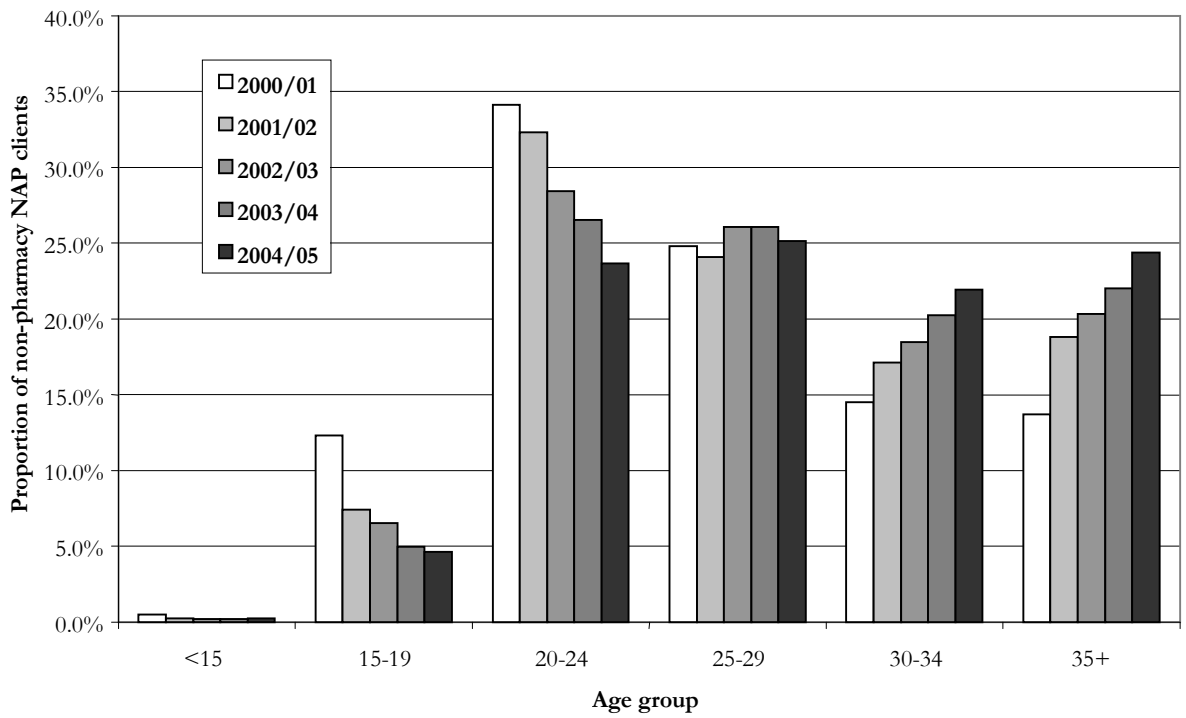
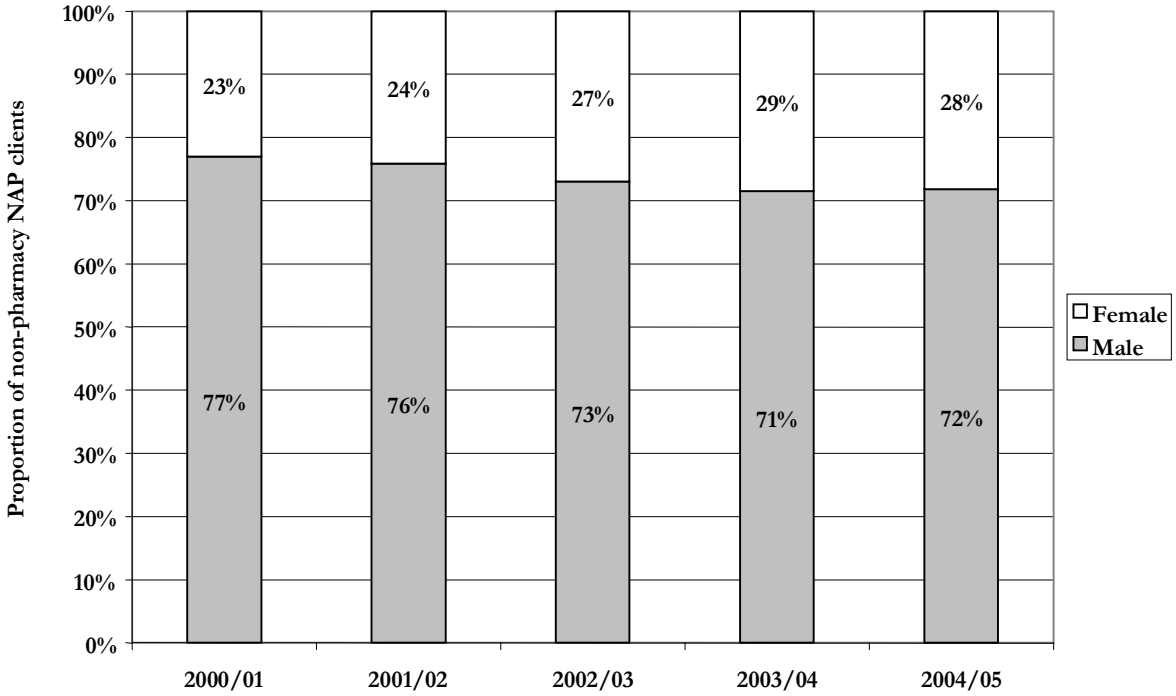


Figure 2: Sex of clients of non-pharmacy Needle Availability Program outlets in Tasmania, 2000/01-2004/05



Given that the sampling procedure for the IDRS studies are largely convenience-based in nature, there is the possibility for notable shifts in demographics to occur, which may impact on the interpretation of differences in the patterns of drug use identified in the annual consumer cohorts. Between the 2004 and 2005 local IDU cohorts, there are small but notable differences in current employment (76% vs. 64% unemployed respectively), in completion of tertiary education (37% vs. 24% had completed trade or technical degrees respectively), and in prison history (25% vs. 34% respectively). While these differences are notable, they may have little impact on the drug use data between the two consumer samples. However, between 2004 and 2005, there was a lower proportion of the IDU cohort reporting involvement in drug treatment (65% vs. 55%), and, in particular, less of the sample was involved in maintenance pharmacotherapies (58% vs. 47%). This is likely to have an impact on the patterns of substance use reported amongst the IDU participants, and reference to this difference, along with other notable discrepancies between the 2005 IDU and previous IDU samples, will be discussed in subsequent sections of this report.

3.2 Drug use history and current drug use

The mean reported age at first injection of a drug was in the late teens (18.7 years, SD = 5.1 years), ranging from 11 to 36 years (strongly similar to that identified in the 2004 cohort: mean 18.7 years, range 12-38: Table 2). There was no significant difference between age of first injection for females and males in the sample (19.2 and 18.4 years respectively).

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

Variable	2004 n=100	2005 n=100
Age of first injection (years)	18.7 (range 12-38)	18.7 (range 11-36)
First drug injected (%)		
Heroin	9	11
Methadone	2	2
Morphine	32	18
Methamphetamine	49	62
Cocaine	0	0
Ecstasy	0	0
Benzodiazepines	2	1
Other	5	6
Drug of choice (%)		
Heroin	38	32
Methadone	16	7
Morphine	13	15
Methamphetamine	19	34
Cocaine	1	2
Ecstasy	1	3
Benzodiazepines	4	2
Other	9	6
Drug most often injected in past month (%)		
Heroin	1	2
Methadone	48	34*
Morphine	20	15
Methamphetamine	29	47
Cocaine	0	0
Ecstasy	0	0
Benzodiazepines	1	4*
Other	1	1
Most recent drug injected* (%)		
Heroin	0	0
Methadone	42	34[a]
Morphine	20	18
Methamphetamine	36	38
Cocaine	0	0
Ecstasy	0	0
Benzodiazepines	5	4[a]
Other	1	7
Frequency of injecting in last month (%)		
Weekly or less	20	8
More than weekly	53	62
Once a day	13	12
Two to three times per day	10	16
More than three time per day	4	2
Polydrug use		
Mean number of drug classes ever tried	12.5	12.7 (12.2[†])
Mean number of drug classes used in last 6 months	7.9	8.1 (7.9[†])
Mean number of drug classes ever injected	6.6	6.1 (6.1[†])
Mean number of drug classes injected in last 6 months	3.5	3.6 (3.6[†])

Source: IDRS IDU Interviews

[†]Note: In 2005 an additional drug class was added to the 17 examined in previous IDRS reports. For the 2005 data, the first number refers to the number of drug classes used (out of the 18 examined), whereas the number in parentheses has been collapsed for consistency with the 17 classes examined in previous years.

*[a]Note: In 2005 one participant reported their drug of choice as both methamphetamine and morphine; one participant reported their last drug used as a combination of benzodiazepines and methadone syrup; and three reported this combination as the drug they had most often injected in the preceding month: these have been included in both the relevant categories, and as such these columns will sum to greater than 100%

As previous IDRS reports (e.g. McKetin, Darke & Kaye, 2000) and local key experts have suggested that there may have been a fall in the age of initial injection among new recruits to injecting, the sample was subdivided into those that had first injected within the previous five years, those that had been injecting for 6-10 years, and those that had begun injecting more than 10 years ago (Table 3). There was no difference between age of first injection for any of these three groups: 19.2 years for the recent initiators, 18.0 years for those with moderate injecting careers, and 18.9 years for those first injecting more than 10 years previously. Similarly, in previous Tasmanian IDRS studies, there has been no difference between age of initiation based on similar median injection career splits, and, as such, it is difficult to support the suggestion of a declining age of initiation into injection amongst local regular injecting drug users. There was considerable variation in the length of participants' injecting drug use careers, with the mean length of time since first injection being 12.1 years, ranging from 1 to 31 years. There was a sex difference with regard to length of injection career for the current cohort, with the mean duration of injection career for male participants (13.6 years, SD=7.2 years) being significantly longer than that for the females sampled (9.5 years, SD=7.1 years: Mann-Whitney U = 766, p=0.003). A similar sex difference was identified in the 2004 cohort.

Table 3: Drug use among newer and older inductees into injecting drug use

Characteristic	Recent initiators to injecting (≤ 5 years) N=17	Moderate injection career (6-10 years) N=32	Longer injection careers (>10 years) N=51
Age first injected	19.2 (SD=5.7)	18.0 (SD=4.7)	18.9 (SD=5.2)
Duration injection career	2.4 (SD=1.4)	8.2 (SD=1.2)	17.7 (SD=5.7)
First drug injected (%):			
(Meth)amphetamine	94	50	61
Heroin	-	6	18
Morphine	6	41	8
Other	-	3	14

Source: IDRS IDU Interviews

Amongst the whole of the 2005 IDU participant cohort, methamphetamine was the first drug injected by 62% of respondents, with 18% reporting morphine, 11% reporting heroin, 2% methadone, and 7% other substances (including benzodiazepines, codeine, ketamine, pethidine and LSD: Table 2). These proportions differ from those reported among the 2004 IDRS IDU cohort, where substantially more participants reported first injecting morphine (32% vs. 18%) and less reported first injecting methamphetamine (49% vs. 62%: Table 2). There was a significant length of injection career-related difference in the first drug injected ($\chi^2(6_{n=100})=25.7$, $p < 0.001$). Almost all of those participants who had started injecting within the preceding five years first injected methamphetamine (94%: Table 3), in comparison to around half of those with longer injection careers (50% of those first injecting 6-10 years ago and 61% of those injecting for more than 10 years). Initiation into injection with heroin was more common amongst those that had started injecting a longer time ago (18% of those that had been injecting for more than 10 years, compared with 6% of those that had been injecting for 6-10 years and none of those recently initiating injecting drug use). Finally, initiation into injection with pharmaceutical tablet preparations of morphine was most common amongst those that had first injected 6-10 years ago (compared with just 6% of the recent initiators into injection and 8% of those that had been injecting for more than 10 years). These changes in drug of initiation into injecting over time are likely to be reflective of the relative dominance or availability of particular drugs in the market at the time when these participants first started injecting.

In the 2005 IDRS IDU cohort, methamphetamine was the reported drug of choice for the majority of participants (34%), with heroin similarly strongly preferred (32%). This is a contrast to trends in the previous IDRS IDU cohorts, where methamphetamine had less commonly been reported as a drug of choice (for example, just 19% of the 2004 cohort reported methamphetamine as their drug of choice). Similarly, in preceding IDRS consumer samples, around two-thirds of the participants reported some sort of opioid as their drug of choice (in 2004, for example, 67% reported either heroin, methadone or morphine as their drug of choice), compared to just over half (54%) of the current participant sample. Consistent with the high preference for methamphetamine, this was also reported as the drug most injected in the preceding month for the majority of the 2005 participants (47%: Table 2) and most commonly as the drug last injected (38%). Despite the high preference for heroin, none of the participants reported it as their last drug injected and only two as the drug they had most often injected in the month prior to interview. Other than methamphetamine, the drugs reported most commonly injected by the consumer cohort were methadone (34%), and morphine (15%), trends similar to that noted in the 2004 cohort, although this represented a smaller proportion of consumers reporting predominant use of either of these drug types (Table 2).

Frequency of injection by IDU during the month prior to interview (Table 2) was varied, with most injecting more than once per week (92%), and 30% injecting at least once per day. This reflects a continuation of the trend seen amongst recent IDRS IDU samples towards an increasing proportion of daily injectors (2003: 17% daily injectors; 2004: 27%: Table 2).

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 under half of the sample (45%) had spent money on illicit drugs on the day before the interview, and that this was most commonly between $20 and $99. The average amount of money spent amongst the sample was $42 (SD $81, range $0-500, median = $0). Amongst only those 45 participants who had spent money on illicit drugs on the day prior to interview, the average amount of money spent was $92 (SD $100, range $10-500, median = $60). In comparison to the 2004 sample, slightly less participants reported not spending any money on drugs on the day prior to interview (60% in 2004 vs. 55% in 2005), and those that had spent money on drugs had, on average, spent more ($40 in 2004 vs. $92 in 2005), and, similarly, the overall average was slightly higher in 2005 ($32 in 2004 vs. $42 in 2005).

Table 4: Amount spent on illicit drugs on day prior to interview

Amount spent on day prior to interview	2004 n=100 %	2005 n=100 %
Nothing	60	55
Less then $20	3	2
$20-49	19	15
$50-99	10	14
$100-199	2	8
$200-399	5	4
$400 or more	1	2

Source: IDRS IDU Interviews

Respondents reported the drugs they used on the day prior to their interview (Table 5). Despite only 45% paying for drugs on the day prior to interview, just 7% had not used any drugs on this day. More than half of the sample had used cannabis on the day prior to interview (57%). Use of methadone (41%, although only used by 3 people not currently enrolled in methadone

maintenance therapy), benzodiazepines (38%), and methamphetamine (22%) were also commonly reported as being used on the day prior to interview. In comparison to this measure in the 2004 IDRS cohort, there were less people reporting use of methadone (57% in 2004 vs. 41% in 2005). Use of other drug types on the day prior to interview was relatively similar in the 2004 and 2005 consumer cohorts.

Polydrug use was widespread, with 72% 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 (30% of the sample, range 0-6). Multiple studies have clearly established that the risk of overdose increases when central nervous system depressants are used in addition to opioids (see Warner-Smith, Lynskley, Darke & Hall, 2000), with concomitant use of alcohol or benzodiazepines with opioids proving especially prominent in opioid overdose fatalities. Of concern was the finding that, of the 50% of the 2005 IDU sample that reported using an opioid on the previous day, 60% reported using an opioid in conjunction with either benzodiazepines (50%, n=25) or alcohol (10%, n=5) on the previous day. A similar trend was identified in the 2004 IDU sample: 57% of those using an opioid on the previous day had done so in conjunction with either benzodiazepines (44%), alcohol (14%) or both (9%).

Table 5: Drugs taken on the day prior to interview among the IDU sample

Drug*	**2004 n=100 %**	**2005 n=100 %**
Cannabis	62	57
Methadone	57	41
Benzodiazepines	40	38
Morphine	17	13
Methamphetamine: powder	3	9
Methamphetamine: base/paste	12	10
Methamphetamine: crystal	3	3
Pharmaceutical stimulants	5	2
Heroin	1	1
Cocaine	0	0
Alcohol	20	20
Anti-depressants	15	9
Buprenorphine	3	3
Other opiates	1	3
Ecstasy	1	1
Did not take any drugs	4	7

Source: IDRS IDU Interviews *Note: could list more than one drug

Participants were also asked about their usual place of injection and where they had last injected. These responses are summarised in Table 6 below, indicating that the majority of the sample tend to inject in private homes (90% usually, 83% last time they injected), while much smaller proportions tend to inject in public places (10% usually, 17% last time). These proportions were very similar for the 2004 and 2005 cohorts.

Table 6: Location in which respondents usually injected in the month prior to interview, and location of last injection

Location	Usual		Last	
	2004 n=100 %	2005 n=100 %	2004 n=100 %	2005 n=100 %
Private home	91	90	85	83
Public toilet	5	5	8	8
Car	4	3	5	7
Street/park or beach	0	2	2	2

Source: IDRS IDU Interviews

Drug use histories of the IDU respondents are summarised in Table 7 below. There was a substantial level of polydrug use among this group, as almost all individuals had used methadone, morphine, methamphetamine, benzodiazepines, alcohol, cannabis, anti-depressants and tobacco at some stage in their lives. Of the 18 possible drug classes examined (treating all forms of methamphetamine and methadone as single classes of drugs), participants had used a median of 13 (mean = 12.7, SD = 3.0, range 5-18) drug classes in their lives, and 8 (mean = 8.1, SD = 2.7, range 3-16) in the preceding six months. A median of 6 drug classes had been injected over their lifetimes (mean = 6.1, SD = 2.8, range 1-12), and 3 (mean = 3.6, SD = 2.0, range 1-10) in the preceding six months[3]. These figures are highly similar to those in the 2004 (Table 2) and 2003 cohorts.

[3] These figures appear greater than previous Tasmanian IDRS reports prior to 2003, due to the inclusions of buprenorphine and homebake new drug classes in the 2002 study. In 2005, a new class of drug was also included in this table (oxycodone), and comparable figures for lifetime and six-month polydrug use with this new drug class collapsed back into the 'other opiate' grouping are provided in Table 2, which reveal patterns of polydrug use very similar to that identified in the 2004 cohort.

Table 7: Polydrug use history of the IDU sample, 2005

Drug Class	Ever used %	Ever injected %	Injected last 6 mths %	Median days injected in last 6 mths*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths %	Used^ last 6 mths %	Median days used^ in last 6 mths*
Heroin	64	63	18	6	21	1	11	-	15	2	19	6
Methadone syrup (prescribed)	56	52	42	54					56	45	45	180
Methadone syrup (illicit)	73	69	49	12					28	17	52	12
Physeptone (prescribed)	20	16	5	12	-	-	-	-	18	6	7	12
Physeptone (illicit)	69	68	40	11	1	-	-	-	26	8	41	9
Any methadone	***85***	***80***	***69***	***49***	***1***	***-***	***-***	***-***	***73***	***57***	***71***	***180***
Buprenorphine (prescribed)	16	7	6	9	-	-	-	-	16	8	8	62
Buprenorphine (illicit)	10	7	5	3	-	-	-	-	6	3	5	3
Morphine	91	89	55	12	1	-	3	-	41	13	59	12
Oxycodone (prescribed)	13	9	3	14	-	-	-	-	4	3	3	18
Oxycodone (illicit)	62	51	26	6	-	-	1	1	16	6	30	4
Homebake	22	20	5	16	2	1	2	-	3	1	5	16
Other opioids	64	6	3	2	19	3	1	-	60	36	39	2
Methamphetamine (powder)	97	96	75	12	11	3	45	9	45	14	76	12
Methamphetamine (base)	93	93	79	18	4	1	7	4	19	12	79	20
Methamphetamine (crystal)	83	78	44	3	19	11	4	1	14	7	50	3
(Meth)amphetamine (liquid)	3	3	1	1					-	-	1	1
Pharmaceutical stimulants	84	72	35	6	4	2	9	2	44	16	43	6
Any (meth)amphetamine (inc. pharm stimulants)	***100***	***100***	***97***	***48***	***27***	***13***	***49***	***11***	***68***	***34***	***97***	***48***
Cocaine	46	30	7	3	8	1	29	1	8	-	8	5
Hallucinogens	78	13	-	-	6	1	1	-	77	22	22	2
Ecstasy	59	27	14	1	2	-	11	4	54	23	31	2
Benzodiazepines	94	46	23	12	12	3	6	1	93	82	86	72
Alcohol	99	4	-	-					99	69	69	12
Cannabis	100										87	180
Anti–depressants	63	-	-	-					63	31	31	180
Inhalants	38										4	2
Tobacco	98										98	180

Source: IDRS IDU interviews ^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting * Among those who had used/injected.

4.0 HEROIN

Less than one-fifth of respondents on the IDU survey were able to comment confidently on the price, purity or availability of heroin (n=16). Of the key experts reporting on groups that predominantly used opioids or were polydrug consumers (n=12), none reported that the group they had most contact with had primarily used heroin in the past six months.

Among the IDU sample, 64% reported they had tried heroin at some stage in their lives, and almost all of these had injected heroin (63% of sample). Nineteen percent had used heroin in the past six months, with all but one injecting the drug in this time. However, two people also reported swallowing and one reported as smoking heroin in the six months prior to interview.

The demographics of the group that had used heroin in the past six months was similar to that of other IDU (see Section 3.1) in terms of sex, age, cultural and educational background, sexual preference, relationship status, drug treatment and employment status, prison history, receipt of income from criminal activity in the preceding month, duration of injection career, age at first injection and frequency of injection.

However, those that had recently used heroin were significantly more likely to inject (any drug) daily than those that had not used heroin in the preceding six months (52.7% vs. 20.9%: $\chi^2(4_{n=100})=13.1$, $p=0.010$). Also, those that had recently used heroin were significantly more likely to report receiving income from criminal activity in the preceding month (57.9% vs. 28.4%: $\chi^2(1_{n=100})=5.6$, $p=0.15$) and that this was their main source of income (21.1% vs. 2.5%: $\chi^2(2_{n=100})=10.5$, $p<0.005$) than those that had not recently used heroin. However, those that had recently used heroin were significantly more likely to have received income from a wage or salary in the preceding month (17% vs. 58%: $\chi^2(1_{n=100})=13.5$, $p=0.001$) than those that had not used heroin in the preceding six months. Also, those that had recently used heroin were significantly more likely to have been enrolled in methadone maintenance therapy in the preceding six months (68% vs. 41%: $\chi^2(1_{n=100})=4.7$, $p=0.041$) and to report methadone as the drug they had most often injected in the preceding month (53% vs. 26%: $\chi^2(8_{n=100})=21.2$, $p=0.007$) than those that had not recently used the drug. Finally, those that had recently used heroin were significantly less likely to report methamphetamine as the drug they had first injected (37% vs. 68%: $\chi^2(12_{n=100})=25.3$, $p=0.005$), and to report heroin as their drug of choice than those that had not recently used the drug (68% vs. 24%: $\chi^2(12_{n=100})=31.7$, $p=0.002$).

Of those IDU surveyed who had used heroin in the past six months (n=19), 68% regarded heroin as their drug of choice, 11% methamphetamine, 11% cocaine, and 5% morphine or other types of opiates respectively. Just two of the IDU sample indicated that heroin was the drug they had most often used in the month prior to interview, despite 32% reporting it as their drug of choice. When asked to clarify the reasons for this discrepancy, 25 respondents (78%) reported that they had not recently used heroin due to low availability; 2 (6%) by choice; with single individuals (3%) reporting this as due to their involvement in drug treatment, due to peer influence, and due to the high price of heroin respectively.

4.1 Price

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

Of those consumers that could comment about price changes of heroin[4] in the preceding six months (sixteen participants reported on some aspect of price, purity or availability of the drug; however, half of these could not confidently comment on recent price changes for heroin) (half (n=4) felt that the local price of heroin had remained stable in this time; one-quarter (n=2) felt that the price had fluctuated; and single individuals perceived the price as increasing, and decreasing, in the six months prior to interview. While the reported purchase prices in Table 8 may appear to suggest increased modal prices for heroin in comparison to the 2004 survey, the number of individuals reporting prices are so small, and the amount involved (particularly in reference to the most popular purchase amount, 'cap'/'taste'/'point') so variable, that it is difficult to make any clear inferences in regard to the purchase price of heroin locally. None of the key experts interviewed for the current study could confidently report on local prices or changes in prices for heroin.

Table 8: Modal price of heroin purchased by IDU, 2000-2005 IDRS

Descriptor	2000 IDRS		2001 IDRS		2002 IDRS		2003 IDRS		2004 IDRS		2005 IDRS		
	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*	$	Range	*n*
'Cap,taste,point' *(~0.05-0.15g)*	**$50**	*1*	**$50**	*15*	**$100**	*12*	**$50**	*7*	**$50**	*6*	**$100**	*($50-100)*	*4*
2 'points'/'tastes' *(~0.2g)*	**$100**	*2*	**$100**	*8*	**$92.50***	*2*	**$100**	*1*	**$50**	*1*	**-**	-	-
1/4 gram *(0.25g)*	**$50**	*1*	**$100**	*1*	**$135***	*4*	**$100**	*1*	**$100**	*1*	**-**	-	-
half-weight *(0.5g)*	**-**	*0*	**$170**	*1*	**$250**	*1*	**-**	*0*	**$370***	*2*	**-**	-	-
gram *(1.0g)*	**$375***	*2*	**$300**	*2*	**$350**	*1*	**$350**	*2*	**$350**	*4*	**$360***	*($250-450)*	*3*

Source: IDRS IDU interviews *where multiple modes existed, median price was substituted.

The Australian Crime Commission (ACC, previously the Australian Bureau of Criminal Intelligence) 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' (0.1-0.3 g) of heroin cost $50, and a true gram $400-$500, in Hobart during the 2002/03 financial year (Table 9). These prices were consistent with IDU reports of price in the 2002 IDRS survey (Bruno & McLean, 2003) and remained stable between the 2000/01 and 2002/03 financial years, consistent with consumer reports of stability in this time. Price information for the 2003/04 and 2004/05 financial years was not reported to the ACC, which is perhaps reflective of low availability of the drug locally (discussed below).

[4] Sixteen IDU participants reported on some aspect of price, purity or availability of the drug; however, half of these could not confidently comment on recent price changes of heroin.

Table 9: Heroin prices in Tasmania reported by the Australian Crime Commission, 1997-2005

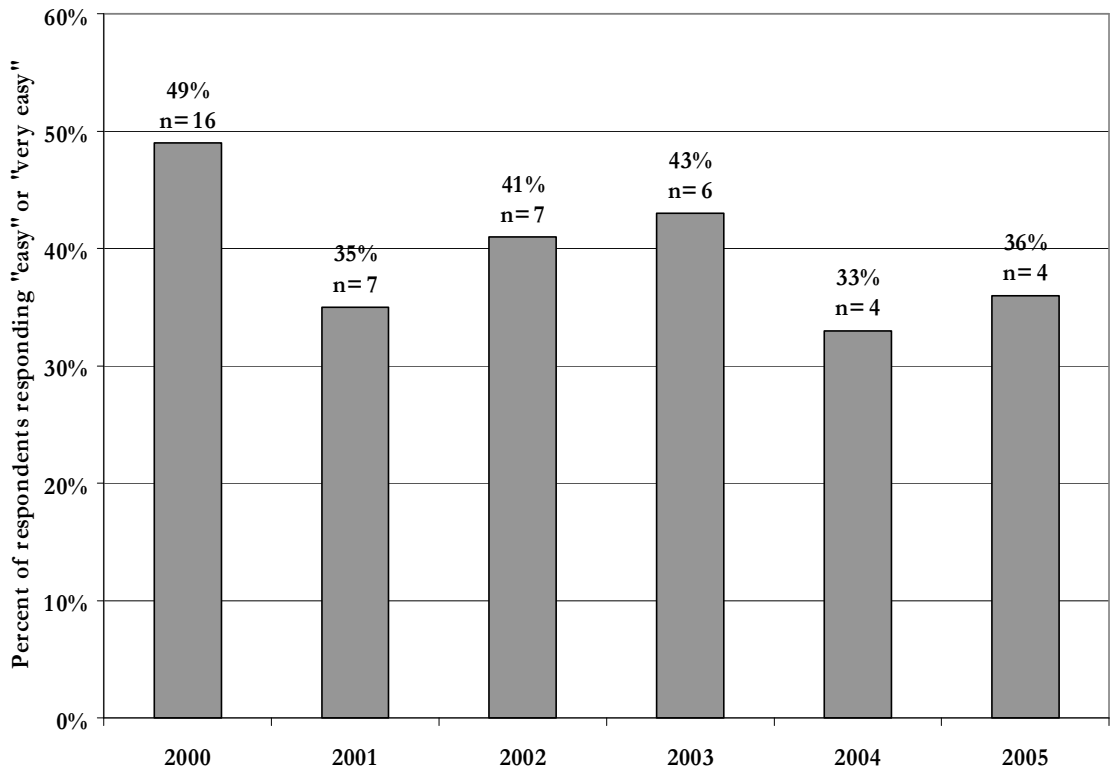
Amount	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
1 taste/cap *(0.1-0.3 gm)*	$60-80	$50	$50	$50	$50	$50	n/r	n/r
1/2 weight *(0.4 - 0.6 gm)*	$150	$100-200	$100-200	$100-200	$100-200	$100-200	n/r	n/r
1 street weight *(0.6 - 0.8 gm)*	$400	$400	$200-400	$200-300	$200-300	$200-300	n/r	n/r
Full gram	$600	$500-700	$400-600	$400-500	$400-500	$400-500	n/r	n/r

Source: Australian Crime Commission & Tasmania Police State Intelligence Services
n/r = data not reported

4.2 Availability

Of the eleven IDU participants that were able to comment on trends in the availability of heroin, consistent with reports in previous years the majority (64%, n=7) considered it as difficult (9%, n=1) or very difficult (55%, n=6) for them to obtain, with the remainder (36%, n=4) reporting it as easily (18%, n=2) or very easily (18%, n=2) accessed in the six months prior to interview. None of the key experts interviewed could confidently comment on the current availability of heroin.

Figure 3: IDU reports of availability of heroin: 2000-2005 IDRS



Source: IDRS IDU interviews

Of the ten IDU participants that could report on changes in local availability of heroin, the clear majority (60%, n=6) perceived no change in availability in the six months prior to interview. However, two participants (20%) perceived a reduction in availability, and one (10%) reported that local availability of the drug had fluctuated. One IDU participant and one key expert reported that heroin had become more available in Hobart in the preceding six months.

In another indication of relatively stable, limited, availability of heroin locally, only 19% of the IDU sample in 2005 reported recent use of the drug, with a median frequency of use of only six times in the preceding six months. Similar to trends in 2004, this reflects the lowest proportion of recent use of heroin among the local regular IDU in the past six years of the Tasmanian IDRS study, despite around one-third of the participants in each study reporting heroin as their drug of choice: with six-monthly use falling from 38% in 2000, 24% in 2001, 21% in 2002, 26% in 2003, and falling to 19% in 2004. Frequency of use has remained relatively stable and low during this time (a median frequency of 7 days out of the preceding six months in 2000, compared to the median of 6 days out of the preceding six months in the 2005 cohort). This low level of use in a regularly injecting sample of individuals, where 32% regard heroin as their drug of choice (and 54% nominate an opioid as their drug of choice), is a good indication that heroin is in poor supply locally. Furthermore, when those IDU that reported heroin as their drug of choice – but had not used this predominantly in the month prior to interview – were asked the reasons for this, 25 (78%) reported that they had not recently used heroin due to low availability of the drug.

Of the ten participants that were able to comment on the source of their heroin (several participants reported purchasing and using heroin when they were in other jurisdictions in the preceding six months, and as such were excluded from this question), multiple sources of the drug were reported: half of these participants noted that the drug had been sent from another jurisdiction directly to them, either as a gift (n=2) from friends (n=2) or a dealer (n=1). Just four participants reported purchasing the drug locally in the preceding six months, either from a dealer's home, a street dealer, a mobile dealer, or from a dealer providing home delivery (n=1 respectively). Those participants that purchased the drug locally noted that it usually took a median of 30 minutes (range 30 - 60 minutes, n=4) for them to score heroin locally in the preceding six months.

Tasmania Police reported a single seizure of a drug suspected to be heroin in the 2004/05 financial year, of 0.2g in the north of the state, during the first quarter of 2005. There were no seizures of heroin made by Tasmania police in the 2001/02, 2002/03 or 2003/04 financial years, in comparison to one seizure (totalling 3 grams) in 2000/01, and five seizures (totalling approximately 18 grams) in 1999/00. No seizures of heroin were reported to the Australian Bureau of Criminal Intelligence (now the ACC) in 1996/97 or 1997/98.

Taken together, it appears that the historical pattern of limited availability of heroin locally has continued, and possibly declined further in the preceding six to twelve months (availability over time is detailed in Figure 3). While some better-connected IDU may have reasonably stable access to the drug, the availability of heroin in the state is still relatively low, as indicated by the low level of recent use of the drug by the IDU sample.

4.3 Purity

Following trends seen in previous years, most IDU that could comment on purity of heroin they had used (n=12) considered it as medium (41%, n=5) or low (33%, n=4) in purity, although 25% (n=3) reported purity as fluctuating in the preceding six months. No key experts could comment on the purity of heroin used by the groups that they were familiar with. In previous surveys, IDU have commented 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 opioids, as the exact quantity of drug purchased is clear.

Of the 19 participants in the IDU sample that reported heroin use in the preceding six months, four had only purchased and used the drug while they were visiting another jurisdiction. Among these remaining 15 participants, 7 reported use of heroin powder in the preceding six months, with 12 using rock form heroin. Most of those that had recently used heroin locally reported that they had most commonly used rock form heroin in the preceding six months (n=10), while 5 reported using heroin powder most often in this time. There appeared to be little purity difference in the forms of the drug used by participants that had predominantly purchased the drug locally (nine participants, three predominantly using powder form, and six rock form heroin) or whom had it sent directly to them from a mainland jurisdiction (six participants, two predominantly using powder form, and four rock form heroin).

In previous IDRS surveys, key experts and IDU have noted that, in general, heroin sold as 'rock' was actually powder, compressed to look like true 'rock' form heroin. Similar reports were made by key experts in Victorian IDRS studies (e.g. Dwyer & Rumbold, 2000). As noted in previous IDRS reports, these two forms may reflect two very different qualities of heroin available. Anecdotal reports from several IDU and KE suggest that the powder form heroin available in the state is heavily 'cut' and very low in purity, with the purity of rock form heroin being slightly higher. In previous years, those that had most often used powder form heroin most commonly reported the purity of heroin as low, with those most often using rock form heroin commonly reporting purity as medium. However, this pattern did not hold in the current dataset, although the small sample size of participants that had used heroin recently renders it difficult to easily identify any particular trends in the data.

There was some division among IDU in regard to trends in the purity of heroin over the preceding six months, with nine participants being able to comment on purity change, and one-third each reporting decreasing or fluctuating purity in this time (n=3 respectively), with 22% (n=2) perceiving no change, and 11% (n=1) an increased purity of heroin. No key expert could confidently comment on trends in purity of heroin. As there was only a single seizure of heroin made by Tasmania Police in 2004/05 (with no purity data available) and no seizures made in 2003/04, no objective purity data are available for comparison.

There are two pieces of objective purity data available for heroin seized within Tasmania. The first relates to a single seizure of less than two grams, made by the Australian Federal Police and analysed during the first quarter of 2000, which returned a measurement of 74.6% purity. The second relates to eight seizures of less than two grams, made by Tasmania Police and analysed during the third quarter of 2002, which returned a median measurement of 70.4% purity (range 69.6-71.0%). It should be noted that there may be a

delay of days to several months between the date of the seizure and the date of receipt of the samples in the laboratory, and as such it is not clear which financial year these analyses refer to.

4.4 Use

4.4.1 Prevalence of heroin use

The 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999) reported that 1.8% (n=15) of Tasmanians sampled had ever used heroin, while 0.5% (n=5) had used it in the year prior to interview. While the small numbers involved mean that meaningful inferences are difficult to draw, the figures from the 2001 survey (Australian Institute of Health and Welfare, 2002) are very similar, with 0.3% (n=4) of Tasmanians sampled reporting using heroin in the year prior to interview. In the 2004 National Drug Strategy Household Survey, it was estimated (from the sample of 1,208 participants) that less than 0.1% of Tasmanians had used heroin in the year prior to interview, compared with 0.2% of the national sample (Australian Institute of Health and Welfare, 2005).

4.4.2 Heroin use among IDU

Reported use of heroin as the main drug injected by non-pharmacy Needle Availability Program outlet clients had shown a steady decrease between 1999/00 and 2001/02, decreasing from 4.3% to just 0.7% of clients in this time (Table 10). However, while still remaining relatively low, particularly given the attractiveness of heroin among IDU, the figures for 2002/03 represented a clear increase over the preceding financial year, with 446 clients (1.5%) reporting heroin as the drug that they most often injected. Data from NAP clients in 2003/04 showed a slight drop in use to 1.1% or 384 clients during the financial year, with this decline continuing into 2004/05, where 0.5% of non-pharmacy NAP clients reported heroin as the drug they most often injected (222 clients). While there are acute limitations of the data collected from Needle Availability Program outlets (see Section 1.4), this slight decline seen amongst NAP statistics is consistent with the similar slight decline in proportion of the local IDRS IDU cohort reporting recent use of heroin in the 2004 and 2005 IDRS studies. It is important to note, however, that NAP data may underestimate the extent of heroin use, as different NAP outlets ask slightly differing questions in regard to drug use – with some asking 'what is the drug you most often inject', while others prefer 'what is the drug you are about to inject', with the different questions having different biases against identification of use of drugs accessed in low frequency. As indicated previously, although 19% of the IDU sample had used heroin in the past six months, just two reported it as the drug they most often injected. Additionally, there was a very high level of polydrug use amongst those who reported recent use of heroin (detailed below).

Table 10: Percentage of heroin reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program outlets, 1997-2005

Year	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Number of clients reporting heroin	390	257	457	405	143	446	384	222
Percent of total clients reporting heroin	5.7%	2.9%	4.3%	2.8%	0.7%	1.5%	1.1%	0.5%

Source: Sexual Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs) has reported heroin as the last drug injected of 10% or less of their Tasmanian participants for their 1996, 1997, 1998 and 1999 surveys, increasing to 22% in 2000, and declining from 2001 into 2002 and again into 2003 and 2004 (Table 11). This trend is generally consistent with that seen from the NAP client data. However, given that these studies only sampled a very small number of clients each year, these figures should be interpreted with caution.

Table 11: Australian Needle and Syringe Program (NSP) Survey: Prevalence of heroin within 'last drug injected', 1996-2004

	1998		1999		2000		2001		2002		2003		2004	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Heroin	5	10	2*	8	0	0	5	10	5†	3	1	1	0	0
Total sample size	51		25		23		51		151		118		107	

Source: Thein, Maher and Dore (2004); Thein, White, Shourie & Maher, 2005

*Note: these two cases reporting heroin injection actually reported their last drug injected as heroin and morphine combined; †of these 5 individuals, one reported their last drug injected as a mixture of heroin and cocaine

4.4.3 Current patterns of heroin use

Nineteen percent of the IDU sample reported using heroin in the six months prior to interview. The median number of days that heroin was used in the past six months by this group was 6 (range 1-50). All but one of those that reported using heroin in this time had injected the drug (median number of days injected 6, range 1-50: the remaining individual had only swallowed heroin in this time), although one had both injected and swallowed heroin, and one both injected and smoked heroin in the preceding six months. 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 types of opioids, cannabis and benzodiazepines, a finding in keeping with reports from key experts that, because of fluctuating availability, primary users of opioids have to be flexible in their patterns of use, turning to other opioids or benzodiazepines if their opioid of choice is unavailable.

Additionally, there was a high level of use of methamphetamine amongst this group, although it was generally used less frequently than other opioids/depressants.

In difference to the trends identified in the IDRS consumer sample and in the NAP client data, one IDU consumer and two key experts noted an increase in the number of people using heroin in the preceding six months, with one of these key experts, a NAP worker, describing these consumers as 'older' (in their thirties or above), well-dressed females.

Table 12: Patterns of drug use reported by those IDU who had used heroin in the past 6 months (n=19)

	% of those who had used heroin in last 6 months reporting use	Median days use for those using the drug
Methadone syrup (illicit)	68	12 (range 1-63)
Physeptone (illicit)	74	10 (range 1-48)
Morphine	63	10 (range 1-96)
Oxycodone	53	4 (range 1-14)
Other opioids	69	2 (range 1-144)
Benzodiazepines	100	66 (range 1-180)
Cannabis	100	180 (range 12-180)
Methamphetamine		
powder	63	5 (range 1-84)
base/paste	84	16 (range 2-180)
ice/crystal	90	4 (range 1-90)
Alcohol	84	9 (range 1-120)

Source: IDRS IDU interviews

4.5 Heroin-related harms

4.5.1 Law enforcement

Tasmania Police State Intelligence Services reported no arrests involving offences relating to heroin between 2000/01 and the 2003/04 financial year[5]. In the 2004/05 financial year there was a single arrest[6] (one female consumer arrest in the north of the state, relating to the seizure of the 0.2g of a drug believed to be heroin in the first quarter of 2005). Due to the small numbers (n=5 in 1999/00) and lack of specificity of reporting of opioid-related arrests in previous years[7], the identification of trends from such data is difficult, other than to provide further support for indications from other data sourced of a limited availability and use of the drug locally.

[5] ACC report six male and four female consumer arrests relating to 'heroin and other opioids' in the 2003/04 financial year, with all of these arrests relating to pharmaceutical opioids rather than heroin.

[6] ACC report eight consumer arrests (five males, three females) and two male provider arrests relating to 'heroin and other opioids' in the 2004/05 financial year, with all of these arrests, other than a single female consumer, relating to pharmaceutical opioids rather than heroin.

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

4.5.2 Health

Given that pharmaceutical opioids such as morphine and methadone tend to be the predominant opioids used by the local IDU population, a more detailed discussion of health-related harms (such as treatment and overdose) is located in a separate section of this report (Section 10.1 and Section 10.2 respectively).

However, two IDU participants reported experiencing a non-fatal heroin overdose in the year prior to interview, and a further two participants noted witnessing a heroin overdose in Hobart in the preceding twelve months. One key expert, an ambulance officer, noted attending no heroin-related overdoses in the six months prior to interview, and only a small number in the previous decade. This participant described those they had attended for heroin overdose as typically from a higher socio-economic status group or had jobs where a lot of cash was earned sporadically (such as people working on fishing boats).

4.6 Trends in heroin use

The majority of indicators – and findings such as the low median rate of use of heroin (6 days in last 6 months amongst those who had used the drug) and, of the 32% of the IDU sample that reported heroin as their drug of choice, only around two-fifths (40%) had recently used heroin – indicate that the low availability of heroin in the state identified in earlier IDRS studies has continued in 2005.

The Australian Crime Commission 2003/04 Illicit Drug Data Report (2005) notes that Burma (Myanmar) was the primary source of heroin for the Australian market, although the most common embarkation points for heroin trafficked to Australian in 2003/04 were from Cambodia, Thailand, Hong Kong, China, Singapore, Malaysia, India, Pakistan and the United Kingdom. Opium cultivation in the South-East Asian 'Golden Triangle' region (Burma, Laos, Thailand) as well as in Pakistan has declined between 2003 and 2004 according to the United Nations World Drug Report (UNDOC, 2005), and this marks a continuation of a trend toward declining opium cultivation in the Golden Triangle region beginning in 2001. However, in contrast, opium cultivation in the 'Golden Crescent' (Afghanistan) region has expanded rapidly in this time, from an estimated 74,722 hectares in 2002 to 132,500 hectares in 2004 (UNDOC, 2005), and the Australian Crime Commission (2005) notes the potential for Afghan heroin to expand into Australian markets should higher quality heroin be produced in that country (ACC, 2005). As such, with the high use of opioids and stable strong preference for heroin amongst the IDU sampled by the IDRS both locally and nationally (Stafford et al, 2006), future trends in use of the drug continue to merit close attention, particularly as heroin markets nationally regain equilibrium.

4.7 Summary of heroin trends

Table 13: Summary of Heroin trends

Price (mode) *'packet'/ 'taste'/ point (0.05-0.20g)* *gram*	• $100, relatively stable • $360, relatively stable
Availability	• difficult to very difficult (64%) • availability stable (60%) • IDU and other data indicate that heroin remains poorly available over the past 6-12 months
Purity and form	• Both 'rock' and powder heroin used, but 'rock' is predominant • No objective purity data are available for locally-purchased heroin; however, consumer estimates suggest 'low' to 'medium' purity • Very mixed reports of trends in local availability of heroin in the preceding six months
Use	• Used by 19% of the IDU sample in past six months, but low rate of use (median = 6 days) despite high preference as drug of choice • Use most common amongst regular consumers of other opioids • Multiple indicators (NAP, NSP) suggests that local use of heroin has decreased slightly in recent months from an already low level amongst local regular IDU • Findings of the 2004 National Drug Strategy Household Survey indicates that less than 0.1% of Tasmanians had used heroin in the previous year

5.0 METHAMPHETAMINE

In the initial years of the IDRS studies, reports have used the overarching term 'amphetamines' to refer to both amphetamine and methylamphetamine (methamphetamine[8]). Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulphate (Chesher, 1993). Following the legislative controls introduced in the early 1990s on the distribution of the main precursor chemicals for the production of amphetamine sulphate (Wardlaw, 1993), illicit manufacturers were forced to rely on different procedures for the preparation of amphetamine. Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine) steadily increased until methamphetamine clearly dominated the market (ABCI, 1999, 2000, 2001). Across Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. For example, in the 2003/04 financial year, of the 4182 (non-phenethylamine) amphetamine-type seizures analysed for purity in Australia, 94.5% were methamphetamine rather than amphetamine (ACC, 2005).

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

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

Powder form methamphetamine[9] is the presentation of the drug which has traditionally been available in Australia. This is commonly a powder that can range from fine to more crystalline or coarse, and may take different colours (commonly white, brown or pink), depending on the chemical process used in its production and the quality of that process. It is produced within Australia, most commonly in small, portable 'laboratories', and is usually based on pharmaceutical pseudoephedrine (extracted from, for example, *Sudafed* tablets). Because of its powder form, it is fairly easy to 'cut' (dilute) and is commonly sold at fairly low purity/potency, although this can vary substantially. Consumers interviewed for the current IDRS survey commonly reported that methamphetamine powder was often 'claggy', a little 'wet' in appearance and sometimes contained small crystals amongst the powder, ranging from clear to white, pink or brown in colour.

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

The two other 'forms' of methamphetamine are traditionally higher in potency (due to being more difficult to 'cut') and have been increasing in availability across all Australian jurisdictions in the past few years (Topp et al, 2002). The first, referred to in some jurisdictions as 'base' or 'paste', is commonly a gluggy, waxy, oily, 'wet' powder. Although it does not seem to have a particular moniker in Tasmania, it is usually sold in units of 'points' (0.1 grams) in comparison to powder methamphetamine, which is traditionally sold in gram units at similar prices. This form of the drug appears oily because the conversion process from pseudoephedrine to methamphetamine produces the alkaline (base) form of methamphetamine, which is 'oily'. To convert this to a more easily injectable form (methamphetamine hydrochloride crystals, which may take the appearance of powder, or, when no impurities are present, and carefully crystallised, may take the form of the 'ice' crystals discussed below) requires a high level of skill, and when not completed correctly, the result of this process is an oily powder that often has a yellow or brownish tinge due to the presence of iodine and other impurities (Topp & Churchill, 2002). In the current study, participants that had recently purchased this form of the drug locally commonly described it as 'milky', 'sticky', 'waxy' and 'wet' in appearance, with specific examples of it as 'clear, jelly-like', 'brown – like soggy brown sugar' or 'golden syrup', or 'pinky – like wet fairy floss'.

The final form of methamphetamine examined in the current study is often referred to as 'ice' or 'crystal meth(amphetamine)'. This the product of a careful production process, and is believed to chiefly be imported into Australia from Asian countries (Topp & Churchill, 2002), although there are also indications of local production in recent years (ACC, 2003). It commonly appears as clear, ice-like crystals, and, as such, is difficult to 'cut' (dilute), resulting in a relatively high-purity/potency product. Consumers in previous IDRS studies have commonly described this form as white/clear crystals or rocks, looking like crushed glass or rock salt (with crystals commonly larger than sugar crystals).

Ninety-seven percent of the respondents on the IDU survey were able to confidently comment on at least some aspects of the price, purity and availability of some form of methamphetamine. For the 2005 IDRS, IDU were asked to differentiate between methamphetamine powder, 'base/paste' and crystalline methamphetamine. This distinction had a good level of face validity to those IDU surveyed, despite there often being a substantial amount of overlap in the physical form of these 'groups'. IDU reported making these distinctions on the basis of physical form, purchase cost and potency of subjective simulant effect. Thirty-five of the 100 consumers interviewed were able to report distinct trends for all three 'forms' of methamphetamine, 37 reported trends on two 'forms', while 25 reported on trends in regard to a single form. Seventy-nine IDU reported trends on methamphetamine powder, 81 reported on 'base/paste', and 44 on crystalline methamphetamine.

Ninety-seven percent of the IDU sample had used methamphetamine or pharmaceutical stimulants (95% had used methamphetamine, with a further two only reporting use of pharmaceutical stimulants) at some time in the six months prior to interview (in the 2004 survey, 94% of the sample had used any stimulant, and 91% used some form of methamphetamine in the six months prior to interview). As this relates to almost the entirety of the current consumer cohort, the demographic characteristics outlined in Section 3.1 are reflective of the participants using methamphetamine. Those that reported methamphetamine as the drug they had most often used in the preceding month were similar to other IDU participating in the study in terms of age, sex, education, employment, prison history, injection frequency, age of first injection and

duration of injection career; however, they were significantly *less* likely to have been in any form of treatment for their drug use in the six months prior to interview (40% vs. 79%: $\chi^2(1_{n=100}) = 16.0$, $p < 0.001$), significantly *more* likely to report a stimulant as their drug of choice (65% vs. 15%: $\chi^2(2_{n=100}) = 31.3$, $p < 0.001$), and had injected significantly fewer drug classes (of the 19 examined in the current study) in the preceding six months (2.6 vs. 3.8 drug types: Mann-Whitney $U = 729.5$, $p<0.001$) than those that had most often injected an opiate in the six months prior to interview.

Twelve key experts reported on groups that primarily used methamphetamine or related psychostimuants, with a further four reporting on groups best characterised as polydrug consumers. Key experts included law enforcement professionals (n=2), emergency medicine specialists (ambulance, emergency ward practitioners: n=3), outreach workers (n=2), youth workers (n=4), Needle Availability Program workers (n=3), and alcohol and other drug treatment staff (n=2).

Key experts were familiar with methamphetamine consumers from virtually the whole range of Hobart suburbs, ranging from those typically considered 'lower socio-economic' regions to the more 'prestigious' suburbs as well as some homeless groups, reflecting both the widespread nature of methamphetamine use and the particular target populations of the services for which the key experts worked (for example, some services specialised in work with homeless clients, worked in particular regions of the community or the public sector, and some worked in private health services). The majority of key experts described consumers that were uniformly from English-speaking backgrounds, although where there was some diversity noted; those from non-English speaking backgrounds were in the minority (less than 10% of the groups that key experts were familiar with). The methamphetamine-consuming groups described ranged between 16 - 55 years in age, with most in their late teens to early thirties. The consumers described by key experts were predominately male (a modal estimate of 60% male), although gender ration estimates ranged from 25-90% male.

Education history of the methamphetamine consumers described ranged across the spectrum from low levels to university graduates; however, given the demographic bias of many of the services key experts worked in, the majority of consumers described had achieved a year 10 education or less. Similarly, key experts were familiar with consumers that were predominantly unemployed, although this again was quite variable, with minorities of these groups described being in employment or studying. Prison history of these consumers ranged from nil to more than half of the groups key experts were familiar with, but were most commonly one-third or less of these consumers, again largely reflective of the target demographics of the key expert's services.

5.1 Price

As discussed above, and indicated in previous Tasmanian IDRS reports, it is clear that there are three main 'forms' of non-pharmaceutical methamphetamine available in Hobart, each with separate pricing schedules (which become more apparent at larger purchase amounts), which will be discussed separately.

IDU reported the median market price of powder methamphetamine as $50 per 0.1 of a gram (an amount typically referred to as a 'point': modal price estimate $50, range $20-80, n=75), and $300 per gram (modal price estimate = $300, range $150-400, n=12). These were consistent with the prices that IDU reported paying for the drug in the

preceding six months: median prices of $50 per 'point' (mode $50, range $30-509, n=54) and $300 per gram (no single mode, range $250-350, n=15: Table 14). These are strongly consistent with the prices reported in the 2004 survey (Table 14).

IDU reported the median price of 'base/paste' methamphetamine as costing $50 per 'point' (0.1 g: modal price estimate $50, range $30-100, n=70), and $325 per gram (no single mode, range $50-400, n=10). These price estimates are reasonably similar to the median prices that consumers reported as actually paying for their last 'point' of 'base/paste' methamphetamine (median, mode = $50, range $30-80, n=56) and last gram (median $350, mode $300, range $150-400, n=18: Table 14).

The median market price reported by consumers for the higher-purity crystalline methamphetamine/'ice' was, again, $50 per 'point' (0.1g: modal price estimate $50, range $50-80, n=31), which corresponded closely with the price that consumers reported as actually paying for their last 'point' (median, mode = $50, range $50-80, n=24: Table 14). However, consumers reported the going market rate for a gram of crystal methamphetamine as a median of $375 (mode = $400, range $200-400, n=6), somewhat higher than the amount that was reported as being paid for this amount of the drug in their most recent purchase (median $340, no single mode, range $250-400, n=6: Table 14).

Reported median market prices for pharmaceutical stimulants were $5 for both 10mg methylphenidate (Ritalin, Attenta: no mode, range $4-10, n=5) and 5mg dexamphetamine (mode $5, range $1-10, n=15). These were similar to the prices that consumers reported as most recently paying for the drug: median of $5 per 10mg methylphenidate tablet (mode $5, range $2-15, n=16), and $4 per 5mg dexamphetamine tablet (no single mode, range $0.6-$9, n=28: Table 14).

Three key experts could confidently comment on the costs of methamphetamine to the groups that they were familiar with, reporting prices consistent with those detailed by the IDU participants: $50 per 'point' of methamphetamine n=2) or three 'points' for $100 (n=1), with two individuals reporting prices for specific 'forms' of the drug as $50 per 'point' of base/paste and $60 per 'point' of crystalline methamphetamine (n=1 respectively).

The majority of both key experts and IDU who commented on the price of any form of methamphetamine (or pharmaceutical stimulants) reported that prices had remained stable over the preceding six months: over all forms, 70% of IDU consumers and 3 of 4 key experts reported stable prices; 81% of those consumers that were able to comment (n=54) and one key expert on price change for powder methamphetamine reported stable prices in the preceding six months; 69% of consumers (n=49) and two key experts able to comment felt that prices for 'base/paste' methamphetamine had remained stable; and 50% (n=12) of consumers able to report on crystalline methamphetamine reported stable prices in this time. Similarly, two-thirds (66%, n=19) of consumers able to report on price changes for pharmaceutical stimulants perceived no changes in the preceding six months.

A notable minority of consumers able to report on price stability in the preceding six months perceived increases in the price of 'base/paste' (14% of those able to comment, n=10), crystalline methamphetamine (29%, n=7, as did the single key expert reporting on crystal methamphetamine price) and pharmaceutical stimulants (21%, n=6) in this time.

Extremely small proportions of consumers perceived decreases (3%, n=2 for powder; 10%, n=7 for base/paste; 13%, n=3 for crystal; and 3%, n=1 for pharmaceutical stimulants) or fluctuations in prices (9%, n=6 for powder; 7%, n=5 for base/paste; 8%, n=2 for crystal; and 10%, n=3 for pharmaceutical) for methamphetamine or related stimulants in the preceding six months.

While the small number of participants reporting prices for some purchase categories renders clear comparisons difficult, it would appear that market prices for methamphetamine remain generally similar to those reported in the 2004 IDRS, consistent with consumer reports (Table 14). In terms of methamphetamine powder, modal reported prices for 'point' and gram purchases remained stable between 2004 and 2005; however, median prices for half-gram purchases have dropped $10 across the surveys, and the price range for the most common purchase amount, 'points', has dropped by a similar amount in this time (range $40-50 in 2004; $30-50 in 2005). Modal prices for 'base/paste' methamphetamine purchases appear stable to those reported in 2004, although there are again some slight indications of price trending downward, with price ranges trending lower for 'point' and gram purchases ('point' purchases ranging between $35-80 in 2004, $30-80 in 2005; gram purchases ranging from $200-250 in 2004, $150-400 in 2005), and modal half-gram prices dropping by $50 between the surveys ($200 in 2004, $150 in 2005). Crystal methamphetamine prices show mixed trends, with price ranges for small amounts trending upward since the previous study ($30-80 per point in 2004 and $50-80 in 2005), but median purchase prices of larger quantities decreasing in this time ($200 per half-gram in 2004, $150 in 2005; $400 per gram in 2004, $340 in 2005), although very small numbers of consumers reported on such purchases, so these trends for crystal methamphetamine should be interpreted with caution.

Tasmania Police area drug bureaux gather regular information regarding current prices of illicit drugs, both through informant reports and covert drug purchases. Since July 1999, this has been provided to the authors through the Tasmanian Police State Intelligence Services and, prior to this, such information has been attained through the Australian Bureau of Criminal Intelligence (ABCI, now the Australian Crime Commission). During the 2004/05 financial year, Tasmania Police reported prices as being $50 per 'point' (0.1g) of methamphetamine, $400-500 per two grams, and $5000 per ounce (Table 15). While consumers did not typically purchase methamphetamine in large amounts, the prices reported by police for 'street deal' purchases (0.1g) were consistent with IDU and KE reports of prices in the current survey, although over a longer time period, providing support for IDU and KE suggestions that the price of methamphetamine had remained stable in the preceding six months. It should be noted that the prices reported in Table 15 for the 2003/04 financial year are substantially greater than those reported for the 2001/02 financial year. It is likely that this change is due to a shift in focus in that the earlier reported prices were primarily reflective of the prices of methamphetamine powder, which was the form that Tasmania Police were primarily identifying at this time.

Table 14: Most common amounts and prices of methamphetamine purchased by IDU, 2000-2005

Descriptor*	2000 Survey Modal Price *(range in parentheses)*	n	2001 Survey Modal Price *(range in parentheses)*	n	2002 Survey Modal Price *(range in parentheses)*	n	2003 Survey Modal Price *(range in parentheses)*	n	2004 Survey Modal Price *(range in parentheses)*	n	2005 Survey Modal Price *(range in parentheses)*	n
Crystal methamphetamine												
'point' or packet (0.1 g: 0.05-0.1 g)	#	#	#	#	$50 *($20-120)*	*12*	$50 ($20-70)	*49*	$50 ($30-80)	*34*	$50 ($50-80)	*24*
2 points (0.2 g: 0.15-0.2 g)	#	#	#	#	$150	*1*	$65 ($50-80)	*4*	$100	*1*	$80 ($80-100)	*3*
quarter-gram (0.25 g: 0.2-0.3 g)	#	#	#	#	$180	*1*	-	-	-	-	-	-
half-gram (0.5 g: 0.4-0.6 g)	#	#	#	#	$275 *($200-275)*	*3*	$195† ($190-300)	*4*	$200 ($180-250)	*6*	$150 ($120-275)	*13*
gram (1.0 g)	#	#	#	#	$400	*1*	$350† ($150-500)	*8*	$400* ($280-500)	*7*	$340* ($250-400)	*6*
Methamphetamine base/paste#												
'point' or packet (0.1 g: 0.05-0.1 g)	$50 *($40-100)*	*52*	$50 *($50-80)*	*34*	$50 *($25-80)*	*66*	$50 ($50-80)	*24*	$50 ($35-80)	*45*	$50 ($30-80)	*56*
2 points (0.2 g: 0.15-0.2 g)	$80 *($70-100)*	*19*	$80 *($50-100)*	*13*	$80†*($50-150)*	*7*	$70 ($50-80)	*4*	$80 ($70-80)	*2*	$80* ($50-120)	*3*
quarter-gram (0.25 g: 0.2-0.3 g)	-	-	-	-	$100 *($100-150)*	*4*	-	-	$150* ($100-200)	*2*	$75	*1*
half-gram (0.5 g: 0.4-0.6 g)	$250 *($150-250)*	*3*	$150 *($50-400)*	*18*	$200 *($80-400)*	*32*	$200 ($150-400)	*8*	$200 ($100-250)	*21*	$150 ($150-400)	*38*
gram (1.0 g)	$350 *($280-400)*	*8*	$400 *($80-450)*	*17*	$400	*29*	$300† ($200-400)	*6*	$300 ($200-350)	*7*	$300 ($150-400)	*18*
Methamphetamine powder												
'point' or packet (0.1 g: 0.05-0.1 g)	-	-	$50 *($40-80)*	*15*	$50 *($50-60)*	*12*	$50 ($40-80)	*27*	$50 ($40-50)	*34*	$50 ($30-50)	*54*
half-gram (0.5 g)	$50	*3*	$50 *($50-60)*	*4*	$50 *($50-800)*	*10*	$70† ($50-200)	*4*	$160* ($30-250)	*16*	$150 ($100-200)	*36*
gram (0.8 g: 0.8-1.0 g)	$80 *($50-100)*	*6*	$50 *($50-100)*	*5*	$80 *($50-450)*	*18*	$215† ($80-400)	*8*	$300 ($50-350)	*10*	$300* ($250-350)	*15*
Pharmaceutical stimulants												
dexamphetamine tablet (5 mg)	-	-	$5 *($1-10)*	*29*	$2 *($2-5)*	*5*	$5 ($1-10)	*40*	$5 ($0-15)	*52*	$4* ($0.6-9)	*28*
methylphenidate tablet (10 mg)	-	-	$5 *($2-10)*	*14*	-	-	$5 ($1-10)	*23*	$5 ($0-10)	*12*	$5 ($2-15)	*16*

Source: IDRS IDU interviews *Note: Common quantities and weight range for each purchase unit in parentheses, †Median price was substituted where no single mode was reported. #Note: prior to 2002, higher purity methamphetamine was not separated into 'crystal' and 'base/paste' forms; as base/paste methamphetamine was the predominant form of higher purity methamphetamine available on the market during these years, prices have been allocated to this form; however, due caution should be made when inferring price changes based on these data.

Table 15: Methamphetamine prices in Tasmania reported by the Tasmania Police drug bureaux, 1997-2005

	Point (~0.1g)	Street gram (0.6-0.8g)	Full gram (1.0g)	Ounce (28 gms)
July-Sept 1997	*price not reported*	$50	$100-120	$1200-1400
Oct-Dec 1997	*price not reported*	$50	$100-120	$1400-1600
Jan-Mar 1998	*price not reported*	$50	$70-100	$1400-1600
April-June 1998	*price not reported*	$50	$70	$1400-1600
July-Sept 1998	*price not reported*	*price not reported*	*price not reported*	*price not reported*
Oct-Dec 1998	*price not reported*	$50	$70-80	$1200-1400
Jan-Mar 1999	*price not reported*	$50	$70-80	$1200-1400
April-June 1999	*price not reported*	$50	$70-80	$1200-1400
July-Sept 1999	$50	*price not reported*	*price not reported*	*price not reported*
Oct-Dec 1999	$50	$50	$70-80	$1200-1400
Jan-Mar 2000	$40-50	$40-50	$70-80	$1200-1400
April-June 2000	$40-50	$40-50	$70-80	$1200-1400
July-Sept 2000	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec 2000	*price not reported*	$40-50	$70-80	$1200-1400
Jan-Mar 2001	$40-50	$40-50	$70-80	$1200-1400
April-June 2001	$40-50	$40-50	$70-80	$1200-1400
July-Sept 2001	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec 2001	$40-50	$40-50	$70-80	$1200-1400
Jan-Mar 2002	$40-70	$40-50	$70-80	$1200-1400
April-June 2002	$40-70	$40-50	$70-80	$1200-1400
July-Sept 2002	$50-60	*price not reported*	*price not reported*	*price not reported*
Oct-Dec 2002	$50-60	*price not reported*	*price not reported*	$3500-5000
Jan-Mar 2003	$50	$100-300	$200-300	$5000
April-June 2003	$50	$150	$400	$5000-6000
July-Sept 2003	$50-70*	$100-300	$300-600*	$3000-10000*
Oct-Dec 2003	$50-70*	$100-300	$300-600*	$3000-10000*
Jan-Mar 2004	$50-70*	$100-300	$300-600*	$3000-10000*
April-June 2004	$50-70*	$100-300	$300-600*	$3000-10000*
July-Sept 2004	$50†	*price not reported*	*price not reported*	$5000
Oct-Dec 2004	$50†	*price not reported*	*price not reported*	$5000
Jan-Mar 2005	$50†	*price not reported*	*price not reported*	$5000
April-June 2005	$50†	*price not reported*	*price not reported*	$5000

Source: Australian Crime Commission; Tasmania Police State Intelligence Services *Note: these prices are those reported by Tasmania Police State Intelligence Services. For this period, the Australian Crime Commission reported the following prices: $50-60 per 0.1g; $200-400 per 1.0g; $3500-6000 per ounce; †Note: in the 2004/05 report, financial year prices only were reported, but are displayed in the above table in quarters for consistency with previous years. Additionally, in the 2004/05 financial year period, the Australian Crime Commission reported the following prices not included in the table: $400-500 per 2 grams; $800 per 3.5 grams; $1600 per 7 grams.

5.2 Availability

Across all 'forms' of methamphetamine, most KE and IDU reporting on availability considered that the drug was 'easy' or 'very easy' to obtain (IDU: 'very easy' 36%, 'easy' 44%; KE: 'very easy' 71% (n=5); 'easy' 29% (n=2)), and that availability had remained stable (IDU: 60%; KE: 55% (n=6)) or had increased (IDU: 23%, KE: 18% (n=2)) in the preceding six months. Trends for each 'form' of the drug are discussed separately below.

Almost all IDU sampled who could comment on the availability of powder form methamphetamine it was thought that it was 'easy' or 'very easy' to obtain (90%, n=64: 'easy' 46%, 'very easy' 44%). The clear majority also reported that the availability of powder methamphetamine had remained stable in the preceding six months (63%, n=42), with a substantial minority considering that it had increased in availability (27%, n=18), and small numbers suggesting a recent decrease (7%, n=5), or fluctuation (3%, n=2) in this time. While only very small numbers of key experts could report on availability of methamphetamine powder, these reports were generally consistent with those of the consumers, regarding it as 'very easily' accessed by consumers in the preceding six months (n=1), although considering availability as 'fluctuating' in this time (n=1).

In regards to 'base/paste' forms of methamphetamine, remarkably similar trends were reported, with 40% (n=30) of IDU consumers regarding it as 'very easy' for them to obtain in the preceding six months, and 44% (n=33) regarding this form as 'easily' accessed in this time. Just 16% (n=12) regarded it as 'difficult' to access base/paste methamphetamine in recent months. Again, most regarded this level of availability as remaining stable in the six months prior to interview (63%, n=45), with equal numbers reporting a recent increase and decrease in availability (18%, n=13 respectively). Key experts reporting on availability considered 'base/paste' methamphetamine as 'very easy' (n=1) or 'easy' (n=1) for consumers to access in the six months prior to interview, and that availability had remained stable (n=1) or fluctuated (n=1) in this time.

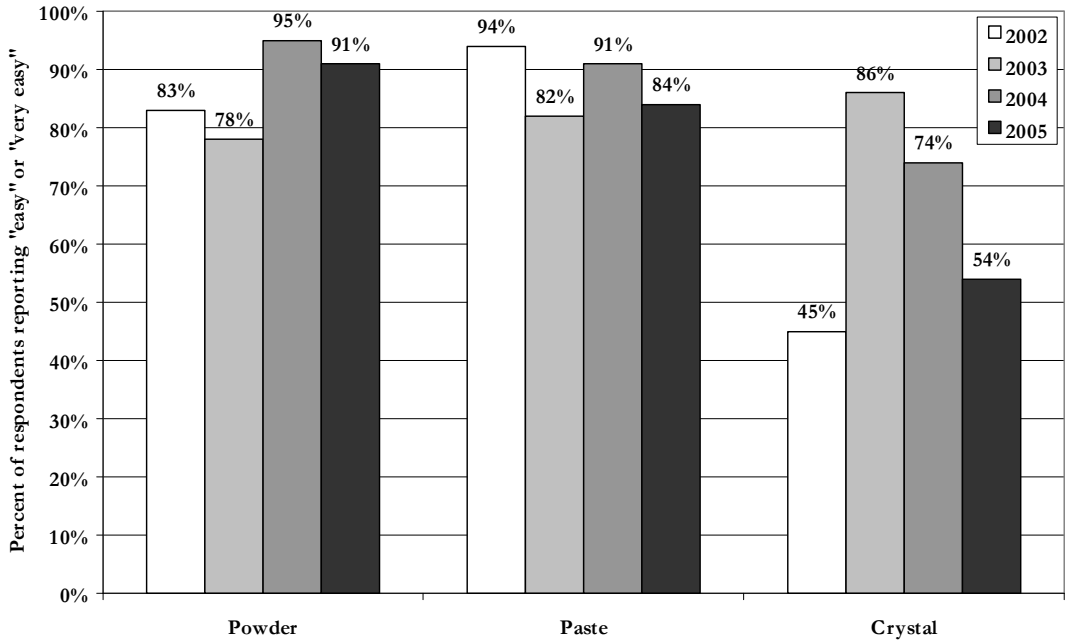
In contrast to the numbers of consumer participants reporting on availability of powder or 'base/paste' methamphetamine (n=71 and 75 respectively), only a small number of consumers could report on such trends for crystalline methamphetamine (n=35). Use of this form of the drug among regular IDU consumers surveyed in the IDRS has changed substantially in the past four surveys, with crystal methamphetamine being very uncommonly accessed by consumers in 2002, and the majority of those reporting on availability considered it as 'difficult' or 'very difficult' for them to access (Figure 4 below). However, in 2003, there were clear indications that that the availability of this form of the drug had increased substantially (20% of the IDU sample in 2002 to 68% in 2003), with a marked increase in the proportion of those sampled reporting recent use (Figure 7), and with 86% of those responding suggesting that it was 'easy' (37%) or 'very easy' (52%) for them to access this form at that time. However, in 2004, it appeared that this trend had somewhat reversed: the proportion of consumers reporting recent use had declined markedly (68% of the sample in 2003, 52% in 2004) and only 22% perceived that it was very easy for them to access crystal methamphetamine in the preceding six months, with 52% reporting that it was 'easy' for them to access this form. This change may have been associated with several arrests made by Tasmania Police of individuals involved in the main supply chain for the drug into the state in December 2003. In the current study, consumer reports on availability would suggest that availability of crystalline methamphetamine has remained similar or possibly somewhat further declined

in recent months in comparison to the 2004 survey: with similar proportions of the sample reporting recent use of crystalline methamphetamine (52% of the sample in 2004 and 50% in 2005), but much smaller numbers reporting that the drug was 'easy' or 'very easy' to access in the preceding six months (74% in 2004, 54% in 2005: 14% of the consumers reporting that the drug was 'very easy' to access in the preceding six months (n=5), 40% (n=14) 'easy', 31% (n=11) 'difficult' and 14% (n=5) 'very difficult'). Most of those consumers reporting on availability of crystal methamphetamine suggested that there had been no recent changes in availability (48% of those reporting, n=14), with substantial minorities reporting increasing (28%, n=8) or decreasing (17%, n=5) availability in the six months prior to interview. Of the key experts that could report on availability trends for crystal methamphetamine, it was reported as 'easy' for consumers to access (n=1), with equal numbers considering that availability of the drug had increased (n=1), decreased (n=1) or remained stable (n=1) to the consumers they were familiar with in the six months prior to interview.

Consumers had mixed reports on the level of availability of pharmaceutical stimulants (dexamphetamine, methylphenidate), with just over half (59%, n=20) considering these as 'easy' (35%, n=12) or 'very easy' (24%, n=8) to access in the preceding six months, and 41% (n=14) considering them as 'difficult' (38%, n=13) or 'very difficult' (3%, n=1) to access in this time. This differs somewhat from the trends reported in the 2004 survey, where the majority of consumers reported that these pharmaceuticals were 'difficult' or 'very difficult' to access (61%, n=30), although there were a larger number of participants reporting recent use of these drugs in the 2004 survey (51% of the sample in 2004, 43% in 2005). Amongst those consumers in the 2005 sample that could confidently comment, the majority considered that the availability of these drugs had not changed in the preceding six months (44%, n=13), and a substantial minority of the current cohort suggested that pharmaceutical stimulants had become more difficult to access in the preceding six months (28%, n=8). This is in contrast to the indications of *lower* proportions of the current cohort reporting recent use, and *greater* proportions considering availability as 'easy' or 'very easy' in comparison to 2004. Equal numbers in the current cohort also considered that availability had increased or fluctuated in the preceding six months (14%, n=4 respectively).

As can be seen in Figure 4 below, IDU consumer reports on the availability of powder methamphetamine in 2005 have remained relatively stable when compared to the results of the 2004 survey, representing a sustained increase from the level of availability of this form in 2002 and 2003. Availability of 'base/paste' methamphetamine appears to have fluctuated across the past four surveys, although has remained easily accessed by consumers throughout this period. However, continuing the trends seen in 2004, a smaller proportion of participants reported crystalline methamphetamine as 'easily' or 'very easily' available in the 2005 survey (54%), in comparison to 74% in 2004 and 86% in 2003 – a clear reversal of the sudden increase in availability that occurred between the 2002 and 2003 surveys. While the reported level of availability of crystalline methamphetamine in 2005 was similar to that in 2002 (54% and 45% reporting the drug as 'easy' or 'very easy' to access), a larger proportion of those in the current sample reported recently using the drug (50% of the IDU sample in 2005 in comparison to 20% in 2002).

Figure 4: IDU reports of ease of availability of different methamphetamine forms: 2002-2005 IDRS



Source: IDRS IDU Interviews

Tasmania Police seizures (Table 16) of drugs suspected to be methamphetamine have varied somewhat in recent years, following a reasonably stable level of seizures in the 2000/01 and 2001/02 financial years (3303g and 3041g respectively), falling to 2022g in 2002/03 and 1182g in 2003/04, but increasing again in 2004/05 to 2283g[10]. These has been a more steady increase in the number of tablets seized believed to be methamphetamine (or pharmaceutical stimulants) in recent years, increasing from 23 in 2000/01, 44 in 2001/02, 70 in 2002/03, 192 in 2003/04 and 261 in 2004/05 (Table 16).

[10] Data reported by the Australian Crime Commission (ACC) differs to that provided by Tasmania Police State Intelligence Services (SIS), with the ACC reporting 109 seizures, totalling 1737g of 'amphetamine-type stimulants' made in Tasmania during the 2003/04 financial year. Similarly, data reported by the ACC in 2004/05 suggests 178 seizures, totalling 3084g of 'amphetamine-type stimulants' made by Tasmania Police in that financial year. As the other data reported in Table 15 represent SIS figures, SIS figures for 2003/04 and 2004/05 are reported for consistency.

Table 16: Tasmania Police data for methamphetamine: July 2000-June 2005

	Jul-Dec 2000	Jan-Jun 2001	Jul-Dec 2001	Jan-Jun 2002	Jul-Dec 2002	Jan-Jun 2003	Jul-Dec 2003	Jan-Jun 2004	Jul-Dec 2004	Jan-Jun 2005
Methamphetamine powder seized (g)*										
South	1113	330	469	1077	882	457	96	495	489	1472
North	17	86	70	1	196	27	23	44	36	114
West	1073	411	822	602	144	316	469	55	9	163
total	2203g	827g	1361g	1680g	1222g	800g	588g	594g	534g	1749g
% within southern region	*51%*	*40%*	*34%*	*64%*	*72%*	*57%*	*16%*	*83%*	*92%*	*84%*
Methamphetamine tablets seized										
South	2	0	1	1	24	21	146	0	0	8
North	4	17	0	0	13	11	43	3	12	206
West	0	0	0	42	1	0	0	0	0	35
total	6	17	1	43	38	32	189	3	12	249
% within southern region	*33%*	*0%*	*100%*	*2%*	*63%*	*66%*	*77%*	*100%*	*0%*	*3%*
Price in southern district										
Taste	$40-50	$40-50	$40-50	$40-70	n/r	n/r	$50-70	$50-70	$50	$50
Gram	$70-80	$70-80	$70-80	$70-80	n/r	n/r	$300-600	$300-600	n/r	n/r

Source: Tasmania Police State Intelligence Services *This row includes powder seized and verified as containing methamphetamine, and unknown powder seized, believed to be methamphetamine; n/r: information was not available for inclusion in the current report.

There does not appear to be a substantial street-based methamphetamine scene, with the majority of IDU usually purchasing the drug (over all forms) through mobile dealers (35%), through friends (28%) or from a dealer's home (27%: Table 17). IDU reported that methamphetamine powder was most commonly purchased through a mobile dealer (34%), at a dealer's home (30%), or through friends (24%), with just 6% reporting most commonly purchasing powder methamphetamine from a street dealer, and small minorities reporting most commonly purchasing from a dealer that provided home delivery of the drug (4%) or through a gift (1%) in the preceding six months. Participants reported it taking a median time of 20 minutes (mode 30 minutes, range 5-240 minutes) to score methamphetamine powder in the preceding six months. Similar pathways to access were reported for 'base/paste' methamphetamine, with 35% of those consumers that had recently purchased the drug reporting most commonly purchasing the drug through a mobile dealer, and 28% respectively reporting most commonly purchasing the drug from a dealer's home or through a friend in the preceding six months. Small minorities reported most commonly purchasing base/paste methamphetamine from a street dealer (3%) or a dealer that offered home delivery (5%) in this time. Base/paste methamphetamine was reported as usually taking a median of 20 minutes to score (mode 30 minutes, range 0-120 minutes) in the preceding six months. While a much smaller number of participants were able to report on purchases of crystal methamphetamine (n=35, in comparison to 70 for powder and 74 for base/paste methamphetamine), this form of the drug was again most commonly purchased through friends (37%) or mobile dealers (34%), with smaller minorities reporting most commonly accessing the drug from a dealer's home (17%), a street dealer (9%) or receiving it as a gift (3%) in the six months prior to interview. Amongst those that had recently purchased the drug, it was reported as usually taking a median of 30 minutes to score (mode 60 minutes, range 0-1440 minutes) in the preceding six months (Table 17).

Table 17: Pathways to access of methamphetamine by IDU

	Methamphetamine form			
	Powder (n=70) %	**'Base/paste' (n=74) %**	**'Ice'/crystal (n=35) %**	**All forms (n=179) %**
Usual access				
Street dealer	6 *(n=4)*	3 *(n=2)*	9 *(n=3)*	5 *(n=9)*
Dealer's home	30 *(n=21)*	28 *(n=21)*	17 *(n=6)*	27 *(n=48)*
Friend	24 *(n=17)*	28 *(n=21)*	37 *(n=13)*	28 *(n=51)*
Mobile dealer	34 *(n=24)*	35 *(n=26)*	34 *(n=12)*	35 *(n=62)*
Home delivery	4 *(n=3)*	5 *(n=4)*	-	4 *(n=7)*
Gift	1 *(n=1)*	-	3 *(n=1)*	1 *(n=2)*
Sent down from mainland	-	-	-	-
Median time to access	20 min *(range 5-240 min)*	20 min *(range 0-120 min)*	30 min *(range 0-1440 min)*	

Source: IDRS IDU Interviews

5.3 Purity

IDU participants that had recently used the various methamphetamine 'forms' were asked to rate their subjective purity.

When asked to describe the purity of powder form methamphetamine, the largest proportion of consumers that were able to comment considered this as 'low' in subjective purity in the preceding six months (35%, n=25). However, there was quite a range of opinions, with large proportions considering this form as 'medium' in subjective purity (28%, n=20) or that purity had fluctuated in the preceding six months (24%, n=17), with a smaller proportion of respondents considering this drug form to have been 'high' in subjective purity in this time (14%, n=10). There were also very mixed reports in regard to the stability of the purity level of this form of the drug in the preceding six months, with one-third of those responding suggesting that purity had decreased (34%, n=23) or fluctuated in the preceding six months (32%, n=22), with one-quarter perceiving subjective purity of methamphetamine as remaining stable in this time (26%, n=18) and just 7% (n=5) suggesting that purity had increased. One key expert was able to report on the purity level of the powder methamphetamine available to the consumers they were familiar with, suggesting that this was 'medium' in subjective purity and that this had remained stable in the preceding six months.

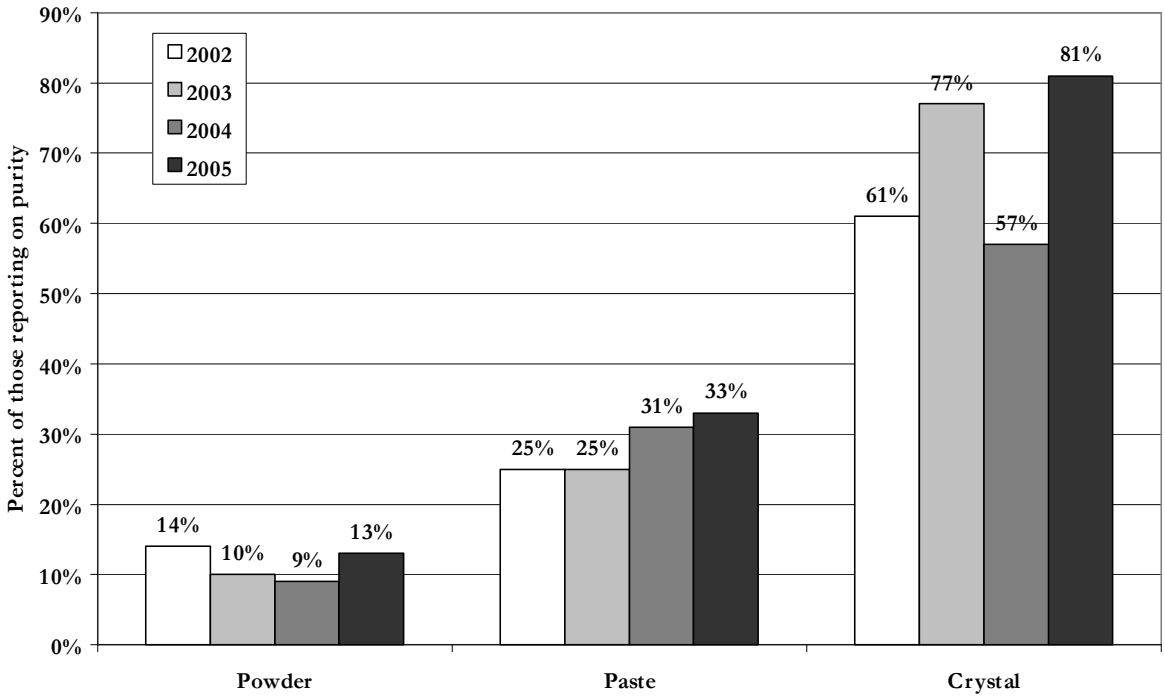
While there was again some mix of opinions when consumers were asked to nominate the subjective purity level of 'base/paste' methamphetamine, the majority of those confident in commenting perceived this as 'medium' (39%, n=29) or 'high' (33%, n=25) in the preceding six months, with only small proportions suggesting that this form was 'low' (11%, n=8) or had fluctuated (17%, n=13) in recent months. The largest proportion of consumers that were able to comment perceived this level of purity as remaining stable in the preceding six months (38%, n=27), with one-quarter noting that purity had fluctuated in this time (24%, n=17), and equal proportions noting recent increases (20%, n=14) and decreases (18%, n=13) in purity of base/paste methamphetamine. Only one key expert was able to report on the purity of this form of the drug, noting that the consumers they were familiar with regarded it as 'high' in purity and that this had remained stable in the preceding six months.

Purity trends for crystalline methamphetamine were more uniform, with this form of the drug predominantly regarded as 'high' in subjective purity in the preceding six months by consumers (81%, n=29), with smaller proportions considering it to be 'medium' (17%, n=6) or had fluctuated in purity (3%, n=1) in this time. The largest proportion of those consumers able to comment felt that the subjective purity level of crystal methamphetamine had remained stable in the preceding six months (43%, n=10), with one-quarter perceiving an increased purity in this time (26%, n=6), and minorities suggesting that purity had decreased (13%, n=3) or fluctuated (17%, n=4) recently. The one key expert able to confidently comment on purity felt that the crystalline methamphetamine used by the consumers they were familiar with was 'high' in subjective purity although had decreased in purity in recent months.

As noted above, only a small number of key experts were able to comment on the purity of methamphetamine used by the consumers they were familiar with in the preceding six months. Considering these reports across all of the 'forms' of methamphetamine, methamphetamine was considered 'high' in subjective purity (n=2), with single reports of 'medium' (n=1) or fluctuating purity (n=1) in the preceding six months. There were also mixed reports in regard to changes in purity levels, with two key experts reporting purity as increasing in the preceding six months (n=2), and single individuals noting decreases (n=1), fluctuations (n=1) or stable (n=1) purity in this time.

Figure 5 displays the proportion of those reporting on purity levels of the different 'forms' of methamphetamine in the past four years of the Tasmanian IDRS studies. This figure suggests that there has been little change in overall reports of subjective purity for powder form methamphetamine in this time. The purity of base/paste methamphetamine may have increased somewhat in recent years, with around one-third of those reporting on subjective purity levels in 2004 and 2005 considering this form as 'high' in purity, in comparison to one-quarter in 2002 and 2003. Consumer reports on subjective purity of crystal methamphetamine have varied in recent surveys, with the vast majority considering this form as high in purity in 2003 (77%), the year when local availability of the drug was at its highest, and the proportion of consumers considering this form of the drug as high in subjective purity dropped to 57% in 2004, a year when availability had markedly reduced as well (see Section 5.2). Despite indications of a possible decreased availability of crystal methamphetamine in 2005, the proportion of consumers considering this form as 'high' in subjective purity had returned to a similar level to that in 2003.

Figure 5: Proportion of IDU reporting methamphetamine powder, base/paste and crystal methamphetamine purity as 'high', 2002-2005



Source: IDRS IDU Interviews

Data for purity of methamphetamine received at police analytical laboratories have been provided for the 1997/98 to 2004/05 financial years (Table 18, Table 19). All amphetamine-type stimulants tested for purity during 2003/04 and 2004/05 were methylamphetamine rather than amphetamine. Drugs seized by Tasmania Police are only tested for composition and purity if the alleged offender pleads not guilty to the associated charge. Hence, purity data for drug seizures in the state are minimal. This very restricted sample size renders it difficult to make inferences about trends in purity of methamphetamine. However, the data do seem to suggest that the level of purity of consumer-type amounts of methamphetamine seized in Tasmania had remained relatively stable over the period 1997/98 to 2000/01. The apparent sharp 'jump' in purity of analysed methamphetamine samples between 2000/01 and 2001/02 related to samples analysed in the October-December 2001 and January-March 2002 period (Table 19). This increase in purity may have simply reflected the analysis of a more representative sampling of

methamphetamine seizures (afforded by the greater sample size) rather than being indicative of changes in market purity, particularly given the decline in both number and purity of analysed seizures in subsequent months (Table 19). Overall purity data in 2004/05 represent an increase in purity (32.3%) when compared to those analysed in the previous year (16.9%: Table 18), and are in line with IDU reports of 'medium' purity levels overall for the two most commonly used forms of the drug. This is tempered, however, by the analysis of a very small number of seizures in 2004/05 (n=10), and the fact that they were all of small seizures of the drug (two grams or less), which have, in previously years, been higher in purity than seizures of larger amounts (purity range of 2-81% for seizures of 2 grams or less, and 4-22% for larger seizures analysed in 2003/04). While, again, it is difficult to make inferences from such a small number of analysed seizures, it is notable that the purity range of analysed seizures, which has been steadily increasing in recent years (0.5-50% in 2000/01; 0.1-70.6% in 2001/02; 1.9-78.5% in 2002/03; 2.4-80.5% in 2003/04), had declined in 2004/05 (18.5-35.5%). The particularly high-purity seizures in previous years are unusual by national standards (ACC, 2005) and may reflect the selection of particularly unusual seizures of the drug for analysis by police[11].

Table 18: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1997/98-2004/05

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
<=2 g								
n	*4*	*31*	*9*	*10*	*20*	*30*	*9*	*10*
avg % purity	5 %	5 %	7.4 %	10.4%	26.6%	12.7%	25.6%	32.3%
> 2g								
n	*2*	*8*	*11*	*14*	*28*	*13*	*14*	-
avg % purity	7 %	21 %	6.6 %	3.6 %	19.2%	11.2%	9.8%	-
Total								
n	*6*	*39*	*20*	*24*	*48*	*43*	*23*	*10*
avg % purity	**6 %**	**8 %**	**7 %**	**6.4 %**	**22.2%**	**12.2%**	**16.9%**	**32.3%**
Range in % purity	3-8%	2-59%	2-26%	0.5-50%	0.1-70.6%	1.9-78.5%	2.4-80.5%	18.5-35.5%

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

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

Table 19: Purity of Tasmanian seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 2001-June 2005

	Jan-Mar 2001	Apr-Jun 2001	Jul-Sep 2001	Oct-Dec 2001	Jan-Mar 2002	Apr-Jun 2002	Jul-Sep 2002	Oct-Dec 2002	Jan-Mar 2003	Apr-Jun 2003	Jul-Sep 2003	Oct-Dec 2003	Jan-Mar 2004	Apr-Jun 2004	Jul-Sep 2004	Oct-Dec 2004	Jan-Mar 2005	Apr-Jun 2005
<=2 g																		
n	*9*	*1*	*1*	*6*	*12*	*1*	*3*	*4*	*4*	*19*	*2*	*2*	*4*	*1*	*10*	-	-	-
median % purity	3.2%	5.2%	9.0%	31.1%	26.0%	6.7%	6.4%	5.9%	13.1%	13.1%	40.0%	28.4%	50.6%	16.9%	32.3%	-	-	-
> 2g																		
n	*12*	*2*	*6*	*7*	*13*	*2*	*1*	*4*	*7*	*1*	*8*	*1*	*5*	-	-	-	-	-
median % purity	3.8%	3.1%	5.5%	30.1%	20.0%	18.5%	6.3%	10.4%	12.8%	7.6%	17.4%	15.4%	4.1%	-	-	-	-	-
Total																		
n	*21*	*3*	*7*	*13*	*25*	*3*	*4*	*8*	*11*	*20*	*10*	*3*	*9*	*1*	*10*	-	-	-
avg % purity	3.4%	4.3%	6.8%	30.1%	24.9%	6.7%	6.4%	10.4%	12.8%	13.0%	17.4%	25.6%	4.1%	16.9%	32.3%	-	-	-

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

In previous years, Tasmania Police have reported that the majority of methamphetamine in the Tasmanian illicit drug market is imported into the state, most commonly by members of organised motorcycle groups or particular criminal groups, via post, or domestic sea or air terminals. Law enforcement professionals interviewed in the 2005 study suggested that methamphetamine importation into the state has remained at a similar level in recent years; however, there have been indications in recent years that local production of methamphetamine may be increasing, both from anecdotal reports, and from the interceptions of illegal methamphetamine production laboratories (or 'box labs'). In 1998/99 and 1999/00, no such laboratories were identified in Tasmania, one was identified in the 2000/01 financial year, three in 2002/03, two in 2002/03, and one in 2003/04. Law enforcement key experts reported intercepting four 'laboratories' in the south of the state alone in 2004/05, and that these were equipped with scientific-grade equipment. The methamphetamine produced in these 'laboratories' is based on pharmaceutical pseudoephedrine (a situation unchanged from previous years), and pharmacy-grade reagents (iodine in particular) are often used in the production of the drug. This pseudoephedrine is accessed from individuals purchasing a small number of boxes of the drug (a common component of cold-relief medication) from a large number of pharmacies. Law enforcement professionals interviewed in the current study indicate that these 'pseudo-runners' may be the person producing methamphetamine themselves, or an 'accomplice' who may be 'clean-cut' in manner. Tasmania Police report steadily developing closer relationships with pharmacies and Pharmaceutical Services (Department of Health and Human Services) in recent years, with pharmacies increasingly reporting suspicious pseudoephedrine transactions to police.

In both the 2003 and 2004 studies, law-enforcement key experts reported that there is no evidence for local production of crystal methamphetamine (with local producers generally producing base/paste or powder), but that this form of the drug was commonly imported from mainland jurisdictions. Certainly, given that the majority of pharmaceutical products containing pseudoephedrine are combination drugs, the refinement process required to produce the highly pure crystalline form of methamphetamine would be exceptionally complex and require a detailed understanding of organic chemistry, a skill level which is not required for the production of powder or base/paste methamphetamine. One key expert, a Needle Availability Program worker, noted that local methamphetamine producers had become more experimental with 'cooking' methods in recent months, mixing different ingredients and using shorter 'cooking times'. Certainly, both consumers and key experts noted the presence of brightly coloured or 'fluorescent' preparations of the drug, which were presumed by those reporting on trends to be for 'marketing' purposes (to try to make the drug more attractive to consumers).

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

5.4 Use

Prevalence of methamphetamine use

The most recent survey of methamphetamine use within the general community of Tasmania was undertaken within the 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2005), which sampled 1208 Tasmanian residents aged 14 and over. These results indicated that 1.8% (n~22) had used the drug in the 12 months prior to interview. This is lower than the rate nationally (3.2%) in the 2005 survey, and similar to the findings of the 2001 survey, where 2.1% of those sampled in Tasmania (from a sample of 1,349) reported use of the drug in the preceding year. It would appear that there has been little substantial change in the level of methamphetamine use in the Tasmanian community in recent years, as the proportion of those sampled in the 1998 survey (Australian Institute of Health and Welfare, 1999; sample size = 1,031) reporting use of the drug in the year prior to interview was very similar, at 1.6%. These very slight differences in the 'prevalence' of methamphetamine use across these studies (1.6% of those aged 14 and above in 1998; 2.1% in 2001 and 1.8% in 2005) are within the standard statistical error range for these studies and as such are unlikely to be reflective of meaningful changes in the extent of the use of these drugs in the population.

Methamphetamine use in particular populations

Data from urine screens of Tasmanian prisoners revealed a very low rate of sympathomimetic amines among positive tests, accounting for 3% or less of all positive tests between 1995/96 and 2004/05 (only a single case was identified in 2004/05, being less than 1% of all positive urine screens in this period). These figures may underestimate the level of use amongst this group, however, due to the relatively rapid elimination of this drug from the body.

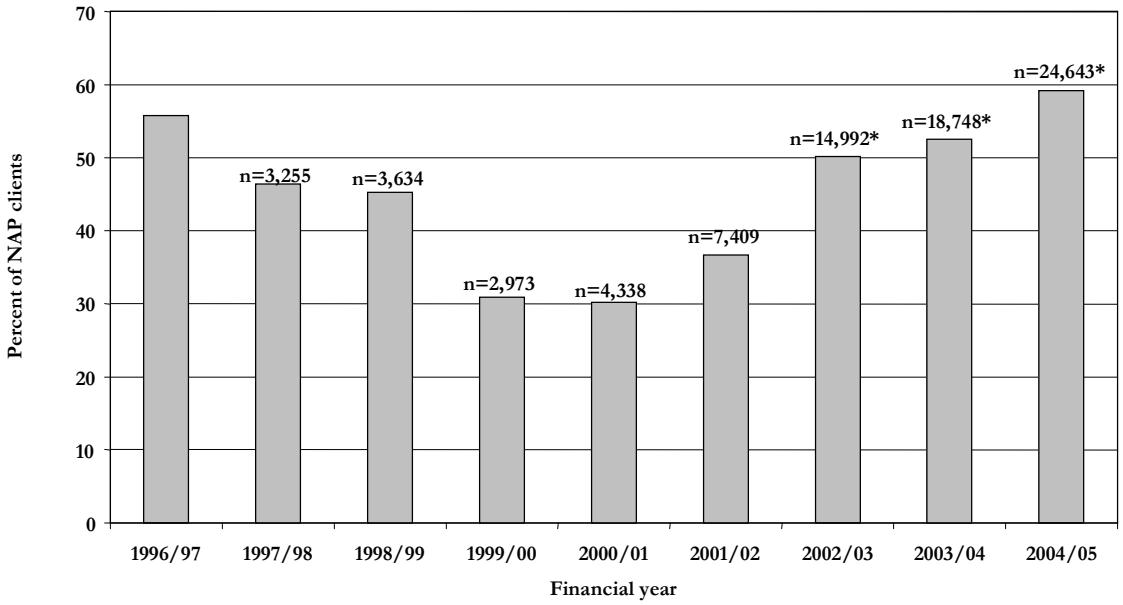
Methamphetamine use among IDU

The Australian Needle and Syringe Program Survey (Thein, Maher & Dore, 2004; Thein, White, Shourie & Maher, 2005: National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs) taKE an annual one-week survey of individuals presenting to Needle Availability Program outlets. Those that participate in the survey are asked, among other things, the last drug they injected. In the 1997 and 1998 surveys, methamphetamine was the last drug injected of around 30% of the Tasmanian participants. In subsequent years, the proportion reporting recent methamphetamine use varied substantially: 20% in 1999, rising to 41% in 2000, and falling again to 25% in 2001. The past three surveys have seen a return to 1997 and 1998 levels: 30% in 2002, 28% in 2003 and 33% in 2004. However, given that the pre-2002 studies only sampled small numbers of clients (23, 51, 25, 27, 28 clients respectively for the 1999-2001 studies, and 151, 118, and 107 clients respectively in the 2002, 2003, and 2004 surveys), such small sample sizes render it difficult to make any reliable inferences regarding trends in use.

Since 1997, clients of non-pharmacy Needle Availability Program outlets have been asked which drug they mostly inject. While methamphetamine has been the most commonly reported single drug used for the past 5 years, the proportion of NAP clients reporting methamphetamine as the drug they most commonly use was in steady decline from 56% in 1996/97 to 30% in 2000/01 (Figure 6). However, this trend has been reversed in the past three financial years, with the proportion increasing to 37% in

2001/02, 50% in 2002/03, 52% in 2003/04, and 59% in 2004/05. While this appears to represent a substantial change in the market over time, these data should be interpreted with caution: firstly, prior to 2001/02, these drug use data were reported by only around 40% of total non-pharmacy NAP clients, predominantly those larger, inner-city outlets, which are biased toward regular, opiate consumers – in recent years, this figure has risen to around 90% of non-pharmacy clients (80% in 2001/02, 88% in 2002/03 and 91% in 2003/04 and 2004/05). As such, recent data may be somewhat more representative and the apparent recent increase in proportions of NAP clients reporting methamphetamine use in the past three financial years, in contrast to trends over preceding years, may simply reflect this more consistent level of reporting across NAP outlets. Secondly, a recent study has estimated that approximately 15% of all injection equipment distributed on a monthly basis is distributed through pharmacy-based outlets (Bruno, 2004, unpublished), where no client data are collected. However, given that the clear bulk of injection equipment distributed through pharmacy outlets (1mL barrels) is appropriate for methamphetamine injection (and not for pharmaceutical opiates, the other type of drugs most commonly injected in Tasmania), it is likely that the majority of this equipment is used for injection of methamphetamine: as such, the non-pharmacy outlet data presented in Figure 6 is likely to be an underestimation of the true proportion of methamphetamine injection amongst Tasmanian IDU.

Figure 6: Proportion of Tasmanian non-pharmacy Needle Availability Program clients reporting methamphetamine as 'drug most often injected', 1996/97-2004/05



Source: Sexual Health, Department of Health and Human Services. *Note: These figures include some estimated data for a number of services, based on average monthly client transactions, where data were missing. Data in relation to the number of clients reporting methamphetamine as the drug most often injected in 1996/97 was not available to the author.

Current patterns of methamphetamine use

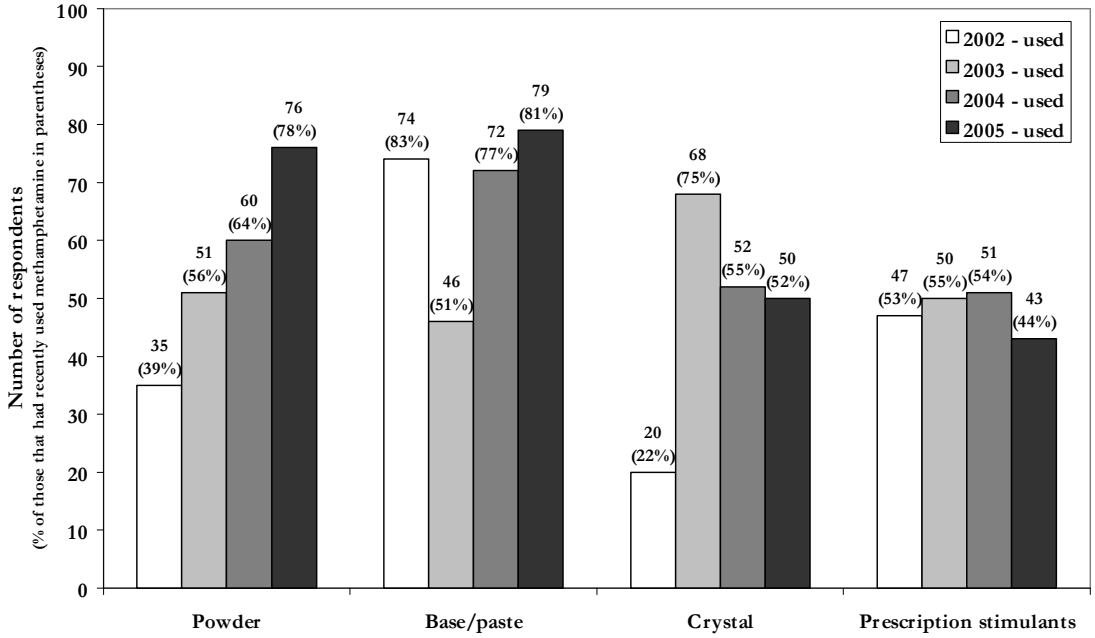
IDU reports of the forms of methamphetamine they had used in the previous six months clearly show that a wide range of forms and potencies of the drug are available to the local consumer community. Seventy-eight percent of those recently using any form of methamphetamine or pharmaceutical stimulant reported using powder form methamphetamine (n=76), and 81% (n=79) had recently used 'base/paste' methamphetamine, with 52% (n=50) reporting recently using crystalline methamphetamine. Similar to preceding surveys, use of liquid form methamphetamine (often known as 'ox blood') was extremely rare in the previous six months (1%, n=1). None of the participants in the current study reported *licit* use of pharmaceutical stimulants (i.e. use prescribed by legitimate prescription), but use of illicitly accessed tablets was seen in a minority of participants (44% of those using any form of methamphetamine or pharmaceutical stimulant in the past six months, n=43), with such use of dexamphetamine (n=29) more common than methylphenidate (n=14; with 11 people reporting recent use of both pharmaceuticals).

The patterns of use of the differing 'forms' of methamphetamine and pharmaceutical stimulants in the preceding six months by IDRS IDU participants across the 2002 to 2005 studies (Figures 7 and 8) displays the changing face of the local methamphetamine market in this time. There are two major changes apparent in these data. The first has revolved around the availability, and therefore use, of crystalline methamphetamine. In the 2002 study, use of this form of the drug was quite rare, consumed by just 22% of methamphetamine-using IDU in the preceding six months, with only 3% nominating it as the methamphetamine form they had most often used in this time. However, in the 2003 study, not only had recent use of this form more than trebled to 75% of those recently using methamphetamine but it was also the form most commonly used by the largest proportion of those using the drug (45%). In the 2004 and 2005 samples, both the proportion of the cohort reporting recent use of crystal methamphetamine (55% of all methamphetamine consumers in 2004, 52% in 2005) and the proportion reporting this as the form they had predominantly used in the preceding six months (15% in 2004, 9% in 2005) were substantially lower, representing a sustained decline from the level of availability and use of crystalline methamphetamine since the 2003 survey. Use of the 'base/paste' form of methamphetamine has been the opposite of that for the use of crystalline methamphetamine: in 2002, this was the form recently used by the majority of the IDU cohort (83% of those recently using methamphetamine), and was similarly the form of the drug most often used by the majority of consumers (65% of those recently using methamphetamine). Both overall use (51% of all recent methamphetamine consumers) and predominant use (24%) declined sharply in 2003 when the availability of crystal methamphetamine increased; however, these rebounded to a stable level in the 2004 and 2005 studies, consistent with that in 2002, with the majority of recent methamphetamine consumers reporting recently using this form (77% in 2004 and 81% in 2005), and 'base/paste' returning as the form most commonly reported as being predominantly used by consumers (43% in 2004, 48% in 2005).

The other major change in the 'forms' of methamphetamine used by the IDRS IDU participants in recent years has been the steadily increasing use of powder form methamphetamine, which has increased from 39% of those recently using methamphetamine in the 2002 study, to 56% in 2003, 64% in 2004 and 78% in 2005 – a doubling in the extent of recent use among IDU cohorts in this four year period. The proportion of recent methamphetamine consumers reporting powder as the form they

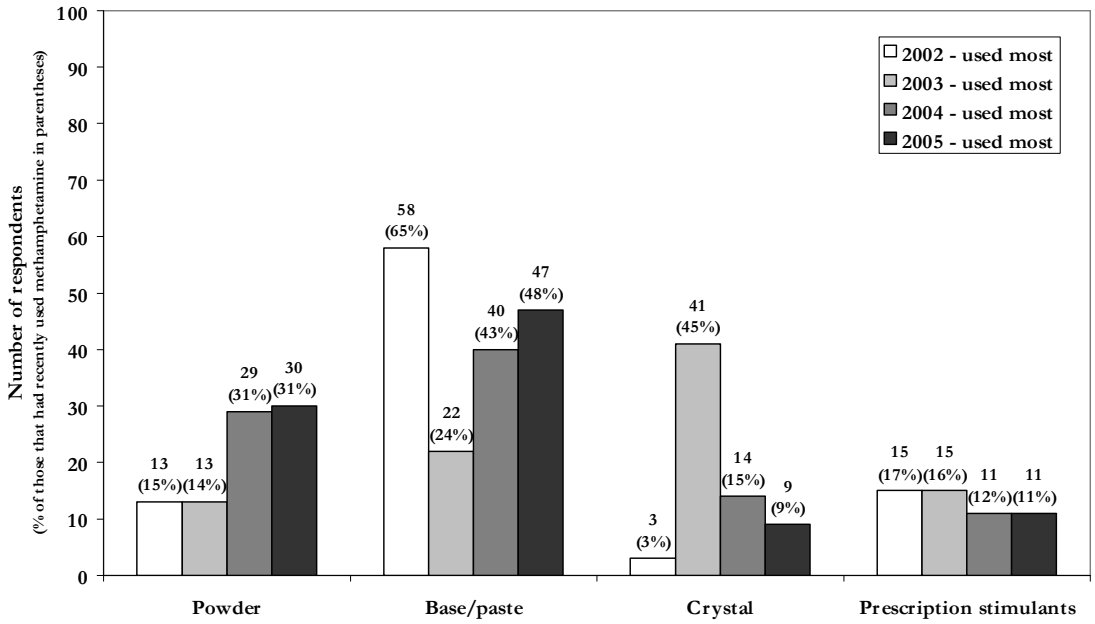
had predominantly used in the six months prior to interview has similarly doubled between the 2002 (15%) and 2005 (31%) study; however, the 'base/paste' form of the drug remains that most commonly used among the samples. It is possible that the increase in use of powder form methamphetamine in recent years may be associated with the indications of increasing local production of the drug over time.

Figure 7: Use of various forms of methamphetamine and prescription stimulants among IDRS IDU participants, 2002-2005



Source: IDRS IDU Interviews

Figure 8: Forms of methamphetamine and prescription stimulants most often used among IDRS IDU participants that had used stimulants, 2002-2005



Source: IDRS IDU Interviews

While prescription stimulants such as methylphenidate and dexamphetamine are not themselves methamphetamine, given that almost without exception those that had used diverted prescription stimulants had also used methamphetamine (only two of those participants that had recently used pharmaceutical stimulants had not used some form of methamphetamine in 2005), these pharmaceuticals form an important part of the overall picture of stimulant use amongst these IDU cohorts. The use of these prescription stimulants had remained relatively stable across the 2002 to 2004 IDRS studies, being used in the preceding six months by 53%, 55% and 54% of recent methamphetamine/pharmaceutical stimulant consumers interviewed in each study respectively. This level of recent use had dropped in 2005 to 44% of recent methamphetamine/pharmaceutical stimulant consumers. However, the proportion of those reporting that they had used diverted pharmaceutical stimulants more often than methamphetamine in the preceding six months has remained relatively stable across the past four surveys (17% of recent methamphetamine/pharmaceutical stimulant consumers in 2002; 16% in 2003, 12% in 2004 and 11% in the current study).

Ninety-five percent of the IDU sample reported using some form of methamphetamine in the six months prior to interview (a further two participants reported using diverted pharmaceutical stimulants but not methamphetamine), with all of these individuals reporting recently injecting these drugs. The median frequency of use of any form of methamphetamine/pharmaceutical stimulants was 48 days in the preceding six months (which relates to approximately twice per week on average), ranging between 1 and 180 days in this time. In the previous years of the IDRS study in Tasmania, there has been a slow increase in the proportion of IDU participants reporting recent use of methamphetamine (83% in 2000; 85% in 2001; 89% in 2002; 91% in 2003 and 94% in 2004), although the median frequency of use of the drug in the preceding six months has remained relatively stable (25 days in the preceding six months in the 2000 cohort; 24 days in the 2001 sample; 25 days in 2002; 20 days in 2003; and 22 days of the preceding six months in the 2004 cohort). This slow increase in use has occurred despite a similar proportion of the IDU cohorts in each study reporting an opiate as their drug of choice (two-thirds or more in each sample). In the current cohort, however, a smaller proportion reported an opiate as their drug of choice (54%: with a concurrent increase in the proportion regarding methamphetamine as their preferred drug, from 19% in 2004 to 34% in 2005), and this may underlie some of the change to a higher proportion of the current participants reporting recent use of methamphetamine/pharmaceutical stimulants (97%), and the doubling of the median frequency of such use, with the participants in the current study reporting using these drugs on a median of 48 out of the preceding 180 days, compared to 22 days in the 2004 cohort).

All of the IDU participants interviewed had used some form of methamphetamine at some stage in their lives, and, as noted above, all but three of the current cohort had used some methamphetamine or pharmaceutical stimulant in the preceding six months. Despite this, just one-third of the sample (34%) indicated that methamphetamine was their drug of choice. Of these consumers, the majority (85%, n=29) reported methamphetamine or pharmaceutical stimulants as the drug they had injected most often in the month prior to interview. Of the five IDU that had not used their drug of choice most often in the previous months, four had instead most commonly used methadone (all but one of whom were receiving methadone maintenance therapy), and one, morphine. All of those that reported methadone as the drug they had most often injected in the preceding month – despite the fact that methamphetamine was their drug of choice – explained this discrepancy as due to the cost of methamphetamine. In contrast,

the one individual that had most often injected morphine rather than their drug of choice in the previous month reported that this was because it was easier for them to access morphine than methamphetamine.

For those consumer participants that had reported methamphetamine or pharmaceutical stimulants as the drug they had most often injected in the preceding month (n=48), the drug class was used for a median of 72 days in the preceding six months (range 2-180), a median frequency of more than three days per week in this time. In the 52 consumers that had most frequently used another illicit drug (all were primary consumers of opioids or benzodiazepines), 49 had used methamphetamine or pharmaceutical stimulants in the preceding six months, at a median frequency of 24 days in the preceding six months (range 1-175 days). It is worth noting that the median frequency of methamphetamine use in both of these subsets is greater than the preceding year's cohort (where those that had most often injected methamphetamine in the preceding month had used the drug on a median of 48 days in this time, and those who had most often injected an opiate had used methamphetamine on a median of 14 days in the preceding six months). As such, the increase in median frequency of use of methamphetamine in the sample overall is not simply reflective of the difference in drug of choice between the 2004 and 2005 cohorts (in 2004, 67% reported an opiate as their drug of choice, in comparison to 54% of the 2005 participants).

Taken together, it is clear that a moderate level of methamphetamine use is common amongst IDU consumers that predominantly inject other drugs. This was supported by comments from key experts reporting on groups of primary consumers of either cannabis or opioids. When discussing the groups of consumers they had recent contact with that had predominantly used cannabis, key experts tended to describe small proportions of such groups who also used methamphetamine recreationally (although three of the eight key experts reporting on groups of primarily cannabis-consuming individuals were not aware of the other drugs used by such individuals), with use of powder form methamphetamine more common in such groups than use of crystal methamphetamine. When reporting on groups of individuals that primarily used some sort of opiate, key experts often considered that a notable proportion of these groups also used methamphetamine (although, again, half of those reporting on primary opiate consumers were not aware of the other drugs these individuals used). These key experts noted that there had been a steady increase in polydrug use – in regards to use of both opiates and methamphetamine – in recent years, with one (a Needle Availability Program worker) reporting that around one-quarter of the opiate consumers they were familiar with would use methamphetamine if they could not access opiates. One other key expert working with methadone maintenance program patients also noted that methamphetamine was used by some of this demographic to self-medicate against the libido-reducing effects of methadone.

While many key experts were unfamiliar with the range of drugs used by the primary methamphetamine-consuming groups they were working with, there were some general usage patterns noted. Firstly, primary methamphetamine consumers described by key experts were generally noted to also use cannabis, with binge alcohol use also common. Key experts reported mixed patterns of benzodiazepine use amongst the methamphetamine consumers they were familiar with, with some reporting that few of these groups used the drug, and others suggesting that it was very common, often used functionally to help people 'come down' from their methamphetamine use, with the formulations most commonly used being diazepam, temazepam (Temaze) and

alprazolam. Key experts also noted some ecstasy or hallucinogen use amongst the primary methamphetamine-using groups they were familiar with, although such use was generally reported as infrequent and that use of these drugs was rarely part of the picture of drugs causing concern to those consumers presenting for problems with substance use. Key experts working in needle and syringe availability programs noted overlaps of half or less – of those that primarily used methamphetamine – also using opiates such as morphine or methadone. Use of heroin, diverted buprenorphine, inhalants, or cocaine were very uncommon among the primary methamphetamine consumers described by key experts.

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Arrest data for methamphetamine-related offences indicate a marked increase in the number of arrests between 1998/99 and 2000/01, with this upward trend sustained into 2001/02 (Table 20). The main increase over this period related to those charged with 'consumer'-type offences (such as use and possession), consistent with reports of increased availability and use of methamphetamines, although there was a concomitant, albeit less marked, increase in the number of supply-type arrests in this period. The 2002/03 financial year saw a decline in the number of arrests, with this reduction relating to a decline in the number of arrests for consumer-type offences rather than that of providers. In the 2003/04 financial year there was a continued reduction in the numbers of methamphetamine-related arrests, with both consumer and provider arrest rates affected; however, arrest rates increased in the 2004/05 financial year for both offence types. While there have been some slight variations in the number of arrests in recent years, it is clearly apparent that there has been a marked and sustained increase in arrests in relation to methamphetamine in recent years, with arrest rates for both consumer and provider offences being substantially greater than those seen prior to 2000/01.

In general, key experts noted no real changes in the type or extent of criminal activities engaged in during the preceding six months by the primary methamphetamine-consuming groups that they were familiar with.

While key experts noted that some of the members of these groups engaged in shoplifting or petty/opportunistic property crime to financially support their substance use, none reported any recent changes in such activity. However, one key expert working in a drug treatment context noted an increase in clients presenting for methamphetamine-related problems that had a history of engaging in high risk crime and burglary. While this particular report may simply be reflective in changes to referrals to a particular service, several consumers reported recent changes in crime related to methamphetamine use in recent months: one noted … *"a different culture is developing – people are handling their drugs less well – getting involved in crime and freaking out…"*, another that *"(people are doing) more crimes, more burg(larie)s to get tastes the next day – people that didn't used to steal do it now…",* and another reported that … *"(people are) doing more crime to get more drugs because their tolerance is right up – (people are) getting more aggressive to get drugs"*.

While three key experts noted no changes in dealing in recent months amongst the methamphetamine-consuming groups they were familiar with, one reported an increase in this time, with similar reports from consumers, with two noting an increase in younger people selling methamphetamine in recent months (with single reports of people in their

early teens selling the drug on behalf of someone else, and an increase in females in their early 20s selling the drug, but not necessarily using it themselves).

Table 20: Consumer and provider arrests for methamphetamine and related substances, 1996/97-2004/05

	1996 /97 n	1997 /98 n	1998 /99 n	1999 /00 n	2000 /01 n	2001 /02 n	2002 /03 n	2003 /04 n	2004 /05† n
Consumers									
Female	3	5	0	4	9	18	8	10	9
Male	15	9	4	14	51	53	34	21	34
Unknown	0	1	2	2	0	0	0	0	0
Total	18	15	6	20	60	71	42	31	43
Providers									
Female	0	0	0	0	1	6	2	1	3
Male	2	0	1	7	9	12	17	7	23
Unknown	0	0	0	1	0	0	0	0	0
Total	2	0	1	8	10	18	19	8	26
Total arrests	20	15	7	28	70	89	66	39	69

Source: Australian Crime Commission (previously the 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.

†Note: Data reported by the ACC differ slightly to that reported by Tasmania Police SIS for 2004/05, and ACC data have been reported for consistency with previous years. SIS data suggest 77 consumer arrests (20 female, 57 male) and 29 provider arrests (27 male, 2 female), and a further 18 where consumer/provider status and gender were not recorded, although these related to methamphetamine *and related drugs such as dexamphetamine and pseudoephedrine.*

There were mixed opinions from key experts in relation to changes in violent crime amongst the methamphetamine consumers they were familiar with – four noted no changes in such behaviours in recent months, while four noted recent increases in violent behaviour related to methamphetamine use in the preceding six months. While some noted that this may reflect recent changes in legislation and mandatory reporting of incidents (for example, domestic violence incidents), one emergency services officer noted an increase in violent offences related to methamphetamine use (although this related to an extremely small number of cases in the preceding six months) and one key expert involved in treatment noted a recent increase in severity of violent incidents, but not the overall number of such incidents, among the methamphetamine clients they were working with. One consumer also noted an increased aggression amongst the methamphetamine consumers they were familiar with in recent months. As all of these reports related to a small number of cases or anecdotal experiences, it is unlikely that these reflect any larger or systematic trend toward increased aggression amongst this demographic.

None of the key experts noted any change in the level of engagement in fraud by these groups, generally noting this as uncommon amongst this demographic. However, two

key experts noted an increase in the number of methamphetamine-consuming clients they were familiar with that were engaged in sex work, with one consumer reporting a similar change in recent months.

5.5.2 Health

While several key experts noted an increase in the purity of available methamphetamine in the past year, none noted any changes in the experience of methamphetamine 'overdose' in this time. Emergency service (ambulance) officers noted an increase in attendance to methamphetamine-related incidents in recent months, but these were few in number (one or two in the preceding six months) and related to behavioural (aggression) or psychiatric (paranoia) effects of the drug. Several consumers reported recent incidence of swelling or infections in their arms associated with methamphetamine injection in recent months, and while three key experts noted little change in injection-related health problems associated with the drug in recent months, one health professional key expert noted that consumers had attributed use of the 'base/paste' form of methamphetamine as a cause of cellulitis; and another similarly qualified key expert noted a recent increase in subacute bacterial endocarditis (infection of the valves of the heart) which was regarded by clients as being associated with methamphetamine injection. While it is possible that these experiences can be attributed to methamphetamine it is also possible that these could be caused by re-use of non-sterile injecting equipment, and, as is discussed in Section 10.4 below, a substantial proportion of the current cohort reported reuse of their injecting equipment in the preceding six months. Regardless of the cause, however, such reports of increased occurrence of these types of health effects amongst local consumers merits attention in future studies and by frontline workers.

As noted in previous sections, methamphetamine appears relatively easily available to local IDU populations, and there are some indications of an increasing level of use generally. While key experts did not note any marked change in the number of people presenting to services for methamphetamine-related issues, in previous years this has been reported as a slowly emerging trend in the state. Data from the Alcohol and Drug Minimum Data Set provide some support for this suggestion, with the number of treatment episodes where methamphetamine was the principal drug of concern increasing in recent years (n=155 in 2000/01, n=161 in 2001/02, and n=180 in 2002/03). However, given that the overall treatment numbers have increased in this time, the proportion of such clients has been declining in this dataset over that period (12.1% in 2001/02 to 7.9% in 2002/03). The proportion of calls to the Alcohol and Drug Information Service (ADIS) telephone line requesting information or assistance in relation to methamphetamine in recent years (see Section 10.1) have similarly slightly increased in the past three financial years.

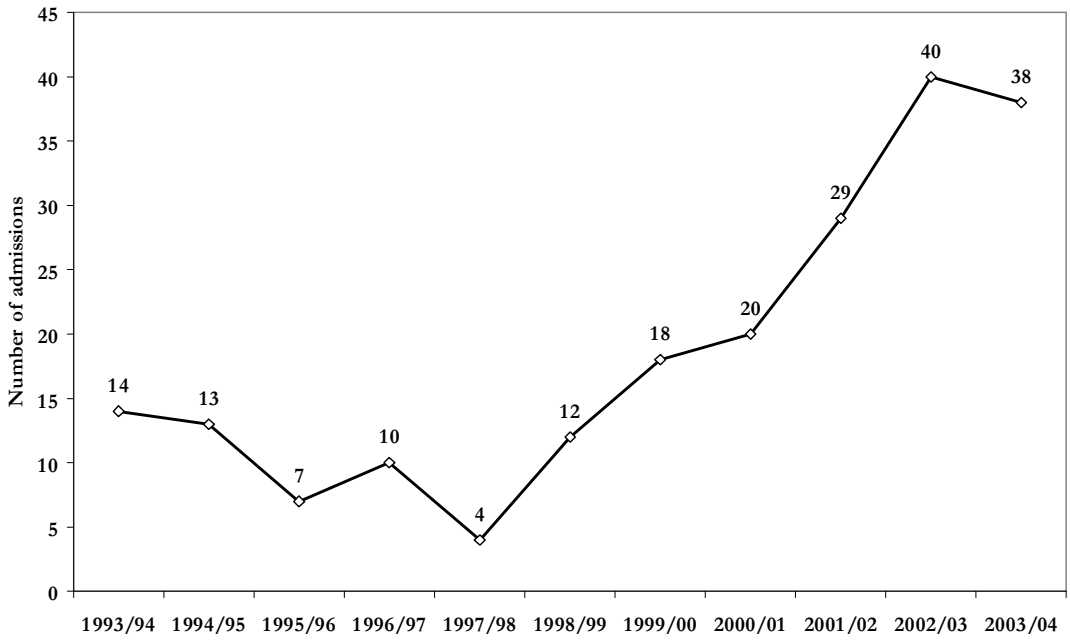
Several key experts noted that changes in the way that the individuals they were familiar with were consuming methamphetamine in recent months were causing adverse health consequences. One key expert, a Needle Availability Program worker, noted that some of the consumers they were familiar with were using the same amounts of methamphetamine as they had done previously, despite the drug being more potent, with the result that these consumers were using for more extended periods ('longer binges'). Similarly, the higher potency and availability of the drug was noted as an attraction to primary opioid users to consume the drug more often, and, as such, producing an increase in polydrug use amongst consumers. Several key experts noted that such an increased frequency of use, or increased binge periods, were producing secondary

consequences in some consumers, with insufficient sleep and nutrition problems exacerbating pre-existing mental health problems. Other key experts noted a decline in self-care (such as hygiene) in recent months amongst some consumers that were using the drug more frequently or for more extended periods.

Hospital morbidity data in relation to use of drugs has been provided by the Australian Institute of Health and Welfare for the 1993/04 to 2003/04 financial year periods (Roxburgh & Degenhardt, 2006). These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where methamphetamine use was recorded as the 'principal diagnosis'; namely, where the effect of methamphetamine was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These were figures based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

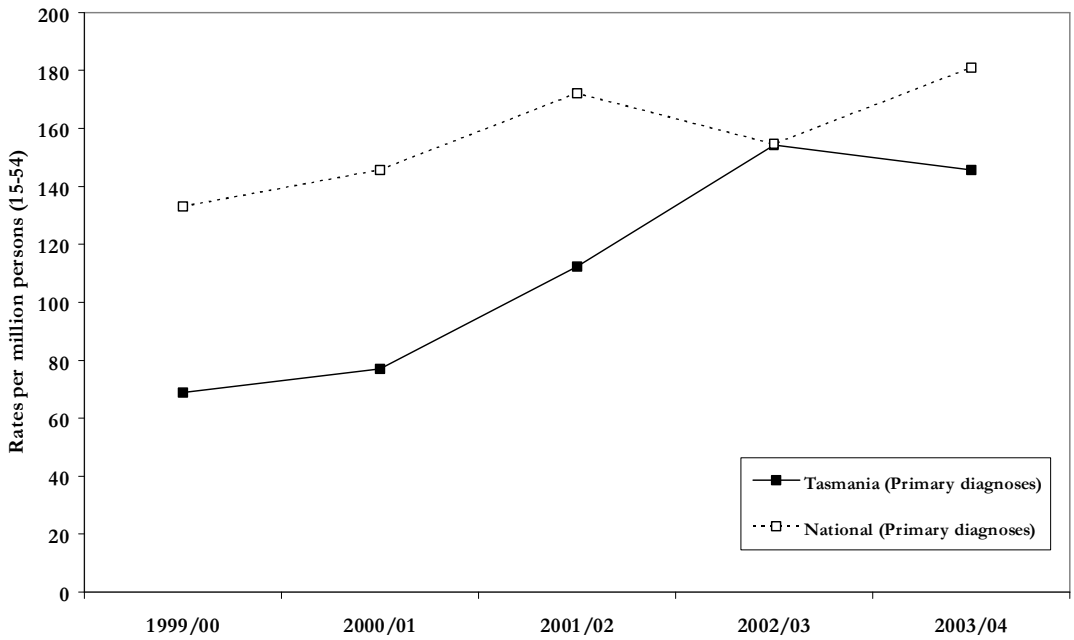
Tasmanian public hospital admissions where methamphetamine use was noted as the principal diagnosis are presented in Figure 9 below. It is clear that, following a relatively stable period between 1993/94 and 1998/99, where there were less than 15 such cases per annum, the number of admissions where methamphetamine use was the principal diagnosis steadily increased between 1999/00 and 2002/03, approximately doubling during this period, with rates appearing to stabilise between 2002/03 and 2003/04. When the population-adjusted rates of Tasmanian admissions are compared with those nationally (Figure 10), two trends are notable: firstly, that both local and national admission rates were increasing steadily between 1999/00 and 2001/02, although local population-adjusted rates were substantially lower than the national figures during this period (with Tasmanian admission rates half that of the national figures in 1999/00 and 2000/01, and two-thirds of the national level in 2001/02). Secondly, the national admission rates for methamphetamine-related primary diagnoses began to plateau after steady increases in previous years in 2001/02, a trend which occurred in the Tasmanian context a year later (possibly reflective of the inclusion of data from the detoxification service for the first time in 2002/03). As such, in the 2002/03 and 2003/04 periods, the local admission rates have been very similar to those seen nationally: in 2002/03, Tasmanian and national admission rates were consistent at 154 per million persons, and in 2003/04, the Tasmanian rate was 81% that of the national average, at approximately 146 admissions per million population in the 15-54 year age group.

Figure 9: Public hospital admissions amongst persons aged 15-54 in Tasmania where methamphetamine use was noted as the primary factor contributing to admission 1993/04-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Figure 10: Public hospital admissions among persons aged 15-54 where methamphetamine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

5.6 Trends in methamphetamine use

In 2003, a markedly increased availability of crystal methamphetamine, or 'ice', provided a major shift in the local methamphetamine market, at least amongst the demographic sampled in the Tasmanian IDRS. In 2004 a shift in crystal methamphetamine availability – this time in the opposite direction - again caused a major shift in the local market. Tasmania Police reported that two key arrests made late in December 2003 disrupted the local supply chain for crystal methamphetamine in the state, and a clear decline in the use and availability of this form in the drug was apparent in the 2004 IDRS cohort. However, in 2004, the overall level of use of methamphetamine amongst the consumer sample remained similar, or perhaps even increased, with use of the 'base/paste' and powder forms of methamphetamine increasing in particular (Figure 7 and 8).

There have been indications in recent years that there has been a slowly increasing level of methamphetamine use amongst IDU groups generally, apparent amongst both the consumers interviewed for the IDRS study and amongst clients of the state's Needle Availability Program (Figure 6). Assuming this is a genuine trend (as a change is not apparent in the prevalence data available in the National Drug Strategy Household Survey, although this study is arguably unlikely to be sensitive to such changes amongst individuals that inject drugs over these timeframes), then there are three main factors that may have contributed to such a shift: an increase in the *number* of people using the drug; an increase in the *frequency* of use of methamphetamine amongst consumers; and/or an increase in *polydrug* use amongst previously predominant opiate consumers. Certainly, there were indications from both the consumers and key experts interviewed in the current study that all three of these factors were apparent.

When asked about recent changes in the types or number of people using drugs in recent months, a substantial number of consumers, more than one-third of the sample (n=34), reported an increase in the *number* of people they were aware of that were using methamphetamine in recent months. Six key experts echoed this opinion. In particular, use was noted as increasing into 'younger' age groups (reported by 22 consumers and 2 key experts), with these groups commonly described as ranging between 13 and 18 years of age. This trend has also been reported in previous years, but not by so large a proportion of the consumer sample. Also similar to previous years, expansions into methamphetamine use by teenage female groups, and higher socio-economic groups, were reported by consumers (described as 'people in full-time employment', 'better dressed' people, and also noted by key experts involved in treatment or working in needle availability outlets) – with this trend described evocatively by one consumer as *"rich kids trying to play poor, romanticising being a junkie"*.

An increase in the *amount* of methamphetamine used by consumers was also commonly reported: with 15 of the IDU cohort noting a recent increase in the frequency at which the people they were familiar with were using the drug, with such a change apparent in groups across the age span (14-60) and in consumers of both genders, and again a similar trend was also noted by one key expert. Certainly, an increase in the median frequency of methamphetamine use was apparent in the current consumer cohort interviewed in the 2005 IDRS study when compared with previous years (even when taking into account the slight change in demographics between samples). While marked changes in the level of polydrug use were not apparent in the current cohort, several key experts noted that there had been a slowly evolving trend to increased polydrug use in the consumers they were working with (with this issue noted by both Needle Availability Program staff and

maintenance pharmacotherapy treatment workers in particular, and generally conceptualised by these individuals as a pattern of mixed opiate and methamphetamine consumption). As has been noted in previous sections, key experts considered this increased level of methamphetamine use within a general context of polydrug use as exacerbating pre-existing problems some of these consumers have (for example, the decreased sleep and nutrition problems associated with methamphetamine use exacerbating behavioural or psychiatric issues). In some support of this, several of the consumers interviewed (n=5) noted an increase in the people they knew shifting from primary opiate use to primary use of methamphetamine in recent months. Such a trend has been noted in the past three IDRS surveys locally and is beginning to be apparent in the characteristics of the participant samples involved in the study (Section 3.1).

The impacts of such changes in methamphetamine use were also being felt by service providers, with several key experts noting an increased complexity, or multiplicity of needs of such consumer groups presenting to services in recent months (although many noted this change had been developing over time and related not only to the substance use of individuals but also financial and housing issues). Key experts working in treatment-related fields also reported concern with the limited range of treatment options available to methamphetamine consumers, and that specific training in working with methamphetamine-consuming clients, and addressing 'challenging' issues (such as aggression or psychiatric comorbidity), needed to be available to workers in the area. Consumers also noted the impact of this change to increased methamphetamine use, with one person noting that there was a *"different culture developing … people are handling their drugs less well – getting involved in crime or freaking out (experiencing psychiatric problems)…"*, with similar changes to involvement in crime, such as burglary, sex work, or increased aggression noted by several other consumers.

5.7 Summary of methamphetamine trends

Table 21: Summary of trends in methamphetamine use

	Methamphetamine 'powder'	'Base/paste' methamphetamine	Crystalline methamphetamine
Price (mode) *'point'/packet (~0.1g)* *gram*	• $50, stable • $300, stable	• $50, stable • $300, stable	• $50, stable to increasing • $340, stable to decreasing
Availability	• Very easy to obtain • Availability stable to increasing	• Very easy to obtain • Availability stable	• Some find access easy, equal numbers find it difficult • Availability stable overall
Purity and form	• IDU reports of low-medium, fluctuating toward decreasing purity • Form: claggy, clear-white/pink/brown	• IDU reports of medium to high purity, quality fluctuating • Form: brown sugar-like, pink-wet or clear jelly	• IDU reports of high purity, quality stable to increasing • Form: white/clear, hard crystals or 'rocks' similar to crushed glass or rock salt
Use	• Use steadily increasing in IDRS IDU samples over time	• Used by more than three quarters of the IDU sample recently, a return to levels close to the pre-2003 increase in availability of crystal methamphetamine • Relatively stable proportion using this form since 2004 study, but frequency of use has increased	• One-half of the sample had used this form recently, stable since 2004, marking a sustained decline from the high level of use in 2003.
Other trends: ▪ Steady increase in the use of methamphetamine, both in the IDRS studies and among clients of the state's Needle Availability Program in recent years, although such a change is not captured in the National Drug Strategy Household Survey prevalence measures. There has been a marked increase in the median frequency of methamphetamine use in the 2005 IDRS consumer cohort in comparison to 2004. ▪ Steady increase in the use of methamphetamine powder in recent years in the IDRS consumer sample, while use of 'base/paste' and crystal methamphetamine have remained stable since 2004 (although the median frequency of use of 'base/paste' has increased, and crystal decreased among the 2005 cohort). ▪ Continued anecdotal reports of increasing local production of methamphetamine (powder and possibly 'base/paste') in recent years, with some supporting evidence for this from slowly increasing number of clandestine laboratories being dismantled by Tasmania Police in this time. ▪ The weight of methamphetamine seizures and number of methamphetamine-related arrests has increased between 2003/04 and 2004/05 ▪ Possible increase in median purity, although based on a small number of non-randomly chosen seizures: 2002/03 median purity = 12%, range 2-79%, n=43; 2003/04 median purity 17%, range 2-81%, n=23; 2004/05 median purity = 32%, range 19-36%, n=10. ▪ Suggestions of a changing local drug consumer culture emerging, with an increase in frequency of methamphetamine use noted among existing consumers, an increase in use of methamphetamine by predominant consumers of opiates, and use of methamphetamine expanding into different demographic groups (an increase in: younger teenage users, female consumers, and 'higher socioeconomic status type' of consumers – a continuation of trends noted in the past two IDRS studies). ▪ Impact of increasing methamphetamine use is being experienced at the level of service providers, with extended methamphetamine 'binges' negatively impacting on the health of some consumers, exacerbating existing health problems; and the limited treatment options for methamphetamine consumers noted as a concern for many in this area.		

6.0 COCAINE

Similar to the patterns in the previous Tasmanian IDRS surveys, only a very small number of IDU (n=4) could comment on any aspect of price, purity or availability of cocaine. However, 46% of the sample indicated that they had tried cocaine at some stage in their lives, with 8 respondents reporting that they had used cocaine in the six months prior to interview (7 had injected, one had snorted, and one consumer had both injected and smoked cocaine in this time). The median frequency of use of cocaine by these 8 participants was five days in the preceding six months (range 1-24 times). The cocaine that these participants had used was exclusively powder. 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.

Only two IDU participants in the current study reported cocaine as being their drug of choice, and no participants reported this as the drug they had most often injected in the preceding month. These individuals had instead most often injected methadone in the month prior to interview. When asked the reasons for this discrepancy, these individuals attributed this to the low availability of the cocaine locally.

6.1 Price

Only three of the current IDU consumer sample could provide information on the price of cocaine, with these participants reporting purchase prices in the last six months of $60 for 0.1g; a median of $200 for 0.5g (n=2, range $120-280), and $400 for 1.0g. This purchase price for a gram of cocaine is somewhat higher than prices in other jurisdictions in 2005 IDRS surveys ($280 in NSW, $250-350 in all other jurisdictions other than Western Australia, where the reported price was $475 per gram (although these estimates are based on extremely small numbers of reports: Stafford, et al, 2006). Only one of these IDU participants could comment on the stability of cocaine prices over time, perceiving this price as remaining stable over the preceding six months. None of the key experts interviewed could comment on the current prices or price changes of cocaine in the preceding six months.

Tasmania Police had been unable to report prices of cocaine from either informant reports or covert bust operations between 1995/96 and 1999/00; however, in 2001 Southern Drug Investigation Services estimated the price of cocaine as $250 per gram, on the basis of an informant report, and the price reported by Tasmania Police remained stable during the remainder of the 2001/02 financial year. Price information for cocaine has not been provided to the Australian Crime Commission between 2002/03 and 2004/05, reflecting the lack of a local market of the drug.

6.2 Availability

Of the three IDU participants that could comment on the local availability of cocaine in the preceding six months[12], one reported that it was 'difficult' for them to access, with the remainder describing it as 'very difficult' (n=2) for them to access the drug in the preceding six months. All three participants suggested that there had been no change in this level of availability in the six months prior to interview. No key experts could comment on the availability of cocaine to the individuals they had contact with.

Of the three IDU participants reporting on cocaine trends, all reported usually accessing the drug from different sources: with one participant purchasing the drug locally, through pre-arrangement with a friend, and the other two participants reporting having the drug sent directly to them from another jurisdiction, either from a friend or a mobile dealer.

While there had been no seizures of cocaine made by Tasmania Police between 1995/96 and 1999/00, two seizures, totalling 29g were made in 2000/01, both by Western Drug Intelligence Services in November, 2000. One seizure of cocaine was made from a person intercepted upon arrival into the state, who was also in possession of a number of tablets of ecstasy. The other seizure resulted from a search of the home of a member of an organised motorcycle gang. There were no seizures of cocaine made by Tasmania Police between 2001/02 and 2004/05.

Just three of the thirty-one key experts reported hearing about use of cocaine among their groups, and where some use was reported, in primary injecting drug user groups, it was generally in very small proportions of their clients that were primarily methamphetamine consumers. Taken together, these reports, and the small number of respondents who had used cocaine in the past six months (n=8) and that were able to report on trends (n=3), 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 three IDU that had purchased and used cocaine locally reported that it was 'high' (n=1) or 'medium' (n=2) in purity, and that this level of purity had remained stable (n=1) in the preceding six months[13]. The last analysed sample of cocaine seized within the state by Tasmania Police was from the first quarter of 2001. This was an amount of less than two grams, and was analysed during the first quarter of 2002 at 44.0% purity.

All eight participants reported that the cocaine that they used in the preceding six months was in powder form, although three noted that the powder had been compressed into a 'rock'-like clump.

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[12] One of the four participants reporting on some aspect of price did not personally use cocaine and so could not report on availability or purity trends for the drug. The other participants reporting recent use of cocaine had purchased and consumed the drug while in another jurisdiction which precluded them from reporting on local price, purity or availability trends.

[13] The remaining two participants did not feel that they could confidently comment on changes in purity of cocaine as they had not used the drug on sufficient occasions in the preceding six months.

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) reported ever trying cocaine, while only 0.1% (n=3) had used it in the 12 months prior to interview. Findings of the 2001 survey (Australian Institute of Health and Welfare, 2002) were very similar, with 0.2% of those sampled reporting using the drug in the preceding year. In the 2004 National Drug Strategy Household Survey, it was similarly estimated (from the sample of 1,208 participants) that approximately 0.2% of Tasmanians had used cocaine in the year prior to interview, compared with 1.0% of Australians nationally (Australian Institute of Health and Welfare, 2005). This is consistent with the stable, low level of use of cocaine amongst local consumers interviewed in the IDRS study.

Cocaine use among IDU

Only 16 clients of non-pharmacy Needle Availability Program clients in 2004/05 indicated that cocaine was the drug they most often injected. This figure has remained very small over the past eight financial years (Table 22), relating to around 10-30 clients each year. However, it is important to note that, despite there being some discrepancy between NAP outlets in the question asked (some asking 'what is the drug you most often inject', while others prefer 'what is the drug you are about to inject'), it is likely that the question 'what is the drug you most often inject' will tend to underestimate the extent of use of cocaine, as none of the IDU sampled in the IDRS survey reported it as the drug they most often used in the preceding month, despite eight recently using the drug and two indicating that it was their drug of choice.

Table 22: Percentage of Tasmanian non-pharmacy Needle Availability Program clients reporting cocaine as the 'drug most often injected', 1997/98-2004/05

Year	1997 /98	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05
Number of clients reporting cocaine	12	28	19	13	20	36	29	16
Percent of total clients reporting cocaine	0.2%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%	>0.1%

Source: Sexual Health, Department of Health and Human Services

None of the Tasmanian participants in any of the 1995, 1996, 1997, 1998 or 1999 Australian Needle and Syringe Program Surveys (Thein, Maher & Dore, 2004; Thein, White, Shourie & Maher, 2005: 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, although, in 2000, one participant reported last using a combination of heroin and cocaine, with the same report occurring again in 2001 and 2002. None of the 2003 participants (from a sample of 118) nor those

interviewed in 2004 (from a sample of 107) reported last injecting cocaine (Thein, White, Shourie & Maher, 2005). It is important to note that the samples prior to the 2001 study (which sampled 151 clients) are extremely small (6, 18, 23, 51, 25, 27, and 28 for the 1995 to 2000 annual studies respectively). As such, these are of very limited power for the detection of low frequency occurrences such as the injection of cocaine.

6.4.2 Current patterns of cocaine use

Of the eight IDU that reported using cocaine in the preceding six months, the median frequency of use was just five days in the last six months (range 1-24 days). Among the seven consumers that reported recently injecting cocaine, the median frequency of injection was three days in the preceding six months (range 1-24 days) – as the one individual that had only snorted cocaine in this time had done so on five days; and the individual that had both injected and smoked cocaine had injected once and smoked on two occasions in the preceding six months.

Just four of the thirty-one key experts reported hearing about use of cocaine among their groups, and where some use was reported, in primary injecting drug user groups, it was rare and generally in very small proportions of their clients or in primary ecstasy-using groups. A larger proportion of key experts (n=8: three reporting on primarily methamphetamine consuming groups; two on primary opioid consumers and three familiar with primary cannabis-consumer groups) indicated that there was definitely no current use of cocaine amongst the groups they came into contact with, and the remainder could not confidently comment as to the presence or otherwise of cocaine use amongst the consumers they were familiar with.

6.5 Cocaine-related harms

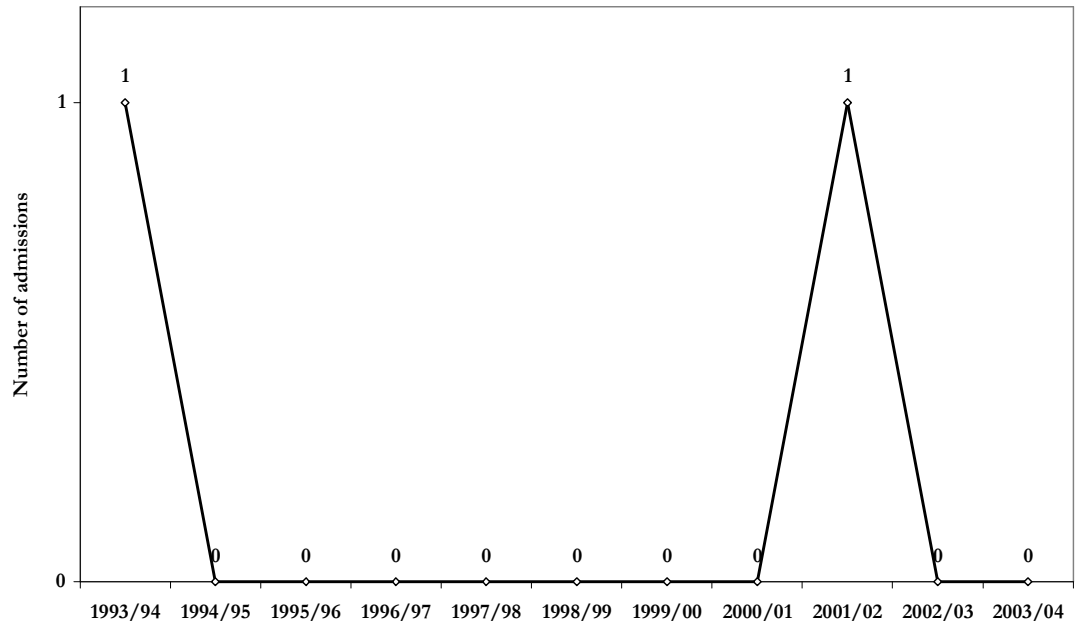
6.5.1 Law enforcement

There have been no arrests made by Tasmania Police in relation to cocaine in the 2003/04 or 2004/05 financial years (Australian Crime Commission, 2005; 2006).

6.5.2 Health

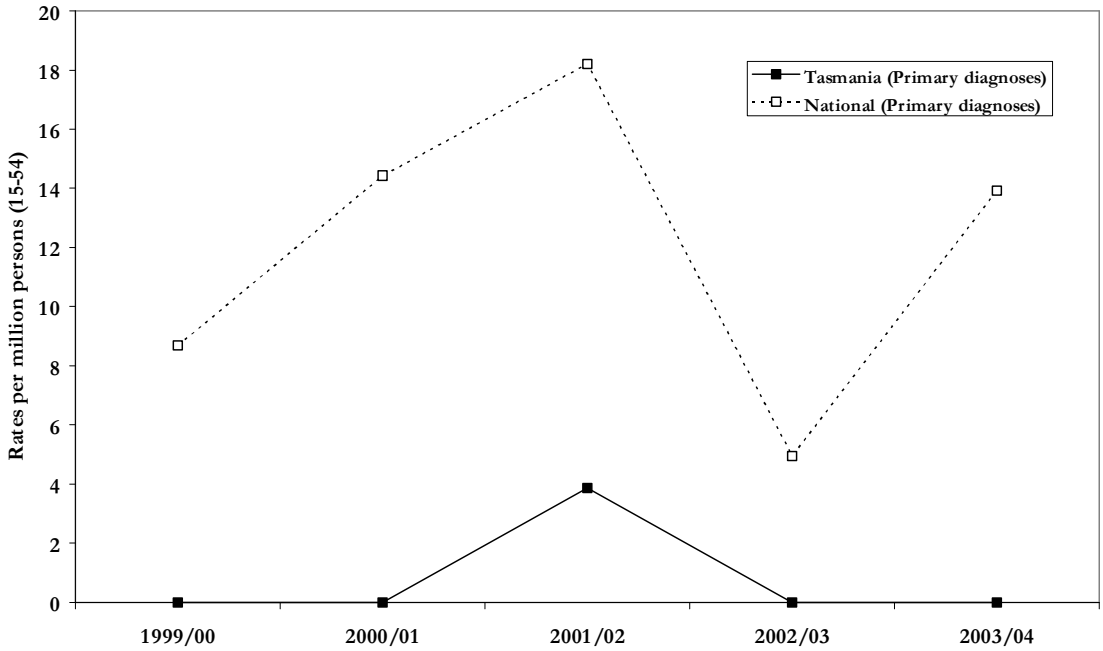
Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare for the 1993/04 to 2003/04 financial year periods (Roxburgh & Degenhardt, 2006). These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where cocaine use was recorded as the 'principal diagnosis'; namely, where the effect of cocaine was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

Figure 11: Public hospital admissions among persons aged 15-54 where cocaine use was noted as the primary factor contributing to admission in Tasmania 1993/04-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Figure 12: Public hospital admissions among persons aged 15-54 where cocaine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Consistent with the apparent low levels of availability and use of cocaine locally, cocaine-related hospital admissions (Figure 11) are virtually non-existent, with only two instances where cocaine was related to the principal diagnosis during the eleven years between 1993/04 and 2003/04. As such, when the local rates of cocaine-related public hospital admissions amongst those aged between 15 and 54 years are compared to the national Australian rate (Figure 12), these are substantially lower, with the total local admissions where cocaine was noted as contributing to the diagnosis remaining 21% or less than that of the national rate between 1999/00 and 2003/04.

6.6 Trends in cocaine use

Examining the extent of use of cocaine among the Tasmanian IDRS IDU participants over the past six years (Table 23) suggests that the level of use of cocaine in this demographic appears to have remained largely similar during this time: generally used by only a minority of participants in the preceding six months (4%-12%), and, in the main, used very infrequently (median frequency of less than monthly use in the preceding six months).

Table 23: Patterns of cocaine use among Tasmanian IDRS IDU participants, 2000-2005

Year	2000	2001	2002	2003	2004	2005
Proportion of sample reporting use of cocaine in the preceding six months	6%	8%	12%	9%	4%	8%
Median days cocaine use in last six months (range in parentheses)	4 (1-40)	5 (1-20)	2 (1-12)	4 (1-74)	2 (1-3)	5 (1-24)
Proportion of IDU sample reporting ever using cocaine	39%	39%	47%	52%	48%	46%

Source: IDRS IDU interviews

As possible indications of changing availability of cocaine in Hobart, three key experts and two of the consumers interviewed noted an increase in people they were familiar with using cocaine in the preceding six months. However, these reports were quite isolated: with two of the key experts noting that they had for the first time been exposed to cocaine in their local work roles in the preceding six months (one key expert was a publican, and one a hospital emergency room physician). One key expert, a law enforcement professional, reported hearing of 'crank' (a cocaine/methamphetamine mixture) in the preceding six months, and of hearing anecdotal reports of an increased local availability of cocaine. One of the consumers reported an increase in cocaine (and other psychostimulant use) among a group of 5 to 10 people they were familiar with, with this group being between 16 and 35 years, and both males and females.

Consistent with these reports, amongst the regular consumers of ecstasy interviewed for the 2005 Tasmanian Ecstasy and related Drug Reporting System (EDRS: Matthews & Bruno, 2006), there was a notable increase in the proportion reporting recently using cocaine – increasing to 20% of the 100 consumers interviewed, from 10% in the 2004 survey and 7% in 2003. However, similar to the IDRS injecting drug consumer cohort,

the use of cocaine amongst the EDRS participants was infrequent, with a median frequency of just once in the preceding six months (range 1-5 days).

6.7 Summary of cocaine trends

In summary, it appears that the availability and use of cocaine in Hobart is very low, at least within the populations surveyed in the current study or accessing government services. The cocaine that is used by Tasmanian IDU appears generally to be directly imported by consumers from dealers in mainland states. These patterns seem to have remained reasonably stable over the past few years. However, it is noteworthy that around half of the Tasmanian IDU sample over the past three years have reported lifetime use of cocaine, an increase from patterns seen in the 2000 and 2001 surveys, and there are anecdotal suggestions of changing availability of the drug locally, and indications of use among different populations of Tasmanian drug consumers (Bruno & McLean, 2004; Matthews & Bruno, 2005, 2006). As such, trends in cocaine markets in the state merit continued examination.

7.0 CANNABIS

Among the IDU respondents, cannabis was the most commonly used illicit drug, with all of the sample using it at some time in their lives, and 87% using in the six months prior to interview. IDRS IDU participants were asked to comment separately on trends around 'bush' (outdoor-grown) cannabis and indoor/hydroponically-grown cannabis. Eighty of the IDU cohort could comment confidently on aspects of price, potency, or availability of indoor/hydroponically-grown cannabis, 65 reported on trends for bush/outdoor cannabis, with 60 reporting on trends for both 'types'. Almost all key experts reported, or suspected (some did not directly discuss cannabis use due to the nature of their professional roles) some level of cannabis use within the populations they had contact with.

Eight key experts reported on groups that were primary users of cannabis. These key experts included two individuals associated with the law enforcement drug diversion program, one law enforcement officer, a publican, two counsellors within the education sector, and two counsellors working in youth-specific services (one specifically with alcohol and drug issues, another in the area of comorbidity).

Key experts were familiar with cannabis users from all suburbs of Hobart. The cannabis users that key experts were familiar with ranged in age from teenagers to people in their sixties, although, given that many of these key experts worked in youth-specific or early intervention programs, the majority were in their late teens to early/mid-twenties. The groups of cannabis users described by key experts ranged from around one-third to eighty percent male, although in general they were slightly male predominant. In keeping with the general demographic profile of Hobart, the cannabis consumers discussed by key experts were predominantly of an English-speaking background, with very small numbers of non-English speaking or indigenous consumers. There were quite mixed patterns of employment among those described, although – given that many of the key experts were working in youth-oriented areas – many of the consumers were currently engaged in education at some level. It was also rare for these consumers that the key experts were familiar with to have a previous prison history.

7.1 Price

The modal market price reported by the IDU for indoor/hydroponically-grown cannabis was $25 per gram (n=29, median = $25, range $10-25), and $300 per ounce (n=43, median $300, range $200-400). These were slightly higher than the modal market prices reported for bush/outdoor cannabis, at $25 per gram (n=22, median = $23.75, range $10-25) and $200 per ounce (n=41, median = $200 range =$80-350). Key experts reported similar prices of $25 for 1-2 grams of indoor or outdoor cannabis (n=4); $70 per quarter-ounce (7 grams: n=1); and $250-300 per ounce of outdoor cultivated cannabis (28 grams: n=1) and $300-350 per ounce of indoor cultivated cannabis (n=1). 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 purchase of bush/outdoor grown cannabis, a $25 'deal' was reported to contain 1.0-28.0g (mode 1.0g, and typically 1.0-4.0g, n=11) of cannabis, with 2.0-7.0g

(mode 7.0g, n=9) in a $50 'deal'[14]. The modal last purchase price for a quarter-ounce of outdoor cannabis was $50 (median $70, range $50-90, n=24), and $200 for an ounce (median $200, range $25-350, n=24). The most common amount of outdoor cannabis purchased by the IDU interviewed was quarter-ounce (n=24), and ounce (n=24) amounts. In the preceding three years of IDRS interviews, quarter-ounce amounts have consistently been the most commonly purchased quantities by the consumers interviewed, however, in this time there has also been a trend for smaller numbers of participants to report on purchasing $25 'deals', and larger numbers to report on purchasing ounce quantities (Table 25).

In general, purchase costs for indoor/hydroponically cultivated cannabis were slightly higher than the reported costs for bush/outdoor cannabis. 'Deals' costing $25 contained 1.0-2.0g (mode 1.0g, n=22), of indoor-cultivated cannabis, with $50 'deals' containing 2.0-3.5g (mode 3.0g, n=4). The more commonly-purchased quarter-ounce amounts of hydroponically cultivated cannabis were reported to be a modal last purchase price of $90 (median = $80, range $70-100, n=37), $40 more than the comparable figure for outdoor cannabis. Modal last purchase prices for an ounce of hydroponically cultivated cannabis was $100 more than that for outdoor cannabis, at $300 (median = $290, range $220-350, n=26). The modal prices of cannabis reported by IDU in the past years of the local IDRS studies are summarised in Table 26 below. Similar to the reports for purchases of outdoor-cultivated cannabis, quarter-ounce and ounce amounts were the most commonly purchased quantities (by n=37 and 26 respectively in the preceding six months), although, in comparison to outdoor-cultivated cannabis, a greater number of consumers reported purchasing $25 'deals' of indoor (Table 26).

The majority of IDU (67% overall, 61% in relation to outdoor cannabis and 71% in relation to hydroponic cannabis: n=40 and 54 respectively[15]) and key experts (100%, n=4) reported that the price of cannabis had not changed in the last six months. A noteworthy minority reported decreasing (16%, n=11) or fluctuating (12%, n=8) prices for outdoor-cultivated cannabis in the preceding six months, and, by contrast, increasing prices for indoor-cultivated cannabis (17%, n=13) in this time.

Despite IDU reports of stable or decreasing prices of outdoor-cultivated cannabis in recent months, comparison of reported purchase prices across the 2003 to 2005 studies suggests the opposite: with the median price for quarter-ounce amounts increasing $10 between the 2004 and 2005 studies (there was no single modal price in 2004) and, while the modal prices for ounce purchases remained similar, the price ranges for both ounces and quarter-ounce amounts both increased in 2005 (from $35-85 to $50-90 for quarter-ounce, and $100-260 to $25-350 for ounces respectively: Table 25). For indoor-cultivated cannabis, the price ranges for the most common purchase amounts remained unchanged between the 2004 and 2005 surveys, but the modal purchase prices for a quarter-ounce increased $10, and for an ounce $50, in this time (Table 25).

[14] This amount is likely to be skewed by a substantial number of IDU purchasing quarter-ounce amounts for $50.

[15] Of the 88 IDU participants reporting on price, purity or availability trends for either 'type' of cannabis, 23 could not comment on trends in relation to 'outdoor'-cultivated cannabis, and 12 could not comment on trends in relation to 'indoor'-cultivated cannabis.

Table 24: Modal prices of cannabis (all 'types') purchased by IDU in Hobart, 2000-2002 IDRS (range in parentheses)

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

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

Table 25: Modal prices of 'bush'/outdoor-cultivated cannabis purchased by IDU in Hobart, 2003-2005 IDRS (range in parentheses)

	2003 IDRS			2004 IDRS			2005 IDRS		
Unit	**Modal amount (grams)**	**Modal price**	**n**	**Modal amount (grams)**	**Modal price**	**n**	**Modal amount (grams)**	**Modal price**	**n**
$10 deal	1.0 g *(1.0-3.0 g)*	$10	4	1.0g (0.5-1.0g)	$10	3	1.0 g* *(1.0 g)*	$10	2
$25 deal	2.0 g *(1.0-7.0 g)*	$25	27	*1.0g (1.0-3.0g)*	$25	24	1.0 g *(1.0-28.0 g)*	$25	11
$50 deal	7.0 g *(3.5-14.0 g)*	$50	15	*7.0g (5.5-7.0g)*	$50	9	7.0 g *(2.0-7.0 g)*	$50	9
Quarter ounce	7 g	$60* *($25-90)*	29	7g	*$60* ($35-85)*	30	7 g	$50 *($50-90)*	24
Half ounce	14 g	$80* *($50-130)*	7	14g	*$100 ($70-120)*	6	14 g	$120 *($100-200)*	5
Ounce	28 g	$150* *(100-200)*	20	28g	*$200 ($100-260)*	21	28 g	$200 *($25-350)*	24

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

Table 26: Modal prices of hydroponic/indoor-cultivated cannabis purchased by IDU in Hobart, 2003-2005 IDRS (range in parentheses)

	2003 IDRS			2004 IDRS			2005 IDRS		
Unit	**Modal amount (grams)**	**Modal price**	**n**	**Modal amount (grams)**	**Modal price**	**n**	**Modal amount (grams)**	**Modal price**	**n**
$10 deal	0.6 g* *(0.5-1.0 g)*	$10	3	*0.5g (0.3-0.5g)*	$10	4	0.9 g* *(0.7-1.0 g)*	$10	2
$25 deal	1.0 g *(1.0-2.0 g)*	$25	46	*1.0g (1.0-2.0g)*	$25	37	1.0 g *(1.0-2.0 g)*	$25	22
$50 deal	3.5 g *(2.0-7.0 g)*	$50	16	*3.0g (2.5-3.5g)*	$50	6	3.0 g *(2.0-3.5g)*	$50	4
Quarter ounce	7 g	$80 *($50-250)*	47	7g	*$80 ($60-100)*	48	7 g	$90 *($70-100)*	37
Half ounce	14 g	$150 *($140-250)*	16	14g	*$150 ($100-180)*	10	14 g	$150 *($100-200)*	9
Ounce	28 g	$300 *($200-350)*	27	28g	*$250 ($150-350)*	27	28 g	$300 *($220-350)*	26

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

Table 27: Cannabis prices in Tasmania reported to the Australian Crime Commission, 1998-2005

	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 1998	$10	$25	$50	$80	$100-120	$160	$200-250	$400	$450
April-June 1998	$10	$25	$50	$80	$100-120	$160	$200-250	$250-350	$350-450
Oct-Dec 1998	$10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300-350	$350-450
Jan-June 1999	$10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300-350	$350-450
Oct-Dec 1999	$5-10	$20-25	$25	$80-90	$90-110	$160-180	$180-230	$300	$350-400
Jan-June 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-400
July-Sept 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-400
Oct-Dec 2000	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-350
Jan-Mar 2001	$5	$25	$25	$80-90	$90-110	$150-160	$170-220	$300	$300-350
April-June 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
July-Sept 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
Oct-Dec 2001	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
Jan-Mar 2002	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
April-June 2002	$5	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
July-Sept 2002	n/r	$20-25	$25	$80	$90	$150	$160	$250-300	$300
Oct-Dec 2002	n/r	$20-25	$25	$90	$90-100	$150	$160	$300	$300
Jan-Mar 2003	n/r	$20-25	$25	$65-75	$100	$125	$180	$250-300	$300
April-June 2003	n/r	$20-25	$25	$65-75	$85-90	$125	$150	$250	$300
July-Sept 2003	n/r	$25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
Oct-Dec 2003	n/r	$25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
Jan-Mar 2004	n/r	$25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
April-June 2004	n/r	$25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
July-Sept 2004	n/r	$20-25	$25	$70-100	$80-100	$100	$150-200	$150-300	$300-350
Oct-Dec† 2004	n/r	$20-25	$25	$70-100	$80-100	$100	$150-200	$150-300	$300-350
Jan-Mar† 2005	n/r	$20-25	$25	$70-100	$80-100	$100	$150-200	$150-300	$300-350
April-June† 2005	n/r	$20-25	$25	$70-100	$80-100	$100	$150-200	$150-300	$300-350

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence), Tasmania Police State Intelligence Services *Note: Reporting criteria were expanded in April 1997 to provide separate data for (outdoor) cannabis head and hydroponically grown cannabis or "skunk". Thus, definitions of what constitutes cannabis "leaf" and "head" may have changed during this time period. †Note: in the 2004/05 ACC report, financial year prices only were reported, but are displayed in the above table in quarters for consistency with previous years.

Tasmania Police provide quarterly figures on the price of covert drug purchases, and reports by experts. According to prices reported to the ABCI (now the ACC), in 2004/05 one gram of cannabis cost $20-25, one quarter-ounce $70-100 and one ounce cost $150-300 (outdoor) and $300-350 (indoor/hydroponic). These prices are similar, but in general slightly higher than the modal purchase prices that IDU nominated in the current study (Table 27).

Tasmania Police report the price of one gram of cannabis hash/resin as $30-50 in the 2001/02 financial year, $20-25 during the 2002/03 and 2003/04 financial years, and $25 in 2004/05. Two IDU participants in the 2004 IDRS study reported purchasing a gram of cannabis hash, reporting prices of $25 and $40 respectively; with one also purchasing a 'cap' of hash oil for $40. None of the consumers interviewed for the 2005 IDRS reported purchasing cannabis hash or hash oil in the six months prior to interview.

7.2 Availability

Across both indoor and outdoor cultivated cannabis, the majority of the IDU sample reported that cannabis was 'very easy' (68%, n=95) or at least 'easy' (29%, n=41) to obtain[16], and that the availability of cannabis had remained stable (78%, n=107) or increased (12%, n=17) in the preceding six months. Key experts echoed these reports, with 75% (n=4) of those able to comment reporting that cannabis was 'very easily' accessed (with the remainder indicating that it was 'easy' for consumers to access, n=1), and that this level of availability had remained stable (66%, n=2) in the six months prior to interview (with a third key expert reporting fluctuating availability of cannabis in this time, in line with seasonal variations). Trends in availability and routes of access will be discussed separately for each type of cannabis below.

In regard to outdoor or 'bush' cannabis, the majority of the IDU commenting believed this to be 'very easily' (66%, n=42), or at least 'easily' (33%, n=21), accessed in the preceding six months, and that this situation had remained stable in this time (78%, n=50). Relatively equal and small numbers of participants reported increased (11%, n=7), decreased (8%, n=5) or fluctuating (3%, n=2) availability of outdoor-cultivated cannabis in the preceding six months. Most IDU reported usually purchasing this type of cannabis from friends (63%, n=40) or at a dealer's home (22%, n=14), with small minorities purchasing from a mobile dealer (8%, n=5), from a 'street' dealer (5%, n=3) or growing the drug themselves (3%, n=2). Participants estimated that it usually took them a median of 17.5 minutes (mode = 10 minutes; range 0-2880 minutes, n=62) to score outdoor/bush cannabis in the preceding six months. It should be noted, however, that four consumers and one key expert noted that there is a traditional seasonal 'dry' or decreased availability of outdoor-cultivated cannabis approximately December and February, at the end of the growing season for cannabis.

More than two-thirds of the IDU reporting on availability of hydroponic/indoor-cultivated cannabis (70%, n=53) regarded it as 'very easily' accessed in the preceding six months, with the majority of the remainder (26%, n=20) reporting that it was 'easy' for them to access the drug (4%, n=3 suggested that it was difficult to access) in this time. More than three-quarters of these respondents (77%, n=57) believed that availability of this type of cannabis had remained stable in the preceding six months, with 14% (n=10)

[16] Of the 88 individuals reporting on availability of either 'form' of cannabis, 12 could not comment on the ease of access to indoor-cultivated cannabis and 24 could not confidently comment on availability of outdoor-cultivated cannabis, and as such these individuals are excluded from the calculated proportions.

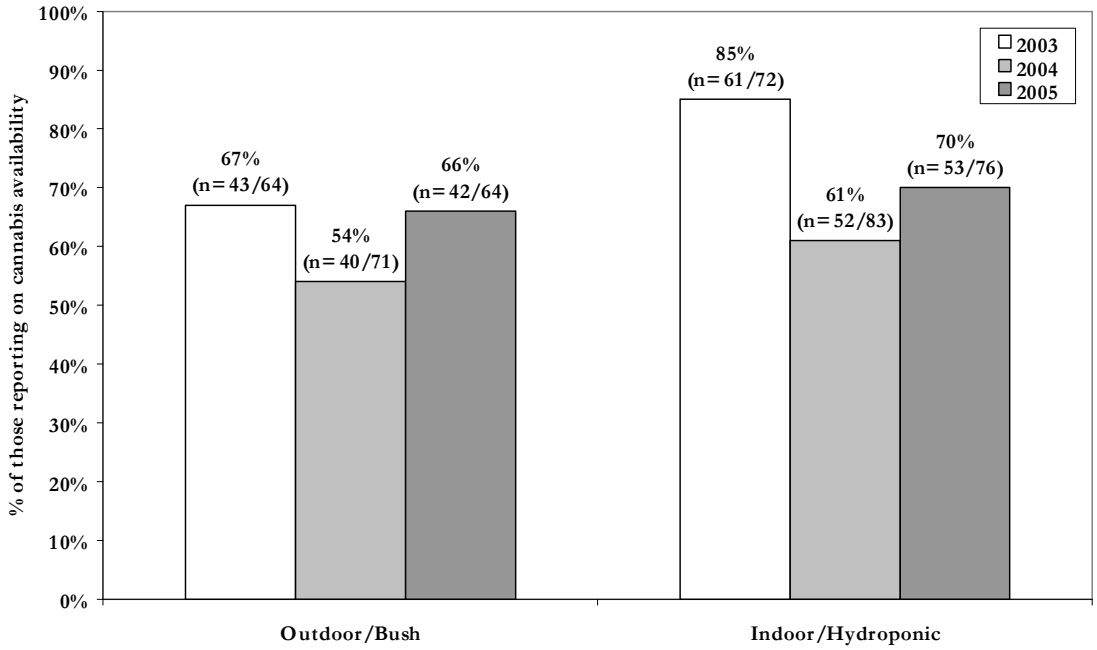
reporting that availability had increased in this time (5%, n=4 perceived that the availability had decreased, and 4%, n=3 that availability had fluctuated in the six months prior to interview). As per trends reported for outdoor-cultivated cannabis, hydroponically-cultivated cannabis was reported as usually being purchased from friends (55%, n=42) or at a dealer's home (26%, n=20), with very small proportions of participants reporting usually growing their own hydroponic cannabis (4%, n=3), buying from a mobile dealer (9%, n=7) or from a 'street' dealer (4%, n=3) or dealer providing home delivery (3%, n=2). Participants estimated that it usually took them a median of 20 minutes (mode = 10 minutes, range 0-1440 minutes, n=73) to score indoor/hydroponic cannabis in the preceding six months, slightly longer than the median time required to access outdoor/bush cannabis.

As depicted in Figure 13 below, there was a drop in the proportion of respondents who reported a 'very easy' availability of both indoor- and outdoor-cultivated cannabis between the 2003 and 2004 IDRS IDU samples. This may have been related to a series of large cannabis seizures in the south of the state late in 2003 or early in 2004 (Figure 14 and 15). Between the 2004 and 2005 studies, the proportion of participants reporting a 'very easy' availability had increased for cannabis of both 'types', with reports on the availability of 'outdoor' cultivated cannabis returning to levels similar to those reported in 2003, but 'indoor'-cultivated cannabis had not returned to the level of availability reported at this time (Figure 13). Examining cannabis seizures made by Tasmania Police[17], it is difficult to determine their relationship with consumer reports of market availability, as the police seizure data suggest a substantial increase in the weight of seizures of cannabis leaf or head 'vegetable matter' between 2003/04 and 2004/05, with a concomitant substantial decrease in the number of cannabis plants or seedlings seized. As such, this change in seizures is likely to be primarily reflective of changes in the coding practices adopted by Tasmania Police, and it is difficult to determine the extent of any change in seizure patterns that may have occurred in this time.

IDU were also asked about the source of the cannabis that they had used last time they had used the drug. Among those that reported 'very sure' or 'moderately sure' of the original source of the drug (n=37), the majority (59%, n=22) believed it to have been grown by small-time, 'backyard' user/growers, with 35% (n=13) reporting it to have been grown by a larger-scale cultivator/supplier (such as a crime syndicate, or organised motorcycle group), and 5% (n=2) grew their own cannabis. These figures are very similar to those reported in previous studies (2004: 59% small-time user/grower; 35% large scale cultivator/supplier; 6% grew own cannabis; 2003: 52% small-time user/grower; 31% large scale cultivator/supplier; 17% grew own cannabis; 2002: 66% small-time user/grower; 26% large scale cultivator/supplier; 8% grew own cannabis).

[17] Data reported in this paragraph has been provided by Tasmania Police State Intelligence Services. Data reported in the Australian Crime Commission annual report does not specify whether cannabis seized related to head/leaf or whole plant, and also, reports that Tasmania Police made 1,854 seizures of cannabis, at a total weight of 449,341g in the 2004/05 financial year.

Figure 13: Proportion of IDU reporting different cannabis forms as 'very easy' to access: 2003-2005 IDRS

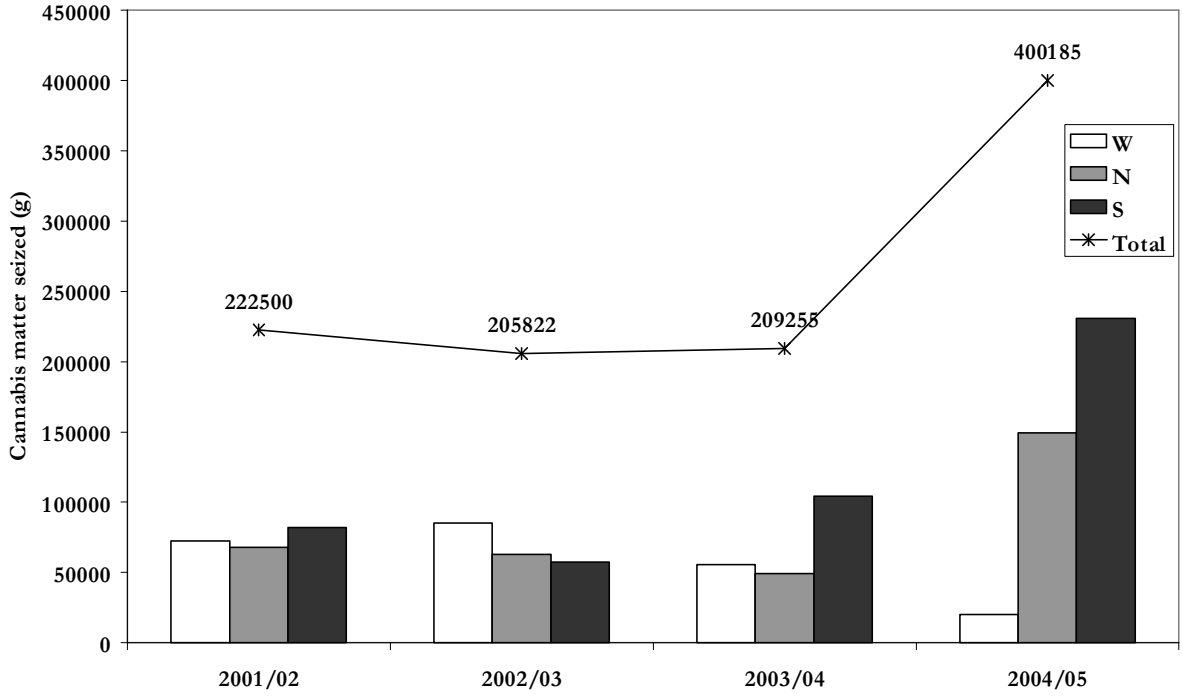


Source: IDRS IDU Interviews

7.3 Potency

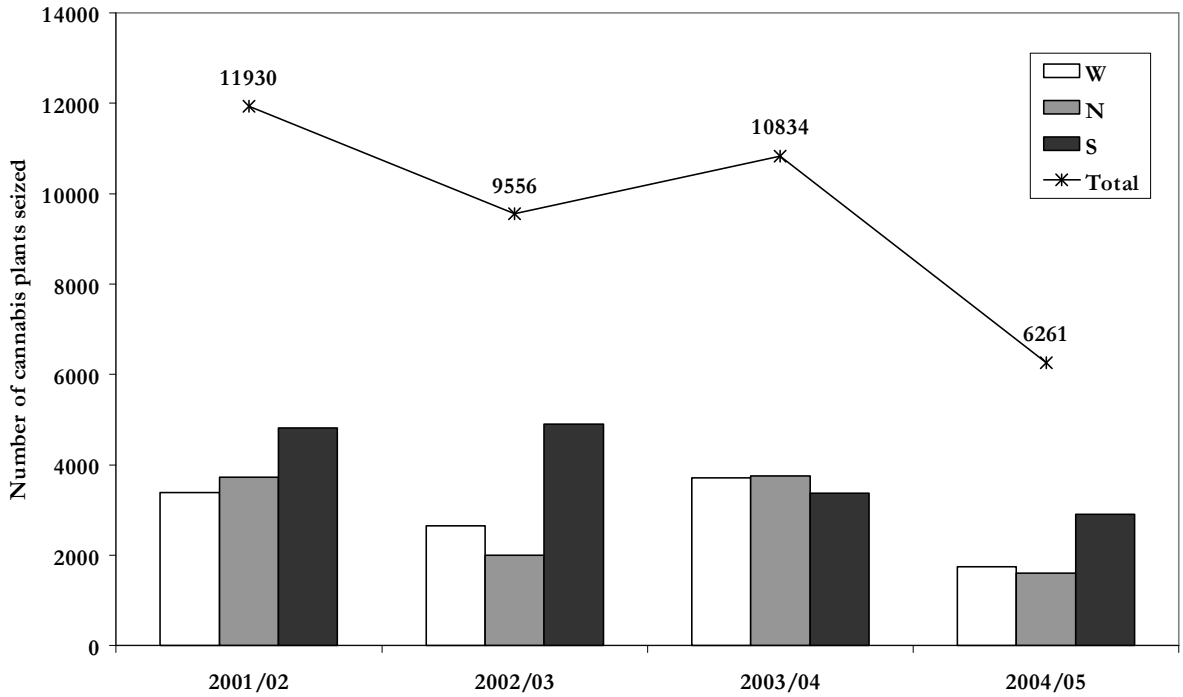
The cannabis used in the past six months by those participating in the IDU survey was marijuana head (the flowering top sections of the female plant), with most cannabis-using IDU (n=87) reporting some use of both hydroponically/indoor-grown (89% of those using cannabis, n=78) and outdoor crops (or 'bush buds', 82%, n=71). Most reported a preference for hydroponically grown head, which was borne out by the finding that 68% (n=59) reported this as the type of cannabis that they had most often used in the last six months, in comparison to 32% (n=28) reporting predominant use of outdoor crops. This pattern is remarkably similar to reports in the 2004 IDRS study, where indoor/hydroponically-cultivated cannabis was the type most commonly used by two-thirds (69%) of recent cannabis-consuming IDU, with one-third (31%) reporting predominantly using outdoor cannabis. Of note was that, in the 2003 survey, a larger proportion of cannabis consumers (81%) reported predominantly consuming indoor/hydroponically-cultivated cannabis, a trend perhaps consistent with the consumer reports of relative ease of availability of these two 'forms' of cannabis locally (see Figure 13 above). Key expert reports on the 'type' of cannabis consumed by the groups of consumers that they were familiar with were consistent with reports from the IDU cohort – use of both of the 'forms' although a preference for 'hydroponically' cultivated cannabis. Fourteen percent of the IDU sample had used hash, and 3% had used hash oil in the preceding six months.

Figure 14: Seizures of cannabis (leaf and head) by Tasmania Police district drug bureaux, 2001-2005



Source: Tasmania Police State Intelligence Services

Figure 15: Seizures of cannabis plants (and seedlings) by Tasmania Police district drug bureaux, 2001-2005



Source: Tasmania Police State Intelligence Services

In 2001, Tasmania Police reported an increasing trend toward hydroponic, or indoor[18], cultivation of cannabis, and supporting evidence for this trend was available in terms of an increasing proportion of Indian Hemp plant seizures being of indoor crops between 1999/00 and 2001/02 (from 16% in 1999/00 to 41% in 2001/02[19]). However, Tasmania Police officers interviewed in 2005 noted some indications that the preference among both consumers and producers may be shifting back toward outdoor-cultivated cannabis. Additionally, one law enforcement key expert had noted seizures of crops where there were multiple different strains of cannabis in a single crop, along with some evidence of importation of different types of cannabis seeds and use of cuttings to develop crops. Apart from these trends, law enforcement professionals interviewed for the current study noted no recent changes in cultivation procedures.

All key experts reporting use of cannabis among their groups stated that the predominant method of cannabis use was smoking through 'buckets' or 'bongs' (water pipes) rather than 'joints' (cannabis cigarettes) or cannabis cookies; although one key expert noted that smoking of cannabis 'joints' was more common amongst 'older' consumers (in their thirties and beyond) in contrast to the preference for bongs and buckets in the younger consumers they were familiar with.

The potency of cannabis across both modes of cultivation was generally rated as 'high' (38%, n=53) or 'medium' (36%, n=49) by the IDU sample, with most respondents indicating that this potency had remained stable (58%, n=77) in the preceding six month period. Notable minorities reported increasing (19%, n=25) or fluctuating (15%, n=20) potency of cannabis in this time. Just three key experts could comment on cannabis potency, with all of these reporting this as 'high' and remaining stable in the preceding six months (although one also reported distinctions between indoor- and outdoor-cultivated cannabis). These reports from both consumers and key experts are very similar to those provided in the 2004 IDRS study.

Potency of outdoor or 'bush' cultivated cannabis was regarded by IDU as generally being 'medium' (50%, n=31), with smaller proportions reporting 'low' (24%, n=15), 'high' (13%, n=8) or fluctuating (14%, n=9) purity in the preceding six months. This level of potency was regarded as having remained stable (64%, n=39), or as having fluctuated (15%, n=9) in the preceding six months, although a small number of IDU felt that purity had decreased (10%, n=6) and a similar number that purity had increased (11%, n=7) in this period. In keeping with these reports, one key expert, a law enforcement professional, noted that outdoor-cultivated cannabis potency fluctuated, and some crops may be low in potency. These reports are consistent with those provided in the 2004 study.

Hydroponically cultivated cannabis, however, was generally reported by IDU as being 'high' (60%, n=45) or 'medium' (24%, n=18) in purity, with a minority reporting that purity had fluctuated in the preceding six months (13%, n=10). Purity was predominantly regarded as remaining stable in the preceding six months (38%, n=53), although substantial minorities reported recent increases (25%, n=18) or fluctuations (15%, n=11) in purity. One law enforcement key expert noted that indoor cultivated cannabis crops

[18] For the purpose of reporting, Tasmania Police record all cannabis plants seized that had been grown indoors as hydroponically cultivated, rather than just those plants that are grown without the use of soil.
[19] Cannabis seizures after 2001/02 were not divided according to cultivation type due to inconsistencies in recording on exhibit sheets.

tended to be higher potency and less likely to vary into low potency than outdoor-cultivated cannabis.

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

7.4 Use

7.4.1 Prevalence of cannabis use

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

Findings of the 2001 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2002) indicated a decline in the proportion of participants reporting recent use of cannabis, with 11.9% of the 1349 participants sampled reporting use of the drug in the year prior to interview, down from 15.8% in the 1998 survey. Prevalence of cannabis use in the 12 month period prior to survey was estimated to be 22.1% in people aged between 14-24 (24.3% in males, 19.8% in females), 22.9% in 25-39 year olds (29.8% in males, 16.7% in females), and 3.4% in those aged 40 and above (4.3% males, 2.6% females).

In the 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2005), the estimated prevalence of cannabis use in the year prior to interview was 10.9% of Tasmanians aged 14 and over, based on a sample of 1208 participants. This marked a continued decline in the prevalence of recent use of the drug in the Tasmanian samples, falling from 15.8% in 1988 and 11.9% in 2001.

7.4.2 Cannabis use in particular populations

Cannabis has made up the vast majority of positive urine screen tests amongst Tasmanian prison inmates since the inception of such screens in 1993. The proportion of all positive urine screens indicating cannabis use has remained at around 70-80% between 1997/98 and 2003/04, despite the number of positive tests varying substantially (from 97 in 1997/98, to 215 in 2000/01, although dropping to 136 in 2001/02, 120 in 2002/03 and 109 in 2003/04) during this period.

In the 2004/05 financial year, there were an increased number of targeted tests (testing on suspicion of substance use) and random tests for the presence of substance use within the Tasmanian prison system, using urine, saliva and breath testing (416 screens in 2004/05 compared with 261 in 2003/04). It is noteworthy that, while the overall number of positive tests remain low (32% in 2004/05), the proportion of positive urine screens indicating cannabis use fell to around half (in comparison to the 70-80% in previous years). Among urine screens that were conducted on a purely random basis, only 30% of

the positive tests related to cannabis use, suggesting a shift in the patterns of substance use in the prison context.

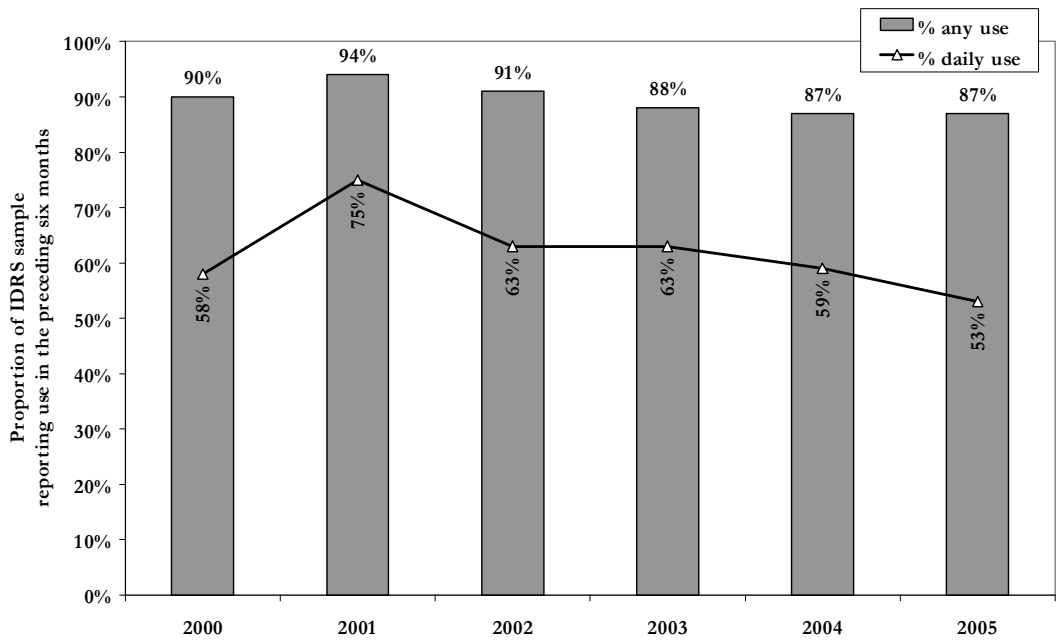
7.4.3 Current patterns of cannabis use

The primary cannabis consumers that key experts were familiar with tended to mainly engage in cannabis use along with some binge consumption of alcohol. Minorities of these primary cannabis-consuming groups tended to be polydrug consumers, with methamphetamine, 'ecstasy', benzodiazepines (primarily diazepam), and to a lesser extent, inhalants (typically paint or aerosol) the drugs most commonly used. Use of these other drugs was sporadic among such demographic groups.

7.4.4 Cannabis use among IDU

Almost all key experts referring to primary consumers of opiates or methamphetamine reported or suspected some level of cannabis use within the populations they had contact with. While cannabis was reported as the drug of choice for only 4% of the IDU consumers interviewed in the current survey, 87% of the entire sample reported some use of cannabis in the preceding six months. Among those that had recently used cannabis, the median frequency of use in the past six months was 180 days (range 1-180), which equates to daily use of the drug. The majority of cannabis users described by key experts also smoked cannabis daily (dependant on finances). Examining recent cannabis use in the five Tasmanian IDRS IDU cohorts (2000-2005: Figure 16), there appears to have been a slow, and slight, decline in the proportions reporting use of the drug across these samples. Of note, in particular, is that while the median frequency of cannabis use in the six months prior to interview has remained at 180 days in each of the 2000-2005 consumer cohorts, the *proportion* of the samples reporting daily use has steadily declined over time (Figure 16).

Figure 16: Proportion of Tasmanian IDRS IDU cohorts reporting use of cannabis in the six months prior to interview, 2000-2005



Source: IDRS IDU Interviews

7.5 Cannabis-related harms

7.5.1 Law enforcement

When asked about changes in the level of criminal activity among the cannabis users that key experts had contact with, the majority indicated that there had been no notable change in the past six months, in relation to property crimes, dealing of drugs or fraud. Key informants noted that there is little crime associated with these cannabis consumers, or, where it is, this generally relates to shoplifting or 'petty' property crime. One key expert working with young people noted that there had been a slow shift to younger people selling cannabis in the geographic area they worked in, with younger people selling from backpacks (rather than private homes) as a relatively new trend. Additionally, two IDU consumers noted an increase in the number of police raids on cannabis dealers in the preceding six months, which, while anecdotal, may be consistent with the increased weight of cannabis seizures in the current financial year: Figure 14).

Several key experts noted a decrease in the number of cannabis-consuming individuals being diverted to treatment or brief intervention in recent months through the Illicit Drug Diversion Initiative (IDDI: detailed in Section 10.8 below). This does not appear to be borne out by data, as information from the IDDI suggests a stable number of diversions made by Tasmania Police over time (978 diversions in 2001/02, 990 in 2002/03, and 977 in 2003/04 and 2004/05 respectively), and cannabis was the drug involved in 95% of the diversions made in 2004/05. Nearly 400 people received health interventions through IDDI in 2004/05 (n=399), with the majority of these cases relating to cannabis use (90%).

Details of cannabis-related consumer and provider arrests are in Section 10.8. Since the implementation of the Cannabis Cautioning Program (which evolved into the Illicit Drug Diversion Initiative), cautions and arrests relating to cannabis increased steadily from 736 in 1998/99 to 1830 in 2002/03. While this trend reversed in 2003/04, declining to 1638 cases, in 2004/05 the number of cautions and arrests relating to cannabis increased again to 2006 cases. The bulk of these cases (92% in 2003/04 and 86% in 2004/05) related to consumer-type offences.

7.5.2 Health

Those key experts in counselling roles saw a minority of those clients that they were working with in regard to cannabis use as experiencing mental health problems, most commonly depression or anxiety (although these are the most common presenting issues for counselling in a general sense). These key experts noted no real changes in the types of presenting issues in these groups other than anecdotal changes or service-related changes. One key expert, an ambulance officer, noted attending around 4-5 clients in the preceding six months where the presenting issue related to use of cannabis, with most of these incidents relating to mental health crises.

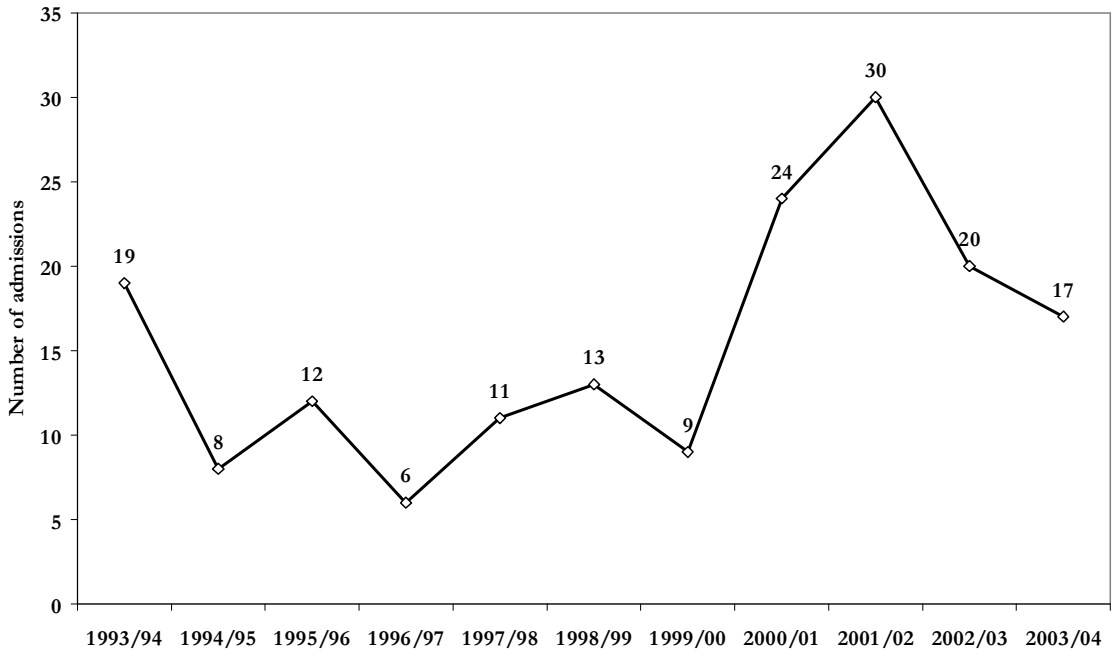
In terms of other aspects of health amongst the cannabis-consuming clients that counselling-based key experts were involved with, several key experts noted an increasing complexity of client needs. One key expert described this as such: *"problems are compounding on problems"* with low incomes making it difficult to access stable accommodation in an increasingly tight accommodation market (with housing for individuals with psychiatric and/or substance use issues particularly difficult to access), with stretched public services further limiting options, and these income and

accommodation problems lead to deleterious effects on physical and mental health. These issues are likely more reflective of changes in other factors other than cannabis use, however, as service providers noted no real changes in treatment-seeking for cannabis use in the preceding six months, and, consistent with this, there has been little change in the number of calls to the Alcohol and Drug Information Service (ADIS) telephone line requesting information or assistance in relation to cannabis in recent years (see Section 10.1).

Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare for the 1993/04 to 2003/04 financial year periods. These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where cannabis use was recorded as the 'principal diagnosis'; namely, where the effect of cannabis was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

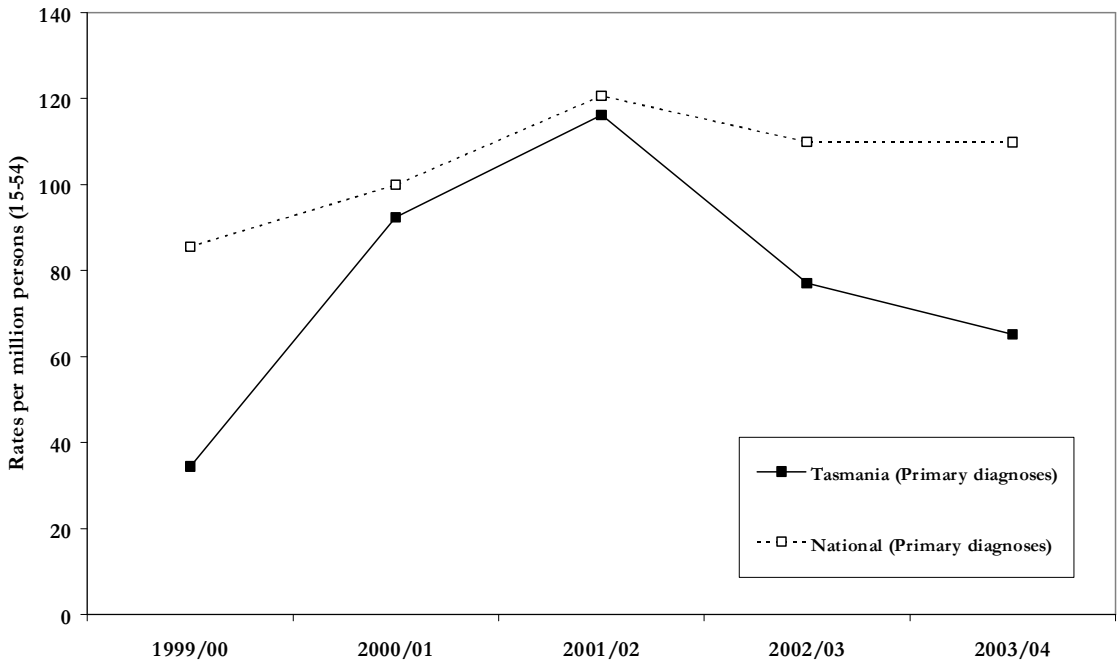
Tasmanian public hospital admissions where cannabis use was noted as the principal diagnosis are presented in Figure 17 below. With the exception of 2000/01 and 2001/02, this has related to 20 cases or less per annum. When the population-adjusted rates of Tasmanian admissions are compared with those nationally (Figure 18), two trends are notable: firstly, that local admission rates have been lower than those nationally across the past five financial years; and secondly that, after a marked increase in cannabis-related primary diagnoses in 2000/01 and 2001/02, leading to admission rates comparable to the national average (with local admission rates 92% and 96% of the national rate respectively), local admission rates have dropped substantially, while those nationally have remained relatively stable, with Tasmanian admission rates 59% of the national average in 2003/04, at around 65 admissions per million population.

Figure 17: Public hospital admissions amongst persons aged 15-54 in Tasmania where cannabis use was noted as the primary factor contributing to admission 1993/04-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Figure 18: Public hospital admissions among persons aged 15-54 where cannabis was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

7.6 Trends in cannabis use

One key expert working with youth, noted a decreasing age of first use of cannabis in recent years, noting: *"you used to see people starting cigarettes at 13 and cannabis at 15; these days you see people starting cannabis use at 13, and use of methamphetamine at 15"*. Consistent with this, eight IDU consumers noted increases in 'younger' people (15-18) using cannabis, with several noting seeing more young females in particular. These may reflect continuations of slowly evolving changes, as similar trends have been reported by both key experts and consumers in all previous Tasmanian IDRS surveys.

Consistent with the trends discussed elsewhere in this report, four IDU consumers reported a recent increase in the use of methamphetamine amongst previously primary cannabis-consuming groups, particularly amongst younger individuals (12-18 years). Smaller numbers of other consumer respondents noted an increase in primary cannabis consumers they were familiar with using 'ecstasy', hallucinogens (psychedelic mushrooms) or opioids in the preceding six months. Key informants noted some use of these drugs in the primary cannabis consumers they were familiar with, but no notable changes in the use of these drugs in this demographic in the preceding six months.

7.7 Summary of cannabis trends

Table 28: Summary of cannabis trends

	Outdoor / 'bush'	Indoor / hydroponic
Price ***Gram*** ***Quarter-ounce*** ***Ounce***	• $25 • $50 • $200 • Prices stable to decreasing in recent months; some slight indications of price increases in comparison to 2004 survey	• $25 • $90 • $300 • prices stable in recent months, but clearly increased in comparison to 2004 survey
Availability	Both indoor- and outdoor-cultivated cannabis: • Easy-very easy to obtain • Availability stable to increasing in recent months, slightly increased in comparison to the 2004 survey (following indications of relatively decreased availability in 2004). Outdoor-cultivated cannabis has returned to previous levels of availability but indoor-cultivated cannabis has not returned to the reported level of availability in 2003 • Tasmania Police report slow shift back toward preferential outdoor cultivation, as well as use of imported or multiple cannabis strains within a single crop	
Potency	• Medium-low (based on IDU estimates) • Potency level stable or fluctuating	• Medium-high (based on IDU estimates) • Potency level stable to increasing
Use	• Most widely used illicit drug • Indications of decreasing prevalence of use of cannabis in recent years in the state (NSDS), and slowly decreasing prevalence in IDRS IDU samples (particularly in regard to proportion of daily cannabis smokers) • High level of daily use among IDU sample and groups discussed by key experts • Hydroponically-grown head preferred by users • Predominantly smoked using 'buckets' and 'bongs' (water pipes)	
Other trends	• Anecdotal reports of an increase in methamphetamine use among some cannabis users • Continued anecdotal reports of a decreasing age of cannabis users • Hospital presentations where cannabis is regarded as the primary cause have steadily declined between 2002/03 and 2003/04, and is below the national rate • Counselling-based key experts report increased complexity of needs of cannabis-consuming clients (financial, housing, physical and mental health), reflecting changes in wider systems rather than changes in substance use or effects of the drug	

8.0 OPIOIDS

Three key experts reported on groups of people who were primary consumers of methadone (all of these key experts were working in pharmacotherapy treatment roles) and a further five key experts reported on groups of people who were primarily users of opioids, populations that were using both diverted pharmaceutical morphine and methadone; either at equal frequency, or using one preferentially, but also regularly using the other depending on availability. These patterns were similar amongst key expert reports on such populations in previous IDRS studies.

Similar trends were noted among the IDU sample, with there being a large overlap between people reporting recent use of these drugs – of those who reported use of morphine in the six months prior to interview, 83% also reported use of some form of methadone (either tablets or syrup, licit or illicitly accessed: Table 29), with almost half recently using oxycodone or other types of opioids.

Additionally, of those who had used morphine in the six months prior to interview, 37% reported methadone as the drug they most often injected in the past month (25% reporting this as being morphine: Table 30). Because of this substantial level of overlap, trends for these drugs are discussed together here.

Table 29: Use of other drugs by those reporting use of morphine in the past six months (n=59)

Drug	% of morphine users reporting use	Median days used by those who had used the drug (range in parentheses)
Heroin	20	5 (1-50)
Methadone (any)	83	180 (1-180)
Prescribed syrup	49	180 (60-180)
Illicit syrup	64	12 (1-121)
Illicit Physeptone	54	8 (1-48)
Oxycodone (illicit)	44	6 (1-48)
Other opioids	49	2 (1-144)
Homebake	7	20 (3-90)
Benzodiazepines	93	96 (1-180)
Cannabis	93	180 (1-180)
Methamphetamine *(any)*	97	40 (1-180)
Powder	78	6 (1-180)
Base/paste	81	12(1-180)
Crystal	54	3 (1-90)

Source: IDRS IDU Interviews

Table 30: Drug of choice and drug most often injected among those reporting use of morphine in the past six months (n=59)

	Drug of choice %	Drug most often injected %
Heroin	34	2
Methadone	7	37*
Morphine	24	25
Methamphetamine	27	36
Benzodiazepine	2	5*

Source: IDRS IDU Interviews

*three consumers reported most often injecting a combination of methadone and benzodiazepines in the preceding month, and, as such, these proportions have been included in both columns

Key experts reporting on the use of opioids included staff involved in pharmacotherapy-based drug treatment programs (methadone prescribers and pharmacotherapy support nurses), drug treatment workers (n=2), and needle and syringe program workers (n=2) and an alcohol and drug counsellor.

Key experts were familiar with users of opioids from all Hobart suburbs, but they were often from inner-city suburbs, or lower socio-economic areas from the eastern shore or northern suburbs, possibly reflecting the nature of the services that the key experts worked in (largely government-run health services). The majority of key experts described opioid users from a predominantly English-speaking background, ranging in age between late teens and late 50s; however, in general, the groups that key experts were referring to were in their late 20s to early 30s. While key experts reported on groups being between 50% and 80% male, the majority of those interviewed were familiar with groups with an equal gender balance. This is a change from previous studies, where, in 2003, such consumer groups were regarded as a median of three-quarters male and in 2004 the groups were three-fifths male predominant. The majority of the opioid users described by key experts in the current study had completed 9 to 10 years of schooling (although a wide range of education history was noted), and were predominantly currently unemployed.

Of the IDU sample, 91% reported they had tried morphine at some stage in their lives, and all but two of these had injected morphine. Fifty-nine percent had used morphine in the past six months, with all but four injecting the drug in this time, and recent oral use was only reported by 13% of the sample. Similar patterns of use were found for illicitly accessed Physeptone tablets of methadone, with 69% of the sample ever using the drug, and all but one having injected. Of the 41 participants using illicitly accessed Physeptone tablets in the past six months, all but one had injected the drug and 8 had used the drug orally. Use of illicitly accessed methadone syrup was similarly prevalent, with 73% of the sample ever using illicit syrup, and all but four of these participants injecting it at some stage in their lives. Just over half of the sample (52%) used illicit methadone syrup in the preceding six months, with all but three reporting recent injection (49% of the sample), and a smaller proportion swallowing syrup (17%) in this time. As would be expected given the high proportion of the current IDU sample that were receiving methadone maintenance treatment at the time of interview (43%, although a further three participants had also been involved in such programs at some stage in the six months prior to interview), more than half (56%) of the sample had used methadone syrup accessed licitly at some stage of their lives, although it is noteworthy that again almost all

had injected licitly-accessed syrup (52%) at some time, which is not consistent with a supervised methadone maintenance program – according to policy and the method that the drug is currently distributed in the program currently. Forty-five percent of the sample had used methadone syrup as part of a maintenance program in the preceding six months, although, again, almost all had recently injected the medication (all but three of these participants). Participants receiving licit prescriptions of Physeptone tablets of methadone were much less common, with just 20% of the sample being in receipt of these at some stage of their lives (16% had injected licitly accessed Physeptone at some stage), and 7% of the sample receiving these via legitimate means in the preceding six months, five of whom had injected the drug in this time. Almost two-thirds of IDU consumers sampled (62%) had ever used oxycodone tablets, although not all of these participants had injected this drug (51% of the sample), with one-third (30%) of the current cohort reporting using oxycodone in the preceding six months (26% of the sample recently injecting, and 16% swallowing the drug in this time). Only a small proportion (13%) of the current participants had ever received prescriptions for oxycodone, with only three accessing the drug legitimately in the preceding six months (with all of these consumers reporting injecting the drug in this time).

The demographics of the group that had used morphine (n=59) in the past six months was similar to that of other IDU (see Section 3.1) in terms of sex, cultural and educational background, treatment and employment status, prison history, relationship status, sexual preference, drug of choice and duration of injection career. However, they were currently significantly younger (29.2 vs. 32.9 years old respectively: Mann-Whitney U = 881.0, p=0.02) and were significantly younger at first injection (17.8 vs. 20.1: Mann-Whitney U = 919.5, p=0.04) than those that had not recently used morphine. Additionally, they were significantly more likely to be daily injectors (42% vs. 12%: $\chi^2(4_{n=100})=14.5$, p=0.006) and to report receiving income from criminal activity in the month prior to interview (31% vs. 7%: $\chi^2(1_{n=100})=7.8$, p=0.005) than those that had not recently used morphine. Finally, recent morphine consumers were significantly more likely to report an opiate as the drug they had most often injected in the month prior to interview (59% vs. 32%: $\chi^2(8_{n=100})=21.5$, p=0.008) than those that had not recently used the drug.

The demographics of those that had used any form of methadone by either licit or illicit means in the past six months (n=71) was similar to that of other IDU (see Section 3.1) in terms of sex, age, cultural and educational background, relationship status, sexual preference, prison history, drug of choice, frequency of injection, age of first injection, first drug injected and duration of injection career. However, those that had recently used methadone were significantly less likely to currently be employed (28% vs. 55%: $\chi^2(4_{n=100})=10.9$, p=0.027) than those that had not. As would be expected, those recently using methadone were significantly more likely to be involved in drug treatment (76% vs. 21%: $\chi^2(1_{n=100})=26.3$, p<0.001 – largely reflecting methadone maintenance involvement), and were significantly more likely to report an opiate as their drug of choice (68% vs. 21%: $\chi^2(12_{n=100})=38.1$, p<0.001) and as the drug type that had most often been injected in the month prior to interview (62% vs. 14%: $\chi^2(8_{n=100})=31.8$, p<0.001) than those that had not recently used methadone.

The demographics of the group that had used oxycodone (n=31) in the past six months was similar to that of other IDU (see Section 3.1) in terms of sex, age, cultural and educational background, relationship status, sexual preference, treatment and

employment status, prison history, drug of choice, age of first injection, first drug injected and duration of injection career. However, those that had recently used oxycodone were significantly more likely to report receiving income from criminal activity in the month prior to interview (36% vs. 15%: $\chi^2(1_{n=100})=5.7$, p=0.017) and significantly more likely to be daily injectors (45% vs. 23%: $\chi^2(4_{n=100})=12.3$, p=0.015) than those that had not recently used the drug.

Sixty-two participants in the IDU sample could comment on aspects of price, purity and availability of morphine, with 66 respondents providing information on illicit methadone syrup, 43 commenting on illicit Physeptone tablet trends and 21 on some aspect of market trends for oxycodone.

8.1 Price

8.1.1 Morphine

Both key experts and IDU reported the market price of morphine as around $1 per milligram, the same price reported in previous IDRS reports. However, as indicated in Table 31 below, the modal price that users paid for their most recent purchase of the drug was generally lower than this figure, with consumers reporting a modal purchase price of $50 per 60mg (range $25-60, n=42), and $70 (range $50-90, n=47) for 100mg MS Contin tablets. Modal prices for Kapanol were similar at $35 (range $15-50, n=29) for 50mg and $70 (range $30-90, n=25) for 100mg. The single key expert (a law enforcement professional) that was able to comment on prices reported $50-60 per 60mg and $80-90 per 100mg morphine. The majority of consumers reporting on morphine prices believed that these had remained stable in the preceding six months (62%, n=55 of those able to comment), with one key expert concurring with this assessment. However, a notable minority of consumers (20%, n=11 of those able to comment) and one other key expert noted an increase in price during this period (with equal numbers of consumers reporting decreases or fluctuations in price in recent months, 9%, n=5 respectively). Comparison of the modal prices for most recent purchases of the drug amongst the 2004 and 2005 survey respondents provides support for reports of stable prices (Table 31), with stable modal prices for three of the most commonly purchased tablet types over this time (60mg and 100mg MS Contin tablets and 100mg capsules of Kapanol). Modal purchase prices for 50mg Kapanol capsules fell by $5 between the 2004 and 2005 samples (after a $5 increase between 2003 and 2004) but the price range for this preparation has remained similar in this time. However, there was a $5 increase in modal purchase price for 30mg tablets of MS Contin in 2005 following stable prices of $20 per tablet in the 2003 and 2004 surveys.

8.1.2 Oxycodone

Prices for purchases of diverted oxycodone were specifically examined for the first time in the 2005 IDRS study (in previous years these data have been collected where offered but not in a formalised fashion). Consumers reported modal purchase prices of $20 per 40mg tablet of OxyContin (range $15-30, n=11), $15 per 20mg OxyContin (range $10-20, n=5) and a median of $40 per 80mg OxyContin tablet (range $30-80, n=9: Table 31). While only a small number of participants could comment on whether prices had recently changed for oxycodone (n=16), most of these consumers regarded prices as remaining stable (69%, n=11). Small minorities reported recent increases (13%, n=2), decreases (6%, n=1) or fluctuations (13%, n=2) in prices for diverted oxycodone. Comparing oxycodone prices reported among the 2005 participants with those from previous cohorts (Table 31) shows consistency with the perceived price stability, with

40mg OxyContin reported as costing $20 in 2003 (n=4), in keeping with the prices identified in the current study.

8.1.3 Methadone

Consistent with reports in previous local IDRS studies, consumers reported the market price of methadone as around $1 per milligram (Table 32). However, prices that IDU respondents reported paying for their last purchase of the drug were highly variable, and, as indicated in Table 32 below, the modal price that users paid for their most recent purchase of larger amounts of the drug (more than 80mg) was generally lower than the $1 per milligram figure. Since the nature of access to the drug does not easily allow for standard purchase amounts to be made, IDU were asked to report the amounts and costs of their most recent purchase of methadone, and these were divided into purchases of less than 80mg or 80mg and above, on the basis of a clear split in the data. Among those purchases of less than 80mg, the modal price paid by IDU was $0.80 per milligram (range $0.50-4.00 per mg, n=14), while modal prices for amounts 80mg and above were approximately $0.75 per milligram (range $0.40-1.00, n=24: Table 32). The majority of consumers (76% of those able to comment, n=32) and two key experts considered that the purchase prices for diverted methadone syrup had remained stable in the preceding six months (with minorities reporting increases or fluctuations in prices; 10%, n=4 respectively). When purchase prices for diverted syrup are compared over time, however, there are suggestions of a decrease in market price: with the modal price (across all purchase amounts) reported by the 2005 participants as $0.80 per mg, compared to $1 per mg in all previous IDRS reports (Table 32). However, given that there have been reports of decreased illicit availability of syrup (and a smaller proportion of the sample recently using diverted syrup) and that the majority of the diverted methadone syrup used among the 2005 cohort was purchased by clients of the methadone program from friends who were also on the program, this price decrease is likely to reflect a decrease in purchasers that were not 'friends' of the provider in the 2005 dataset, who are typically charged higher rates than 'friends', hence reducing the overall reported price.

Prices for Physeptone tablets of methadone appear to have remained stable across the past six years of the Tasmanian IDRS study, at $10 per 10mg tablet (Table 32). However, while half of the consumers reporting on price trends perceived no recent changes in price for diverted Physeptone (53% of those able to comment, n=17), a substantial proportion reported recent increases in prices (41%, n=13). This is consistent with reports of decreasing availability of diverted Physeptone and decreasing rates of use of this drug in the current cohort (discussed below).

Table 31: Market prices of morphine and related products reported by IDU and modal price for most recent purchase of particular forms of the drug (reported price range in parentheses).

	2000 IDRS		2001 IDRS		2002 IDRS		2003 IDRS		2004 IDRS		2005 IDRS	
Preparation	**Price**	**n**	**Price**	***n***	**Price**	***n***	**Price**	***n***	**Price**	***n***	**Price**	***n***
Morphine $ per mg	$1	*20*	$1	*8*	$1	*15*	$1	*14*	$1	*10*	$1	*19*
Morphine $ per 100 mg	$80	*2*	$80	*5*	$75*	*3*	$75	*8*	$80	*24*	$80	*33*
MS Contin												
10 mg tablet	$8 ($3-15)	*9*	$5 ($5-10)	*3*	$7.50 ($5-10)	*2*	$5($5-15)	*3*	$4 ($3-15)	*3*	$10 ($10)	*2*
30 mg tablet	$25 ($8-40)	*41*	$25 ($10-35)	*42*	$20 ($10-30)	*45*	$20 ($20-30)	*18*	$20 ($1-25)	*26*	$25 ($15-35)	*21*
60 mg tablet	$50 ($13-60)	*62*	$50 ($18-60)	*74*	$50 ($18-60)	*86*	$50 ($15-60)	*51*	$50 ($4-58)	*50*	$50 ($25-60)	*42*
100 mg tablet	$80 ($15-100)	*54*	$80 ($50-100)	*68*	$80 ($20-100)	*73*	$70 ($12-100)	*44*	$70 ($5-80)	*44*	$70 ($50-90)	*47*
Kapanol												
20 mg capsule	$15 ($10-20)	*16*	$10 ($5-25)	*14*	$20 ($10-20)	*14*	$15 ($10-30)	*9*	$13 ($5-20)	*9*	$13* ($5-20)	*6*
50 mg capsule	$40 ($15-50)	*36*	$40 ($25-50)	*40*	$40 ($15-50)	*43*	$35 ($12-50)	*35*	$40 ($15-50)	*35*	$35 ($15-50)	*29*
100 mg capsule	$80 ($60-100)	*12*	$80 ($50-90)	*31*	$80 ($50-100)	*36*	$70 ($17-100)	*22*	$70 ($30-80)	*20*	$70 ($30-90)	*25*
Anamorph												
30 mg tablet	$25 ($15-30)	*29*	$25 ($15-30)	*26*	$25 ($10-30)	*44*	$20* ($10-30)	*9*	$30 ($15-30)	*16*	$25* ($22-45)	*3*
OxyContin												
10 mg tablet	-	-	-	-	-	-	-	-	-	-	$7.50* ($5-10)	*2*
20 mg tablet	-	-	-	-	-	-	-	-	-	-	$15 ($10-20)	*5*
40 mg tablet	-	-	-	-	$15	*1*	$20 ($20)	*4*	$40	*1*	$20 ($15-30)	*11*
80 mg tablet	-	-	-	-	-	-	-	-	-	-	$40* ($30-80)	*9*

Source: IDRS IDU interviews *Median substituted for mode, as no single mode existed.

Table 32: Market prices of methadone reported by IDU and modal price for most recent purchase of particular forms of the drug (reported price range in parentheses).

	2000 IDRS		2001 IDRS		2002 IDRS		2003 IDRS		2004 IDRS		2005 IDRS	
Preparation	**Price**	**n**	**Price**	**n**	**Price**	**n**	**Price**	**n**	**Price**	**n**	**Price**	**n**
Methadone $ per mg	$1	*40*	$1 ($0.4-1)	*49*	$1 ($0.5-1)	*49*	$1 ($0.5-1)	*29*	$1 ($0.5-1.2)	*62*	$1 ($0.5-2)	*59*
Methadone syrup (price per mg)												
Amounts less than 80 mg	$1.0 ($0.5-1.0)	*30*	$1.0 ($0.5-1)	*11*	$1.0 ($0.4-1)	*19*	$1.0 ($0.3-1)	*21*	$1.0 ($0.4-1)	*30*	$0.8 ($0.5-4)	*24*
Amounts greater than 80 mg	$0.8 ($0.5-1.2)	*23*	$0.55 ($0.3-1)	*15*	$0.8 ($0.4-0.9)	*24*	$0.8 ($0.5-1)	*22*	$0.8 ($0.4-1)	*42*	$0.75 ($0.4-1)	*14*
All purchase amounts	$1.0 ($0.5-1.2)	*53*	$1.0 ($0.3-1.0)	*26*	$1.0 ($0.4-1.0)	*43*	$1.0 ($0.3-1.0)	*43*	$1.0 ($0.4-1)	*72*	$0.8 ($0.4-1)	*38*
Physeptone												
5 mg tablet	-	*0*	$7*($5-10)	*3*	$5	*1*	-	-	$10	*2*	$5	*1*
10 mg tablet	$10 ($4-12)	*17*	$10 ($2-15)	*53*	$10 ($5-15)	*53*	$10 ($3-20)	*62*	$10 ($5-15)	*43*	$10 ($5-15)	*33*

Source: IDRS IDU Interviews

8.2 Form

8.2.1 Morphine

Consumer respondents were asked to nominate the preparations of morphine that they had used in the preceding six months. Of the 59 participants reporting use of morphine in the preceding six months, use of diverted MS Contin (89%, n=53) and Kapanol (59%, n=35) was most common, with smaller proportions reporting recently using diverted MS Mono (17%, n=10), diverted Anamorph (9%, n=5) or diverted Ordine[20] (liquid morphine: 2%, n=1). Use of licitly-accessed morphine in the preceding six months was relatively scarce within the IDU sample, with just 2 individuals reporting such use of MS Contin (3%) and one Kapanol (2%) in this time. When asked to nominate which form they had used most often in the preceding six months, 75% (n=44) reported illicit MS Contin, 18% illicit Kapanol (n=11), 3% licit MS Contin (n=2) and 2% illicitly-accessed MS Mono and licit Kapanol (n=1 each) respectively. Finally, it is clear from these figures that only a very small minority of those using morphine (5%) had accessed this from licit[21] sources in the preceding six months.

8.2.2 Oxycodone

Almost one-third (n=31) of the current IDU sample reported use of some preparation of oxycodone in the six months prior to interview, with 30 accessing diverted doses of the drug and three accessing the drug by legitimate prescription (all of these were prescriptions of OxyContin). Among those accessing the drug illicitly, OxyContin was most commonly used (n=26), with smaller numbers of consumers reporting recent use of diverted Endone (n=5) or OxyNorm (n=1). When asked which form they had used most often in the preceding six months, 11% (n=3) indicated legitimately prescribed OxyContin, 82% diverted OxyContin, and 4% diverted Endone or OxyNorm respectively. These patterns of use are very similar to those reported among the 2004 IDRS IDU cohort.

8.2.3 Methadone

Seventy-one percent of the IDU sample had reported use of methadone syrup in the past six months, the majority of whom had been on a methadone maintenance program within this time (65%, n=46). Of those that had used methadone syrup, 73% (n=52) had purchased diverted methadone syrup at some stage in the preceding six months (including 63% of those individuals that were receiving methadone maintenance therapy).

Use of the tablet preparation of methadone, Physeptone, was reported in a slightly smaller percentage of the sample (42% of the sample, and 59% of those reporting recent use of methadone) in the preceding six months. Of the 42 individuals who reported use of Physeptone tablets, 41 had accessed diverted doses in the preceding six months, while 7 had received legitimate prescriptions for Physeptone. This level of recent use of Physeptone, by 42% of the IDU sample, represents a continued reduction in the use of this drug, falling from 65% of the 2003 IDU cohort, to 57% in 2004, following a sharp increase in use between 2000 and 2003 (rising from 30% to 65% of the cohorts in this period)

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

[21] During interviewing, 'licit means' was defined as having the drug prescribed directly to the individual, whether appropriate or otherwise. By this definition, doctor-shopping would be considered as 'licit means'.

When asked to describe the form of methadone they had predominantly used in the preceding six months, 61% (n=43) indicated licit methadone syrup, 25% (n=18) illicit methadone syrup, 10% (n=7) illicit- and 4% (n=3) licit- Physeptone tablets.

8.2.4 Other pharmaceutical opioids and related substances

Due to recent developments of new opiate-based or strong analgesic pharmaceuticals and the known interest among the Tasmanian illicit drug market for pharmaceutical preferences for drugs, IDU were also asked about use of other pharmaceutical opiates and related substances in the preceding six months. Eight participants reported being prescribed Tramadol in the six months prior to interview, with 7 reporting recent illicit use of this drug. None of those prescribed the drug had also accessed it illicitly (and vice-versa). Single participants reported recently using (without prescription) Catapres (clonidine) and Panadol Forte (a combination analgesic tablet containing a high codeine dose along with paracetamol). A further six participants had recently received legitimate prescriptions for Panadol Forte. Fentanyl was enquired about for all participants but none had recently used this drug.

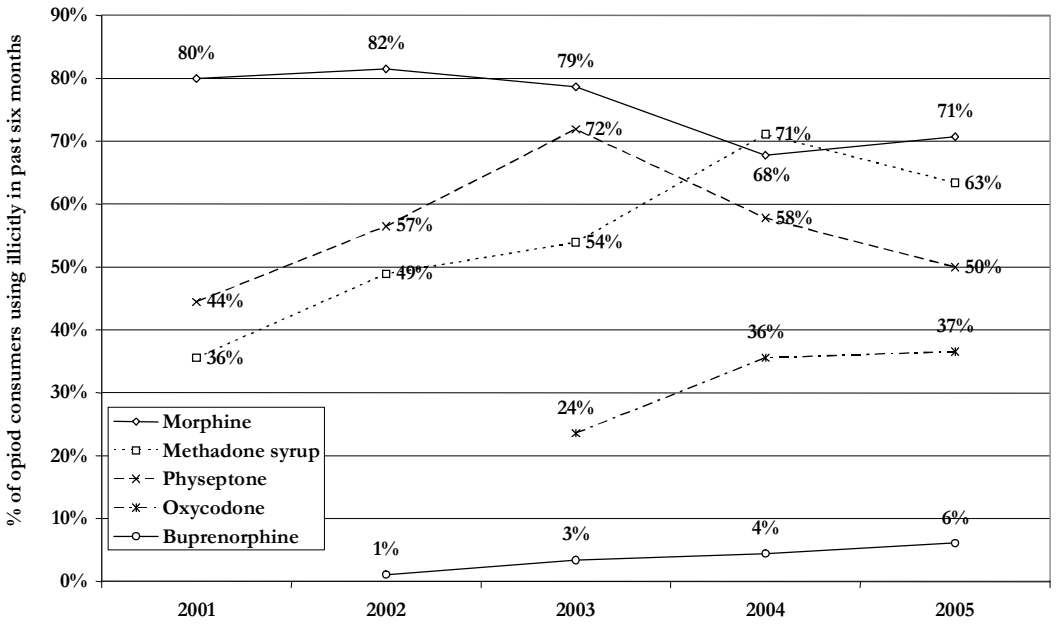
8.2.5 Use of different forms of pharmaceutical opiates across IDRS studies

Use of these different types of pharmaceutical opiates across the IDRS IDU samples is charted in Figure 19 and 20 below. It should be noted that these figures report on the proportion of the IDU participants reporting accessing these drugs illicitly (rather than direct from a doctor's prescription for them) in the six months prior to interview, and as such these figures differ somewhat from the total proportion of the IDU samples in each study reporting any use of these products. Moreover, to allow for more consistent comparisons, Figure 19 presents illicit use of each pharmaceutical opiate type *as a proportion of the number of pharmaceutical opiate consumers in each cohort*, while Figure 20 presents illicit use as a proportion of the entire IDRS samples each year. Given the smaller proportion of opiate consumers in the 2005 cohort, Figure 19 allows a more direct comparison of changes within the local opioid market than the subsequent figure.

Figure 19 indicates that the proportion of the sample reporting recent use of illicit morphine – which was the predominant pharmaceutical opiate used both by IDRS IDU participants and clients of the state's non-pharmacy Needle Availability Program to 2002 (see Figure 22) – has been declining relatively stably since this time. Diverted methadone (Physeptone) tablet use had steadily increased from 2000, where 32% of the sample had recently used the drug (either licitly or illicitly), rising to 64% (using diverted tablets) in 2003, with use subsequently declining in 2004 and further still in 2005 to just 41% of the current cohort reporting illicit use. Across the years of the IDRS study, the proportion reporting recent use of diverted methadone syrup has increased (32% in 2001 to 64% in 2004); however, this was always commonly used amongst those already enrolled in the methadone maintenance program (in 2002, almost half of those sampled that were enrolled in methadone maintenance had also purchased diverted syrup in the six months prior to interview, and existing maintenance patients comprised more than half of all those accessing diverted syrup) and it appears to have increased over time: 45% of those IDRS IDU participants enrolled in methadone maintenance therapy reporting also using diverted methadone in the six months prior to interview in the 2002 study, 50% of such individuals in 2003 and 69% in 2004. In 2005, use of diverted methadone syrup amongst the sample appeared to decline (from 64% of the 2004 cohort to 52% of the 2005 participants) and the proportion of enrolled methadone maintenance clients interviewed who had recently purchased the drug illicitly had similarly declined (falling from 69% among the 2004 cohort to 63% in 2005). Use of diverted buprenorphine has remained

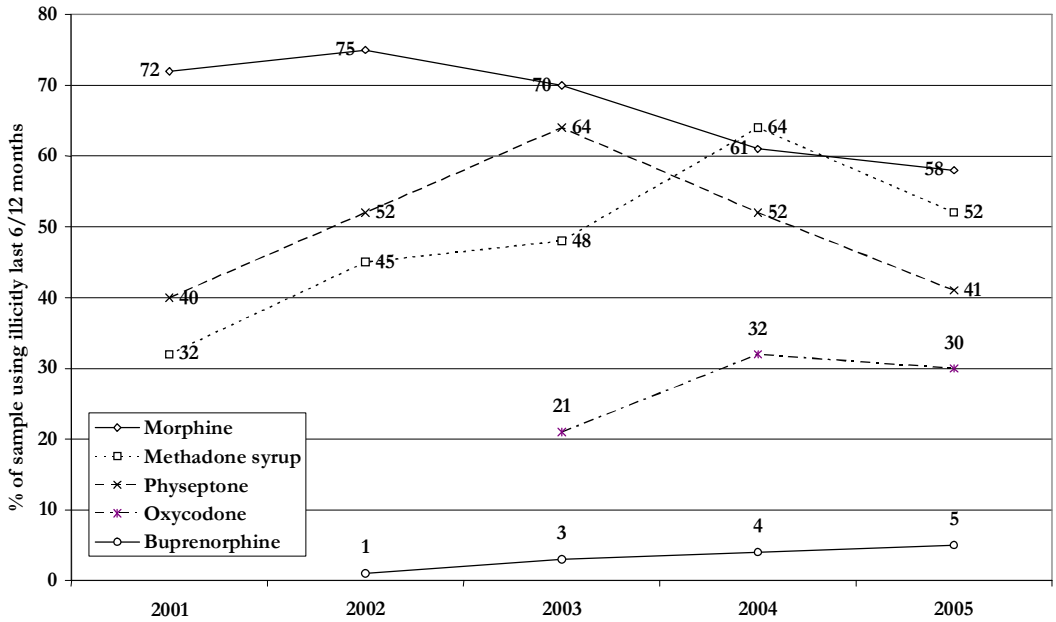
low across the four years where the drug has been available for pharmacotherapy. Finally, there has been a notable increase in reported use of diverted oxycodone in the three years this has been explicitly examined in the IDRS study, rising to one-third of participants from anecdotal reports of use in 2002.

Figure 19: Proportion of opiate consumers within the Tasmanian IDRS IDU cohorts reporting non-prescription use of different types of pharmaceutical opiate or related products in the six months prior to interview, 2001-2005.



Source: IDRS IDU Interviews

Figure 20: Proportion of Tasmanian IDRS IDU cohorts reporting use of different types of pharmaceutical opiate or related products in the six months prior to interview, 2001-2005.



Source: IDRS IDU Interviews

8.3 Availability

8.3.1 Morphine

The majority of the consumers interviewed who could comment on availability trends for morphine (n=52) reported that morphine was 'easy' or 'very easy' for them to obtain (83%: 50% 'easy'; 33% 'very easy'), and that the availability of morphine had remained stable (59%) in the six months prior to interview (with relatively equal proportions perceiving recently increased or decreased availability: 20% vs. 16% respectively). Three key experts reported on the availability of morphine to the consumer group they were familiar with, uniformly echoing the reports from the IDU cohort – that morphine is 'easily' available (n=3) and that this situation appeared unchanged in the preceding six months (n=3). Among the IDRS consumer sample, participants reported usually purchasing morphine in the past six months from a friend (40%, n=22), or from a dealer's home (35%, n=19), with smaller proportions reporting usually accessing from a mobile dealer (18%, n=10) or a street dealer (7%, n=4). Participants noted that it usually took them a median of 20 minutes to score morphine in the preceding six months (range 5-360, n=50).

Seizures of morphine and other narcotic pills by Tasmania Police remained reasonably stable between 1999/00 and 2002/03: 215 tablets (100 of these being morphine) in 1999/00; 322 tablets in 2000/01 (21 morphine tablets); 254 tablets (63 morphine) in 2001/02, and 211 morphine tablets in 2002/03. Perhaps partially due to more specific coding of seizures of pharmaceuticals, a marked increase in the number of morphine tablets seized in 2003/04 was noted, with 686 morphine tablets seized in this period. However, in 2004/05, seizures had returned to their previous level at 230 tablets, and 6mL of liquid morphine

8.3.2 Oxycodone

Only a minority of the consumers interviewed in the 2005 IDRS study (18%) could confidently report on availability trends for oxycodone in the preceding six months. In contrast to trends for morphine, while one-third (33%, n=6) reported that the drug was 'easy' to access, 61% (n=11) regarded it as 'difficult' for them to access. More than two-thirds (69%, n=11) reported that this situation had remained stable in the preceding six months, while a minority (19%, n=3) considered that it had become more difficult to access recently. Participants had usually purchased oxycodone from a friend (58%, n=11) or at a dealer's home (26%, n=5) in the preceding six months, with some reporting purchasing from a street (11%, n=2) or mobile (5%, n=1) dealer in this time. Participants reported that it had usually taken a median of 30 minutes (range 0-300, n=18) to score oxycodone in the six months prior to interview.

8.3.3 Methadone

In a continuation of trends identified in the 2004 study, the majority of participants reporting on the availability of diverted Physeptone tablets considered it as 'difficult' to access (59%, n=23), with only a minority considering the drug as 'easy' (28%, n=11) or 'very easy' (10%, n=4) to access in the preceding six months. While 44% (n=17) noted no change in the level of availability of Physeptone recently, a substantial proportion noted that it had become more difficult (38%, n=15) to access, or that availability had fluctuated (13%, n=5) in this time. Such a reduction in the availability of this drug is consistent with the reduction in the proportion of the IDU sample reporting recent use of this drug (Figure 20). Most IDU reported usually purchasing Physeptone through a friend (57%, n=21), with smaller numbers purchasing from a dealer's home (16%, n=6),

a street dealer (14%, n=5) or a mobile dealer (11%, n=4). Consumers reported that it usually took them a median of 30 minutes to 'score' Physeptone (range 0-120 minutes, n=33) in the past six months.

Participants were somewhat divided in their reports of the availability of diverted methadone syrup, with 57% considering it as 'easy' or 'very easy' to access (19% 'very easy', n=9; 38% 'easy', n=18), and 44% as 'difficult' or 'very difficult' to access (40% 'difficult' n=19; 4% 'very difficult', n=2). Again, as noted by IDU in previous years, the degree of availability is highly dependant on standing arrangements, with one participant describing the situation as such: *'it is very easy to access if you have a pre-existing arrangement, but very difficult if you try to find it on a whim'*. The majority of those reporting on trends in availability of illicit syrup perceived it as remaining stable in the preceding six months (55%, n=26), although one-quarter (23%, n=11) noted that it had become more difficult to access the drug in this time (equal minorities noted an increased or fluctuating availability 11%, n=5 respectively). Three key experts were able to report on the availability of diverted methadone syrup to the clients that they were familiar with, and reported availability trends consistent with the IDRS IDU consumers: one key expert noting the drug was 'easily' available, one that it was 'difficult', with two respondents noting that there had been no recent changes in availability and one considering that it had become more difficult to access in the preceding six months.

IDU that had used illicit methadone syrup almost exclusively reported that they usually purchased the drug from friends in the preceding six months (82%, n=36), although a small number usually purchased from a street dealer (9%, n=4) or from a dealer's home (7%, n=3). Due to concerns among some key experts in previous years about use of 'spat out' doses of methadone syrup, IDU were asked about the source of their last illicit purchase of methadone syrup, with 98% reporting that the drug had come from a 'take-away'[22]dose (one participant did not know the source of their previous methadone syrup[23]). When asked how long it took IDU to 'score' illicit methadone syrup, respondents indicated it usually taking a median of 10 minutes to score the drug in the preceding six months (range 0-150 minutes, n=42). This can be interpreted in terms of the 'pre-arrangements' noted by the IDU above, which was noted as the modal 'time' to access the drug (n=16) – in the 2001 IDRS, one key expert, a user group representative, and two IDU, reported a trading system amongst a group of IDU on the methadone program, where, when people picked up two or three 'takeaway' doses of methadone, some people would give the doses not required for that day to friends, with the expectation of reciprocation later in the week. This system protects users from 'bingeing' and using all their takeaway doses in one day, thus having to find a replacement opioid to hold them until their next methadone dose (and avoids the risk of being 'stood over' for their methadone or the risk of it being stolen, which was reported by one participant in the current study). Similar 'in-kind' and pre-organised systems were described in subsequent IDRS studies. In the 2004 study, two key experts working with younger IDU reported that their clients at times used up their take-away doses within one or two days (rather than the three days they were provided for) and then had to buy or otherwise

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

[23] It was likely, however, that this participant may instead have been reporting that they did not wish to comment, rather than not being aware of the source, as they had responded similarly to all questions in relation to source for all types of drugs used recently.

access some amounts of methadone illicitly to avoid experiencing opiate withdrawal. These patterns may be reflected in the pathways of access to illicit methadone syrup (discussed above and in Table 33), with almost all reporting accessing their last illicit methadone through a friend, while purchases through 'street dealers' – most commonly methadone program clients approached outside a pharmacy for their takeaway dose – were substantially less common.

Table 33: Pathways to illicit methadone access, 2005

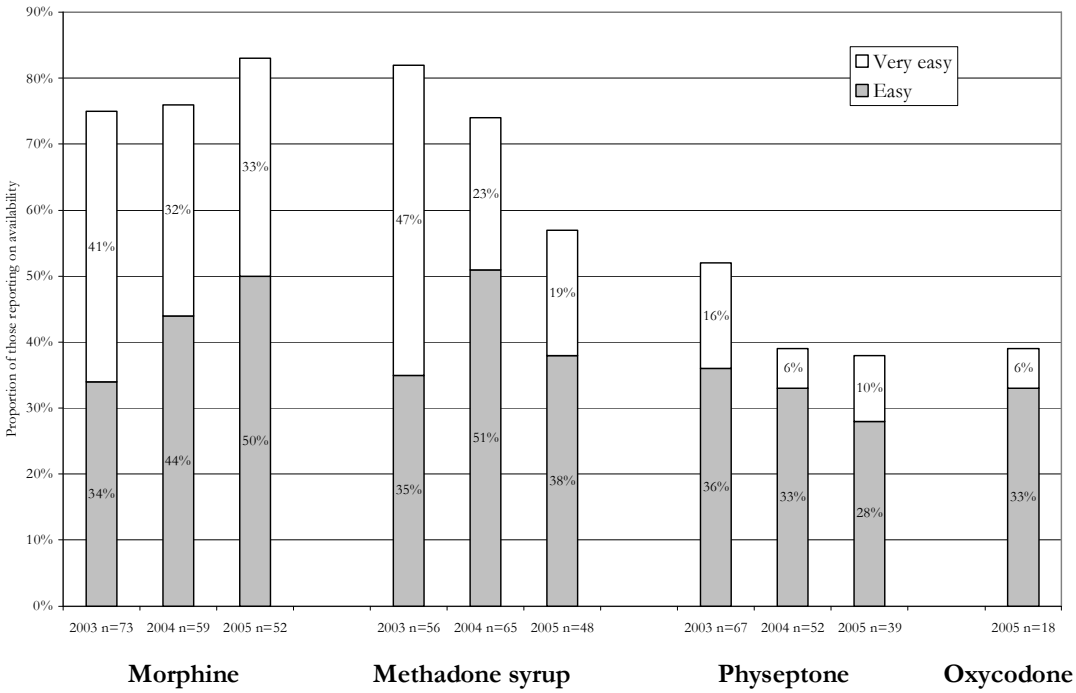
	Illicit methadone syrup (n=44)	Illicit Physeptone tablets (n=37)
Source of last illicit syrup#		
Take-away dose	98% (n=42)	n/a
Didn't know source	2% (n=1)	n/a
Usual source of illicit purchase#		
Friend	82% (n=36)	57% (n=21)
Street dealer	9% (n=4)	14% (n=5)
Dealer's home	7% (n=3)	16% (n=6)
Mobile dealer	-	11% (n=4)
Sent from mainland	-	-
Median time to 'score'	10 min (range 0-150 min)	30 min (range 0-120 min)

Source: IDRS IDU Interviews *at any time in the preceding six months; #for those reporting source

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

When IDU reports of the availability of illicit pharmaceutical opiates are compared between the 2003 and 2005 IDRS studies (2003 was the first year in which explicit differentiation was made between methadone syrup and Physeptone tablets in regard to availability: Figure 21), several changes are notable. firstly, in regard to morphine availability, a slightly increasing proportion of respondents (although a declining number of individuals) regarded availability as 'easy' or 'very easy', with this change relating to an increase in the proportion of consumers regarding it as 'easily' available; in regard to methadone syrup, there has been a steady decline in the proportion of consumers considering the drug as 'easily' or 'very easily' available, with much of this change relating to a notable drop in the proportion reporting that syrup was 'very easy' to access (falling from 47% in 2003 to 19% in 2005); and finally, there has been a continuing drop overall in the proportion of respondents reporting Physeptone tablets as 'easy' or 'very' easy to access, with the majority of respondents reporting that it was 'difficult' or 'very difficult' to access this drug in recent months.

Figure 21: IDU reports of 'easy' or 'very easy' availability of illicit pharmaceutical opiates 2003-2005.



Source: IDRS IDU Interviews

8.4 Patterns of opioid use

8.4.1 Prevalence of opioid use

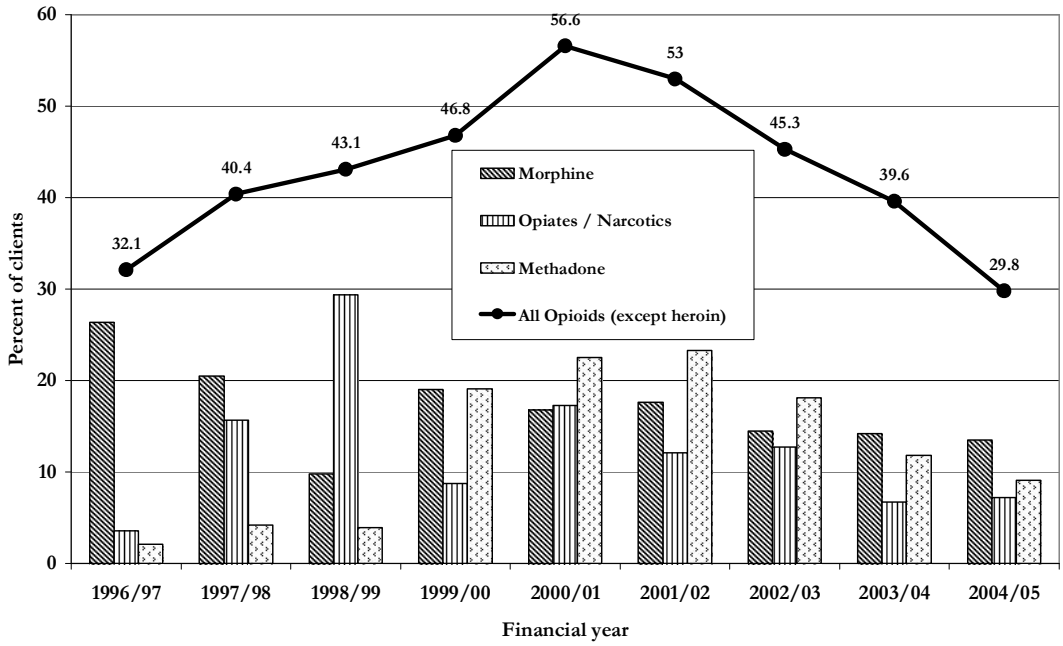
The 2004 National Drug Strategy Household Survey interviewed 1208 Tasmanians aged 14 or above about their drug use. This study identified that 0.2% of those sampled (n~2) reported using methadone for non-medical purposes in the year prior to interview, and 0.6% (n~7) had used other opioids for non-medical purposes in this time (Australian Institute of Health and Welfare, 2005). Similar proportions were identified in the 2001 study (0.1% of the 1349 respondents using methadone for non-maintenance purposes and 0.7% other opiates in the year prior to interview: Australian Institute of Health and Welfare, 2002). In the 1998 National Drug Household Survey (Australian Institute of Health and Welfare, 1999), 0.6% of the 1349 respondents reported using methadone illicitly in the 12 months prior to interview. Given the degree of variance due to sampling issues around each of these proportions, it is not possible to suggest any change in the local population prevalence of each of these drugs.

8.4.2 Pharmaceutical opioid use among IDU and other groups

Data from clients of non-pharmacy Needle Availability Program outlets reporting an opioid as the drug they most often inject have been highly variable over the past eight years (Figure 22), due primarily to clients nominating the catch-all 'opiates-narcotics' category rather than indicating a specific single drug. When these data are collapsed, a trend becomes clearer, with the percentage of clients reporting opioids (excluding heroin) as the drug they most often injected steadily increasing from 32.1% in 1996/97 to 56.6% in 2000/01, then decreasing again to 53.0% in 2001/02 and continuing downward to 29.8% in 2004/05. This is the inverse of the trend noted for methamphetamine use among non-pharmacy NAP clients (Section 5.4.3). While this appears to represent a

substantial change in the market over time, these data should be interpreted with caution. Firstly, prior to 2001/02, these drug use data were reported by only around 40% of total non-pharmacy NAP clients, predominantly those larger, inner-city outlets, which are biased toward regular, opiate consumers – in recent years, this figure has risen to 90% of these clients (80% in 2001/02, 88% in 2002/03 and 91% in 2003/04 and 2004/05). As such, recent data may be somewhat more representative and the apparent recent increase in proportions of NAP clients reporting methamphetamine use relative to those reporting opiate use in the past three financial years, in contrast to trends over preceding years, may simply reflect this more consistent level of reporting across NAP outlets. Also noteworthy is the indication that, although injection of morphine had consistently been reported as more popular than injection of methadone to 1998/99, the popularity of both drugs was equivalent in 1999/00, and, in 2000/01, methadone was more commonly reported substance, a trend continuing into 2002/03 but which reversed again in 2003/04 and 2004/05 (in contrast to trends seen in the current IDU cohort). The exact nature of these trends are unclear, as responses in the broad 'opiates/narcotics' category are likely to mask the true level of injection of methadone.

Figure 22: Percentages of Tasmanian non-pharmacy Needle Availability Program clients reporting opioids as their 'drug most often injected', 1996/97-2004/05



Source: Sexual Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (Thein, Maher & Dore, 2004; Thein, White, Shourie & Maher, 2005: 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 1996-2004 surveys (Table 34). Given that this study prior to 2002 only utilised relatively small sample sizes (18, 23, 51, 25, 27 and 28 clients respectively between 1997 and 2001), it is difficult to infer any trends in use from these figures. However, in the three most recent studies, gathering more substantial sample sizes (n=151 in 2002; n=118 in 2003; n=107 in 2004), rates of use of methadone have perhaps slightly increased (32% in 2002 and 2003, rising to 38% in 2004), while the proportion reporting last using morphine has remained similar (16% in 2002; 24% in 2003; 19% in 2004).

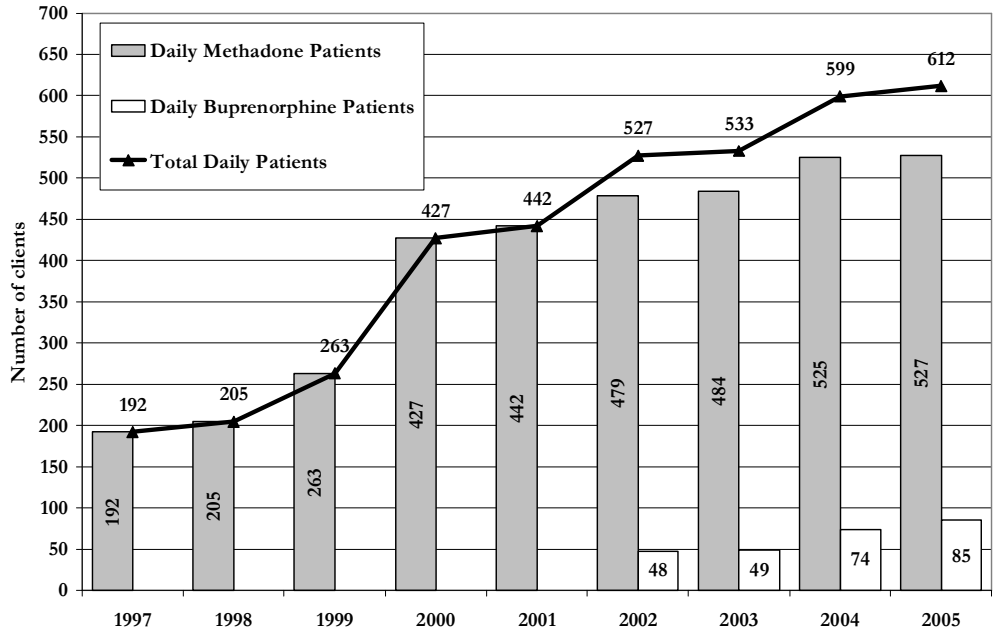
Table 34: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within 'last drug injected', 1998-2004

	1998		1999		2000		2001		2002		2003		2004	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Heroin	*5*	**10**	*2**	**8**	*6#*	**22**	*3†*	**11**	*5*	**3**	*1*	**1**	*0*	**0**
Methadone	*17*	**33**	*11*	**46**	*9*	**33**	*11*	**39**	*49*	**32**	*38*	**32**	*41*	**38**
Morphine	*10*	**20**	*5*	**26**	*8*	**30**	*11*	**39**	*25*	**16**	*28*	**24**	*20*	**19**
Total Sample Size	51		25		27		28		151		118		107	

Source: Thein, White, Shourie & Maher, 2005 *Note: during the 1999 and 2000 surveys, 16% (n=4), 11% (n=3) and 18% (n=5) participants respectively reported using some combination of opioids, and percentages have been adjusted accordingly to reflect this

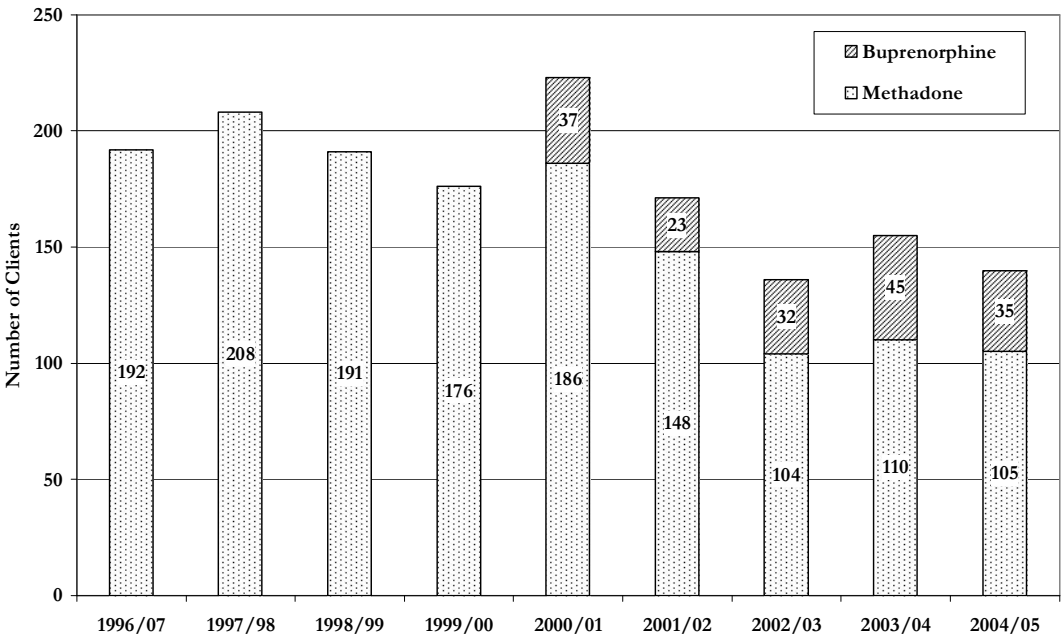
There has been a steady growth in the number of clients on Tasmania's methadone maintenance program since 1995 (Figure 23). Currently there are over 500 daily recipients of methadone, more than treble the number on the program in 1995. However, this increase in numbers is likely to primarily reflect the long-term nature of methadone maintenance therapy, as the number of new applications for the program had remained consistent between 1997-2001 (approximately 200 new applications per annum), and has been decreasing since this time, to 105 new patients in the 2004/05 financial year (Figure 24). This decline in the numbers of new methadone maintenance patients has been at least partially accounted for by new admissions to buprenorphine maintenance, which was made available as a treatment option for the first time in 2000/01. Following an initial influx of individuals that were previously receiving treatment with methadone switching to buprenorphine in the first year of availability of the drug (n=37 in 2000/01), the number of new admissions to buprenorphine maintenance had steadily increased between 2001/02 and 2003/04 (from 23 to 45: Figure 24), and has decreased slightly in the most recent financial year (35 cases). As such, the number of daily buprenorphine patients has grown from 48 as of July 2002 to 85 in July 2005, bringing the total number of daily pharmacotherapy patients in the state to more than 600 as of July 2005 (Figure 23).

Figure 23: Growth of the Tasmanian pharmacotherapy programs, 1997-2005



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

Figure 24: New admissions to pharmacotherapy treatments in Tasmania, 1996-2005



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

Tasmanian prescription rates for Schedule 8 pharmaceuticals[24] since 1991 were also provided by Pharmaceutical Services (DHHS). During this time, Tasmanian consumption of morphine has been consistently 120% or more of the national average, and increasing over recent years to 141% in 2003, while national use had stabilised (Figure 25). For the first time, in 2004, the local population prescription rate for morphine had decreased, although given that prescriptions at the national level had similarly declined the Tasmanian consumption rate for morphine remained more than 140% that of the national average (Figure 25). Following these trends, the number of applications received by Tasmanian Pharmaceutical Services for approval to prescribe narcotics[25] had steadily increased, almost exponentially, in recent years, from 351 in 1989/90 to 2701 applications in 2003/04[26], although a slight decline was noted in 2004/05 (2499: Figure 26).

In contrast, despite the use of methadone syrup amongst a large proportion of the IDU sample in all three Tasmanian IDRS studies, local rates of consumption of methadone syrup had been continuously below that of the national average until 2002 (Figure 27). These proportions are distorted, however, by the high numbers of methadone maintenance patients in New South Wales. Noteworthy also is the sharp decline in consumption of methadone syrup nationally in 2001, largely associated with the wide introduction of buprenorphine maintenance treatment, particularly so in Victoria. With this contrast of declining use nationally and slowly increasing prescription locally, for the first time, in 2003, the Tasmanian consumption of methadone syrup passed that of the national average (112%: Figure 27). However, there was an abrupt reversal in prescription rates for methadone syrup nationally (while the Tasmanian trend continued upward) in 2004, so that Tasmanian population rates of consumption of methadone syrup had returned to a level slightly below that seen nationally (89% of the national average: Figure 27).

In contrast to the trend for use of methadone syrup, Tasmanian consumption of methadone 10mg tablets has been consistently above 200% that of the national average since 1992 (Figure 28) with a rapid increase in use to 2000 (where local prescription rates were 260% that of the national average). Since a stabilisation of use in 2000 and 2001, there had been a slight decline in usage of 10mg Physeptone tablets both locally and nationally in 2002 and 2003, with a subsequent increase in 2004. While the gap between the relative prescription rates has been falling in recent years, the level of Tasmanian consumption of the tablets remains 250% that of the national average. When trends across both preparations of methadone are combined, overall consumption of methadone in Tasmania remained below that of the Australian average until 2002, and in 2003 grew to 130% that of the national average, and returned to a similar rate to the national average (local rates being 106% that of the national figures) following the increase in syrup prescription rates nationally in 2004 (Figure 29).

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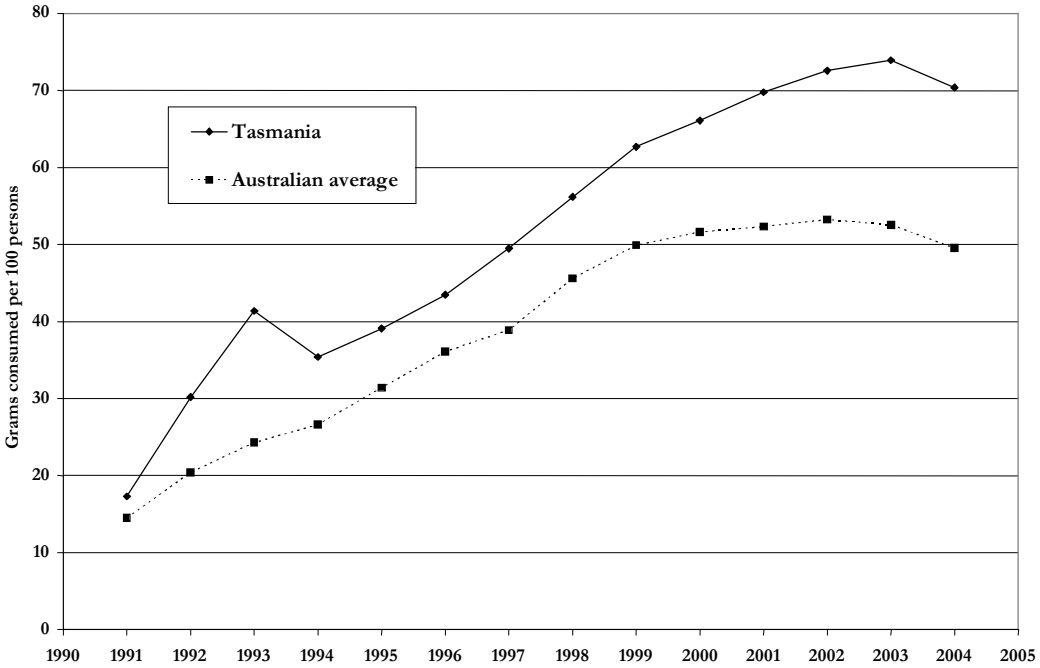
[24] Pharmaceuticals classed under Schedule 8 are variously classed as narcotic substances or drugs of addiction/dependence in differing jurisdictions.

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

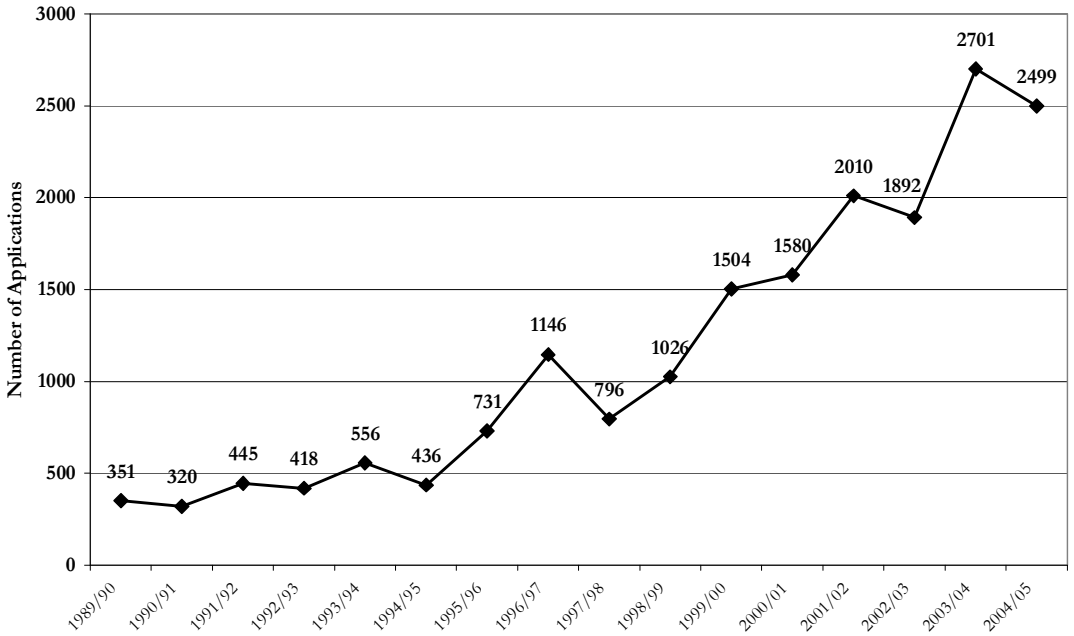
[26] It is worth noting that the level of compliance in regard to submission of applications is significantly dependent on reminders being sent to doctors, and as such these figures are unlikely to reflect the absolute number of cases requiring such a submission.

Figure 25: Consumption of morphine per 1000 persons, 1991-2004



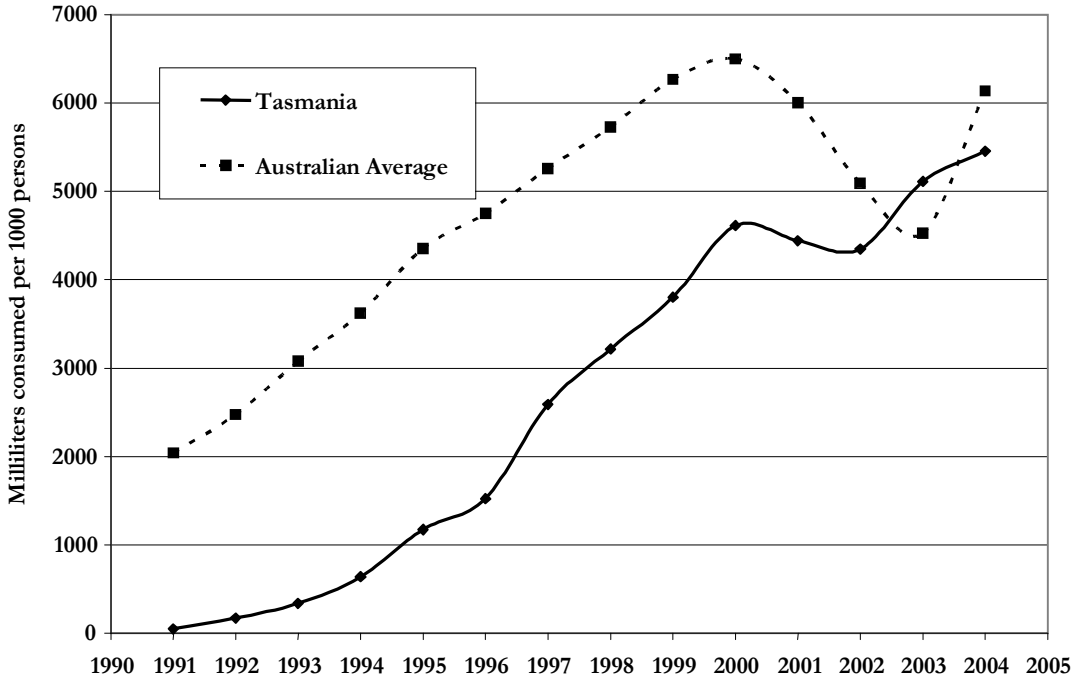
Source: Pharmaceutical Services, Department of Health and Human Services

Figure 26: S22 applications received by Pharmaceutical Services, Tasmania: 1989/90-2004/05



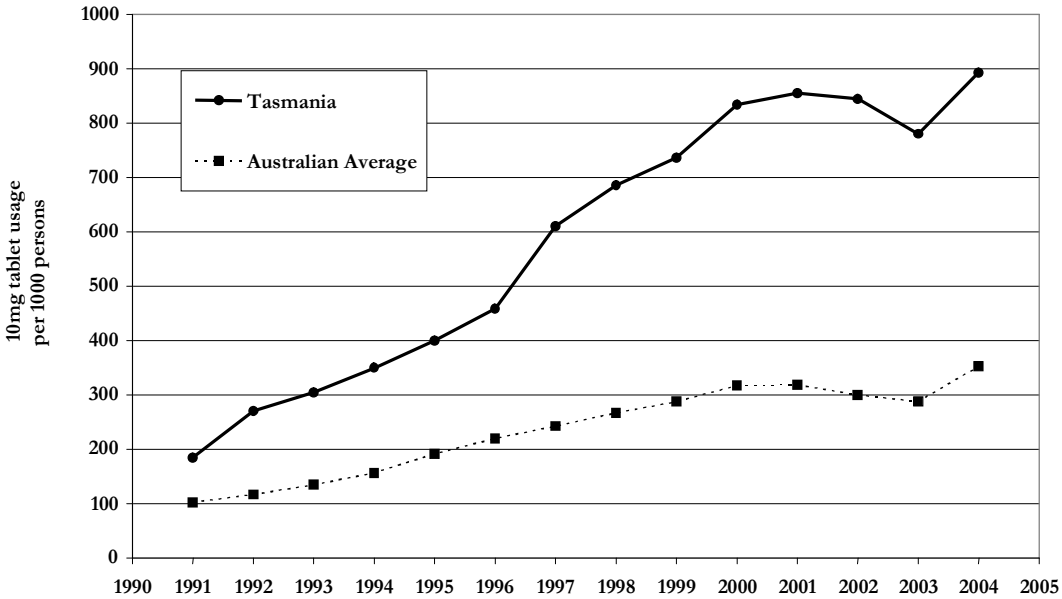
Applications are for approval to prescribe narcotics to a patient for more than two months or for a person who is drug dependent.
Source: Pharmaceutical Services, Department of Health and Human Services

Figure 27: Consumption of methadone syrup per 1000 persons, 1991-2004



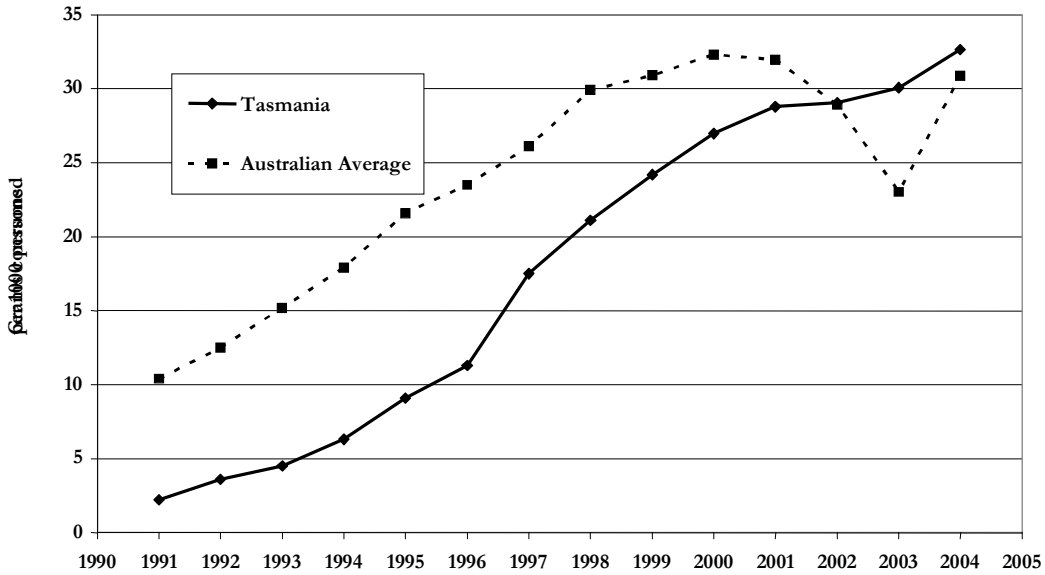
Source: Pharmaceutical Services, Department of Health and Human Services

Figure 28: Consumption of methadone 10mg tablets per 1000 persons, 1991-2004



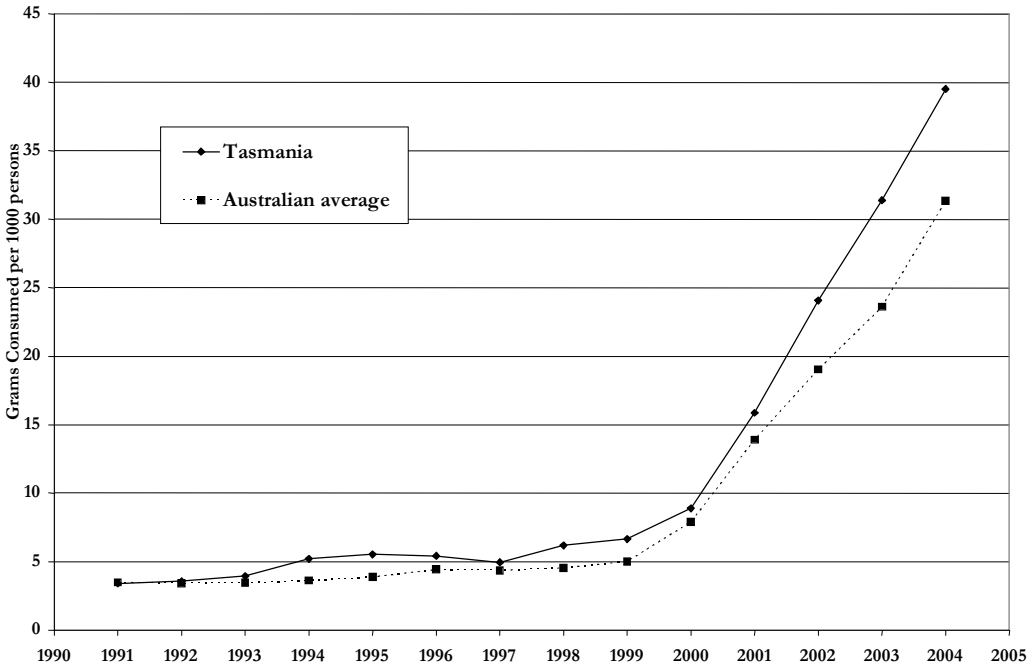
Source: Pharmaceutical Services, Department of Health and Human Services

Figure 29: Consumption of methadone per 1000 persons, 1991-2004



Source: Pharmaceutical Services, Department of Health and Human Services

Figure 30: Consumption of oxycodone per 1000 persons, 1991-2004



Source: Pharmaceutical Services, Department of Health and Human Services

Finally, prescriptions of oxycodone are detailed in Figure 30. Nationally there has been a rapid uptake in the use of this drug since 1999, with uptake in Tasmania being particularly rapid, with prescription rates more than quadrupling in the five years between 2000 and 2004. In 2004, local consumption of oxycodone was 126% of the national average.

While a proportion of these differences in consumption rates can be accounted for by prescription practices and the aging nature of the Tasmanian population, it does, however, indicate a certain willingness to prescribe tablet opioids among Tasmanian doctors. This said, these practices do not seem to apply to the injecting drug user population, as a near-negligible proportion of IDU reported accessing opioids via licit means[27] in the six months prior to interview: with the exception of methadone as part of a maintenance program, only 12 of the current IDU cohort reported accessing morphine, oxycodone or methadone tablets via licit means in this time (3 oxycodone, 7 Physeptone, 3 morphine).

8.4.3 Current patterns of opioid use

Morphine

Morphine was reported as the drug of choice of 15% of the IDU sample, with 59% 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 12 days (range 1-180), which equates to use of the drug approximately every fortnight on average. Morphine was reported as the last drug injected prior to interview for 18% of the IDU sample, and as the drug most injected for 15% in the past month.

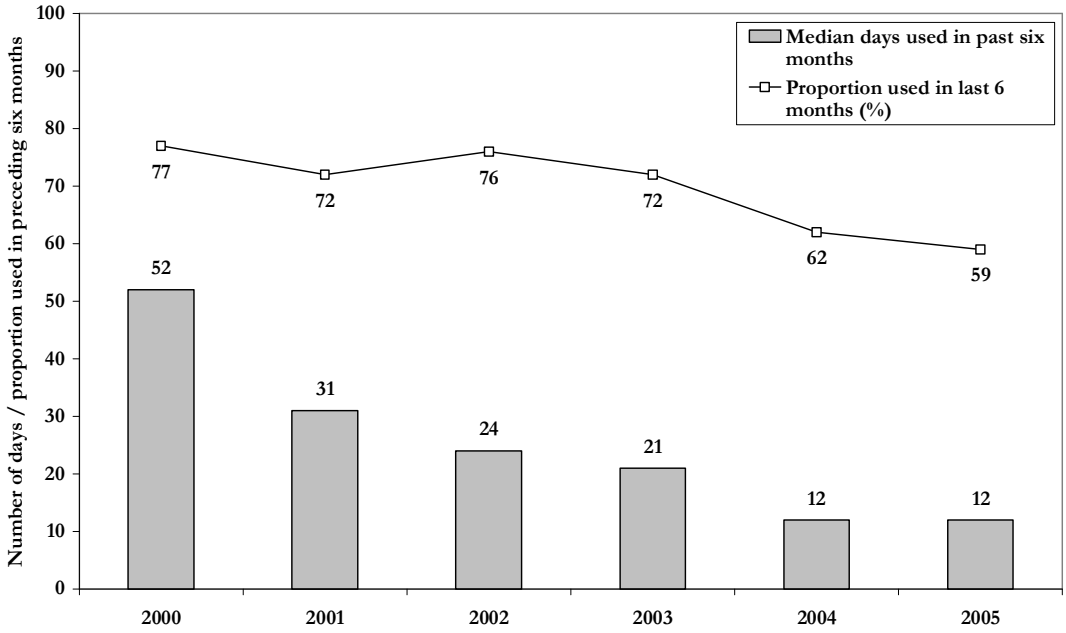
As shown in Figure 31, these figures represent a continuation of a trend toward decreasing levels of use of morphine in the IDRS IDU samples over time: to 2003, the proportion of the samples reporting use of morphine in the six months prior to interview had remained relatively stable (72%-77%); however, there had been a steadily declining median frequency of use of the drug amongst these participants (falling from 52 days in the preceding six months in the 2000 IDU sample to 21 days in the 2003 sample), and in 2004 there were marked declines in both the proportion reporting use of the drug (72% to 62%) and the frequency of this use (21 days in the preceding six months to 12 days). This decline occurred despite a relatively stable proportion of the IDU samples receiving methadone maintenance therapy (52% in 2001, 50% in 2002, 58% in 2003 and 54% in 2004), and the cohorts remaining predominantly opiate-preferring (with between 61% and 67% of the samples between 2001 and 2004 nominating an opiate as their drug of choice). In the 2005 cohort, the level of morphine use remained similar to that in 2004 (59% of the sample, at a median of 12 days in the preceding six months), despite the cohort including both a smaller number of people enrolled in methadone maintenance (43% in at the time of interview and a further 3% at some stage in the preceding six months) and a decline in the proportion reporting an opiate as their drug of choice (54%).

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

Oxycodone

While almost a third of the participants interviewed in the current study had used oxycodone in the six months prior to interview (31%: 30% accessing the drug illicitly, and 3% via legitimate prescription), oxycodone was not reported by any participants as their drug of choice, the drug they had most recently injected or as the drug they had injected most often in the month prior to interview. The median frequency of use of any oxycodone was 6 days in the last six months (range 1-50), with illicit use being less frequent (median = 4 days, range 1-48) than use by prescription (median 18 days, range 6-50 days). As noted above, use of oxycodone among the Tasmanian IDRS IDU cohorts has increased in the past three years, rising to one-third of participants from anecdotal reports of use in 2002.

Figure 31: Proportion of Tasmanian IDRS IDU cohorts reporting use of morphine, and the median frequency of this use, in the six months prior to interview, 2000-2005.



Source: IDRS IDU Interviews

Methadone

Methadone was reported as the drug of choice of 7% of the IDU sample, with 71% of the entire sample reporting some use of methadone in the preceding six months. In regard to use of methadone syrup, 45% of the sample had been prescribed this drug in the preceding six months, using it at a median frequency of 180 days in this time (range 60-180). This represents a steady decline in use of prescribed methadone syrup amongst the consumers sampled for the IDRS study: falling from 59% in 2003 to 45% in the current study (Figure 32)[28]. Fifty-two percent of the 2005 IDU sample had used illicit methadone syrup in the preceding six months, at a median frequency of 12 days (range 1-

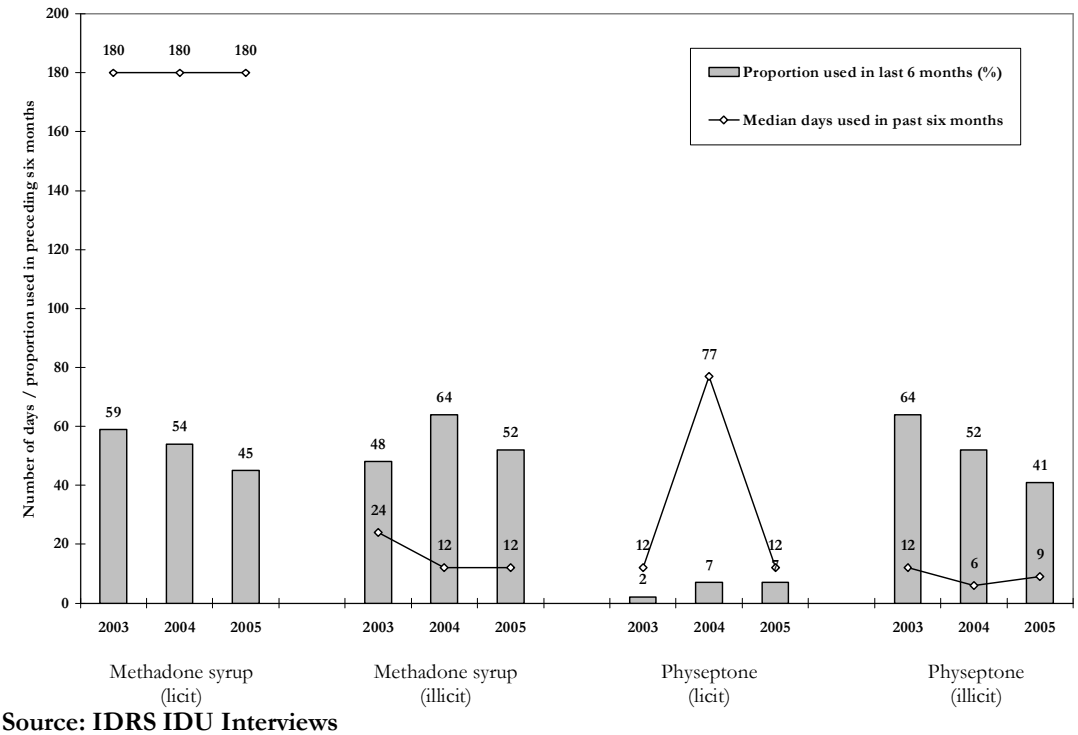
[28] Levels and frequencies of use of methadone were not broken down clearly into separate categories of licit and illicit use of tablets and syrup in the Tasmanian IDRS until 2003, so trends over longer time periods are unable to be examined.

121) in this time. A smaller number of participants in the 2005 cohort reported illicit use of methadone syrup in comparison to the 2004 cohort (64% in 2004 and 52% in 2005: Figure 32), although the median frequency of such use remained the same.

Licit Physeptone tablets were only used by 7% of the consumer sample in the preceding six months, at a median frequency of 12 days in this time (range 3-180 days). This represents a decrease in the median frequency of licit use of the drug in the IDU samples between 2004 and 2005 (from 77 days to 12 days respectively) but, given the small numbers of individuals involved, is simply likely to reflect a statistical quirk (the number of people prescribed for short periods out-numbering those prescribed the drug on a daily basis, which reduces the overall median frequency of use). In keeping with consumer reports of decreased availability of Physeptone, use of illicitly-accessed Physeptone tablets has steadily declined in the past three IDRS cohorts, falling from 64% in 2003 to 41% in 2005 (Figure 32), although the median frequency of this use has remained low in each of these studies (12 days in 2003, 9 days in 2005).

Consistent with reports in 2004, methadone was injected in the preceding six months by almost all of the consumers interviewed reporting recent use of the drug (97%: n=69/71; 2004: 96%, n=82/85).

Figure 32: Proportion of Tasmanian IDRS IDU cohorts reporting use of methadone, and the median frequency of this use, in the six months prior to interview, 2003-2005.



Source: IDRS IDU Interviews

Primary users of opioids described by key experts were commonly polydrug consumers, with regular use of cannabis, methamphetamine, and benzodiazepines. Those individuals receiving methadone maintenance therapy but continuing to use illicit drugs were reported to use methamphetamine or dexamphetamine for self-medication or recreational purposes by several key experts. While oral use of benzodiazepines was

predominant among these groups, key experts also reported some intravenous use of benzodiazepines, at times in combination with opioids (detailed below), with injection of benzodiazepines seen as being a increasing issue in these groups by five key experts working with large numbers of IDU through NAP outlets, methadone programs or law enforcement.

8.5 Opioid-related harms

8.5.1 Law enforcement

In the 2001/02 financial year, 34 arrests (23 consumers, 11 providers) were made by Tasmania Police involving offences relating to opioids (including heroin and other narcotics[29]), a pattern which appears reasonably stable in comparison to 17 arrests (13 consumers, 4 providers) in 2000/01[30], 19 arrests (14 consumers, 5 providers), in 1999/00, 25 arrests (24 consumers, 1 provider) in 1998/99, 16 arrests (15 consumers, 1 provider) in 1997/98 and 28 arrests (24 consumers, 5 providers) in 1996/97. In the 2002/03 financial year, counting rules changed, so the available data are not directly comparable to previous years. Smaller numbers were subsequently reported in this category, being 9 arrests (6 consumers, 1 provider, 2 unknown) in 2002/03, 10 (all consumers) in 2003/04; and 9 arrests (8 consumers, 1 unknown) in 2004/05.

Key experts reporting on groups that primarily used opioids generally reported no noteworthy changes in the level of crimes committed by this group in the preceding six months. Key experts described some degree of property crime amongst some of their primary opioid-using groups (mainly shoplifting or petty, opportunistic theft and, to a lesser extent, burglary), but had not noted any change in the extent of such behaviour in recent months. One law-enforcement key expert noted that some providers of morphine would accept stolen goods as payment for drugs, typically digital cameras, laptop computers, or video cameras. None of the key experts noted any recent change in the extent of drug dealing by the opiate consumers they were familiar with. Fraud was seen as uncommon amongst these groups, and this was uniformly perceived by key experts as not changing amongst the groups they were referring to in recent months. While one key expert, a health professional, noted a recent unusual incident in regard to forging of a doctor's letter, law enforcement key experts noted no recent changes in prescription fraud, and that such activity was minimal. In terms of violent crime, the majority of key experts noted no recent changes in violence amongst the primary opiate-using groups they were familiar with in recent months. However, one key expert involved in drug treatment noted a marked recent increase in aggressive and intimidative approaches by the opiate-consuming clients they were working with in the past 6-12 months. In support of this, two consumers had also noted an increase in aggression amongst the regular opiate consumers they were familiar with in recent months. In terms of aggression and intimidation toward patients of the methadone maintenance program (in previous years, such consumers have reported being 'stood over' by others in an attempt to access takeaway doses of methadone illicitly), one law enforcement professional noted that there had been less reports of this occurrence in the preceding six months. However, another key expert noted that such intimidation had increased in recent months, and four of the consumers interviewed noted that they had been threatened or 'heavied' by others

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

[30] Arrest data quoted here may differ slightly from figures reported in the ABCI annual 'Australian Illicit Drug Reports', as some opioid-related data may be classified there under 'other drugs'. Data here reflects that provided by Tasmania Police State Intelligence Services.

when trying to pick up takeaway doses of methadone in the past month. There are indications that police are responsive to this issue, with six IDU participants noting an increased police presence around pharmacies dispensing methadone in recent months, particularly on days when 'takeaway' doses are dispensed.

When asked about recent changes in police activity, all key experts noted no recent changes in relation to opioid users in recent months. Law enforcement key experts interviewed noted no such changes other than that they have been developing closer ties with pharmacies in recent years.

8.5.2 Health

In regard to recent changes in the health of opioid-using groups that key experts had contact with, several issues were noted. Firstly, two key experts noted an increase in the numbers of younger opiate consumers (in their early twenties) presenting for drug rehabilitation programs. Similar to trends reported for primary methamphetamine-consuming groups, several key experts noted that the complexity of opiate-using clients needs had been steadily increasing over time, with many people presenting to support services affected in multiple areas (for example, with housing increasingly difficult to access, some key experts noted that, for some of their clients, this, in turn would make it more difficult to meet Centrelink obligations, leading to breaches and reductions in income, which itself made maintenance of daily methadone dispensing costs difficult to manage).

An increase in opiate-related overdose in recent months was noted by multiple key experts in a variety of occupations (n=5: from key experts working in emergency health services, law enforcement, drug treatment, and needle availability programs). Such a recent change was also noted by several consumers. While there were no objective data publicly available at the time of completion of this report that were able to support the suggested changes in overdoses, the anecdotal reports from these key experts suggested that these were associated with use of methadone, morphine, or methadone and benzodiazepines in combination. In support of this, several consumers reported witnessing overdoses in the previous year where the drugs involved were believed to be methadone and alprazolam in combination (n=6), methadone and morphine in combination (n=2) or morphine and benzodiazepines in combination (n=1).

In terms of injection-related health, five health-related key experts (drug treatment workers, emergency health services, and needle availability program staff) noted a recent decline in vein health amongst their opiate-consuming groups. These included increases in experience of abscesses (noted by one Needle Availability Program worker, who noted this change amongst younger opiate consumers who may not have been injecting themselves). Drug treatment staff and emergency health workers also noted recent increases in septicaemia (suggested as possibly relating to re-use of injection equipment or among people that had experienced infections or abscesses following injection but had not accessed treatment), and in bacterial endocarditis (likely from injection of non-sterile material and/or use of non-sterile equipment). One ambulance officer interviewed noted responding to between 15 and 20 cases related to IDU consumers of pharmaceutical opiates in the preceding six months in Hobart, with the majority of these cases relating to infections and other problems associated with injection-related issues. Finally, two key experts involved in drug treatment noted recent increases in the numbers of opiate consumers injecting into their groin, with these consumers doing so because they had damaged other injection sites over extended periods of injection.

IDU participants that had injected opioids in the month prior to interview were asked if they had experienced any health problems associated with this injection (Table 35). More than two-fifths (44%) had injected morphine in this time, and almost two-thirds (63%) had injected some form of methadone. Of those that had recently injected morphine, two-fifths (39%) reported experiencing no harms associated with this injection. The most common problems associated with morphine injection were self-reported dependence (23%), swelling of the arm (23%: reflecting injections missing the veins, infections, or lack of rotation of injection sites), prominent scarring or bruising (18%) or difficulty finding veins to inject into (18%), suggesting venous damage. Similar to trends for morphine injection, two-fifths of those recently injecting methadone reported no problems in association with such use (43%). The commonest problem reported was again self-reported dependence (29%). Similar to trends for morphine, indicators of venous damage, such as difficulty finding veins (21%) or prominent scarring or bruising (11%) were also common, with a further 13% reporting recent swelling of the arm. One-sixth (14%) reported recently experiencing a 'dirty hit' associated with methadone injection (an injection that made the individual feel physically sick), an experience which is commonly related to injection of impurities or contaminants. Anecdotal reports from IDU suggest that this may be due to non-sterile water being used to dilute take-away doses of methadone syrup.

Key experts were asked about recent changes in the mental health of the opioid-using groups that they had been in contact with over the preceding six months. While the majority did not note any changes in mental health in this time (n=3), one key expert involved in drug treatment noted an increase in the number of individuals presenting for pharmacotherapy programs that had an existing severe/persistent mental illness-type of diagnosis. A further key expert, involved in NAP, had noted an increase in methamphetamine use amongst the opiate consumers they were familiar with, and that such use (with its associated impact on sleep patterns and nutrition) had exacerbated existing mental health problems amongst some of the consumers they were familiar with.

Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare for the 1993/04 to 2003/04 financial year periods. These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where opioid use was recorded as the 'principal diagnosis'; namely, where the effect of opioid was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

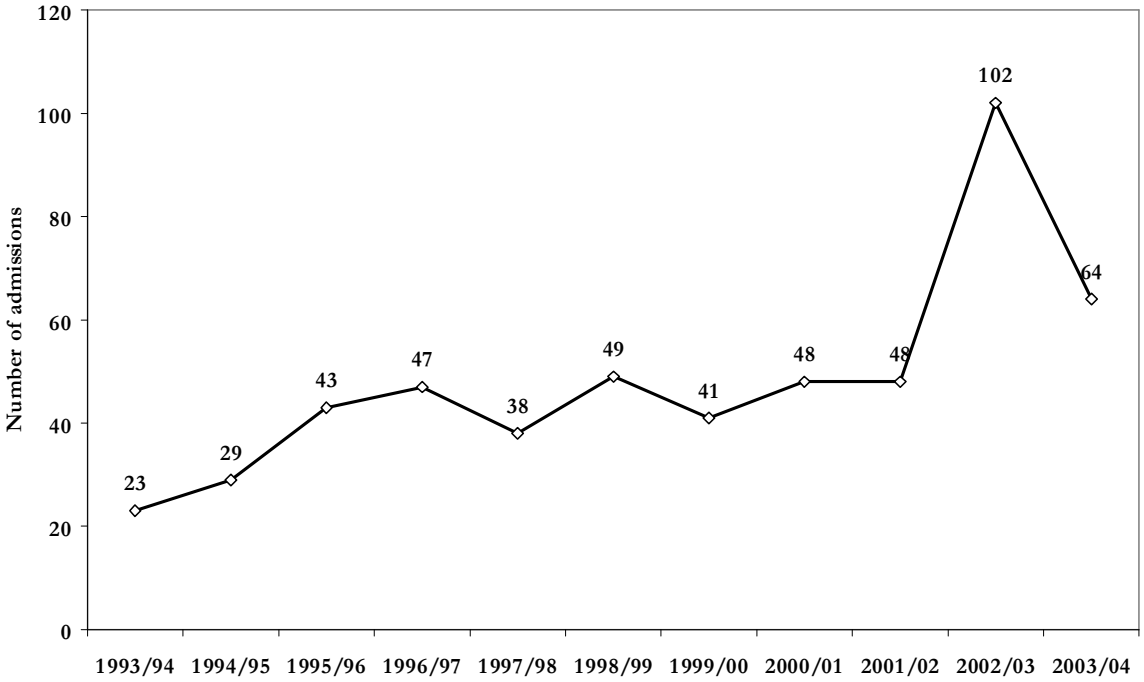
Table 35: Injection-related problems experienced by recent morphine and methadone injectors

	Morphine		Methadone	
	%	n	%	n
Percent of sample injecting in the past month	44	*44*	63	*63*
Injection-related problem experienced				
No problems	39	*17*	43	*27*
Overdose	0	*0*	0	*0*
Abscesses/infections	5	*2*	6	*4*
'Dirty hit'	2	*1*	14	*9*
Prominent scarring/bruising	18	*8*	11	*7*
Thrombosis/blood clotting	7	*3*	8	*5*
Swelling of arm	23	*10*	13	*8*
Swelling of leg	0	*0*	3	*2*
Swelling of hand	7	*3*	5	*3*
Swelling of feet	0	*0*	0	*0*
Hospitalisation	0	*0*	0	*0*
Contact with ambulance	0	*0*	0	*0*
Contact with police	0	*0*	0	*0*
Dependence	23	*10*	29	*18*
Difficulty finding veins to inject into	18	*8*	21	*13*
Skin ulcers	0	*0*	0	*0*
Gangrene	0	*0*	0	*0*
Other	9	*4*	6	*4*

Source: IDRS IDU Interviews

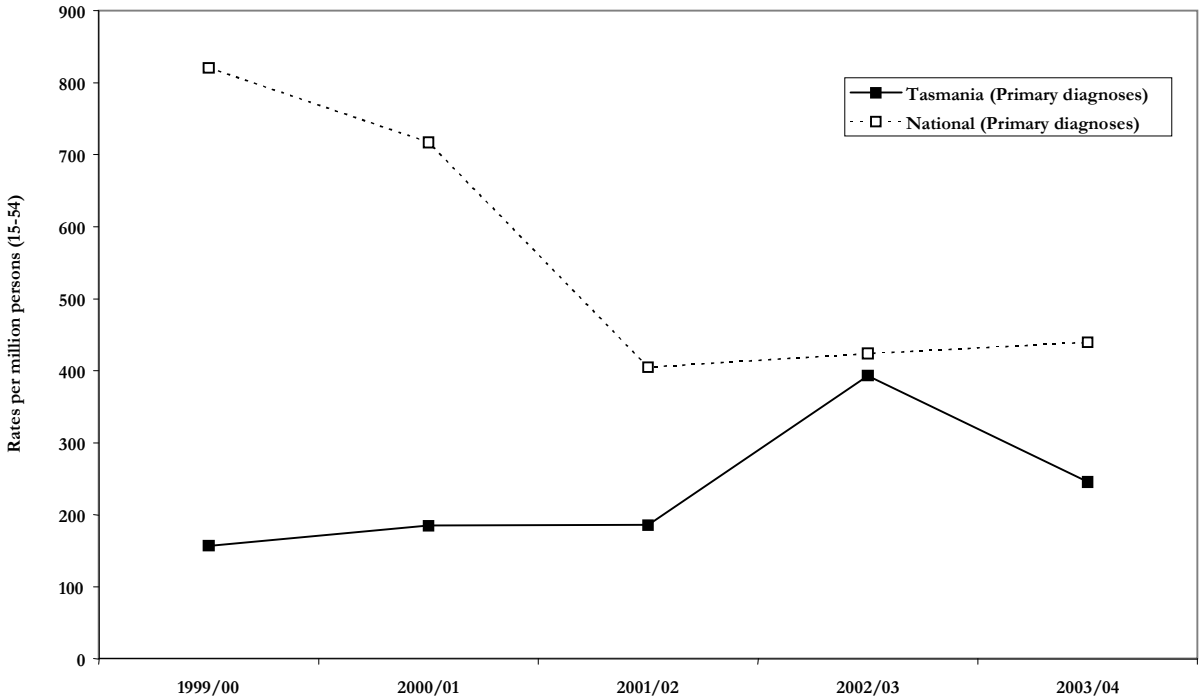
Opioid admissions are presented in Figure 33 below. Between 1995/96 and 2001/02, primary diagnoses relating to opioid use had remained relatively stable, between 40 and 50 admissions per quarter. However, when data from the state's public detoxification centre were included in these figures (July 2002), there was a marked, but unsustained, increase in the number of admissions (rising from 48 admissions in 2001/02 to 102 in 2002/03, and falling to 64 in 2003/04). As can be seen in Figure 34 below, when the Tasmanian rate of opiate-related admissions per million population is compared to that of the national Australian level, prior to the inclusion of figures from the public detoxification service being included, local admission rates for such cases were substantially lower than the national rates (around one-quarter of the primary diagnoses 1999/00 and 2000/01, and one-half of the admission rate in 2001/02). In 2002/03, when detoxification patients were included, local admission rates were comparable to those nationally (395 vs. 424 admissions per million persons between the ages of 15 and 54 respectively). However, in 2003/04, local admission rates returned to around half that of the national level (245 vs. 440 admissions per million persons between the ages of 15 and 54 respectively), reflecting the decrease in admissions locally in comparison to a stable level nationally.

Figure 33: Public hospital admissions amongst persons aged 15-54 in Tasmania where opioid use was noted as the primary factor contributing to admission, 1993/04-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Figure 34: Public hospital admissions among persons aged 15-54 where opioids were noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1999/00-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

8.6 Trends in patterns of opioid use

Multiple other trends in opioid use were noted by both key experts and the consumers interviewed. As was reported in Section 5.6, consistent with the trends identified in previous reports, several of the IDU interviewed noted that the consumers they were familiar with had switched from predominant use of opioids to predominant use of methamphetamine (with these groups including both male and female consumers, across the age range, n=5).

Despite indications to the contrary among the current consumer sample, and in data from the state's Needle Availability Program, multiple consumers independently reported an increase in the number of opiate consumers they were aware of in recent months (n=18). In particular, an increase in the number of young consumers (in their late teens to early twenties), of a broader demographic of consumers (described as 'business people' by consumers and key experts) and of female opiate consumers (noted by eight consumers and three key experts) was identified. The increase in female consumers was supported by the relatively even gender balance in the opiate consumers described by key experts (a change from the male predominance in previous years). Several IDU (n=7) reported that the opiate consumers they were familiar with had increased the frequency of their opiate use in the preceding six months, with this change noted among both male and female consumers across the age range.

While a notable number of the IDU sample reported being aware of a greater number of opiate consumers in recent months, this was more commonly in relation to an increase in use of morphine (n=7) rather than of methadone (n=4) or oxycodone (n=1) Two consumers noted in particular a recent increase in the use of opiates in combination with benzodiazepines (in the same syringe, most commonly methadone and alprazolam) among the consumers they were familiar with, which was also noted by multiple key experts. Such use was apparent in the current IDU sample, with three consumers reporting methadone-alprazolam combinations as the drug they had most often injected in the month prior to interview. This combination of use is of considerable concern, not solely due to the deleterious effects of injection of benzodiazepines (see Fry & Bruno, 2002) but also due to the increased risk of overdose on use of multiple central nervous system depressant drugs. As noted above, both consumers and key experts in the current study provided anecdotal reports of local overdose deaths associated with combinations of pharmaceutical opiates and benzodiazepines. Also, in previous IDRS reports, respondents have noted extremely disinhibited behaviour following such combined use. As such, the non-prescription combination use of opiates and benzodiazepines merits careful attention in the coming months, particularly from front-line health intervention workers.

8.7 Summary

Table 36: Summary of trends in opioid use

	Morphine	Methadone
Price	• $70/100 mg, stable to increasing	• $0.8/mg, stable (syrup) • $10/10mg, stable to increasing (Physeptone)
Availability	• Easy to very easy • Stable	• Mixed reports: syrup 'easy' to access only if standing arrangement (and largely purchased from friends); 'difficult' and decreasing in availability otherwise • Diverted Physeptone access 'difficult' and increasingly so
Form	• MS Contin predominant • Ordine use almost non-existent (following increases in previous years)	• Both Physeptone tablets and methadone syrup accessed illicitly • Decreasing use of Physeptone tablets • Diverted syrup often accessed by people already on the program
Use	• Illicit oxycodone use increasing (21% in 2003, 30% in 2005), and sold more cheaply than morphine ($40 per 80mg) despite higher relative potency, but availability 'difficult' and stable • Continuing decline in use and availability of illicit Physeptone tablets of methadone this year following four years of steadily increasing use between 2000 and 2003 • Morphine appears to be losing users to methamphetamine • Anecdotal reports of an increase in younger people using opioids	
Other trends	• Reports of continuing use of opioids and benzodiazepines (predominantly alprazolam) simultaneously among some IDU consumers, a practice which carries an increased risk of overdose and disinhibited behaviour • Continuing anecdotal reports suggesting many users are changing from being primary users of opioids to being primary users of methamphetamine • Opioids accessed for illicit use by IDU are not coming from direct doctor-shopping by IDU themselves	

9.0 BENZODIAZEPINES

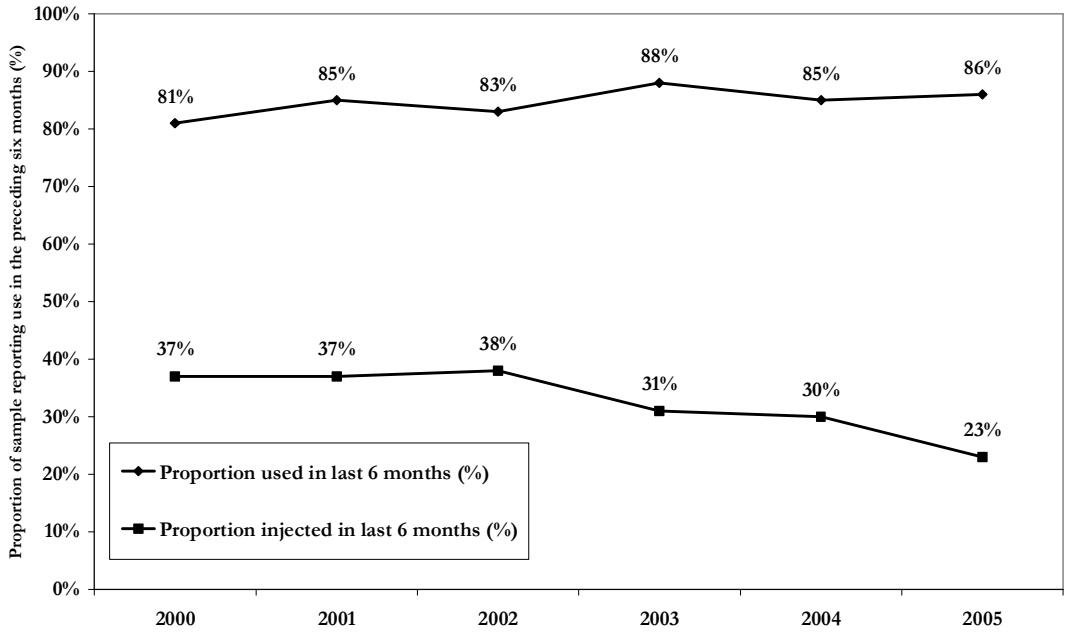
Almost all (94%) of the IDU sample had used benzodiazepines at some stage in their lives. Similarly, 93% had ever swallowed benzodiazepines, with 82% swallowing a benzodiazepine in the preceding six months. While this indicates a high level of use of these drugs amongst IDU, of particular note is the fact that 46% of the sample had ever injected benzodiazepines, with 23% injecting in the six months prior to interview. As is shown in Figure 35 below, rates of overall use have remained fairly stable (81%-88% across the 2000 to 2005 surveys), while recent injection rates in the IDRS IDU cohorts fell slightly between 2002 and 2003 (from a stable 37-38% between 2000 and 2002 to 31% and 30% in 2003 and 2004) and again in 2005 (23%). The reduction in injection rates between 2002 and 2003 occurred following a policy change to reduce the availability of gel capsules of temazepam, the benzodiazepine and formulation most preferred for injection by IDU, through the Pharmaceutical Benefits Scheme (PBS) in mid-2002. The effect of this policy change was more marked in other jurisdictions, with rates of recent benzodiazepine injection across the national IDRS samples declining from 24% in 2001 to 14% in 2004 (in contrast to the local change from 38% to 30% in this period: Stafford et al, 2005). As discussed below, it would appear that many of the Tasmanian consumers that were engaged in benzodiazepine injection shifted their use from injection of temazepam gel capsules to injection of alprazolam tablets in response to this availability change. Between the 2004 and 2005 Tasmanian IDRS IDU samples, however, there was a continued decline in the rate of recent injection, from 30% to 23%. While rates of benzodiazepine injection in the national IDRS samples similarly declined (from 14% in 2004 to 8% in 2005: Stafford et al, 2006), it is possible that some of the change in the level of recent benzodiazepine injection in the local 2005 sample may relate to the recruitment of a smaller proportion of opiate consumers (with recent use of morphine falling from 62% in 2004 to 59% in the 2005 sample; use of illicit methadone syrup from 54% to 45%; diverted Physeptone from 52%-41%; and, importantly, the proportion involved in methadone maintenance falling from 52% in 2004 to 41% in 2005) and of individuals that reported opiates as their drug of choice (67% in 2004 and 54% in 2005), given that an association between opiate use and benzodiazepine injection has been noted in previous studies (Bruno, 2005; Fry & Bruno, 2002).

The demographic characteristics 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, relationship status, employment, access of income from criminal activity, age of first injection, duration of injecting career, drug of choice and frequency of injection. However, those that had recently used benzodiazepines were significantly more likely to be involved in drug treatment (65% vs. 29%, $\chi^2(1_{n=100})=6.7$, $p=0.01$), particularly methadone maintenance therapy (50% vs. 21%, $\chi^2(1)=3.9$, $p=0.047$) than those that had not. Additionally, recent benzodiazepine users among the consumer sample were significantly more likely to have a previous prison history (38% vs. 7%, $\chi^2(1_{n=100})=5.2$, $p=0.022$), and less likely to be heterosexual (86% vs. 93%, $\chi^2(3_{n=100})=8.2$, $p=0.043$) than those that had not recently used the drug.

Those that had recently injected benzodiazepines were similar to the other IDU consumers sampled in terms of age, sex, cultural background, relationship status and sexual preference, employment, access of income from criminal activity, prison history, age of first injection, duration of injecting career, and frequency of injection. Again, those that had recently injected benzodiazepines were significantly more likely to be involved in

drug treatment (91% vs. 51%, $\chi^2(1_{n=100})=12.2$, $p<0.001$), particularly methadone maintenance therapy (87% vs. 34%, $\chi^2(1_{n=100})=20.2$, $p<0.001$) than those that had not. Benzodiazepine injectors were also significantly more likely to report an opiate as their drug of choice (78% vs. 49%, $\chi^2(2_{n=100})=6.4$, $p=0.04$) than those that had not recently injected such drugs.

Figure 35: Proportion of IDU reporting benzodiazepine use and injection in the preceding six months 2000-2005



Source: IDRS IDU Interviews

Frequency of use of benzodiazepines was a median of 72 days in the preceding six months amongst those using the drug (range 1-180), somewhat higher than the rate in the 2004 (median frequency 50 days, range 1-180) and 2003 surveys (30 days, range 1-180). Among the 23 participants that had recently injected benzodiazepines, the median frequency of injection was 12 days in the preceding six months (range 1-120 days), again somewhat greater than the median frequency of use identified in the 2004 (median 6 days, range 1-120) or 2003 (median frequency 5 days) local cohorts.

High levels of oral benzodiazepine use in the last six months were seen among those IDU who had most often injected methadone (91%), morphine (80%) and methamphetamine (83%). Consistent with the demographic characteristics, injection of benzodiazepines was more common amongst primary users of methadone, with approximately one-third of those that had most commonly injected methadone (30%) recently injecting benzodiazepines, in comparison to 20% of predominant injectors of morphine and 15% of those most often injecting methamphetamine (Table 37).

Table 37: Patterns of use of benzodiazepines amongst primary users of other drugs in the IDU sample *(n=100, number of respondents in parentheses)*

Drug most injected in the past month	Swallowed benzodiazepines in past 6 months	Injected benzodiazepines in the past 6 months
Methadone (n=34)	91% (n=31)	29% (n=10)
Morphine (n=15)	80% (n=12)	20% (n=3)
Methamphetamine (n=47)	83% (n=39)	15% (n=7)

Source: IDRS IDU Interviews

Key experts reported similar patterns of use among the groups they had most contact with, reporting some use among primary users of cannabis, where use of the drug was limited and predominantly oral; and use among primary users of methamphetamine (and other psychostimulants such as ecstasy), reporting some intravenous use, but it was again predominantly swallowed, and used in particular for 'coming down' from stimulant use (although one key expert working in needle availability reported a recent decline in methamphetamine consumers using benzodiazepines in this way, instead preferring extended methamphetamine 'binges'). Key experts more commonly noted use of benzodiazepines among primary users of opioids, with swallowing most common, although, consistent with trends in the IDU sample, some intravenous use was also noted. Several key experts (n=8) working in a variety of fields (drug treatment, the Needle Availability Program, and law enforcement) noted a recent increase in the use of benzodiazepines amongst the consumers they were familiar with, referring to increased use of alprazolam amongst opiate consumers in particular, as well as a recent increase of injection of benzodiazepines amongst such demographics.

When asked to nominate the main type of benzodiazepine used in the past six months, diazepam (65%: Valium, 52%), and alprazolam (23%: Xanax 15%) were most common, with lower levels of primary use of oxazepam (8%: Serepax, 8%), nitrazepam (2%: Mogadon, Alodorm, 1% respectively), with a single individual reporting predominant recent use of temazepam (1%).

Examination of Table 38 clearly indicates that, as per trends in previous IDRS cohorts, Valium (diazepam) is the most commonly used benzodiazepine among those swallowing the drug (used by 78% of those swallowing a benzodiazepine in the preceding six months, n=67), with use of Antenex (diazepam) also common (21%, n=18). Oral use of Xanax (alprazolam) in the preceding six months had steadily increased among IDRS IDU cohorts between 2001 and 2004 (16% of those reporting recent benzodiazepine use in 2001, 45% in 2004), although this remained relatively stable in the most recent survey (38%, n=33 in 2005). Use of Serepax (oxazepam) was also common (35%) but at levels of use comparable to those seen in previous IDRS IDU cohorts (33% in 2004). There were some indications for slight decreases in the extent of oral use of Temaze (temazepam: 24%, n=20 in 2004; 13%, n=11 in 2005) and Mogadon (nitrazepam: 17%, n=14 in 2004, 9%, n=8 in 2005).

In contrast to trends reported for oral use of benzodiazepines, use of alprazolam tablets was much more common amongst those injecting benzodiazepines than diazepam. Comparing the injection of the main types of benzodiazepines used for injection across IDRS IDU cohorts over time (Tables 39, 40), it is clear that use of gel capsule formulations of temazepam has decreased over time (36% of the sample in 2001, falling

to 4% in 2005, at a median frequency of just 5 days in the preceding six months in the current cohort). Rates of injection of diazepam have remained relatively stable over time (6%-10% of the cohorts between 2002 and 2005, at a median frequency of 8 days or less in this time). Importantly, both the proportion of the IDU cohorts reporting recent injection of alprazolam, and the median frequency of such use, has steadily increased over time (rising from 3%, at a median frequency of 7 days in 2002 to 19% at a median frequency of 24 days in the preceding six months in 2005), particularly since the reduced availability of temazepam gel capsules in 2002. This pattern is consistent with reports from both IDU and key experts in each of the past three IDRS studies that simultaneous injection of alprazolam with opiates had increased among some local IDU consumers. This combination of use is of considerable concern, not solely due to the deleterious effects of injection of benzodiazepines (see Fry & Bruno, 2002) but also due to the increased risk of overdose on use of multiple central nervous system depressant drugs, and moreover the extremely disinhibited behaviour that can occur following such combined use.

Table 38: Benzodiazepine formulations used by IDU orally in the six months prior to interview: 2001-2005 IDRS

Benzodiazepine	Proportion using this benzodiazepine/brand orally in the preceding six# months									
	2001 IDRS (n=74)		2002 IDRS (n=80)		2003 IDRS (n=87)		2004 IDRS (n=82)		2005 IDRS (n=86)	
	%	n	%	n	%	n	%	n	%	n
Alprax (*alprazolam)*	-		-		-		-		2	2
Kalma (*alprazolam)*	-		8	6	1	1	10	8	9	8
Xanax (*alprazolam)*	16	12	14	11	34	29	45	37	38	33
Lexotan *(bromazepam)*	-		3	2	4	3	1	1	-	
Paxam (*clonazepam)*	-		3	2	4	3	1	1	2	2
Rivotril (*clonazepam)*	8	6	8	6	1	1	1	1	3	3
Antenex (*diazepam)*	12	9	19	15	4	3	22	18	21	18
Diazemuls (*diazepam)*	3	2	-		-		1	1	-	
Ducene (*diazepam)*	8	6	5	4	5	4	9	7	10	9
Valium (*diazepam)*	84	62	73	58	81	69	83	68	78	67
Valium liquid (*diazepam)*	-		-		1	1	0		-	
Valpam (*diazepam)*	-		-		1	1	2	2	2	2
Hypnodorm (*flunitrazepam)*	5	4	10	8	13	11	12	10	7	6
Rohypnol (*flunitrazepam)*	24	18	-		-		-		-	
Alodorm (*nitrazepam)*	1	1	5	4	1	1	7	6	5	4
Mogadon (*nitrazepam)*	34	25	20	16	22	19	17	14	9	8
Alepam (*oxazepam)*	1	1	5	4	-		4	3	8	7
Murelax (*oxazepam)*	5	4	1	1	2	2	9	7	2	2
Serepax (*oxazepam)*	36	27	31	25	32	27	33	27	35	30
Euhypnos* (*temazepam)*	4	3	5	4	5	4	11	9	2	2
Normison* (*temazepam)*	45	33	21	17	1	1	21	17	6 *(tab)*	5
Temaze* (*temazepam)*	18	13	30	24	8	7	11	9	2	2
Temaze (tablets)					14	12	24	20	13	11
Temtabs (*temazepam)*	-		9	7	1	1	9	7	7	6

Source: IDRS IDU Interviews. *signifies those benzodiazepines available in gel capsule formulation; #2002 data are for the five-month period Jan-April, and June, 2002

Table 39: Benzodiazepines used by IDU consumers intravenously in the six months prior to interview: 2001-2005 IDRS

Benzodiazepine	Proportion using this benzodiazepine/brand intravenously in the preceding six# months									
	2001 IDRS (n=38)		2002 IDRS (n=38)		2003 IDRS (n=31)†		2004 IDRS (n=30)		2005 IDRS (n=23)	
	%	n	%	n	%	n	%	n	%	n
Alprax (*alprazolam)*	-		-		4	1	3	1	9	2
Kalma (*alprazolam)*	-		3	1	13	3	13	4	30	7
Xanax (*alprazolam)*	11	4	8	3	38	9	57	17	78	18
Paxam (*clonazepam)*	-		-		13	3	3	1	-	
Rivotril (*clonazepam)*	-		-		4	1	7	2	9	2
Antenex (*diazepam)*	-		5	2	-		10	3	13	3
Valium (*diazepam)*	8	3	16	6	13	3	10	3	22	5
Valium liquid (*diazepam)*	-		-		13	3	-		-	
Hypnodorm (*flunitrazepam)*	3	1	5	2	13	3	3	1	9	2
Rohypnol (*flunitrazepam)*	5	2	-		-		-		-	
Alepam (*oxazepam)*	-		3	1	-		-		9	2
Serepax (*oxazepam)*	3	1	5	2	-		7	2	13	3
Euhypnos* (*temazepam)*	8	3	24	9	46	11	33	10	4	1
Normison* (*temazepam)*	82	31	53	20	8	2	60	18	17	4
Temaze* (*temazepam)*	24	9	47	18	29	7	43	13	-	
Temtabs (*temazepam)*	-		5	2	4	1	7	2	9	2

Source: IDRS IDU interviews *signifies those benzodiazepines available in gel capsule formulation; #2002 data are for the five-month period Jan-April, and June, 2002; †data only collected on 24 of the 31 individuals reporting injecting use of benzodiazepines in the preceding six months: proportions are calculated relative to these 24 participants.

Table 40: Types of benzodiazepines commonly injected by IDU: 2001-2005

	2001	2002#	2003	2004	2005
Temazepam gel capsules					
% injecting in past six months	36%	30%	14%	19%	4%
Median days injected	*n/r*	10	6	3	5
Alprazolam					
% injecting in past six months	4%	3%	11%	17%	19%
Median days injected	*n/r*	7	20	24	24
Diazepam					
% injecting in past six months	3%	6%	6%	10%	8%
Median days injected	*n/r*	3	5	4	8

Source: IDRS IDU Interviews #2002 data are for the five-month period Jan-April, and June, 2002

9.1 Availability and Access

Key experts generally found it difficult to separate licit and illicit use of benzodiazepines amongst the groups of consumers they were reporting on, as often there was a substantial amount of overlap in use, with, for example, some people receiving diverted medications as a gift from a friend, or others bingeing on a benzodiazepine prescription then having to purchase diverted benzodiazepines to maintain their usual base level of use. When IDU were asked what their usual source of benzodiazepines was in the preceding six months, 56% of those that had used the drug reported predominantly accessing benzodiazepines via licit means (for genuine symptoms), with smaller proportions reporting accessing the majority of the benzodiazepines they had recently used through gifts from friends (20%) or through purchasing from friends (14%). None of the consumers reported usually accessing benzodiazepines through doctor-shopping (Table 41). When considering all modes of access to benzodiazepines in the preceding six months, legitimate access through prescription (64%), access to diverted tablets from friends as gifts (53%) or at a cost (30%) were again the most common modes of access. When compared with the modes of access to benzodiazepines reported in previous IDRS cohorts, there was a decline in the proportions accessing these drugs from 'dealers' (22% purchasing benzodiazepines from a dealer in 2004, 9% in 2005; 31% swapping drugs with a dealer for benzodiazepines in 2004, 17% in 2005: Table 41).

Table 41: Methods of obtaining benzodiazepines in the six# months prior to interview: 2001-2005 IDRS

All modes of access	2001 IDRS (n=69) %	2002 IDRS (n=75) %	2003 IDRS (n=88)* %	2004 IDRS (n=85) %	2005 IDRS (n=86) %
Doctors (genuine symptoms)	57 *(n=39)*	53 *(n=40)*	n/a	59 *(n=50)*	**64 *(n=55)***
Doctors (fake symptoms)	9 *(n=6)*	8 *(n=6)*	n/a	2 *(n=2)*	**-**
Forged prescriptions	0 *(n=0)*	0 *(n=0)*	n/a	-	**-**
Altered existing prescriptions	0 *(n=0)*	0 *(n=0)*	n/a	-	**-**
Friends (gift or purchase) †	67 *(n=46)*	59 *(n=44)*	n/a	56 *(n=48)*	**53 *(n=46)***
Friends (purchase)†	†	†	n/a	40 *(n=34)*	**30 *(n=26)***
Family	3 *(n=2)*	8 *(n=6)*	n/a	n/a	**n/a**
Dealer / street (purchased)	23 *(n=16)*	28 *(n=21)*	n/a	22 *(n=19)*	**9 *(n=8)***
Dealer / street (swap drugs)	4 *(n=3)*	12 *(n=9)*	n/a	31 *(n=26)*	**17 *(n=15)***
Theft	n/a	n/a	n/a	2 *(n=2)*	**1 *(n=1)***
Primary mode of access					
Doctors (genuine symptoms)	**45 *(n=31)***	**47 *(n=35)***	**48 *(n=38)***	**44 *(n=37)***	**56 *(n=48)***
Doctors (fake symptoms)	**9 *(n=6)***	**1 *(n=1)***	**1 *(n=1)***	**2 *(n=2)***	**-**
Forged prescriptions	**0 *(n=0)***	**0 *(n=0)***	**0 *(n=0)***	**-**	**-**
Altered existing prescriptions	**0 *(n=0)***	**0 *(n=0)***	**0 *(n=0)***	**-**	**-**
Friends (gift or purchase) †	**42 *(n=29)***	**35 *(n=26)***	**27 *(n=21)***	**26 *(n=22)***	**20 *(n=17)***
Friends (purchase)†	**†**	**†**	**20 *(n=16)***	**13 *(n=11)***	**14 *(n=12)***
Family	**1 *(n=1)***	**3 *(n=2)***	**n/a**	**n/a**	**n/a**
Dealer / street (purchased)	**3 *(n=2)***	**13 *(n=10)***	**4 *(n=3)***	**5 *(n=4)***	**5 *(n=4)***
Dealer / street (swap drugs)	**0 *(n=0)***	**1 *(n=1)***	**n/a**	**7 *(n=6)***	**6 *(n=5)***
Theft	**n/a**	**n/a**	**n/a**	**-**	**-**

Source: IDRS IDU interviews #Note: 2002 data refer to a four-month period of accessing benzodiazepines (January-April 2002), due to the nature of the survey questions. *Data were only collected on 79 participants: proportions are calculated with reference to this number. †In 2003, data were divided according to purchase from friend or gift from friend to clarify trends from previous years.

Those participants that had accessed diverted benzodiazepine tablets in the six months prior to interview were asked about their ease of access to such drugs in this time. Most participants noted that it was 'easy' or 'very easy' (74%: 35% 'very easy', n=17; 39% 'easy', n=19), although one-fifth (22%, n=11) considered it 'difficult' to access diverted benzodiazepine tablets in recent months. The largest proportion of consumers reported no recent change in availability of diverted benzodiazepine tablets in recent months (45%, n=23), with relatively equal proportions noting recent decreases (29%, n=15) or increases (20%, n=10) in availability in this time. This may suggest a similar level of availability to diverted tablets as was reported by the consumers interviewed in 2004, where 70% reported 'easy' or 'very easy' access to these drugs.

9.2 Price

Perhaps reflecting the multiple paths to access of benzodiazepines by IDU (for example, licit prescription, gifts, trade for other items or drugs, as well as illicit purchase), IDU provided highly varying accounts of the cost of their last purchase of diverted benzodiazepines. Most common prices reported were $5 per 2 mg alprazolam (Xanax or Kalma) tablet, $1 per 5 mg diazepam (Valium or Antenex) tablet, $3 per 1mg flunitrazepam (Rohypnol) tablet, $2 per 5 mg nitrazepam (Mogadon) tablet, $2 per 30 mg oxazepam (Serepax) tablet, and $1-2 per 10 mg temazepam (Temaze or Temtab) tablet (Table 42). Given the small sample sizes reporting on prices of these drugs, it is difficult to ascertain whether there have been any substantial changes in price over time, although it is possible that the price of Xanax (alprazolam) may have increased slightly.

Table 42: Modal price per tablet of last purchase of diverted benzodiazepines

Benzodiazepine	2001 IDRS			2002 IDRS			2003 IDRS			2004 IDRS			2005 IDRS		
	N	Modal price (per tablet)	Price range (per tablet)	N	Modal price (per tablet)	Price range (per tablet)	N	Modal price (per tablet)	Price range (per tablet)	N	Modal price (per tablet)	Price range (per tablet)	N	Modal price (per tablet)	Price range (per tablet)
Alprax (*alprazolam*) *1 mg*	-	-	-	-	-	-	-	-	-	-	-	-	*1*	$2	-
2 mg	-	-	-	-	-	-	*1*	$5	-	*1*	$5	-	*4*	$5	$3-5
Kalma (*alprazolam*) *1 mg*	-	-	-	-	-	-	-	-	-	-	-	-	*1*	$2.50	-
2 mg	-	-	-	*1*	$2.50	-	*1*	$5	-	*4*	$5	$1.50-5	*10*	$5	$2-10
Xanax (*alprazolam*) *1 mg*	-	-	-	-	-	-	*1*	$5	-	-	-	-	*2*	$2	$1-3
2 mg	*7*	$5	$2-5	*2*	$4.25#	$3.50-5	*7*	$5	$1.50-8	*6*	$2.50	$1-2.50	*28*	$5	$0.5-15
Rivotril (*clonazepam*) *2 mg*	*5*	$2.50	$1-5	-	-	-	*2*	$1.50#	$0.50-2.50	*2*	$1.50#	$1-2	*1*	$2.50	-
Antenex (*diazepam*) *5 mg*	-	-	-	*1*	$1	-	-	-	-	*4*	$1	$1-5	*10*	$1	$0.5-2
Valium (*diazepam*) *5 mg*	*30*	$1	$0.5-5	*14*	$1	$0.75-3	*17*	$1	$0.40-3	*19*	$1	$0.20-2	*24*	$1	$0.25-5
Hypnodorm (*flunitrazepam*) *1 mg*	-	-	-	*1*	$2.50	-	*10*	$2.50#	$1.20-3	*6*	$2.50	$1-2.50	*7*	$3	$3-10
2 mg	*2*	$5	-	*2*	$4.50#	$4-5	*2*	$5.00	-	-	-	-	-	-	-
Alodorm (*nitrazepam*) *5 mg*	*1*	$1.25	-	-	-	-	-	-	-	*2*	$1.50	$1-2	*4*	$2	$0.5-5
Mogadon (*nitrazepam*) *5 mg*	*9*	$2	$1-5	*4*	$2	$1-5	*7*	$1.25#	$0.50-3	*5*	$1	$0.5-2	*6*	$2	$1-10
Serepax (*oxazepam*) *15 mg*	*3*	$2.50#	$1-5	-	-	-	-	-	-	*1*	$0.50	-	-	-	-
30 mg	*11*	$2.25#	$1-5	*4*	$1	$1-2	*4*	$1.85#	$0.80-2.50	*9*	$2	$1-5	*12*	$2	$1-5
Euhypnos (*temazepam*) **10 mg*	-	-	-	*1*	$1.50	-	*1*	$2.50	-	*3*	$2	$2-3	*1*	$2	-
**20 mg*	*3*	$4#	$1.25-10	*4*	$4.50#	$3-10	*7*	$4.80#	$1.50-7	*7*	$5	$2-20	*1*	$15	-
Normison (*temazepam*) *10 mg tablet*	-	-	-	*4*	$3.50#	$1-5	-	1	-	*1*	$1.50	$1-2	*2*	$1.50*	$1-2
**10 mg capsule*	*30*	$2	$0.8-5	*1*	$2.50	-	*1*	$5	-	*3*	$2	$2-2.50	*1*	$7.50*	$7-8
**20 mg capsule*	*12*	$4#	$2-10	*12*	$3.50#	$1-10	*1*	$4	-	*9*	$5	$2-8	*1*	$10	-
Temaze (*temazepam*) *10 mg tablet*	-	-	-	*2*	$2.50#	$1-4	*3*	$2.50#	$1-3	*4*	$1	$1-5	*7*	$2	$1-5
**10 mg capsule*	*5*	$2	$1-5	*2*	$2.25#	$1-3.50	*2*	$1.15#	$1-1.25	*4*	$4.50	$2-10	*2*	$1.50*	$1-2
**20 mg capsule*	-	-	-	*1*	$3	-	*2*	$5.50#	$5-6	*3*	$5	$5-20	-	-	-
Temtabs (*temazepam*) *10 mg*	-	-	-	*1*	$1	-	-	-	-	*3*	$1	$0.5-1	*4*	$1	$0.2-2

Source: IDRS IDU Interviews * signifies gel capsule formulation, # signifies cases where multiple modes existed – in these cases, median prices are reported

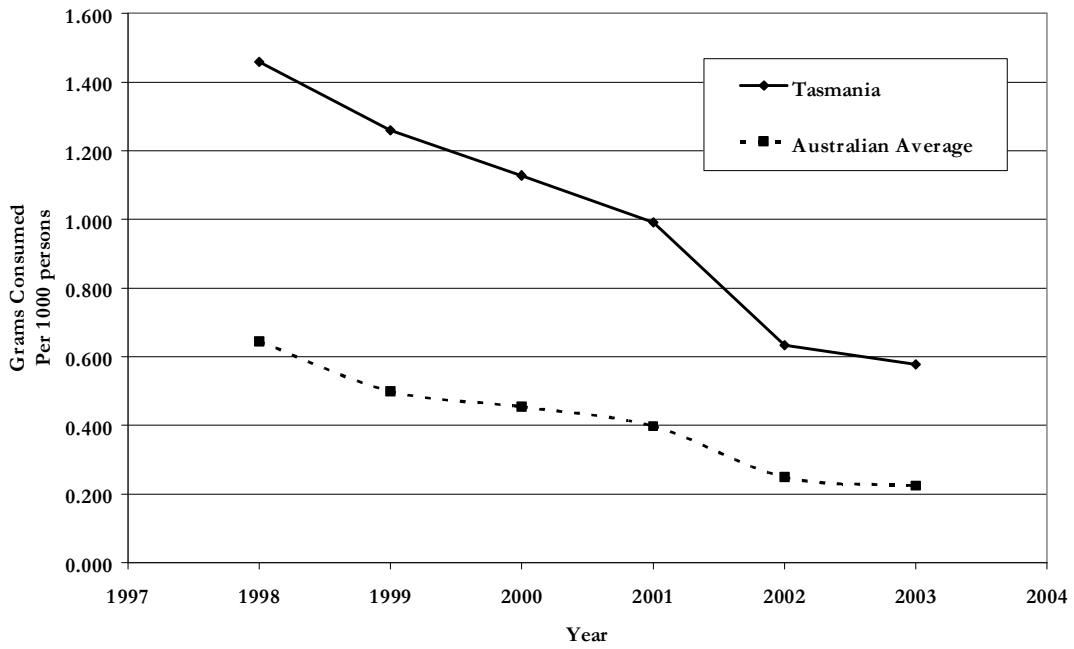
9.3 Use

9.3.1 Prevalence of benzodiazepine use

Of the Tasmanians surveyed in the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), 7.9% (n=75) indicated that they had ever tried benzodiazepines for non-medical purposes, and 2.9% (n=28) reported use in the year prior to the survey. However, in the 2001 National Drug Household Survey (n=1349: Australian Institute of Health and Welfare, 2002), only 1.0% (n=13) of respondents reported using benzodiazepines for non-medical purposes in the year prior to interview. In the 2004 survey, just 0.7% (n~8) of the 1208 local participants sampled (Australian Institute of Health and Welfare, 2005) reported using benzodiazepines (referred to as "tranquilizers/sleeping pills" in the study) in the year prior to interview. While these are low base rates of reported benzodiazepine users, this does seem to indicate a slight reduction in the prevalence of benzodiazepine (mis)use between the 1998 and 2001/2004 studies.

Use of flunitrazepam (Hypnodorm, previously sold as Rohypnol) is a benzodiazepine that is particularly preferred by IDU due to its potent and quick-acting effect. Despite the prescription of this drug being tightly defined through the Pharmaceutical Benefits Scheme and its classification as a Schedule 8 drug, participants in recent local IDRS and related studies have continued to report some use of diverted Hypnodorm tablets, albeit in small amounts. Prescription rates of flunitrazepam in Tasmania (Figure 36) show low and declining levels of prescription of the drug both in the state and nationally, although prescription rates of flunitrazepam in Tasmania have remained consistently around 250% that of the national average between 1999 and 2003..

Figure 36: Consumption of flunitrazepam per 1000 persons, 1991-2003



Source: Pharmaceutical Services, Department of Health and Human Services

9.3.2 Use in particular populations

Benzodiazepines have consistently comprised approximately 10-16% of all positive urine screens among Tasmanian prisoners between 1996/97 and 2000/01, despite markedly increasing numbers of positive urine screens during this period. However, in 2001/02, the proportion of positive urine screens indicating use of benzodiazepines had dropped to 7% (n=9), the lowest proportion since 1995/96 (6%). During 2002/03, however, the proportion of positive urine screens testing positive for benzodiazepines returned to 14%, a similar level to that in the 1996/97-2000/01 period, a trend which continued in 2003/04 (12%). In 2004/05, this figure increased, with 20% of the positive drug screens relating to benzodiazepine use, half of these identified on suspicion, half as part of regular screening requirements.

9.3.3 Benzodiazepine use among IDU

Reported use of benzodiazepines as the main drug injected by non-pharmacy Needle Availability Program outlet clients has undergone massive changes in the past four years: with an increase from 0.3% to 13.5% of clients between 1998/99 and 1999/00, returning to more modest levels (3.5%) in 2000/01. This proportion remained reasonably stable at 3.8% in 2001/02, dropping again in 2002/03 to less than 1% of all client transactions, a level which has continued into 2003/04 and 2004/05 (Table 43). While there are limitations with this dataset (see Section 2.4), it would appear that the apparent rapid increase in benzodiazepine use between 1998/99 and 1999/00 stabilised at a lower level during 2000/01 and 2001/02, and the level of primary benzodiazepine use may have returned to more traditional low levels during 2002/03 and beyond. While data from the Needle Availability Program are likely to underestimate the true level of injection of benzodiazepines (as the question usually asked is 'what is the drug you usually inject'), there is some support for these trends, as the proportion of IDRS IDU samples reporting recent injection of benzodiazepines remained stable between 2000 and 2002 (37% in 2000 and 2001, 38% in 2002), dropping slightly in 2003 to 31%, and again in the current cohort (23%).

Table 43: Percentage of benzodiazepines reported as 'drug most often injected' by Tasmanian non-pharmacy Needle Availability Program clients, 1997-2005

Year	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Number of clients reporting benzodiazepines	18	24	1294	505	761	52	139*	36*
Percent of total clients reporting benzodiazepines	0.3%	0.3%	13.5%	3.5%	3.8%	0.2%	0.4%	>0.1%

Source: Sexual Health, Department of Health and Human Services

9.4 Benzodiazepine-related harms

9.4.1 Law enforcement

Trends from Tasmania Police in regard to benzodiazepines appear to have remained relatively stable between 2000/01 and 2001/02, with seizures of 2511 pills and 78 arrests (72 consumers, 6 providers) associated with Schedule 4 drugs in 2001/02, in comparison

to 2374 pills and 93 arrests (84 consumers, 9 providers) in 2000/01. Counting rules for this data had changed in 2002/03 and, as such, subsequent data are not directly comparable. Using these new processes, four consumers were arrested in relation to benzodiazepines in 2002/03 and one in 2003/04. In 2004/05, six arrests were made in relation to benzodiazepines, all of which related to consumer-type offences.

During the 2003/04 financial year a new series of exhibit sheet rules were instigated for Tasmania Police seizures, which allowed the explicit recording of the types of tablets seized. In the July-December 2003 period, a total of 264 benzodiazepine tablets were seized by Tasmania Police (12 tablets in the Northern District, 208 in the Southern District, and 26 tablets in the Western District), while in the January-June 2004 period a somewhat smaller number of tablets were seized, totalling 179 (26 tablets in the Northern District and 153 in the Southern District). In the 2004/05 financial year, a smaller number of tablets were seized, 200 in total (compared with the 443 in the preceding year), 96 being diazepam, 54 temazepam, 49 oxazepam and one flunitrazepam, the majority of which were seized in the Southern District (95%: with 8 tablets seized in the Western District, and 3 in the North).

9.4.2 Health

Multiple key experts noted recent changes in health problems associated with benzodiazepine use among the substance-using populations they had recent contact with – with these changes relating to benzodiazepine injection in particular. Two key experts (from law enforcement and drug treatment fields) provided reports of recent overdoses, anecdotally believed to be associated with alprazolam use, or alprazolam use in combination with an opioid. Consumers echoed these reports, with seven individuals reporting witnessing overdoses anecdotally associated with alprazolam use in Hobart in the year prior to interview (one reporting an overdose they believed to be related to alprazolam use alone, two noting cases believed to relate to alprazolam and opioids in combination, and four witnessing overdoses suggested as relating to alprazolam and methadone in combination).

The other recent changes noted by key experts related to the harms associated with the injection of benzodiazepines. One key expert (in the drug treatment field) noted a recent increase in the extent of vein damage amongst opiate-consuming clients they were familiar with, with the change regarded as relating to the harms associated with the injection of tablets. One key expert working with a large number of consumers in the Needle Availability Program provided a similar report, noting that many consumers were not using pill filters when injecting tablets because they were seen as cost-prohibitive[31]. One of the ambulance officers interviewed noted an increase in attending cases where consumers were experiencing systemic infections, following improper injection (or injection with non-sterile equipment), that they had failed to seek medical assistance for, until the infection had become very advanced. Injections of pharmaceutical products, and of Xanax in particular, was noted as often involved in these cases. Several key experts in the area of drug treatment for opiate consumers noted a recent increase in injection-related problems associated with benzodiazepines in recent months: three cases of gangrene in the extremities, particularly associated with injections in the groin area or accidentally hitting arteries when injecting (one of the consumers interviewed in the

[31] Pill filters are available to consumers in Hobart at cost in a limited number of Needle Availability Program outlets. Other sterile injection equipment is provided through this program at no cost to the consumer (at non-pharmacy outlets).

current study had also reported damage to their hand and leg following injection of alprazolam in these areas in the past six months).

IDU that had injected any benzodiazepine in the month prior to interview were asked if they had experienced any problems that they associated with this use (Table 44). Fifteen participants had injected benzodiazepines in this time, with two-thirds (67%, n=10) of these individuals reporting experiencing some injection-related harm that they attributed to benzodiazepines. The problems most commonly reported were difficulty finding veins to inject into and prominent scarring or bruising (20%, n=3; and 13%, n=2 respectively), both indicators of venous damage, as well as swelling of limbs (arm, leg) or rashes at injection sites (20%, n=3 respectively), reflecting injections missing the veins, infections, or lack of rotation of injection sites. Two participants reported recently experiencing a 'dirty hit' (12%, n=2: feeling physically unwell immediately following injection) associated with benzodiazepine injection.

Table 44: Injection-related problems experienced by recent benzodiazepine injectors

	Benzodiazepines	
	%	n
Percent of sample injecting in the past month	15	*15*
Injection-related problem experienced		
No problems	33	*5*
Overdose	-	-
Abscesses/infections	7	*1*
'Dirty hit'	13	*2*
Prominent scarring/bruising	13	*2*
Thrombosis/blood clotting	7	*1*
Swelling of arm	20	*3*
Swelling of leg	20	*3*
Swelling of hand	13	*2*
Swelling of feet	-	-
Hospitalisation	-	-
Contact with ambulance	-	-
Contact with police	-	-
Dependence	7	*1*
Difficulty finding veins to inject into	20	*3*
Skin ulcers	-	-
Gangrene	-	-
Rash	20	*3*

Source: IDRS IDU Interviews

9.5 Trends in patterns of benzodiazepine use

In addition to the recent changes in health of consumers associated with benzodiazepine use noted above, key experts and IDU consumers interviewed noted several recent trends in association with benzodiazepine use amongst IDU groups, with most revolving around use of Xanax (alprazolam).

In contrast to the trends identified in the IDU sample, two consumers reported that they were aware of a greater number of people using benzodiazepines intravenously in the past six months. An increase in the number of people using Xanax (alprazolam) in particular was noted by two consumers, and supported by eight key experts (from a variety of fields including NSP, drug treatment and law enforcement), with this increase particularly notable in the Northern Suburbs (noted by two key experts, from NSP and law enforcement). As one aspect of this increasing use, one key expert involved in drug treatment noted an increase in consumers asking about the drug *'as if it is something new'* in the market.

With the increasing interest in Xanax, some of those interviewed reporting an increased pressure emerging in recent months – with one consumer noting *"Xanax is a big problem in Hobart – it's in high demand, you get hassled by people in pharmacies for Xanax, and doctors are very tight on it"*. One key expert also noted that the consumers they were familiar with had reported an increase in such hassling or intimidation by others attempting to access alprazolam from other drug users legitimately receiving the drug. Consistent with this, four consumers in the current study reported having legitimately prescribed alprazolam stolen from them in the month prior to interview. Additionally, medical professionals interviewed also noted that intimidation or threats applied by patients with the aim of forcing prescriptions of alprazolam had been increasing in the past twelve to eighteen months.

Two of the consumers interviewed noted an increase in the number of people they were aware of that were using opioids and alprazolam in deliberate combination in recent months, with this trend supported by key experts. This is consistent with reports identified in the past two IDRS studies, where it was noted that Xanax was being used in much the same way as temazepam gel capsules were by consumers prior to their removal from the market: most commonly simultaneously with methadone syrup. Indeed, three of the consumers interviewed in the current study reported this combination as the drug they had injected most often in the month prior to interview, and fourteen reported coincident injection of benzodiazepines and opiates in the past six months: on average, combining 100mg diazepam equivalents (range 5-200mg) with 50mg methadone (range 5-200mg) on 29 days out of the previous 180 (range 1-108 days). Similarly, 39 consumers (excluding those doing so under medical supervision) reported deliberately combining oral benzodiazepine use with intravenous opiate use in the past six months, on average combining 55mg diazepam equivalents (range 20-160mg) with 82mg methadone (range 17-250mg) on 15 days out of the past 180 (range 2-48 days). One consumer put it simply – *"Xanax has taken over from footies (temazepam)"*. This combination of use is of considerable concern, not solely due to the deleterious effects of injection of benzodiazepines (see Fry & Bruno, 2002) but also due to the increased risk of overdose on use of multiple central nervous system depressant drugs: as noted above, two key experts and several consumers reported recent overdose incidents anecdotally believed to be related to alprazolam or combined alprazolam-benzodiazepine use. Additionally, consumers and key experts have reported incidents of extremely disinhibited behaviour following coincident benzodiazepine and opiate use, with one consumer interviewed in the current study noting: *"they're (alprazolam) worse than eggs (temazepam gel capsules) – it's like being instantly drunk, you do things that you didn't know you were doing."* Given such reports, these patterns of use merit careful attention in the coming months, particularly from frontline health intervention workers.

Finally, two key experts involved in inpatient drug treatment noted recent increases in the numbers of people seeking drug rehabilitation places where benzodiazepine use and addiction was a clear part of the clinical picture for the individual.

9.6 Summary

There are clear indications that, following a reduction of the injection of benzodiazepines among IDU between 2002 and 2003, arising from the restriction and eventual removal of the preferred temazepam gel capsules from the market, injection of benzodiazepines remains an ongoing part of the local drug culture, with local IDU consumers continuing to inject at rates relatively higher in comparison to that identified in other Australian jurisdictions. As noted in the 2003 and 2004 studies, it is also clear that alprazolam (Xanax in particular) appears to have largely replaced the local illicit market for temazepam gel capsules among those IDU particularly interested in benzodiazepine injection, with this drug being used in similar ways to temazepam capsules by consumers, such as in simultaneous combination with methadone syrup or other opioids. Between the 2003 and 2005 studies, both the proportion of the IDU samples reporting recent injection of alprazolam, and the frequency of such use in the preceding six months, had increased (11%, median frequency of 20 days in the preceding six months among the 2003 IDU cohort, to 19% and a median frequency of 24 days in 2005), and there are anecdotal reports of increased demand for alprazolam locally. This is a particular concern given the serious psychological and physical harms associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within local IDU, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

10.0 OTHER DRUGS

10.1 Ecstasy and other related drugs

Key experts reported largely infrequent, oral use of 'ecstasy'[32] among a small minority of users of other illicit drugs, most commonly amongst groups that were primarily cannabis consumers, although reporting some use amongst primary methamphetamine-consuming groups and primary opiate-using groups.

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 it in the year prior to the survey. A very similar rate (0.8%, n~10) reported use of ecstasy in the year prior to interview in the 2001 National Drug Household Survey (n=1349: Australian Institute of Health and Welfare, 2002). In the 2004 survey, 1.6% (n~19) of the 1208 people sampled over the age of 14 reported use of ecstasy in the previous year (Australian Institute of Health and Welfare, 2005). While this may, on the surface, appear to suggest an increase in the prevalence of ecstasy use, given the small numbers of cases involved this variation is well within that expected for sampling error, and, as such, it is not possible to conclude that any reliable change in prevalence of ecstasy use had occurred between the studies.

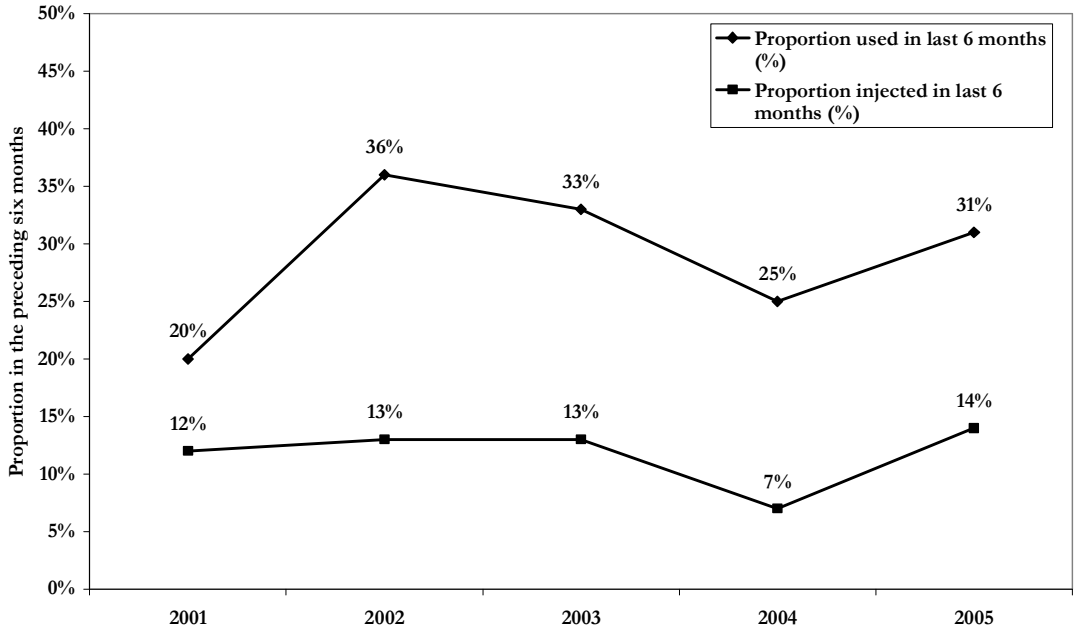
In the IDU sample, 59% had used ecstasy at some stage in their lives. Swallowing of the drug was most common, reported by 54% of the sample at some stage of their lives, and 23% in the preceding six months. Injection of ecstasy was reported by 27% of the sample at some stage in their lives, while 14% had injected the drug in the past six months, at a median frequency of once in this period. In total, 31% of the sample reported using ecstasy in the past six months, with a median frequency of use of two days (range 1-24 days) in this period. As shown in Figure 37 below, these indications of use represent a change in comparison to the levels reported in the 2004 IDRS IDU cohort. In terms of the overall proportion of the sample reporting use of ecstasy in the preceding six months, this rose between 2001 and 2002 (from 20% to 36% of the samples) and steadily declined in subsequent years, falling to 25% in the 2004 sample. In contrast to this decline, however, the proportion reporting ecstasy use in the 2005 study rose to return to a level similar to that in 2003 (31%). Similarly, the proportion of the local consumer cohorts reporting recent injection remained relatively stable between 2001 and 2003 (12-13% of the respective samples), and declined to 7% of the 2004 sample, but returned to a level similar to that of the 2003 sample in the current cohort (14%). Consistent with key expert reports, the median frequency of use of ecstasy amongst IDU samples is low, with this remaining between two and three times in the preceding six months in the 2001 to 2005 IDRS IDU cohorts (3 days in 2003, 2 days in all other surveys).

Surprisingly, the demographics of those that had used ecstasy in the past six months did not differ from those of the larger IDU sample (see Section 3.1), in terms of age, sex, cultural background, education, sexual preference and relationship status, treatment and prison history, employment status, age of first injection, duration of injection career or

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

frequency of injection. Such overall similarities are consistent with reports from key experts that recreational use of ecstasy was common amongst primary users of both stimulant and depressant drugs. However, recent ecstasy consumers in the current IDU cohort were significantly more likely to report attaining income from criminal sources in the month prior to interview (36% vs. 15%: $\chi^2(1_{n=100})=5.68$, p=0.17) than those that had not.

Figure 37: Proportion of IDU reporting ecstasy use and injection in the preceding six months 2001-2005



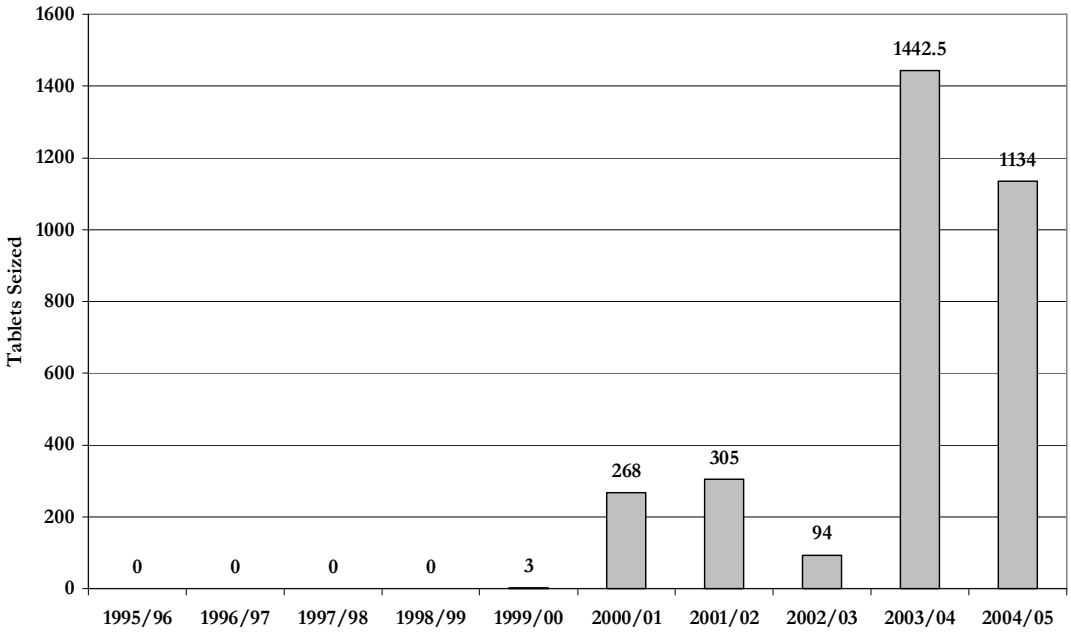
Source: IDRS IDU Interviews

Trends in regard to price, purity and availability of ecstasy are not examined in detail within the IDRS study. However, a study conducted during a similar time-frame and methodology to the current study, using regular ecstasy users as the drug user cohort, has been conducted (Matthews & Bruno, 2006), and examines trends in ecstasy and other 'party drug' use in greater depth. This study suggests that ecstasy is 'easy' or 'very easy' to obtain by consumers in Hobart, and that this level of availability has remained stable or increased somewhat during the early months of 2005. Subjective reports from consumers of the drug suggest that the purity of ecstasy available in Hobart during the early months of 2005 was generally variable and fluctuating between 'medium' and 'high', and that it cost, on average, $40 per tablet. These figures appear relatively stable or slightly diminished in terms of price, purity and availability, in contrast to indications of an expanding market between 2003 and 2004 (Bruno & McLean, 2004a; Matthews & Bruno, 2005), that are not apparent when examining a primary injecting-drug consumer cohort.

In support of suggestions of a slightly tightening ecstasy market in Tasmania, during 2003/04, Tasmania Police seized 1442.5 'ecstasy' tablets, a substantial increase from seizures in previous years (94 in 2002/03, 345 in 2001/02 and 268 in 2000/01: Figure 38), but in the 2004/05 financial year the number of tablets seized had declined slightly to 1134 tablets.

There were three samples of phenethylamines (the class of drugs that ecstasy, or MDMA, and drugs such as MDA, MDEA and mescaline belong to) seized by Tasmania Police analysed for purity in 2003, returning a median purity of 28.5% (range 28.5-28.6%: ACC, 2004). Similar results were returned from seizures analysed in 2003/04 (median purity 26.0%, range 10.4-44.5%, n=33; ACC, 2005). No seizures were analysed for purity in 2004/05.

Figure 38: Seizures of tablets believed to be 'ecstasy' by Tasmania Police, 1995/96-2004/05



Source: Tasmania Police State Intelligence Services

Findings of the recent dedicated study into ecstasy use in Hobart (Matthews & Bruno, 2006) clearly indicate that ecstasy remains relatively very easily available locally, and used by a broadening demographic group of individuals. This, and the information from Tasmania Police seizures, suggests that the availability of ecstasy – recent constrictions notwithstanding – has increased in Hobart during recent years, just as it has across the country. With this greater availability of the drug in Tasmania, local IDU samples have shown an increasing exposure to the drug over time. Indeed five consumers interviewed in the current IDRS IDU sample reported that they were aware of more people using ecstasy in the past six months (with these demographic groups including males and females estimated as being between teenage years and 50), with this supported by one key expert. However, the very low median frequency of use, and the relatively small proportion of this regular injecting drug user cohort reporting recent use of ecstasy, suggests that ecstasy use is generally a limited, recreational event among such groups, with regular injecting drug users tending to preferentially use methamphetamines or opioids at substantially greater frequency.

10.2 Prescription stimulants (dexamphetamine, methylphenidate)

While it was very uncommon for the key experts to report any use of prescription stimulants such as methylphenidate (Ritalin, Attenta) or dexamphetamine amongst the substance using groups they had recent contact with, two-fifths (43%) of the IDU consumers interviewed had recently used these drugs. Dexamphetamine was the more commonly used of these two drugs, used by 29% of the sample, with 14% using methylphenidate in the preceding six months (11 had used both drugs).

In the IDU sample, 84% had used prescription stimulants at some stage in their lives. Injection of these drugs was most common, reported by 72% of the sample at some stage of their lives, and 35% in the preceding six months, at a median frequency of six times in this period (range 1-96). Swallowing of prescription stimulants was reported by 44% of the sample at some stage in their lives, while 16% had swallowed these drugs in the past six months. In total, 43% of the sample reported using prescription stimulants in the past six months, with a median frequency of use of six days (range 1-96 days) in this period. While use of these drugs appears common among the IDU cohort, it appears that they are predominantly used as a second-line drug, as just 11% (n=11) of those using stimulant drugs (methamphetamine or prescription stimulants) reported methylphenidate or dexamphetamine as the stimulant they had most commonly used in the preceding six months.

This level or pharmaceutical stimulant use among the IDRS IDU cohort is somewhat lower than that reported in the 2003 and 2004 consumer samples, where 50% and 51% respectively reported recent use of pharmaceutical stimulants (although there was a similar frequency of such use across the past three studies). This reflects the first decline in the proportion of the IDRS consumer cohorts in the past five years, following increases between 2001 (22% of the cohort recently using these drugs) and 2002 (44%: Figures 7 and 8).

The demographic characteristics of those who had used prescription stimulants in the past six months did not differ from those of the larger IDU sample (see Section 3.1), in terms of sex, cultural background, sexual preference and relationship status, education, treatment and prison history, employment status, engagement in criminal activity, drug of choice, age of first injection or frequency of injection. Key experts in previous IDRS studies have suggested that such prescription stimulants are more commonly used by younger (predominantly school-age) people. This was not supported in the current cohort, with no significant differences in age identified between those that had recently used pharmaceutical stimulants (30.1 years) and those that had not (31.2 years).

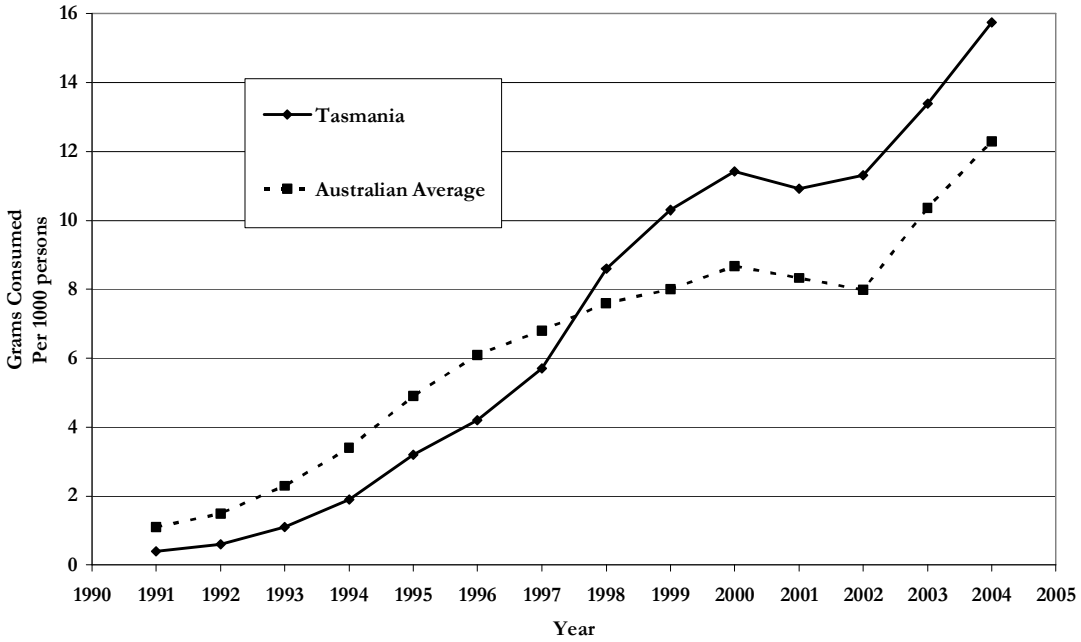
Reported modal market prices for pharmaceutical stimulants were $5 per 10mg methylphenidate tablet (Ritalin, Attenta: range $2-15, n=16) and a median of $4 per 5mg dexamphetamine tablet (range $0.60-9, n=28). These prices are consistent with those reported in previous local IDRS studies (Table 14: where modal prices for each of the drug types were consistently reported at $5 per tablet in the 2001, 2003 and 2004 surveys). The majority of IDU who commented on price of prescription stimulants indicated that these prices had remained stable (65%, n=19) in the preceding six months. However, there was some variation in these reports, with 21% (n=6) reporting increasing prices, and 10% (n=3) fluctuating prices in this time.

There was some division among IDU reports of ease of access to prescription stimulants such as dexamphetamine or methylphenidate, with the majority indicating that these were 'easy' or 'very easy' to access in the preceding six months (58%: 35% 'easy'; 23% 'very easy'), while more than one-third considered these as 'difficult' for them to access in this time (38%, n=13). The majority of those able to report on trends in availability suggested that the availability of pharmaceutical stimulants had not changed in the past six months (48%, n=13), although a substantial number felt that it had become more difficult for them to access these drugs in recent months (equal proportions reported recent increases or fluctuations in availability, 15%, n=4). When asked the sources of their prescription stimulants, IDU reported that these drugs were invariably accessed via illicit means: none of the consumers reported accessing pharmaceutical stimulants from a medical practitioner in the preceding six months. This was consistent with the reports amongst the 2004 cohort, where just a single consumer reported receiving a prescription for these drugs.

Tasmanian prescription rates of methylphenidate and dexamphetamine (Figures 39 and 40) provide some context for these 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, remaining at a similarly higher relative rate of local prescription in the context of an increasing national prescription rate in subsequent years. Tasmanian consumption rates of dexamphetamine were comparable to that of the national level between 1997 and 1999, rising to 120% that of the steadily increasing Australian average between 2000 and 2003. However, in the first decline in prescription rates seen in these data, rates of dexamphetamine prescription fell to a level comparable to the national rate in 2004. Tasmanian prescription rates of methylphenidate and dexamphetamine were 128% and 109% that of the Australian average in 2004. While these generally increasing trends indicate an escalating utilisation of methylphenidate and dexamphetamine by Australian doctors, these increasing prescription rates do not necessarily indicate an increase in abuse of these medications. However, these rates do reflect an increasing amount of these drugs used within the local community, which brings with it an increasing potential for abuse of these drugs.

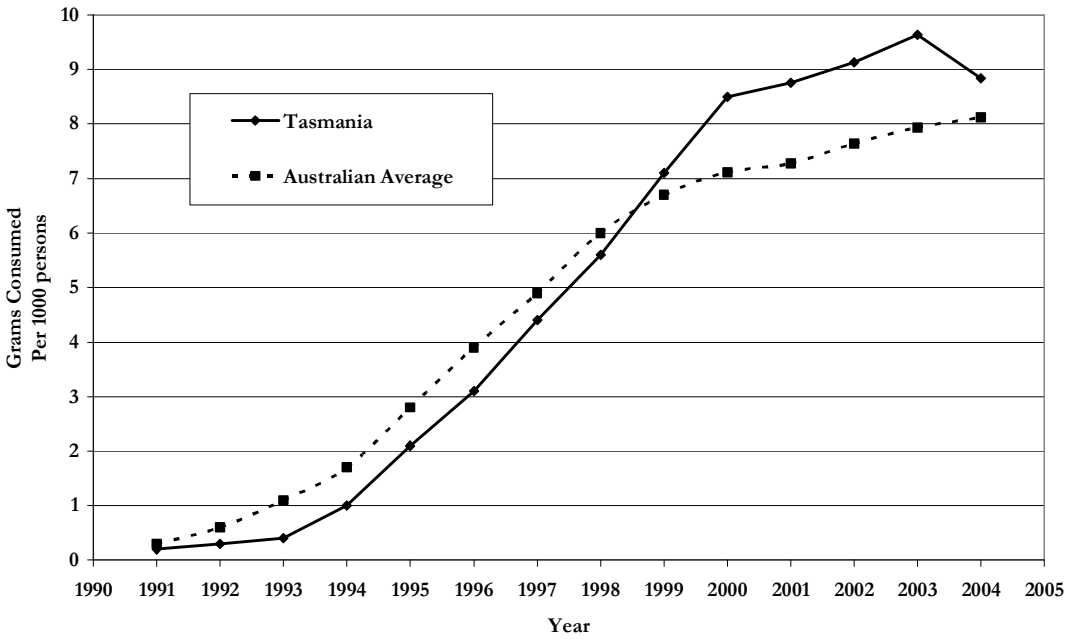
Two key experts, both interacting with a large number of consumers through the Needle Availability Program, noted an increase in the number of people using dexamphetamine, and a decrease in the numbers using methylphenidate, amongst their client groups in the past six months.

Figure 39: Consumption of methylphenidate (Ritalin) per 1000 persons, 1991-2004



Source: Pharmaceutical Services, Department of Health and Human Services

Figure 40: Consumption of dexamphetamine per 1000 persons, 1991-2004



Source: Pharmaceutical Services, Department of Health and Human Services

10.3 Inhalants

While 38% of the IDU respondents reported ever using inhalants, only 4% had used them in the six months prior to interview. The inhalants reported included petrol, glue, and amyl nitrate. However, the use of these substances was extremely infrequent, with two participants reporting using them on a single occasion only in the preceding six months, with the remaining two participants doing so on just two occasions in this time.

Most key experts were not aware of any recent use of inhalants amongst the drug users they had contact with, and those few that reported use (n=4) noted that it was rare amongst their client groups. Those key experts that could report on inhalant use were working in emergency health contexts, outreach or youth work fields. Ambulance officers interviewed had noted some recent experience with consumers seeking treatment following 'chroming' or sniffing glue vapour, although had attended no such cases in the past six months. Other key experts had noted infrequent 'chroming' amongst the young primary cannabis/psychostimulant consumers they worked with. Others involved in outreach youth services had reported use of glue, paint or petrol amongst a small proportion of the consumers they were working with, although one noted a recent increase in use of butane in the past six months, amongst a small group of consumers in their late teens to early twenties. In previous IDRS studies, key experts reported that the substance users they were associated with were extremely negative toward use of inhalants, regarding it as a 'primary school thing'.

10.4 Hallucinogens

Twenty-two percent of the IDU respondents in the current study reported use of hallucinogens in the six months prior to interview, although three-quarters (78%) had used something from this class of drugs at some stage in their lives. The current frequency of use was rare, with only a median of two days use in the past six months among those whom reported use of the drug (range 1-24 days). The majority of participants had used these drugs only once (n=9) or on two to three (n=6) occasions in this time. These indications of use are all similar to those reported in previous Hobart IDRS samples, with recent use remaining generally stable at around 20% of each cohort over this time (26% in 2001; 16% in 2002; 21% in 2003; 20% in 2004), and the median frequency of use remaining at just one or two days in the preceding six months across each of these samples.

Key expert reports followed a similar theme, noting irregular use, most commonly of psychedelic mushrooms, amongst a small proportion of the consumers that they had contact with, with such reports more commonly amongst primary cannabis or psychostimulant consumers rather than groups that primarily used opioids. One key expert noted an increase in use of LSD and psychedelic mushroom in the past 6 months, referring to consumers in a 'middle class, uni or raver' demographic. In support of this, the Party Drugs Initiative study – using similar methods to the IDRS but a primary ecstasy-using group as its consumer sample and conducted in Hobart (Matthews & Bruno, 2005, 2006) – found higher levels of use relative to the IDRS IDU cohort (albeit also at a low frequency) among regular ecstasy users (41% of the 100 ecstasy users using psychedelic mushrooms in the six months prior to interview, and 32% using LSD in 2004; and 40% using mushrooms and 31% LSD in the 2005 study). More details about hallucinogen use in such demographic groups can be found in Matthews and Bruno (2005, 2006).

Among the 2005 IDU sample, 17 individuals reported use of LSD in the preceding six months, and 8 people noted using mushrooms in this time (three individuals had used both). One ambulance officer noted attending an individual requiring assistance following psychedelic mushroom use in the past six months, which was noted as an unusual occurrence.

Tasmania Police reported prices of LSD tabs as $20-$25 during the 2001/02 and 2000/01 financial years, a potential decrease on the $15-$30 reported during 1999/00. Price information in regard to LSD is no longer reported by the ACC in their annual reports.

Tasmania Police seized 5 tabs of LSD during 2001/02 (all during December, 2001), and 8 tabs during 2000/01 (all during August 2000), compared to 109 tabs during the 1999/00 financial year, all during the summer October-December 1999 quarter. During 2002/03, Tasmania Police (Western District) seized 488 tabs believed to be LSD (and sold as such by the 'dealer') but forensic tests of the seized tabs indicated negative results for any drug. During 2003/04, 31 tabs of LSD, 10.5 grams of psychedelic mushrooms (psilocybin) and 6 'tablets' defined as hallucinogenic were seized by Tasmania Police. In 2004/05, 1289 tabs of LSD and 565 grams of psychedelic mushrooms were seized. These quantities seized are so variable, and the level of use of hallucinogens among the IDRS cohort so low, that it is difficult to infer any clear trends in availability for this class of drugs from these figures.

10.5 Alkaloid poppies

In the IDU sample, 64% reported using an opioid other than morphine, methadone, oxycodone or heroin at some stage in their lives. Use of such opioids in the six months prior to interview was only reported by one-third (39%) of the sample. Of these, 16 reported predominant use of some preparation of alkaloid poppies (described by the IDU as opium, opium tar or poppy 'tea'), with the remainder reporting use of tramadol (n=13), and Panadeine Forte (codeine phosphate/paracetamol: n=2), pethidine (n=3) or clonidine (n=1), all of which are pharmaceutical analgesics.

One-fifth (21%) of the current cohort reported use of alkaloid poppies at some stage in the preceding six months. This level of recent use of alkaloid poppies is somewhat greater than that identified within the past four local IDRS IDU cohorts (13% in 2001, 14% in 2002, 12% in 2003, and 13% in 2004); however, reports of recent use have not returned to the high proportion of consumers among the sample reporting use of alkaloid poppy presentations in the 2000 survey (34%). Within the 2005 sample, median frequency of use of an alkaloid poppy preparation was three days in the preceding six months (range 1-144 days).

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 (see Section 3.1), in terms of age, sex, cultural background, relationship status and sexual preference, prison history, employment status, age of first injection, duration of injection career or frequency of injection. However, those that had recently used alkaloid poppies had completed a significantly greater number of years of education (10.4 vs. 9.6 years: Mann-Whitney U = 572, p=0.025) and were significantly more likely to have received income from criminal activity in the previous month (48% vs. 14%: $\chi^2(1_{n=100})=11.3$, p=0.001) than those that had not recently used poppies. Also, recent consumers of poppies in the current cohort were significantly more likely to report an opiate as their drug of choice (86% vs. 48%:

$\chi^2(2_{n=100})=11.1$, $p=0.006$) and significantly more likely to be involved in drug treatment (91% vs. 52%: $\chi^2(1_{n=100})=10.3$, $p=0.001$), particularly methadone maintenance (71% vs. 39%: $\chi^2(1_{n=100})=6.9$, $p=0.009$) than those that had not.

Tasmania Police State Intelligence Services have reported stable prices of $10 and $20 per 'ball' of poppy tar between January 2000 and June 2001, but have not reported price information for alkaloid poppy preparations since this time. During 2004/05, Tasmania police reported seizing 626 capsules, 473 plants, and 2530g of capsules and related matter (Table 45). This is comparable with seizures in recent years: in 2003/04, Tasmania police seized 601 capsules, 31 poppy plants and 2g of poppy tar/resin; in 2002/03, 7 capsules, 1473.3g of capsules, 84 poppy plants and 2g of poppy tar; in 2001/02, 382 capsules and 9.319 kg of capsules; in 2000/01, 3522 capsules; and 3933 capsules and 50g of poppy tar seized in the 1999/00 financial year (Table 45). However, this mixture of reporting renders it difficult to clearly identify trends in seizure data.

The diversion rate of Tasmanian alkaloid poppy crops, shown in Table 45 below, had been in steady decline between 1996 and 1998. Contrary to this trend, however, 1998/99 and 1999/00 saw a substantial amount of poppies stolen from crops. It should be noted that a small number of particularly large hauls were largely responsible for these rates of diversion (in one case, a single haul of approximately 50,000 capsules were stolen). In concert with trends suggesting a decline in alkaloid poppy use amongst IDU during 2001, there was a major decrease in the numbers of poppies stolen during 2000/01 when compared to the two earlier financial years (7765 capsules in comparison to over 60,000 in 1998/99 and 1999/00). The 2001/02 financial year saw a doubling of the number of stolen poppy capsules (15,946) in comparison to the previous year, and thefts had continued to rise in 2002/03 and 2003/04 (to 20,223 and 24,128 capsules stolen per annum respectively). However, in the 2004/05 financial year, the number of capsules stolen, and the number of theft incidents recorded, had declined since 2003/04.

Tasmania Police key experts in previous IDRS studies report that the declines in diversion following 1999/00 are likely to be attributed both to a more pro-active approach by Tasmania Police poppy task forces and the decision by producers not to specifically identify thebaine poppy crops. This is a substantial deterrent to illicit use, as thebaine poppies are physically identical to morphine-producing crops, with the exception that thebaine acts as a central nervous system stimulant (morphine behaves in the opposite way, and is a central nervous system depressant), causing adverse strychnine-like convulsions after high doses. In support of this, in 2001, one key expert, a user group representative, noted negative experiences with thebaine-based diverted poppies amongst the IDU they were familiar with, with the individuals concerned not returning to use of poppy preparations.

Table 45: Tasmanian alkaloid poppy crop diversion rates, 1996-2005

	1996 /97	1997 /98	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05
Number of capsules stolen	42,426	30,424	66,013	62,700	7765	15,946	20,223	24,128	16,201
Cost per hectare of securing poppy crops	$45	$39	$33	$27	$28	$28	$30	$47	$44
Number of capsules stolen per hectare sown	3.95	2.44	4.41	2.99	0.39	0.81	1.11	1.97	1.25
Number of theft incidents reported	46	38	34	39	20	27	27	39	35
% of IDU sample reporting use	-	-	-	34	13	14	12	13	21
Median days used among IDU using	-	-	-	6 (1-151)	6 (1-81)	4 (1-45)	5 (1-48)	3 (1-96)	3 (1-144)
TASPOL seizures	-	-	-	*3933 capsules* ; 50g tar*	*3522 capsules**	*382 capsules* ; plus 9319g of capsules*	*7 capsules plus 1473.3g capsules; 84 plants; 2g tar*	*601 capsules; 18g resin; 31 plants; **	*626 capsules; 2515.4g capsules; 2.7g resin; 473 plants; 11.7g seed*

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

10.6 Other Substances

10.6.1 Homebake

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

While no key experts noted any use of homebake amongst the groups they had contact with, 22% of the 2005 IDU sample reported they had used homebake at some stage in their lives. Injection of the drug was most common, reported by 20% at some stage in their lives, and 5% in the preceding six months, at a median frequency of sixteen days in this time (range 1-90 days). Lifetime use of homebake by smoking (2%), swallowing (3%), or snorting (2%) was much less common, with only a single participant reporting smoking or swallowing this drug in the six months prior to interview. In total, 5% of the IDU sample reported some use of homebake in the past six months, with a median frequency of use of only sixteen days (range 1-90 days) in this period.

10.6.2 Buprenorphine

With the advent of buprenorphine as a maintenance treatment option for opioid addiction in the 2000/01 financial year, trends in buprenorphine use among regular IDU groups have been examined since the 2002 IDRS survey. In the current cohort of IDU only 23 reported ever using buprenorphine (15 had done so in the 2004 cohort), with 16 ever receiving the drug licitly, and 10 ever using diverted Physeptone. Of those that had ever used diverted buprenorphine, 3 had also received the drug legitimately at some stage. Eight of the current IDU participants reported being prescribed buprenorphine in the six months prior to interview, and five individuals had used diverted buprenorphine in that time (two of these individuals were also being prescribed the drug). Among those being prescribed the drug, all had used buprenorphine orally in the preceding six months, and six reported injection of buprenorphine in this time (median frequency of 9 days in the preceding 180, range 1-85).

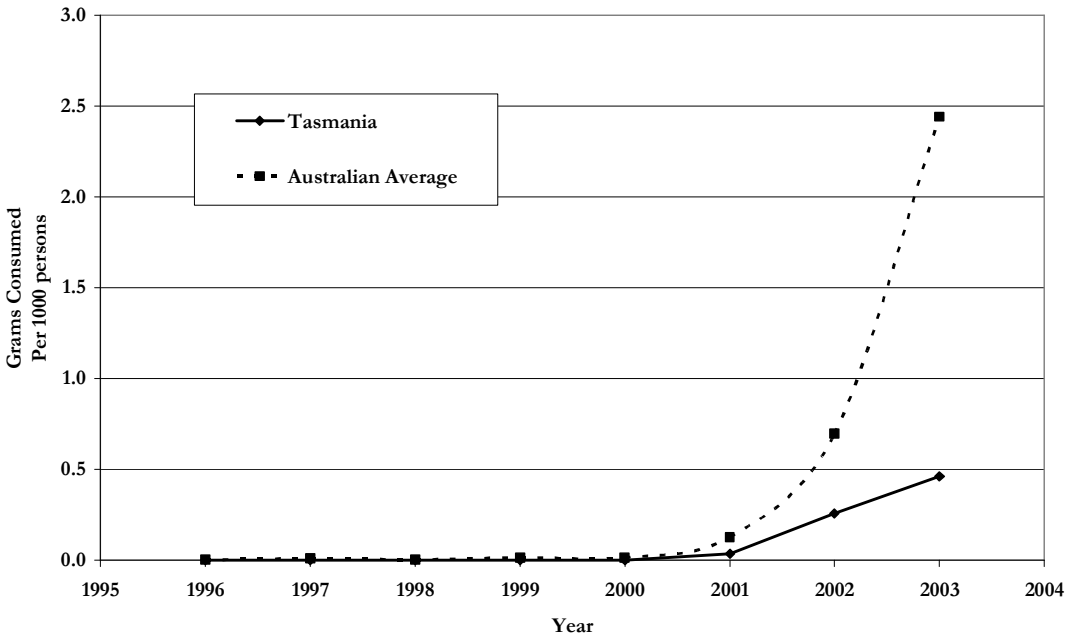
The median frequency of licit use was 62 days (range 1-90 days) in the six months prior to interview. Of those that had recently used diverted buprenorphine, three had swallowed the drug, and all had used the drug intravenously, at a median frequency of three occasions in this time (range 1-3 occasions).

As noted in Section 8.4 above, buprenorphine first became available as a pharmacotherapy in the state in 2000/01. Following an influx of individuals that were previously receiving treatment shifting to buprenorphine in the first year of availability of the drug (n=37 in 2000/01), the number of new admissions to buprenorphine maintenance in Tasmania has stabilised in the past three financial years (n=32 in

2002/03, n=45 in 2003/04 and n=35 in 2004/05). In this time, the number of daily buprenorphine patients in the state has grown from 48 as of July 2002 to 85 in July 2005. Tasmanian prescription rates of buprenorphine are detailed below in Figure 41. Following the trends in buprenorphine maintenance admissions, the rate of prescription of the drug in the state has increased tenfold between 2001 and 2003 from 0.04g to 0.46g per 1000 persons. However, the prescription rates nationally have increased remarkably rapidly since 2001, largely due to the enthusiastic uptake of buprenorphine treatment in Victoria, and the prescription rates of buprenorphine locally are just 19% of the national average (in contrast to that of methadone syrup, which was 113% of the national average in 2003).

While no key experts reported hearing of injection of illicit buprenorphine amongst the substance-using individuals they had contact with, given the high use of diverted pharmaceutical opioids among the regular IDU population locally, and the notable rates of diversion of buprenorphine in other jurisdictions (Stafford, et al, 2006), trends in use of buprenorphine merit close attention as the drug continues to be more widely adopted as a treatment option locally in the coming years.

Figure 41: Consumption of buprenorphine per 1000 persons, 1991-2003



Source: Pharmaceutical Services, Department of Health and Human Services

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 experts are involved with, or they do not meet the criteria for inclusion in the IDU survey. As such, trends identified here should be interpreted with due caution and may merit further investigation using more appropriate methodologies.

The main trends identified for these categories of drugs were:

- Rates of use of pharmaceutical stimulants in the 2005 IDRS IDU cohort had declined somewhat, in contrast to steady increases between 2001 and 2003. These drugs were used by two-fifths of the participants in the current study, although they were generally used infrequently, and are rarely the stimulant drug most commonly used by such individuals.
- Multiple sources of information suggest that the availability of ecstasy has increased in Hobart during recent years, just as it has across the country. One-third of the IDU consumers interviewed had recently used ecstasy, although this was on an infrequent basis. However, there are clear indications of increasing use of this drug in other demographic groups (Matthews & Bruno, 2005; 2006).
- A slight increase in the proportion of consumers interviewed in the IDRS indicated use of diverted alkaloid poppies in the 2005 study, with these drugs being used by one-fifth of the sample, although poppy thefts have declined and police seizures possibly increased in the preceding year.
- Limited use of diverted buprenorphine among the 2005 IDRS IDU cohort.

11.0 ASSOCIATED HARMS

11.1 Treatment

11.1.1 Tasmanian Alcohol and Other Drug Treatment Minimum Data Set

The National Minimum Data Set for Alcohol and other Drug Treatment Services (NMDS) was developed as a nationally consistent response to data collection for alcohol and other drug treatment services. Data collection began on July 1, 2000, and data from Tasmanian government and non-government agencies across the state are presented in Table 46 below. Data from clients receiving only methadone maintenance treatment, and admitted patients in psychiatric hospitals or general hospital wards, are not included in these figures.

The findings from the 2002/03 data show 66% of those receiving services were male and a small proportion (8%) identified as being Aboriginal and/or Torres Strait Islanders. Some history of injecting drug use was noted in 27.6% of clients in the 2002/03 dataset, with 17.4% reporting injecting drug use in the three months prior to data collection. Figures for the reported principal drug of concern again reflect the predominance of treatment for alcohol (40.8%), with treatment for cannabis (18.6%), nicotine (18.0%), amphetamine (7.9%), and opiates/analgesics other than heroin and methadone (likely to refer to morphine: 7.6%) also common. Only 19.2% of clients in the 2002/03 treatment data had an opiate as their principal drug of concern.

There are several notable changes in the NMDS figures between the 2000/01 and 2002/03 datasets. Chief amongst these is the steeply increasing number of individuals treated overall; however, in the early stages of collection of this data it is not yet clear whether this reflects real changes or simply an increase in participating agencies and the application of more consistent data-recording processes. In the main, the demographics have remained stable and the raw number of cases in reference to each of the main illicit drugs as principal drug of concern appear to have remained similar over time (for example, there were 155 cases where amphetamine was the principal drug of concern in 2000/01, 161 in 2001/02, and 180 in the most recent dataset); however, as the overall number of cases included in the dataset has increased, these proportions appear to be declining (for example, amphetamine, heroin, morphine, and benzodiazepines). It is noteworthy that the number of cases where nicotine is the principal drug of concern have steadily increased across surveys.

Table 46: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set, 2000/01-2002/03

Total Data Set	2000/01	2001/02	2002/03
n	1404	1735	2568
% receiving service for own use	91% (n=1279)	97% (n=1691)	89%
For those receiving service for own use			
Sex (% male)	65% (n=826)	66% (n=1116)	66%
Mean age (years)	31.8 (SD=11.6)	33.6 (SD=13.3)	n/r
Aboriginal and/or Torres Strait Islander	8% (n=103)	7% (n=123)	8%
Injecting drug use history			
Current (0-3 months prior)	23.8% (n=304)	18.4% (n=311)	17.4% (n=396)
Recent (3-12 months prior)	5.2% (n=66)	5.4% (n=92)	4.0% (n=91)
Historical (>12 months prior)	5.2% (n=66)	5.9% (n=100)	6.2% (n=141)
None	28.4% (n=363)	38.7% (n=654)	34.7% (n=796)
Not stated	37.5% (n=480)	31.5% (n=534)	37.9% (n=868)
Principal drug of concern			
Alcohol	38.8% (n=496)	36.7% (n=620)	40.8% (n=933)
Nicotine	2.4% (n=31)	16.6% (n=280)	18.0% (n=412)
Cannabis	22.7% (n=290)	24.7% (n=418)	18.6% (n=426)
Amphetamine	12.1% (n=155)	9.5% (n=161)	7.9% (n=180)
Cocaine	0.2% (n=3)	0.0% (n=0)	0% (n=0)
Other stimulants	0.9% (n=11)	0.6% (n=10)	0% (n=0)
'Ecstasy' and related	0.1% (n=1)	0.3% (n=5)	0% (n=0)
Heroin	2.3% (n=30)	1.1% (n=18)	0.5% (n=12)
Morphine	6.6% (n=84)	7.2% (n=121)	n/r
Methadone	6.0% (n=77)	0.2% (n=3)	3.5% (n=79)
Other opiates/analgesics	4.1% (n=53)	1.1% (n=19)	7.6% (n=173)
Benzodiazepines	2.9% (n=37)	1.7% (n=29)	0.7% (n=16)
Other	0.8% (n=10)	0.4% (n=7)	2.4% (n=55)
Method of use			
Ingest	48.1% (n=615)	40.9% (n=691)	47.8% (n=1093)
Smoke	24.7% (n=316)	40.4% (n=684)	36.3% (n=830)
Inject	21.3% (n=273)	16.6% (n=281)	14.1% (n=323)
Sniff	0.2% (n=3)	0.2% (n=3)	0% (n=0)
Inhale	0.2 (n=2)	0.1% (n=1)	0.3% (n=8)
Other/Not reported	5.5% (n=70)	1.8% (n=31)	1.4% (n=31)
Other drugs of concern			
Alcohol	9.8% (n=125)	6.8% (n=115)	4.4% (n=101)
Nicotine	4.1% (n=52)	6.9% (n=115)	3.8% (n=87)
Cannabis	18.3% (n=234)	13.9% (n=235)	10.4% (n=237)
Amphetamine	9.3% (n=119)	6.6% (n=111)	3.9% (n=90)
Cocaine	1.2% (n=15)	0.3% (n=5)	0.1% (n=3)
Other stimulants	0.4% (n=5)	0.6% (n=10)	Nr
'Ecstasy' and related	1.6% (n=21)	0.8% (n=14)	0.1% (n=3)
Heroin	2.7% (n=35)	0.9% (n=15)	0.5% (n=11)
Morphine	4.9% (n=63)	3.4% (n=57)	Nr
Methadone	2.9% (n=37)	1.2% (n=21)	0.9% (n=22)
Other opiates/analgesics	0.7% (n=9)	0.4% (n=7)	2.2% (n=50)
Benzodiazepines	9.3% (n=119)	3.5% (n=60)	2.6% (n=60)
Other	1.6% (n=21)	1.4% (n=24)	0.3% (n=8)

Source: Australian Institute of Health and Welfare Note: multiple presentations of the same individual excluded.

11.1.2 Alcohol and Drug Information Service Data

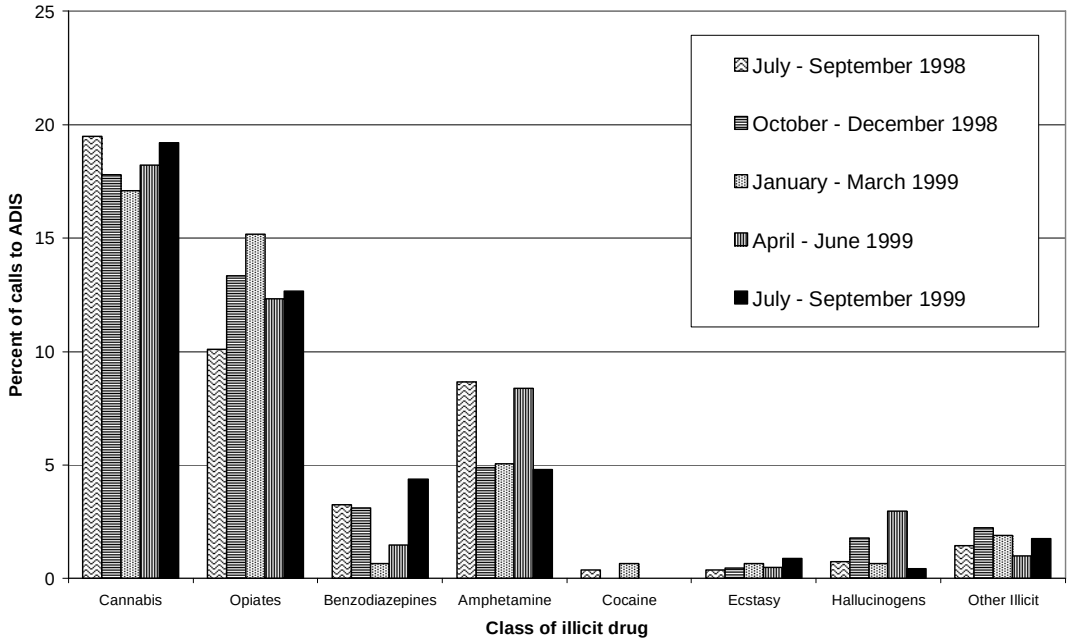
The Tasmanian Alcohol and Drug Information Service (ADIS), previously administered by Department of Health and Human Services staff at Hobart's detoxification service, was transferred to Turning Point Alcohol and Drug Centre in Victoria in mid-May 2000. Turning Point systematically records data for each 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 42). During this period, the majority of calls pertaining to illicit drugs were regarding cannabis (18%), followed by opioids (13%) and methamphetamine (7%). A trend toward a slight increase in opioid-related inquiries was noted during this period. Data from previous years were unavailable, rendering it difficult to make comparisons.

Data from calls made to the Turning Point-administered ADIS have been reported over differing time periods due to the requirements of the Department of Health and Human Services; however, for comparative purposes (and since these annual data are the only information available to the author), these slightly differing reporting periods will each be treated as financial year periods. The number of calls made to ADIS have slowly declined in the past five years: there were 2422 calls made to the service between May 15, 2000 and June 30, 2001; 2208 in the 2000/01 financial year; 1827 in 2001/02; 1984 during the period April 2002-March 2003; 1837 during 2003/04; and 1498 in 2004/05.

For calls regarding specific persons using drugs (either from the person themselves or about them from parents, partners, etc) contacting the Turning Point-administered ADIS, information regarding the drug or drugs used is detailed in Figure 43. While these largely follow similar patterns to the 1998/99 ADIS data, due to its more systematic recording and its referral to a specific sub-group of calls, the two datasets are not directly comparable, and as such have been displayed in separate figures.

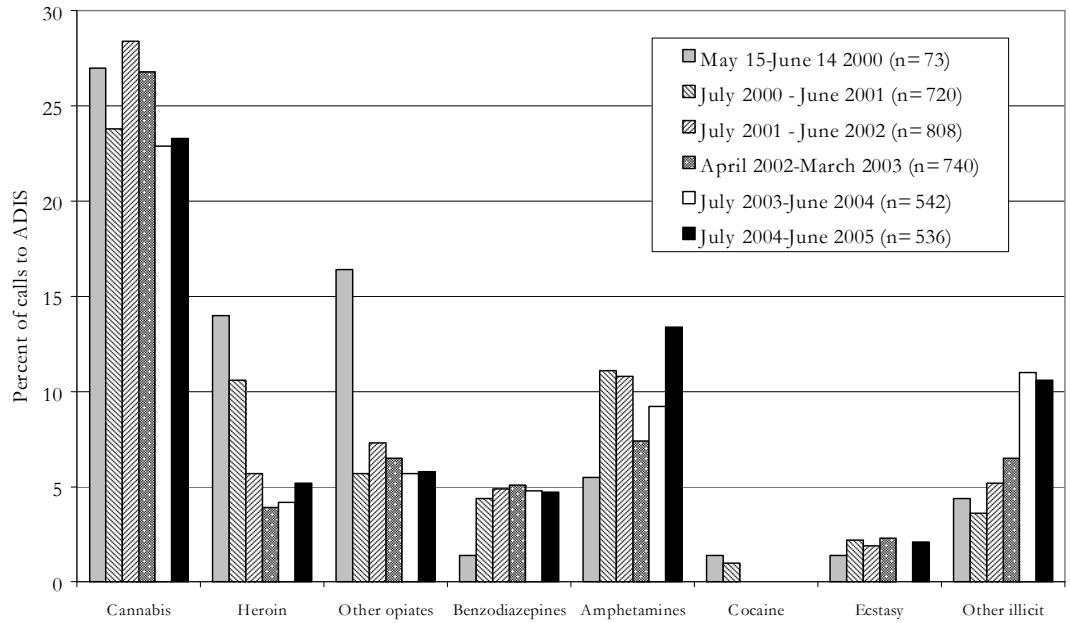
Due to the fact that quarterly data are not available, it is difficult to make clear inferences regarding trends; however, in all sets of ADIS data the bulk of calls pertaining to illicit drugs were in regard to cannabis use, followed by methamphetamine and opioids. The makeup of the calls in regards to people using specific drugs during the past three years have all been very similar, with the only notable changes being a slight decrease in the proportion of calls relating to cannabis, and an increase in calls relating to methamphetamine. Calls in relation to ecstasy use appear to have declined during 2003/04 in Figure 43; however, this drug was not specified in the 2003/04 reporting, and this information (along with cocaine and hallucinogens), may have been collapsed into the apparently increased 'other illicits' category.

Figure 42: Percentage of calls to ADIS by drug type (1998/99)



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

Figure 43: Percentage of calls to ADIS referring to persons using specific drugs, May 14, 2000 - June 2005



Source: ADIS Tasmania Reports, Turning Point Alcohol and Drug Centre
(*note that calls referring to ecstasy were not specified in the 2004 reporting, and may have been collapsed into the 'other' column)

Trends in the demographic characteristics of the drug users identified in calls to ADIS over time are again difficult to identify due to differences in the age groupings adopted across reports. During 2000/01, the majority of drug users identified were aged between 22 and 40 years of age (59%), although a sizeable proportion of calls related to people in

the 16 to 18 year age group (15.5%). During 2001/02, there appeared to be a slight upward shift in the age of identified consumers, as, while the majority were again aged between 22 and 40 years (56.4%), calls in relation to people in the 16 to 18 year age group had decreased by 5% (to 10.2%), while calls relating to people more than 40 years of age increased 6% (to 19% of calls). Age characteristics of the drug consumers described in 2002/03 ADIS calls were almost identical to the previous year (10.7% aged 16 to 18 years; 57% aged between 22 and 40 years; 19.2% more than 40 years of age). While in a slightly differing age grouping, there is again some suggestion of an increased age of the drug users discussed in the 2003/04 data, where 9.5% were aged between 15 and 19; 62.3% aged between 20 and 40 years; and 26.7% were more than 40 years of age, an increase of 7.5% from the previous year's report. The age of the drug users discussed in calls to ADIS in 2004/05 were consistent with those reported in the preceding year: 9.5% between 15 and 19; 61% between 20 and 40 years; and 28% more than 40 years.

Among the calls relating to people using drugs in the 2000/01 year, there was an approximately equal gender distribution (50.1% male), which was particularly noteworthy given that statistics from similar services in Victoria have consistently demonstrated a preponderance of male drug users in calls to their services, usually in the order of 60% male. In 2001/02, the drug users identified in calls to ADIS fell more closely to this 'traditional' bias, with 58% of calls relating to males, a ratio that has continued into recent years (62% male in 2002/03; 61% in 2003/04; 56% in 2004/05).

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

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

In the April 2002-March 2003 period, the annual number of calls to DACAS had again fallen from previous years, with 48 calls in total made to the service (although approximately 10 were of an administrative rather than information-related nature). In keeping with previous trends, the majority of calls were made by medical practitioners (47.8%), with some utilisation by nurses (13.0%), general alcohol and drug workers (13.0%), youth workers (4.3%), psychologists (4.3%) and other medical practitioners (4.3%). The majority of calls related to methadone (22.2%), alcohol (18.5%) and cannabis (18.5%), with smaller numbers relating to benzodiazepines (11.1%), and inhalants (7.4%). This represents an increase in the proportion of calls regarding alcohol and cannabis in relation to the other drugs.

During 2003/04, 44 calls were made to DACAS (although a substantial number of health professionals had used the ADIS line during this time), a similar call rate to that of the 2002/03 reporting period. Calls again were predominantly made by medical practitioners (36.2%), but also made by nurses (21.3%), alcohol and drug workers (10.6%), pharmacists or social workers (5.3% respectively). While not explicitly detailed, the majority of calls identified issues pertaining to the management of alcohol problems (53%), cannabis (40%) or benzodiazepines (20%).

In the 2004/05 financial year, 42 calls were made to DACAS, with a further 110 calls from health professionals made to the ADIS line in that period. Calls were predominantly made by medical practitioners (increasing from 2003/04 to 55% of calls), but also by nurses (25%), alcohol and drug workers (15%) and workers in mental health fields (5%). While the content of calls was not explicitly detailed, 30% of consultations related to the management of maintenance pharmacotherapy, with smaller proportions relating to alcohol or cannabis use (15% respectively).

11.2 Overdose

While all but five participants included in the IDU sample reported that they had ever used some form of opioid, one-third of these (n=33, 35%) had ever experienced an opioid overdose (23 of these 33 individuals experiencing an overdose associated with heroin use, 6 an overdose due to morphine, and 9 experiencing an overdose due to methadone), with 6% having overdosed in the previous year (on any opioid: Table 47). Of those who had ever overdosed on either drug, the median number of times they had overdosed was twice (median = twice, range 1-6 times for heroin overdose; median = once, range 1-2 times for morphine overdose; all incidences of methadone overdose on single occasion). Among those that had ever experienced an overdose, the median time since their last overdose was seven years prior to interview among those that had overdosed on heroin (range 12-240 months), 33 months prior to interview among those that had overdosed on morphine (range 14-144 months), and two years prior for people that had overdosed on methadone (range 3-72 months).

It is notable that, in recent years, the rates of overdose amongst the Tasmanian consumers interviewed in the IDRS have been comparable with those reported in other jurisdictions. For example, in the 2004 IDRS, 49% of the national study sample (total sample size n=948) had ever experienced an opiate overdose, with 13% experiencing at least one overdose in the year prior to interview (12% on heroin, 2% on morphine). These figures are comparable to those figures reported in the 2004 Tasmanian IDRS study (47% ever overdosed, 11% in the previous 12 months). In earlier IDRS studies, the local level of reported recent experience of non-fatal opioid overdose has remained lower than that experienced in the national sample, possibly reflecting the different patterns of opiate use locally, where relatively lower proportions of the consumers interviewed had used heroin, but use of pharmaceutical preparations of opioids was much more common – with this predominant use of pharmaceutical opioids (where the dose is known) having the potential to reduce the likelihood of accidental overdose. However, it may be that the high level of use of benzodiazepines, and in particular the simultaneous use of multiple CNS depressant drugs, has underpinned these overdose levels in the local cohort: as noted in Section 3.2 above, of the 50 IDRS IDU participants that reported using an opioid on the day prior to interview, 60% reported using an opioid in conjunction with either benzodiazepines (50%) or alcohol (10%) on this day.

This noted, the proportion of the local sample reporting having ever overdosed (33% in 2005; 46% in 2004) and the proportion that reported experiencing an overdose in the preceding year (6% in 2005; 11% in 2004) have both declined in comparison to the 2004 study, and returned to levels similar to those reported in the 2002 and 2003 samples (although it is worth noting that there is a lower level of opiate use among the 2005 cohort compared with the previous cohorts).

Table 47: Reported experience of opioid overdose among the IDU sample (n=100)

	% of IDU in past month					
	2000 IDRS	**2001 IDRS**	**2002 IDRS**	**2003 IDRS**	**2004 IDRS**	**2005 IDRS**
Overdosed (ever)	31%	25%*	33%	34%:	46%: *35% heroin; 18% morphine*	33% *22% heroin; 6% morphine; 9% methadone*
Median times ever overdosed	twice	once	once	twice	thrice *(heroin);* once *(morphine)*	Twice *Twice (heroin) Once (morphine) Once (methadone)*
Overdosed *(last 12 months)*	10%	8%	7%	5%	11%	6% *2% heroin; 4% methadone*
Administered naloxone (ever)	14%	13%	21%	19%	26% *(24% heroin)*	12% *(11% heroin)*
Administered naloxone *(last 12 months)*	7%	3%	3%	3%	7%	1%
Witnessed an overdose (ever)	50%	54%	61%	65%	65%	55%
Median times ever witnessed overdose	twice	twice	twice	twice	thrice	thrice
Witnessed an overdose *(last 12 months)*	24%	51%	26%	34%	20%	27%

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

Of note is that only slightly more than one-third of those who indicated they had ever had an opioid overdose had ever been administered Narcan (36%). Narcan (naloxone) is a fast-acting opioid antagonist given to reverse the effects of opioids in the event of an overdose. Only one of the six consumers that reported an opioid overdose in the preceding 12 months had been administered Narcan in this period. Overall, those who had been administered Narcan reported a median period of 60 months since they were last administered the drug (range 12-120 months), similar to the figures for reports of experience of opioid overdose generally (median = 60 months since last overdose, range 3-240 months).

Fifty-five percent of the IDU respondents reported ever witnessing one or more overdoses (median = three times, range once to one hundred times). Those respondents that had ever witnessed an overdose reported a median period of 24 months since they last experienced such an event (range 0-348 months). One-quarter (27%) of the current IDU participants reported witnessing an overdose in the 12 months prior to interview. While the proportion of the sample reported ever witnessing an opiate overdose was slightly lower than that reported in the 2002-2004 Tasmanian IDRS IDU cohorts (55% in 2005 compared with 61-65% in the earlier studies: Table 47), the proportion of consumers interviewed that reported witnessing an overdose in the preceding year was similar to these studies (27% in the 2005 cohort; 20-34% in 2002-2004).

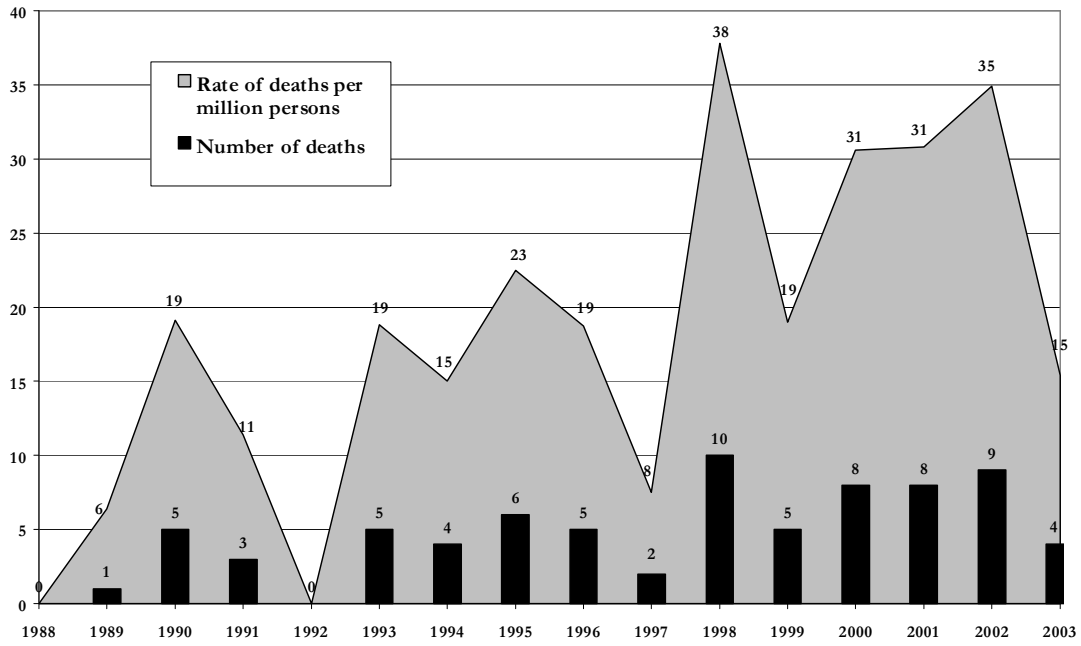
The number of opioid-related fatalities[33] among those aged 15-44 years noted by the State Coroners office has remained quite small during the period 1988-2003 (Figure 44: data for 2004 were not available at time of completion of this report), these minimal figures rendering clear analysis of trends difficult. However, when the rate of deaths per million population are considered, it becomes clearer that there has been an increase in rates of overdose over time in Tasmania, from less than 10 deaths per million population prior to 1990 to over 30 deaths per million population in recent years (1998, 2000-2002). Reported opioid-related fatalities in 2003, in contrast to the aforementioned trend, were less than half that seen in the previous year. While this is an extremely positive piece of data, it should be noted that there can be quite an extended delay in the presentation of the final coronial ruling in each case, and it is possible that more cases may be added to this published aggregate figure for 2003. Additionally, it is not possible to determine whether this represents an early trend towards a reduced rate of overdose or an unusual year against the general trend towards an increasing population rate of such overdoses (such as was the case in 1997 and 1999). It should be noted that the number of opiate-related deaths nationally declined sharply in 2001 and have remained relatively stable since this time (Degenhardt, Roxburgh & Black, 2004).

To 1999, there was approximately an even sex distribution among these victims of opioid-related fatalities, although in 2000 the five fatalities related to four males and a single female, and in 2001 the figures reflect the death of two males and three females. The seven accidental deaths due to opioids in 2002 related to seven males and two females. During 2003, the four accidental deaths due to opioids related to two females and two males. With the exception of a single fatal overdose clearly associated with heroin use, the cases to 1999 largely relate to methadone or morphine. Benzodiazepines were also present in many of these cases[34].

[33] These figures are derived from the underlying cause of death according to Australian Bureau of Statistics coding practices. They relate to the following codes from the International Classification of Diseases, 10th edition of F11; F19 with F11; X42, X44 or F19 with T40.0-40.4, T40.6; namely accidental deaths due to opioid use disorder, multiple drug use disorder or poisoning where opioid use disorder or poisoning was included. Please refer to Degenhardt, Roxburgh and Black (2004) for further details.

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

Figure 44: Number of opioid overdose deaths among those aged 15-44 years, 1988-2003



Source: Degenhardt, Roxburgh and Black (2004)

11.3 Blood-borne viral infections

Blood-borne viral infections, 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 48 indicates the number of cases of BBVI recorded in the state between 1991 and 2005. 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. Following this period, incident reports of hepatis C have remained between 13 and 19 cases per annum, with the exception of 2000 and 2004, where 30 and 28 cases respectively were reported (Figure 45). In contrast, unspecified (not new infections) notifications of hepatitis C had steadily increased between 1997 and 2003 (rising from 197 to 347 cases in this period), but have been in decline since this time (falling from 347 cases in 2003 to 194 in 2005). All incident cases of hepatitis C between 1996 and 2000 had injecting drug use as a recent risk factor for infection[35]. Similar to the pattern for incident cases of hepatitis C, incident cases of hepatitis B have remained between 18-21 cases per annum between 2000 and 2004, with the exception of a smaller number of cases in 2003 (n=10), and a very small number of cases reported in 2005 (n=4). Reports of unspecified hepatitis B infections (not new cases) have varied around 40 cases (22-71) per annum between 1991 and 2005, showing no clear trend in any direction.

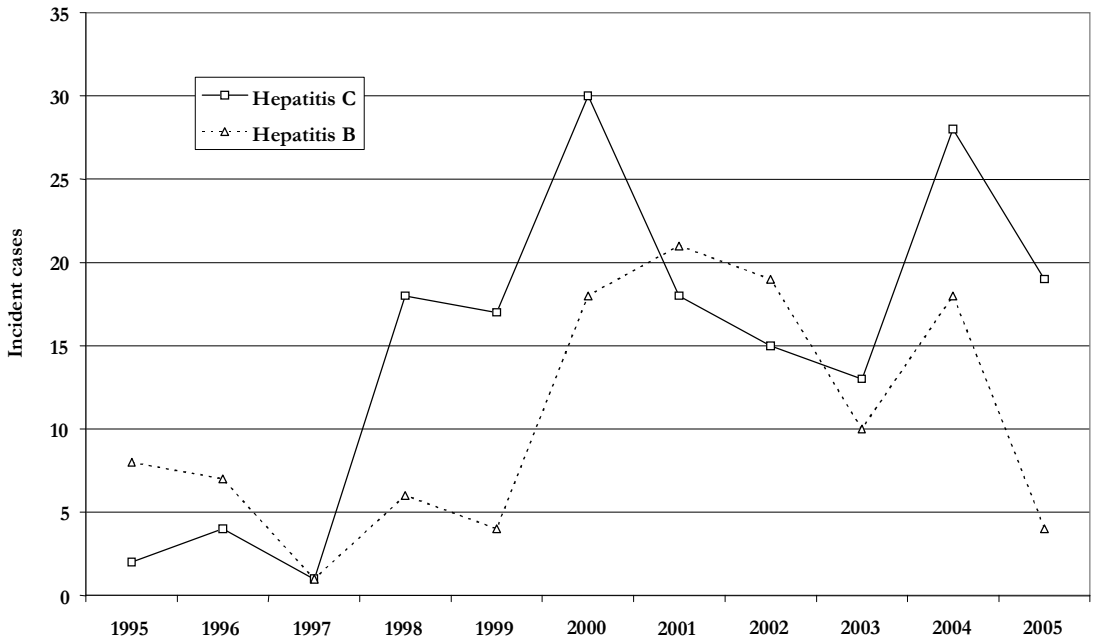
[35] Such detailed information was not available to the authors for cases identified since 2001.

Table 48: Rates of notifiable blood-borne viral infections in Tasmania 1991-2005

	Blood-borne viral infections			
Year	**Hepatitis C (incident)**	**Hepatitis C (unspecified)**	**Hepatitis B (incident)#**	**Hepatitis B (unspecified)**
1991	*n/a*	*n/a*	*n/a*	50
1992	*n/a*	*n/a*	*n/a*	52
1993	*n/a*	*n/a*	0	33
1994	*n/a*	*n/a*	0	40
1995	2	226	8	56
1996	4	262	7	38
1997	1	197	1	22
1998	18	255	6 (5)	28
1999	17	281	4 (4)	27
2000	30	298	18 (5)	39
2001	18	318	21	20
2002	15	322	19	34
2003	13	347	10	71
2004	28	283	18	59
2005	19	194	4	45

Source: Communicable Diseases Network - Australia New Zealand - National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services (data as of Jan 20, 2006 and subject to revision) #Number of incident cases of hepatitis B infection where illicit drug use was present as a risk factor for acquiring the infection are presented in parentheses. 'n/a' refers to cases where either no data are available or where recorded data were not specifically broken into incident and unspecified cases.

Figure 45: Total notifications of incident hepatitis B and C infections in Tasmania, 1995-2005



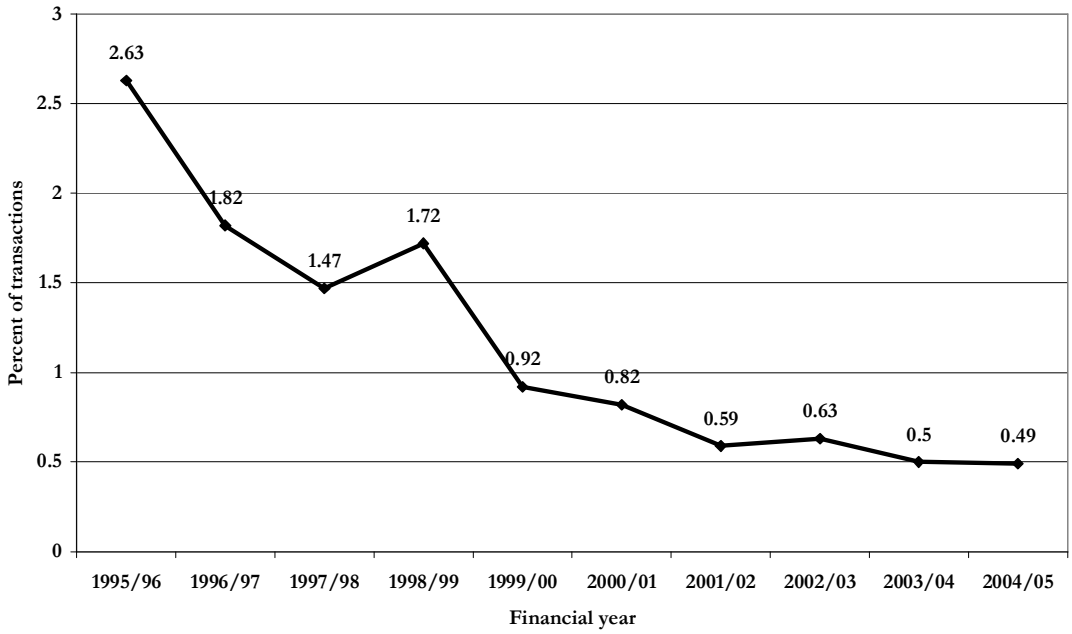
Source: Communicable Diseases Network - Australia New Zealand - National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services (data as of Jan 20, 2006 and subject to revision)

11.4 Sharing of injecting equipment among IDU

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 BBVI such as HIV and hepatitis B and C. Clients of non-pharmacy Needle Availability Program outlets are routinely asked whether they have shared needles and syringes or other injection equipment since their last visit to the service.

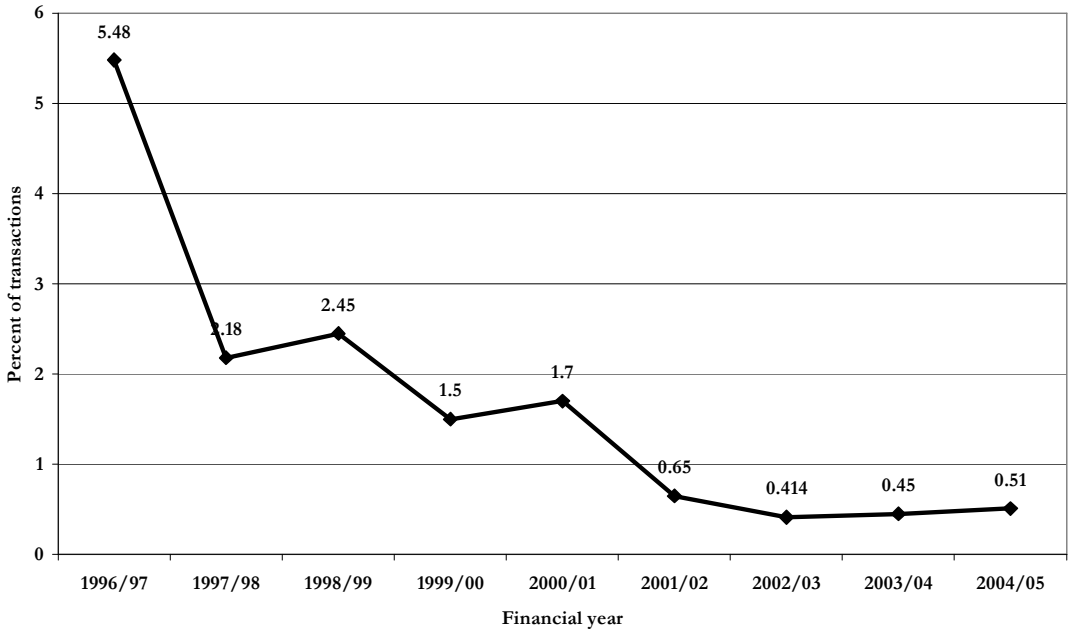
Reported sharing of needles/syringes by clients of non-pharmacy Needle Availability Program outlets overall in Tasmania have shown a reasonably steady decline since 1995/96 (Figure 46). While data on recent sharing have not necessarily been uniformly recorded for every client transaction in these services, among those where information was collected, the reported proportion of clients recently sharing needles/syringes has declined from 2.6% of recorded transactions state-wide in 1995/96 to just 0.5% in 2004/05. Following a similar overall trend to that of sharing of needles and syringes, reported rates of sharing of other injection equipment (such as spoons, mixing containers or tourniquets) has steadily declined from 5.48% of all recorded client transactions state-wide in 1996/97 to 0.42% in 2002/03, and plateaued around this figure in subsequent years (0.45% in 2003/04 and 0.51% in 2004/05: Figure 47).

Figure 46: Reported sharing of needles and syringes by non-pharmacy Needle Availability Program clients 1995/96-2004/05



Source: Sexual Health, Department of Health and Human Services

Figure 47: Reported sharing of other injection equipment by non-pharmacy Needle Availability Program clients 1995/96-2004/05



Source: Sexual Health, Department of Health and Human Services

Among the 2005 IDRS IDU sample, fourteen participants reported lending a used needle/syringe to others in the month prior to interview. This is a similar rate to that reported in the 2004 study (12%), which was a clear increase from the extremely low rates reported in previous local studies (Table 49). These participants predominantly reported providing their used equipment to others only on one (n=12) occasion in the preceding month, although two individuals reported doing so on 3-5 occasions in this period.

Among these samples of regular injecting drug users in Hobart, the proportion of respondents reporting using a needle/syringe after it had been used by someone else had remained stable at 10% of the 2000-2002 samples, dropping to 6% of the 2003 cohort and 5% in 2005 (Table 49). It is noteworthy that this level of recent sharing of needles among a regular injecting cohort is substantially greater than that seen in the NAP client data. All of those in the 2005 cohort who had injected with a used needle/syringe in the month prior to interview reported that only one other person had used the syringe prior to them. People who had used the syringe previously were reported to be a close friend (n=4) or regular sex partner (n=1). Again, most reported only having injected with another person's used equipment on one (n=2) or two (n=1) occasions in the preceding month, although two individuals reported doing so on 3-5 occasions in this period. It is notable that, of these participants that had recently used another person's syringe in the preceding month, 40% (n=2 of 5) had also reported lending one of their used syringes to another person in this time. As such, it appears that much of this level of poor injection health practices is concentrated to a small number of individuals. The types of needles shared were 1mL insulin syringes (n=2), 3/5mL needle/syringe (n=2) and a winged infusion set (butterfly, n=1). Participants noted that they had used another person's equipment because NSP outlets were either too far away for them to access (n=3) or that they required equipment on an occasion when accessible outlets were closed (nights or weekends, n=3).

Interestingly, almost two-thirds of the consumers sampled reported re-using their own injection equipment in the month prior to interview (62%). This is not a recommended practice as repeated use of needles leaves them blunt, which could cause damage to the venous system, and use of non-sterile equipment can lead to the introduction of bacteria into the bloodstream, which can lead to infections, septicaemia or endocarditis. Amongst the sample, 20% had re-used equipment on a single occasion in the preceding month, 16% twice, 14% on three to five occasions, 9% on six to ten occasions, and 3% more than 10 times in the month prior to interview. The equipment most commonly re-used were 'butterflies' (n=25) and 1mL insulin syringes (n=23), with smaller proportions re-using needles attached to 20mL barrels (n=14), 3/5mL barrels (n=8) or 10mL barrels (n=5), or a needle only (n=1). Participants noted that they had re-used equipment because they required equipment on occasions when accessible outlets were closed (nights or weekends, n=30), because an outlet was too far away for them to access (n=20), because they weren't motivated to access sterile equipment (n=6) or because their outlet had limits on the amount of equipment provided on any one occasion (n=3).

More than half of the IDU sample (59%) reported not sharing any other types of injecting equipment in the month prior to interview. Tourniquets were shared in this time by 15%, spoons or mixing containers by 26%, water by 27% and filters by 4% of the IDU cohort in the month prior to interview. While (with the exception of a reduction in the sharing of filters) these rates are similar to those reported amongst the 2004 Tasmanian IDRS IDU cohort, these figures appear high in comparison to those identified in the 2001 through to 2003 Tasmanian IDRS cohorts (Table 49). This reflects a stricter definition of 'sharing' in the most recent studies: during 2001-2003, behaviour was considered as sharing only if a person had clearly used a piece of injecting equipment previously used by another person, while if two people had used the same water, filter or mixing container at the same time, both using sterile injecting equipment, then this was not counted as sharing (this latter scenario is recorded as 'sharing' in the 2004 and 2005 studies). If this same rule was applied to the 2005 cohort, then the percentage figures would reduce to 4% sharing a mixing container; 2% sharing filters; 5% water; and 15% tourniquets. These figures for sharing of tourniquets and filters are at an equal level with those reported in 2001-2003; however, these adjusted rates for sharing of water and spoons/mixing containers represent increases in sharing of these types of equipment in comparisons to the earlier studies. However, these figures remain lower than the comparative figures for sharing of injection equipment identified in the 2000 study (where the same strict rules were applied[36]). These indices of sharing of injection equipment require careful monitoring, as sharing of any equipment during the injection process puts consumers at risk of exposure to BBVI, and the possible upwards trend in some of these figures (particularly lending needles to others, or sharing of waters) suggests that some users may be adopting unsafe practices or relaxing their vigilance around such issues.

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

Table 49: Proportion of the IDU sample (n=100) reporting sharing of injection equipment in the month prior to interview

Injection equipment sharing	% of IDU in past month					
	2000 IDRS %	2001 IDRS %	2002 IDRS %	2003 IDRS %	2004 IDRS %	2005 IDRS %
Borrowed used needles	10	10	10	6	8	5
Lent used needle to others	12	6	1	3	12	14
Shared spoons/ container	53	5	1	1	30*	26* (4)
Shared water	35	7	1	2	22*	27* (5)
Shared filters	32	3	1	1	15*	4* (2)
Shared tourniquets	29	10	14	11	21*	15* (15)

Source: IDRS IDU Interviews *These figures appear high relative to the 2001, 2002, 2003 studies due to a more strict definition of sharing being applied: during 2001-2003, behaviour was considered as sharing only if a person had clearly used a piece of injecting equipment previously used by another person, while if two people had used the same water, filter or mixing container at the same time, both using sterile injecting equipment, then this was not counted as sharing. If this same rule was applied to the 2004 cohort, then the percentage figures would reduce to 8% sharing a mixing container; 8% sharing filters; 11% water; and 21% tourniquets

In the current study, some aspects of injection practices were examined in more detail. Despite the current IDU cohort being regular injecting drug users, only four-fifths (79%) reported that they always injected themselves. Five participants 'never' self-injected, 5% injected themselves 'sometimes', 6% 'about half the time' and 5% 'usually' injected themselves in the preceding month. Those participants that did not always self-inject were significantly younger (27.2 years vs. 31.7 years: Mann-Whitney U = 558.0, p<0.041), were more likely to be female (57% vs. 33%: $\chi^2(1_{n=100})=4.1$, p=0.042), had been injecting for a significantly shorter period of time (7.9 years vs. 13.2 years: Mann-Whitney U = 471.0, p=0.002), were significantly more likely to identify as A&TSI (24% vs. 8%: $\chi^2(1_{n=100})=4.5$, p<0.035) and less likely to be involved in drug treatment in the preceding six months (38% vs. 66%: $\chi^2(1_{n=100})=5.3$, p<0.021) than those that did always inject themselves. Interestingly, there were no significant differences between those that did always self-inject and those that did not in terms of education, relationship status, sexual preference, prison history, frequency of injection, drug of choice or drug most often injected, and, importantly, in terms of sharing or lending of needles or other injection equipment in the preceding month.

A second series of questions examined whether the IDU participants had injected any person other than themselves in the month prior to interview. Surprisingly, more than half (51%) of the IDU cohort had done so in the preceding month, with the majority injecting only one (26% of the sample) or two (11%) people in this time, although 9% reported injecting 3-5 people, three respondents injected 6-10 people and two participants had injected more than ten people in the preceding month. Those people being injected were most commonly described as close friends (n=34, 67%), regular sex partners (n=15, 29%), or acquaintances (n=8, 16%), with single individuals reporting injecting a casual sex partner, or a family member in this period. This administration of drugs to others was predominantly during social drug-using sessions, with almost all people injecting themselves either prior to (n=29, 58%) or after (n=16, 32%) administering the drugs to the other individual on the most recent occasion which this situation arose (5 people, 10% had just injected the other person and not themselves). It is important to note that more that four-fifths (42%, n=20) of these individuals did not wash their hands in-between such administrations. This level of injection of others by

this regular IDU group is very high and the importance of maintaining 'blood awareness' between each injection is an important target for intervention among these consumer groups to help avoid infection with BBVI.

11.5 Injection-related health problems

There was a substantial rate of injection-related problems reported by the IDU surveyed, with 62% reporting at least one such problem in the preceding month (Table 50). This rate of experience of injection-related health problems is notably lower that those identified in previous Tasmanian IDRS IDU cohorts (72-78% between 2000 and 2004: Table 50). This may reflect the slightly reduced rate of injection of pharmaceutical opiates among the 2005 participants. Pharmaceutical products such as morphine tablets are often covered with a waxy film that cannot be completely removed in the preparation of the drug for injection, such waxy build-ups potentially damaging injection sites. Accordingly, the most commonly reported problems among the Tasmanian IDU were scarring/bruising of injection sites (31%) and difficulty injecting (47%), indicating vascular damage. Comparing rates of recent injection-related problems for the 2004 and 2005 Tasmanian IDU samples, most levels appear to have remained relatively stable (Table 50). However, notable in these data are that the reported rate of scarring or bruising of injection sites was much less commonly reported in comparison to previous samples (31% of the current cohort, in comparison to 42-59% in the study participants between 2000 and 2004). Reported rates of experience of 'dirty hits' had continued a decline since the levels present in 2003 (31% in 2003, 19% in 2005). Experience of a 'dirty hit' – feeling physically unwell soon after injection – is commonly due to the injection of contaminants or impurities. In the 2005 cohort, 68% of the 19 participants reporting experience of a 'dirty hit' reported this to have been associated with the injection of methadone, 26% methamphetamine, 21% morphine, and 26% benzodiazepines. This association of 'dirty hits' has been reported in previous local IDRS studies, where consumers suggested that this was due to non-sterile water being used for the dilution of methadone syrup. In keeping with this suggestion, in the 2002 study, one key expert – a methadone prescriber with a large client base – noted an increasing number of people feeling 'sick' from injection of methadone syrup, which they suggested as possibly due to the increased dilution of these doses in 2001.

As has been noted in the preceding sections, several key experts noted recent changes in the experience of injection-related problems amongst the substance-using groups they had contact with in the preceding six months. While two key experts (in drug treatment fields) reported no recent changes in injection-related harms, nine reported a recent increase in such problems (three reported improvements in this area in recent months). In particular, three key experts working with large numbers of opiate consumers noted an increase in bacterial infections or septic ulcers amongst their clients in the past six months, which they believed to be associated with re-use of non-sterile injection equipment, or of injection of drugs dissolved in non-sterile solutions. As an extreme case of such infections, one of these key experts had recently noted cases of endocarditis amongst their clients for the first time in their (extensive) experience with local consumers. Two key experts (working in NSP outlets and youth outreach) noted an increase in abscesses amongst the consumers they were familiar with in recent months, noting that these cases related to younger consumers that had required others to inject them, or who had not filtered preparations derived from tablets prior to injection. One key expert working in a large NSP outlet noted that some of their clients had reported 'burning' sensations after intravenous administration of methamphetamine, which may relate to the use of particular cutting agents used for that drug.

Table 50: Injection-related health problems reported by participants in the IDU survey in the month prior to interview (n=100)

Injection-related health problems	% experiencing the problem in the last month					
	2000 %	2001 %	2002 %	2003 %	2004 %	2005 %
Scarring/bruising	59	42	53	49	42	31
Difficulty injecting	50	48	48	51	49	47
Thrombosis	18	21	5	10	8	12
"Dirty hit"	15	31	18	31#	24~	19@
Infections/abscesses	9	9	8	8	11	11
Overdose	0	0	0	0	1	1
At least one injection-related problem	78 (range 1-5, median 2*)	72 (range 1-5, median 2*)	72 (range 1-5, median 2*)	76 (range 1-5, median 2*)	72 (range 1-5, median 2*)	62 (range 1-5, median 2*)
Median injection frequency	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week
% injecting daily	31	29	29	17	27	30

Source: IDRS IDU Interviews *for those noting injection-related problems; #83% of these were due to methadone injection, 10% to morphine and 7% attributed to methamphetamine.; ~58% of these were attributed to methadone injection, 25% from morphine, 17% to methamphetamine

11.6 Driving risk behaviours

The majority of the consumers interviewed in the current study had driven a car in the preceding six months (84%). Of these participants, almost two-thirds noted that they had driven within one hour of consuming (non-prescription) drugs in this time (63%, n=53). Table 51 below summarises the drugs that were used, where methamphetamine (74%, n=39) and cannabis (62%, n=33) were most commonly reported, while diverted opiates were less commonly reported (methadone: 38%, n=20; morphine: 25%, n=13). Given these high rates of driving under the influence of drugs in the current cohort, it will be most important to monitor changes in such behaviour in future IDU cohorts as roadside drug testing and drug driving education campaigns are increasingly implemented in the state.

Table 51: Proportion of IDU driving a car in the preceding six months (n=84) that had driven soon after using non-prescription drugs (n=53).

Drug	%	n
Heroin	2%	1
Methadone (illicit)	38%	20
Morphine (illicit)	25%	13
Cocaine	2%	1
Methamphetamine (any)	74%	39
Powder methamphetamine	*49%*	*26*
Base methamphetamine	*43%*	*23*
Crystal methamphetamine	*6%*	*3*
Ecstasy	4%	2
Cannabis	62%	33

Source: IDRS IDU Interviews

11.7 Mental health problems

As there exists a substantial body of work identifying increased rates of mental health issues among those who use illicit drugs, IDU participants were asked if they had attended a health professional for a mental health problem (other than drug dependence) in the six months prior to interview (Table 52).

While attendance to a health professional for such issues is likely to underestimate the real prevalence of mental health problems in this group (as it is common for many people not to seek help for these issues), a high proportion of IDU reported recently presenting to services for mental health concerns. More than two-fifths (43%) of IDU participants in the current study reported recently attending some professional for a mental health issue. The majority of these individuals had presented to a general practitioner for assistance (36%; Table 52) rather than a dedicated mental health professional (21%). These rates of seeking mental health treatment are similar in the current cohort (43%) to those reported in the prior study (44%) and represent a sustained and substantial increase in comparison to the levels identified in the 2002 (25%) and 2003 (28%) consumer samples. Consistent with this, the rates of prescribed anti-depressant use in the current cohort (28%) was similar to that of the previous sample (34%) and higher than earlier local IDRS studies (17% in 2003, 24% in 2002).

The most common, self-reported, reason for seeking support among IDU was depression (76% of those that had sought treatment, n=33), followed by anxiety (63%, n=27). These have remained the predominant issues in each of the IDRS cohorts, just as they are in the general population (American Psychiatric Association, 1994).

When examining the self-reported mental health problems experienced in relation to the number of cases where the participant had presented to a health professional (Table 52), it is clear that the main difference in these data between the 2004 and 2005 IDU cohorts derives from a slight decline in the proportion reporting expressing depression (98%, n=43 in 2004; 76%, n=33 in 2005). Additionally, in keeping with the high levels of use of methamphetamine amongst the current cohort, the proportions self-reporting experiencing anxiety or anxiety-related issues has increased, a trend that has been evolving over time (with 16%, n=4 of those seeking mental health treatment in 2002 reporting problems with anxiety, and 12%, n=3 panic; rising to 63%, n=27 reporting anxiety and 14%, n=6 panic in 2005). Reported rates of presentation for psychosis and related problems (psychotic episodes, schizophrenia, drug induced psychosis) have remained relatively stable over time, and were substantially lower than that for mood disorders. However, this proportion in the sample as a whole (4% of each of the 2002 and 2003 samples, 9% in 2004 and 6% in 2005) is clearly greater than that experienced among the general population (1%: American Psychiatric Association, 1994). Reported rates of presentations for most other issues had remained relatively stable across the 2004 and 2005 cohorts.

Table 52: Proportion of IDU participants attending a health professional for a mental health problem other than addiction in the six months prior to interview.

	2002 IDRS %		2003 IDRS %		2004 IDRS %		2005 IDRS %	
% attending a health professional for a mental health problem in past six months	25		28		44		43	
% attending GP	16		20		36		36	
% attending mental health professional	12		14		22		21	
Specific mental health problems experienced (% of those reporting attending a health professional)								
	n	**%**	**n**	***%***	**n**	**%**	**n**	**%**
Depression	15	*60*	18	*64*	43	*98*	33	*76*
Bipolar	2	*8*	4	*14*	4	*9*	4	*9*
Anxiety	4	*16*	12	*43*	22	*50*	27	*63*
Panic	3	*12*	2	*7*	4	*9*	6	*14*
Paranoia	1	*4*	4	*14*	6	*14*	3	*7*
Schizophrenia / psychosis	4	*16*	4	*14*	9	*20*	6	*14*
Obsessive-compulsive disorder	1	*4*	-	-	2	*5*	1	*2*
Attention deficit hyperactivity disorder	2	*8*	2	*7*	0	-	0	-
Anger management	2	*8*	1	*4*	0	-	0	-
Personality disorder	3	*12*	-	-	2	*5*	2	*5*

Source: IDRS IDU Interviews

11.8 Substance-related aggression

Participants in the current study were asked if they had become verbally aggressive (threatening, shouting, abuse) or physically aggressive (shoving, hitting, fighting) either while under the influence or in withdrawal from drugs in the six months prior to interview.

In terms of verbal aggression (Table 53), two-fifths (39%) of the current IDU cohort reported that they themselves had become verbally aggressive while under the influence of drugs in the preceding six months. This was most commonly associated with use of methamphetamine (n=19, 49% of those reporting verbal aggression under the influence), and, in line with the extent of use of this drug in the sample, with the powder (23%, n=9) and base/paste forms (21%, n=8) of methamphetamine rather than crystalline methamphetamine (21%, n=8). Other drugs commonly reported included benzodiazepines (31%, n=12), alcohol (23%, n=9) and morphine (21%, n=8). One-third (31%) of those interviewed reported becoming verbally aggressive during withdrawal from drugs in the past six months. Again, this was commonly associated with methamphetamine (68%, n=21), particularly the powder (39%, n=12) and 'base/paste' forms (35%, n=11), but also with withdrawal from benzodiazepines (35%, n=11) and, to a lesser extent, morphine (19%, n=6), methadone (13%, n=4) and cannabis (13%, n=4).

Somewhat smaller proportions of the sample reported that they had become physically aggressive in the preceding six months following drug use (18%). Similar to the patterns reported for verbal aggression while under the influence of drugs, this was most often

associated with methamphetamine use (50%, n=9, predominantly powder: 28%, n=9; or base/paste: 22%, n=4), but also with alcohol (33%, n=6), benzodiazepines (33%, n=6) and methadone (22%, n=4). Similarly, a small proportion of consumers reported becoming physically aggressive while withdrawing from drugs, typically following methamphetamine use (73%, n=11: particularly of 'base/paste': 40%, n=6; or powder: 33%, n=5), benzodiazepines (33%, n=5) or methadone (20%, n=3).

It is noteworthy that the potent crystal methamphetamine, which has been associated with aggression by key experts in previous studies, was relatively uncommonly reported to have contributed to verbal or physical aggression amongst this cohort, although this may reflect the limited use of this form of the drug amongst the current cohort.

Table 53: Proportion of IDU participants becoming aggressive following substance use in the six months prior to interview

	Verbal aggression				Physical aggression			
	Under influence		During withdrawal		Under influence		During withdrawal	
Proportion reporting aggression following drug use								
	39		31		18		15	
Drugs involved in aggression								
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Alcohol	23%	*9*		-	33%	*6*		-
Benzodiazepines	31%	*12*	35%	*11*	33%	*6*	33%	*5*
Methadone	10%	*4*	13%	*4*	22%	*4*	20%	*3*
Morphine	21%	*8*	19%	*6*	6%	*1*	7%	*1*
Heroin	5%	*2*	3%	*1*		-	7%	*1*
Other opiates		-		-		-		-
Any Methamphetamine	**49%**	***19***	**68%**	***21***	**50%**	***9***	**73%**	***11***
Speed	23%	*9*	39%	*12*	28%	*5*	33%	*5*
Crystal	8%	*3*	10%	*3*	11%	*2*	13%	*2*
Base	21%	*8*	35%	*11*	22%	*4*	40%	*6*
Cocaine		-		-		-		-
LSD		-		-		-		-
Ecstasy		-		-		-		-
Cannabis	13%	*5*	13%	*4*	11%	*2*	13%	*2*
Inhalants		-		-		-		-
Other	3%	*1*						-
Can't specify		-				-	7%	*1*
Methamphetamine & alcohol	3%	*1*			6%	*1*		-
Methamphetamine & cannabis	3%	*1*	3%	*1*				-
Cannabis & alcohol	3%	*1*			11%	*2*		-
Methadone & Benzodiazepines					6%	*1*		-
Pharm stimulants	3%	*1*	3%	*1*				-

Source: IDRS IDU Interviews

11.9 Criminal and police activity

Just over one-half (53%) of the IDU respondents self-reported involvement in some type of criminal activity in the preceding month (Table 54). This is a level that is comparable with that reported in the 2005 National IDRS sample (46%, total sample size 943: Stafford et al, 2006). The most commonly reported crimes in the local cohort were dealing of drugs (33%) and property crime (31%), with relatively few respondents reporting involvement in violent crime (10%) or fraud (6%).

Most IDU reporting involvement in criminal activity in the month prior to interview indicated that they had engaged in such activities less than once per week. However, some of those interviewed reported more frequent recent involvement in dealing (7% daily, 8% more than once per week, 7% weekly, 11% less than weekly) and property crimes such as stealing or shoplifting (4% daily, 3% more than once per week, 4% once per week, 10% less than once per week). Half (47%) of the IDU respondents had been arrested in the previous twelve months. The most common grounds for arrest were property crime (16%), with smaller proportions being arrested for violent crime (11%), driving offences (11%), or miscellaneous charges (16%: such as being drunk and disorderly n=5; breach of bail conditions/restraining order n=4; failure to appear n=2). Despite the noted presence of drug driving amongst the current cohort, none of the participants had been arrested in the past year for alcohol and driving or drugs and driving offences. Similarly, despite the notable rate of involvement in dealing, two participants reported being arrested for dealing in the year prior to interview.

On examination of rates of reported criminal activity in the 2004 and 2005 Tasmanian IDRS samples (Table 54), the (self-reported) level of criminal involvement had declined from 63% of the participants interviewed in 2004 to 53% in 2005. However, this marks a return to the rates reported in the 2001-2003 surveys (50-56%) as well as to a level comparable with the national IDRS consumer samples. Much of the change between the 2004 and 2005 cohorts relates to a decline in the proportion of consumers reporting recent involvement in dealing (43% in 2004, 33% in 2005) to a level similar to that among the 2002 and 2003 cohorts (34% and 32% respectively). Between the 2004 and 2005 cohorts, the proportion of consumers reporting recent involvement in fraud had remained stable (7% in 2004 and 6% in 2005), as had the reported recent involvement in property crime (34% in 2004; 31% in 2005), although the proportion being arrested for such offences had declined between the surveys (29% in 2004 had been arrested for property crimes in the preceding year, compared with 16% of the 2005 cohort). The other notable change has come from an increase in the self-reported involvement in violent crimes, which have risen from 5% of the cohort in 2003 and 2004 to 10% in 2005; and reported prior-year arrest rates have similarly increased in this time (5% in 2003, 9% in 2004 and 11% in 2005). However, the consumers interviewed have consistently reported that such involvement is infrequent.

Among the key experts interviewed, most considered rates of property crime to have remained stable among the substance-using groups that they were associated with in the preceding six months, or were not aware of property crime engaged in by these groups (n=32). Key experts noted some involvement of the groups they were referring to in petty crime, such as opportunistic shoplifting or thefts from cars, and less commonly burglaries or car theft. One key expert (a Needle Availability Program worker) noted an increase in shoplifting amongst the client group they were working with in recent months. Law enforcement key experts noted no changes in property crime rates amongst

drug consumers in recent months, but did note that providers of methamphetamine and morphine would accept goods in trade for drugs, most commonly items such as digital cameras, video cameras, or laptop computers.

In terms of dealing of drugs, most key experts were not able to comment on such activities amongst the groups of consumers that they were familiar with, and those that did predominantly reported no change in the preceding six months in this area. Two key experts noted changes in the demographics of some methamphetamine providers in recent months, with one noting more 'upper class' people selling the drug, and the other noting an increase in user/dealers (people selling in order to offset the cost of their own drug use). Two key experts, community workers in a lower socio-economic area, noted a recent shift toward people dealing out of backpacks (particularly younger people in their teens and early twenties), in contrast to the typical picture of people dealing from private homes. Similarly, most key experts were unaware of any fraud committed by the groups they were familiar with, with key experts noting that such incidents typically related to writing of fraudulent medical communications (doctor's notes or prescriptions), credit card fraud, or stealing of electricity (for the indoor production of cannabis), but that they had noted no recent changes in the incidence of such occurrences. In terms of violent crimes, seven key experts noted no changes in the level of these crimes amongst the groups they were familiar with in recent months. However, five key experts noted recent increases in violence and aggression. One key expert noted an increase in aggressive behaviour amongst their client group in recent months, with several examples of patients attempting to intimidate a prescriber with the intention of forcing a prescription of alprazolam or methadone; one noted an increase in such 'standover' tactics being applied to patients of maintenance pharmacotherapy programs (where some consumers seeking access to diverted pharmaceuticals attempt to use intimidation to force patients to give or sell them their prescribed medications). Two key experts working in drug treatment agencies noted an increase in aggression and an increase in the severity (but not frequency) of violent incidents in their inpatient facility in the preceding six months. Finally, one of the ambulance officers interviewed noted an increase in violent incidents, particularly in relation to methamphetamine intoxication, in the preceding six months.

Table 54: Reported criminal activity among IDU (n=100)

Activity	2000 IDRS %	2001 IDRS %	2002 IDRS %	2003 IDRS %	2004 IDRS %	2005 IDRS %
Crime (% in last month)						
Dealing	49	41	34	32	43	33
Property crime	18	23	28	22	34	31
Violent crime	10	4	6	5	5	10
Fraud	5	4	2	6	7	6
Any crime	*64*	*56*	*50*	*52*	*63*	*53*
Arrested last 12 months (%)	*43*	*41*	*41*	*46*	*51*	*47*
Arrested for property crime	16	13	25	21	29	16
Arrested for use/possession	9	1	9	2	9	5
Arrested for violent crime	6	9	14	5	9	11
Arrested for fraud	2	0	0	3	2	1
Arrested for dealing/trafficking	1	2	1	0	1	2
Arrested for driving offence	*	4	5	2	6	11
Arrested for alcohol and driving	*	2	2	1	1	0
Arrested for drugs and driving	*	0	3	3	2	0
Arrested for other reason	10	17	8	16	14	16

Source: IDRS IDU Interviews *Note: Comparable data for these cells were not gathered in the 2000 IDRS study

11.10 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 55). Among those IDU that felt confident in providing a response, 53% (n=40) believed that police activity had remained stable, and 40% (n=30) reported an increase in police activity in this time. However, most had not experienced any reduction in their ability to purchase drugs by any recent changes in local police activity (85%, n=82). The major changes noted by IDU were primarily an increased visibility of police presence (n=14), commonly noted in the central business district (n=5), pharmacies dispensing methadone (n=4), and at night and weekends; an increase in searches, either of the person or of cars (n=9); an increase in being questioned in relation to drugs (n=8); of roadside testing (n=2); and an increased number of raids or busts of providers noted (n=7: of cannabis providers, n=2; methamphetamine providers, n=4; morphine providers, n=1).

Key experts reported similar perceptions of police activity, with almost all reporting no recent changes in police activity toward the users they came into contact with. Among the few who did report changes, this was related to the perception of a decrease in raids of dealers (n=2) or of consumers reporting being 'hassled' by police (n=1) in the preceding six months. Law enforcement officers themselves reported no recent changes in their approaches, continuing to target providers through intelligence gathering and through enhancing relationships with relevant community organisations, such as pharmacies.

Four key experts working in the treatment and youth work/outreach sectors noted good relationships with police, consistent with trends noted in previous surveys, where key experts noted an increase in a 'community policing'-based approach to substance users,

with police preferring to educate or counsel users through the diversion program (discussed below) rather than involve them further in the criminal justice system.

Table 55: Perceptions of police activity among IDU

Question	%
Have there been changes in police activity in the last six months?	
More activity	30
Stable	40
Less activity	5
Don't know	25
Has police activity made it more difficult to buy drugs recently?	
Yes	14
No	82
Don't know	4

Source: IDRS IDU Interviews

Such an approach by police is likely to reflect their investment in early intervention to help deflect first time offenders away from the criminal justice system. In July 1998, Tasmania Police introduced a Cannabis Cautioning Program, which gave police officers the discretion to caution first-time minor cannabis offenders. Following a successful trial of the program, the eligibility criteria for cautioning were expanded to include consideration of non-first time offenders (ABCI, 2001). In March 2000, under a series of initiatives funded by the Council of Australian Governments, the program was further adapted within the Tasmanian Early Intervention and Diversion Framework. This current diversion model now extends to cover individuals who have been apprehended for no more than three offences in the past ten years, and follows a three-tiered approach to diversion.

Individuals with a first minor cannabis offence are cautioned and provided with health and legal information, as well as contact details of referral and treatment services, and do not receive any criminal record. Second-time offenders are cautioned and diverted into a brief face-to-face intervention with a health professional. Again, there is no criminal conviction; however, if they fail to attend the brief intervention the individual is prosecuted for the drug offence. Third-time offenders are cautioned and diverted directly to assessment and treatment through the Department of Health and Human Services Alcohol and Drugs Service. Charges are not pursued providing attendance and compliance with the requirements of treatment as assessed. In the case of a first offence with an illicit drug other than cannabis, individuals are immediately diverted to the third tier of diversion (as per third time cannabis offenders). This initiative is clearly well supported by police, with approximately 1000 diversions made per annum in each of the past four financial years (Table 56). Notably, the number of second- and third-level diversions (to health interventions) appear to have declined between 2002/03 and 2003/04 (from 263 to 179 cases), but increased again between 2004/05 (to 365 cases: Table 56).

Table 56: Drug diversions or cautions issued by Tasmania Police 2000-2005

	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05
Number of cautions/diversions state-wide	764	978	990	977	977
% diversions in Southern District	95	79	78	n/r	53
Number diverted to health intervention state-wide	151	n/a	263	179	365
% health intervention diversions in South	86	n/a	86	90	57

Source: Tasmania Police State Intelligence Services State-wide Illicit Drug Reports; Alcohol and Drug Service

Note: These figures may differ from data submitted to the Australian Crime Commission if the decision to charge persons was altered to a caution after the figures were forwarded to State Intelligence Services. *These data refer to the period March-June 2000. 'n/a' refers to cases where the relevant data were not provided to the authors

Data pertaining to drug-related arrests in Tasmania between 1995/96 and 2002/03 are shown below in Table 57. These data illustrate a marked increase in arrests for methamphetamine-related offences for 2000/01 and 2001/02 in comparison to previous years (7 arrests in 1998/99 to 89 in 2001/02). While these arrests decreased between 2001/02 and 2003/04 (89 in 2001/02, 66 in 2003/04 and 39 in 2003/04), these have again increased in 2004/05 (rising to 72 arrests in the most recent financial year). Cannabis-related arrests appear to have doubled between 1999/00 and 2004/05 (from 736 in 1999/00 to 1474 in 2004/05). As this increasing trend coincides with the implementation of the Cannabis Cautioning Program, and subsequently the Illicit Drug Diversion Initiative, it is likely that much of this increase 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 preceding years. Arrests for opioids have remained low in the past 9 years, and arrests for cocaine have remained almost non-existent in that time.

Table 57: Number of arrests (including cautions and diversions) for cannabis- methamphetamine- opioid- and cocaine-related offences in Tasmania, 1996/97-2004/05

Type of offence	1996/ 97	1997/ 98	1998/ 99	1999/ 00	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05
Cannabis	1079	1196	736	799	1050	1540	1830	1638	1474
Methamphetamine	20	15	7	28	70	89	66	39	72
Opioids	28	16	25	9	9	34	9	10	16
Cocaine	0	0	0	0	4	1	0	0	0

Source: Australian Illicit Drug Reports 1995/96-2000/01, Australian Bureau of Criminal Intelligence (now the Australian Crime Commission), and Tasmania Police State Intelligence Services State-wide Illicit Drug Reports Note: 2001/02 data are based on data provided to State Intelligence Services, which may differ from official statistics and counting rules used by the Australian Crime Commission (formerly ABCI); similarly, data for 2004/05 is State Intelligence Service Data, reported for consistency with data presented earlier in this report. ACC figures for 2004/05 differ only slightly from those reported here (cannabis: n=1353; methamphetamine: n=69; opioids: n=10; cocaine: n=0)

Table 58 below indicates the proportion of arrests for offences relating to the possession or use of illicit drugs (consumer offences) as opposed to supply-type (provider) offences. In the past nine years, the proportion of arrests relating to consumer-type offences has been variable without particular trend for both cannabis and opioid arrests (Table 58). Arrests relating to methamphetamine, however, have followed a variable but identifiable

trend toward a lower proportion of consumer-type arrests (Table 58), which is reflective of Tasmania Police's focus toward suppliers.

Table 58: Consumer arrests (including cautions and diversions) for cannabis-methamphetamine- and opioid-related offences as a proportion of all drug-related arrests in Tasmania 1996/97-2004/05

Drug Type	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Cannabis	49	76	93	88	96	72	90	92	82
Methamphetamine	90	100	86	71	86	79	63	79	61
Opioids	86	94	96	78	89	68	88	100	81

Source: Australian Illicit Drug Reports 1995/96-2000/01, Australian Bureau of Criminal Intelligence (now the Australian Crime Commission), and Tasmania Police State Intelligence Services State-wide Illicit Drug Reports Note: 2001/02 data are based on data provided to State Intelligence Services, which may differ from official statistics and counting rules used by the Australian Crime Commission (formerly ABCI). Similarly, 2004/05 data are based on SIS reporting, for consistency with data presented earlier in this report; however, figures reported by the ACC are consistent with these: cannabis – 83% consumers; methamphetamine – 62% consumers; opioids – 80% consumers.

As shown in Table 59, the number of individuals before the Supreme Court for selling or trafficking in drugs has increased slightly in the past 9 years, from 22 individuals in 1996/97 to 33 in 2004/05. As part of the context of these increases, the *Misuse of Drugs Act 2001* implemented changes to the existing law and may have expanded the number of prosecutions appropriate for presentation to the Supreme Court. The act was further amended in 2004. It is thus likely that the recent apparent increase in charges (from 20 in 2003/04 to 33 in 2004/05) may largely relate to such legal changes (the full effect of the enactment of the *Misuse of Drugs Act, 2001* together with several prosecutions being withheld while amendments effected in 2004 were being expected, and then were the subject of a reference to the Court of Criminal Appeal to determine if there were any retrospective effect: T. Ellis SC, *Personal Communication*, 2005), rather than necessarily reflective of substantial changes in the rate of such offences. In 2003/04 and 2004/05, the majority of relevant charges before the Supreme Court related to trafficking in a controlled substance (16 individuals in 2003/04 and 19 in 2004/05) and cultivating a controlled plant for sale (3 individuals in 2003/04 and 10 in 2004/05).

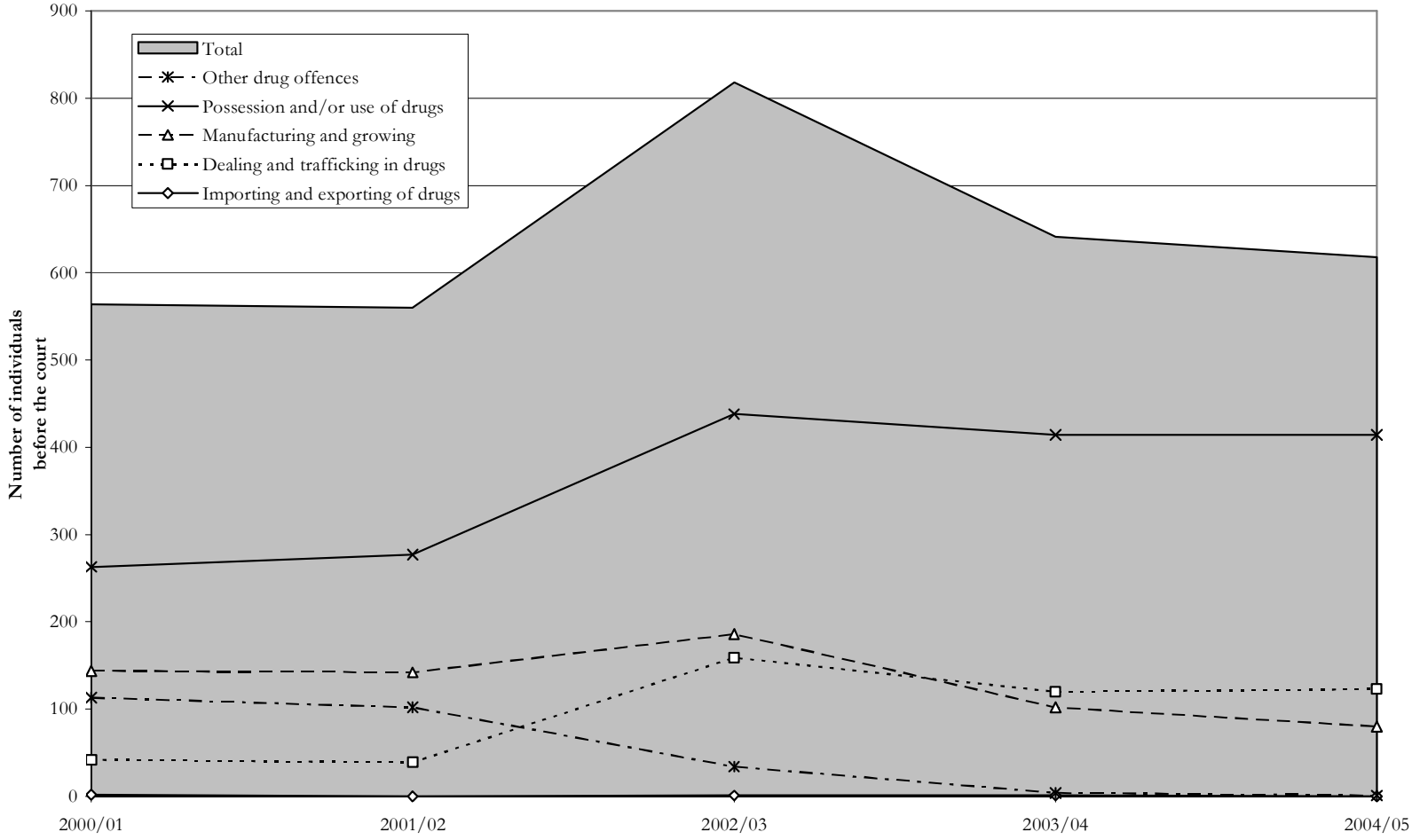
The number of individuals before the Magistrates Court for drug-related matters has stabilised somewhat in the past three financial years following marked increases in the number of cases in 1999/00 (Table 59, Figure 48). In particular over the past six financial years, the number of individuals before the court dealing and trafficking in drugs (23 individuals in 1999/00 and 123 in 2004/05) has markedly increased. It is noteworthy that the number of cases in relation to possession or use declined in 1999/00 in comparison to previous years, possibly reflecting the impact of the Cannabis Cautioning trial; however, these cases have steadily increased since this time (195 individuals in 1999/00 and 414 in 2004/05), and in recent financial years these cases had returned to a level similar to that prior to the implementation of the diversion programs. The number of cases relating to importing and/or exporting of drugs heard by the Magistrates Court has remained low and stable in recent years. In contrast, the number of cases for manufacturing or growing of drugs has declined in recent years following an earlier increase (with 101 individuals before the court for this charge in 1999/00, rising to 186 in 2002/03, and declining to 80 in 2004/05).

Table 59: Number of individuals before Tasmanian courts or imprisoned on drug charges, 1996-2005

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
SUPREME COURT OF TASMANIA									
Number of individuals convicted of selling or trafficking in dangerous drugs	22	18	22	27	14	15	30	20^	33~
HOBART MAGISTRATES COURT									
Number of individuals before the court for:									
dealing and trafficking in drugs	*n/p*	30 *(40)*	28 *(33)*	23 *(28)*	42 (47)	39 *(48)*	159 *(180)*	120 *(138)*	123 *(130)*
importing /exporting of drugs	*n/p*	4 *(5)*	7 *(8)*	5 *(8)*	2 (2)	0 *(0)*	1 *(1)*	1 *(1)*	0 *(0)*
manufacturing/growing of drugs	*n/p*	201 *(260)*	164 *(189)*	101*(124)*	144 *(163)*	142 *(194)*	186 *(202)*	102 *(105)*	80 *(81)*
possession and/or use of drugs	*n/p*	469 *(928)*	342 *(654)*	195*(428)*	263*(544)*	277 *(542)*	438 *(896)*	414 *(829)*	414 *(800)*
other drug offences	*n/p*	229 *(284)*	178 *(251)*	105*(169)*	113*(155)*	102 *(104)*	34 *(38)*	4 *(6)*	1 *(1)*
(alleged number of offences in parentheses)									
HOBART PRISON*									
Number of individuals incarcerated	21	42	26	29	*n/p*	16	35	35	54
Number of offences among those incarcerated	33	77	50	44	25	27	78	71	100
Offence breakdown									
Grow prohibited plant/substance	3	6	3	4	0	2	6	4	13
Possession/use	16	30	20	22	13	18	44	42	65
Prescription offences	3	7	6	0	0	0	4	1	0
Sell/supply narcotic substance	1	1	1	2	0	1	5	4	7
Sell/supply prohibited substance	1	6	4	0	6	4	5	5	6
Traffic in narcotic substance	1	1	1	6	1	1	3	1	0
Traffic prohibited substance	4	7	2	4	1	1	7	6	7
Traffic prohibited plant	0	5	4	2	1	0	3	4	1
Other	4	14	9	5	3	0	0	4	1

Sources: Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court Data); Corrective Services (Prison data), Department of Justice and Industrial Relations *Note that numbers of incarcerations refer to cases presented before both the Supreme and Magistrates courts; 'n/p' refers to cases where data were not provided to the authors**.** ^Note: this includes the following offences: cultivating a controlled plant for sale (3); posses a thing intended for the use in manufacturing drugs for sale (1); selling a narcotic substance (1); trafficking in a controlled substance (16); ~note that this includes the following offences (most serious offences only recorded): trafficking in a controlled substance (19); trafficking in a prohibited substance (1); cultivating a controlled plant for sale (10); possess thing intended to use for cultivating a controlled plant for sale (2).

Figure 48: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2000/01-2004/05



Source: Hobart Magistrates Court

In the past five financial years, both the number of individuals incarcerated at Hobart Prison, and the number of offences among these individuals has increased (Table 59), with these changes largely relating to increases in the numbers imprisoned on charges of possession or use of drugs, and for growing a prohibited plant or substance (the number of individuals incarcerated for most other categories of drug-related offence had remained stable over time: Table 59).

11.11 Pharmacy burglaries

Tasmania Police provided information in relation to burglaries of Tasmanian pharmacies between 1998/99 and 2003/04. The data suggest that, following a steady decline between 1998/99 and 2000/01, the number of pharmacy burglaries slightly increased, from just two during 2000/01 to 10 during 2002/03, and subsequently remained relatively stable, at 6 in 2003/04 and 7 in 2004/05 (Table 60). The majority of these incidents in 2004/05 related to the theft of cash, rather than pharmaceutical opiates or related drugs. Although the products stolen were not explicitly detailed in all cases, benzodiazepines were the most commonly stolen pharmaceutical (among those of interest in the context of illicit drug use or production), featuring in at least 12 of the 17 incidents in 1998/99, 8 of the 10 1999/00 burglaries, 2 of the 10 2002/03 burglaries and 1 each of the incidents in 2001/02 and 2003/04. In 2004/05, one of the 7 pharmacy burglaries involved the theft of benzodiazepines, and there was an additional case of shoplifting of benzodiazepines in this period. Part of the reason for this is that opioid-based products are commonly stored in more secure areas (such as floor safes), and hence these higher-illicit value products are rarely stolen. Amongst the 10 burglaries in 2002/03, five accessed prescription drugs of interest (3 accessed benzodiazepines, 3 dexamphetamine, 3 oxycodone, 2 pseudoephedrine, 1 morphine and 1 methadone respectively, although the drugs stolen were not specified in three of the burglaries), and it is noteworthy that at least one of the burglaries in 2002/03 netted a wide array of products including morphine, methadone, Physeptone, benzodiazepines and a number of other opiates, and (unlike the majority of the other burglaries) appeared quite organised and targeted in the products accessed. During 2003/04, three of the six burglaries accessed pharmaceuticals of interest (2 accessed methadone, 1 benzodiazepines, and 1 pseudoephedrine, although the products stolen were not specified in some cases). None of the pharmacy burglaries during 2003/04 accessed a large number of products or appeared to target any particular products. Similarly, in 2004/05, none of the seven burglary incidents accessed pharmaceutical opiates (although there was a single case in this period where these drugs were shoplifted); however, there was one case of theft of pseudoephedrine in these burglaries. As such, it is clear that pharmacy burglary is clearly not a major pathway to access of the pharmaceutical products used by the IDU within Tasmania.

Table 60: Pharmacy burglaries in Tasmania 1998/99-2004/05

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Number of pharmacy burglaries	17	10	2	4	10	6	7
Number of burglaries accessing*:							
Benzodiazepines	12	8	-	1	2	1	1 (+1)
Pharmaceutical opiates	-	-	-	-	3	2	0 (+1)

Source: Tasmania Police *Note: Details of products stolen is not available in all cases; + refers to additional non-burglary (shoplifting) theft of pharmaceutical products

11.12 Summary of Drug-Related Issues

Overdoses

- In 2005, 6% of the consumers interviewed reported experiencing a non-fatal opioid overdose in the preceding year, and one-quarter of the sample had witnessed such an overdose in this time. This rate of overdose experience is a decline from that seen amongst the 2004 cohort, and a return to the relatively lower rate seen in the 2003 and 2004 cohorts. However, multiple key experts and consumers provided anecdotal reports of an increase in the numbers of overdoses in the preceding six months, which were attributed in particular to coincident use of multiple CNS depressant drugs (opioids and benzodiazepines in particular).
- The number of opioid overdose deaths among those aged 14-54 years noted by the State Coroners office appeared to have declined in 2003 against a backdrop of a steadily increasing population rate of overdose in Tasmania in recent years. Details of opioid overdoses in subsequent years are not publicly available.

Blood-borne viral infections

- Reported incident cases of hepatitis C infection in the state appear to have remained largely unchanged since 1998, averaging 20 new cases of infection reported per annum.

Sharing of injection equipment

- Self-reported rates of sharing of needles or syringes among non-pharmacy Needle Availability Program clients state-wide have declined from 2.6% of all transactions in 1995/96 to 0.5% in 2004/05. However, all IDRS studies in Hobart have suggested that 5-10% of these cohorts share used needles or syringes at least once in a month. Additionally, there are indications of increasing sharing rates in the past two IDRS surveys (using the proxy measure of whether consumers had 'lent' their used needles to another consumer in the preceding month, reported by 14% of the 2005 participants).
- Self-reported rates of sharing of other injection equipment among non-pharmacy Needle Availability Program clients state-wide have declined from 5.5% of all transactions in 1996/97 to 0.5% in 2004/05. There are possible indications that some IDRS IDU participants may be relaxing their vigilance around blood awareness in regard to sharing of injecting equipment other than syringes (particularly in regard to waters and mixing containers).
- Almost two-thirds of the consumers interviewed reported re-using their own injection equipment in the month prior to interview, with the majority of these participants re-using on multiple occasions in this time. This is not a recommended practice as repeated use of needles leaves them blunt, which could cause damage to the venous system, and use of non-sterile equipment can lead to the introduction of bacteria into the bloodstream, which can lead to infections, septicaemia or endocarditis. 'Butterflies' and 1mL insulin syringes were the equipment most commonly re-used, and this was typically reported as being due to NSP outlets being inaccessible (either due to distance or equipment being required outside of business hours).
- Despite being regular injecting drug users, one-fifth of the 2005 local IDRS cohort did not always self inject in recent months, with those that did not always self inject being significantly younger and more likely to be female.
- Half of the IDU participants had injected others in the month prior to interview, most commonly on occasions where they were also injecting themselves, although in almost half of these cases participants did not report washing their hands between injections. As such, this

issue is a clear education target for reducing exposure risk to BBVI amongst this demographic.

Injection related problems

- A substantial proportion of IDU surveyed experienced injection-related health problems, at a relative rate greater than those seen amongst IDU in other jurisdictions, possibly due to the increased harms associated with the injection of pharmaceuticals.
- Scarring, difficulties finding veins to inject into (indicative of vascular damage) and experience of 'dirty hits' (feeling physically unwell soon after injection, often associated with the injection of contaminants or impurities) were the commonest injection-related problems experienced by the current IDRS IDU cohort.
- Multiple key experts noted recent increases in experiences of bacterial infections associated with injecting drug use in recent months, likely related to injection of non-sterile solutions or of re-use of injection equipment.

Driving risk behaviours

- Almost two-thirds of the consumers sampled that had driven a car in the past six months had done so within an hour of using non-prescription drugs on at least one occasion. Methamphetamine and cannabis were most commonly involved.

Mental health comorbidity

- More than two-fifths of the IDRS IDU participants reported presenting to a health professional for a mental health issue in the preceding six months. This rate of presentations is substantially greater than that seen in the general population.
- In comparison to reports in earlier local IDRS IDU surveys, there has been a steadily increasing rate of individuals presenting for anxiety-related issues (consistent with an increasing use of methamphetamine in these cohorts over time).

Crime

- Half of the IDRS IDU self-reported involvement in some form of criminal activity in the month prior to interview, a level consistent with that seen in IDRS IDU samples in other jurisdictions. Crimes most commonly reported were drug dealing, and, to a lesser extent, property crime (such as shoplifting or burglaries), although such involvement was generally reported to be infrequent.
- Around one-third of the consumers interviewed reported becoming verbally aggressive following drug use in the past six months, and one-fifth or less reported becoming physically aggressive following drug use in this time. The drugs most commonly involved were methamphetamines (powder or base/paste), and, to a lesser extent, alcohol and/or benzodiazepines.

12.0 DISCUSSION

The major trends identified in the 2005 Tasmanian IDRS report relate to indications of emerging changes in the local methamphetamine market and culture amongst consumers; the changing patterns of pharmaceutical opiate use amongst local IDU; and the continuing trend toward coincident opioid and benzodiazepine (particularly alprazolam) use. Summaries of major trends for each drug class are reported below by drug type.

12.1 Heroin

Very few of the IDU consumers interviewed in the 2005 Tasmanian IDRS could report on local trends in price, purity, or availability of heroin. Consistent with patterns seen in previous studies, only a small proportion of the cohort (19%) reported using the drug in the preceding six months, with this use being very infrequent (6 of the previous 180 days), despite a high preference for heroin as a drug of choice. Similarly, use of heroin among clients of the state's Needle Availability Program remained below 2% of all non-pharmacy client transactions in 2004/05.

The price of heroin purchased within the state was reported as $100 per 'packet' (0.05-0.2g) and $360 per gram, and was considered stable in recent months by the very small number of consumer reports on use (n=8). Consistent with trends noted in previous years, the majority of IDU considered heroin as 'difficult' or 'very difficult' to access, and that this situation had not changed in recent months. In further support of this, half of those reporting on availability had accessed the drug through having it sent directly to them from another jurisdiction, rather than being able to access the drug locally.

Consumers predominantly used rock-form heroin and considered the drug as 'low' to 'medium' in subjective purity in the preceding six months. Consumers were very mixed in their reports of changes in purity, and as there was only a single seizure of heroin in Tasmania in 2004/05 (of 0.2g), and none in the preceding three years, there are no objective purity data to compare consumer reports against.

The majority of indicators – such as a steadily declining proportion of use of heroin among clients of the state's Needle Availability Program, findings such as the low median rate of use of heroin (6 days in last 6 months amongst those who had used the drug) and that, of the 32% of the IDU sample that reported heroin as their drug of choice, only around two-fifths (40%) had recently used heroin – indicate that the low availability of heroin in the state, identified in earlier IDRS studies, has continued in 2005.

12.2 Methamphetamine

Over the past four years of the IDRS in Hobart, higher-purity forms of methamphetamine have generally increased in availability in the state. This easy availability of high-potency forms of the drug may have made use of methamphetamine particularly attractive among IDU, with almost all of those surveyed in the current study using some 'form' of the drug in the six months prior to interview (95%), despite just one-third (34%) nominating it as their drug of choice. Moreover, the proportion of clients of the state's Needle Availability Program reporting predominant use of methamphetamine has steadily increased from 31% of recorded transactions (almost 3,000 cases) in 1999/00 to 59% in 2004/05 (more than 24,000 transactions).

The market prices locally for all three presentations of methamphetamine appear to have remained relatively stable since those reported in the 2004 IDRS study, particularly in relation to the most common purchase amount, a 'point' (0.1g) of the drug at $50 for any form. Modal

purchase prices for larger amounts of powder and 'base/paste' methamphetamine remained stable since 2004 at $300 per gram. However, there were some indications of a decrease in median prices for grams of crystal methamphetamine, falling from $400 in 2004 to $340 in the 2005 survey (there was no mode in each survey), although only small numbers of participants reported purchasing in such amounts. Consumers predominantly regarded the prices of each presentation of the drug as remaining stable in recent months.

IDU reports on subjective purity of powder methamphetamine were 'low' to 'medium' and fluctuating toward decreased purity in recent months. 'Base' was considered by consumers as 'medium' to 'high' in subjective purity, with potency fluctuating in recent months. Consumers considered crystalline methamphetamine used locally as 'high' in subjective purity, with this remaining stable or trending toward increased purity in the preceding six months. Only a small number of methamphetamine seizures were analysed in the 2004/05 financial year (n=10), and the median purity of these samples was 32% (range 19-36%).

Consumers interviewed regarded powder form methamphetamine as 'easy' to 'very easy' to access, with availability stable to increasing in recent months. 'Paste'/'Base' was also considered as 'easy' to 'very easily' accessed, with availability stable in the preceding six months. In contrast, while some consumers found crystal methamphetamine 'easy' to access, equal proportions noted that it was 'very difficult' to access. While consumers noted little recent change in availability of crystal methamphetamine in recent months, a smaller proportion of consumers regarded the drug as 'easy' to access and there was a decrease in the median frequency of use of this form between the 2004 and 2005 surveys (frequency of use falling from 8 to 3 days of the preceding 180, despite an equal number of consumers – half of the sample in each survey – reporting recent use). This represents a sustained reduction in the local availability and use of crystal methamphetamine, in comparison to a marked increase in use of the drug between 2002 and 2003 (where use increased from one-fifth to more than two-thirds of those interviewed). Use of the powder and base forms of methamphetamine were consistent with availability trends, in that a steadily increasing proportion of consumers sampled have reported recently using powder form in the past four IDRS surveys (increasing from one-third of the sample in 2002 to three-quarters in 2005), while use of 'base' has remained stable (by around three-quarters of the cohort) between 2004 and 2005. However, the median frequency of use of both of these forms increased between the 2004 and 2005 cohorts, with the median frequency of use of any form of the drug more than doubling to 48 days out of the previous 180 in the 2005 sample, compared to a steady rate of between 20 and 25 out of the previous 180 days in the previous 5 years of the IDRS locally. Indeed, there have been indications of increasing use of methamphetamine both amongst recent IDRS cohorts and amongst clients of the state's Needle Availability Program, with Tasmania police also reporting an increase in identification of local clandestine methamphetamine laboratories (although remaining small in number), and an increase in the number of arrests and weight of seizures relating to methamphetamine in 2004/05 compared to 2003/04.

Consumers noted a change in the local drug culture developing, with methamphetamine being used at greater frequency, and the drug increasingly used among different demographic groups – previous predominant consumers of opioids, younger teen-aged groups, and young females, as well as into a wider range of socio-economic groups. Service providers also noted the impact of increasing polydrug use and extended methamphetamine binges on clients seeking their services, and noted concern about the limited range of treatment options available for this client group within the state.

12.3 Cocaine

It appears that the availability and use of cocaine in Hobart continues to be very low, at least within the populations surveyed in the current study or accessing government services, with use of the drug amongst clients of the state's Needle Availability Program virtually non-existent. Only a very small proportion of the IDRS IDU participants reported recent use of the drug (8%), which was exclusively in powder form. By the very few consumers that could comment on trends in availability, cocaine was considered very difficult to access, a situation that was considered stable in the preceding six month period. The cocaine that is used by Tasmanian IDU appears generally to be directly imported by consumers from dealers or contacts in other jurisdictions. Tasmania Police have made no seizures of cocaine in the past four financial years. These patterns of low levels of availability and use in these cohorts appear to have remained reasonably stable over the past few years. However, it is noteworthy that around half of the Tasmanian IDRS IDU sample has reported lifetime use of cocaine, an increase from patterns seen in earlier studies. Similarly, there has been an increase in the level of use of the drug in different local consumer populations (Matthews & Bruno, 2006), which may provide early indications of emerging changes in local markers for the drug.

12.4 Cannabis

Among the IDU consumers surveyed, cannabis use continued to be almost ubiquitous, with 87% using the drug in the preceding six months, and the majority of these individuals using the drug daily.

Consistent with prices reported in 2004, consumers reported purchasing a mode of 1g of indoor- or outdoor-cultivated cannabis in a traditional $25 'deal' of the drug. When accessing outdoor-cultivated cannabis, consumers typically purchased in quarter-ounce (median $70) or ounce (median $200) amounts. While prices for ounces were similar in 2004 and 2005, the median cost for a quarter-ounce had increased $10 between the studies, although consumers perceived no change, or even price decreases, in recent months. Prices for indoor-cultivated cannabis were higher, at a median of $80 per quarter-ounce and $290 per ounce, with the most common purchase prices reflecting increases in the cost for indoor-cultivated cannabis since those reported in the 2004 study. Consumer reports reflected this, suggesting stable to increasing prices in the preceding six months for indoor-cultivated cannabis.

Consumers reported that both indoor- and outdoor-cultivated cannabis was 'easy' or 'very easy' to obtain, with this situation remaining stable in recent months. However, there were indications of somewhat increased availability in comparison to the trends identified in the 2004 IDRS survey, following indications of relatively decreased availability between 2003 and 2004. Tasmania Police report a slow shift back toward preferential outdoor cultivation of cannabis, also noting the use of imported seed or of multiple cannabis strains within single crops.

Similar to previous years, consumers described the subjective potency of outdoor-cultivated cannabis as 'medium' to 'low', with this level generally considered stable in the preceding six months. Indoor-cultivated cannabis was regarded as 'medium' to 'high' in subjective potency by consumers, with this level regarded as stable or increasing in recent months. Cannabis-consuming IDU interviewed generally reported using both indoor- and outdoor-cultivated cannabis in the preceding six months, although indoor-cultivated cannabis was the form most commonly smoked. While cannabis remains the most commonly used illicit drug, both in the IDU sample and in the state, there are indications of decreasing levels of use, both from the National Drug Strategy Household Survey (suggesting that use of cannabis in the previous year in local samples has declined from 15.8% in 1998, and 11.9% in 2001 to 10.9% of those aged 14 and over), and a

slowly decreasing rate of use in the IDRS IDU samples, particularly in regard to the proportion of daily cannabis smokers.

12.5 Other opioids

Morphine was reported to cost $70 per 100mg, or $50 per 60mg, consistent with prices identified in the 2004 survey, and considered by respondents as being stable in recent months. Morphine was considered 'easy' to 'very easy' to obtain by consumers, and reported as remaining stable or increasing in availability in recent months. Over half the sample (59%) had used morphine in recent months, with all but four injecting the drug in this time. MS Contin® remains the predominant preparation used by this group, used by 53% of the sample as a whole, and was the form used predominantly by three-quarters of those reporting recent morphine use, with Kapanol® the next commonest preparation (used by one-third of the sample), and smaller proportions reporting using Anamorph® or MS Mono® in the preceding six months. The median frequency of use of morphine amongst local IDRS IDU cohorts, and in recent years, the proportion of consumers reporting recent use, has steadily declined over time: falling from 77% of the 2000 IDRS sample using at a median frequency of 52 of the last 180 days to 58% of the 2005 sample using at a median frequency of 11 days in the preceding six months. Similar trends are also apparent in data from the state's Needle Availability Program. There are continuing reports, both from consumers and key experts, that morphine is being increasingly rejected by users in favour of methamphetamine and other pharmaceutical opioids.

Diverted methadone syrup was reported to cost a median of approximately $0.80 per milligram in 2005, a price lower than that to the 2004 participants ($1 per mg) but considered as stable in recent months by the consumers. A steadily declining proportion of consumers have found the drug easily accessed in recent years (82% in 2003, 74% in 2004 and 56% in 2005), with consumers reporting stable or decreasing availability of this drug in the preceding six months. Both IDU consumers and key experts note that the drug is generally only available where there is a standing arrangement with a person on the program, and is almost uniformly reported as being obtained from friends (82%). Moreover, the majority of the use of diverted methadone syrup comes from individuals themselves receiving methadone maintenance, with key experts noting clients purchasing small amounts of the drug to avoid physical withdrawal if they had precipitously used their takeaway doses, or traded it due to, or to avoid, 'standover' threats and aggression from others. However, there have been increasing reports of consumers injecting combinations of alprazolam and methadone syrup in the past three IDRS studies, a practice that carries an increased risk of overdose, injection-related harms, and adverse social or legal consequences from the particular disinhibitive effects of this combination, which both consumers and key experts noted as concerns in regard to this trend.

Diverted Physeptone® tablets of methadone were regarded as costing a mode of $10 per 10mg (as has been reported in the past five years of the IDRS), with prices regarded by consumers considered stable or increasing in recent months. Physeptone was regarded as difficult to access, with the level of availability remaining stable or declining somewhat in the preceding six months. Consistent with this, the proportion of the consumer sample reporting recent Physeptone use has continued to decline in local IDRS studies, falling from 64% in 2003, to 52% in 2004 and 41% in 2005.

Oxycodone use among local IDU samples appears to have risen in recent years, with one-third of the current cohort reporting use of the drug, predominantly OxyContin® tablets, in the preceding six months. Despite their higher relative potency than morphine tablets, these drugs are sold locally at lower comparative prices ($0.50 per milligram for 40mg and 80mg oxycodone tablets), with consumers reporting stable prices in recent months. While the drug remains

predominantly 'difficult' for consumers to access currently (a situation regarded as stable by IDU), there are indications that oxycodone use may expand within the local market, which, given the high relative potency of oxycodone and its possible synergistic effects with other opiates, is an issue that merits continued careful monitoring.

One-fifth of the 2005 IDU consumer sample reported using some preparation of alkaloid poppies in the preceding six months, although such use was infrequent (a median of 3 days out of the preceding 180). This represents an increase in the proportion of the IDU consumer sample reporting such use when compared to recent IDRS studies (12-14% in the local studies between 2001 and 2004). However, the rates of use amongst the current consumer cohort were less than that seen in the 2000 IDRS survey (when one-third had recently used some alkaloid poppy preparation, at a median frequency of use twice that of the current sample), and the number of poppy thefts in 2004/05 were a quarter of those in that year (63,000 capsules stolen in 1999/00 compared to 16,000 in 2004/05). Moreover, the number of thefts from poppy crops has fallen one-third from the previous financial year (from 24,000 capsules in 2003/04 to 16,000 in 2004/05).

Buprenorphine, recently adopted as a maintenance treatment option for opioid addiction in the state, appears to have made little impact on the illicit opioid market, with only five individuals participating in the 2005 survey reporting illicit use of the drug (two of whom were also receiving legitimate buprenorphine prescriptions). All of those who had accessed buprenorphine illicitly in the preceding six months had injected the drug, but this use was infrequent (a median of three times in the preceding 180 days). However, given that substantial levels of diversion have occurred in jurisdictions where buprenorphine maintenance treatment is more common, careful monitoring of this issue is clearly warranted as Tasmania's buprenorphine program expands, particularly given the existing culture of use of pharmaceutical products among local IDU.

It is important to note also that the opioids used by this group are not coming from direct doctor-shopping by IDU, as the vast majority report obtaining them 'illicitly', i.e. not on a prescription in their name. Similarly, thefts from doctors' surgeries or pharmacies remain extremely low.

12.6 Benzodiazepines

There are clear indications that, following a reduction of the injection of benzodiazepines among IDU between 2002 and 2003 (arising from the restriction and eventual removal of the preferred temazepam gel capsules from the market) injection of benzodiazepines remains an ongoing part of the local drug culture, with local IDU consumers continuing to inject at rates relatively higher in comparison to that identified in other Australian jurisdictions. As noted in the 2003 and 2004 studies, it is also clear that alprazolam (Xanax in particular) appears to have largely replaced the local illicit market for temazepam gel capsules among those IDU particularly interested in benzodiazepine injection, with this drug being used in similar ways to temazepam capsules by consumers, such as in simultaneous combination with methadone syrup or other opioids. Between the 2003 and 2005 studies, both the proportion of the IDU samples reporting recent injection of alprazolam, and the frequency of such use in the preceding six months, had increased (11%, median frequency of 20 days in the preceding six months among the 2003 IDU cohort, to 19% and a median frequency of 24 days in 2005), and there are anecdotal reports of increased demand for alprazolam locally. This is a particular concern given the serious psychological and physical harms associated with benzodiazepine injection. Additionally, the level of use and availability of benzodiazepines generally remains high within local IDU, particularly among primary users of opiates, which is again of concern given the increased risk of overdose when the

two substances are combined. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

12.7 Associated harms

Self-reported rates of sharing of needles or syringes among clients of non-pharmacy Needle Availability Program outlets have steadily declined over time from 2.6% of all transactions in 1995/96 to 0.5% in 2004/05. However, all IDRS studies in Hobart have suggested that 5-10% of these cohorts share used needles or syringes at least once in a month. Additionally, there are indications of increasing sharing rates in the past two IDRS surveys (using the proxy measure of whether consumers had 'lent' their used needles to another consumer in the preceding month, reported by 14% of the 2005 participants). Similar to the improving trends for sharing of needles and syringes, self-reported rates of sharing of other injection equipment (such as water, tourniquets and mixing containers) has steadily decreased among clients of non-pharmacy Needle Availability Program outlets (5.5% in 1996/97 to 0.5% in 2004/05). However, a more stringent examination of such practices in the IDRS study suggests that there is still the potential for BBVI transmission in the injection practices adopted by a substantial proportion of those regular consumers interviewed, with two-fifths sharing some sort of injecting equipment in the preceding month (most commonly sharing mixing containers: 26%, water: 27%, or tourniquets: 15%, albeit, in most cases, in situations where both people were using sterile injection equipment).

Almost two-thirds of the consumers interviewed reported re-using their own injection equipment in the month prior to interview, with the majority of these participants re-using on multiple occasions in this time. This is not a recommended practice, as repeated use of needles leaves them blunt, which could cause damage to the venous system, and use of non-sterile equipment can lead to the introduction of bacteria into the bloodstream, which can lead to infections, septicaemia or endocarditis. 'Butterflies' and 1mL insulin syringes were the equipment most commonly re-used, and this was typically reported as being due to NSP outlets being inaccessible (either due to distance or equipment being required outside of business hours).

In more targeted examination of injection practices in the current IDRS study, two notable points for health education interventions were identified. Firstly, in the current cohort, despite being regular injecting drug users, one-fifth of the 2005 IDU cohort did not always self-inject, with those that did not always self inject were significantly younger and more likely to be female. Secondly, half of the IDU participants had injected others in the month prior to interview, most commonly on occasions where they were also injecting themselves, although in almost half of these cases participants did not report washing their hands between injections – clearly a behaviour that increases the exposure risk to BBVI.

Blood-borne viral infections, such as HIV/AIDS and hepatitis B and C are a major health risk for individuals who inject drugs. Surveillance data on the number of hepatitis C cases reported to the Public Health Department indicate that reported incident cases of hepatitis C infection in the state appear to have remained largely unchanged since 1998, averaging 20 new cases of infection reported per annum.

A substantial proportion of IDU surveyed experienced injection-related health problems, at a relative rate greater than those seen amongst IDU in other jurisdictions, possibly due to the increased harms associated with the injection of pharmaceuticals, which is less common in other jurisdictions. Scarring, difficulties finding veins to inject into (indicative of vascular damage) and experience of 'dirty hits' (feeling physically unwell soon after injection, often associated with the injection of contaminants or impurities) were the commonest injection related-problems experienced by the current IDRS IDU cohort. Multiple key experts noted recent increases in

experiences of bacterial infections associated with injecting drug use in recent months, likely related to injection of non-sterile solutions of re-use of injection equipment.

In 2005, 6% of the consumers interviewed reported experiencing a non-fatal opioid overdose in the preceding year, and one-quarter of the sample had witnessed such an overdose in this time. This rate of overdose experience is a decline from that seen amongst the 2004 cohort, and a return to the relatively lower rate seen in the 2003 and 2002 cohorts. However, multiple key experts and consumers provided anecdotal reports of an increase in the numbers of overdoses in the preceding six months, which were attributed in particular to coincident use of multiple CNS depressant drugs (opioids and benzodiazepines in particular). While the number of opioid overdose deaths among those aged 14-54 years noted by the State Coroner's office appeared to have declined in 2003 against a backdrop of a steadily increasing population rate of overdose in Tasmania in recent years, details of number of deaths from opioid overdoses in subsequent years are not publicly available.

More than two-fifths of the IDRS IDU participants reported presenting to a health professional for a mental health issue in the preceding six months. This rate of presentations is substantially greater than that seen in the general population. In comparison to reports in earlier local IDRS IDU surveys, there has been a steadily increasing rate of individuals presenting for anxiety-related issues (consistent with an increasing use of methamphetamine in these cohorts over time).

12.8 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 are 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 the agencies involved 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 focused research within different demographic groups is required to provide better information in these areas.

It is important to note that the purpose of the IDRS is simply to detect trends that warrant further investigation, not to explore and verify such trends. As such, the concurrent use of the three data sets included in this study, each with their own inherent strengths and limitations, affords an efficient and appropriate approach to achieving the aims of the study. In subsequent years, the validity of the IDRS will be further enhanced by the development of more systematic data sets (e.g. for ambulance and coroner data), and the incorporation of the results of several projects currently underway in the state.

13.0 IMPLICATIONS

The findings of the Tasmanian 2005 IDRS suggest the following areas for further investigation and possible consideration in policy:

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

2. Extension of a regular drug trend monitoring framework into other regions within the state (such as Launceston and the North-West coast) as there has been little specific research examining patterns of drug use within these areas, and, due to their access to air and sea ports and establishment of organised motorcycle group headquarters, availability and use of illicit substances may differ substantially in these regions from patterns seen in Hobart. An initial study in 2003 has provided evidence suggesting that there are clear distinctions between the drug markets in these regions (Bruno, 2004b *[unreleased]*). As such, it may not be appropriate to infer similarity between drug trends and emergent issues identified in Hobart-based studies to these regions.

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

4. As use and availability of the higher potency forms of methamphetamine appear to be steadily increasing, clear and practical harm-reduction information for use of these forms of the drug should be accessed and distributed to consumers and health intervention workers. It is important to note also that there are indications that these drugs are increasingly being used by populations other than regular injecting drug users, such as primary ecstasy-using groups, that may not be accessing traditional health/health information services (Matthews & Bruno, 2005, 2006). Additionally, since increased levels of use of such high-potency methamphetamine may increase the level of experience of the negative effects of excessive methamphetamine use, development and implementation of practical strategies and training for dealing with such affected individuals should be considered for frontline health intervention workers and emergency services workers. Moreover, as noted by several key experts in the sector interviewed in the current study, investigation of the requirement for specialist treatment programs and/or services for primary consumers of these drugs is warranted.

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

6. Oxycodone prescriptions both locally and nationally have continued a rapid increase in recent years. With diverted oxycodone use increasing amongst local IDU consumers, but still infrequent, it may be the case that knowledge of the drug amongst the consumer community is still developing. Reviews of opioid equianelgesic dose ratios suggest that oxycodone is between 1.5-2.0 times the potency of morphine (Piereira, Lawlor, Vigano, Dorgan & Bruera, 2001). Moreover, oxycodone reaching systemic circulation after injection is more than twice that after oral or rectal administration (Leow, Smith, Watt, Williams & Cramond, 1992). Consumers need to be made aware that oxycodone, although similar in presentation and trade name (e.g. morphine: MS Contin; oxycodone – OxyContin) is more potent that morphine, and that caution needs to be exercised in its use. Further, given the talc content of the tablets, careful preparation and filtering of the drugs is required to avoid granulomas (Roberts, 2002). Frontline workers need to be aware of these issues and to implement harm reduction interventions with potential illicit consumers of this drug.

7. Research into factors that would reduce the harms associated with the intravenous administration of tablet preparations of morphine, methadone and benzodiazepines commonly used within the local IDU population, and dissemination of this information to users through continued training of Needle Availability Program staff and peer groups. For example, despite clear evidence that injection of tables are associated with the development of granulomas in internal organs (Roberts, 2002; Gotway et al, 2002) there has been no research into the effectiveness of commercially available pill or biological filters on reducing the harms associated with intravenous use of these drugs. As an interim harm-reduction measure, however, given the existing evidence in support of the potential benefit offered by such filters in regard to the use of other drugs (Scott, 2005) it would be recommended that pill filters become more widely available, and their use promoted by frontline workers, to local IDU consumers.

8. Research examining misuse of pharmaceutical products in populations other than IDU, as this has been a demographic identified in both key expert interviews in the current study and in associated local research (Fry, Smith, Bruno, O'Keefe & Miller, 2004; Bruno, 2004c) but not accessed within the methodology of the IDRS, and this population has, to date, been largely invisible in research or other data collections.

9. Continued monitoring of the intravenous use of benzodiazepines, particularly in terms of the combined injection of alprazolam and methadone syrup, as this is a practice that substantially increases the risk of overdose. There is considerable concern about this practice amongst consumers and service providers alike, and a targeted campaign to increase awareness of the potential harms of this combination, as well as provision of accurate, non-judgemental harm reduction information, would be timely and likely to lead to improved health outcomes for consumers.

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

11. Continued emphasis on, and support for, targeted strategies to further reduce the rates of sharing of needles/syringes and other injection equipment (such as tourniquets, filters and mixing containers) among IDU, as well as to minimise the harms associated with poor injecting practice through improving awareness and adoption of safe injection techniques and vein care among IDU. It was identified in the current study that there are a substantial proportion of regular injecting drug users that do not always self-inject, and,

similarly, large proportions of consumers that inject others but do not always maintain a vigilant cleanliness routine when doing so, and both these groups would be appropriate targets for a focused health education campaign from frontline NAP workers, or indeed peer groups, in order to maintain downward pressure on exposure to BBVI among IDU.

12. Re-use of injection equipment is an issue that has not previously been examined in the IDRS or in studies from the Needle Availability Program. The rate of re-use of injection equipment identified in the current study was surprisingly high (almost two-thirds of the participants in the month prior to interview). Given the identification of infections, septicaemia and endocarditis, both among the current IDU sample and by key experts interviewed in the current study – all of which are associated with the introduction of bacteria into the bloodstream (which is possible through the use of non-sterile injecting equipment) – this is clearly an emerging issue which requires attention. The high level of re-use of injection equipment demands the attention of the Needle Availability Program to identify whether there are systemic barriers hampering access to sterile injecting equipment. In the short-term, information on procedures for cleaning injection equipment, and the harms associated with use of non-sterile equipment, should be more actively provided to consumers.

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

14. While self-reported rates of experience of mental health issues are likely to under-represent the true extent of these issues, more than two-fifths of the IDU sample reported recently attending a health professional for mental health concerns, a level substantially greater than that seen in the general population. As such, the increasing systemic focus in the state toward development and implementation of interventions for such co-morbid populations is clearly warranted and continued enhancement of partnerships between the mental health and alcohol and other drug sectors is crucial to meet the needs of this group.

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

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