TRENDS IN DRUG USE IN AUCKLAND, WELLINGTON AND CHRISTCHURCH

Findings from the three site locations of the 2006 and 2007 Illicit Drug Monitoring System (IDMS)

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Contents

Executive Summary

Introduction

This report combines the samples of frequent drug users from the 2006 and 2007 Illicit Drug Monitoring System (IDMS) to examine geographical differences in drug use and drug trends between Auckland, Wellington and Christchurch. A total of 642 frequent drug users were interviewed for the 2006 and 2007 IDMS. Forty-five percent of the frequent drug users were from Auckland, 25% were from Wellington and 30% were from Christchurch. As the same recruitment method was used in each site location, the drug users recruited and drug trends reported, are considered to be indicative of drug use in each site location. A larger representative population drug survey is required to verify the trends found in this report.

Auckland

There was greater use of methamphetamine and crystal methamphetamine in Auckland compared to the other two main centres. There was also evidence of a larger black market for methamphetamine in Auckland than in the other two locations. Methamphetamine and opiates were both purer and cheaper in Auckland, and this is likely to reflect the size of the Auckland drug market and its importance as a domestic and international transport hub. The use of ecstasy (MDMA) was considered to be increasing in Auckland and this may be contributing to the decline in the demand and supply of LSD in this location. The reported increase in ecstasy (MDMA) use must, however, be placed in the wider context of current drug use in New Zealand. Chemical analysis of alleged ecstasy pills sized in New Zealand has found a range of substances, including BZP. It is not clear the extent to which the reports of increased 'ecstasy' use actually refer to the ready availability of BZP.

Christchurch

There was greater use of opiates and Ritalin in Christchurch compared to the other two main centres. There were also greater levels of injection of opiates, Ritalin, amphetamine and ketamine in Christchurch. There was evidence of higher availability of opiates and a large efficient black market for opiates in Christchurch. There was evidence that the purity and use of methamphetamine may be increasing in Christchurch. There was a large and possibly expanding black market for cannabis in Christchurch. As in the other locations, more people were reported to be using ecstasy (MDMA).

Wellington

There was greater use of ecstasy (MDMA) and LSD in Wellington compared to the other two main centres. LSD was considered to be relatively more available in Wellington than in the other two sites. As in the other locations, more people were reported to be using ecstasy (MDMA). There was some evidence to suggest that drug use in Wellington may be more dominated by student and the dance party sub-cultures than in the other centres.

Methamphetamine

Methamphetamine was the second most commonly used illegal drug in Auckland, the fourth most commonly used illegal drug in Wellington and the third most commonly used illegal drug in Christchurch. Availability was considered to be 'easy/very easy' in all three sites. The price of a gram of methamphetamine was reported to be higher in Christchurch than Auckland or Wellington. Purity was higher in Auckland and Christchurch than in Wellington. Purity was reported to be increasing in Christchurch. There was an increase in the use of methamphetamine in Christchurch compared to Wellington. A higher proportion of the frequent drug users had purchased methamphetamine weekly or more often in Auckland than in Wellington. Frequent drug users in Auckland spent a higher dollar amount on methamphetamine on a typical occasion than those in Christchurch. The supply of methamphetamine was considered to be more reliable in Auckland and Christchurch than in Wellington. These findings indicate a larger methamphetamine market in Auckland compared to the other two main centres.

Opiates

Opiates were the seventh most commonly used illegal drugs in Auckland, the fifth most commonly used illegal drugs in Wellington and the second most commonly used illegal drugs in Christchurch. Opiates were considered to be easier to obtain in Christchurch than in Wellington. Opiates were reported to have become more difficult to obtain in Wellington. The price of opiates was lower in Auckland than in Christchurch or Wellington. Opiates were reported to be more pure in Auckland than in Christchurch. More people were considered to be using opiates in Christchurch compared to the other two site locations. A higher proportion of the frequent drug users in Christchurch had purchased opiates weekly or more often than in the other two locations. A higher proportion of frequent drug users in Christchurch could purchase opiates in less than 20 minutes than in Wellington. These findings suggest a large population of opiate users and an efficient black market for opiates in Christchurch. Levels of property crime and drug dealing committed by frequent drug users were higher in

Christchurch than the other two main centres. Dependent opiate users have been found to use property crime and drug dealing to pay for their drug use (see Bennett and Holloway, 2005).

Cannabis

Cannabis was the most commonly used illegal drug in Auckland, Wellington and Christchurch. Availability was reported to be 'very easy/easy' in all three sites. Cannabis was judged to have become easier to obtain in Wellington compared Auckland. Prices were reported to be increasing in Christchurch compared to Auckland. There was an increase in the number of people using cannabis in Christchurch. A higher proportion of the frequent drug users in Christchurch had purchased cannabis weekly or more often than in the other two site locations. The supply of cannabis was reported to be more reliable in Christchurch compared to Auckland. A higher proportion of the frequent drug users in Christchurch could purchase cannabis in less than 20 minutes than in Auckland or Wellington. These findings suggest a large and possibly growing black market for cannabis in Christchurch.

Ecstasy (MDMA)

Ecstasy (MDMA) was the third most commonly used illegal drug in Auckland, the second most commonly used illegal drug in Wellington and the fourth most commonly used illegal drug in Christchurch. Availability was reported to be 'easy' in all three sites. The price of ecstasy (MDMA) was lower in Auckland compared to Wellington and Christchurch. More people were considered to be using ecstasy in all three locations. These findings suggest growing use of ecstasy (MDMA) in New Zealand. The situation with ecstasy in New Zealand is somewhat confused, however, by the presence of a large legal market for BZP. Drug dealers sometimes sell BZP as ecstasy to earn higher black market prices, and chemical analysis of alleged ecstasy pills has uncovered a range of substances, including BZP.

Crystal methamphetamine

Crystal methamphetamine was the fourth most commonly used illegal drug in Auckland, the seventh most commonly used illegal drug in Wellington and the sixth most commonly used illegal drug in Christchurch. Availability was considered to have been 'stable/more difficult' in all three site locations. Price was reported to be 'stable/increasing' in all three locations. These findings suggest that recent large seizures of crystal methamphetamine in Auckland have negatively impacted the availability and increased the price of crystal methamphetamine throughout the country.

LSD

LSD was the fifth most commonly used illegal drug in Auckland, the third most commonly used illegal drug in Wellington and the fifth most commonly used illegal drug in Christchurch. LSD was judged to be more difficult to obtain in Auckland compared to the other two locations. The price of LSD was lower in Auckland compared to Wellington and Christchurch. LSD appeared to be particularly common in Wellington. Other analysis of the 2007 IDMS data has suggested that LSD is currently popular among the ecstasy using dance party community (Wilkins et al., 2008) and ecstasy use was also found to be high in Wellington.

Conclusion

There were a number of instances where the prices of drugs were lower and purity higher in Auckland compared to Wellington and Christchurch. The international research literature on illegal drug markets indicates that drug prices tend to be lower and drug purity higher, the closer a drug purchase is made to the original supply source or to a large urban centre (Caulkins and Reuter, 1998, Caulkins, 2007, Kleiman, 1992). Price data on illegal drugs from the United States indicates there is a 'urban hierarchy', with large cosmopolitan cities such as Philadelphia occupying the first tier and more regional cities such as Pittsburgh the second tier (Caulkins and Reuter, 1998). The lower prices and higher purity of drugs in Auckland are likely to reflect a number of geographical factors including a larger population and Auckland's importance as an international transport hub. The high levels of methamphetamine use in Auckland are consistent with population survey results which show higher levels of amphetamine use in the upper half of the North Island (see Wilkins et al., 2005a). The decline in the availability of LSD in Auckland may reflect the strong markets for ecstasy (MDMA) and methamphetamine in the Auckland area and the fact that drug dealers can earn higher prices for these drug types than for LSD (see Wilkins et al., 2008).

The large population of opiate users in Christchurch may be an example of the opiate market reaching some historical critical mass where the user population has now become self sustaining and there are enough users to sustain an efficient ongoing supply network. It may also reflect the historical situation that possible alternatives to opiates, such as ecstasy (MDMA), cocaine, LSD and methamphetamine, have tended to be more expensive in Christchurch compared to the other centres. There was some evidence that this may be changing in the case of methamphetamine as the use and purity of methamphetamine was considered to be increasing in Christchurch.

The popularity of LSD in Wellington may also reflect some historical preference for this drug type in that city and possibly the greater role the dance party/student sub-culture plays in the demand for drugs in that location.

Future analysis

The understanding of the differences in price for drugs between the site locations could be enhanced through the calculation of purity adjusted prices for each drug type in each location. For example, if the mean gram price of methamphetamine in Auckland was $568 (as reported here) and the mean purity was 80% then the purity adjusted price of a gram of pure methamphetamine would be $710. If a gram of methamphetamine in Christchurch costing $883 was only 50% pure then the purity adjusted price for a pure gram would be $1,766. The price of a gram of methamphetamine is 55% higher in Christchurch than Auckland using the unadjusted prices. If we adjust the prices to account for purity then the price of a gram of methamphetamine is 149% higher in Christchurch than in Auckland.

The understanding of the price of drugs in different locations could also be enhanced through the calculation of quantity adjusted prices. For example, if the mean price of an 'ounce' of cannabis in Auckland was $300 (as reported here), and weighed an average of 28 grams (i.e. a full ounce), then the price per gram would be $10.71. If the mean price of an ounce of cannabis in Christchurch was $310 but on average weighed only 25 grams, the price per gram would be $12.40 or $347 per true ounce.

1. Introduction

The Illicit Drug Monitoring System (IDMS) was established to provide ongoing and timely information on changes in drug use and drug related harm in New Zealand. The recruitment of frequent drug users for the IDMS has been carried out in the same three site locations (i.e. Auckland, Wellington and Christchurch) using an identical methodology in 2006 and 2007. The employment of the same recruitment process has consistently yielded different types of frequent drug users in each site location suggesting there may be some distinct regional variation in drug use in New Zealand.

To further investigate the possibility of the existence of regional variation in drug use the findings from the 2006 IDMS were analysed by site location in early 2007, for a limited number of variables. This analysis confirmed some regional differences in drug use and drug trends between the study sites. It was recognised that the ability to investigate these location specific differences was limited by the sample size available in each site location from the 2006 IDMS. Consequently, it was decided that after the completion of the 2007 IDMS that the samples of the 2006 and 2007 IDMS (see Wilkins et al., 2008, Wilkins et al., 2007) would be combined and variations in drug use between the sites would be re-examined.

The IDMS sample of frequent drug users is not intended to be a representative sample of drug users in a given site. However, the same recruitment method is used in each site and consequently the frequent drug users recruited in each site and the drug trends reported are considered to be indicative of drug use in a given site. A representative population survey is required to confirm the regional differences in drug use found in the IDMS.

1.1 Method

The frequent drug users interviewed for the 2006 and 2007 IDMS were recruited and interviewed using the same research methodology. The frequent drug users were recruited from the three main centres (i.e. Auckland, Wellington and Christchurch) using purposive sampling and 'snowballing' (Biernacki and Waldorf, 1981, Watters and Biernacki, 1989). Purposive sampling involves the use of targeted recruitment strategies and is used to reach hard-to-reach populations, such as illegal drug users, when general population sampling is ineffective and expensive. 'Snowballing' is a peer recruitment strategy where interviewers ask those who have recently been interviewed to recommend the study to their friends and

social acquaintances. Interviewing for each wave of the IDMS took place from July to October in each respective year.

In order to be eligible to be interviewed for the study a respondent had to be 16 years or older, have used one of the main drugs of interest approximately monthly or more often in the last six months, and have resided in the site location for the past 12 months. To ensure that a broadly representative sample of frequent drug users is interviewed for the study, a range of 'start points' for recruitment are chosen, based on the demographic profile of users and an understanding of the venues and locations where they are likely to congregate in a given site (see Wilkins et al., 2004, Wilkins et al., 2005a, Wilkins et al., 2005b).

Participants were informed that all the information provided was strictly confidential and anonymous, and that the results would only be presented in aggregate. The project was designed so that no individual participant could be identified at any later date. The protocols and procedures used to collect and store the data for IDMS were approved by the Massey University Human Subjects Ethics Committee. All participants were offered a $20 food or music voucher to compensate them for their time. Further details of the methodology of the IDMS can be found in the main report of the 2007 IDMS (Wilkins et al., 2008).

A total of 642 frequent drug users were interviewed for the 2006 and 2007 IDMS, including 224 frequent methamphetamine users, 216 frequent ecstasy (MDMA) users and 202 frequent injecting drug users. Table 1.1 presents the frequent drug users by location.

Table 1.1: Frequent drug users by location

Frequent drug user type	Auckland (n=290)	Wellington (n=161)	Christchurch (n=191)	Combined Modules (n=642)
Methamphetamine users	54%	21%	18%	35%
Ecstasy (MDMA) users	35%	49%	19%	34%
Injecting drug users (IDU)	11%	30%	63%	31%

1.2 Analysis

Statistical testing was carried out to identify differences between the three site locations (i.e. Auckland, Wellington and Christchurch) for a range of drug measures collected in the study. Testing for differences in proportions (e.g. yes/no questions) was done using Fisher's exact test. A p-value of greater than 0.05 was defined as indicating no evidence of any differences between the three locations. If a p-value of less than 0.05 was obtained, three Fisher's exact tests were used to test for differences between each pair-wise combination of locations. The three p-values were adjusted for using Holm's step-down procedure to maintain an overall alpha level of 0.05. One-way ANOVAs with Tukey-Kramer post-hoc adjustments were used to test for differences between means. Differences between medians were tested using non-parametric one-way ANOVAs. If a p-value of less than 0.05 was obtained, three -parametric one-way ANOVAs were used to test for differences between each pair-wise combination of locations. The three p-values were adjusted for using Holm's step-down procedure to maintain an overall alpha level of 0.05. Scale-type questions, such as difficulty of obtaining a drug were allocated scores (e.g. very difficult=4, difficult=3, easy=2 and very easy=1). Differences between the mean scores were tested using one-way ANOVAs with Tukey-Kramer post-hoc adjustments. One-way ANOVAs assume the samples tested form a normal distribution. With scale-type questions such an assumption can never be met as the scores are based on discrete data. However frequency tables show the distribution of data as being mound shaped, providing an approximation of a normal probability distribution. All analysis was run using SAS software.

2. Poly drug use

2.1 Introduction

The frequent drug users in each site were asked a series of questions about their use of a range of different drug types including alcohol, tobacco, amphetamines, hallucinogens, opiates, and pharmaceuticals. The frequent drug users were asked whether they had used a particular drug type in their lifetimes and whether they had used the drug in the past six months. If a frequent drug user indicated they had used a drug type in the past six months they were asked on how many days they had used the drug in the past six months and how they had administered the drug in the previous six months.

2.2 Drug use patterns

The drug types most commonly used by the frequent drug users in Auckland were alcohol (86%), cannabis (84%), tobacco (75%), methamphetamine (74%), ecstasy (MDMA) (65%), crystal methamphetamine (48%) and BZP party pills (36%) (Table 2.1). The drug types most commonly used by the frequent drug users in Wellington were alcohol (89%), cannabis (86%), tobacco (78%), ecstasy (MDMA) (73%), LSD (46%), BZP party pills (40%) and methamphetamine (39%). The drug types most commonly used by the frequent drug users in Christchurch were cannabis (91%), tobacco (82%), alcohol (74%), other opiates (59%), methadone (53%), BZP party pills (49%), Ritalin (47%), benzodiazepines (44%), methamphetamine (41%) and ecstasy (MDMA) (38%).

Table 2.1: Poly drug use of the frequent drug users by location

	Auck	Well	Christ	Auck	Well	Christ	Auck	Well	Christ
Drug type	**Last six months (n=290)**	**Last six months (n=161)**	**Last six months (n=191)**	**Mean days used**	**Mean days used**	**Mean days used**	**Injected past six months**	**Injected past six months**	**Injected past six months**
Alcohol	86%	89%	74%	62 days	59 days	44 days	-	-	-
Cannabis	84%	86%	91%	86 days	95 days	114 days	-	-	-
Tobacco	75%	78%	82%	154 days	139 days	166 days	-	-	-
Meth -amphetamine	74%	39%	41%	54 days	26 days	42 days	35%	35%	42%
Ecstasy (MDMA)	65%	73%	38%	8 days	10 days	8 days	6%	12%	15%
Crystal meth -amphetamine	48%	21%	19%	50 days	29 days	32 days	33%	45%	49%
BZP party pills	36%	40%	49%	9 days	8 days	16 days	1%	5%	38%
Nitrous oxide	28%	21%	25%	8 days	4 days	9 days	-	-	-
LSD	27%	46%	29%	5 days	9 days	5 days	0%	1%	0%
Amphetamine	25%	26%	19%	14 days	12 days	21 days	22%	14%	41%
Benzodiazepines	22%	33%	44%	36 days	36 days	49 days	6%	11%	8%
Other opiates (morphine, MST, homebake, M-Eslon, Kapanol)	21%	30%	59%	59 days	52 days	81 days	71%	81%	93%
'Magic' mushrooms (psilocybin)	17%	24%	13%	3 days	9 days	5 days	-	-	-
GHB	17%	8%	0%	12 days	24 days	0 days	0%	0%	0%

Methadone	16%	30%	53%	108 days	109 days	103 days	70%	76%	54%
Ritalin (methyl-phenidate)	14%	21%	47%	22 days	9 days	40 days	57%	33%	86%
Amyl nitrate	13%	15%	15%	5 days	19 days	2 days	-	-	-
Ketamine	12%	7%	5%	6 days	1 days	2 days	9%	8%	56%
Anti-depressants	7%	5%	9%	33 days	32 days	90 days	10%	13%	0%
Cocaine	8%	6%	4%	6 days	24 days	2 days	25%	11%	13%
MDA	5%	12%	8%	4 days	4 days	4 days	13%	10%	31%
Heroin	7%	12%	6%	82 days	55 days	39 days	95%	95%	100%
Solvents	1%	1%	2%	15 days	24 days	3 days	-	-	-

A higher proportion of the frequent drug users in Auckland compared to Wellington had;

- Used methamphetamine in the past six months (74% vs. 39%, p<0.0001)
- Used crystal methamphetamine in the past six months (48% vs. 21%, p<0.0001)

A higher proportion of the frequent drug users in Auckland compared to Christchurch had;

- Used methamphetamine in the past six months (74% vs. 41%, p<0.0001)
- Used crystal methamphetamine in the past six months (48% vs. 19%, p<0.0001)
- Drank alcohol in the past six months (86% vs. 74%, p=0.0034)
- Used ecstasy (MDMA) in the past six months (65% vs. 38%, p<0.0001)
- Used ketamine in the past six months (12% vs. 5%, p=0.0258)

A higher proportion of the frequent drug users in Christchurch compared to Auckland had;

- Used 'other opiates' in the past six months (59% vs. 21%, p<0.0001)
- Used Ritalin in the past six months (47% vs. 14%, p<0.0001)

A higher proportion of the frequent drug users in Christchurch compared to Wellington had;

- Used 'other opiates' in the past six months (59% vs. 30%, p<0.0001)
- Used Ritalin in the past six months (47% vs. 21%, p<0.0001)

A higher proportion of the frequent drug users in Wellington compared to Auckland had;

- Used LSD in the past six months (46% vs. 27%, p=0.00012)
- Used 'other opiates' in the past six months (30% vs. 21%, p=0.0519)
- Used MDA in the past six months (12% vs. 5%, p=0.0276)

A higher proportion of the frequent drug users in Wellington compared to Christchurch had;

- Drank alcohol in the past six months (89% vs. 74%, p=0.0009)
- Used ecstasy (MDMA) in the past six months (73% vs. 38%, p<0.0001)
- Used LSD in the past six months (46% vs. 29%, p=0.0026)
- Used 'magic' mushrooms (24% vs. 13%, p=0.0231)

When a frequent methamphetamine user indicated they had used a drug type in the past six months they were then asked on how many days they had used the drug type during the previous six months.

The frequent drug users in Auckland compared Wellington had, on average;

- Used methamphetamine on a greater number of days during the past six months (54 days vs. 26 days, $p<0.0001$)
- Used crystal methamphetamine on a greater number of days during the past six months (50 days vs. 29 days, $p=0.018$)
- Used Ritalin on a greater number of days during the past six months (22 days vs. 9 days, $p=0.0183$)

The frequent drug users in Christchurch compared Auckland had, on average;

- Used 'other opiates' on a greater number of days during the past six months (81 days vs. 59 days, $p=0.0102$)
- Used Ritalin on a greater number of days during the past six months (40 days vs. 22 days, $p=0.0116$)
- Used cannabis on a greater number of days during the past six months (114 days vs. 86 days, $p<0.0001$)
- Smoked tobacco on a greater number of days during the past six months (166 days vs. 154 days, $p=0.0064$)

The frequent drug users in Christchurch compared Wellington had, on average;

- Used Ritalin on a greater number of days during the past six months (40 days vs. 9 days, $p<0.0001$)
- Used 'other opiates' on a greater number of days during the past six months (81 days vs. 52 days, $p=0.0102$)
- Used cannabis on a greater number of days during the past six months (114 days vs. 95 days, $p=0.018$)
- Smoked tobacco on a greater number of days during the past six months (166 days vs. 139 days, $p<0.0001$)

When a frequent methamphetamine user had used a drug type in the past six months they were also asked about all the different ways they had administered the drug during the past six months.

A higher proportion of the frequent drug users in Christchurch compared to Auckland had;

- Injected 'other opiates' in the past six months (93% vs. 71%, p=0.0006)
- Injected Ritalin in the past six months (86% vs. 57%, p=0.014)
- Injected ketamine in the past six months (56% vs. 9%, p=0.0165)

A higher proportion of the frequent drug users in Christchurch compared to Wellington had;

- Injected amphetamine in the past six months (41% vs. 14%, p=0.033)
- Injected Ritalin in the past six months (86% vs. 33%, p<0.0001)

A higher proportion of the frequent drug users in Wellington compared to Christchurch had;

- Injected methadone in the past six months (76% vs. 54%, p=0.0381)

2.3 Drug of choice

The frequent drug users were asked what their main drug of choice was (i.e. their favourite or preferred drug). The drug type most commonly mentioned by the frequent drug users in Auckland as their drug of choice was methamphetamine (21%), followed closely by ecstasy (MDMA) (20%) and cannabis (18%) (Table 2.2). The drug type most commonly mentioned by the frequent drug users in Wellington as their drug of choice was ecstasy (MDMA) (24%), followed by cannabis (16%), methadone (13%), 'other opiates' (12%) and alcohol (12%). The drug type most commonly mentioned by the frequent drug users in Christchurch as their drug of choice was 'other opiates' (40%), followed by ecstasy (12%), amphetamine sulphate (10%) and methamphetamine (9%).

Table 2.2: Drug of choice by location

Drug of choice	Auckland (n=284)	Wellington (n=156)	Christchurch (n=190)
Meth-amphetamine	21%	6%	9%
Ecstasy (MDMA)	20%	24%	12%
Cannabis	18%	16%	8%
Alcohol	8%	12%	2%
Heroin	7%	6%	2%
LSD	6%	5%	0%
Other opiates	5%	12%	40%
Cocaine	4%	1%	1%
Amphetamine sulphate	2%	1%	10%
Crystal meth amphetamine	2%	1%	4%
Methadone	2%	13%	2%
Tobacco	1%	1%	0%
Ritalin	0%	1%	6%

A higher proportion of the frequent drug users in Auckland compared to Wellington had;

- Named methamphetamine as their drug of choice (21% vs. 6%, p=0.00015)

A higher proportion of the frequent drug users in Auckland compared to Christchurch had;

- Named methamphetamine as their drug of choice (21% vs. 9%, p=0.00018)
- Named cannabis as their drug of choice (18% vs. 8%, p=0.009)
- Named alcohol as their drug of choice (8% vs. 2%, p=0.009)
- Named heroin as their drug of choice (7% vs. 2%, p=0.0228)

A higher proportion of the frequent drug users in Christchurch compared to Auckland had;

- Named 'other opiates' as their drug of choice (40% vs. 5%, p<0.0001)
- Named amphetamine sulphate as their drug of choice (10% vs. 2%, p=0.0004)
- Named Ritalin as their drug of choice (6% vs. 0%, p<0.0001)

A higher proportion of the frequent drug users in Christchurch compared to Wellington had;

- Named 'other opiates' as their drug of choice (40% vs. 12%, p<0.0001)
- Named amphetamine sulphate as their drug of choice (10% vs. 1%, p=0.0003)
- Named Ritalin as their drug of choice (6% vs. 1%, p=0.0158)

A higher proportion of the frequent drug users in Wellington compared to Auckland had;

- Named ecstasy (MDMA) as their drug of choice (24% vs. 20%, p=0.0368)
- Named 'other opiates' as their drug of choice (12% vs. 5%, p=0.0129)
- Named methadone as their drug of choice (13% vs. 2%, p<0.0001)

A higher proportion of the frequent drug users in Wellington compared to Christchurch had;

- Named ecstasy (MDMA) as their drug of choice (24% vs. 12%, p=0.0192)
- Named alcohol as their drug of choice (12% vs. 2%, p=0.0015)
- Named heroin as their drug of choice (6% vs. 2%, p=0.046)
- Named methadone as their drug of choice (13% vs. 2%, p=0.0004)

2. Methamphetamine

2.1 Introduction

Methamphetamine ('P', or 'pure') is a powerful psychostimulant with pharmacological characteristics and effects which closely resemble those of cocaine (Gawin and Ellinwood, 1988, Hall and Hando, 1994, Kuhn et al., 1998, Shearer et al., 2002). Chronic and high dose use of methamphetamine causes hostility, paranoia, hallucinations, and obsessive behaviour (Hall and Hando, 1994, Kuhn et al., 1998, Shearer et al., 2002). Heavy methamphetamine users often go on extended binges where they use the drug continuously over several days or even weeks without sleep. As a binge lengthens the user experiences states of panic and terror, which can lead to paranoid psychoses resembling schizophrenia in people with no pre-existing psychological conditions (Gawin and Ellinwood, 1988). Binges end in a 'crash' characterised by depression, fatigue, insomnia, headaches, and a strong psychological craving to use the drug again (Gawin and Ellinwood, 1988). Physiological harm from methamphetamine use includes damage to cardiac and vascular systems and damage to dopamine terminals in the brain, with possible implications for mood and movement disorder in later life (Kuhn et al., 1998, Shearer et al., 2002).

2.2 Knowledge of methamphetamine trends

Fifty-six percent of the frequent drug users interviewed (n=359) indicated they felt confident enough to comment on the price, purity and availability of methamphetamine. This group included 69% of frequent drug users living in Auckland (n=201), 40% of the frequent drug users living in Wellington (n=65) and 42% of the frequent drug users living in Christchurch (n=93).

2.3 Availability of methamphetamine

2.3.1 Current availability

Forty-six percent of the frequent drug users described the current availability of methamphetamine as 'easy', with a further 38% describing the availability of the drug as 'very easy' (Table 2.1). The average score for the current availability of methamphetamine for all the frequent drug users was 1.8 which indicates that overall the current availability of methamphetamine is 'easy/very easy'. There was no statistically significant difference in the average score for availability between the three locations (p=0.9893)

Table 2.1: Current availability of methamphetamine by location

Current availability of methamphetamine (%)	Auckland (n=196)	Wellington (n=65)	Christchurch (n=91)	Combined (n=352)
Very easy [1]	40%	45%	30%	38%
Easy [2]	43%	34%	60%	46%
Difficult [3]	15%	20%	10%	15%
Very difficult [4]	2%	2%	0%	1%
Average availability score (1=very easy – 4=very difficult)	1.8	1.8	1.8	1.8
Overall current status	Easy/ very easy	Easy/ very easy	Easy/ very easy	Easy/ very easy

2.3.2 Change in availability

Fifty-two percent of the frequent drug users reported that the availability of methamphetamine was 'stable' (Table 2.2). The average score for the change in availability of methamphetamine for all the frequent drug users was 1.9, which indicates that overall the availability of methamphetamine was 'stable'. The availability of methamphetamine was considered to have become easier in Christchurch compared to Auckland (1.8 vs. 2.0, p=0.0042).

Table 2.2: Change in availability of methamphetamine by location

Change in availability of methamphetamine (%)	Auckland (n=195)	Wellington (n=63)	Christchurch (n=91)	Combined (n=349)
Easier [1]	18%	30%	31%	24%
Stable [2]	52%	43%	57%	52%
Fluctuates [2]	9%	8%	4%	7%
More difficult [3]	21%	19%	8%	17%
Average change in availability score (1=easier – 3=more difficult)	2.0	1.9	1.8	1.9
Overall recent change	Stable	Stable	Stable	Stable

2.4 Price of methamphetamine

2.4.1 Current price

The frequent drug users reported the current median price of a point (0.1 grams) of methamphetamine to be $100 (Table 2.3). The current median price of a gram of methamphetamine was $600. The mean price of a gram of methamphetamine was lower in Auckland than in Christchurch ($568 vs. $883, $p<0.0001$). The mean price of a gram of methamphetamine was also lower in Wellington than in Christchurch ($681 vs. $883, $p=0.0086$).

Table 2.3: Current median (mean) price for methamphetamine (NZD) by location, 2006

Current price of methamphetamine	Auckland	Wellington	Christchurch	Combined modules
Number with knowledge	n=149	n=46	n=79	n=274
Median (mean) price 'point' (0.1 grams)	$100 ($94)	$100 ($101)	$100 ($98)	$100 ($96)
Number with knowledge	n=98	n=24	n=21	n=143
Median (mean) price gram	$600 ($568)	$800 ($681)	$1000 ($883)	$600 ($633)

2.4.2 Change in price

Fifty-four percent of the frequent drug users reported that the price of methamphetamine was 'stable' (Table 2.4). The average score for the change in the price of methamphetamine for all the frequent drug users was 2.0, which indicates that overall the price of methamphetamine was 'stable'. There was no statistically significant difference in the average score for the change in price of methamphetamine between the three locations (p=0.702).

Table 2.4: Change in the price of methamphetamine by location

Change in price of methamphetamine (%)	Auckland (n=178)	Wellington (n=57)	Christchurch (n=87)	Combined modules (n=322)
Decreasing [1]	24%	12%	15%	19%
Stable [2]	47%	60%	66%	54%
Fluctuating [2]	12%	14%	7%	11%
Increasing [3]	18%	14%	13%	16%
Average change in price score (1=decreasing – 3=increasing)	1.9	2.0	2.0	2.0
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating

2.5 Purity of methamphetamine

2.5.1 Current purity

Thirty-six percent of the frequent drug users described the current purity of methamphetamine as 'fluctuating', with a further 35% describing the current purity of the drug as 'high' (Table 2.5). The average score for the current purity of methamphetamine for all the frequent drug users was 2.3, which indicates that overall the level of purity of methamphetamine is 'medium/high'. Methamphetamine was considered to be purer in Auckland than in Wellington (2.3 vs. 2.1, p=0.0087) and also purer in Christchurch than in Wellington (2.3 vs. 2.1, p=0.0195).

Table 2.5: Current purity of methamphetamine by location

Current purity methamphetamine (%)	Auckland (n=191)	Wellington (n=55)	Christchurch (n=86)	Combined modules (n=332)
Low [1]	7%	13%	5%	7%
Medium [2]	20%	29%	21%	22%
Fluctuates [2]	35%	40%	37%	36%
High [3]	39%	18%	37%	35%
Average purity score (1=low – 3=high)	2.3	2.1	2.3	2.3
Overall current status	Medium/ high	Medium	Medium/ high	Medium/ high

2.5.2 Change in purity

Thirty-seven percent of the frequent drug users reported that the purity of methamphetamine was 'stable', with a further 29% saying that purity had 'fluctuated' (Table 2.6). The average score for the change in purity of methamphetamine for all the frequent drug users was 2.0, which indicates that overall the purity of methamphetamine was 'stable/fluctuating'. The purity of methamphetamine was judged to be increasing in Christchurch compared to Auckland (2.1 vs. 1.9) and this was close to being statistically significant (p=0.0599).

Table 2.6: Change in purity of methamphetamine by frequent drug user group

Change in purity of methamphetamine (%)	Auckland (n=181)	Wellington (n=52)	Christchurch (n=83)	Combined modules (n=316)
Decreasing [1]	20%	25%	8%	18%
Stable [2]	40%	25%	39%	37%
Fluctuating [2]	26%	31%	34%	29%
Increasing [3]	14%	19%	19%	16%
Average change in purity score (1=decreasing – 3=increasing)	1.9	1.9	2.1	2.0
Overall recent change	Stable/ fluctuates	Fluctating/ decreasing	Stable/ increasing	Stable/ fluctuates

2.6 Perceptions of the number of people using methamphetamine

Forty-six percent of the frequent drug users thought 'more' people they know were using methamphetamine (Table 2.7). The average score for all the frequent drug users for the question was 2.3, indicating that overall the 'same/more' people were using methamphetamine compared to six months ago. More people were thought to be using methamphetamine in Christchurch than in Wellington (2.5 vs. 2.0, p=0.0039). More people were also thought to be using methamphetamine in Christchurch compared to Auckland (2.5 vs. 2.2) and this was close to being statistically significant (p=0.0603).

Table 2.7: Perceptions of the number of people using methamphetamine by location

Number of people using methamphetamine (%)	Auckland (n=197)	Wellington (n=62)	Christchurch (n=89)	Combined modules (n=355)
Less [1]	19%	31%	16%	20%
Same [2]	38%	34%	22%	33%
More [3]	43%	35%	61%	47%
Average number of people using score (1=less – 3=more)	2.2	2.0	2.5	2.3
Overall recent change	Same/ more	Same	More/ same	Same/ more

2.7 Purchase

The frequent drug users were asked how frequently they had purchased methamphetamine and what dollar amount they typically spent on the drug on a single occasion. Forty-six percent of the frequent drug users who had purchased methamphetamine had done so weekly or more often (Table 2.8). The frequent drug users had spent a median of $200 on methamphetamine on a typical occasion. A higher proportion of the frequent drug users in Auckland than in Wellington purchased methamphetamine weekly or more often (62% vs. 30%, p=0.012). The frequent drug users in Auckland spent a higher median dollar amount on methamphetamine than the frequent drug users in Christchurch ($200 vs. $100, p=0.0027). The frequent drug users paid a median of $100 per 'point' and $600 per gram for methamphetamine.

Table 2.8: Characteristics of methamphetamine transactions by location

Transactions	Auckland (n=141)	Wellington (n=43)	Christchurch (n=45)	Combined modules (n=229)
Purchased weekly or more often	62%	30%	53%	46%
Median amount spent on typical occasion (mean)	$200 ($350)	$200 ($225)	$100 ($154)	$200 ($288)
Median per 'point' (mean)	100 ($91)	$100 ($93)	$100 ($93)	$100 ($92)
Median per gram (mean)	$600 ($617)	$800 ($732)	$800 ($730)	$600 ($647)

2.8 Reliability of supply

Forty-five percent of the frequent drug users indicated that methamphetamine was 'always' available, with a further 45% saying it was 'mostly' available (Table 2.9). The supply of methamphetamine was considered more reliable in Auckland than in Wellington (4.4 vs. 4.0, p=0.0033) and more reliable in Christchurch than in Wellington (4.4 vs. 4.0, p=0.0177).

Table 2.9: Reliability of supply of methamphetamine by location

Level of reliability	Auckland (n=141)	Wellington (n=43)	Christchurch (n=44)	Combined modules (n=228)
Never any available [1]	0%	0%	0%	0%
Hardly ever some available [2]	1%	5%	2%	2%
Sometimes some available [3]	5%	21%	9%	9%
Mostly some available [4]	48%	44%	34%	45%
Always some available [5]	46%	30%	55%	45%
Average score (1=never available – 5=always available)	4.4	4.0	4.4	4.3

2.9 Search time

The frequent drug users were asked how long it would take them to purchase some methamphetamine if they wanted some. Twenty-five percent of the frequent drug users could purchase methamphetamine in less than 20 minutes (Table 2.10). There was no statistically significant difference between the locations in the proportion of the frequent drug users who could purchase methamphetamine in less than 20 minutes (p=0.5039).

Table 2.10: Time taken to purchase methamphetamine by location

Time taken to purchase	Auckland (n=141)	Wellington (n=43)	Christchurch (n=44)	Combined modules (n=228)
Weeks	1%	0%	0%	<1%
Days	4%	5%	0%	3%
About a day	12%	9%	11%	11%
Hours	24%	35%	11%	24%
1 hour	36%	28%	45%	36%
Less than 20 minutes	23%	23%	32%	25%

3. Crystal methamphetamine

3.1 Introduction

Crystal methamphetamine ('ice', 'crystal' or 'shabu') is the crystallised form of methamphetamine (Matsumoto et al., 2002, McKetin and McLaren, 2004). It is currently thought to be largely manufactured in Asia and smuggled into New Zealand across the border. Imported crystal methamphetamine is sometimes perceived by users to be more professionally made and more potent than the locally manufactured methamphetamine, known as 'P' or pure (Wilkins et al., 2004). However, recent ESR analysis suggests that there is typically little difference in purity between locally made methamphetamine and imported crystal methamphetamine. Among drug users there is sometimes no clear distinction between methamphetamine and crystal methamphetamine, with some users describing all methamphetamine as crystal methamphetamine including the locally made 'P'. With respect to pharmacological effects, there may be little difference between the two substances, yet given the understanding that users often distinguish between a local methamphetamine and imported crystal methamphetamine there is some justification for monitoring them separately.

3.2 Knowledge of crystal methamphetamine trends

Twenty-nine percent of the frequent drug users interviewed (n=183) indicated they felt confident enough to comment on the price, purity and availability of crystal methamphetamine. This group included 41% of the frequent drug users living in Auckland (n=116), 14% of the frequent ecstasy users living in Wellington (n=23) and 23% of the frequent injecting drug users living in Christchurch (n=44). In this chapter we will only compare findings from Auckland and Christchurch as there are low numbers of frequent drug users with knowledge of crystal methamphetamine in Wellington.

3.3 Availability of crystal methamphetamine

3.3.1 Current availability

Forty-five percent of the frequent drug users described the current availability of crystal methamphetamine as 'easy' (Table 3.1). The average score for the current availability of crystal methamphetamine for all the frequent drug users was 2.1, which indicates that overall the current level of availability of crystal methamphetamine is 'easy'. There was no statistically significant difference in the average score for the current availability of crystal methamphetamine between Auckland and Christchurch (p=0.6634).

Table 3.1: Current availability of crystal methamphetamine by location

Current availability of crystal methamphetamine (%)	Auckland (n=111)	Christchurch (n=44)	Combined modules (n=178) [includes Wellington]
Very easy [1]	22%	27%	25%
Easy [2]	49%	39%	45%
Difficult [3]	25%	32%	26%
Very difficult [4]	5%	2%	4%
Average availability score (1=very easy – 4=very difficult)	2.1	2.1	2.1
Overall current status	Easy	Easy	Easy

3.3.2 Change in availability

Fifty-one percent of the frequent drug users reported that the availability of crystal methamphetamine was 'stable' (Table 3.2). The average score for the change in availability of crystal methamphetamine for all the frequent drug users was 2.1 which indicates that overall the availability of crystal methamphetamine was 'stable/more difficult'. There was no statistically significant difference in the average score for the change in availability of crystal methamphetamine between Auckland and Christchurch (p=0.3669).

Table 3.2: Change in availability of crystal methamphetamine by location

Change in availability of crystal methamphetamine (%)	Auckland (n=109)	Christchurch (n=44)	Combined modules (n=175) [includes Wellington]
Easier [1]	10%	16%	13%
Stable [2]	49%	57%	51%
Fluctuates [2]	11%	7%	9%
More difficult [3]	30%	20%	28%
Average change in availability score (1=easier – 3=more difficult)	2.2	2.0	2.1
Overall recent change	Stable/ more difficult	Stable/ more difficult	Stable/more difficult

3.4 Price of crystal methamphetamine

3.4.1 Current price

The frequent drug users reported the current median price of a point (0.1 grams) of crystal methamphetamine to be $100 (Table 3.3). There was no statistically significant difference in the mean price paid for a point of crystal methamphetamine between Auckland and Christchurch (p=0.651). The frequent drug users were only asked about the price of a gram of crystal methamphetamine in the 2007 IDMS and so the numbers available for this question are lower than for the previous question. The low numbers available for the price of a gram of crystal methamphetamine prevent any reliable statistical comparison between the locations.

Table 3.3: Current median (mean) price for crystal methamphetamine (NZD) by location

Current price of crystal methamphetamine	Auckland	Christchurch	Combined modules [includes Wellington]
Number with knowledge	n=74	n=37	n=121
Median (mean) price 'point' (0.1 grams)	$100 ($102)	$100 ($99)	$100 ($102)
Number with knowledge	n=26	n=4	n=36
Median (mean) price 'gram'	$600 ($645)	$850 ($775)	$700 ($685)

3.4.2 Change in price

Sixty percent of the frequent drug users reported that the price of crystal methamphetamine was 'stable' (Table 3.4). The average score for the change in the price of crystal methamphetamine for all the frequent drug users was 2.1, which indicates that overall the price was 'stable'. There was no statistically significant difference in the average score for the change in the price of crystal methamphetamine between Auckland and Christchurch (p=0.6173).

Table 3.4: Change in the price of crystal methamphetamine by location

Change in price of crystal methamphetamine (%)	Auckland (n=107)	Christchurch (n=39)	Combined modules (n=167) [includes Wellington]
Decreasing [1]	10%	8%	10%
Stable [2]	58%	74%	60%
Fluctuating [2]	10%	5%	11%
Increasing [3]	22%	13%	19%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.1	2.1
Overall recent change	Stable/ increasing	Stable/ increasing	Stable/ increasing

3.5 Purity of crystal methamphetamine

3.5.1 Current purity

Forty-nine percent of the frequent drug users described the current purity of crystal methamphetamine as 'high' (Table3.5). The average score for the current purity of crystal methamphetamine for all the frequent drug users was 2.4, which indicates the overall current purity of crystal methamphetamine is 'medium/ high'. There was no statistically significant difference in the average score for the current purity of crystal methamphetamine between Auckland and Christchurch (p=0.5335).

Table 3.5: Current purity of crystal methamphetamine by location

Current purity crystal methamphetamine (%)	Auckland (n=110)	Christchurch (n=44)	Combined modules (n=176) [includes Wellington]
Low [1]	9%	2%	7%
Medium [2]	21%	25%	22%
Fluctuates [2]	22%	25%	22%
High [3]	48%	48%	49%
Average purity score (1=low – 3=high)	2.4	2.5	2.4
Overall current status	Medium/ high	Medium/ high	Medium/ high

3.5.2 Change in purity

Fifty-three percent of the frequent drug users reported that the purity of crystal methamphetamine was 'stable', with a further 28% saying that purity had 'fluctuated' (Table 3.6). The average score for the change in the purity of crystal methamphetamine for all the frequent drug users was 2.1 which indicates that overall the purity of crystal methamphetamine was 'stable/fluctuating'. There was no statistically significant difference in the average score for the change in purity of crystal methamphetamine between Auckland and Christchurch (p=0.868).

Table 3.6: Change in purity of crystal methamphetamine by location

Change in purity of crystal methamphetamine (%)	Auckland (n=106)	Christchurch (n=43)	Combined modules (n=170) [includes Wellington]
Decreasing [1]	11%	9%	11%
Stable [2]	53%	49%	53%
Fluctuating [2]	18%	10%	28%
Increasing [3]	18%	14%	16%
Average change in purity score (1=decreasing – 3=increasing)	2.1	2.0	2.1
Overall recent change	Stable/ fluctuates	Stable/ fluctuates	Stable/ fluctuates

3.6 Perceptions of the number of people using crystal methamphetamine

Thirty-seven percent of the frequent drug users thought 'more' people they know were using crystal methamphetamine (Table 3.7). Thirty-six percent of the frequent drug users said 'about the same' number were using crystal methamphetamine. The average score for all the frequent drug users for the question was 2.1 indicating that overall the 'same/more' people were using crystal methamphetamine. There was no statistically significant difference in perceptions of the number of people using crystal methamphetamine between Auckland and Christchurch (p=0.2679).

Table 3.7: Perceptions of the number of people using crystal methamphetamine by frequent drug user group

Number of people using crystal methamphetamine (%)	Auckland (n=114)	Christchurch (n=42)	Combined modules (n=179) [includes Wellington]
Less [1]	25%	20%	26%
Same [2]	40%	29%	36%
More [3]	34%	51%	37%
Average number of people using score (1=less – 3=more)	2.1	2.3	2.1
Overall recent change	Same/ more	Same/ more	Same/ more

4. Ecstasy (MDMA)

4.1 Introduction

Ecstasy (3,4-methylenedioxymethamphetamine, MDMA or 'E' or 'X') has both amphetamine and hallucinogenic effects (Kuhn et al., 1998, Gowing et al., 2001, Gowing et al., 2002, Topp et al., 1998). Ecstasy (MDMA) increases heart rate, blood pressure, and body temperature, and produces a sense of energy and alertness (like standard amphetamines), but also a state of empathy for others (due to increased release of serotonin) (Kuhn et al., 1998). High doses of ecstasy (MDMA) cause teeth clenching, paranoia, anxiety and confusion (Kuhn et al., 1998). Ecstasy (MDMA) can cause hyperthermia (extreme heat stroke) resulting in death when combined with sustained physical exercise and elevated temperatures, which are commonly found in dance clubs (these environments compound the natural pharmacological effect of ecstasy on the body's thermoregulatory mechanism) (Gowing et al., 2001, Gowing et al., 2002). Ecstasy (MDMA) can also cause water intoxication and death when excessive amounts of water are consumed as the drug inhibits the body's ability to excrete fluid (Topp et al., 1998, Gowing et al., 2002). Although cases of serious adverse effects from ecstasy (MDMA) use appear low relative to the extent of use, it is the unpredictability of adverse events (dose is not predicative of adverse effects) that makes the risks significant (Gowing et al., 2002). Long term effects from ecstasy (MDMA) include insomnia, energy loss, depression, irritability, muscle aches, and blurred vision (Topp et al., 1998). Ecstasy (MDMA) has also been controversially linked to damage to serotonin terminals in the brain, with possible implications for short term memory, cognitive function and mood regulation (Gowing et al., 2002).

4.2 Knowledge of ecstasy (MDMA) trends

Fifty-six percent of the frequent drug users interviewed (n=362) indicated they felt confident enough to comment on the price, purity and availability of ecstasy (MDMA). This group included 64% of the frequent drug users (n=186) living in Auckland, 70% of the frequent drug users (n=113) living in Wellington and 33% of the frequent drug users living in Christchurch (n=63).

4.3 Availability of ecstasy (MDMA)

4.3.1 Current availability of ecstasy (MDMA)

Fifty-four percent of the frequent drug users described the current availability of ecstasy (MDMA) as 'easy' (Table 4.1). The average score for the current availability of ecstasy (MDMA) for all the frequent drug users was 2.1 which indicates that overall the current level of availability of ecstasy (MDMA) is 'easy'. There was no statistically significant difference in the average score for the current availability of ecstasy (MDMA) between the three locations (p=0.7206).

Table 4.1: Current availability of ecstasy (MDMA) by location

Current availability of ecstasy (MDMA) (%)	**Auckland (n=184)**	**Wellington (n=113)**	**Christchurch (n=60)**	**Combined modules (n=357)**
Very easy [1]	24%	20%	20%	22%
Easy [2]	53%	56%	53%	54%
Difficult [3]	22%	23%	27%	23%
Very difficult [4]	1%	1%	0%	1%
Average availability score (1=very easy – 4=very difficult)	2.0	2.0	2.1	2.1
Overall current status	Easy	Easy	Easy	Easy

4.3.2 Change in availability of ecstasy (MDMA)

Forty-six percent of the frequent drug users reported that the availability of ecstasy (MDMA) was 'stable' (Table 4.2). The average score for the change in the availability of ecstasy (MDMA) for all the frequent drug users was 1.9, which indicates that overall the availability of ecstasy (MDMA) was 'stable'. There was no statistically significant difference in the average score for the change in availability of ecstasy (MDMA) between the three locations (p=0.5628).

Table 4.2: Change in availability of ecstasy (MDMA) by location

Change in availability of ecstasy (MDMA) (%)	Auckland (n=179)	Wellington (n=108)	Christchurch (n=61)	Combined modules (n=348)
Easier [1]	23%	21%	26%	23%
Stable [2]	46%	46%	44%	46%
Fluctuates [2]	13%	19%	18%	16%
More difficult [3]	13%	19%	18%	16%
Average change in availability score (1=easier – 3=more difficult)	1.9	1.9	1.9	1.9
Overall recent change	Stable	Stable	Stable	Stable

4.4 Price of ecstasy (MDMA)

4.4.1 Current price of ecstasy (MDMA)

The median price for a pill of ecstasy (MDMA) was $60 (Table 4.3). The mean price of a pill of ecstasy was lower in Auckland than Wellington ($52 vs. $62, $p<0.0001$). The mean price of a pill of ecstasy was also lower in Auckland than in Christchurch ($52 vs. $66, $p<0.0001$).

Table 4.3: Current median (mean) price for ecstasy (MDMA) (NZD) by location

Current price of ecstasy (MDMA)	Auckland (n=167)	Wellington (n=88)	Christchurch (n=57)	Combined modules (n=312)
Median (mean) price 'pill'	$50 ($52)	$60 ($62)	$65 ($66)	$60 ($58)

4.4.2 Change in price of ecstasy (MDMA)

Sixty-one percent of the frequent drug users reported that the price of ecstasy (MDMA) was 'stable' (Table 4.4). The average score for the change in the price of ecstasy (MDMA) for all the frequent drug users was 1.9, which indicates that overall the price of ecstasy was 'stable/decreasing'. There was no statistically significant difference in the average score for the change in price of ecstasy (MDMA) between the three locations ($p=0.4518$).

Table 4.4: Change in the price of ecstasy (MDMA) by location

Change in price of ecstasy (MDMA) (%)	Auckland (n=176)	Wellington (n=110)	Christchurch (n=59)	Combined modules (n=345)
Decreasing [1]	18%	15%	27%	19%
Stable [2]	61%	63%	58%	61%
Fluctuating [2]	14%	15%	7%	13%
Increasing [3]	7%	6%	8%	7%
Average change in price score (1=decreasing – 3=increasing)	1.9	1.9	1.8	1.9
Overall recent change	Stable/ decreasing	Stable/ decreasing	Stable/ decreasing	Stable/ decreasing

4.5 Purity of ecstasy (MDMA)

4.5.1 Current purity of ecstasy (MDMA)

Thirty percent of the frequent drug users described the current purity of ecstasy (MDMA) as 'medium', 29% described it as 'fluctuating' and 29% as 'high' (Table 4.5). The average score for the current purity of ecstasy (MDMA) for all the frequent drug users was 2.2 which indicates that overall the purity of ecstasy (MDMA) is 'medium/high'. There was no statistically significant difference in the average score for the purity of ecstasy (MDMA) between the three locations (p=0.9558).

Table 4.5: Current purity of ecstasy (MDMA) by location

Current purity of ecstasy (MDMA) (%)	Auckland (n=177)	Wellington (n=110)	Christchurch (n=60)	Combined modules (n=347)
Low [1]	8%	6%	10%	8%
Medium [2]	31%	33%	25%	30%
Fluctuates [2]	32%	32%	35%	29%
High [3]	29%	29%	30%	29%
Average purity score (1=low – 3=high)	2.2	2.2	2.2	2.2
Overall current status	Medium/ high	Medium/ high	Medium/ high	Medium/ high

4.5.2 Change in purity of ecstasy (MDMA)

Thirty-eight percent of the frequent drug users reported that the purity of ecstasy (MDMA) had 'fluctuated', with a further 37% saying that purity was 'stable' (Table 4.6). The average score for the change in the purity of ecstasy (MDMA) for all the frequent drug users was 2.0, which indicates that overall the purity of ecstasy (MDMA) was 'stable/fluctuating'. There was no statistically significant difference in the average score for the change in purity of ecstasy (MDMA) between the three locations (p=0.6942).

Table 4.6: Change in purity of ecstasy (MDMA) by location

Change in purity of ecstasy (MDMA) (%)	**Auckland (n=171)**	**Wellington (n=106)**	**Christchurch (n=57)**	**Combined modules (n=334)**
Decreasing [1]	15%	12%	16%	14%
Stable [2]	42%	35%	30%	37%
Fluctuating [2]	33%	42%	47%	38%
Increasing [3]	11%	10%	7%	10%
Average change in purity score (1=decreasing – 3=increasing)	2.0	2.0	1.9	2.0
Overall recent change	Stable/ Fluctuates	Stable/ Fluctuates	Stable/ fluctuates	Stable/ fluctuates

4.6 Perceptions of the number of people using ecstasy (MDMA)

Forty-seven percent of the frequent drug users thought 'about the same' number of people they know were using ecstasy (MDMA) and 45% said 'more' people they know were using ecstasy (Table 4.7). The average score for all the frequent drug users for the question was 2.4 indicating that overall the 'same/more' people were using ecstasy (MDMA). There was no statistically significant difference in perceptions of the number of people using ecstasy (MDMA) between the three locations (p=0.7006)

Table 4.7: Perceptions of the number of people using ecstasy (MDMA) by location

Number of people using ecstasy (MDMA) (%)	Auckland (n=184)	Wellington (n=110)	Christchurch (n=61)	Combined modules (n=355)
Less [1]	9%	6%	13%	9%
Same [2]	46%	50%	44%	47%
More [3]	46%	44%	43%	45%
Average number of people using score (1=less – 3=more)	2.4	2.4	2.3	2.4
Overall recent change	Same/ More	Same/ more	Same/ more	Same/ more

4.7 Purchase

The frequent drug users were asked how frequently they had purchased ecstasy (MDMA) and what dollar amount they typically spent on the drug on a single occasion. Twelve percent of the frequent drug users who had purchased ecstasy (MDMA) had done so weekly or more often (Table 4.8). The frequent drug users had spent a median of $70 on ecstasy (MDMA) on a typical occasion. The frequent drug users paid a mean price of $56 per ecstasy pill. The frequent drug users in Auckland paid a lower mean price per ecstasy (MDMA) pill than the frequent drug users in Christchurch ($51 vs. $66, $p<0.0001$). The frequent drug users in Auckland also paid a lower mean price per pill than the frequent drug users in Wellington ($51 vs. $60, $p<0.0001$). The frequent drug users in Wellington paid a lower mean price per pill than the frequent drug users in Christchurch ($60 vs. $66, $p=0.0365$).

Table 4.8: Characteristics of ecstasy (MDMA) transactions by location

Transactions	Auckland (n=143)	Wellington (n=99)	Christchurch (n=45)	Combined modules (n=287)
Purchased weekly or more often	8%	11%	22%	12%
Median amount spent on typical occasion (mean)	$60 ($260)	$70 ($129)	$80 ($122)	$70 ($925)
Median per pill (mean)	$50 ($51)	$60 ($60)	$65 ($66)	$60 ($56)

4.8 Reliability of supply

Thirty percent of the frequent drug users indicated that ecstasy (MDMA) was 'always' available, with a further 46% saying it was 'mostly' available (Table 4.9). There was no statistically significant difference in the reliability of supply of ecstasy (MDMA) between the three locations (p=0.3128).

Table 4.9: Reliability of supply of ecstasy (MDMA) by location

Level of reliability	Auckland (n=143)	Wellington (n=98)	Christchurch (n=45)	Combined modules (n=286)
Never any available [1]	0%	0%	0%	0%
Hardly ever some available [2]	3%	1%	4%	2%
Sometimes some available [3]	19%	26%	20%	21%
Mostly some available [4]	43%	45%	56%	46%
Always some available [5]	35%	29%	20%	30%
Average score (1=never available – 5=always available)	4.1	4.0	3.9	4.1

4.9 Search time

The frequent drug users were asked how long it would take them to purchase ecstasy (MDMA) if they wanted some. Nine percent of the frequent drug users could purchase ecstasy (MDMA) in less than 20 minutes (Table 4.10). There was no statistically significant difference in the proportion of the frequent drug users who could purchase ecstasy (MDMA) in less than 20 minutes between the locations (p=0.2492).

Table 4.10: Time taken to purchase ecstasy (MDMA) by location

Time taken to purchase	Auckland (n=141)	Wellington (n=99)	Christchurch (n=44)	Combined modules (n=284)
Weeks	8%	3%	5%	6%
Days	35%	42%	25%	36%
About a day	21%	22%	20%	21%
Hours	14%	16%	16%	15%
1 hour	13%	9%	18%	13%
Less than 20 minutes	9%	7%	16%	9%

5. LSD

5.1 Introduction

Lysergic acid diethylamide or LSD ('trips' or 'acid') is a hallucinogen which gained notoriety in many Western countries during the 1960s. While the use of LSD waned in many countries in subsequent decades, LSD remained relatively popular among drug users in New Zealand. Comparison of national household drug surveys conducted in 1990 and 1998 found increased use of LSD in the population (Field and Casswell, 1999). Between 1990-1994, New Zealand had the seventh highest number of LSD seizures of twenty-four countries surveyed (New Zealand Customs Service, 2002). In more recent years, the use of LSD in New Zealand has been eclipsed to some extent by the emergence of ecstasy and methamphetamine (Wilkins et al., 2002c, Wilkins et al., 2002d, Wilkins et al., 2003).

5.2 Knowledge of LSD trends

Thirty-six percent of the frequent drug users interviewed (n=229) indicated they felt confident enough to comment on the price, purity and availability of LSD. This group included 34% of the frequent drug users living in Auckland (n=98), 51% of the frequent drug users living in Wellington (n=82) and 26% of the frequent drug users living in Christchurch (n=49).

5.3 Availability of LSD

5.3.1 Current availability of LSD

Forty-one percent of the frequent drug users described the current availability of LSD as 'easy' and 40% described the current availability of LSD as 'difficult' (Table 5.1). The average score for the current availability of LSD for all the frequent drug users was 2.4 which indicates that overall the current level of availability of LSD is 'easy/difficult'. LSD was judged to be less available in Auckland than in Wellington (2.6 vs. 2.2, p=0.0038).

Table 5.1: Current availability of LSD by location

Current availability of LSD (%)	Auckland (n=98)	Wellington (n=80)	Christchurch (n=48)	Combined modules (n=226)
Very easy [1]	7%	23%	4%	12%
Easy [2]	37%	35%	58%	41%
Difficult [3]	43%	39%	35%	40%
Very difficult [4]	13%	4%	2%	8%
Average availability score (1=very easy – 4=very difficult)	2.6	2.2	2.4	2.4
Overall current status	Difficult	Easy/ difficult	Easy/ difficult	Easy/ difficult

5.3.2 Change in availability of LSD

Thirty-seven percent of the frequent drug users reported that the availability of LSD had been 'stable' in the past six months (Table 5.2). The average score for the change in availability of LSD for all the frequent drug users was 2.0, which indicates that overall the availability of LSD was 'stable/fluctuating'. The availability of LSD was also considered to have become more difficult in Auckland compared to Christchurch (2.2 vs. 1.8, p=0.006).

Table 5.2: Change in availability of LSD by location

Change in availability of LSD (%)	Auckland (n=90)	Wellington (n=77)	Christchurch (n=48)	Combined modules (n=215)
Easier [1]	12%	19%	25%	20%
Stable [2]	34%	32%	48%	37%
Fluctuates [2]	24%	32%	19%	26%
More difficult [3]	29%	16%	8%	20%
Average change in availability score (1=easier – 3=more difficult)	2.2	2.0	1.8	2.0
Overall recent change	Stable/more difficult	Stable	Stable/ easier	Stable

5.4 Price of LSD

5.4.1 Current price of LSD

The median price paid for a 'tab' of LSD was $40 (Table 5.3). The mean price of LSD was reported to be lower in Auckland than in Christchurch ($33 vs. $39, p=0.0014). The mean price of LSD was also lower in Auckland than Wellington ($33 vs. $38, p=0.0078).

Table 5.3: Current median (mean) price for LSD (NZD) by location

Current price of LSD	Auckland (n=87)	Wellington (n=60)	Christchurch (n=45)	Combined modules (n=192)
Median (mean) price for a 'tab'	$30 ($33)	$40 ($38)	$40 ($39)	$40 ($36)

5.4.2 Change in price of LSD

Seventy percent of the frequent drug users reported that the price of LSD was 'stable' (Table 5.4). The average score for the change in the price of LSD for all the frequent drug users was 2.0 which indicates that overall the price of LSD was 'stable'. There was no statistically significant difference in the average score for the change in price of LSD between the three locations (p=0.0759).

Table 5.4: Change in the price of LSD by location

Change in price of LSD (%)	Auckland (n=90)	Wellington (n=75)	Christchurch (n=48)	Combined modules (n=213)
Decreasing [1]	9%	4%	13%	8%
Stable [2]	69%	65%	79%	70%
Fluctuating [2]	11%	15%	2%	10%
Increasing [3]	11%	16%	6%	12%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.1	1.9	2.0
Overall recent change	Stable	Stable	Stable	Stable

5.5 Purity of LSD

5.5.1 Current purity of LSD

Thirty-three percent of the frequent drug users described the current strength of LSD as 'medium', 26% said it had fluctuated and 30% described it as 'high' (Table 5.5). The average score for the current strength of LSD for all the frequent drug users was 2.2 which indicates that overall the strength of LSD is 'medium/high'. There was no statistically significant difference between the three groups of frequent drug users with respect to the current strength of LSD (p=0.1814).

Table 5.5: Current purity of LSD by location, 2006

Current purity of LSD (%)	Auckland (n=90)	Wellington (n=74)	Christchurch (n=49)	Combined modules (n=213)
Low [1]	12%	7%	18%	12%
Medium [2]	33%	39%	22%	33%
Fluctuates [2]	26%	20%	35%	26%
High [3]	29%	34%	24%	30%
Average purity score (1=low – 3=high)	2.2	2.3	2.1	2.2
Overall current status	Medium/ high	Medium/ high	Medium/ high	Medium/ high

5.5.2 Change in purity of LSD

Forty-two percent of the frequent drug users reported that the strength of LSD was 'stable' (Table 5.6). The average score for the change in the strength of LSD for all the frequent drug users was 2.0 which indicates that overall the strength of LSD had been 'stable/fluctuating'. There was no statistically significant difference in the average score for the change in strength of LSD between the three locations (p=0.0832).

Table 5.6: Change in purity of LSD by location

Change in purity of cannabis (%)	Auckland (n=80)	Wellington (n=67)	Christchurch (n=47)	Combined modules (n=194)
Decreasing [1]	19%	9%	17%	15%
Stable [2]	50%	42%	28%	42%
Fluctuating [2]	20%	28%	43%	28%
Increasing [3]	11%	21%	13%	15%
Average change in purity score (1=decreasing – 3=increasing)	1.9	2.1	2.0	2.0
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating

5.6 Perceptions of the number of people using LSD

Fifty percent of frequent drug users thought 'about the same' number of people they know were using LSD (Table 5.7). The average score for all the frequent drug users for the question was 2.0 indicating that overall 'about the same' number of people were using LSD. There was no statistically significant difference in perceptions of the number of people using LSD between the three locations (p=0.2497).

Table 5.7: Perceptions of the number of people using LSD by location

Number of people using LSD (%)	Auckland (n=95)	Wellington (n=82)	Christchurch (n=49)	Combined modules (n=226)
Less [1]	28%	23%	24%	26%
Same [2]	52%	45%	57%	50%
More [3]	20%	32%	18%	24%
Average number of people using score (1=less – 3=more)	1.9	2.1	1.9	2.0
Overall recent change	Same	Same	Same	Same

5.7 Purchase

The frequent drug users were asked how frequently they had purchased LSD and what dollar amount they typically spent on the drug on a single occasion. Three percent of the frequent drug users who had purchased LSD had done so weekly or more often (Table 5.8). The frequent drug users had spent a median of $40 each on LSD on a typical occasion. The frequent drug users had paid a mean price of $34 per LSD tab. The frequent drug users in Auckland paid a lower mean price per LSD tab than the frequent drug users in Christchurch ($31 vs. $38, p=0.0013). The frequent drug users in Auckland also paid a lower mean price per LSD tab than the frequent drug users in Wellington ($31 vs. $35, p=0.0501).

Table 5.8: Characteristics of LSD transactions by location

Transactions	Auckland (n=56)	Wellington (n=65)	Christchurch (n=32)	Combined modules (n=153)
Purchased weekly or more often	2%	5%	0%	3%
Median amount spent on typical occasion (mean)	$40 ($98)	$40 ($117)	$40 ($85)	$40 ($103)
Median per tab (mean)	$30 ($31)	$33 ($35)	$40 ($38)	$35 ($34)

5.8 Reliability of supply

Forty percent of the frequent drug users indicated that LSD was ‘sometimes’ available, with a further 33% saying it was ‘mostly’ available (Table 5.9). There was no statistically significant difference in the reliability of supply of LSD between the three locations (p=0.1186).

Table 5.9: Reliability of supply of LSD by location

Level of reliability	Auckland (n=54)	Wellington (n=59)	Christchurch (n=31)	Combined modules (n=144)
Never any available [1]	0%	0%	0%	0%
Hardly ever some available [2]	17%	7%	3%	10%
Sometimes some available [3]	39%	42%	35%	40%
Mostly some available [4]	30%	36%	35%	33%
Always some available [5]	15%	15%	26%	17%
Average score (1=never available – 5=always available)	3.4	3.6	3.8	3.6

5.9 Search time

The frequent drug users were asked how long it would take them to purchase LSD if they wanted some. Eight percent of the frequent drug users could purchase LSD in less than 20 minutes (Table 5.10). There was no statistically significant difference in the proportion of the frequent drug users who could purchase LSD in less than 20 minutes between the locations (p=0.2628).

Table 5.10: Time taken to purchase LSD by location

Time taken to purchase	Auckland (n=55)	Wellington (n=62)	Christchurch (n=32)	Combined modules (n=149)
Weeks	9%	6%	13%	9%
Days	31%	42%	19%	33%
About a day	33%	13%	28%	23%
Hours	13%	16%	6%	13%
1 hour	11%	13%	22%	14%
Less than 20 minutes	4%	10%	13%	8%

6. Cannabis

6.1 Introduction

Cannabis is New Zealand's most widely used illegal drug and the third most popular drug after alcohol and tobacco. The supply of cannabis in New Zealand is met almost entirely through domestic cannabis cultivation, either via clandestine outdoor cultivation or indoor hydroponic growing operations (Yska, 1990, Walker et al., 1998, Wilkins et al., 2002b, Wilkins and Casswell, 2003). The black market for cannabis in New Zealand has recently been estimated to have an annual dollar turnover of $131-$190 million dollars (NZD) (Wilkins et al., 2002a, Wilkins et al., 2005b). Cannabis is sold in New Zealand within private social networks and from public drug houses, known as 'tinny' houses (Wilkins et al., 2005a). Recent analysis of cannabis purchasing in New Zealand has found that adolescents aged 15-17 years old were more likely to purchase their cannabis from 'tinny' houses than older cannabis buyers (Wilkins et al., 2005a). Exploration of the structure of the illegal market for cannabis in New Zealand suggests that many cannabis users receive their cannabis for 'free' during group consumption sessions, and that many heavy cannabis users finance their spending on cannabis through selling cannabis (Wilkins and Sweetsur, 2006a). High spending on cannabis has the greatest financial impact among low income groups, where approximately 8% of low income earning cannabis buyers are spending 20% or more of their gross annual personal income on cannabis (Wilkins and Sweetsur, 2006b).

6.2 Knowledge of cannabis trends

Eighty-five percent of the frequent drug users interviewed (n=542) indicated they felt confident enough to comment on the price, purity and availability of cannabis in the past six months. This group included 86% of the frequent drug users living in Auckland (n=248), 84% of the frequent drug users living in Wellington (n=134) and 85% of the frequent drug users living in Christchurch (n=160).

6.3 Availability of cannabis

6.3.1 Current availability of cannabis

Sixty-two percent of the frequent drug users described the current availability of cannabis as 'very easy', with a further 33% describing the availability of the drug as 'easy' (Table 6.1). The average score for the current availability of cannabis for all the frequent drug users was 1.4 which indicates that overall the current level of availability of cannabis is 'very easy/ easy'. There was no statistically significant difference in the perception of the availability of cannabis in the three locations (p=0.226).

Table 6.1: Current availability of cannabis by location

Current availability of cannabis (%)	Auckland (n=245)	Wellington (n=134)	Christchurch (n=160)	Combined modules (n=539)
Very easy [1]	58%	64%	66%	62%
Easy [2]	35%	32%	30%	33%
Difficult [3]	6%	3%	4%	4%
Very difficult [4]	1%	1%	1%	1%
Average availability score (1=very easy – 4=very difficult)	1.5	1.4	1.4	1.4
Overall current status	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy / easy

6.3.2 Change in availability of cannabis

Seventy percent of the frequent drug users reported that the availability of cannabis was 'stable' (Table 6.2). The average score for the change in the availability of cannabis for all the frequent drug users was 2.0 which indicates that overall the availability of cannabis was 'stable'. Cannabis was judged to have become relatively easier to obtain in Wellington than in Auckland (1.9 vs. 2.0, p=0.0183).

Table 6.2: Change in availability of cannabis by location

Change in availability of cannabis (%)	Auckland (n=243)	Wellington (n=133)	Christchurch (n=159)	Combined modules (n=535)
Easier [1]	8%	12%	9%	9%
Stable [2]	66%	66%	79%	70%
Fluctuates [2]	14%	17%	5%	12%
More difficult [3]	13%	5%	7%	9%
Average change in availability score (1=easier – 3=more difficult)	2.0	1.9	2.0	2.0
Overall recent change	Stable	Stable	Stable	Stable

6.4 Price of cannabis

6.4.1 Current price of cannabis

The median price paid for a 'tinny' (1.5 grams) of cannabis was $20 (Table 6.3). The median price paid for an ounce (28 grams) of cannabis was $300. There was no statistically significant difference in the mean price paid for a 'tinny' (p=0.2087) or an ounce of cannabis (p=0.25) between the three locations.

Table 6.3: Current median (mean) price for cannabis (NZD) by location, 2006

Current price of cannabis	Auckland	Wellington	Christchurch	Combined modules
Number with knowledge	n=182	n=100	n=154	n=436
Median (mean) price for a 'tinny' (1.5 grams)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)
Number with knowledge	n=117	n=55	n=104	n=276
Median (mean) price for an ounce (28 grams)	$300 ($300)	$300 ($304)	$300 ($310)	$300 ($304)

6.4.2 Change in price of cannabis

Seventy-eight percent of the frequent drug users reported that the price of cannabis was 'stable' (Table 6.4). The average score for the change in the price of cannabis for all the frequent drug users was 2.1, which indicates that overall the price of cannabis was 'stable'. The price of cannabis was reported to be increasing in Christchurch compared to Auckland (2.1 vs. 2.0, p=0.0055).

Table 6.4: Change in the price of cannabis by location

Change in price of cannabis (%)	Auckland (n=235)	Wellington (n=129)	Christchurch (n=158)	Combined modules (n=522)
Decreasing [1]	6%	3%	4%	4%
Stable [2]	80%	75%	77%	78%
Fluctuating [2]	9%	10%	4%	8%
Increasing [3]	5%	12%	15%	10%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.1	2.1	2.1
Overall recent change	Stable	Stable	Stable/ increasing	Stable

6.5 Purity of cannabis

6.5.1 Current purity of cannabis

Forty-nine percent of the frequent drug users described the current strength of cannabis as 'high' (Table 6.5). The average score for the current strength of cannabis for all the frequent drug users was 2.5, which indicates that overall the current strength of cannabis is 'high/medium'. There was no statistically significant difference in the average score for the strength of cannabis between the three locations (p=0.2191).

Table 6.5: Current purity of cannabis by location

Current purity of cannabis (%)	Auckland (n=238)	Wellington (n=129)	Christchurch (n=158)	Combined modules (n=525)
Low [1]	3%	3%	3%	3%
Medium [2]	16%	16%	12%	15%
Fluctuates [2]	34%	36%	30%	33%
High [3]	47%	44%	55%	49%
Average purity score (1=low – 3=high)	2.4	2.4	2.5	2.5
Overall current status	High/ medium	High/ medium	High/ medium	High/ medium

6.5.2 Change in purity of cannabis

Forty-eight percent of the frequent drug users reported that the strength of cannabis was 'stable', with 17% saying it was 'increasing' (Table 6.6). The average score for the change in the strength of cannabis for all the frequent drug users was 2.1, which indicates that overall the strength of cannabis was 'stable/increasing'. There was no statistically significant difference in the perceptions of the change in the strength of cannabis between the three locations (p=0.1126).

Table 6.6: Change in purity of cannabis by location

Change in purity of cannabis (%)	Auckland (n=233)	Wellington (n=128)	Christchurch (n=155)	Combined modules (n=516)
Decreasing [1]	4%	5%	5%	5%
Stable [2]	55%	50%	35%	48%
Fluctuating [2]	27%	29%	37%	30%
Increasing [3]	14%	16%	24%	17%
Average change in purity score (1=decreasing – 3=increasing)	2.1	2.1	2.2	2.1
Overall recent change	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing

6.6 Perceptions of the number of people using cannabis

Seventy-three percent of the frequent drug users thought 'about the same' number of people they know were using cannabis, 17% said 'more' people were using cannabis, and 10% said that 'less' people they know were using the drug (Table 6.7). The average score for all the frequent drug users for the question was 2.1 indicating that overall 'about the same' number of people were using cannabis compared to six months ago. There was considered to be an increase in the number of people using cannabis in Christchurch compared to Auckland (2.2 vs. 2.0, p=0.0159).

Table 6.7: Perceptions of the number of people using cannabis by location

Number of people using cannabis (%)	Auckland (n=245)	Wellington (n=135)	Christchurch (n=160)	Combined modules (n=540)
Less [1]	13%	9%	8%	11%
Same [2]	70%	73%	66%	70%
More [3]	16%	18%	26%	20%
Average number of people using score (1=less – 3=more)	2.0	2.1	2.2	2.1
Overall recent change	Same	Same	Same/ more	Same

6.7 Purchase

The frequent drug users were asked how frequently they had purchased cannabis and what dollar amount they typically spent on the drug on a single occasion. Fifty-eight percent of the frequent drug users who had purchased cannabis had done so weekly or more often (Table 6.8). The frequent drug users had spent a median of $40 on cannabis on a typical occasion. The frequent drug users paid a median price of $20 per 'tinny' and $300 per ounce of cannabis. A higher proportion of the frequent drug users in Christchurch than in Auckland had purchased cannabis weekly or more often (71% vs. 53%, p=0.0045). A higher proportion of the frequent drug users in Christchurch than in Wellington had purchased cannabis weekly or more often (71% vs. 50%, p=0.0045).

Table 6.8: Characteristics of cannabis transactions by location

Transactions	Auckland (n=178)	Wellington (n=104)	Christchurch (n=122)	Combined modules (n=404)
Purchased weekly or more often	53%	50%	71%	58%
Median amount spent on typical occasion (mean)	$40 ($154)	$50 ($372)	$33 ($71)	$40 ($120)
Median per 'tinny' (mean)	$20 ($21)	$20 ($20)	$20 ($20)	$20 ($20)
Median per ounce (mean)	$300 ($282)	$300 ($299)	$280 ($274)	$300 ($285)

6.8 Reliability of supply

Fifty-eight percent of the frequent drug users indicated that cannabis was 'always' available, with a further 39% saying it was 'mostly' available (Table 6.9). The supply of cannabis was considered to be more reliable in Christchurch compared to Auckland (4.6 vs. 4.4, p=0.0138).

Table 6.9: Reliability of supply of cannabis by location

Level of reliability	Auckland (n=180)	Wellington (n=104)	Christchurch (n=122)	Combined modules (n=406)
Never any available [1]	0%	0%	0%	0%
Hardly ever some available [2]	2%	0%	0%	1%
Sometimes some available [3]	4%	2%	2%	3%
Mostly some available [4]	43%	40%	31%	39%
Always some available [5]	52%	58%	66%	58%
Average score (1=never available – 5=always available)	4.4	4.6	4.6	4.5

6.9 Search time

The frequent drug users were asked how long it would take them to purchase cannabis if they wanted some. Forty-five percent of the frequent drug users could purchase cannabis in less than 20 minutes (Table 6.10). A higher proportion of the frequent drug users could purchase cannabis in less than 20 minutes in Christchurch than in Auckland (60% vs. 39%, p=0.0009). A higher proportion of the frequent drug users could also purchase cannabis in less than 20 minutes in Christchurch than in Wellington (60% vs. 36%, p=0.0009).

Table 6.10: Time taken to purchase cannabis by location

Time taken to purchase	Auckland (n=180)	Wellington (n=104)	Christchurch (n=121)	Combined modules (n=405)
Weeks	1%	0%	0%	<1%
Days	5%	6%	0%	4%
About a day	11%	5%	5%	7%
Hours	19%	22%	6%	16%
1 hour	26%	32%	29%	28%
Less than 20 minutes	39%	36%	60%	45%

7. Opiates

7.1 Introduction

The international supply of heroin into New Zealand was substantially disrupted in the late 1970s by successful drug enforcement operations (Newbold, 2000, New Zealand Customs Service, 2002). Three domestic sources of opiates subsequently emerged in New Zealand to replace the regular supply of imported heroin: (1) morphine sulphate tablets (MST or misties), (2) 'homebake heroin' (made from codeine-based tablets), and (3) opium (extracted from opium poppies) (New Zealand Customs Service, 2002). Interceptions of heroin intended for the New Zealand domestic market remain spasmodic despite the presence of a fairly large market for heroin in nearby Sydney (New Zealand Customs Service, 2002).

7.2 Knowledge of opiate trends

Thirty-nine percent of the frequent drug users interviewed (n=248) indicated they felt confident enough to comment on the price, purity and availability of opiates in the previous six months. This group included 25% of the frequent drug users living in Auckland (n=73), 35% of the frequent drug users living in Wellington (n=56) and 62% of the frequent drug users living in Christchurch (n=119).

7.3 Availability of opiates

7.3.1 Current availability of opiates

Forty-four percent of the frequent drug users described the current availability of opiates as 'easy' (Table 7.1). Thirty-eight percent of the frequent drug users described the current availability of opiates as 'very easy'. The availability of opiates was considered to be easier in Christchurch than in Wellington (1.7 vs. 2.2, p=0.0006).

Table 7.1: Current availability of opiates by location

Current availability of opiates (%)	Auckland (n=73)	Wellington (n=56)	Christchurch (n=117)	Combined modules (n=246)
Very easy [1]	41%	25%	42%	38%
Easy [2]	36%	39%	51%	44%
Difficult [3]	18%	30%	4%	14%
Very difficult [4]	5%	5%	3%	4%
Average availability score (1=very easy – 4=very difficult)	1.9	2.2	1.7	1.8
Overall current status	Easy/ Very easy	Easy/ Very easy	Easy/ Very easy	Easy/ Very easy

7.3.2 Change in availability of opiates

Sixty-seven percent of the frequent drug users reported that the availability of opiates was 'stable' (Table 7.2). The average score for the change in availability of opiates for all the frequent drug users was 2.0 which indicates that overall the availability of opiates was 'stable'. Opiates were considered to be becoming more difficult to obtain in Wellington than in Auckland (2.2 vs. 1.9, p=0.0255).

Table 7.2: Change in availability of opiates by location

Change in availability of opiates (%)	Auckland (n=71)	Wellington (n=54)	Christchurch (n=117)	Combined modules (n=242)
Easier [1]	18%	6%	12%	12%
Stable [2]	65%	63%	69%	67%
Fluctuates [2]	6%	9%	9%	8%
More difficult [3]	11%	22%	10%	13%
Average change in availability score (1=easier – 3=more difficult)	1.9	2.2	2.0	2.0
Overall recent change	Stable	Stable/ more difficult	Stable	Stable

7.4 Price of opiates

7.4.1 Current price of opiates

It is difficult to obtain a general price for opiates as the prices paid can refer to a range of different opiate types of varying purity and saleable quantities. Table 7.3 presents the prices reported paid for 100 milligrams of opiates. Frequent drug users in Auckland paid a lower mean price for 100 milligrams of opiates than frequent drug users in Christchurch ($86 vs. $101, p=0.0008). Frequent drug users in Auckland also paid a lower mean price for 100 milligrams of opiates than frequent drug users in Wellington ($86 vs. $102, p=0.0019).

Table 7.3: Current median (mean) price for opiates (NZD) by location

Current price of opiates	Auckland (n=35)	Wellington (n=38)	Christchurch (n=107)	Wellington (n=180)
Median (mean) price for 100 milligrams	$100 ($86)	$100 ($102)	$100 ($101)	$100 ($98)

7.4.2 Change in price of opiates

Seventy percent of the frequent drug users reported that the price of opiates was 'stable' (Table 7.4). The average score for the change in the price of opiates for all the frequent drug users was 2.0 which indicates that overall the price of opiates was 'stable'. The price of opiates was considered to be increasing in Christchurch compared to Auckland (2.1 vs. 1.9) and this was close to being statistically significant (p=0.0832).

Table 7.4: Change in the price of opiates by location

Change in price of opiates (%)	Auckland (n=61)	Wellington (n=53)	Christchurch (n=113)	Combined modules (n=227)
Decreasing [1]	15%	4%	14%	12%
Stable [2]	77%	81%	62%	70%
Fluctuating [2]	3%	9%	3%	4%
Increasing [3]	5%	6%	21%	13%
Average change in price score (1=decreasing – 3=increasing)	1.9	2.0	2.1	2.0
Overall recent change	Stable	Stable	Stable	Stable

7.5 Purity of opiates

7.5.1 Current purity of opiates

Fifty-one percent of the frequent drug users described the current purity of opiates as 'high' (Table 7.5). The average score for the current purity of opiates for all the frequent drug users was 2.5 which indicates that overall the purity of opiates is 'medium/high'. Opiates were reported to be currently more pure in Auckland than in Christchurch (2.6 vs. 2.4, p=0.0121).

Table 7.5: Current purity of opiates by location

Current purity of opiates (%)	Auckland (n=67)	Wellington (n=51)	Christchurch (n=105)	Combined modules (n=223)
Low [1]	3%	4%	8%	5%
Medium [2]	18%	35%	26%	26%
Fluctuates [2]	13%	16%	23%	18%
High [3]	66%	45%	44%	51%
Average purity score (1=low – 3=high)	2.6	2.4	2.4	2.5
Overall current status	High/ medium	High/ medium	Medium/ high	Medium/ high

7.5.2 Change in purity of opiates

Seventy-five percent of the frequent drug users reported that the purity of opiates was 'stable' (Table 7.6). The average score for the change in the purity of opiates for all the frequent drug users was 2.0 which indicates that overall the purity of opiates was 'stable'. There was no statistically significant difference in the average score for the change in the purity of opiates between the three locations (p=0.9348).

Table 7.6: Change in purity of opiates by location

Change in purity of opiates (%)	Auckland (n=64)	Wellington (n=56)	Christchurch (n=113)	Combined modules (n=233)
Decreasing [1]	2%	5%	9%	6%
Stable [2]	88%	84%	63%	75%
Fluctuating [2]	9%	7%	21%	15%
Increasing [3]	2%	4%	7%	5%
Average change in purity score (1=decreasing – 3=increasing)	2.0	2.0	2.0	2.0
Overall recent change	Stable	Stable	Stable	Stable

7.6 Perceptions of the number of people using opiates

Forty-two percent of the frequent drug users thought 'about the same' number of people they know were using opiates (Table 7.7). The average score for all the frequent drug users for the question was 2.1 indicating that overall 'about the same/more' number of people were using opiates compared to six months ago. There was a reported increase in the number of opiate users in Christchurch compared to Auckland (2.4 vs. 1.9, p=0.0003). There was also a reported increase in the number of opiate users in Christchurch compared to Wellington (2.4 vs. 1.8, p<0.0001).

Table 7.7: Perceptions of the number of people using opiates by location

Number of people using opiates (%)	Auckland (n=68)	Wellington (n=55)	Christchurch (n=118)	Combined modules (n=241)
Less [1]	31%	40%	12%	24%
Same [2]	46%	40%	41%	42%
More [3]	24%	20%	47%	34%
Average number of people using score (1=less – 3=more)	1.9	1.8	2.4	2.1
Overall recent change	Same/ Less	Same/ Less	Same/ more	Same/ more

7.7 Purchase

The frequent drug users were asked how frequently they had purchased opiates and what dollar amount they typically spent on the drug on a single occasion. Sixty-four percent of the frequent drug users who had purchased opiates had done so weekly or more often (Table 7.8). The frequent drug users had spent a median of $80 on opiates on a typical occasion. The frequent drug users had paid a median of $836 per gram of opiates. The frequent drug users in Auckland paid a lower mean price per gram of opiates than those in Christchurch ($732 vs. $913, p=0.0221).

Table 7.8: Characteristics of opiate transactions by location

Transactions	Auckland (n=48)	Wellington (n=37)	Christchurch (n=90)	Combined modules (n=175)
Purchased weekly or more often	54%	54%	73%	64%
Median amount spent on typical occasion (mean)	$100 ($235)	$80 ($101)	$75 ($104)	$80 ($140)
Median per gram (mean)	$800 ($732)	$833 ($791)	$1000 ($913)	$1000 ($836)

7.8 Reliability of supply

Forty-eight percent of the frequent drug users reported that opiates were ‘always’ available, with a further 41% saying they were ‘mostly’ available (Table 7.9). There was no statistically significant difference in the reliability of supply of opiates between the three locations (p=0.9189).

Table 7.9: Reliability of supply of opiates by location

Level of reliability	Auckland (n=45)	Wellington (n=36)	Christchurch (n=89)	Combined modules (n=170)
Never any available [1]	0%	0%	0%	0%
Hardly ever some available [2]	7%	0%	0%	2%
Sometimes some available [3]	9%	11%	9%	9%
Mostly some available [4]	24%	42%	49%	41%
Always some available [5]	60%	47%	42%	48%
Average score (1=never available – 5=always available)	4.4	4.4	4.3	4.3

7.9 Search time

The frequent drug users were asked how long it would take them to purchase opiates if they wanted some. Forty-two percent of the frequent drug users could purchase opiates in less than 20 minutes (Table 7.10). A higher proportion of the frequent drug users could purchase opiates in less than 20 minutes in Christchurch compared to Wellington (51% vs. 26%, p=0.0462).

Table 7.10: Time taken to purchase opiates by location

Time taken to purchase	Auckland (n=48)	Wellington (n=35)	Christchurch (n=90)	Combined modules (n=173)
Months	2%	0%	1%	1%
Weeks	4%	11%	0%	3%
Days	4%	11%	0%	3%
About a day	6%	20%	3%	8%
Hours	21%	23%	11%	16%
1 hour	27%	20%	32%	28%
Less than 20 minutes	35%	26%	51%	42%

8. Criminal behaviour

8.1 Property crime

Sixteen percent of the frequent drug users reported they had committed a property crime in the past month (Table 8.1). The frequent drug users from Christchurch were more likely than those from Wellington to have committed a property crime in the past month (23% vs. 15%, p=0.021).

Table 8.1: Frequency of property crime by location

Frequency of property crime	Auckland (n=287)	Wellington (n=159)	Christchurch (n=191)	Combined modules (n=637)
No property crime	85%	87%	77%	84%
Less than once per week	10%	7%	15%	11%
Once per week	3%	1%	2%	2%
More than once per week (not daily)	1%	3%	3%	2%
Daily	1%	1%	3%	1%

8.2 Drug dealing

Thirty-eight percent of the frequent drug users had sold illegal drugs in the past month (Table 8.2). The frequent drug users from Christchurch were more likely than those from Auckland to have sold illegal drugs in the past month (49% vs. 31%, p=0.0096).

Table 8.2: Frequency of selling illegal drugs by location

Frequency of selling illegal drugs	Auckland (n=286)	Wellington (n=160)	Christchurch (n=188)	Combined modules (n=634)
No drug dealing	69%	61%	51%	62%
Less than once per week	14%	17%	13%	15%
Once per week	6%	8%	12%	8%
More than once per week (not daily)	5%	6%	11%	7%
Daily	6%	8%	14%	9%

8.3 Fraud

Six percent of the frequent drug users had committed a fraud in the past month (Table 8.3). There was no statistically significant difference in the level of fraud committed by the frequent drug users between the three locations (p=0.951).

Table 8.3: Frequency of having committed fraud by location

Frequency of fraud	Auckland (n=288)	Wellington (n=160)	Christchurch (n=191)	Combined modules (n=639)
No fraud	94%	95%	94%	94%
Less than once per week	4%	3%	5%	4%
Once per week	1%	1%	1%	1%
More than once per week (not daily)	<1%	<1%	0%	<1%
Daily	<1%	0%	0%	<1%

8.4 Violent crime

Six percent of the frequent drug users reported they had committed a violent crime in the past month (Table 8.4). There was no statistically significant difference in the level of self reported violent crime between the three locations (p=0.5411).

Table 8.4: Frequency of committing a crime involving violence by location

Frequency of crime involving violence	Auckland (n=288)	Wellington (n=160)	Christchurch (n=191)	Combined modules (n=639)
No violent crime	94%	95%	92%	94%
Less than once per week	5%	5%	6%	5%
Once per week	1%	0%	1%	1%
More than once per week (not daily)	0%	0%	1%	<1%
Daily	0%	0%	0%	0%

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