# **New Zealand Police**

# NZ-ADAM

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# **ANNUAL REPORT 2006**

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# CONTENTS

Exec	CUTIVE SUMMARY	1
INTRO	ODUCTION	6
2.1	International Programmes	6
2.2	The NZ-ADAM Programme	7
2.3	Scope of this Report	8
Ουτι	INE OF ACTIVITIES	10
3.1	Development and Preparation	10
3.2	Data Collection	11
3.3	Report Production	13
3.4	Future Directions	13
Resu	LTS ACROSS ALL SITES JULY 2005 - JUNE 2006	15
4.1	Introduction	15
4.2	Programme Throughput and Participation	15
4.3	Participant Profile	17
4.4	Requests for Urine Samples and Urinalysis Results	27
4.5	Self-Reported Drug Use	
4.6	Reported Drug Use and Criminal Activities	
4.7	Acquiring Drugs	
4.8	Selling Drugs	53
NZ-A	ADAM AND DUMA COMPARISONS	58
5.1	Introduction	58
5.2	Profile of Participants	58
5.3	Drug Use Among Detainees	59

# **A**PPENDICES

Appendix A	Shift Summaries, 2005-2006
Appendix B	NZ-ADAM QUESTIONNAIRE



# TABLES

Table 1: Detainees' Eligibility and Participation in NZ-ADAM	17
Table 2: First Offence Recorded, Participating and Non-participating Detainees	26
Table 3: Comparison of Urinalysis Results and Self-Reported Drug Use	40
Table 4: First Recorded Offence by Self-Reported Drug Use in the Past 12 Months	43
Table 5: First Recorded Offence by Self-Reported Drug Use in the Past 30 Days	
Table 6: First Recorded Offence by Self-Reported Drug Use in the Past 48 Hours	45
Table 7: Comparative Age Profile between DUMA and NZ-ADAM	58
Table 8: Comparative Educational Status between DUMA and NZ-ADAM	59
Table 9: Mean Age of First Drug Use	60
Table 10: Drugs Acquired in Past 30 Days, NZ-ADAM and DUMA	61
Table 11: Current First Recorded Offence Committed by NZ-ADAM and DUMA Participants	(%)62
Table 12: Offence Committed by Self-Reported Drug Use in previous 30 days for NZ-AE DUMA	AM and



# FIGURES

Figure 1: Programme Throughput and Participation16
Figure 2: Detainee and Participant Gender
Figure 3: Participant Age Profile (n=961)18
Figure 4: Participants' Marital Status (n=960)19
Figure 5: Participants' Principal Ethnicity (n=960)19
Figure 6: Participants' Highest Educational Level Achieved (n=965)20
Figure 7: Participants' Employment Status (n=965)20
Figure 8: Participants' Type of Work (n=442)21
Figure 9: Sources of Income in Past 30 Days (n=965)21
Figure 10: Government Benefits Received by Participants (n=965)22
Figure 11: Participants' Place of Residence last 30 Days (n=965)23
Figure 12: Number of Persons Living in Participants' Households (n=965)
Figure 13: Participants' Number of Dependent Children (n=965)24
Figure 14: Most Recent Drug or Alcohol Treatment Programme Attended by Participants Who Reported Previous Treatment Programme Attendance (n=336)
Figure 15: First Offence Recorded for Current Episode of Detention (n=965)25
Figure 16: Number of Previous Arrests in Last 12 Months (n=960)27
Figure 17: Urine Sample Provision (n=965)
Figure 18: Proportion of Participants Who Provided a Urine Sample Testing Positive to Drugs (n=557) 
Figure 19: Types of Illicit Drugs Testing Positive (n=557)
Figure 20: Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=557)
Figure 21: Whangarei - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=144)
Figure 22: Henderson - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=175)
Figure 23: Hamilton - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=113)
Figure 24: Dunedin - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=125)
Figure 25: Proportion of Participants Who Provided a Urine Sample Testing Positive to Cannabis by Site – Time Series

Figure 26: Proportion of Participants Who Provided a Urine Sample Testing Methamphetamines by Site – Time Series	Positive to 
Figure 27: Types of Drugs Ever Used, Used in Last 30 Days and Last 48 Hours (n=965)	33
Figure 28: Number of Drugs Ever Used (n=965)	34
Figure 29: Age at which Drugs First Tried	34
Figure 30: Number of Days Drugs Used in the Past 30 Days	35
Figure 31: Key Characteristics of Cannabis and Methamphetamine Users	36
Figure 32: Proportion of Participants Using Drugs in the Past 30 Days – Time Series	37
Figure 33: Whangarei - Proportion of Participants Using Drugs in the Past 30 Days - Time S	Series37
Figure 34: Henderson - Proportion of Participants Using Drugs in the Past 30 Days - Time S	Series38
Figure 35: Hamilton - Proportion of Participants Using Drugs in the Past 30 Days - Time Set	ries38
Figure 36: Dunedin - Proportion of Participants Using Drugs in the Past 30 Days - Time Ser	ies39
Figure 37: Reported Dependence on Drugs in Last 12 Months (n=965)	40
Figure 38: Impact of Drugs on Anger	41
Figure 39: Driving Under the Influence of Drugs	42
Figure 40: Reported Drug Use at Time of Arrest (n=965)	46
Figure 41: Contribution of Drug Use to Current Criminal Activity	47
Figure 42: Offending Caused by Need to Buy Drugs (n=960)	47
Figure 43: Amount Spent on Illicit Drugs in Past 30 Days (n=960)	48
Figure 44: Drugs Acquired in Past 30 Days (n=965)	48
Figure 45: Proportion of Participants Acquiring Drugs in Past 30 Days - Time Series (n=965	)49
Figure 46: Whangarei - Proportion of Participants Acquiring Drugs in Past 30 Days - Time	Series50
Figure 47: Henderson - Proportion of Participants Acquiring Drugs in Past 30 Days - Time	Series50
Figure 48: Hamilton - Proportion of Participants Acquiring Drugs in Past 30 Days - Time Se	ries51
Figure 49: Dunedin - Proportion of Participants Acquiring Drugs in Past 30 Days - Time Se	ries51
Figure 50: Method of Contact to Acquire Drugs	52
Figure 51: Location Where Drugs Last Acquired	53
Figure 52: Proportion of Participants Selling Drugs (n=957)	53
Figure 53: Proportion of Participants Selling Drugs – Time Series	54
Figure 54: Whangarei - Proportion of Participants Selling Drugs – Time Series	54
Figure 55: Henderson - Proportion of Participants Selling Drugs – Time Series	55
Figure 56: Hamilton - Proportion of Participants Selling Drugs – Time Series	55
Figure 57: Dunedin - Proportion of Participants Selling Drugs – Time Series	56
Figure 58: Perceived Risks and Violence of Illicit Drug Markets (n=958)	57

# 1

# **EXECUTIVE SUMMARY**

#### The NZ-ADAM Programme

New Zealand Arrestee Drug Abuse Monitoring (NZ-ADAM) is a programme which seeks to measure drug and alcohol use among people who have recently been apprehended by police. NZ Police obtained funding for a one-year initial pilot of NZ-ADAM at four sites (Whangarei, Henderson, Hamilton and Dunedin), to be followed by a three-year extension should the pilot prove to be successful and useful. Health Outcomes International (HOI) was contracted by NZ Police to conduct the pilot. The programme is managed from the Office of the Commissioner and is informed by a multi-agency Advisory Committee comprising members from Ministry of Health, Ministry of Justice, Department of Corrections, Accident Compensation Corporation, Alcohol Advisory Council and NZ Police. Data collection for the NZ-ADAM pilot programme commenced at Henderson on 18 April 2005, followed by Whangarei on 21 April 2005, Dunedin on 7 July 2005 and Hamilton on 12 July 2005.

Potential participants in the NZ-ADAM programme comprise all persons detained at the participating watch houses at the time the interviewers are present, except those who meet the following exclusion criteria:

- Persons less than 17 years of age.
- Persons unfit for interview due to the effects of alcohol/drugs/medication.
- Persons considered unsuitable to participate due to mental health issues.
- Persons unable to complete the interview due to language difficulties.
- Persons considered to possess violent tendencies.
- Persons who have been held in custody in excess of 48 hours.
- Persons deemed ineligible for other reasons at the discretion of watch house personnel.

This is the first annual report for NZ-ADAM and covers the operation of the first full year of the NZ-ADAM programme in which all four participating sites (Whangarei, Henderson, Hamilton and Dunedin) were covered. Data collection for this period commenced on 1 July 2005 and continued through to 30 June 2006.

#### **Programme Throughput and Participation**

A total of 2,206 detainees were available to participate in the NZ-ADAM data collection process throughout the year. Of these, 965 met the inclusion criteria and agreed to be interviewed and 950 completed the entire interview process. A total of 561 (59%) interviewees agreed to provide a urine sample, and of these 557 provided samples acceptable for analysis.

The proportion of available detainees who proceeded to interview varied across the four sites, from 35% at Henderson to 58% at Dunedin. Reasons for the variation in participation rates included such factors as detainee profiles, how busy the watch house was at the time the interviewers were present and watch house staff attitudes towards the study.

#### Demography

Of the 965 interviewees, 84.7% were male and 14.8% were female, mean age 27.5 years (males 27.1 years, females 29.5 years). The majority (60.9%) reported that they were single and had never married (61.7% of males and 55.9% of females). Forty-seven percent reported being New Zealand Mäori, 37.3% identified as New Zealand European/Pakeha and 4.5% as Samoan. Thirty-eight percent had completed some high school but did not complete compulsory years, and 28% completed compulsory high school. Almost 35% were working in full-time employment and a

further 11% were working part-time, whilst 26% were unemployed but looking for work and 8% were unemployed and not looking for work.

#### **Employment and Income**

The majority (56.8%) of respondents who were employed (either full-time or part-time) worked as manual workers/labourers and a further 25.3% worked as craftsmen/skilled tradesmen.

The most common sources of income in the 30 days prior to detention were welfare or government benefits (44% of respondents), family or friends (41%), and full-time work (36%). Of all sources of income identified, 21% related to illegal activities.

Almost one quarter (24.5%) of participants had received Unemployment Benefits in the last 12 months and 14.7% had received Sickness or Invalids Benefits. However, almost half (43.5%) reported not having received any government benefits in the past 12 months.

#### Living Arrangements

Almost half (49.5%) of participants reported having lived in someone else's house or apartment most of the time in the last 30 days, whilst 44.1% reported living in their own house or apartment. Just over half of those interviewed (53.6%) reported that between 3 and 5 persons lived in their household, including themselves. Eighteen percent indicated that they lived in a household of 6 to 10 people and a further 17.4% lived with one other person. Almost two-thirds (65.3%) reported that they had no dependent children, 29.6% reported having between 1 and 3 dependent children and 4.9% reported having more than 4 dependent children.

## Drug and Alcohol and Psychiatric Hospital Treatment

The responses indicate that 35% of those interviewed had at some time participated in drug or alcohol treatment programmes and that 5% were currently participating in a treatment programme. Of the 336 participants who reported that they were not currently, but had previously, participated in a treatment programme, 34% reported they had most recently participated in a Rehabilitation Programme/Therapeutic Community, 25% reported attendance at an Outpatient/Counselling Programme, and 16% reported membership of a Support Group. Among those interviewed, 8.1% reported having previously been a patient in a psychiatric ward or hospital for an overnight stay or longer.

#### Offending

The most common first recorded charge was "Offence against Justice", 38.8% of all interviewees being charged with this offence, which includes "Breach of Bail". Other first recorded offence types were "Serious Assaults" (10.1% of participants) and "Theft" (8.8%).

Just over one third (34%) of those interviewed reported that they had not been arrested at all during the previous 12 months; 51% reported having been arrested between 1 and 5 times; and 10% report having been arrested between 6 and 10 times. Almost 4% reported having been arrested more than 10 times in the previous 12 months.

#### Positive Drug Tests

Of the 557 participants who provided a usable urine sample, 406 (73%) tested positive to one or more illicit drugs. Urinalysis indicated that 59% of the participants providing a usable sample tested positive to one drug, 11% tested positive to two drugs, 2% tested positive to three drugs and 1% tested positive to more than three drugs.

Cannabis was the most commonly detected illicit drug, 69% of the samples testing positive to cannabinoids. Methamphetamines were the second most commonly detected drug (12%). A range of other substances were detected at rates below 2%.

Further investigation of the urinalysis results indicates the following with regard to individual sites:

• In Whangarei there has been a slight downward trend in the prevalence of cannabis use but an increase in methamphetamine use. Whangarei had the second highest detection rate for cannabis.

- In Henderson, all main drugs exhibited downward trends in use. Henderson was the only site where positive detection of heroin is greater than 2%. This site also had the lowest detected rate of cannabis but the highest detection rate for methamphetamines.
- Hamilton exhibited an upward trend in cannabis use with methamphetamine use relatively constant. This site had the highest detection rate for cannabis, but one of the lowest detection rates for methamphetamines.
- Dunedin exhibited a steady rate of cannabis use but an increase in the detection of tranquilisers. Dunedin is the only site to show a positive detection rate for tranquilisers greater than 2%, but less than 2% for methamphetamines.

## Self-Reported Drug Use

Only 1% of those interviewed reported that they had never tried any drug, including alcohol, and only 5% reported having tried only one drug. Just over a quarter (27%) reported having tried two drugs, but the majority (68%) reported having tried three or more drugs. Alcohol and cannabis had almost universally been tried, by 99% and 94% of participants respectively, and were also the most commonly used drugs in the 30 day and the 48 hour periods preceding detention. Whilst hallucinogens had been tried by more participants (52%) than methamphetamines (48%), amphetamines (38%) or ecstasy (30%), methamphetamines were reported to have been used by more participants (24%) in the last 30 days than hallucinogens and amphetamines (6%) or ecstasy (5%). 9% of participants reporting having used methamphetamine in the 48 hours prior to detention, making it the third most commonly used drug after alcohol and cannabis during this time period.

Of those who had ever tried alcohol, 93% reported having first tried it under the age of 18 years; 89% of those who had ever tried cannabis also reported having first tried it aged less than 18 years. Similarly, large proportions of those who had ever tried hallucinogens (65%), amphetamines (53%), tranquilisers (50%), cocaine (48%), or heroin (46%) had done so for the first time aged under 18 years. Conversely, methamphetamines and methadone were most commonly first tried at over 20 years of age (43% and 46% respectively). First use of ecstasy was evenly distributed across the three age groups.

Alcohol was used by 779 participants at some time during the past 30 days, making it the most widely used drug, but cannabis (used by 694 participants) was the most frequently consumed drug, 59% of users reporting use on 11 or more days out of the last 30 (45% reported using on at least 21 days). Methamphetamines were reportedly used by a relatively large number of participants (227) and also relatively frequently, 34% of users reporting use on 11 or more days in the last 30.

An analysis of the demographic and other characteristics of those who reported the use of cannabis or methamphetamine in the previous 30 days indicated that methamphetamine users had the following characteristics compared to cannabis users:

- A lower proportion are male (77% compared to 86%);
- Are more likely to be of Maori descent (80% compared to 52%);
- Are less likely to be working full-time (24% compared to 32%);
- Used for the first time at an older average age (22 years compared to 13 years of age);
- Used less often in the last month (on 10 days compared to 17 days); and
- Are more likely to sell drugs to others (12% compared to 5% of users).

Site specific analyses indicate that:

- In Whangarei, cannabis use exceeded alcohol use in the most recent quarter, although both were showing a slight downward trend, as was self-reported methamphetamine use.
- Henderson demonstrated a convergence between the self-reported use of alcohol and cannabis, with both trending slightly downwards. Reported use of methamphetamines was relatively constant over the period.
- Hamilton reported an upward trend in the reported use of both cannabis and alcohol over the year, but a slight downward trend in reported methamphetamine use.

• Dunedin recorded a convergence between reported alcohol use and cannabis use, with the former trending down and the latter trending upwards. Self-reported methamphetamine use was very low.

#### Corroboration of Self Reported Drug Use and Urinalysis Results

The corroboration of self-reported drug use and positive urinalysis results was highest for cannabis, 94% of those testing positive also reporting use in the previous 30 days, and 68% reporting use in the previous 48 hours. Among those who tested positive for methamphetamines the corresponding figures were 81% and 54% respectively.

#### Drug Dependence

Overall, 39% of all participants reported having felt dependent on at least one drug (including alcohol) in the past 12 months. A quarter (25%) of participants indicated that they had felt dependent on cannabis in the past 12 months, whilst 15% reported a dependence on alcohol and 8.5% reported a dependence on methamphetamines.

#### **Drugs and Anger**

The drugs most frequently reported to make users more or much more likely to get angry were methamphetamines, alcohol, and amphetamines. Cannabis, methadone and heroin were the drugs most frequently reported to make users less or much less likely to get angry.

#### Reported Drug Use and Criminal Activities

Of the 367 participants detained for an offence "Against Justice" (mainly breach of bail), 90% reported using alcohol in the previous 12 months, 83% reported using cannabis in the previous 12 months and 39% reported using methamphetamines in the previous 12 months, 80% reported using alcohol in the previous 30 days, 77% reported using cannabis in the previous 30 days and 23% reported using methamphetamines in the previous 30 days.

Fifty-one percent of participants reported that they had been using at least one drug at the time of their arrest. Thirty-seven percent reported using cannabis, 21% reported using alcohol and almost 7% reported using methamphetamines.

More than 50% of users of all drugs other than cannabis indicated that their drug use had contributed to their involvement in criminal activity at least a little. Twenty-five percent of cannabis users reported that their drug use contributed to between "some" and "all" of their criminal activities.

Nearly half (49%) of participants reported that "none at all" of their criminal offending was caused by the need to buy illegal drugs and a further third (33%) responded that they did not commit criminal offences to obtain money. However, 17% of participants reported that their offending was caused to some degree by their need to buy illegal drugs.

#### **Buying and Selling Drugs**

Half (50.4%) of the participants reported that they had not spent any money on illicit drugs in the 30 days prior to their detention. However, 18% reported spending \$100 or less; 7% spent between "\$101 and \$200"; 10% spent between "\$201 and \$500"; and 7% spent between "\$501 and \$1,000". A small minority, 3.5%, claimed to have spent over \$2,000 on illicit drugs in the past 30 days.

Among all participants, 737 (76%) reported that they had acquired (but not necessarily paid for) illicit drugs in the 30 days prior to their detention. A majority (73%) reported having acquired cannabis during this period, 25% reported acquiring amphetamines (including methamphetamines), 6% had acquired ecstasy and 3% heroin. Site specific analyses indicate that:

- Whangarei experienced a slight decline in all drugs acquired during the year, particularly amphetamines.
- Henderson experienced a decrease in cannabis acquired during the year, heroin and ecstasy also displaying small declines. Amphetamine acquisition was relatively constant.
- Hamilton experienced a decline in amphetamine acquisition, and to a lesser extent in ecstasy and heroin acquisition. Cannabis acquisition was relatively constant.

• Dunedin experienced an increasing trend in cannabis acquisition, with other drug acquisition rates remaining relatively constant or showing small declines.

The site specific data highlight the fact that drug use and drug acquisition tend to be localised activities occurring in markets that are subject to local conditions and influences.

Visiting a house or flat was the most common method of acquiring cannabis (55% acquired by this method) ecstasy (27%) and amphetamines (including methamphetamines) (33%). Contacting a supplier by mobile phone was also relatively common, 35% of amphetamines, 36% of ecstasy and 15% of cannabis being acquired via this method of contact. A private house or flat was the main location at which drugs were acquired across all drug types, particularly amphetamines.

Eleven percent of all participants reported having sold cannabis, 5.6% reported having sold amphetamines (including methamphetamines) and 1% reported having sold ecstasy. Less than 1% of respondents reported having sold heroin.

- Selling drugs was reported to present more risks from Police activity than buying in all drug markets.
- The amphetamine market was reported to involve the greatest risk from Police activities whether buying or selling and to be the most violent illegal drug market.
- Buying cannabis was reported to be the drug-related transaction at least risk from Police activities.
- The cannabis and ecstasy markets were perceived to be the least violent of the four drug markets.



# INTRODUCTION

New Zealand Arrestee Drug Abuse Monitoring (NZ-ADAM) is a programme which seeks to measure drug and alcohol use among people who have recently been apprehended by police. NZ Police obtained funding for a one-year initial pilot of NZ-ADAM at four sites (Whangarei, Henderson, Hamilton and Dunedin), followed by a three-year extension should the pilot prove to be successful and useful. Health Outcomes International (HOI) was contracted by NZ Police to conduct the pilot. The programme is managed from the Office of the Commissioner and is informed by a multi-agency Advisory Committee comprising members from Ministry of Health, Ministry of Justice, Department of Corrections, Accident Compensation Corporation, Alcohol Advisory Council and NZ Police.

This is the first annual report for NZ-ADAM, covering the period from 1 July 2005 to 30 June 2006. Whilst the programme commenced in April 2005 in Whangarei and Henderson, the 12 month period covered in this report represents the first full year in which all four sites were included in the programme.

# 2.1 INTERNATIONAL PROGRAMMES

Equivalent arrestee drug use monitoring systems operate in around 14 other countries, including the Drug Use Monitoring in Australia (DUMA) programme, and the United Kingdom's New England and Wales Arrestee Drug Abuse Monitoring Research (NEW-ADAM). Collectively, the different national variations of such research projects form the International Arrestee Drug Abuse Monitoring (I-ADAM) programme. I-ADAM was developed in response to recognition of the gaps in information sources about illicit drug use patterns among the offender population.

I-ADAM involves independent researchers interviewing persons held in police custody to determine patterns of drug use, and corroborating the interview information on drug usage with forensic testing of urine samples. The samples are tested by an independent laboratory for the prior use/presence of six illicit drugs (cocaine, opiates, cannabis, methadone, benzodiazepines and amphetamines).

Other key elements of I-ADAM are that:

- Participation is voluntary (in most sites, more than 80% of detainees approached agree to the interview and, of those, about 70% agree to give urine specimens);
- Participation is confidential (i.e. names and addresses of those participating are not kept, and assurances are given that responses/results will not be used in any subsequent proceedings); and
- Data are presented in aggregate form only.

Data from I-ADAM are used to examine issues such as the relationship between drugs and property crime or violent crime, to monitor patterns of drug use over time, and to help assess the need for drug treatment among the apprehended offender population. By providing insight into drug use patterns, I-ADAM provides a powerful tool for policymakers, and is used by law enforcement agencies for monitoring and resource allocation purposes. For example, access to aggregated data about the level of illicit drug use in the offender population can help in evaluating the effectiveness of specific policy initiatives, such as crackdowns on particular local drug markets.

# 2.2 THE NZ-ADAM PROGRAMME

# 2.2.1 OVERVIEW

New Zealand's participation in the I-ADAM programme is seen as an important way for Police to monitor drug trends in New Zealand and to assess the impact of illicit drug use on different types of criminal behaviour. The inclusion of alcohol in the programme also enables Police to assess its impact on criminal behaviour.

The **aims** of the New Zealand Arrestee Drug Abuse Monitoring (NZ-ADAM) programme are to:

- Collect illicit drug and alcohol prevalence data from offenders at selected sites in New Zealand;
- Improve the quality of data available on illicit drug and alcohol use in the offender population;
- Provide aggregated data in a timely fashion to New Zealand law enforcement agencies on the level of alcohol and illicit drug use within the offender population;
- Establish a mechanism whereby local and national law enforcement agencies can evaluate policy initiatives; and
- Provide an early warning system for changes in patterns of illicit drug use among the offender population.

The key **objectives** of the NZ-ADAM pilot include:

- Gathering information about arrestees' alcohol and other drug use prior to their apprehension by police;
- Corroborating self-reported information about the link between substance use and offending with urinalysis results;
- Profiling drug use and criminal activity;
- Gathering information regarding the sources and means employed to acquire illicit drugs;
- Gathering information on the perceived risks from Police activity of buying and selling drugs and the perceived violence associated wioth the four key drug markets; and
- Preparing quarterly reports, and a final overview report, on the results of the research cycles and the overall usefulness of the NZ-ADAM model in New Zealand.

The key **outcomes** sought from the NZ-ADAM pilot include:

- Improved quality of (aggregated) data available on alcohol and other drug use among the offender population;
- Greater responsiveness of law enforcement agencies to emerging trends, based on a more sophisticated understanding of the drug-crime nexus; and
- An increased knowledge base upon which to base policy development and resourcing decisions in related areas (e.g. the treatment services sector).

Data from NZ-ADAM are used to examine issues such as the relationship between drugs and property and violent crime, to monitor patterns of drug use over time, and to help assess the need for drug treatment amongst the offender population. NZ-ADAM is expected to be an invaluable aid to community planning, monitoring, and resource allocation and represents an important source of data for NZ policy makers. Data collected through NZ-ADAM sites also provide a research and evaluation tool for local analysts, policymakers and practitioners.

# 2.2.2 ELIGIBILITY CRITERIA

Potential participants in the NZ-ADAM programme comprise all persons detained at the participating watch houses at the time the interviewers are present, except those who meet the following exclusion criteria:

- Persons less than 17 years of age.
- Persons unfit for interview due to the effects of alcohol/drugs/medication.
- Persons considered unsuitable to participate due to mental health issues.

- Persons unable to complete the interview due to language difficulties.
- Persons considered to possess violent tendencies.
- Persons who have been held in custody in excess of 48 hours.
- Persons deemed ineligible for other reasons at the discretion of watch house personnel.

# 2.2.3 INTERVIEW PROCESSES

Interviewers attend the watch houses on a rotating shift basis covering approximately twelve hours per week at each site throughout the quarter. The shifts are scheduled to include every day of the week and a range of hours across each day to ensure completeness of coverage.

The interview process is as follows:

- Watch house officers assess each detainee to determine if they should be excluded from the study on the basis of any of the above criteria.
- All detainees who do not meet any of the exclusion criteria are escorted by police, one at a time at appropriate intervals, to a secure and private interview room. The researchers then explain the purpose and content of the study and the ethical processes in place. The detainee is advised that participation in the study is voluntary and that participation in the interview does not imply consent to provide a urine sample. The detainee is given an information sheet (jointly signed by the Research Director and the Commissioner of Police) which guarantees the confidentiality and the integrity of the research process.
- Detainees who agree to participate are asked to sign a consent form. Detainees who decline to participate are escorted back to the cells.
- The interview commences once the consent form is signed. The researcher asks each question in the questionnaire in turn and the participants' answers are recorded on a response form which preserves the participants' anonymity. If it becomes apparent at any time during the interview that the participant is in need of referral to a support service (e.g. because of mental health or drug/alcohol issues), then contact information for an appropriate agency is provided to them.
- On completion of the interview the participant is asked to provide a urine sample. Consenting participants are then escorted to a bathroom to produce the sample. The sample pot is bar-coded with the same identification number as the survey form to enable subsequent matching of the results. Participants who do not consent to provide a urine sample are escorted back to the cells at the completion of the interview.

Participants are offered a non-alcoholic drink and a snack at the completion of the process and can take these when they are escorted back to the cells.

# 2.3 SCOPE OF THIS REPORT

This report covers the operation of the first full year of the NZ-ADAM programme in which all four participating sites (Whangarei, Henderson, Hamilton and Dunedin) were covered. Data collection for this period commenced on 1 July 2005 and continued through to 30 June 2006.

Section 2 presents an outline of the main activities undertaken to date in gaining ethics approval for the study, recruiting and training research staff, and establishing and maintaining the data collection processes at the nominated sites. Comments in regard to the data collection and quality assurance processes are also provided, together with suggestions for future considerations of pertinent issues in these areas.

Section 3 presents aggregated quantitative data across the four sites for the year 1 July 2005 to 30 June 2006, together with selected data for the individual participating sites. In presenting these data, we have provided a wide selection of the outputs from the collection, covering each of the main subject areas and the majority of questions included in the questionnaire. The results are presented in both tabular and graphical form.

Section 4 presents some comparative data for NZ-ADAM for the 12 months to 30 June 2006 and DUMA for the calendar year 2005.

Appendix A presents data on the presence of NZ-ADAM interviewers at the respective watch houses and the participation rates achieved.

Appendix B presents a copy of the NZ-ADAM questionnaire used during the study period covered herein.



# **OUTLINE OF ACTIVITIES**

# 3.1 DEVELOPMENT AND PREPARATION

The first phase of the NZ-ADAM programme commenced in November 2004. A range of research tasks were undertaken which culminated in the development of an options paper exploring the NZ-ADAM methodology and associated requirements. At the inaugural meeting of the NZ-ADAM Advisory Committee (on 15 December 2004) the Committee discussed each of the issues presented, and as a result NZ Police made the following decisions:

- The four sites to host the NZ-ADAM pilot programme would be Whangarei, Henderson, Dunedin and Hamilton.
- The Multi-Regional Ethics Committee (MREC) was identified as the appropriate ethics committee from which to seek ethics approval for the pilot programme (approval was ultimately obtained from the MREC in April 2005).
- The content of the NZ-ADAM questionnaire was to be based on the Australian DUMA instrument, with changes reflected in the NZ instrument trialed in 2005 by SHORE to be given consideration. Questionnaire content was subsequently agreed upon prior to submission to the MREC.
- Data collection would occur on a continuous (rather than periodic) basis and would commence once ethics approval was obtained, the first quarter anticipated as being 1 April to 30 June 2005.
- The recruitment of interviewers would be conducted in the manner preferred by HOI.
- Advanced technology would not be considered for use in data collection until the research programme was operating efficiently and would then only be trialed in one or two sites at a time.
- ESR was selected to perform the urine testing for all four sites.

NZ Police approved a progressive roll-out of the NZ-ADAM pilot programme, commencing with Whangarei and Henderson in the quarter April to June 2005, to be followed by Dunedin and Hamilton in the quarter July to September 2005.

Initial recruitment of interviewers was undertaken in early March 2005 for the first two sites and in early May 2005 for the remaining two sites. Two candidates were employed at each site after passing the necessary Police checks. In-house training was conducted for all selected interviewers immediately prior to the commencement of data collection.

A continual focus in the lead up to the implementation of the pilot programme was liaison with the local Police at each site to ensure that they were briefed about the status of the programme and were ready to host it.

Initial site visits to Whangarei and Henderson were made in December 2005 and to Dunedin and Hamilton in March 2006. Senior HOI personnel made further visits to each site at the time the data collection processes were implemented.

Communication with local Police between site visits was maintained via email and telephone. The cooperation and support from local Police personnel at all levels has been extremely good and has been a major contributing factor to the successful implementation of the programme to date.

Extensive programme documentation has been developed to assist interviewers in the conduct of their duties and as part of the quality assurance processes established for the programme. In

addition, a step-by-step summary of the process ("Standard Operating Procedures for Site Personnel") was prepared for Police at each site.

# 3.2 DATA COLLECTION

Data collection for the NZ-ADAM pilot programme commenced at Henderson on 18 April 2005, followed by Whangarei on 21 April 2005, Dunedin on 7 July 2005 and Hamilton on 12 July 2005. During the first few shifts at each site the on-site trainer (who has extensive experience in the DUMA collection in Australia) briefed as many Police Officers as possible about the programme and introduced them to the interviewers. The trainer also supervised each interviewer in their first few days on the job, providing immediate feedback designed to improve their technique and process. This process has also been followed whenever a new interviewer commenced.

# 3.2.1 DATA COLLECTION PROCESSES

Data collection processes have been established across all four participating sites, and have been found to be working effectively, as reflected by the fact that participation targets have been met or exceeded, together with the quality of the data collected. Feedback provided by Police liaison officers at each site indicates that the NZ-ADAM interviewers have fitted in well with the routine operations of the watch houses and their presence has become part of the normal watch house environment. Wherever any issues have arisen, (and these have been few and of a relatively minor nature), contact has been made with the liaison officer to address the issue immediately.

One of the differences between the NZ-ADAM approach and the Australian DUMA approach is that NZ-ADAM allows for continuous data collection, whereas DUMA conducts its data collection over a three-week period within each quarter. NZ-ADAM interviewers are required to ensure that their presence in the watch house provides cover over each day of the week, as well as time of day for each quarterly reporting period. They also need to cater for the workload of the watch house and the most suitable timing for their presence to coincide with the peaks and flows of that workload. Interviewers submit their proposed shifts in advance of each month to ensure that these requirements are met. This strategy is designed to maximise the representativeness of the sample.

Details of the shifts when interviewers have attended the watch houses, the number of detainees available and those participating in the NZ-ADAM programme are presented in Appendix A. Overall, the data illustrates that there has been good coverage across time of day: 26% of interviewer shifts were between 6am and midday; 31% between midday and 6pm; and 43% between 6pm and midnight (no shifts are conducted between midnight and 6am, as the watch house throughput decreases during this period and these detainees can generally be interviewed during the following morning shift). The distribution of shifts across day of the week is fairly evenly distributed, ranging from 11% of total shifts on Mondays to 18% on Sundays.

This profile is fairly consistent across all sites, with the exception of Whangarei, where specific data collection procedures have had to be adopted, due to the nature of the physical environment of the watch house. The only room suitable for the NZ-ADAM interview is out of sight of watch house staff, and has restricted exit points. For safety reasons, the data collection process therefore requires two interviewers to be present at each interview (one as an observer). This has placed restrictions on the days and times that interviewers have been able to attend the watch house. Notwithstanding these restrictions, Whangarei has met its target of 200 completed interviews during the year. We understand that a new watch house is proposed for Whangarei but its timing is uncertain.

Each site has a target of 200 completed interviews over the year, a target that has been exceeded by all sites. As illustrated in the following section, a total of 950 interviews were completed across all sites during the 12 month period, exceeding the target of 800 by 19%.

One of the significant advantages of a continuous data collection approach rather than the periodic collection approach used in DUMA is the capacity to attract and retain high quality interviewers. In DUMA, their experience has shown that finding experienced and appropriate staff for data collection when the project only runs for three weeks out of every twelve is particularly difficult. There are not many people available for intense bursts of data collection, followed by weeks of no work. Continuous data collection has allowed NZ-ADAM to build up a team of regular

interviewers who work part-time elsewhere or undertake study. The offer of a regular work pattern attracts good quality candidates. Staff turnover has been relatively low, with those leaving mainly due to work commitments or for personal reasons, and have been replaced with suitably qualified and experienced staff.

# 3.2.2 URINE SAMPLING

The overall proportion of participants providing urine samples over the twelve month period was 59%, although a further 9% agreed to provide a sample but could not produce one. This compares to 81% of DUMA participants providing a sample in 2005, and a reported average of 70% across I-ADAM programmes.

Rates in NZ-ADAM varied between sites, from 53% at Hamilton to 63% at Whangarei. The reasons for the lower rate in NZ-ADAM are uncertain, but it has been suggested that it may have some basis in cultural resistance to the provision of body samples. This does not appear to be supported by the data, where, for example, Whangarei had the highest proportion of Maori participants, but also achieved the highest rate of participants providing a urine sample.

A more likely contributing factor seems to be the experience and approach adopted by individual interviewers, and their capacity to engage with the participant. Ongoing efforts are made to ensure that interviewers seek to maximise the level of compliance among detainees, while respecting their rights and the procedures specified in the ethics approval. Strategies that have been found to be more successful among some interviewers are continuing to be explored, and interviewers are encouraged to adopt them consistently.

# 3.2.3 QUALITY ASSURANCE PROCESSES

A robust quality assurance process has been put in place to maximise the reliability and validity of the data collected by the NZ-ADAM interviewers. The interviewers are required to check each questionnaire on completion of the interview to ensure that all relevant questions have been completed correctly. If not, the participant is re-interviewed to obtain the missing information (if possible).

The questionnaires are then independently audited for errors such as omissions, incorrect skip patterns, incorrect codes and inconsistencies. Wherever possible, any errors are corrected before the questionnaires are sent for data entry. Data entry is governed by business rules to ensure, for example, that only valid codes are entered and that inter-code logic patterns are applied. An error report is then created and sent to all interviewers and site managers in New Zealand. This forms the basis for further training, feedback and discussion about the objectives of particular questions that may be causing problems.

Error rates have been found to vary considerably between interviewers, usually depending on how comfortable they first feel in the police setting. The more experience they have working with offenders, the more 'energy' they have to give to the completion of the questionnaire. Errors have reduced dramatically following receipt of the first few error reports and accompanying explanation from the NZ site manager. On the few occasions when errors have not improved despite feedback and on-site assistance, the interviewers have been replaced. All interviewers know that the quality of the entire NZ-ADAM project rests on their ability to accurately explain what each question is looking for and to transcribe what the respondent tells them.

Data quality has also been positively affected by the ongoing data collection process in NZ-ADAM rather than the periodic data collection process adopted in DUMA. Interviewers retain their skills and are able to maintain their expertise under the current arrangements. Commentary provided by DUMA managers indicates that the periodic data collection process requires repeated training and retraining of staff to maintain their skills.

# 3.2.4 QUESTIONNAIRE DEVELOPMENT AND REFINEMENT

The NZ-ADAM questionnaire is a long and difficult questionnaire to administer. It has a series of multiple questions and numerous skip patterns to follow (a copy of the current NZ-ADAM questionnaire is provided at Appendix B). This complexity, coupled with the often harsh interview

setting and potentially volatile respondents, means that the interviewers need to be highly trained and experienced.

A complete year of data collection in all four sites has enabled the opportunity to analyse a large body of work and to see where the questionnaire could benefit from refinement. There is a series of questions which could be removed and others which would benefit from rewording. This would help to streamline the questionnaire, reduce the opportunity for errors, and reduce the time taken to administer.

The Australian DUMA questionnaire is revised on a regular basis, so long as the underlying objectives of the essential questions are not lost. For example, information about whether the charges are summary or indictable has now been removed from the charge information in the Australian project.

At question 1 in DUMA, the number of hours between arrest and interview has been removed, as the critical factor (48 hours) is still left in the question. Surprisingly, calculating the number of hours between arrest and interview, in whole numbers, has been the cause of numerous errors, both in New Zealand and Australia.

The layout of the drug use pattern question in NZ-ADAM needs revision as the current skip pattern is very difficult to follow and results in loss of some data as some columns are not completed in full.

The distinction between amphetamines and methamphetamines is one that is not made in the Australian project. NZ-ADAM allows for that distinction and this does not appear to cause any problems for either the interviewers or the respondents, providing for a greater differentiation between these types of drugs.

Questions about quantities of drugs used/purchased/sold are often difficult because the questionnaire does not provide a standard measurement for the drugs. This should be addressed.

# **3.3 REPORT PRODUCTION**

Quarterly reports have been produced since the inception of the programme presenting results in both aggregated form and for individual sites. These have been presented to the NZ-ADAM Advisory Committee for comment and feedback, which in turn has further informed their development and presentation.

In addition, a series of "snapshot" reports have been prepared presenting a selection of key statistics for each participating site. These have been provided to each participating watch house to illustrate the types of data available and to stimulate local interest in the programme.

It is intended that the quarterly reports be further "streamlined" to reduce their length and to focus on trends emerging both over time and between sites. The annual report will be a more comprehensive report that covers a wider range of data over the twelve month period.

# 3.4 FUTURE DIRECTIONS

Looking to the future, and assuming that the NZ-ADAM programme continues past the initial oneyear pilot stage, a number of issues should be considered.

# 3.4.1 REVIEW/CONFIRM PARTICIPATING SITES

The selection of the original four participating sites was based primarily on a requirement to provide geographic representation of the country, together with their capacity to provide the required 50 interviews per quarter. There were a number of factors present at the commencement of the programme that precluded the participation of Christchurch and Wellington (among others) that may no longer be relevant. It is perhaps therefore timely for a review to be held of the sites to ascertain whether any changes should be made to the sites participating, and if so, which other sites should be considered.

# 3.4.2 REVIEW QUESTIONNAIRE

As noted above, the current NZ-ADAM questionnaire is very long and complex in its design which impacts on both its efficiency and the quality of data. Other I-ADAM sites review their questionnaire periodically to improve them, without altering the underlying objectives of the key questions. It is suggested that a review be undertaken of the current NZ-ADAM questionnaire to further improve its application and data collection processes.

# 3.4.3 DISSEMINATION OF REPORTS

To date the various reports produced from the NZ-ADAM programme have had limited circulation and distribution. This may have limited the extent of potential interest in their content and their capacity to inform the decisions of policy-makers and service providers. It is suggested that the reports be disseminated to a wider audience to ascertain their wider value and contribution.



# RESULTS ACROSS ALL SITES JULY 2005 – JUNE 2006

# 4.1 INTRODUCTION

This section presents the aggregated NZ-ADAM data collected across the four participating sites (Whangarei, Henderson, Hamilton and Dunedin) for the year to 30 June 2006.

Data is presented thematically, covering the following areas:

- Programme throughput and participation.
- Participant profile.
- Requests for urine samples and urinalysis results.
- Reported drug use.
- Reported drug use and criminal activities.
- Acquiring drugs.
- Selling drugs.
- Perceived risks of the drug market.

# 4.2 PROGRAMME THROUGHPUT AND PARTICIPATION

A total of 2,206 detainees were available to participate in the NZ-ADAM data collection process throughout the year. Of these, 965 met the inclusion criteria and agreed to be interviewed and 950 completed the entire interview process. This compares to a target of 800 participants established for the study at its commencement. A total of 561 interviewees agreed to provide a urine sample, and of these 557 provided samples acceptable for analysis. Figure 1 depicts the proportions of all detainees who participated in each stage of the data collection procedure.

The proportion of available detainees who proceeded to interview varied across the four sites, from 35% at Henderson to 58% at Dunedin. Reasons for the variation in participation rates included such factors as the profiles of the detainees, how busy the watch house was at the time the interviewers were present and watch house staff attitudes towards the study. The rate of consent to provide a urine sample over the year was 59%.

Table 1 summarises the reasons detainees did not participate in the study. The primary reason for non-participation was that the detainee met one of the exclusion criteria (n=1,029 or 47% of all detainees available at the time interviewers were present in the watch house).



Figure 1: Programme Throughput and Participation

Status	Outcome of Process	Number	%
	Under 17 years old	224	10.2%
	Violent or uncontrolled behaviour/security risk	155	7.0%
	Other	150	6.8%
	Watch-house constraints	146	6.6%
Mat avaluation oritoria	Too intoxicated	139	6.3%
Met exclusion criteria	Medical reasons	75	3.4%
	Released/bailed	62	2.8%
	Taken to court/detention	52	2.4%
	Language problem	22	1.0%
	Booked over 48 hours ago	4	0.2%
Declined to participate	Declined to be interviewed	100	4.5%
Declined to participate	Declined to sign consent form	17	0.8%
Declined to Police	Declined to be taken to meet interviewers	95	4.3%
Proceeded to interview	Participated in NZ-ADAM	965	43.7%
Total		2,206	100.0%

Table 1: Detainees' Eligibility and Participation in NZ-ADAM

# 4.3 PARTICIPANT PROFILE

The following sections describe the demographic and other characteristics of participants in the NZ-ADAM programme over the year.

# 4.3.1 DEMOGRAPHY

# GENDER

Of the 965 detainees who proceeded to interview, 84.7% were male and 14.8% were female. (Gender information was not recorded for one interviewee.) These proportions do not differ significantly from the 85.7% male and 13.6% female proportions recorded for all detainees in the watch house at the time the interviewers were present. Figure 2 illustrates the gender ratios.



## Figure 2: Detainee and Participant Gender

# AGE

The mean age of participants was 27.5 years (males 27.1 years, females 29.5 years). Among all participants 26.8% (27.8% of males and 21% of females) were aged 17-20 years, and a further 27.7% (28.7% of males and 22.4% of females) were aged 21-25 years. Age profiles for males, females and all participants are shown in Figure 3.





# Note: 4 records were excluded due to age and/or gender not being stated.

#### MARITAL STATUS

The majority (60.9%) of participants reported that they were single and had never married (61.7% of males and 55.9% of females). Figure 4 displays the proportion of males and females in each marital status category.



# Note: 5 records were excluded due to gender not being stated.

#### ETHNICITY

Participants were asked to identify the ethnic group with which they primarily identified. Fortyseven percent reported being New Zealand Mäori, 37.3% identified as New Zealand European/Pakeha and 4.5% as Samoan. Figure 5 illustrates the ethnic profile of all participants.





# 4.3.2 EDUCATION AND EMPLOYMENT

#### EDUCATIONAL STATUS

Figure 6 details the highest educational level attained by NZ-ADAM participants. Thirty-eight percent had completed some high school but did not complete compulsory years, and 28% completed compulsory high school.



# Figure 6: Participants' Highest Educational Level Achieved (n=965)

## EMPLOYMENT STATUS

The current employment status of participants is depicted in Figure 7. Almost 35% were working in full-time employment and a further 26% were unemployed but looking for work. Almost 11% were working part-time and 8% were unemployed and not looking for work.





## TYPE OF WORK

Participants who were employed (either full-time or part-time) were asked to describe the main type of work they do. The majority (56.8%) of respondents worked as manual workers/labourers and a further 25.3% worked as craftsmen/skilled tradesmen. The work profile of all employed participants is illustrated in Figure 8.



## Sources of Income

Participants reported a range of income sources in the 30 days prior to their detention, as detailed in Figure 9 (note that respondents could identify multiple sources of income). The most common sources of income were welfare or government benefits (44% of respondents), family or friends (41%), and full-time work (36%). Of all sources of income identified, 21% related to illegal activities.





#### **GOVERNMENT BENEFITS RECEIVED**

Almost one quarter (24.5%) of participants had received Unemployment Benefits in the last 12 months and 14.7% had received Sickness or Invalids Benefits. However, almost half (43.5%) reported not having received any government benefits in the past 12 months.<sup>1</sup> The range of government benefits received by all participants in the past 12 months is illustrated in Figure 10.



## Figure 10: Government Benefits Received by Participants (n=965)

# 4.3.3 LIVING ARRANGEMENTS

## RESIDENCE

When asked to describe where they had lived most of the time in the last 30 days, almost half (49.5%) of participants reported having lived in someone else's house or apartment, while 44.1% reported living in their own house or apartment. Figure 11 illustrates the reported living arrangements of all participants during the last 30 days.

Almost a fifth (20%) of participants reported living in subsidised housing (data not shown).

<sup>&</sup>lt;sup>1</sup> Note that the numbers reported in Figure 46 refer to participants' sources of income in the past 30 days. Thus, the numbers in Figures 9 and 46 differ as they relate to different time periods.



#### Figure 11: Participants' Place of Residence last 30 Days (n=965)

## NUMBER OF PEOPLE LIVING IN HOUSEHOLD

Just over half of participants (53.6%) reported that between 3 and 5 persons lived in their household, including themselves. Eighteen percent of respondents indicated that they lived in a household of 6 to 10 people and a further 17.4% lived with one other person. The numbers of people reported as living in all participants' households are presented in Figure 12.



Figure 12: Number of Persons Living in Participants' Households (n=965)

3-5 people, 53.6%

Participants who reported that no (0) people lived in their household indicated elsewhere in the interview that they were living in prison or on the streets.

# DEPENDENT CHILDREN

Almost two-thirds (65.3%) of participants reported that they had no dependent children, 29.6% reported having between 1 and 3 dependent children and 4.9% reported having more than 4 dependent children, as illustrated in Figure 13.



## Figure 13: Participants' Number of Dependent Children (n=965)

# 4.3.4 DRUG AND ALCOHOL TREATMENT

# DRUG AND ALCOHOL AND PSYCHIATRIC HOSPITAL TREATMENT

Participants were asked a number of questions regarding their participation in drug and alcohol treatment programmes and whether they had ever been a patient in a psychiatric ward or hospital. The responses indicate that 35% of participants had at some time participated in drug or alcohol treatment programmes and that 5% were currently participating in a treatment programme.



#### Figure 14: Most Recent Drug or Alcohol Treatment Programme Attended by Participants Who Reported Previous Treatment Programme Attendance (n=336)

Of the 336 participants who reported that they were not currently, but had previously, participated in a treatment programme, 34% reported they had most recently participated in a Rehabilitation Programme/Therapeutic Community, 25% reported attendance at an Outpatient/Counselling Programme, and 16% reported membership of a Support Group. These responses are presented in Figure 14.

Among all participants, 8.1% reported having previously been a patient in a psychiatric ward or hospital for an overnight stay or longer.

# 4.3.5 OFFENDING

#### CURRENT OFFENCE

Participants had been detained for a wide range of offences. Figure 15 presents the percentage of participants for whom each offence type was recorded first on the charge sheet at the watch house. (In the majority of cases, the first offence recorded is the most serious offence.)

The most common first recorded charge was "Offence against Justice", with 38.8% of all participants being charged with this offence, which includes "Breach of Bail". Unfortunately the data does not record the original offence for which the participant was bailed. Other first recorded offence types were "Serious Assaults" (10.1% of participants), "Theft" (8.8%).



#### Figure 15: First Offence Recorded for Current Episode of Detention (n=965)

Table 2 provides a comparison of the first offence recorded for detainees who were interviewed and those who were not interviewed. The comparison confirms that the first offence profile of the participant sample closely resembles that of the total detainee population present at the time the interviews were held.

	Interviewees Non-Participating De			iting Detainees
	No.	%	No.	%
Against Justice	374	38.8%	439	36.0%
Serious Assaults	97	10.1%	98	8.0%
Theft	85	8.8%	102	8.4%
Driving	74	7.7%	49	4.0%
Burglary	51	5.3%	52	4.3%
Disorder	46	4.8%	88	7.2%
Drugs (Cannabis)	33	3.4%	22	1.8%
Minor Assaults	33	3.4%	40	3.3%
Destruction of Property	29	3.0%	38	3.1%
Intimidation/threats	27	2.8%	50	4.1%
Trespass	24	2.5%	46	3.8%
Drugs (not Cannabis)	17	1.8%	25	2.1%
Receiving	10	1.0%	10	0.8%
Robbery	10	1.0%	13	1.1%
Detox	9	0.9%	35	2.9%
Fraud	9	0.9%	5	0.4%
Grievous Assaults	9	0.9%	34	2.8%
Car Conversion Etc	7	0.7%	7	0.6%
Other	6	0.6%	20	1.6%
Sexual Attacks	6	0.6%	8	0.7%
Immigration	4	0.4%	15	1.2%
Kidnapping and Abduction	2	0.2%	1	0.1%
Family Offences	1	0.1%	16	1.3%
Homicide	1	0.1%	3	0.2%
Littering	1	0.1%	0	0.0%
Abnormal Sex	0	0.0%	1	0.1%
Sexual Affronts	0	0.0%	1	0.1%
Total	965	100%	1,218	100.0%

## Table 2: First Offence Recorded, Participating and Non-participating Detainees

# PREVIOUS ARRESTS AND PRISON HISTORY

Among participants, just over a third (34%) reported that they had not been arrested at all during the previous 12 months; 51% reported having been arrested between 1 and 5 times in the previous 12 months; and 10% report having been arrested between 6 and 10 times in that period. Almost 4% reported having been arrested more than 10 times in the previous 12 months. Details are shown in Figure 16.

Participants also reported whether they had been in prison during the last 12 months. Two percent (2%) reported having been in prison during this period for a drug offence and a further 18% reported having been in prison for other offences.



## Figure 16: Number of Previous Arrests in Last 12 Months (n=960)

# 4.4 REQUESTS FOR URINE SAMPLES AND URINALYSIS RESULTS

Figure 17 presents participant responses to a request that they provide a urine sample for drug testing. Of those who completed the interview questionnaire 57.9% provided a urine sample, 8.9% agreed to the request but could not produce a sample and 31.2% refused to provide a sample.





## NUMBER OF DRUGS TESTING POSITIVE

Of the 557 participants who provided a usable urine sample, 406 (73%) tested positive to one or more illicit drugs. Urinalysis indicated that 59% of the participants providing a usable sample tested positive to one drug, 11% tested positive to two drugs, 2% tested positive to three drugs and 1% tested positive to more than three drugs.

Urinalysis results describing the number of drugs testing positive among the 557 participants who provided a usable sample are presented in Figure 18.





# TYPES OF ILLICIT DRUGS TESTING POSITIVE

As noted previously, of the 557 participants who provided a useable urine sample, 406 tested positive to at least one drug. Because some participants tested positive to more than one drug, a total of 511 positive drug tests resulted. Across all samples provided (557), cannabis was the most commonly detected illicit drug, with 69% of the samples testing positive to cannabinoids. Methamphetamines were the second most commonly detected drug (12%). A range of other substances were detected at rates below 2%. It should be noted that the high rates of detection of cannabis could be partly due to the fact that urine testing can detect its use up to 30 days compared with fewer than four days for some of the other drugs. Results are illustrated in the following figure.





The following figure shows that the proportion of participants testing positive to the different illicit drugs did not vary significantly over the four quarters, however the smaller the proportion of participants the greater the variance. For ease of illustration, illicit drugs with a proportion testing positive of less than 2% are excluded from the graph.





This data is further dissected in the following figures to show the results for individual sites. Comments in regard to individual sites include:

• In Whangarei there has been a slight downward trend in the prevalence of cannabis but an increase in methamphetamines.

- In Henderson, all main drugs exhibited a downward trend. Henderson is the only site where positive detection of heroin is greater than 2%.
- Hamilton exhibited an upward trend in cannabis with methamphetamines relatively constant.
- Dunedin exhibited a steady rate of detection of cannabis but an increase in the detection of tranquilisers. Dunedin is the only site to show a positive detection rate for tranquilisers greater than 2%, but less than 2% for methamphetamines.

Figure 21: Whangarei - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=144)



Figure 22: Henderson - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=175)





Figure 23: Hamilton - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs – Time Series (n=113)

Figure 24: Dunedin - Proportion of Participants Who Provided a Urine Sample Testing Positive to Illicit Drugs - Time Series (n=125)



Figures 25 and 26 present the time series for the urinalysis results for cannabis and methamphetamines respectively for each of the study sites over the four quarters. The graphs illustrate:

- Hamilton had the highest rate of detected cannabis, and as described previously, displayed an upward trend. On the other hand, it had one of the lowest rates of detection of methamphetamines.
- Whangarei had the second highest rate of detected cannabis, and a variable, though relatively low, detected rate of methamphetamines.
- Henderson had the lowest detected rate of cannabis and displayed a downward trend. However, it also had the highest detected rate of methamphetamines.

Figure 25: Proportion of Participants Who Provided a Urine Sample Testing Positive to Cannabis by Site – Time Series



Figure 26: Proportion of Participants Who Provided a Urine Sample Testing Positive to Methamphetamines by Site – Time Series



# 4.5 SELF-REPORTED DRUG USE

Participants were asked a series of interview questions regarding their drug use patterns. The following sections summarise the responses to these questions.

# DRUGS EVER USED, USED IN LAST 30 DAYS AND LAST 48 HOURS

Participants were asked to indicate if they had ever tried each of a range of drugs, including alcohol, or had used any of them in the last 30 days or the last 48 hours. Alcohol and cannabis had almost universally been tried, by 99% and 94% of participants respectively, and were also the most commonly used drugs in the 30 day and the 48 hour periods preceding detention.

Whilst hallucinogens had been tried by more participants (52%) than methamphetamines (48%), amphetamines (38%) or ecstasy (30%), methamphetamines were reported to have been used by more participants (23%) in the last 30 days than hallucinogens and amphetamines (6%) or ecstasy (5%). In the 48 hours prior to detention methamphetamines were the third most commonly used drug after alcohol and cannabis, with 9% of participants reporting having used this drug within this time period.

Detailed results for self-reported drug and alcohol use are presented in Figure 27.



## Figure 27: Types of Drugs Ever Used, Used in Last 30 Days and Last 48 Hours (n=965)

## NUMBER OF DRUGS EVER TRIED

From the responses to the question regarding drugs that participants had ever used, it was possible to identify the number of different drugs that each participant had tried at least once. Only 1% of respondents reported that they had never tried any drug, including alcohol, and only 5% reported having tried only one drug. Just over a quarter (27%) of participants reported having tried two drugs, but the majority (68%) reported having tried three or more drugs. The results relating to multiple drug use are presented in Figure 28.



## Figure 28: Number of Drugs Ever Used (n=965)

# AGE AT WHICH DRUGS FIRST TRIED

Participants were asked to report the age at which they had first tried each drug. The responses, expressed as a proportion of the number of respondents who reported ever having used each drug type, are summarised in Figure 29. The number of respondents reporting having ever used each drug is contained in parentheses following each drug name on the horizontal axis.



#### Figure 29: Age at which Drugs First Tried

Of those reporting having ever tried alcohol, 93% reported having first tried it under the age of 18 years; 89% of those ever having tried cannabis also reported first trying it aged less than 18 years. Similarly, hallucinogens (65%), amphetamines (53%), tranquilisers (50%), cocaine (48%), and heroin (46%) were also tried for the first time in this age group. Methamphetamines and methadone were most commonly first tried at over 20 years of age (43% and 46% respectively). Persons having used ecstasy were evenly distributed across these three age groups when first trying it.

# FREQUENCY OF DRUG USE IN THE PAST 30 DAYS

Participants were asked the frequency with which they used different drugs in the preceding 30 days. Their responses, which detail the number of days that each drug type was consumed over the last 30 days, are illustrated in Figure 30. The number of participants who reported having used each drug at least once in the last 30 days is presented in parentheses after each drug name on the vertical axis. The percentages included in the body of the graph indicate the proportion of those participants who had used each drug at least once during the last 30 days who reported having used the drug with the nominated frequency.

Whilst alcohol was the most widely used drug (used by 779 participants at some time during the past 30 days), cannabis (used by 694 participants) was the most frequently consumed drug, with 59% of these users reporting that they had used it on 11 or more days out of the last 30 (45% reported using it on at least 21 days). Methamphetamines were reportedly used by a relatively large number of participants (227) and also relatively frequently, with 34% of users reporting that they had used the drug on 11 or more days in the last 30.



## Figure 30: Number of Days Drugs Used in the Past 30 Days

## 4.5.1 COMPARATIVE PROFILE

An analysis has been undertaken of the demographic and other characteristics of participants who identified as having used cannabis and those who reported as having used methamphetamines in the previous 30 days. The results are presented in Figure 31.

0 10 20 30 40 50 60 70 80 90 10	י <b>סכ</b>					
31.1% 5%	,					
31.1%						
at 30.4% 31.1%						
14.5% 31.5%						
10.4 days 17.1 days						
13.1 yrs						
r 0.75 children 0.64 children						
3.75 people 3.98 people						
26.9% 29%						
<b>32%</b>						
42.4%						
52%						
62.6% 64.5%						
27 yrs 25.5 yrs						
86.4%						
	77.1% 86.4% 27 yrs 25.5 yrs 64.5% 64.5% 80% 52% 42.4% 23.8% 32% 26.9% 29% 3.75 people 3.98 people 0.75 children 0.64 children 22.3 yrs 13.1 yrs 10.4 days 17.1% 80.4% 31.5% 31.5% 31.1%					

Figure 31: Key Characteristics of Cannabis and Methamphetamine Users

Overall, methamphetamine users had the following characteristics compared to cannabis users:

- A lower proportion are male (77% compared to 86%);
- Are more likely to be of Maori descent (80% compared to 52%);
- Are less likely to be working full-time (24% compared to 32%);
- Used for the first time at an older average age (22 years compared to 13 years of age);
- Used less often in the last month (on 10 days compared to 17 days); and
- Are more likely to sell drugs to others (12% compared to 5% of users).

The drug use data are presented as a series over the four quarters in Figure 32, based on the number of participants who reported use of each drug in the previous 30 days. For ease of illustration, those drugs with a reported proportion of participants using them of less than 2% have been excluded.

Figure 32 is representative of all participants over the four quarters. The highest reported proportion of use can be seen with alcohol and cannabis with their reported use converging in the most recent quarter. It has been suggested that use of hallucinogens is seasonal with peaks being seen in the July to September 05 and April to June 06 quarters which could be due to the growing cycle of mushrooms.



Figure 32: Proportion of Participants Using Drugs in the Past 30 Days - Time Series

The following figures illustrate these findings for individual sites over the four quarters of the year.







Figure 34: Henderson - Proportion of Participants Using Drugs in the Past 30 Days - Time Series

Figure 35: Hamilton - Proportion of Participants Using Drugs in the Past 30 Days - Time Series





Figure 36: Dunedin - Proportion of Participants Using Drugs in the Past 30 Days - Time Series

Comments in regard to each site include:

- In Whangarei, cannabis use exceeded alcohol use in the most recent quarter, although both were showing a slight downward trend, as was self-reported methamphetamine use.
- Henderson also demonstrated a convergence between the self-reported use of alcohol and cannabis, with both trending slightly downwards. Reported use of methamphetamines was relatively constant over the period.
- Hamilton reported an upward trend in the reported use of both cannabis and alcohol over the year, but a slight downward trend in reported methamphetamine use.
- Dunedin recorded a convergence between reported alcohol use and cannabis use, with the former trending down and the latter trending upwards. Self-reported methamphetamine use was very low, consistent with the urinalysis results reported previously.

## CORROBORATION OF SELF REPORTED DRUG USE AND URINALYSIS RESULTS

The self-reported use of drugs over the previous 48 hours and 30 days was compared with the urinalysis results to ascertain the extent of corroboration between the two measures of recent drug use. Table 3 presents the percentages of participants who tested positive in the urinalysis for each type of drug who also self-reported use of that drug in the previous 48 hours and the previous 30 days.

The corroboration of self-reported drug use and positive urinalysis results was highest for cannabis, with 94% of those testing positive reporting having used the drug in the previous 30 days, and 68% reporting having used cannabis in the previous 48 hours. Among those who tested positive for methamphetamines the corresponding figures were 81% and 54% respectively. Some caution should be employed when interpreting the results for amphetamine and methamphetamine use, as the self-report figures reflect the drugs participants believed they had used whilst the urinalysis provides a measure of the drugs actually consumed. The self-report and urinalysis results may therefore differ, at least in part because the drugs supplied to users may not necessarily be the drugs they believe they are taking.

Drug	Number testing positive, urinalysis	Percentage of those who tested positive who reported use in last 30 days	Percentage of those who tested positive who reported use in last 48 hours
Cannabis	378	93.9%	68.0%
Methamphetamines	67	80.6%	53.7%
Heroin	8	50.0%	37.5%
Tranquilisers	27	44.4%	29.6%
Methadone	6	33.3%	0.0%
Amphetamines	13	15.4%	15.4%
Cocaine	0	0.0%	0.0%

Table 3:	Comparison	of Urinalysis Results and	Self-Reported	Drua Use
	• • • • • • • • • • • • • • • • • • •	en ennangele needlike ante	. een nepenee	

# DEPENDENCE ON DRUGS

Participants were asked whether they had felt that they needed or were dependent on the drugs that they used in the past 12 months. Overall, 39% of all participants reported having felt dependent on at least one drug (including alcohol) in the past 12 months. The responses relating to each drug are summarised in Figure 37. A quarter (25%) of participants indicated that they had felt dependent on cannabis in the past 12 months, whilst 15% reported a dependence on alcohol and 8.5% reported a dependence on methamphetamines.





## IMPACT OF DRUGS ON ANGER

Participants were asked what effect each of the drugs that they used had on their likelihood to get angry. The responses differed between the different types of drugs, as illustrated in Figure 38.<sup>2</sup> The drugs most frequently reported to make users more or much more likely to get angry were methamphetamines, alcohol, and amphetamines. Cannabis, methadone and heroin were the drugs most frequently reported to make users less or much less likely to get angry.





## Drugs and Driving

Participants were asked how much of their driving was done whilst under the influence of drugs. The responses are presented in Figure 39.<sup>3</sup> Users of cannabis, methamphetamines, and amphetamines most often reported driving at least sometimes whilst under the influence. The percentage (34%) of alcohol users who reported driving while under the influence was smaller than the percentage of users of each of these drugs who reported driving under the influence.

<sup>&</sup>lt;sup>2</sup> For ease of comprehension, the categories "much less likely" and "less likely" have been incorporated into one category ("much/less likely") and the categories "much more likely" and "more likely" have been incorporated into one category ("much/more likely").

<sup>&</sup>lt;sup>3</sup> For ease of comprehension, the categories "All" and "Most" have been incorporated into one category ("All/Most") and the categories "Some" and "Hardly Any" have been incorporated into one category ("Some/Hardly Any").



# Figure 39: Driving Under the Influence of Drugs

# 4.6 REPORTED DRUG USE AND CRIMINAL ACTIVITIES

This section examines associations between participants' self-reported drug use and their criminal activities.

# FIRST RECORDED CURRENT OFFENCE AND SELF-REPORTED DRUG USE

An analysis of participants' self-reported drug use by their current offence first recorded in the watch house records is presented in Tables 4, 5 and 6.

Table 4 details the nature of the first recorded current offence, the number of participants charged with each offence and the percentage of those participants who reported using each drug in the previous 12 months. For example, of the 367 participants detained for an offence "Against Justice" 90% reported using alcohol in the previous 12 months, 83% reported using cannabis in the previous 12 months and 39% reported using methamphetamines in the previous 12 months. Table 4 thus details self-reported drug use in the previous 12 months as a percentage of the number of participants detained for each offence. (Some of these results should be treated with caution, given the small sample sizes associated with the use of some drugs.)

Table 5 details the nature of the first recorded current offence, the number of participants charged with each offence and the percentage of those participants who reported using each drug in the previous 30 days. Thus, of the 367 participants detained for an offence "Against Justice", 80% reported using alcohol in the previous 30 days, 77% reported using cannabis in the previous 30 days and 23% reported using methamphetamines in the previous 30 days. Table 5 thus details self-reported drug use in the previous 30 days as a percentage of the number of participants detained for each offence. (Some of these results should be treated with caution, given the small sample sizes associated with the use of some drugs.)

Table 6 details the nature of the first recorded current offence, the number of participants charged with each offence and the percentage of those participants who reported using each drug in the previous 48 hours. Thus, of the 367 participants detained for an offence "Against Justice", 44% reported using alcohol in the previous 48 hours, 44% reported using cannabis and 8% reported using methamphetamines. Table 6 thus details self-reported drug use in the previous 48 hours as a percentage of the number of participants detained for each offence. (Some of these results should be treated with caution, given the small sample sizes associated with the use of some drugs.)

Offence	Alcohol	Cannabis	Cocaine	Heroin	Methadone	Amphetamines	Meth- amphetamines	Ecstasy	Tranquilisers	Hallucinogens
Against Justice (367)	89.9%	83.4%	3.5%	5.2%	3.5%	15.0%	38.7%	12.8%	3.8%	20.2%
Arms Act Offences (2)	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Burglary (47)	87.2%	89.4%	2.1%	6.4%	2.1%	21.3%	48.9%	14.9%	12.8%	38.3%
Car Conversion Etc (29)	82.8%	89.7%	6.9%	3.4%	3.4%	6.9%	44.8%	13.8%	6.9%	31.0%
Destruction of Property (29)	100.0%	82.8%	0.0%	3.4%	6.9%	10.3%	20.7%	17.2%	0.0%	27.6%
Detox (4)	100.0%	75.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Disorder (50)	96.0%	76.0%	2.0%	2.0%	4.0%	6.0%	22.0%	18.0%	0.0%	12.0%
Driving (66)	93.9%	81.8%	6.1%	3.0%	7.6%	22.7%	43.9%	31.8%	1.5%	19.7%
Drugs (Cannabis) (20)	80.0%	100.0%	5.0%	10.0%	10.0%	25.0%	20.0%	15.0%	10.0%	35.0%
Drugs (not Cannabis) (32)	65.6%	84.4%	6.3%	9.4%	6.3%	9.4%	71.9%	28.1%	3.1%	21.9%
Family Offences (18)	100.0%	77.8%	5.6%	5.6%	0.0%	5.6%	44.4%	27.8%	11.1%	22.2%
Fraud (8)	87.5%	50.0%	12.5%	12.5%	0.0%	12.5%	37.5%	12.5%	12.5%	37.5%
Grievous Assaults (13)	84.6%	69.2%	0.0%	0.0%	0.0%	15.4%	23.1%	7.7%	0.0%	0.0%
Homicide (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Immigration (4)	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intimidation/threats (26)	76.9%	80.8%	3.8%	3.8%	3.8%	7.7%	26.9%	15.4%	15.4%	15.4%
Kidnapping and Abduction (2)	100.0%	100.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Littering (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minor Assaults (34)	91.2%	67.6%	2.9%	0.0%	0.0%	8.8%	11.8%	5.9%	0.0%	5.9%
Other/Unknown (9)	100.0%	55.6%	0.0%	11.1%	0.0%	22.2%	22.2%	11.1%	0.0%	22.2%
Receiving (8)	62.5%	87.5%	0.0%	25.0%	25.0%	25.0%	62.5%	25.0%	25.0%	12.5%
Robbery (9)	66.7%	66.7%	0.0%	11.1%	11.1%	11.1%	33.3%	11.1%	11.1%	11.1%
Serious Assaults (89)	94.4%	76.4%	1.1%	1.1%	0.0%	10.1%	25.8%	7.9%	2.2%	12.4%
Sexual Attacks (7)	85.7%	42.9%	0.0%	0.0%	0.0%	14.3%	28.6%	14.3%	0.0%	0.0%
Theft (65)	89.2%	84.6%	7.7%	9.2%	7.7%	23.1%	41.5%	21.5%	10.8%	21.5%
Trespass (24)	87.5%	75.0%	8.3%	12.5%	4.2%	20.8%	50.0%	16.7%	4.2%	29.2%
Vagrancy Offences (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 4: First Recorded Offence by Self-Reported Drug Use in the Past 12 Months

Offence	Alcohol	Cannabis	Cocaine	Heroin	Methadone	Amphetamines	Meth- amphetamines	Ecstasy	Tranquilisers	Hallucinogens
Against Justice (367)	80.4%	76.6%	1.1%	1.9%	1.4%	6.5%	23.4%	4.4%	1.1%	6.0%
Arms Act Offences (2)	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Burglary (47)	85.1%	80.9%	0.0%	2.1%	2.1%	8.5%	17.0%	8.5%	12.8%	12.8%
Car Conversion Etc (29)	75.9%	82.8%	6.9%	3.4%	3.4%	6.9%	27.6%	6.9%	3.4%	6.9%
Destruction of Property (29)	96.6%	75.9%	0.0%	3.4%	0.0%	6.9%	20.7%	3.4%	0.0%	17.2%
Detox (4)	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Disorder (50)	92.0%	64.0%	0.0%	0.0%	2.0%	2.0%	12.0%	2.0%	0.0%	2.0%
Driving (66)	87.9%	71.2%	1.5%	1.5%	3.0%	7.6%	33.3%	13.6%	0.0%	4.5%
Drugs (Cannabis) (20)	75.0%	90.0%	5.0%	10.0%	10.0%	5.0%	15.0%	0.0%	5.0%	20.0%
Drugs (not Cannabis) (32)	53.1%	75.0%	3.1%	0.0%	0.0%	3.1%	62.5%	18.8%	0.0%	9.4%
Family Offences (18)	77.8%	72.2%	5.6%	0.0%	0.0%	0.0%	27.8%	5.6%	5.6%	5.6%
Fraud (8)	75.0%	37.5%	12.5%	12.5%	0.0%	12.5%	37.5%	12.5%	12.5%	0.0%
Grievous Assaults (13)	76.9%	61.5%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%
Homicide (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Immigration (4)	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intimidation/threats (26)	61.5%	76.9%	3.8%	3.8%	0.0%	0.0%	15.4%	3.8%	7.7%	7.7%
Kidnapping and Abduction (2)	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Littering (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minor Assaults (34)	85.3%	58.8%	2.9%	0.0%	0.0%	2.9%	2.9%	2.9%	0.0%	0.0%
Other/Unknown (9)	100.0%	33.3%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%
Receiving (8)	37.5%	75.0%	0.0%	12.5%	0.0%	12.5%	50.0%	12.5%	0.0%	12.5%
Robbery (9)	66.7%	66.7%	0.0%	0.0%	0.0%	11.1%	33.3%	0.0%	11.1%	0.0%
Serious Assaults (89)	87.6%	66.3%	1.1%	0.0%	0.0%	4.5%	15.7%	2.2%	2.2%	4.5%
Sexual Attacks (7)	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%
Theft (65)	78.5%	69.2%	1.5%	7.7%	3.1%	10.8%	33.8%	7.7%	7.7%	7.7%
Trespass (24)	83.3%	66.7%	4.2%	4.2%	4.2%	4.2%	37.5%	4.2%	0.0%	8.3%
Vagrancy Offences (1)	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 5: First Recorded Offence by Self-Reported Drug Use in the Past 30 Days

Offence	Alcohol	Cannabis	Cocaine	Heroin	Methadone	Amphetamines	Meth- amphetamines	Ecstasy	Tranquilisers	Hallucinogens
Against Justice (367)	44.1%	44.1%	0.5%	0.3%	0.0%	1.6%	7.9%	0.8%	0.0%	0.8%
Arms Act Offences (2)	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Burglary (47)	48.9%	57.4%	0.0%	2.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Car Conversion Etc (29)	48.3%	48.3%	0.0%	0.0%	0.0%	3.4%	13.8%	6.9%	0.0%	0.0%
Destruction of Property (29)	69.0%	41.4%	0.0%	0.0%	0.0%	0.0%	6.9%	3.4%	0.0%	3.4%
Detox (4)	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Disorder (50)	78.0%	28.0%	0.0%	0.0%	2.0%	0.0%	4.0%	0.0%	0.0%	0.0%
Driving (66)	63.6%	50.0%	0.0%	1.5%	1.5%	3.0%	12.1%	0.0%	0.0%	0.0%
Drugs (Cannabis) (20)	25.0%	70.0%	0.0%	0.0%	0.0%	5.0%	5.0%	0.0%	0.0%	0.0%
Drugs (not Cannabis) (32)	28.1%	59.4%	0.0%	0.0%	0.0%	0.0%	43.8%	0.0%	0.0%	0.0%
Family Offences (18)	55.6%	55.6%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	5.6%	0.0%
Fraud (8)	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grievous Assaults (13)	61.5%	38.5%	0.0%	0.0%	0.0%	0.0%	7.7%	0.0%	0.0%	0.0%
Homicide (1)	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Immigration (4)	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intimidation/threats (26)	26.9%	38.5%	0.0%	3.8%	0.0%	0.0%	7.7%	0.0%	7.7%	0.0%
Kidnapping and Abduction (2)	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Littering (1)	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minor Assaults (34)	67.6%	29.4%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other/Unknown (9)	88.9%	22.2%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%
Receiving (8)	12.5%	50.0%	0.0%	0.0%	0.0%	12.5%	25.0%	0.0%	0.0%	0.0%
Robbery (9)	33.3%	44.4%	0.0%	0.0%	0.0%	0.0%	22.2%	0.0%	0.0%	0.0%
Serious Assaults (89)	59.6%	44.9%	0.0%	0.0%	0.0%	2.2%	3.4%	0.0%	1.1%	1.1%
Sexual Attacks (7)	28.6%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Theft (65)	41.5%	50.8%	0.0%	1.5%	0.0%	4.6%	13.8%	0.0%	4.6%	0.0%
Trespass (24)	50.0%	50.0%	4.2%	0.0%	0.0%	0.0%	4.2%	4.2%	0.0%	4.2%
Vagrancy Offences (1)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 6: First Recorded Offence by Self-Reported Drug Use in the Past 48 Hours

#### USING DRUGS WHEN ARRESTED

When asked whether they had been using drugs at the time of their arrest, 51% (n=496) of participants reported that they had been using at least one drug at the time. Thirty-seven percent of participants reported using alcohol at the time, 21% reported using cannabis and almost 7% reported using methamphetamines (Note that participants could report using more than one drug). Responses relating to all drug types are provided in Figure 40.



#### Figure 40: Reported Drug Use at Time of Arrest (n=965)

# CONTRIBUTION OF DRUG USE TO CURRENT OFFENCE

Participants who stated that they had been using drugs when they became involved in the activities for which they were subsequently arrested were then asked the extent to which they believed their use of these drugs contributed to their involvement in these activities.

The responses provided by the 488 participants who were using at least one drug at the time of their arrest and who answered this question are presented in Figure 41.

More than 50% of users of all drugs other than cannabis indicated that their drug use had contributed to their involvement in criminal activity at least a little. Twenty-five percent of cannabis users reported that their drug use contributed between "some" and "all" to their criminal activities. (Some of these results should be treated with caution, given the small sample sizes associated with the use of some drugs.)



#### Figure 41: Contribution of Drug Use to Current Criminal Activity

# NEED TO BUY DRUGS AS CAUSE OF OFFENDING

Participants were asked to describe how much of their criminal offending was caused by the need to buy illegal drugs, to which nearly half (49%) of participants responded "none at all", and a further third (33%) responded that they did not commit criminal offences to obtain money. However, 17% of participants reported that their offending was caused to some degree by their need to buy illegal drugs. Figure 42 depicts the responses to this question.



## Figure 42: Offending Caused by Need to Buy Drugs (n=960)

# 4.7 ACQUIRING DRUGS

# EXPENDITURE ON DRUGS

When participants were asked how much they had spent on illicit drugs in the 30 days prior to their detention, half (50.4%) reported that they had not spent any money on drugs during that period. However, 18% of participants reported spending \$100 or less; 7% spent between "\$101 and \$200"; 10% spent between "\$201 and \$500"; and 7% spent between "\$501 and \$1,000". A small minority, 3.5%, claimed to have spent over \$2,000 on illegal drugs in the past 30 days. Figure 43 depicts the responses to this question.





\*This includes 9 records that were either not stated (7), refused to answer (1) or did not know (1)

## DRUGS ACQUIRED IN PAST 30 DAYS

Among all participants, 737 (76%) reported that they had acquired illicit drugs in the 30 days prior to their detention. A majority of all participants (73%) reported having acquired cannabis during this period, 25% reported acquiring amphetamines (including methamphetamines), 6% had acquired ecstasy and 3% heroin (Note that participants could report acquiring more than one drug). Figure 44 depicts these results.





Further analysis was conducted on these variables and is presented as a time series over the four quarters of the year. The following figure illustrates that there is no discernible change in trend over the year for those acquiring different drugs.



Figure 45: Proportion of Participants Acquiring Drugs in Past 30 Days – Time Series (n=965)

These variables were further analysed on a site by site basis to determine whether there were any geographical differences. The results are presented in the following figures, which reveal:

• Whangarei demonstrated a slight decline in all drugs acquired during the year, particularly amphetamines.

• Henderson displayed a decrease in cannabis acquired during the year, with heroin and ecstasy also displaying a small decrease. Amphetamine acquisition was relatively constant throughout the year.

• Hamilton displayed a decline in amphetamine acquisition, and to a lesser extent in ecstasy and heroin acquisition. Cannabis acquisition was fairly constant during the year

• Dunedin exhibited an increasing trend in cannabis acquisition, with other drugs fairly constant or showing a small decline.

The data highlights the fact that drug use and drug acquisition tends to be a localised activity, with markets that are subject to local conditions and influences.



Figure 46: Whangarei - Proportion of Participants Acquiring Drugs in Past 30 Days – Time Series

Figure 47: Henderson - Proportion of Participants Acquiring Drugs in Past 30 Days - Time Series





Figure 48: Hamilton - Proportion of Participants Acquiring Drugs in Past 30 Days - Time Series

Figure 49: Dunedin - Proportion of Participants Acquiring Drugs in Past 30 Days - Time Series



# METHOD OF CONTACT TO ACQUIRE DRUGS

The methods by which participants contacted the person from whom they last acquired drugs varied by drug type. Visiting a house or flat was the most common method of acquiring cannabis (55% of this drug was acquired by this method) ecstasy (27%) and amphetamines (including methamphetamines) (33%). Contacting a supplier by mobile phone was also relatively common, with 35% of amphetamines, 36% of ecstasy and 15% of cannabis being acquired via this method of contact. Responses to this question are presented in Figure 50.



#### Figure 50: Method of Contact to Acquire Drugs

## LOCATION AT WHICH DRUGS ACQUIRED

A private house or flat was shown to be the main location at which drugs were acquired across all drug types, particularly amphetamines. Overall, cannabis and amphetamines were the drugs acquired from the widest range of locations. Responses to this question are shown in Figure 51.



# Figure 51: Location Where Drugs Last Acquired

# 4.8 SELLING DRUGS

Participants were asked whether they had sold any drugs in the previous 30 days. Eleven percent of all participants reported having sold cannabis, 5.6% reported having sold amphetamines (including methamphetamines), 1% reported having sold ecstasy and under 1% of respondents reported having sold heroin. These results are depicted in Figure 52.



## Figure 52: Proportion of Participants Selling Drugs (n=957)

Further analysis was conducted on these variables and is presented as a time series illustration over the four quarters of the year. The following figure shows a distinct downward trend, particularly for cannabis and amphetamines.



Figure 53: Proportion of Participants Selling Drugs - Time Series

These variables were further analysed on a site by site basis to determine whether there were any geographical differences. All sites present the same general downward trend as that seen overall.







Figure 55: Henderson - Proportion of Participants Selling Drugs - Time Series







Figure 57: Dunedin - Proportion of Participants Selling Drugs - Time Series

# RISKS OF THE DRUG MARKET

Participants were asked to describe the illegal drug markets for cannabis, heroin, amphetamines (including methamphetamines) and ecstasy in their local areas by commenting on:

- the degree of perceived risk from Police activities associated with **selling** each type of drug in the area;
- the degree of perceived risk from Police activities associated with **buying** each type of drug in the area; and
- the degree of violence associated with the market for each type of drug in the area.<sup>4</sup>

The responses detailing the perceived risks and violence associated with each of the four nominated illegal drug markets are presented in Figure 58.



Figure 58: Perceived Risks and Violence of Illicit Drug Markets (n=958)

For ease of illustration, where participants refused to or did not provide an answer to the question, their responses have been excluded.

The following observations summarise the findings from this analysis:

- Selling drugs was considered to present more risks from Police activity than buying in all drug markets.
- The amphetamine market was reported by participants to involve the greatest risk from Police activities whether buying or selling and was also perceived to be the most violent illegal drug market.
- Buying cannabis was perceived by participants to be the drug-related transaction at least risk from Police activities.
- The cannabis and ecstasy markets were perceived to be the least violent of the four drug markets.

<sup>&</sup>lt;sup>4</sup> For ease of comparison, the responses "Very Risky", "Very Violent" and "Fairly Risky" and "Fairly Risky" and "Fairly Risky" into the category "Very Risky/Violent & Fairly Risky/Violent". The responses "Not very Risky", "Not very Violent" and "Not at all Risky" and "Not at all Violent" have been grouped into the category "Not very Risky/Violent & Not at all Risky/Violent".

# 5

# NZ-ADAM AND DUMA COMPARISONS

# 5.1 INTRODUCTION

As previously noted, the New Zealand Arrestee Drug Abuse Monitoring (NZ-ADAM) is one of a number of similar international programmes which seek to measure drug and alcohol use among people who have recently been detained by police. Of particular interest is the Drug Use Monitoring in Australia (DUMA) programme which, like the NZ-ADAM programme, involves the collection of self-reported and urinalysis data from people detained in police watch houses. This section draws some comparisons between the two studies on a number of levels including detainee profiles and drug use by participants. The DUMA data has been derived from the report by Mouzos, Smith and Hind.<sup>5</sup>

# 5.2 **PROFILE OF PARTICIPANTS**

# GENDER

The comparison of gender across both studies shows that the large majority of detainees was male (85% in both studies).

# AGE

Among all participants in both studies, the largest group was aged 21-30 years (42%). However, other age groups differed in their representation. Twenty-seven percent of DUMA participants were over 35 years compared to 19% of NZ-ADAM participants. Conversely 14% of DUMA participants were aged 18-20 years, compared to 27% of NZ-ADAM participants. Overall, DUMA participants were older than NZ-ADAM participants. The age distribution of the participants in both studies is shown in Table 7 below.

Age Group	NZ-ADAM	DUMA
18-20 yrs	27%	14%
21-30 yrs	42%	42%
31-35 yrs	12%	17%
Over 35 yrs	19%	27%

#### Table 7: Comparative Age Profile between DUMA and NZ-ADAM

## EDUCATIONAL STATUS

In making comparisons in the area of educational status of participants in NZ-ADAM and DUMA, it was assumed that Polytech courses in New Zealand are commensurate with Australian TAFE courses. The highest percentage of participants in both studies were found to have completed some high school but had not completed the compulsory years (in the DUMA study this was stated as participants having had less than 10 years of formal education). Other comparisons are shown in Table 8 below.

<sup>&</sup>lt;sup>5</sup> Mouzos J, Smith L, Hind N. *Drug use monitoring in Australia: 2005 Annual Report on drug use among police detainees.* Research Public Policy Series No.70. Australian Institute of Criminology, 2006.

Education Level Acquired	NZ-ADAM	DUMA
Some high school but compulsory years not completed	38%	48%
Completed Polytech (TAFE) course	9.5%	17%
Currently at Polytech (TAFE)) or University	3.5%	11%
Completed University	2%	4%

#### Table 8: Comparative Educational Status between DUMA and NZ-ADAM

# PLACE OF RESIDENCE

When asked to describe where they had lived most of the time in the last 30 days, 44% of NZ-ADAM participants reported living in a house or apartment they owned or rented, compared to 47% of DUMA participants. Two percent and six percent reported to have been living on the street in the NZ-ADAM and DUMA studies respectively.

# GOVERNMENT BENEFITS RECEIVED

Among DUMA participants 62% reported obtaining money through government benefits compared to 56% of NZ-ADAM participants.<sup>6</sup>

# 5.3 Drug Use Among Detainees

# 5.3.1 URINALYSIS RESULTS

The following section presents detailed results of urinalysis testing by different drug types. In DUMA, 81% of interviewed participants provided a urine sample, while 59% of NZ-ADAM interviewees provided a useable sample. According to the DUMA report, in terms of the socio-demographic profile of detainees, most serious offence, self-reported drug use and prior contact with the justice system, there are few differences between the profiles of detainees who provide a sample and those who do not.

## CANNABIS

Cannabis was the most commonly detected drug across both studies, but was considerably higher among NZ-ADAM participants. Over half (54%) of DUMA detainees tested positive for cannabis, compared to 69% of the New Zealand detainees who tested positive to cannabis.

## **METHAMPHETAMINES**

The NZ-ADAM results show that 12% of detainees tested positive for methamphetamines compared to 28% testing positive in the DUMA study<sup>7</sup>.

## Heroin

There was a considerable difference in the results for heroin between the two studies. A very small percentage of New Zealand participants (3%) tested positive for opiates whereas 17% percent of the Australian detainees tested positive for opiate use.

<sup>6</sup> Note that the figures reported on for NZ-ADAM are for 12 months – no time period was stated for the DUMA figures. The figures reported for sources of income are based on a different time period (income obtained in the past 30 days) thus, the numbers in 'Government Benefits' and 'Sources of Income' differ as they relate to different time periods.

<sup>7</sup> The figure stated for methamphetamine use is based on the study finding 929 positive amphetamine screens of which 96 tested positive to amphetamines only and 28 tested positive to ecstasy only.

## TRANQUILISERS

A comparison between the two studies on tranquiliser use is more difficult as the method of reporting varied between the studies The NZ-ADAM reported that overall 5% of detainees tested positive to various forms of tranquilisers. The DUMA study presented its findings by gender, with 19% of males and 33% of females testing positive, compared to the NZ-ADAM study findings of 5% of males and 1% of females.

#### COCAINE

Cocaine was found to be the least likely of all drugs to be used with DUMA reporting only 1% of detainees testing positive and this was mirrored in the NZ-ADAM study where no detainees tested positive to cocaine at the time of the study.

## ECSTASY

Positive tests for ecstasy were low in both studies with 0.2% and 2.5% testing positive in the NZ-ADAM and DUMA studies respectively.

# 5.3.2 SELF-REPORTED DRUG USE

Both studies collected data relating to the self-reported drug use by detainees. The DUMA report found that 42% of detainees reported having used drugs prior to their arrest, while the NZ-ADAM study found that approximately half of detainees (51%) reported that they had been using at least one drug at the time of their arrest. Ninety-eight per cent of DUMA participants reported ever having drunk alcohol, compared to 99% of NZ-ADAM participants.

## AGE DRUG ACTIVITY COMMENCED

Detainees in both studies were asked to identify the age at which they had first tried drugs and the results across the two studies were quite similar. Alcohol and cannabis were the drugs that were tried at the youngest age with NZ-ADAM detainees reporting 13 years of age for both drugs and DUMA reporting 14 years of age for both drugs. Generally NZ-ADAM males report younger ages for first drug use, with the exceptions of methamphetamines and hallucinogens. A more detailed comparison is shown in Table 9 below.

	Ма	les	Females				
	NZ-ADAM	DUMA	NZ-ADAM	DUMA			
Alcohol	13	14	13	14			
Cannabis	13	14	13	14			
Cocaine	17	19	17	18			
Heroin	16	19	18	19			
Methadone	17	22	20	19			
Methamphetamines	19	18	22	19			
Ecstasy	17	20	19	17			
Tranquilisers	16	19	18	18			
Hallucinogens	16	15	17	15			

Table 9:	Mean	Age	of First	Drua	Use <sup>8</sup>
	moun	1.90	011100	Diag	000

<sup>&</sup>lt;sup>8</sup> Note that DUMA figures only relate to detainees who tested positive to drug use.

# 5.3.3 ACQUIRING DRUGS

Both studies reported that the large majority of detainees had acquired drugs in the last 30 days (76% in NZ-ADAM and 67% in DUMA). A number of questions were also asked to ascertain the method of contact as well as the place of purchase of these drugs. A summary of these findings is presented in the table below.

	Canr	nabis	Her	oin	Amphetamines			
	NZ-ADAM	DUMA	NZ-ADAM	DUMA	NZ-ADAM	DUMA		
Method of Contact								
Mobile Phone	15%	20%	14%	41%	35%	33%		
Landline Phone	3%	16%	21%	28%	3%	20%		
Visit a house or flat	55%	37%	7%	14%	33%	24%		
Approach them in public	8%	11%	14%	9%	4%	8%		
Place of Purchase								
House or flat	55%	59%	54%	32%	67%	52%		
On the street	8%	21%	15%	47%	9%	25%		
Delivered to individual	8%	11%	15%	10%	9%	14%		

Table 10: Drugs Acquired in Past 30 Days, NZ-ADAM and DUMA<sup>9</sup>

Generally the methods and places of acquisition were comparable across the two studies, with some variations, for example the greater use of landline phones in DUMA and the higher prevalence of acquiring drugs on the street in DUMA.

# 5.3.4 DRUG TREATMENT

Comparisons between the two studies indicated that across all detainees about a third had been in treatment at some stage in their lives (35% NZ-ADAM and 31% DUMA). Only 5% of New Zealand detainees reported currently being in treatment compared to12% in Australia.

# 5.3.5 DRUGS & CRIME

Offences committed by detainees in both studies were categorised according to the appropriate offence hierarchy for both countries. The comparisons made in the table below use the NZ-ADAM offence categorisation.<sup>10</sup> Where there is no data for DUMA it is not evident where they would fit using the NZ-ADAM offence classification.

<sup>9</sup> Note that some results were omitted due to differing reporting categories - comparisons were made only on matching drugs, matching method of contact and place of purchase.

NZ-ADAM used the offence hierarchy provide by the NZ Police where as the DUMA study was based on the Australian Standard Offence Classification scheme (Australian Bureau of Statistics 1997).

Offence Category	NZ-ADAM	DUMA
Administrative (includes Breaches)	39	17
Violence	19	24
Dishonesty	17	-
Driving (includes drink driving)	8	14
Property	6	27
Disorder	5	6
Drugs and Anti-social Offences	5	7
Other	2	5
Sexual Offences	1	-

## Table 11: Current First Recorded Offence Committed by NZ-ADAM and DUMA Participants (%)

Comparisons between the offence for which participants were detained and the proportion of these participants who self-reported drug use in the previous 30 days across both studies are shown in the table below. The proportion of participants using cannabis was consistently higher across all offence types in NZ-ADAM compared to DUMA, while the reverse occurred for heroin and tranquilisers. Methamphetamine use varied between the different offence types across the two studies.

# Table 12: Offence Committed by Self-Reported Drug Use in previous 30 days for NZ-ADAM and DUMA<sup>11</sup>

Offenee Category	Adı	nin.	Diso	rder	Dri	ving	Dru	ıgs	Prop	perty	Violence	
Offence Calegory	NZ	AUS	NZ	AUS	NZ	AUS	NZ	AUS	NZ	AUS	NZ	AUS
Cannabis	76%	50%	64%	52%	71%	61%	78%	58%	73%	60%	66%	52%
Heroin	2%	12%	0%	4%	2%	11%	3%	17%	4%	21%	1%	8%
Methamphetamines12	30%	24%	14%	16%	41%	27%	42%	35%	33%	33%	17%	22%
Tranquilisers	1%	17%	0%	15%	0%	13%	3%	14%	0%	30%	3%	18%

# OFFENDING AND DRUG USE

There is quite a difference between the two studies when participants were asked if their drug use contributed to their offence. The NZ-ADAM study found that more than 50% of users of all drugs other than cannabis indicated that their drug use had contributed to their involvement in criminal activity to some degree. Twenty-five percent of NZ-ADAM cannabis users reported that their drug use contributed between "some" and "all" to their criminal activities. However, although the DUMA study does not break the results down by drug it was found that 36% reported at least some of their offences were drug-related (excluding alcohol), while 64% of participants did not attribute any of their offending to drugs.

# CRIMINAL HISTORY

In DUMA, 57% of detainees reported having been previously arrested in the previous twelve months, compared to 65% of NZ-ADAM detainees. Similarly, 15% of DUMA detainees reported having been in prison in the previous 12 months (3% for drug offences) while in NZ-ADAM 20% had been in prison, with 2% being imprisoned for drug offences.

<sup>&</sup>lt;sup>11</sup> Note that the DUMA data shown is only on male detainees.

<sup>&</sup>lt;sup>12</sup> The figures shown for NZ-ADAM include amphetamines in line with the DUMA method of data presentation.

# A

# SHIFT SUMMARIES, 2005-2006

							W	/hangarei										
		6am	-12pm			12pr	m-6pm			6pm	n-12am			Total				
Day of Week	No. of Shifts	Hours Present	No. Avail.	No. Agreed	% of Total Shifts													
Monday	1	4	2	1	0	0	0	0	10	40	21	17	11	44	23	18	11%	
Tuesday	0	0	0	0	0	0	0	0	13	51	48	24	13	51	48	24	13%	
Wednesday	0	0	0	0	0	0	0	0	20	76	70	34	20	76	70	34	20%	
Thursday	0	0	0	0	0	0	0	0	18	68.5	57	30	18	68.5	57	30	18%	
Friday	0	0	0	0	0	0	0	0	7	28	38	16	7	28	38	16	7%	
Saturday	0	0	0	0	0	0	0	0	5	20	12	7	5	20	12	7	5%	
Sunday	1	4	5	3	8	37	63	39	15	60	112	63	24	101	180	105	24%	
Total	2	8	7	4	8	37	63	39	88	343.5	358	191	98	388.5	428	234	100%	
Average per Shift		4.0	3.5	2.0		4.6	7.9	4.9		3.9	4.1	2.2		4.0	4.4	2.4		

							Hende	erson										
		6am	-12pm			12pr	n-6pm			6pm	-12am		Total					
Day of Week	No. of Shifts	Hours Present	No. Avail.	No. Agreed	% of Total Shifts													
Monday	2	6	12	3	16	51.25	65	29	5	14.75	21	8	23	72	98	40	14%	
Tuesday	5	18	12	5	10	30.25	31	9	10	34.75	50	18	25	83	93	32	15%	
Wednesday	3	9.5	8	3	14	45.25	59	25	10	32.25	64	22	27	87	131	50	16%	
Thursday	4	15	11	5	15	50.75	70	29	10	31.25	52	10	29	97	133	44	17%	
Friday	8	26	23	9	14	42.25	44	19	6	21.5	26	12	28	89.75	93	40	16%	
Saturday	2	8	11	2	5	15	17	4	5	19	23	7	12	42	51	13	7%	
Sunday	12	41	119	33	10	37	96	34	4	16.5	35	13	26	94.5	250	80	15%	
Total	36	123.5	196	60	84	271.75	382	149	50	170	271	90	170	565.25	849	299	100%	
Average per Shift		3.4	5.4	1.7		3.2	4.5	1.8		3.4	5.4	1.8		3.3	5.0	1.8		

							Ham	ilton											
		6am	-12pm			12pr	n-6pm			6pm	-12am			Total					
Day of Week	No. of Shifts	Hours Present	No. Avail.	No. Agreed	% of Total Shifts														
Monday	3	8	12	3	6	14.5	10	6	2	7	6	4	11	29.5	28	13	8%		
Tuesday	6	15	28	10	5	13.5	9	6	9	28	30	13	20	56.5	67	29	14%		
Wednesday	9	23.75	48	18	9	22	14	7	7	20.25	23	6	25	66	85	31	18%		
Thursday	8	22.5	29	15	6	16.5	24	13	12	34.5	36	17	26	73.5	89	45	19%		
Friday	4	13	19	8	6	14.75	5	2	10	27.25	33	17	20	55	57	27	14%		
Saturday	3	7.5	0	0	7	15.5	9	4	5	13	20	8	15	36	29	12	11%		
Sunday	3	10.5	22	11	11	49	122	40	8	26.25	49	15	22	85.75	193	66	16%		
Total	36	100.25	158	65	50	145.75	193	78	53	156.25	197	80	139	402.25	548	223	100%		
Average per Shift		2.8	4.4	1.8		2.9	3.9	1.6		2.9	3.7	1.5		2.9	3.9	1.6			

Dunedin																		
		6am	-12pm			12pr	n-6pm			6pm	-12am			Total				
Day of Week	No. of Shifts	Hours Present	No. Avail.	No. Agreed	% of Total Shifts													
Monday	8	21	12	7	3	7	1	0	7	19	6	3	18	47	19	10	10%	
Tuesday	10	23.5	13	5	3	8	1	0	7	14	5	4	20	45.5	19	9	11%	
Wednesday	7	17.5	7	5	7	18.5	4	4	11	27.5	14	6	25	63.5	25	15	14%	
Thursday	5	14	12	4	10	26.5	10	8	12	35	18	9	27	75.5	40	21	15%	
Friday	10	24.5	24	18	7	17	9	5	12	32.5	10	5	29	74	43	28	16%	
Saturday	19	60.25	40	30	5	11	6	3	8	21	7	5	32	92.25	53	38	17%	
Sunday	24	88.25	105	54	6	17.5	16	9	4	11	13	7	34	116.75	134	70	18%	
Total	83	249	213	123	41	105.5	47	29	61	160	73	39	185	514.5	333	191	100%	
Average per Shift		3.0	2.6	1.5		2.6	1.1	0.7		2.6	1.2	0.6		2.8	1.8	1.0		

All Sites																	
	6am-12pm				12pm-6pm				6pm-12am				Total				
Day of Week	No. of Shifts	Hours Present	No. Avail.	No. Agreed	% of Total Shifts												
Monday	14	39	38	14	25	72.75	76	35	24	80.75	54	32	63	192.5	168	81	11%
Tuesday	21	56.5	53	20	18	51.75	41	15	39	127.75	133	59	78	236	227	94	13%
Wednesday	19	50.75	63	26	30	85.75	77	36	48	156	171	68	97	292.5	311	130	16%
Thursday	17	51.5	52	24	31	93.75	104	50	52	169.25	163	66	100	314.5	319	140	17%
Friday	22	63.5	66	35	27	74	58	26	35	109.25	107	50	84	246.75	231	111	14%
Saturday	24	75.75	51	32	17	41.5	32	11	23	73	62	27	64	190.25	145	70	11%
Sunday	40	143.75	251	101	35	140.5	297	122	31	113.75	209	98	106	398	757	321	18%
Total	157	480.75	574	252	183	560	685	295	252	829.75	899	400	592	1870.5	2158	947	100%
Average per Shift		3.1	3.7	1.6		3.1	3.7	1.6		3.3	3.6	1.6		3.2	3.6	1.6	



NZ-ADAM QUESTIONNAIRE