



# **New Zealand Arrestee Drug Use Monitoring (NZ-ADUM)**

## **2010 Report**

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## Executive Summary

### Introduction

The primary aim of NZ-ADUM is to measure the level of alcohol and drug use by police detainees and investigate the role alcohol and drug use plays in criminal offending. NZ-ADUM also monitors trends in drug use and drug markets; documents alcohol and drug related harm; measures the demand for alcohol and drug treatment among detainees; and seeks to identify underlying drivers of drug use and offending among detainees.

### Methodology

The 2010 NZ-ADUM interviewed a total of 814 police detainees held for less than 48 hours at Whangarei, Auckland Central, Wellington Central and Christchurch Central police watch houses from April to July 2010. Two hundred of these detainees were tested for drug use via the collection of a urine sample. The interviews were conducted by SHORE/Whariki interviewers in a private room in the watch house. All the information provided by detainees is confidential and is only reported in aggregate.

### Purpose of this report

The principal purpose of this report is to present the descriptive data from the 2010 NZ-ADUM analysed by site location. Some bivariate analyses have been completed to look at initial associations between alcohol and drug use and offending behaviour, and between adolescent development and alcohol and drug use and offending behaviour. More sophisticated statistical modelling of these associations will be presented in future publications.

### Demographics

Eighty-nine percent of the police detainees were male, the median age of the detainees was 24 years, 44% were European, 38% were Maori and 14% were Pacific. Fifty-four percent of the detainees had not completed the compulsory high school years and only 37% were employed. Thirty-two percent had suffered from a mental illness. Detainees in Whangarei were more likely to be Maori, to have not completed the compulsory years

of education, to be unemployed and to have dependent children. Detainees in Christchurch Central were more likely to be unemployed and to have suffered from a mental illness.

### **Arrest history**

The detainees had been arrested an average of three times in the past 12 months (median=2, range 1-30). The detainees had been arrested for a wide range of offences, including 'Against Justice' (39%), 'assault' (30%), 'driving offences' (16%), 'public disorder' (13%), 'burglary' (12%), 'cannabis offences' (11%) and 'theft' (9%). The most common drug offences the detainees were arrested for were cannabis (76%), methamphetamine (21%), alcohol offences (10%) and ecstasy (2%).

### **Alcohol use**

Ninety percent of the detainees had drunk alcohol in the past 12 months. Thirty-six percent had been drinking alcohol prior to their arrest; consuming a mean of 12 standard drinks before being arrested. Male detainees and those who were receiving social welfare benefits were more likely to be heavier drinkers. Detainees in Christchurch Central drank alcohol on more occasions than those in Whangarei and Wellington Central. Detainees in Whangarei drank a higher number of drinks on a typical day than those in Auckland Central.

### **Methamphetamine use**

Twenty-six percent of the detainees had used methamphetamine in the past 12 months. Detainees in Central Auckland were more likely to have used methamphetamine, and used it on more occasions, than detainees in the other sites. The availability of methamphetamine was described as 'very easy/ easy'. The availability of methamphetamine was higher in Auckland Central than in Christchurch Central and Whangarei. The mean price paid for a gram of methamphetamine was \$723. The price of methamphetamine was lower in Auckland Central and Whangarei than the other sites. Detainees aged 25 years or older, Maori detainees, those unemployed or on a

sickness benefit, those who had not completed the compulsory years of education and those who had been in prison in the past 12 months were more likely to be heavier methamphetamine users (i.e. at least weekly users).

### **Cannabis use**

Seventy-two percent of the detainees had used cannabis in the past 12 months. The detainees had used cannabis on a mean of 187 days in the past year. Detainees in Christchurch Central were more likely to have used cannabis in the past year and the past month than the other sites. Detainees in Christchurch Central and Wellington Central were more likely to have used cannabis before their arrest. Maori detainees were more likely to have used cannabis in the past year and the past month.

### **Ecstasy (MDMA) use**

Twenty-two percent of the detainees had used ecstasy in the past 12 months. The prevalence of ecstasy use in the past 12 months was higher in Wellington Central and Christchurch Central. The frequency of ecstasy use was higher in Auckland Central and Wellington Central. Detainees who used ecstasy in Wellington Central were likely to report using 'more' ecstasy than detainees in Auckland Central and Christchurch Central. The mean price paid for a pill of ecstasy was \$51. The price of ecstasy was higher in Christchurch Central than the other sites. European detainees were more likely to have used ecstasy.

### **Opioid use**

Eight percent of the detainees had used an opioid (i.e. morphine, heroin, opiates/opioids) in the past 12 months. Detainees in Christchurch Central were more likely to have used an opioid in the past year than those in Whangarei and Auckland Central. Detainees in Christchurch Central had used an opioid for the first time at an earlier age than those in Wellington Central.

### **Cocaine use**

Four percent of the detainees had used cocaine in the past 12 months. Detainees in Wellington Central and Auckland Central were more likely to have tried cocaine than detainees in the other two sites.

### **Other drug use**

Twenty percent of the detainees had used hallucinogens, 8% had used tranquillisers, and 6% had used amphetamine sulphate. Detainees in Wellington Central and Christchurch Central were likely to have used a Hallucinogen (e.g. LSD or 'magic' mushrooms) in the past 12 months. Detainees in Auckland Central and Christchurch Central were more likely to have used a tranquilliser in the past 12 months. European detainees were more likely to have used hallucinogens and tranquilisers.

### **Alcohol, drug use and criminal offending**

Twenty-three percent of the detainees reported committing a violent crime in the past month and the same percentage had sold drugs in the past month. Nineteen percent had committed a property crime and 15% had shoplifted in the past month. Detainees who were under 25 years old, unemployed or on a sickness benefit, of single marital status and who had been in prison in the past 12 months were more likely to have committed a property crime in the past 30 days. Detainees who were of Maori ethnicity, who were unemployed or on a sickness benefit, who did not complete the compulsory years of high school education, and who were *not* of single marital status were more likely to have committed a violent crime in the past 30 days. Detainees who had consumed heavier quantities of alcohol were more likely to have committed a property crime and sold drugs in the previous month. Detainees who were heavier users of cannabis were more likely to have committed a property crime, sold drugs and committed a violent crime in the previous month. Detainees who were heavier users of methamphetamine were more likely to have committed a property crime and to have sold drugs in the previous month.

### **Adolescent development, criminal offending, and alcohol and drug use**

Fifteen percent of the police detainees had been in Child Youth and Family (CYF) care when they were growing up, with Maori detainees more likely to have been in CYF care and youth detention facilities. Thirty-one percent of the police detainees said their parents were drunk 'often' or 'all the time' when they were growing up. Sixty-three percent of the detainees had been warned or arrested by police before they were 17 years old. Sixty-one percent of the detainees had been expelled or suspended from school. Maori detainees were more likely to report poor parenting, poor adolescent behaviour and poorly behaved adolescent peer groups. Detainees who were poorly behaved as adolescents and who had poorly behaved peers at school were more likely to be heavier alcohol drinkers. Detainees who experienced poor parenting, were poorly behaved as adolescents and who had poorly behaved peers at school were more likely to be heavier cannabis and methamphetamine users. Eighteen percent of the detainees had been sexually abused with Maori detainees more likely to have been the victims of such abuse.

### **Alcohol, drug use and violence**

Fifty-nine percent of the police detainees reported being physically aggressive in the past 12 months. Sixty-two percent reported being under the influence of alcohol and drugs on at least some of the occasions they were physically aggressive. Thirty-three percent had been physically aggressive toward their partner. The drug types which the detainees most commonly reported using while being physically aggressive were alcohol (81%), cannabis (36%) and methamphetamine (11%). Detainees in Auckland Central were more likely to be under the influence of methamphetamine while being physically aggressive. Sixty-one percent of the detainees reported being the victim of physical aggression in the previous 12 months. Seventy-three percent of the detainees thought their victimiser had been under the influence of alcohol and drugs on at least some of the occasions they experienced physical aggression. Maori and Pacific detainees were more likely to report being treated unfairly due to their ethnicity than European detainees.



### **Alcohol, drug use and driving**

Forty-five percent of the detainees who drank alcohol and drove had driven under the influence of alcohol. Fifty-six percent of the detainees who used methamphetamine and drove had driven under the influence of methamphetamine. Sixty-two percent of the detainees who used cannabis and drove had driven under the influence of cannabis. Fifty-seven percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of alcohol. Sixty-eight percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of drugs. Detainees in Christchurch Central thought they were less likely to be stopped by police while driving under the influence of alcohol and drugs than detainees in the other three sites.

### **Urine testing for drug use**

Sixty-five percent of the police detainees tested positive for cannabis, 11% tested positive for methamphetamine, 8% tested positive for amphetamine and 3% tested positive for morphine. Ninety-four percent of the detainees who tested positive for cannabis use, 82% of those who tested positive for methamphetamine and 45% of those who tested positive for opioids had also self-reported using these drug types in the past month.

### **Harm from alcohol and drug use**

Eighty-eight percent of the detainees who used alcohol and drugs had experienced at least one problem from their alcohol and drug use in the past 12 months. The detainees reported experiencing problems such as family issues, financial issues, low work performance, verbal and physical aggression, dangerous driving and risky sexual behaviour. Alcohol (80%), cannabis (33%) and methamphetamine (14%) were the drug types to which the detainees most commonly attributed their drug-related problems. Detainees in Christchurch Central were more likely to attribute their drug-related problems to alcohol while detainees in Auckland Central were more likely to attribute their drug-related problems to methamphetamine.

### **Alcohol and drug treatment**

Thirty-six percent of the detainees felt they needed at least some help to reduce their alcohol and drug use. The drug types which the detainees most commonly needed help for were alcohol (64%), cannabis (38%), methamphetamine (15%) and tobacco (13%). Eighteen percent of the detainees had unsuccessfully sought help for alcohol and drug problems. The detainees reported experiencing a mean of four barriers when attempting to access drug treatment. The barriers most commonly experienced were 'had no transport to get there' (29%), 'fear of what might happen once made contact with the service' (28%), 'social pressure to keep on using' (28%), 'didn't know where to go' (26%), 'long waiting lists' (24%), 'couldn't get an appointment at a suitable time' (23%), 'fear of losing friends' (22%) and 'no local services available' (22%). Sixteen percent of the detainees had been in an alcohol and drug treatment programme in the past 12 months and 6% were currently in a treatment programme.

### **Contact with the criminal justice system**

Sixty-three percent of the detainees had been convicted for a criminal offence. Thirty-nine per cent had been sent to prison and 13% had been in prison in the past 12 months.

## Chapter 1 - Methodology

### Introduction

The New Zealand Arrestee Drug Use Monitoring (NZ-ADUM) research programme was developed to investigate the nexus between drug use and criminal offending in New Zealand. NZ-ADUM aims to collect data on the level of alcohol and drug use among police detainees; the role alcohol and drug use plays in offending; monitor trends in drug use, drug-related harm and drug markets; identify the level of demand for alcohol and drug treatment among detainees and investigate barriers experienced by detainees when attempting to access treatment services; and contribute to knowledge concerning the underlying drivers of crime and drug use in New Zealand.

NZ-ADUM is intended to inform policy development, policy evaluation, strategic direction and best practice in regard to issues around drug use and offending in New Zealand. NZ-ADUM also contributes to an understanding of current trends in drug use and drug markets, and assists in the identification of new and emerging drug types. Finally, NZ-ADUM will assist in the development of a body of knowledge of the underlying drivers of drug use and crime which will contribute to long term initiatives to reduce drug use and offending in New Zealand.

### Background

NZ-ADUM<sup>1</sup> was developed from the ADAM methodology (Arrestee Drug Abuse Monitoring System) which was first developed in the United States during the mid 1980s (Hart, 2003; Taylor, 2002). The United States ADAM methodology was extended in 2000 and is currently conducted in 10 key sites in the United States

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<sup>1</sup> NZ-ADUM was originally known as the NZ-ADAM (New Zealand Arrestee Drug Abuse Monitoring System)

(Office of National Drug Control Policy, 2009). The core component of the ADAM methodology is the interviewing of individuals detained in police stations about their drug use and offending behaviour (Hunt & Rhodes, 2001; National Institute of Justice, 2003). The second key component of the ADAM methodology is that the detainees' self-reporting of drug use is verified through scientific testing of drug use via urine or oral fluids. ADAM research is conducted by an independent research group which guarantees that the interviews with detainees will be voluntary, private and confidential, and that the results will only be reported in aggregate (i.e. no individual detainee is ever identified).

Studies based on the core ADAM methodology have been conducted in Australia (i.e. Drug Use Monitoring in Australia or DUMA) and England and Wales for a number of years (i.e. New England and Wales Arrestee Drug Abuse Monitoring Research or NEW-ADAM) (see Boreham, et al., 2007; Gaffney, et al., 2010). NZ-ADUM was adapted from the international ADAM programme in 2003 (Wilkins & Rose, 2003) and a local pilot of the methodology was completed in 2004 at Papakura Police Station in 2004 (Wilkins, et al., 2004). A national NZ-ADUM programme was conducted from 2005 to 2009 (Hales & Manser, 2009). The NZ-ADUM programme was reviewed and re-designed in 2010 to enhance the value and utilisation of the research. The re-design of NZ-ADUM involved a review and extension of the questionnaire. The location of the NZ-ADUM study sites and aspects of the sampling methodology were also changed to enhance the representativeness of the sample. It is intended that NZ-ADUM be flexible enough to respond to research questions of immediate importance while retaining the core methodology into the future to allow valid comparisons of key measures over time (i.e. trends in drug use and offending).

## Aims

- To measure the level of alcohol and drug use among police detainees
- To monitor trends in drug use among police detainees
- To investigate the role alcohol and drug use plays in criminal offending
- To monitor trends in the price and availability of key drugs of concern
- To identify the level of demand for alcohol and drug treatment services among police detainees
- To identify barriers experienced by police detainees when attempting to find help for alcohol and drug issues
- To identify underlying drivers of crime and drug use

## Method

NZ-ADUM is conducted in four central city police watch houses in New Zealand (i.e. Whangarei, Auckland Central, Wellington Central and Christchurch Central). The study involves the face-to-face interviewing of a total of 800 police detainees at the four selected police watch houses for a period of approximately three months at each site. The four watch houses were selected as sites for the study as they are considered to be key strategic locations for policing in New Zealand and likely to provide the best representative picture of the police detainee population in each location. The selected watch houses were also required to be busy enough to have a sufficient throughput of detainees to facilitate two shifts of interviewing per day, be large enough to have a private interview room available for interviewing, and have toilet facilities located near interview rooms to permit the collection of urine samples.

The study sites were established on a rolling basis with interviewing beginning in Auckland in mid March, in Whangarei in late March, in Wellington in early April and Christchurch in mid April. A total of 200 urine samples were collected from all four sites during the first half of the interviewing phase. Early morning and early evening interviewing shifts were conducted every day of the week for the whole three months of interviewing at each site. The interviewing shift times were selected to match the two periods in a 24 hour day when the police cells were at their fullest (i.e. following the night shift and following the day shift). Table 1.1 shows completed interviews were shared fairly evenly between the days of the week. A relatively higher proportion of interviews were conducted on a Sunday as greater numbers of detainees were accumulated during the weekend and there was no court in operation on Sunday.

Table 1.1: Distribution of interviews by day of the week by location, 2010

Day (%)	Whangarei (n=114)	Auckland Central (n=282)	Wellington Central (n=151)	Christ- church Central (n=262)	Total (n=809)
Sunday	7	23	23	20	20
Monday	25	9	15	15	14
Tuesday	7	8	13	14	11
Wednesday	24	13	12	11	14
Thursday	16	14	12	9	12
Friday	12	17	13	16	15
Saturday	9	16	13	15	14

It is not possible to interview some detainees in a safe and ethical manner due to their level of intoxication, violent behaviour, emotional state, mental illness or lack of English language competency. Consequently, detainees were excluded from the study if they were:

- under 17 years of age;
- unfit for interview due to intoxication from alcohol/drugs or medication;
- unfit for interview due to mental health issues;

- unable to understand the questions due to poor English language comprehension;
- unfit for interview due to threatening or violent behaviour;
- held in custody for more than 48 hours;
- deemed unavailable by watch house staff due to ongoing legal/administrative proceedings

Police watch house staff were responsible for assessing the safety and suitability of detainees to be interviewed. The watch house staff initially approached suitable detainees in the cells to ask them if they wanted to participate in the study. Those detainees who were interested in participating were escorted to a private interview room where the ADUM interviewer introduced themselves, explained the purpose of the study and invited them to participate in an interview. The interviewer explained to the detainee that participation in the study was voluntary, everything they said was confidential, they could choose not to answer any question if they didn't want to, and the results of the study would only be reported in aggregate. The interviewer also explained to the detainee that they would only be required to answer general questions about their own drug use and offending and that no information was required about specific people, places, times or events. The interviewers were directed to terminate an interview if detainees started to voluntarily provide any specific details about offending to avoid the risk of the study becoming embroiled in any subsequent legal matters. The ethical protocols used in NZ-ADUM have been reviewed and approved by the Massey University Human Subjects Ethics Committee.

## Analysis

Statistical analysis was completed to compare results between the four watch house sites, and by primary ethnic group for some questions. Differences between proportions (e.g. ever used cannabis) were tested using logistic regression analysis. Differences between continuous variables (e.g. age) were tested using regression analysis. Some continuous variables were positively skewed (e.g. frequency of use of

methamphetamine) hence statistical testing was run on the log-transformed values for these items. Ordered categorical questions (e.g. frequency unemployed or in temporary employment over the past five years, where the options range from “Never” to “All the time”) were assigned numbers and tested using regression analysis. Chi-square tests were used to make comparisons between self-reported drug use, crime and demographic variables. Analysis was only completed for questions where there were sufficient numbers of detainees answering the question. All analysis was run using SAS version 9.2.



## Chapter 2 - Demographics

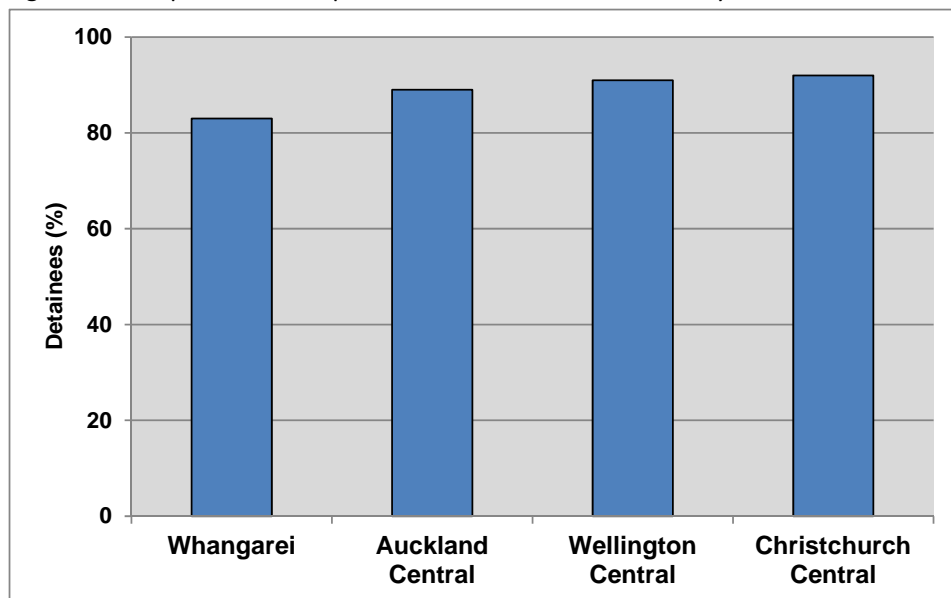
### Introduction

This chapter presents the general demographic characteristics of the police detainees interviewed for the 2010 NZ-ADUM study. Police detainee samples collected for ADAM studies in other countries have included a high proportion of males, young adults, poorly educated, unemployed and members of ethnic minorities compared to the wider populations (see Boreham, et al., 2007; Gaffney, et al., 2010; Office of National Drug Control Policy, 2009). Previous NZ-ADAM detainee samples have also included high proportions of males (83%), young adults (mean age 27), Maori (52%), those with low educational achievement (i.e. 42% had not completed compulsory high school years), low employment (i.e. only 36% were employed) and high levels of recent prison history (14% had been in prison in the past 12 months) (Hales & Manser, 2009). The site locations for the 2010 NZ-ADUM were changed from the previous NZ-ADAM programme and this is likely to have some consequences for the demographic profile of the detainee sample. More detailed data on the detainees' mental health, educational achievement and employment history were collected in the 2010 NZ-ADUM. Sections on early family life and adolescent development were also included in the redesigned 2010 NZ-ADUM questionnaire and these findings are presented in subsequent chapters of this report.

#### *Gender*

Eighty-nine percent of the police detainee sample was male. There was no statistically significant difference in the proportion of detainees who were male between the study sites (Figure 2.1).

Figure 2.1: Proportion of the police detainees who were male by location, 2010



### Age

The median age of the police detainees was 24 years (mean 28 years, range 17-63 years) (Table 2.1). The mean age of the detainees was older in Auckland Central than in Christchurch Central (29 years vs. 27 years,  $p=0.0031$ ).

Table 2.1: Mean age of the police detainees by location, 2010

Site	Age (years)		
	Median	Mean	Range
Whangarei (n=114)	25	27	17-60
Auckland central (n=284)	26	29	17-63
Wellington central (n=152)	24	28	17-62
Christchurch central (n=262)	23	27	17-63
Total (n=812)	24	28	17-63

## *Ethnicity*

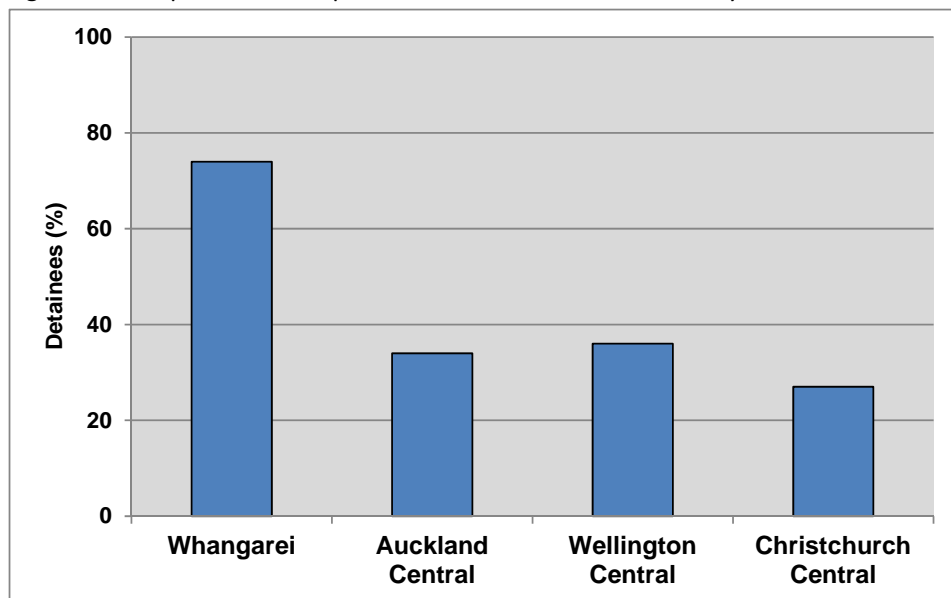
The police detainees were asked two questions about their ethnicity: 'Which ethnic group do you mainly belong to?'; and 'Is there any other ethnic group you belong to?'. For the purposes of this report we classified the detainees by their primary ethnicity. Forty-four percent of the detainees identified their primary ethnicity as European, 38% said they were Maori, 14% said they were Pacific and 2% said they were Asian (Table 2.2).

Table 2.2: Primary ethnicity of the police detainees by location, 2010

Primary ethnicity (%)	Whangarei (n=114)	Auckland Central (n=285)	Wellington Central (n=151)	Christ- church Central n=262)	Total (n=812)
European	23	32	42	67	44
Maori	74	34	36	27	38
Pacific	4	24	15	5	14
Asian	0	5	1	0	2
Other	0	5	6	<1	3

A higher proportion of the detainees were Maori in Whangarei compared to Auckland Central (74% vs. 34%,  $p<0.0001$ ), Christchurch Central (74% vs. 27%,  $p<0.0001$ ) and Wellington Central (74% vs. 36%,  $p<0.0001$ ) (Figure 2.2). The Wellington Central site had a higher proportion of Maori detainees than the Christchurch Central site (36% vs. 27%,  $p=0.0488$ ).

Figure 2.2: Proportion of the police detainees who were Maori by location, 2010



### *Iwi*

The police detainees who identified Maori as their primary or secondary ethnicity were asked if they knew their iwi affiliation. Eighty-seven percent of the Maori detainees reported they knew their iwi (Table 2.3). There was no difference in the knowledge of iwi affiliation between the site locations.

Table 2.3: Percentage of Maori detainees who knew their iwi by location, 2010

Site	Know iwi (%)
Whangarei (n=91)	81
Auckland Central (n=123)	88
Wellington Central (n=62)	92
Christchurch Central (n=104)	87
Total (n=380)	87

## Education

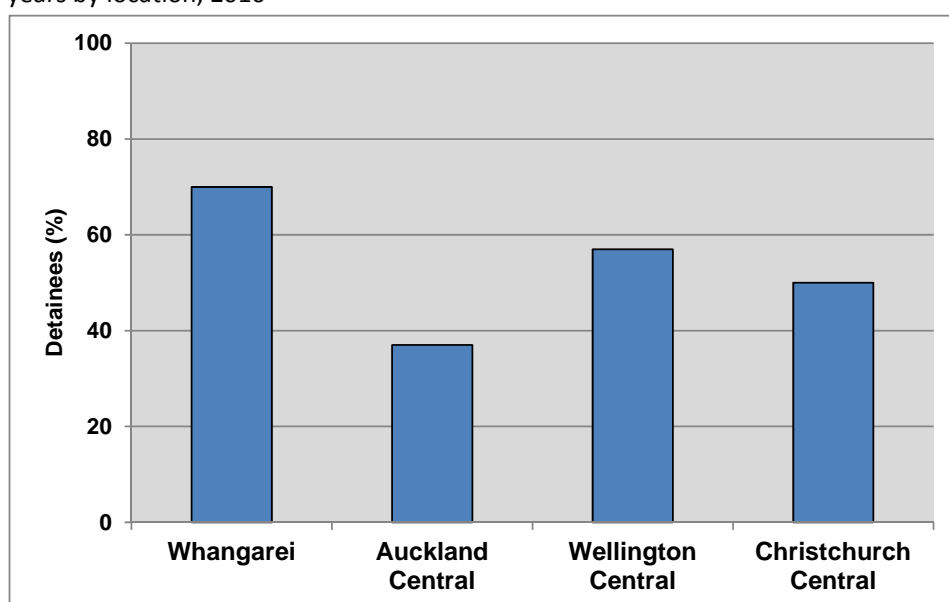
The police detainees were asked about their highest level of educational achievement. Four percent of the detainees had never been to school (Table 2.4). A further 50% had completed some high school years but had not completed the compulsory years.

Table 2.4: Highest educational level of police detainees by location, 2010

Highest education level	Whangarei (n=114)	Auckland Central (n=283)	Wellington Central (n=151)	Christ- Church Central(n =258)	Total (n=806)
Never went to school	4	6	4	<1	4
Some high school but did not complete compulsory years	70	37	57	50	50
Completed compulsory high school	18	22	11	17	18
Completed high school above compulsory years	0	14	2	3	6
Still in high school	1	<1	1	<1	1
Some polytechnic but did not complete	4	2	2	9	4
Completed a polytechnic course	1	5	13	17	10
Still in polytechnic course	1	2	3	1	2
Some university but did not complete	1	2	0	2	1
Completed a university or higher degree	1	6	6	1	4
Still in university	0	3	2	0	1

The detainees in Whangarei were more likely to have not completed the compulsory high school years than those in Auckland Central (74% vs. 43%,  $p<0.0001$ ), Wellington central (74% vs. 61%,  $p=0.0307$ ) and Christchurch Central (74% vs. 50%,  $p<0.0001$ ) (Figure 2.3). The detainees in Wellington Central were more likely to have not completed the compulsory high school years than those in Auckland Central (61% vs. 43%,  $p=0.0005$ ) and Christchurch Central (61% vs. 50%,  $p=0.0399$ ).

Figure 2.3: Proportion of police detainees who did not complete compulsory high school years by location, 2010



### *Age left school*

The police detainees had left school at a mean age of 15.5 years. The detainees in Christchurch Central left school at a younger age than those in Auckland Central (15.2 years vs. 15.7 years,  $p=0.0006$ ), Wellington Central (15.2 years vs. 15.6 years,  $p=0.0055$ ) and Whangarei (15.2 years vs. 15.5 years,  $p=0.0454$ ) (Table 2.5).

Table 2.5: Mean age police detainees left school by location, 2010

Site	Mean age left school (years)
Auckland Central (n=278)	15.7
Christchurch Central (n=258)	15.2
Wellington Central (n=149)	15.6
Whangarei (n=113)	15.5
Total (n=798)	15.5

### *Employment status*

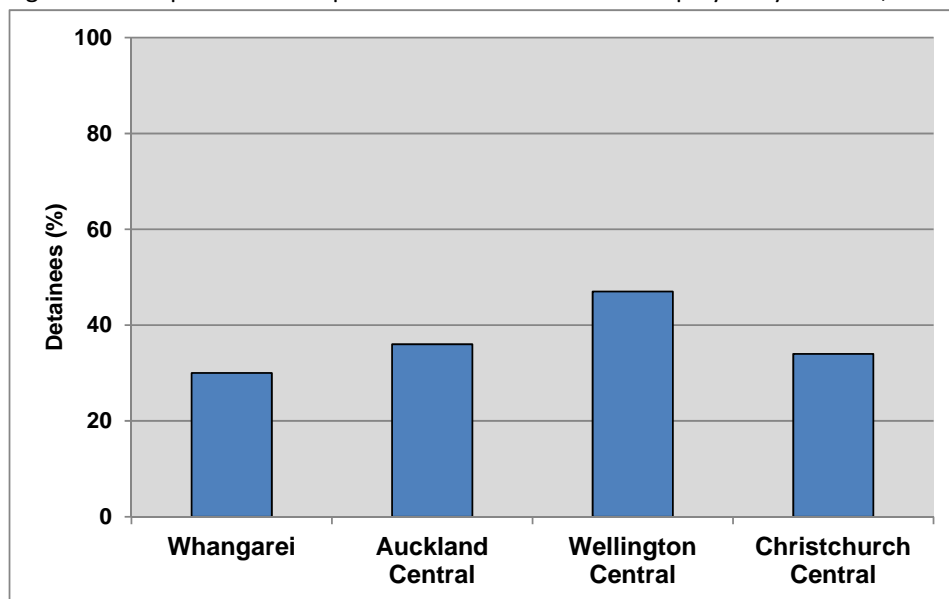
Thirty-nine percent of the police detainees were unemployed, 37% were employed (12% part-time and 25% full-time), 12% were on a sickness benefit, 7% were students and 3% were parenting/care-giving or doing unpaid work (Table 2.6).

Table 2.6: Employment status of police detainees

Employment status (%)	Whangarei (n=115)	Auckland Central (n=283)	Wellington Central (n=152)	Christchurch Central (n=262)	Total (n=812)
Unemployed/ sickness/ other	64	55	45	61	55
Employed	30	36	47	34	37
Students	5	9	8	5	7

The detainees in Wellington Central were more likely to be employed than the detainees in Christchurch Central (47% vs. 34%,  $p=0.0342$ ) or Whangarei (47% vs. 30%,  $p=0.0440$ ).

Figure 2.4: Proportion of the police detainees who were employed by location, 2010



#### *Length of time currently unemployed*

The police detainees who were currently unemployed reported that they had been out of work for a mean of 2.8 years (median 1 year) (Table 2.7). There was no statistically significant difference between the sites with respect to length of time been unemployed.

Table 2.7: Length of time the police detainees were unemployed by location, 2010

Site	Mean years unemployed
Whangarei (n=64)	2.8
Auckland Central (n=148)	3.1
Wellington Central (n=67)	2.7
Christchurch Central (n=156)	2.5
Total (n=435)	2.8



### *Unemployed or temporary employment over the past five years*

All the police detainees were asked to describe how often they had been unemployed or in temporary employment during the past five years using a five point scale (i.e. 0=never – 5=all the time). Thirty percent of the detainees had been unemployed or in temporary employment 'often' or 'all the time' over the previous five years (Table 2.8).

Table 2.8: Frequency police detainees had been unemployed or in temporary employment during the previous five years by location, 2010

Frequency (%)	Whangarei (n=109)	Auckland Central (n=280)	Wellington Central (n=145)	Christchurch Central (n=255)	Total (n=789)
Never [0]	9	21	19	15	17
Hardly any [1]	20	23	25	30	25
Sometimes [2]	39	23	25	29	28
Often [3]	15	12	19	16	15
All the time [4]	17	21	12	11	15
Average frequency score (1=Never – 5=All the time)	2.1	1.9	1.8	1.8	1.9

### *Marital status*

Sixty percent of the police detainees were single, 25% were living in a de facto relationship and 6% were married (Table 2.9).

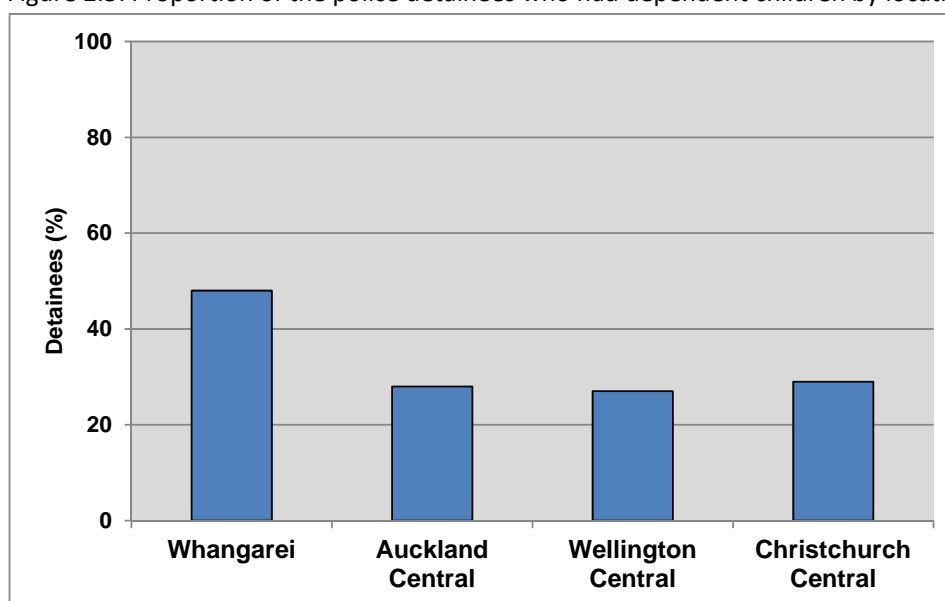
Table 2.9: Marital status of police detainees by location, 2010

Marital status (%)	Whangarei (n=114)	Auckland Central (n=281)	Wellington Central (n=152)	Christ- church Central (n=262)	Total (n=809)
Single	50	61	64	63	60
De facto	38	21	20	25	25
Married	4	8	7	3	6
Separated or divorced	7	10	7	9	9
Widowed	1	0	1	1	1

### *Number of dependent children*

Thirty-one percent of the police detainees had dependent children. The detainees in Whangarei were more likely to have dependent children than those in Auckland Central (46% vs. 28%,  $p=0.0007$ ), Wellington Central (46% vs. 27%,  $p=0.0021$ ) and Christchurch Central (46%. Vs. 29%,  $p=0.0018$ ) (Figure 2.5).

Figure 2.5: Proportion of the police detainees who had dependent children by location, 2010



Those detainees who had dependent children had a mean of 2.0 children (Table 2.10). Detainees in Christchurch Central had fewer dependent children than those in Auckland Central (1.6 vs. 2.0,  $p=0.0238$ ), Wellington Central (1.6 vs. 2.4,  $p=0.0274$ ) and Whangarei (1.6 vs. 2.1,  $p=0.0041$ ).

Table 2.10: Number of dependent children in detainee's care

Site	Any dependent children (%)	Mean number of children (of those who had any)
Whangarei (n=111)	46	2.1
Auckland Central (n=281)	28	2.0
Wellington Central (n=150)	27	2.4
Christchurch Central (n=262)	29	1.6
Total (n=804)	31	2.0

### *Accommodation*

Forty-seven percent of the police detainees were living in someone else's house and 45% in their own house in the previous 30 days (Table 2.11). Two percent had no fixed address. There was no statistically significant difference in the percentage of the detainees living in a private residence between the study sites.

Table 2.11: Current accommodation of police detainees by location, 2010

Accommodation type (%)	Whangarei (n=114)	Auckland Central (n=285)	Wellington Central (n=152)	Christ-church Central (n=262)	Total (n=813)
Own house (rented or owned)	44	41	54	43	45
Someone else's house	47	50	35	50	47
Some other house location (caravan park, boarding)	6	5	6	3	4
Shelter/ emergency housing	1	1	3	2	1
Prison	1	0	0	0	<1
Halfway house	0	0	1	<1	<1
Hospital or psychiatric hospital	0	<1	0	0	<1
Street/ no fixed address	1	3	2	2	2

### *Number of people living in a household*

Those police detainees who had lived in a private house in the past 30 days (i.e. either in their own home or someone else's home) were asked how many people, including themselves, had lived in the house on a regular basis in the previous 30 days. A mean of 4 people had lived in the detainees' homes (median 3, range 1-16).

### *Mental illness*

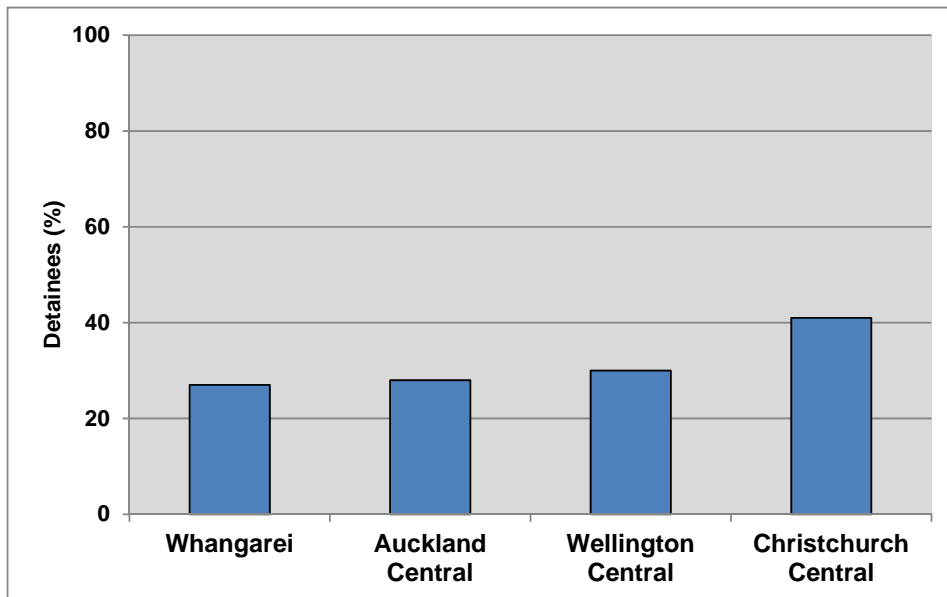
Thirty-two percent of the police detainees reported having had a mental illness at some time in their life. (Table 2.12).

Table 2.12: Proportion of police detainees who had suffered from a mental illness by location, 2010

Site	Ever had mental illness (%)
Whangarei (n=115)	27
Auckland Central (n=282)	28
Wellington Central (n=151)	30
Christchurch Central (n=262)	41
Total (n=810)	32

Detainees in Christchurch Central were more likely to have ever had a mental illness than detainees in Auckland Central (41% vs. 28%,  $p=0.0013$ ), Wellington Central (41% vs. 30%,  $p=0.0365$ ) and Whangarei (41% vs. 27%,  $p=0.0107$ ) (Figure 2.6).

Figure 2.6: Proportion of the police detainees who had ever had a mental illness by location, 2010



### *Psychiatric inpatient*

Eight percent of the police detainees had been a patient in a psychiatric ward or hospital for at least an overnight stay (Table 2.13).

Table 2.13: Proportion of police detainees who had ever been a patient in a psychiatric ward or hospital for an overnight stay or longer by location, 2010

Site	Ever been a psychiatric patient overnight (%)
Whangarei (n=115)	4
Auckland Central (n=282)	6
Wellington Central (n=150)	9
Christchurch Central (n=262)	11
Total (n=809)	8

### *Treatment or medication for mental illness*

Twelve percent of the police detainees were currently receiving treatment or medication for a mental illness at the time of their arrest (Table 2.14).

Table 2.14: Proportion of police detainees currently receiving treatment or medication for a mental illness by location, 2010

Site	Currently receiving treatment for a mental illness (%)
Whangarei (n=115)	14
Auckland Central (n=278)	9
Wellington Central (n=150)	8
Christchurch Central (n=262)	15
Total (n=805)	12

### *Mental health*

The police detainees were asked to assess their current mental health using a five point scale (i.e. 1=poor – 5=excellent). Thirteen percent of the detainees reported their mental health was 'fair' or 'poor' (Table 2.15).

Table 2.15: Self reported current mental health of police detainees by location, 2010

Frequency (%)	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=149)	Christ- church Central (n=262)	Total (n=811)
Excellent [5]	35	26	28	24	27
Very good [4]	22	28	30	35	30
Good [3]	32	31	30	29	30
Fair [2]	10	12	8	8	9
Poor [1]	1	4	4	5	4
Average score of mental health (1=Poor – 5=Excellent)	3.8	3.6	3.7	3.7	3.7

### *Physical health*

The police detainees were also asked to assess their current physical health using a five point scale (i.e. 1=poor – 5=excellent). Fifteen percent of the detainees reported their physical health was 'fair' or 'poor' (Table 2.16). The Christchurch Central detainees reported a higher level of physical health than detainees in Auckland Central (3.7 vs. 3.4,  $p=0.0042$ ) or Wellington Central (3.7 vs. 3.5,  $p=0.0385$ ).

Table 2.16: Self reported current physical health of police detainees by location, 2010

Frequency (%)	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christ- church Central (n=262)	Total (n=814)
Excellent [5]	24	22	24	26	24
Very good [4]	30	22	23	32	27
Good [3]	31	39	35	30	34
Fair [2]	14	10	11	8	10
Poor [1]	1	6	7	3	5
Average score of mental health (1=Poor – 5=Excellent)	3.6	3.4	3.5	3.7	3.6

## Summary

- Eighty-nine percent of the police detainee sample was male
- The police detainees had a median age of 24 years old
- Forty-four percent of the police detainees were European, 38% were Maori and 14% were Pacific
- A higher proportion of police detainees were Maori in the Whangarei site compared to the other sites
- Fifty-four percent of the police detainees had not completed the compulsory high school years of education
- A higher proportion of police detainees in the Whangarei site had not completed the compulsory high school years compared to the other sites



- Thirty-seven percent of the police detainees were employed
- Detainees in Whangarei and Christchurch Central were less likely to be employed than detainees in the Wellington Central site
- Thirty-one percent of the police detainees had dependent children
- Detainees in Whangarei were more likely to have dependent children than the other sites
- Thirty-two percent of the police detainees had suffered from a mental illness in their lifetimes
- Detainees in Christchurch Central were more likely to have ever suffered from a mental illness than the other sites

## Chapter 3 – Alcohol

### Introduction

The excessive consumption of alcohol contributes significantly to a range of social problems including public disorder, crime, violence, family and partner violence, dangerous driving, injury and accident, suicide, work absenteeism and poor work performance (Babor, et al., 2010; Kleiman, 1992). Alcohol use is also a factor in a range of serious health disorders including liver damage, cardiovascular disease, pancreatitis, hypertension, cancer, brain damage and alcoholism (Babor, et al., 2010). Alcohol is the most widely available and used recreational drug in many Western countries including New Zealand (Wilkins & Sweetsur, 2008b, 2008c).

#### *Use of alcohol*

Ninety-eight percent of the police detainees had tried alcohol during the course of their lives, with 90% having consumed alcohol in the past year and 80% having done so in the past month (Table 3.1).

Table 3.1 Police detainees' patterns of alcohol use by location, 2010

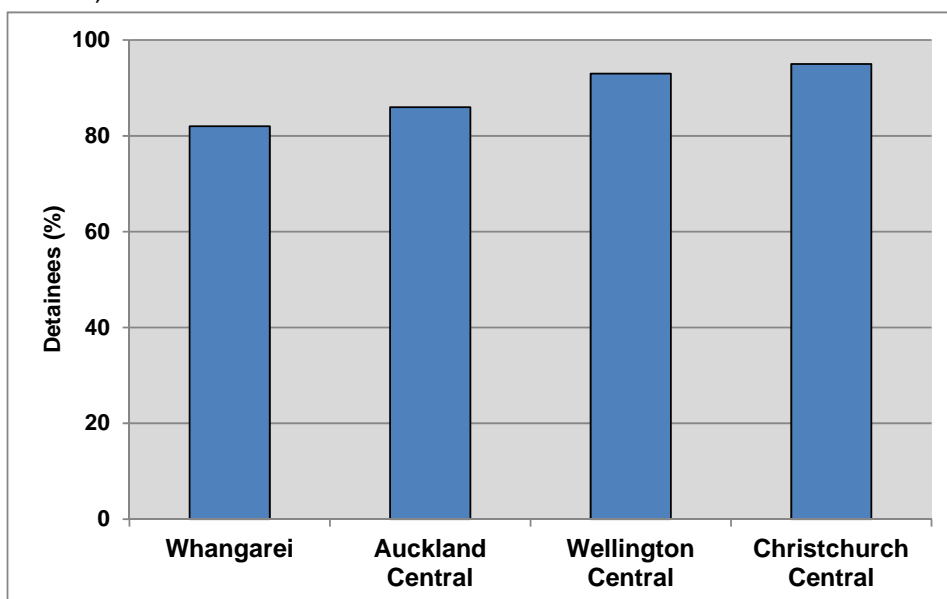
Use of alcohol	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	97	97	99	100	98
Mean age first used (years)	13	13	13	13	13
Used in past 12 months (%)	82	86	93	95	90
Mean number of years of use	11	11	10	12	11
Mean number of days used in past 12 months*	89	118	100	109	108
Mean number of standard drinks per day*	15	11	13	12	12
Felt dependent in past 12 months (%)*	21	25	26	21	23
Used in past month (%)	74	76	84	86	80
Mean number of days used in past month**	8	10	8	9	9
Mean number of days males had 5 or more drinks in past month**	6	8	8	9	8
Mean number of days females had 3 or more drinks in past month**	7	8	2	7	7

\* of those who drank alcohol in the past 12 months

\*\* of those who drank alcohol in the past month

Detainees in Christchurch Central were more likely to have used alcohol in the past 12 months than those in Auckland Central (95% vs. 86%,  $p=0.0010$ ) and Whangarei (95% vs. 82%,  $p=0.0004$ ) (Figure 3.1). Those detainees surveyed in Wellington Central were also more likely to have used alcohol in the past year than those in Auckland Central (93% vs. 86%,  $p=0.0224$ ) and Whangarei (93% vs. 82%,  $p=0.007$ ).

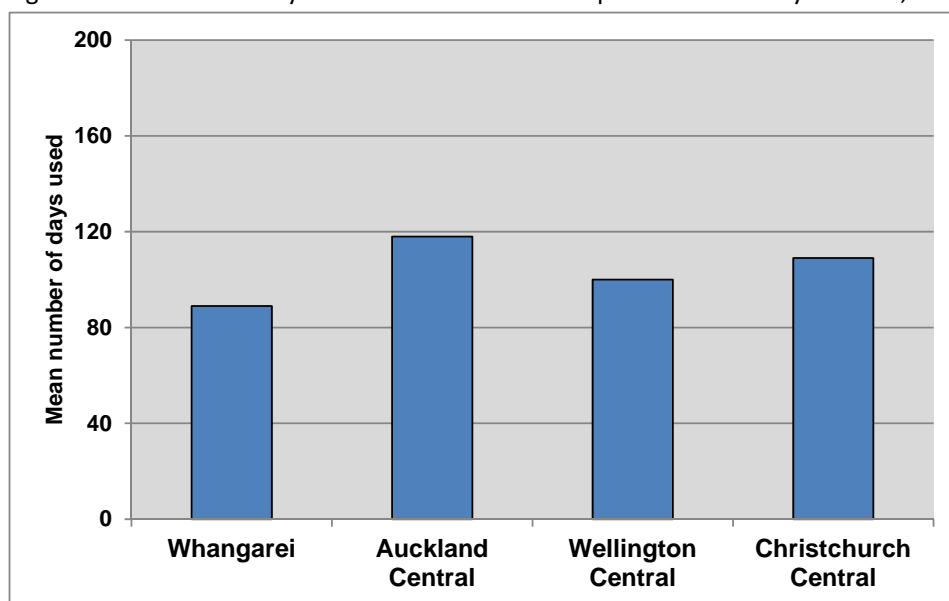
Figure 3.1: Proportion of police detainees who used alcohol in the past 12 months by location, 2010



#### *Frequency of alcohol use*

The police detainees drank alcohol on a mean of 108 days in the past 12 months (median 52, range 1-365 days). They drank alcohol on a mean of nine days in the past 30 days. Detainees in Christchurch Central drank alcohol on a higher mean number of days in the past year than those in Whangarei (109 vs. 89,  $p=0.0196$ ) and Wellington Central (109 vs. 100,  $p=0.0429$ ) (Figure 3.2).

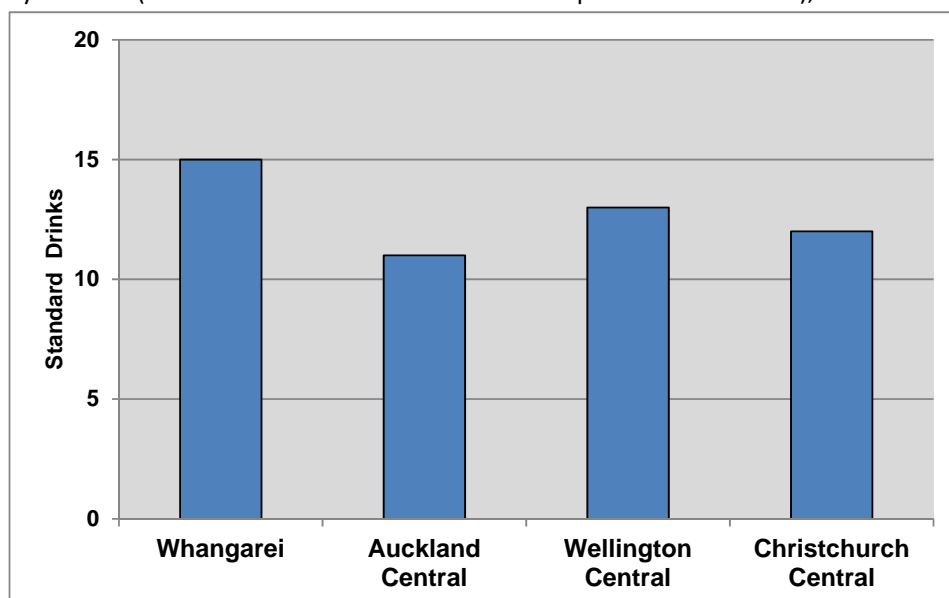
Figure 3.2: Number of days alcohol consumed in the past 12 months by location, 2010



#### *Quantity of alcohol consumed*

The police detainees drank a mean of 12 standard drinks on a typical day of use (median 12, range 0.5-60 drinks). Detainees in Whangarei drank a higher mean number of standard drinks on a typical day than those in Auckland Central (15 vs. 11,  $p=0.0014$ ) (Figure 3.3). Detainees in Christchurch Central drank more drinks on a typical day than those in Auckland Central (12 vs. 11,  $p=0.0360$ ).

Figure 3.3: Mean number of standard drinks consumed by police detainees on a typical day by location (of those who had drunk alcohol in the previous 12 months), 2010



The detainees were asked on how many days during the past month they drank larger quantities of alcohol (i.e. five or more drinks for men on a single occasion or three or more drinks for women on a single occasion). The male detainees had drunk heavier quantities of alcohol on a mean of eight days in the 30 days and the female detainees had drunk heavier quantities of alcohol on a mean of seven days in the past 30 days.

#### *Alcohol use by ethnicity*

There was no statistically significant difference in the prevalence of alcohol use among the police detainees by ethnic group (Table 3.2).

Table 3.2: Police detainees' patterns of alcohol use by primary ethnicity, 2010

Use of alcohol	Maori (n=307)	Pacific (n=110)	European/ Asian/Other (n=395)*	All (n=812)
Ever used (%)	98	97	99	98
Used in past 12 months (%)	88	93	90	90
Used in past month (%)	79	85	80	81

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

### *Dependency on alcohol*

The police detainees who had drunk alcohol in the past 12 months were asked if they felt they were dependent on alcohol during this time. Twenty-three percent of the detainees felt they were dependent of alcohol. There was no statistically significant difference in the level of alcohol dependency between the sites.

### *Alcohol use at time of arrest*

Thirty-six percent of the police detainees had been drinking alcohol at the time of their arrest (Table 3.3).

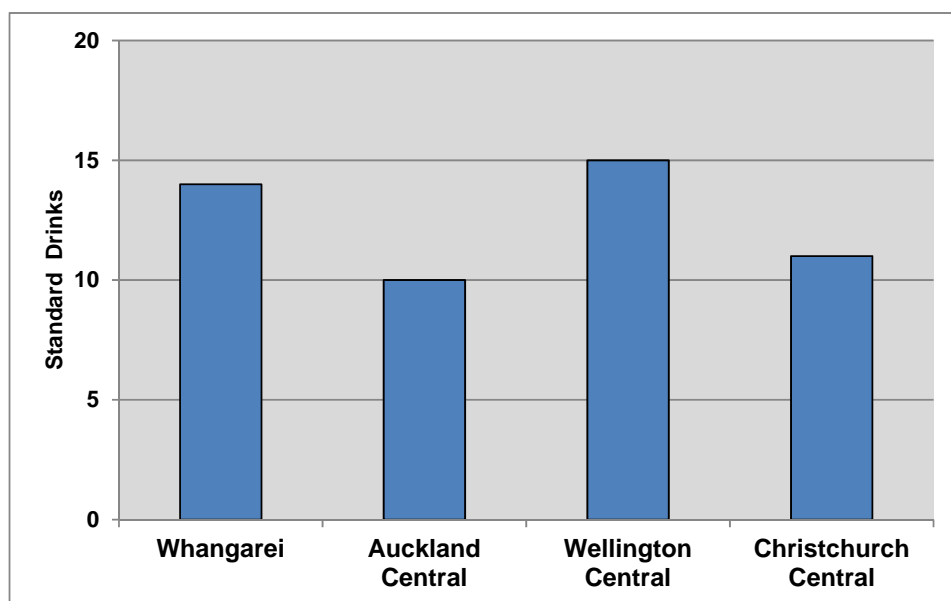
Table 3.3: Alcohol use by police detainees at time of arrest by location, 2010

Use of alcohol	Whangarei (n=111)	Auckland Central (n=283)	Wellington Central (n=147)	Christchurch Central (n=262)	All (n=803)
Using when arrested (%)	32	35	40	38	36
Mean number of standard drinks before arrest*	14	10	15	11	12

\* of those who had been drinking alcohol when arrested

The detainees had consumed a mean of 12 standard drinks before their arrest (median 10, range 0.5-50 drinks). The detainees in Wellington Central had consumed a greater number of drinks before their arrest than those in Auckland Central (15 vs. 10,  $p=0.0040$ ) (Figure 3.4).

Figure 3.4: Mean number of standard drinks consumed at the time of arrest by location, 2010



#### *Change in use of alcohol*

Those police detainees who reported using alcohol in the previous year were asked how their drinking had changed compared to a year ago. Forty-nine percent of detainees were drinking 'less' alcohol, 26% were drinking 'more' and 22% were drinking the 'same' level of alcohol (Table 3.4).



Table 3.4: Police detainees' change in level of alcohol use by location, 2010

Change in use of alcohol	Whangarei (n=93)	Auckland central (n=244)	Wellington central (n=141)	Christchurch central (n=247)	All (n=725)
More [3]	20%	30%	24%	26%	26%
Same [2]	31%	18%	24%	21%	22%
Less [1]	46%	48%	48%	50%	49%
Stopped [0]	2%	3%	4%	3%	3%
Mean score of change in use (0 = stopped – 3 = more)	1.7	1.8	1.7	1.7	1.7
Overall change in use	Less/same	Less/more	Less/same	Less/more	Less/more

#### *Associations between demographic variables and heavier alcohol use*

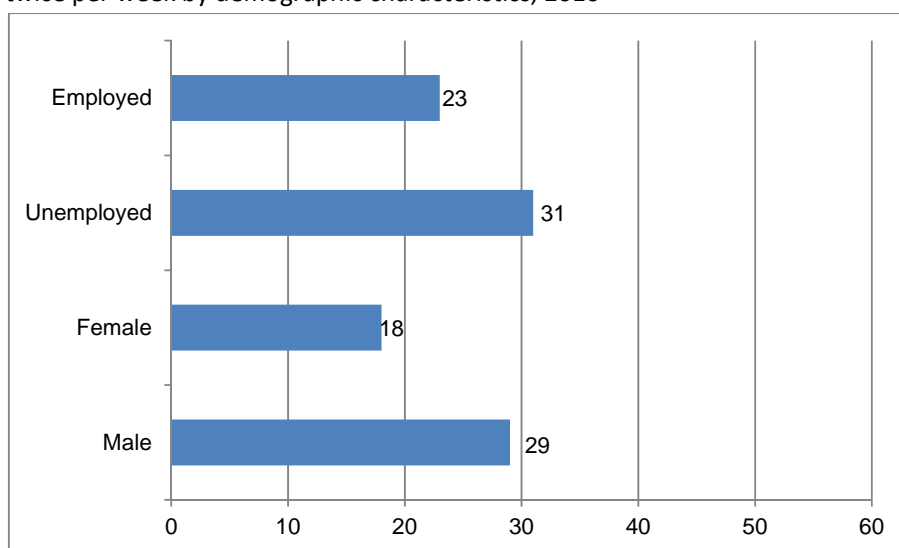
The statistical associations between various demographic variables and heavier alcohol use among the police detainees were investigated to provide an indication of risk factors for heavier alcohol use for this group. The analysis was completed using bivariate analysis. More sophisticated multivariate models will be developed in the near future. Heavier alcohol use was defined as consuming large quantities of alcohol (i.e. five or more standard drinks for males on a single occasion or three or more standard drinks for females on a single occasion) at least twice weekly over the past month. Male detainees were more likely to have consumed heavier quantities of alcohol than female detainees (29% vs. 18%,  $p=0.0387$ ) (Table 3.5 and Figure 3.5). Detainees who were unemployed or on the sickness benefit were more likely than those not unemployed or on the sickness benefit to have consumed heavier quantities of alcohol (31% vs. 23%,  $p=0.0114$ ).

Table 3.5: The association between demographic variables and heavier alcohol use in the past 30 days among police detainees, 2010

	High consumption of alcohol* at least twice a week in the past 30 days	
	%	<i>p-value</i>
(n=806)		
Male	29	0.0387
Female	18	
Under 25 years old	30	0.1326
25 years +	25	
Maori primary ethnicity	28	0.8703
Non-Maori primary ethnicity	27	
Unemployed/sickness benefit	31	0.0114
Not unemployed/ sickness benefit	23	
Did not complete compulsory years of high school	29	0.3817
Completed compulsory years of high school	26	
Not living in a private residence	32	0.3231
Living in a private residence	27	
Single marital status	27	1
Not single marital status	27	
Prison in past 12 months	33	0.1897
No prison in past 12 months	26	

\*Five or more standard drinks on a single occasion for males or three or more standard drinks on a single occasion for females

Figure 3.5: Proportion of police detainees who consumed high quantities of alcohol at least twice per week by demographic characteristics, 2010



#### *Current availability of alcohol*

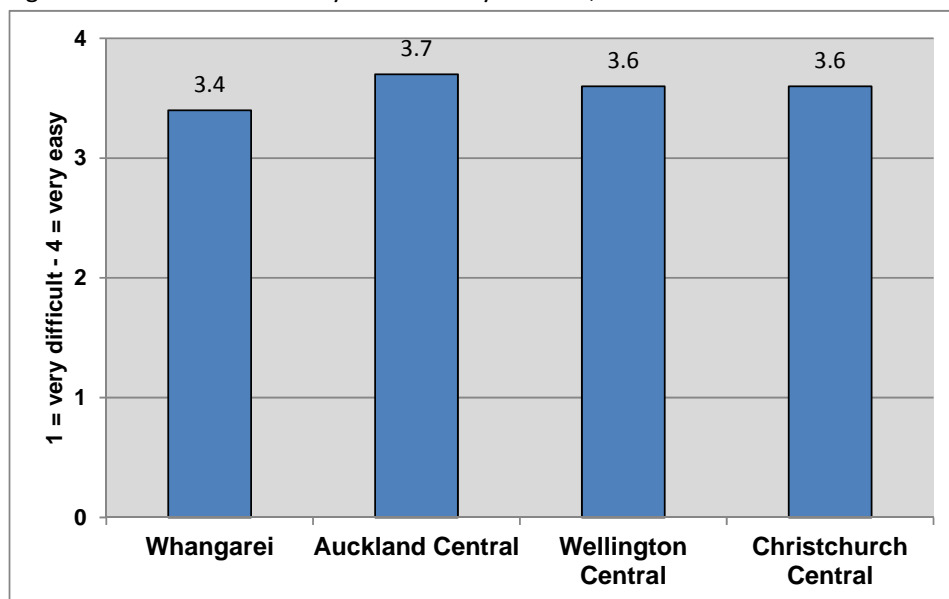
The police detainees reported the current availability of alcohol was 'very easy' (Table 3.6).

Table 3.6: Police detainees' perceptions of the current availability of alcohol by location, 2010

Current availability of alcohol	Whangarei (n=97)	Auckland Central (n=245)	Wellington Central (n=138)	Christchurch Central (n=248)	All (n=728)
Very easy [4]	49%	77%	70%	72%	70%
Easy [3]	41%	17%	23%	18%	22%
Difficult [2]	7%	4%	5%	9%	6%
Very difficult [1]	2%	2%	1%	2%	2%
Average availability (1 = very difficult – 4 = very easy)	3.4	3.7	3.6	3.6	3.6
Overall current availability	Very easy/easy	Very easy	Very easy	Very easy	Very easy

Alcohol was considered to be less available in Whangarei compared to Auckland Central (3.4 vs. 3.7,  $p=0.0004$ ), Wellington Central (3.4 vs. 3.6,  $p=0.0082$ ) and Christchurch Central (3.4 vs. 3.6,  $p=0.0120$ ) (Figure 3.6).

Figure 3.6: Current availability of alcohol by location, 2010



#### *Change in availability of alcohol*

The police detainees reported the availability of alcohol had been 'stable/ easier' over the past six months (Table 3.7).

Table 3.7: Current availability of alcohol by location, 2010

Change in availability of alcohol	Whangarei (n=96)	Auckland Central (n=242)	Wellington Central (n=137)	Christchurch Central (n=248)	All (n=723)
Easier [3]	26%	22%	19%	21%	22%
Stable [2]	64%	69%	71%	67%	68%
Fluctuates [2]	5%	2%	3%	6%	4%
More difficult [1]	5%	7%	7%	6%	6%
Mean change in availability (1 = more difficult – 3 = easier)	2.2	2.2	2.1	2.2	2.1
Overall change in availability	Stable/easier	Stable/easier	Stable	Stable/easier	Stable/easier

#### *Change in the price of alcohol*

The police detainees reported the price of alcohol had been 'increasing/ stable' over the previous six months (Table 3.8).

Table 3.8: Police detainees' perception of the change in the price of alcohol in the past six months by location, 2010

Change in price of alcohol	Whangarei (n=91)	Auckland central Central (n=224)	Wellington central (n=116)	Christchurch central (n=238)	All (n=669)
Increasing [3]	46%	54%	57%	53%	53%
Fluctuating [2]	22%	9%	9%	5%	10%
Stable [2]	24%	29%	28%	32%	29%
Decreasing [1]	8%	8%	6%	9%	8%
Mean change in price (1 = decreasing – 3 = increasing)	2.4	2.5	2.5	2.4	2.5
Overall change in availability	Increasing/stable	Increasing/stable	Increasing/stable	Increasing/stable	Increasing/stable

#### *Time taken to purchase alcohol*

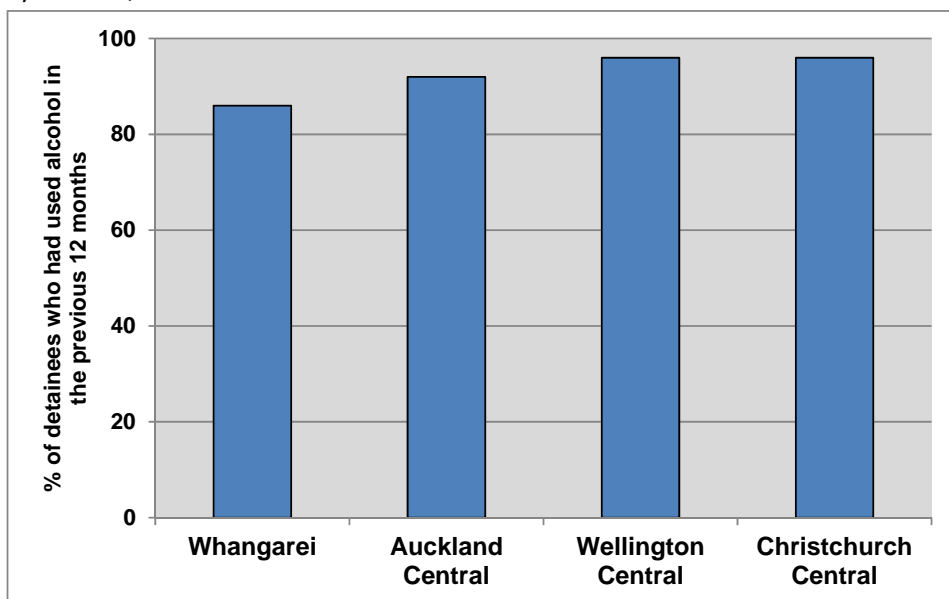
Ninety-three percent of the police detainees could purchase alcohol in one hour or less (Table 3.9). Eighty percent of the detainees could purchase alcohol in less than 20 minutes.

Table 3.9: Time taken by police detainees to purchase alcohol, by location, 2010

Time taken to purchase alcohol (%)	Whangarei (n=96)	Auckland Central (n=216)	Wellington Central (n=137)	Christchurch Central (n=247)	All (n=696)
Weeks	2%	1%	0%	0%	1%
Days	6%	1%	0%	0%	1%
About 1 day	1%	3%	1%	0%	1%
Hours	4%	3%	3%	3%	3%
1 hour	13%	14%	15%	12%	13%
Less than 20 mins	74%	78%	82%	84%	80%

A lower proportion of detainees could purchase alcohol in one hour or less in Whangarei compared to Wellington Central (87% vs. 97%,  $p=0.0093$ ) and Christchurch Central (87% vs. 96%,  $p=0.0017$ ) (Figure 3.7).

Figure 3.7: Proportion of the police detainees who could purchase alcohol in one hour or less by location, 2010



#### *Effect of alcohol on the likelihood to get angry*

Those police detainees who reported using alcohol in the past 12 months were asked what effect drinking alcohol has on their likelihood to become angry. Thirty-seven percent of the alcohol using detainees said using alcohol was 'more likely' or 'much more likely' to make them become angry (Table 3.10).

Table 3.10: Effect of alcohol on police detainees' likelihood to become angry, 2010

Effect of alcohol on likelihood to get angry	All (n=720)
Much more likely [5]	11%
More likely [4]	26%
No effect [3]	32%
Less likely [2]	23%
Much less likely [1]	8%
Mean impact on likelihood to get angry (1 = much less – 5 = much more)	3.1

#### *Driving under the influence of alcohol*

Those police detainees who drank alcohol in the past year were asked how often they drove under the influence of alcohol. Twenty-two percent of the detainees said they did not drive and a further 10% said their licence was suspended. Forty-five percent of the detainees who drank alcohol in the past 12 months and drove had driven under the influence of alcohol (Table 3.11). There was no statistically significant difference in the mean level of driving under the influence of alcohol between the locations.



Table 3.11: Extent police detainees who drove and who had used alcohol in the past 12 months had driven under the influence of alcohol by location, 2010

Extent drove under the influence of alcohol (%)	Whangarei (n=79)	Auckland central (n=165)	Wellington central (n=91)	Christchurch central (n=54)	All (n=489)
All [4]	3%	2%	4%	2%	3%
Most [3]	3%	3%	3%	6%	4%
Some [2]	14%	18%	14%	19%	17%
Hardly any [1]	37%	19%	18%	18%	21%
None [0]	44%	58%	60%	55%	55%
Mean score of extent drove under influence (0 = none – 4 = all)	0.8	0.7	0.7	0.8	0.8

## Summary

- Ninety percent of the police detainees had drunk alcohol in the past 12 months
- Detainees in Christchurch Central were more likely to have used alcohol in the past 12 months than those in Auckland Central and Whangarei
- Detainees drank alcohol on a mean of 108 days in the past 12 months
- Detainees in Christchurch Central drank alcohol on a higher mean number of days in the past 12 months than those in Whangarei and Wellington Central
- Detainees drank a mean of 12 standard drinks on a typical day of use
- Detainees in Whangarei drank a higher mean number of drinks on a typical day of use than those in Auckland Central.

- Twenty-three percent of the detainees who had drunk alcohol in the past 12 months felt they were dependent on it
- Thirty-six percent of the detainees had been drinking alcohol prior to their arrest. They consumed a mean of 12 standard drinks before being arrested.
- Male detainees and those who were unemployed or on a sickness benefit were more likely to be heavier alcohol drinkers
- The current availability of alcohol was reported to be 'very easy'
- The availability of alcohol was described as 'stable/ easier' compared to six months ago
- The price of alcohol was described as 'increasing/ stable'
- Eighty percent of the detainees could purchase alcohol in less than 20 minutes
- Thirty-seven percent of the alcohol drinking detainees said using alcohol was 'more likely' or 'much more likely' to make them become angry
- Forty-five percent of the detainees who drank alcohol and drove had driven under the influence of alcohol

## Chapter 4 - Methamphetamine

### Introduction

The police detainees were asked about the use of 'methamphetamine' which the interviewer described as 'meth', 'ice', 'P', 'pure' or 'crystal'. Methamphetamine, known colloquially in New Zealand as 'P' or 'pure', is a powerful psycho-stimulant with pharmacological characteristics and effects closely resembling those of cocaine (Gawin & Ellinwood, 1988; Hall & Hando, 1994; Kuhn, et al., 1998; Shearer, et al., 2002). Chronic and high dose use of methamphetamine can cause hostility, paranoia, hallucinations, obsessive behaviour and drug dependency (Hall & Hando, 1994; Kuhn, et al., 1998; Shearer, et al., 2002).

Methamphetamine use emerged in New Zealand in the late 1990s (Wilkins, et al., 2002a). The population prevalence of meth/amphetamine use in New Zealand reached its peak in 2001, remained largely stable during the mid-2000s, before declining in more recent years (Wilkins, et al., 2002a; Wilkins & Sweetsur, 2008c). The proportion of New Zealanders having used meth/amphetamine in the previous year declined from 5.0% in 2001 to 3.4% by 2006 (i.e. among population aged 15-45 years old) (Wilkins & Sweetsur, 2008c). These findings suggest the use of methamphetamine in New Zealand may have moved on from the epidemic stage characterised by large increases in use in the general population, to an endemic phase, characterised by heavy use among certain sub-populations, such as the mentally ill, urban poor, career criminals and youth delinquents. There has also been a decline in the use of meth/amphetamine in Australia, down from 3.2% in 2004 to 2.3% in 2007 (i.e. among population aged 14 years and older) (Australian Institute of Health and Welfare, 2008).

### *Patterns of methamphetamine use*

Forty-one percent of the police detainees had tried methamphetamine in their lifetimes, 26% had used methamphetamine in the past year and 14% had used it in the past month (Table 4.1).

Table 4.1: Police detainees' patterns of methamphetamine use by location, 2010

Use of methamphetamine	Whangarei (n=115)	Auckland Central (n=284)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=813)
Ever used (%)	43	45	42	35	41
Mean age first used (years)*	22	22	22	22	22
Used in past 12 months (%)	25	29	28	22	26
Mean number of years of use**	4.9	6.0	6.8	5.3	5.8
Mean number of days used in past 12 months**	44	102	67	35	68
Injected in past 12 months**	10	29	18	15	20
Felt dependent in past 12 months (%)**	19	36	28	7	25
Used in past month (%)	15	19	12	10	14
Mean number of days used in past month***	7	12	9	5	9

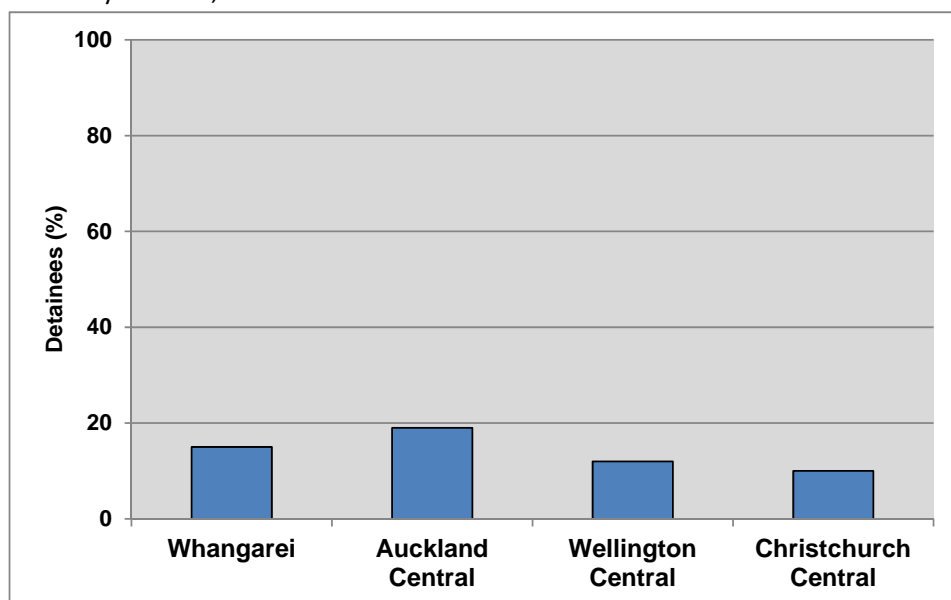
\* of those who had ever tried

\*\* of those who had used in the past 12 months

\*\*\* of those who had used in the past month

Twenty percent of the detainees who had used methamphetamine in the past 12 months had injected it. The detainees in Auckland Central were more likely than those in Christchurch Central to have used methamphetamine in the past 30 days (19% vs. 10%,  $p=0.0076$ ) (Figure 4.1).

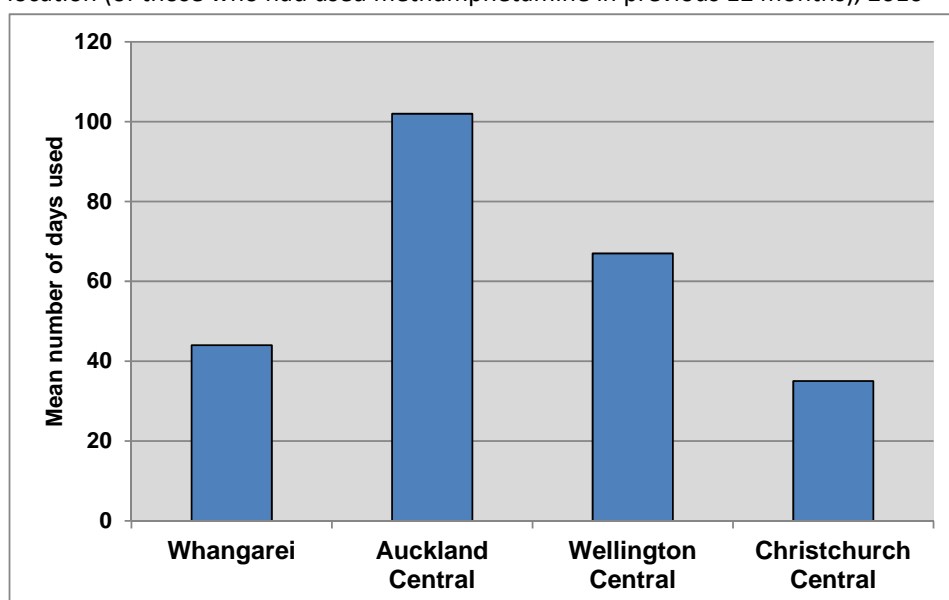
Figure 4.1: Proportion of police detainees who had used methamphetamine in the past month by location, 2010



#### *Frequency of methamphetamine use*

The police detainees used methamphetamine on a mean of 68 days in the past 12 months (median 6, 1-365 days). The detainees in Auckland Central had used methamphetamine on a higher mean number of days in the previous year than those in Wellington Central (102 times vs. 67 times,  $p=0.0279$ ), Whangarei (102 times vs. 44 times,  $p=0.0452$ ) and Christchurch Central (102 times vs. 35 times,  $p=0.0008$ ) (Figure 4.2).

Figure 4.2: Mean number of days of methamphetamine use in the previous 12 months by location (of those who had used methamphetamine in previous 12 months), 2010



The detainees in Auckland Central had also used methamphetamine on a greater mean number of days in the past month than those in Christchurch Central (12 days vs. 5 days,  $p=0.0017$ ).

#### *Methamphetamine use by ethnicity*

Pacific detainees were less likely to have ever tried methamphetamine than Maori detainees (29% vs. 46%,  $p=0.0024$ ) and Europeans/Asian/Other detainees (29% vs. 40%,  $p=0.0394$ ) (Table 4.2).

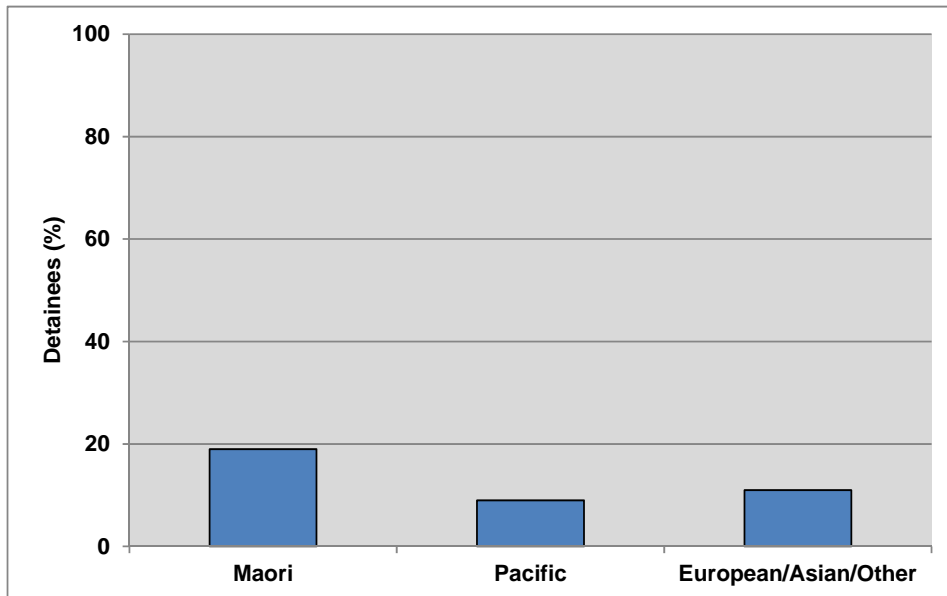
Table 4.2: Police detainees' patterns of methamphetamine use by primary ethnicity, 2010

Use of methamphetamine	Maori (n=307)	Pacific (n=109)	European/Asian/Other (n=395)*	All (n=811)
Ever used (%)	46	29	40	41
Used in past 12 months (%)	30	20	25	26
Used in past month (%)	19	9	11	14

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

Maori detainees were more likely to have used methamphetamine in the previous month than Pacific detainees (19% vs. 9%,  $p=0.0175$ ) and European/Asian/Others (19% vs. 11%,  $p=0.0036$ ) (Figure 4.3).

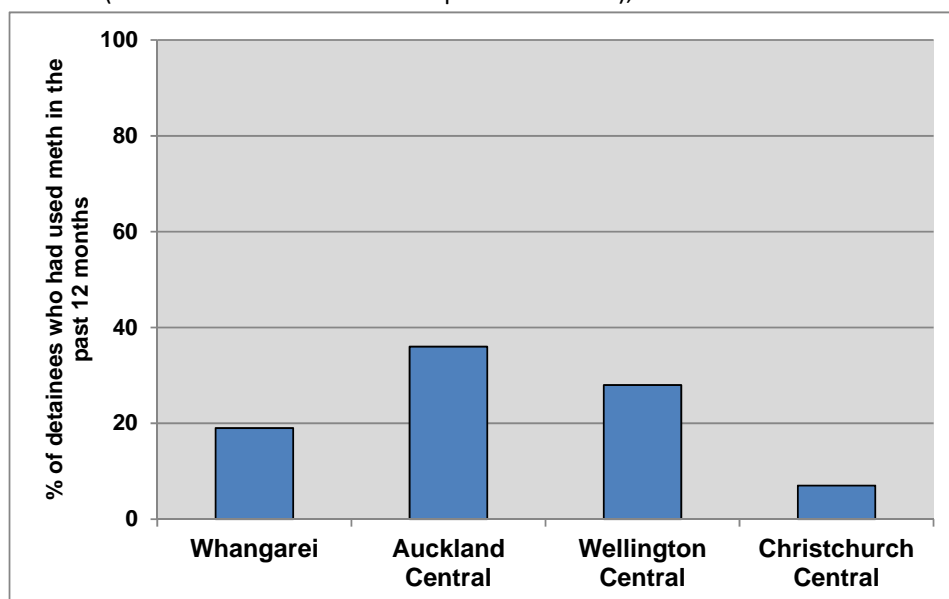
Figure 4.3: Proportion of police detainees who used methamphetamine in the past month by primary ethnicity, 2010



#### *Dependency on methamphetamine*

The police detainees who had used methamphetamine in the past 12 months were asked if they felt they had been dependent on methamphetamine during the previous 12 months. Twenty-five percent of the detainees who had used methamphetamine in the past 12 months indicated that they had felt dependent on methamphetamine. A higher proportion of methamphetamine using detainees felt they were dependent on methamphetamine in Auckland Central than in Christchurch Central (36% vs. 7%,  $p=0.0004$ ) and in Wellington Central compared to Christchurch Central (28% vs. 7%,  $p=0.0103$ ) (Figure 4.4).

Figure 4.4: Proportion of police detainees who felt dependent on methamphetamine by location (of those who had used in the past 12 months), 2010



#### *Methamphetamine use at the time of arrest*

Three percent of the police detainees reported they were using methamphetamine at the time of their arrest (Table 4.3).

Table 4.3: Methamphetamine use by police detainees at time of arrest by location, 2010

Use of methamphetamine	Whangarei (n=113)	Auckland central (n=280)	Wellington central (n=149)	Christchurch central (n=262)	All (n=804)
Using when arrested (%)	2	6	3	1	3

#### *Change in use of methamphetamine*

Those police detainees who reported using methamphetamine in the previous year were asked how their use had changed compared to a year ago. Seventeen percent



of the police detainees had 'stopped' using methamphetamine, 38% were using 'less' methamphetamine and 35% were using 'more' methamphetamine (Table 4.4).

Table 4.4: Police detainees' change in methamphetamine use by location, 2010

Change in use of methamphetamine	Whangarei (n=30)	Auckland Central (n=81)	Wellington Central (n=41)	Christchurch Central (n=54)	All (n=206)
More [3]	37%	41%	24%	33%	35%
Same [2]	10%	7%	20%	7%	10%
Less [1]	33%	41%	39%	35%	38%
Stopped [0]	20%	11%	17%	24%	17%
Mean score of change in use (0=stopped - 3=more)	1.6	1.8	1.5	1.5	1.6
Overall change in use	More/less	More/less	Less/more	Less/more	Less/More

#### *Associations between demographic variables and heavier methamphetamine use*

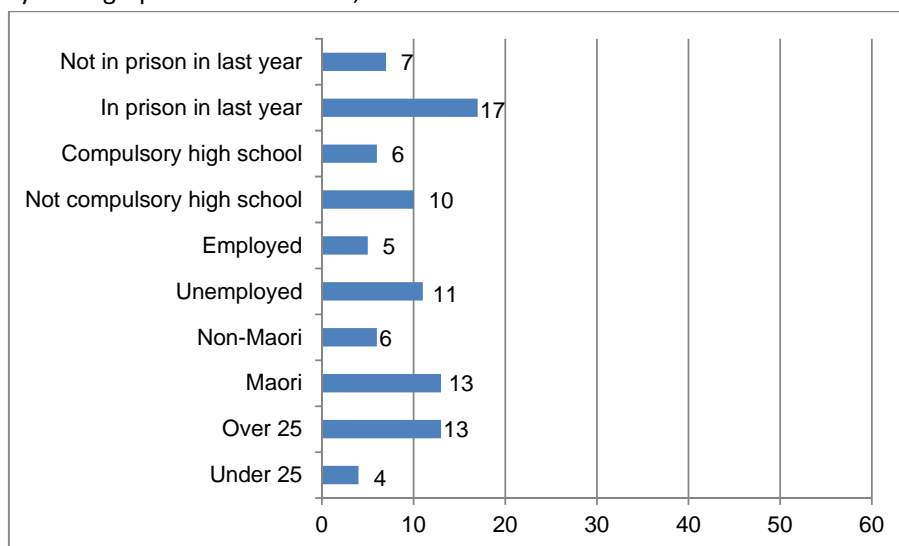
The statistical associations between various demographic variables and heavier methamphetamine use were investigated to provide an indication of risk factors for heavier methamphetamine use among police detainees. The analysis was completed using bivariate analysis. Heavier methamphetamine use was defined as using methamphetamine at least once per week during the past month. Detainees aged 25 years or older were more likely to be heavier users of methamphetamine than those under 25 years old (13% vs. 4%,  $p<0.0001$ ) (Table 4.5 and Figure 4.5). Maori detainees were more likely than non-Maori detainees to be heavier users of methamphetamine (13% vs. 6%,  $p=0.0014$ ). Detainees who were unemployed or on the sickness benefit were more likely than those not unemployed or on the sickness benefit to be heavier users of methamphetamine (11% vs. 5%,  $p=0.0021$ ). Detainees who did not complete the compulsory years of high school education were more

likely than those who did complete the compulsory years of high school to be heavier users of methamphetamine (10% vs. 6%,  $p=0.0136$ ). Detainees who had been in prison in the previous 12 months were also more likely than those who had not been in prison in the previous 12 months to be heavier users of methamphetamine (17% vs. 7%,  $p=0.0013$ ).

Table 4.5: The association between demographic variables and heavier methamphetamine use in the past 30 days among police detainees, 2010

	<b>Used meth - amphetamine at least once a week in the past 30 days</b>	
(n=806)	%	<i>p-value</i>
Male	8	0.5165
Female	10	
Under 25 years old	4	<0.0001
25 years +	13	
Maori primary ethnicity	13	0.0014
Non-Maori primary ethnicity	6	
Unemployed/sickness benefit	11	0.0021
Not unemployed/ sickness benefit	5	
Did not complete compulsory years of high school	10	0.0136
Completed compulsory years of high school	6	
Not living in a private residence	15	0.0623
Living in a private residence	8	
Single marital status	8	1
Not single marital status	8	
Prison in past 12 months	17	0.0013
No prison in past 12 months	7	

Figure 4.5; Proportion of the police detainees who used methamphetamine at least weekly by demographic characteristics, 2010



#### *Current availability of methamphetamine*

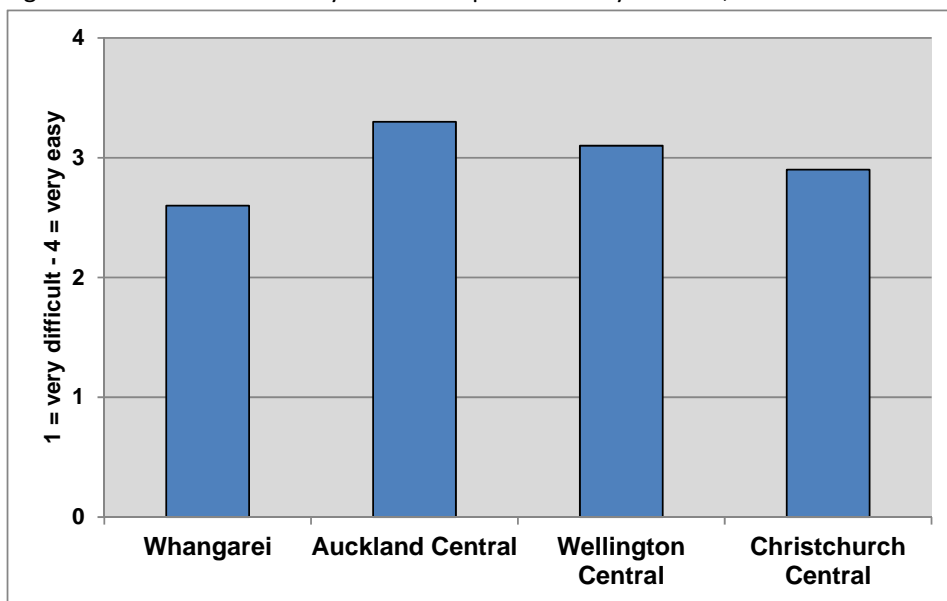
The police detainees reported the current availability of methamphetamine to be 'very easy/ easy' (Table 4.6).

Table 4. 6: Police detainees' perceptions of the current availability of methamphetamine by location, 2010

Current availability of methamphetamine	Whangarei (n=29)	Auckland Central (n=82)	Wellington Central (n=39)	Christchurch Central (n=54)	All (n=204)
Very easy [4]	17%	50%	44%	35%	40%
Easy [3]	38%	28%	31%	33%	31%
Difficult [2]	34%	20%	13%	19%	20%
Very difficult [1]	10%	2%	13%	13%	8%
Average availability score (1=very difficult – 4=very easy)	2.6	3.3	3.1	2.9	3.0
Overall current status	Easy/ difficult	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy

The detainees in Auckland Central were more likely to describe the currently availability of methamphetamine as 'very easy' compared to those in Christchurch Central (3.3 vs. 2.9,  $p=0.0413$ ) and Whangarei (3.3 vs. 2.6,  $p=0.0011$ ) (Figure 4.6).

Figure 4.6: Current availability of methamphetamine by location, 2010



#### *Change in availability of methamphetamine*

Thirty-four percent of the police detainees reported the availability of methamphetamine had been 'stable' over the previous six months, 24% said it had become 'easier' and 24% said it had become 'more difficult' (Table 4.7).

Table 4.7: Police detainees' perceptions of the change in availability of methamphetamine by location, 2010

Change in availability of methamphetamine	Whangarei (n=27)	Auckland central (n=76)	Wellington central (n=30)	Christchurch central (n=51)	All (n=184)
Easier [3]	19%	32%	27%	16%	24%
Stable [2]	33%	32%	33%	39%	34%
Fluctuates [2]	26%	12%	27%	16%	17%
More difficult [1]	22%	25%	13%	29%	24%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.1	2.1	1.9	2.0
Overall recent change	Stable/ fluctuates	Stable/ easier	Stable/ fluctuates	Stable/ more difficult	Stable/ more difficult

### *Current price of methamphetamine*

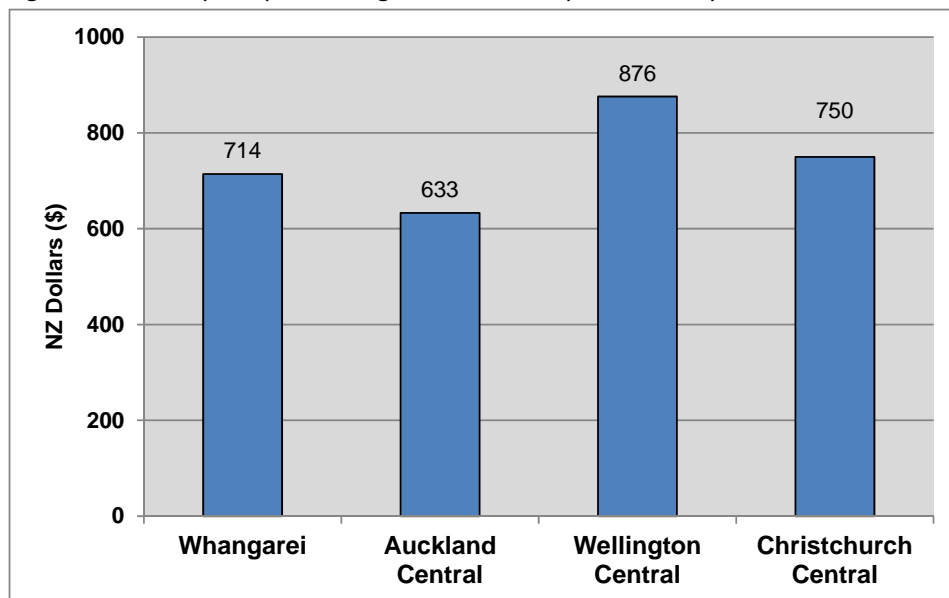
The police detainees reported paying a median price of \$100 for a 'point' of methamphetamine and \$700 for a gram of methamphetamine (Table 4.8).

Table 4.8: Current median (mean) price paid by police detainees for a 'point' and gram of methamphetamine (NZD) by location, 2010

Current price of methamphetamine (\$)	Whangarei	Auckland Central	Wellington Central	Christ church Central	All
<b>Number with knowledge</b>	<b>n=24</b>	<b>n=63</b>	<b>n=22</b>	<b>n=47</b>	<b>n=156</b>
Median (mean) price 'point' (0.1 grams)	\$100 (\$102)	\$100 (\$108)	\$100 (\$101)	\$100 (\$110)	\$100 (\$107)
<b>Number with knowledge</b>	<b>n=7</b>	<b>n=34</b>	<b>n=18</b>	<b>n=12</b>	<b>n=71</b>
Median (mean) price gram	\$800 (\$714)	\$600 (\$633)	\$850 (\$876)	\$900 (\$750)	\$700 (\$723)

The mean price of a gram of methamphetamine was higher in Wellington Central compared to Auckland Central (\$876 vs. \$633,  $p<0.0001$ ) and higher in Wellington Central compared to Whangarei (\$876 vs. \$714,  $p=0.0165$ ) (Figure 4.7).

Figure 4 7: Mean price paid for a gram of methamphetamine by location, 2010



#### *Change in the price of methamphetamine*

The police detainees reported the price of methamphetamine had been ‘stable/ increasing’ over the past six months (Table 4.9).

Table 4. 9: Police detainees’ perception of the change in the price of methamphetamine in the past six months by location, 2010

Change in price of meth-amphetamine	Whangarei (n=28)	Auckland Central (n=81)	Wellington Central (n=31)	Christchurch Central (n=50)	All (n=190)
Increasing [3]	21%	22%	23%	20%	22%
Fluctuating [2]	18%	10%	10%	8%	11%
Stable [2]	57%	58%	52%	64%	58%
Decreasing [1]	4%	10%	16%	8%	9%
Average change in price score (1=decreasing – 3=increasing)	2.2	2.1	2.1	2.1	2.1
Overall recent change	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing

### *Time taken to purchase to purchase methamphetamine*

Fifty-seven percent of the police detainees were able to purchase methamphetamine in one hour or less (Table 4.10).

Table 4. 10: taken by police detainees to purchase methamphetamine by location, 2010

<b>Time to purchase methamphetamine(%)</b>	<b>Whangarei (n=28)</b>	<b>Auckland Central (n=81)</b>	<b>Wellington Central (n=31)</b>	<b>Christchurch Central (n=50)</b>	<b>All (n=190)</b>
Weeks	7	3	3	4	4
Days	7	5	11	4	6
About one day	10	8	8	16	11
Hours	17	16	28	29	22
1 Hour	34	34	11	25	27
Less than 20 mins	24	34	39	22	30

### *Effect of methamphetamine on the likelihood to get angry*

Those police detainees who reported using methamphetamine in the past 12 months were asked what effect using methamphetamine has on their likelihood of becoming angry. Thirty-two percent of the methamphetamine using detainees said using methamphetamine was 'more likely' or 'much more likely' to make them become angry (Table 4.11).

Table 4. 11: Effect of methamphetamine on police detainees' likelihood of becoming angry, 2010

<b>Effect of methamphetamine on likelihood to get angry</b>	<b>All (n=201)</b>
Much more likely [5]	13%
More likely [4]	19%
No effect [3]	44%
Less likely [2]	15%
Much less [1]	8%
Mean impact on likelihood to get angry (1=much less - 5=much more)	3.1

### *Driving under the influence of methamphetamine*

Those police detainees who had used methamphetamine in the past year were asked how often they drove under the influence of methamphetamine. Twenty percent of the detainees said they did not drive and a further 13% said their licence was suspended. Fifty-six percent of the detainees who used methamphetamine and drove had driven under the influence of methamphetamine (Table 4.12).

Table 4.12: Extent police detainees who drove and who had used methamphetamine in the past 12 months had driven under the influence of methamphetamine by location, 2010

Extent drove under the influence of methamphetamine	Whangarei (n=26)	Auckland Central (n=54)	Wellington Central (n=29)	Christchurch Central (n=30)	All (n=139)
All [4]	8%	7%	28%	10%	12%
Most [3]	12%	17%	10%	3%	12%
Some [2]	27%	20%	14%	10%	18%
Hardly any [1]	15%	13%	10%	17%	14%
None [0]	38%	43%	38%	60%	44%
Mean score of extent drove under influence (0=none -4=all)	1.3	1.3	1.8	0.9	1.3

## Summary

- Twenty-six percent of the police detainees had used methamphetamine in the previous 12 months
- Detainees in Auckland Central were more likely to have used methamphetamine in the past 30 days than those in Central Christchurch



- Detainees in Auckland Central had used methamphetamine on a higher number of days than the other sites
- Maori detainees were more likely to have used methamphetamine in the previous month
- Twenty-five percent of the police detainees who had used methamphetamine in the past 12 months felt they were dependent on it
- A higher proportion of police detainees felt they were dependent on methamphetamine in Auckland Central and Wellington Central compared to Christchurch Central
- Detainees aged 25 years or older, Maori detainees, those unemployed or on a sickness benefit, those that did not complete the compulsory years of education and those who had been in prison in the past 12 months were more likely to be heavier methamphetamine users
- The current availability of methamphetamine was reported to be 'very easy/easy'
- The availability of methamphetamine was considered to be higher in Auckland Central than in Christchurch Central and Whangarei
- The median price of a 'point' of methamphetamine was \$100 and the median price of a gram was \$700
- The mean price of a gram of methamphetamine was higher in Wellington Central than in Auckland Central and Whangarei
- The price of methamphetamine was reported to be 'stable/ increasing'
- Fifty-seven percent of the police detainees could purchase methamphetamine in one hour or less
- Thirty-two percent of the methamphetamine using detainees said using methamphetamine was 'more likely' or 'much more likely' to make them become angry
- Fifty-six percent of the detainees who used methamphetamine and drove had driven under the influence of methamphetamine

## Chapter 5 - Cannabis

### Introduction

Cannabis has been the most widely used illegal drug in New Zealand for a number of decades (Wilkins, et al., 2002b). However, recent national household drug survey findings indicate there has been a decline in cannabis use among the general population in New Zealand in the past few years. Last year use of cannabis in New Zealand decreased from 20% in 2001 to 18% in 2006 (i.e. among the population aged 15-45 years old) (Wilkins & Sweetsur, 2008c). Similar declines in cannabis use have been found in Australia, the United Kingdom, Western Europe and the United States in recent years suggesting broad socio-cultural factors may be contributing to a decline in cannabis use (European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), 2009).

The retail black market for cannabis in New Zealand has been estimated to have an annual dollar turnover of \$131-\$190 million (NZD) (Wilkins & Casswell, 2002; Wilkins, et al., 2005b). Exploration of the structure of the cannabis market in New Zealand suggests that many cannabis users receive their cannabis for 'free' during group consumption sessions, and that some heavy cannabis users finance their spending on cannabis through selling cannabis to others (Wilkins & Sweetsur, 2006). Cannabis is generally sold within private social networks (MacCoun & Reuter, 2001). In New Zealand, cannabis is also sold semi-publicly from drug houses, known as 'tinny' houses, and from street drug markets (Wilkins, et al., 2005a). Adolescent cannabis users have been found to be more likely than adult cannabis users to purchase their cannabis from 'tinny' houses (Wilkins, et al., 2005a).

#### *Use of cannabis*

Eighty-seven percent of the detainees had tried cannabis, 72% had used cannabis in the past 12 months and 63% had used it in the past 30 days (Table 5.1).

Table 5.1: detainees' patterns of cannabis use by location, 2010

Use of cannabis	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	88	83	89	91	87
Mean age first used (years)*	15	14	15	14	14
Used in past 12 months (%)	68	63	76	81	72
Mean number of years of use**	10	11	10	11	11
Mean number of days used in past 12 months**	160	196	181	191	187
Felt dependent in the past 12 months (%)**	30	43	44	34	38
Used in past month (%)	58	57	63	71	63
Mean number of days used in past month***	16	17	18	18	18

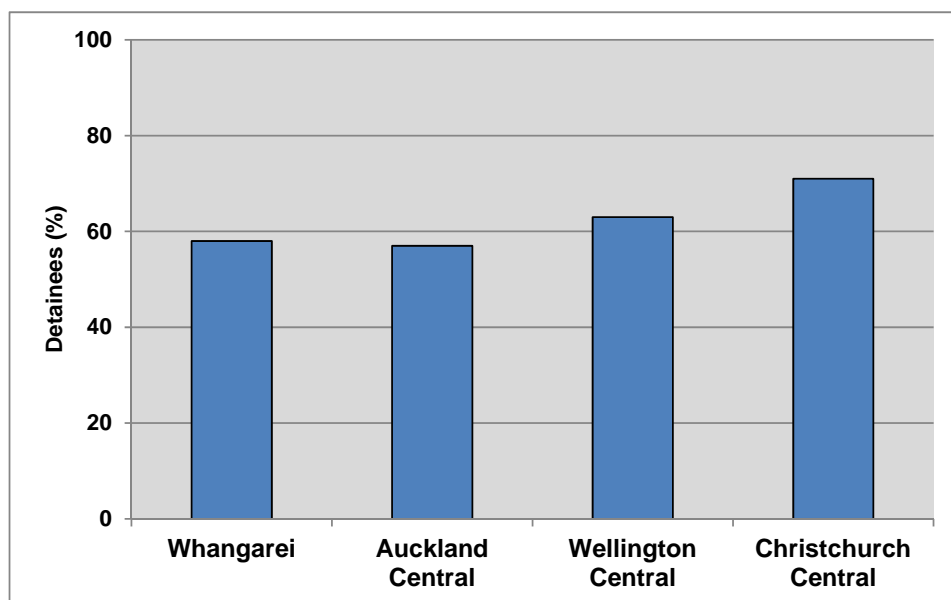
\* of those who had ever tried

\*\* of those who had used in the past 12 months

\*\*\* of those who had used in the past month

Those detainees in Christchurch Central were more likely to have used cannabis in the past year than those in Auckland Central (81% vs. 63%,  $p<0.0001$ ) and Whangarei (81% vs. 68%,  $p=0.0105$ ). Detainees in Wellington Central were more likely than those in Auckland Central to have used cannabis in the past 12 months (76% vs. 63%,  $p=0.0107$ ). A higher proportion of detainees in Christchurch Central had also used cannabis in the past month compared to those in Auckland Central (71% vs. 57%,  $p=0.001$ ) and Whangarei (71% vs. 58%,  $p=0.0222$ ) (Figure 5.1).

Figure 5 1: Proportion of police detainees who used cannabis in the past 30 days by location, 2010



#### *Frequency of cannabis use*

The police detainees had used cannabis on a mean of 187 days in the past 12 months (median 156, 1-365 days). They had used cannabis on a mean of 18 days in the past 30 days.

#### *Cannabis use by ethnicity*

Maori detainees were more likely to have ever tried cannabis than Pacific detainees (93% vs. 72%,  $p < 0.0001$ ) and European/Asian/Other detainees (93% vs. 87%,  $p = 0.0097$ ) (Table 5.2). Maori detainees were more likely to have used cannabis in the past 12 months than Pacific detainees (79% vs. 56%,  $p < 0.0001$ ) and European/Asian/Other detainees (79% vs. 71%,  $p = 0.0117$ ).

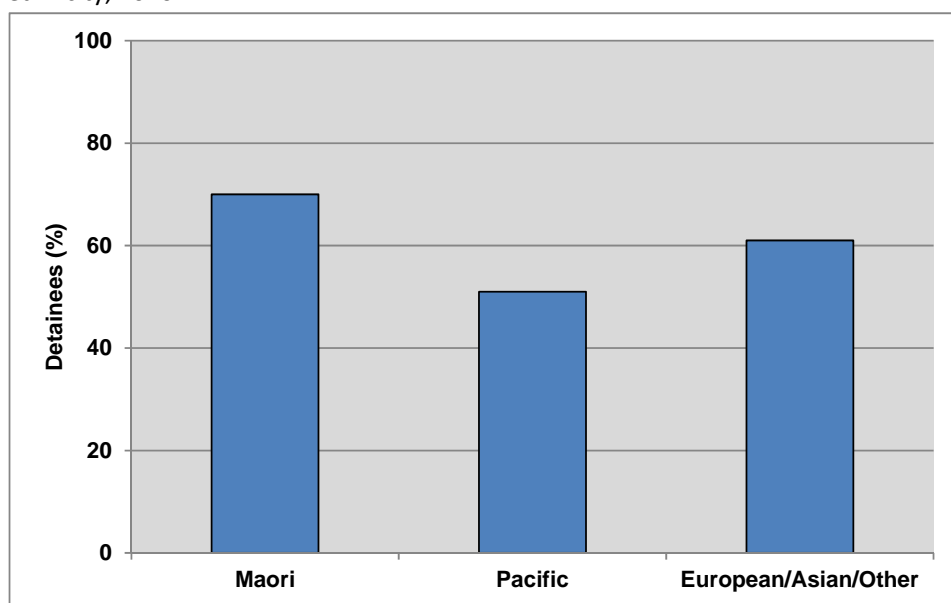
Table 5.2: Police detainees' patterns of cannabis use by primary ethnicity, 2010

Use of cannabis	Maori (n=307)	Pacific Islanders (n=110)	European/Asian/Other (n=395)*	All (n=812)
Ever used (%)	93	72	87	87
Used in past 12 months (%)	79	56	71	72
Used in past month (%)	70	51	61	63

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

Maori detainees were also more likely to have used cannabis in the past month than Pacific detainees (70% vs. 51%,  $p=0.0006$ ) and Europeans/Asian/Other detainees (70% vs. 61%,  $p=0.0176$ ) (Figure 5.2).

Figure 5 2: Proportion of police detainees who used cannabis in the past 30 days by primary ethnicity, 2010



### *Dependency on cannabis*

Thirty-eight percent of the police detainees who had used cannabis in the past 12 months indicated they felt dependent on cannabis.

### *Cannabis use at the time of arrest*

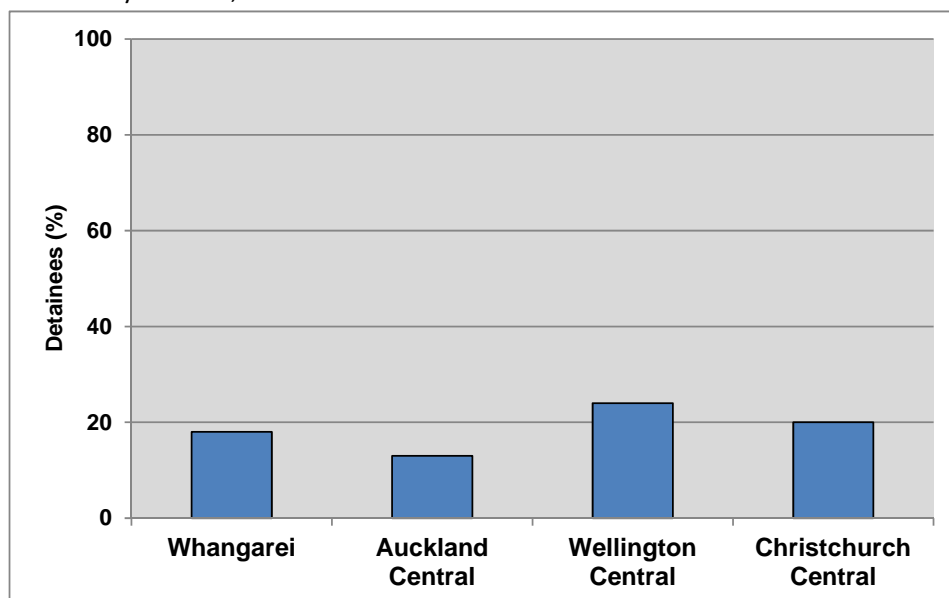
Eighteen percent of the police detainees reported they were using cannabis at the time of their arrest (Table 5.3).

Table 5.3: Cannabis use by police detainees at time of arrest by location, 2010

Use of cannabis	Whangarei (n=110)	Auckland Central (n=281)	Wellington Central (n=150)	Christchurch Central (n=259)	All (n=800)
Using when arrested (%)	18	13	24	20	18

Detainees in Wellington Central were more likely to report using cannabis before they were arrested than those in Auckland Central (24% vs. 13%,  $p=0.0049$ ) (Figure 5.3). Detainees in Christchurch Central were also more likely to report using cannabis before they were arrested than those in Auckland Central (20% vs. 13%,  $p=0.0321$ ).

Figure 5 3: Proportion of police detainees who were using cannabis before they were arrested by location, 2010



### *Change in use of cannabis*

Those police detainees who had used cannabis in the previous year were asked how their use had changed compared to a year ago (Table 5.4). Forty-four percent of the cannabis using detainees said they were using 'less' cannabis, 26% said they were using the 'same' and the same percentage said they using 'more'. Only 4% of the detainees said they had stopped using cannabis in the past 12 months.

Table 5.4: Last year cannabis users' change in cannabis use by location, 2010

Change in use of cannabis	Whangarei (n=76)	Auckland Central (n=178)	Wellington Central (n=112)	Christchurch Central (n=208)	All (n=574)
More [3]	29%	34%	21%	21%	26%
Same [2]	28%	21%	29%	27%	26%
Less [1]	38%	44%	46%	47%	44%
Stopped [0]	5%	1%	4%	5%	4%
Mean score of change in use compared to 12 months ago [0= stopped – 3= more	1.8	1.9	1.7	1.6	1.7
Overall change in use	Less/ more	Less/ more	Less/ same	Less/ same	Less/ Same

### *Associations between demographic variables and heavier cannabis use*

The statistical associations between various demographic variables and heavier cannabis use among the police detainees were investigated to provide an indication of risk factors for heavier cannabis use for this group. Heavier cannabis use was defined as using cannabis at least three times per week over the past month. Detainees under the age of 25 years were more likely to be heavier cannabis users than those aged 25 years or older (43% vs. 34%,  $p=0.0165$ ) (Table 5.5 and Figure 5.4). Maori detainees were more likely than non-Maori detainees to be heavier cannabis users (46% vs. 34%,  $p<0.0001$ ). Detainees who were unemployed or on the sickness

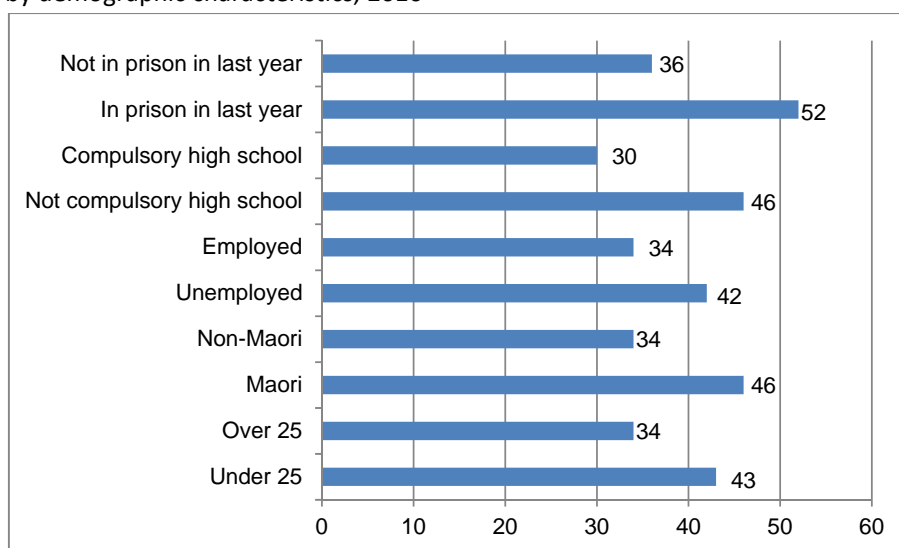
benefit were more likely than those not unemployed or on the sickness benefit to be heavier cannabis users (42% vs. 34%,  $p=0.0198$ ). Detainees who did not complete the compulsory years of high school were more likely than those who did complete the compulsory years of high school to be heavier cannabis users (46% vs. 30%,  $p<0.0001$ ). Detainees who had been in prison in the previous 12 months were more likely than those who had not been in prison in the previous 12 months to be heavier cannabis users (52% vs. 36%,  $p=0.0029$ ).

Table 5.5: The association between demographic variables and heavier cannabis use among police detainees, 2010

	Used cannabis at least three times a week in the past 30 days	
(n=806)	%	p-value
Male	39	0.1499
Female	30	
Under 25 years old	43	0.0165
25 years +	34	
Maori primary ethnicity	46	<0.0001
Non-Maori primary ethnicity	34	
Unemployed/sickness benefit	42	0.0198
Not unemployed/sickness benefit	34	
Did not complete compulsory years of high school	46	<0.0001
Completed compulsory years of high school	30	
Not living in a private residence	35	0.6051
Living in a private residence	39	
Single marital status	39	0.9408
Not single marital status	38	
Prison in past 12 months	52	0.0029
No prison in past 12 months	36	



Figure 5.4: Proportion of police detainees who used cannabis at least three times per week by demographic characteristics, 2010



#### *Current availability of cannabis*

The police detainees described the current availability of cannabis as 'very easy/easy' (Table 5.6).

Table 5.6: Police detainees' perceptions of the current availability of cannabis by location, 2010

Current availability of cannabis	Whangarei (n=80)	Auckland Central (n=175)	Wellington Central (n=110)	Christchurch Central (n=209)	All (n=574)
Very easy [4]	41%	55%	54%	58%	54%
Easy [3]	34%	30%	31%	28%	30%
Difficult [2]	21%	13%	11%	12%	13%
Very difficult [1]	4%	2%	5%	2%	3%
Average availability score (1=very difficult – 4=very easy)	3.1	3.4	3.3	3.4	3.3
Overall current status	Very easy/easy	Very easy/easy	Very easy/easy	Very easy/easy	Very easy/easy

### *Change in availability of cannabis*

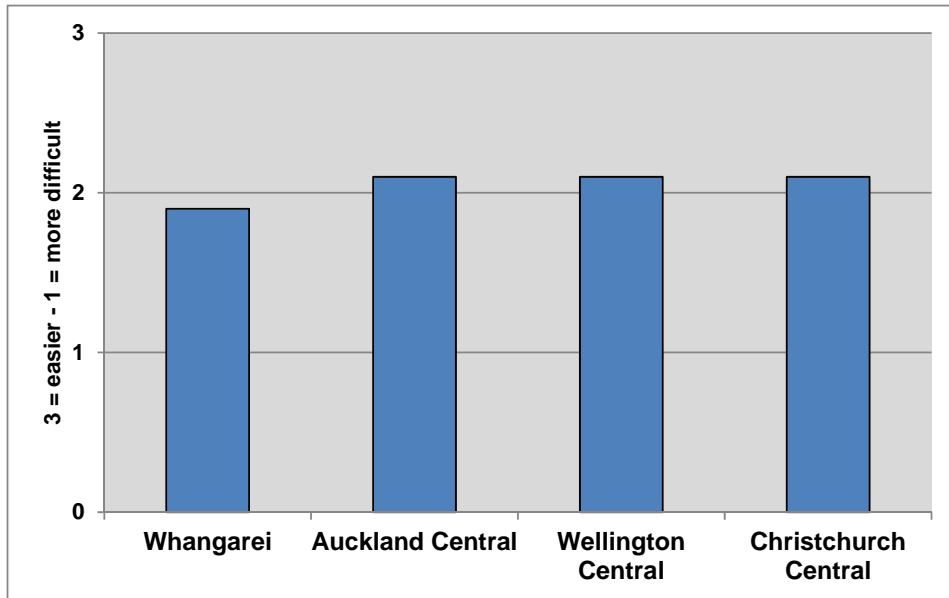
Fifty-seven percent of the police detainees reported the availability of cannabis had been 'stable' over the previous six months, 20% said it had become 'easier' and 13% said it had become 'more difficult' (Table 5.7).

Table 5.7: Police detainees' perception of the change in availability of cannabis by location, 2010

Change in availability of cannabis (%)	Whangarei (n=78)	Auckland Central (n=167)	Wellington Central (n=109)	Christchurch Central (n=206)	All (n=560)
Easier [3]	12%	25%	21%	18%	20%
Stable [2]	58%	49%	62%	59%	57%
Fluctuates [2]	10%	13%	7%	12%	11%
More difficult [1]	21%	13%	9%	11%	13%
Average change in availability score (1=more difficult – 3=easier)	1.9	2.1	2.1	2.1	2.1
Overall recent change	Stable/ more difficult	Stable/ easier	Stable/ easier	Stable/ easier	Stable/ easier

The detainees in Whangarei were more likely to describe the availability of cannabis as becoming 'more difficult' than those in Auckland Central (1.9 vs. 2.1,  $p=0.0065$ ), Wellington Central (1.9 vs. 2.1,  $p=0.0109$ ) and Christchurch Central (1.9 vs. 2.1,  $p=0.0329$ ) (Figure 5.5).

Figure 5.5: Change in the availability of cannabis by location, 2010



#### *Current price of cannabis*

The police detainees reported paying a median price of \$20 for a 'tinny' of cannabis, \$325 for an ounce of cannabis and \$3,100 for a pound of cannabis (Table 5.8). The mean price of a pound of cannabis was higher in Christchurch Central compared to Auckland Central (\$3700 vs. \$2677,  $p=0.037$ ) and in Christchurch Central compared to Wellington Central (\$3700 vs. \$2152,  $p=0.0382$ ). There were an insufficient number of detainees in Whangarei reporting the pound price of cannabis to make comparisons to the other sites.

Table 5.8: Current median (mean) price paid by police detainees for cannabis (NZD) by location, 2010

Current price of cannabis (\$)	Whangarei	Auckland Central	Wellington Central	Christ church Central	All
Number with knowledge	n=73	n=124	n=87	n=191	n=475
Median (mean) price per 'tinny'	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)	\$20 (\$20)
Number with knowledge	n=6	n=41	n=26	n=33	n=106
Median (mean) price per 'ounce'	\$325 (\$321)	\$350 (\$329)	\$300 (\$308)	\$340 (\$323)	\$325 (\$322)
Number with knowledge	n=2	n=16	n=10	n=14	n=42
Median (mean) price per 'pound'	\$1925 (\$1925)	\$3100 (\$2677)	\$1240 (\$2152)	\$3500 (\$3700)	\$3100 (\$2857)

### *Change in the price of cannabis*

The police detainees reported the price of cannabis had been 'stable' over the past six months (Table 5.9).

Table 5.9: Police detainees' perception of the change in the price of cannabis in the past six months by location, 2010

Change in price of cannabis (%)	Whangarei (n=77)	Auckland Central (n=168)	Wellington Central (n=97)	Christchurch Central (n=204)	All (n=546)
Increasing [3]	8%	9%	11%	8%	9%
Fluctuating [2]	9%	5%	10%	8%	8%
Stable [2]	82%	85%	76%	82%	82%
Decreasing [1]	1%	1%	2%	1%	1%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.1	2.1	2.1	2.1
Overall recent change	Stable	Stable	Stable	Stable	Stable

### *Time taken to purchase cannabis*

Seventy-eight percent of the police detainees were able to purchase cannabis in one hour or less (Table 5.10).

Table 5.10: Time taken by police detainees to purchase cannabis by location, 2010

Time to purchase cannabis (%)	Whangarei (n=79)	Auckland Central (n=152)	Wellington Central (n=110)	Christchurch Central (n=208)	All (n=549)
Months	1	1	2	0	1
Weeks	3	1	0	<1	1
Days	6	7	1	3	4
About one day	4	8	8	5	6
Hours	13	8	8	11	10
1 Hour	19	20	31	23	23
Less than 20 mins	54	56	50	58	55

### *Effect of cannabis on the likelihood to get angry*

Those police detainees who reported using cannabis in the past 12 months were asked what effect using cannabis has on their likelihood to become angry. Only two percent of the cannabis using detainees said using cannabis was 'more likely' or 'much more likely' to make them become angry (Table 5.11). Thirty-three percent of the detainees said that using cannabis was 'much less likely' to make them become angry.

Table 5.11: Effect of cannabis on police detainees' likelihood to become angry, 2010

Effect of cannabis on likelihood to get angry	All (n=575)
Much more likely [5]	0%
More likely [4]	2%
No effect [3]	29%
Less likely [2]	27%
Much less [1]	33%
Mean impact on likelihood to get angry (1=much less - 5=much more)	1.9

#### *Driving under the influence of cannabis*

Those police detainees who had used cannabis in the past year were asked how often they drove under the influence of cannabis. Twenty-four percent of the detainees said they did not drive and a further 10% said their licence was suspended. Sixty-two percent of the detainees who drove and used cannabis had driven under the influence of cannabis (Table 5.12).

Table 5.12: Extent police detainees who drove and who had used cannabis in the past 12 months had driven under the influence of cannabis by location, 2010

Extent drove under the influence of cannabis	Whangarei (n=63)	Auckland Central (n=110)	Wellington Central (n=80)	Christchurch Central (n=125)	All (n=378)
All [4]	10%	8%	18%	14%	12%
Most [3]	13%	13%	11%	14%	13%
Some [2]	24%	22%	20%	22%	22%
Hardly any [1]	16%	17%	13%	15%	15%
None [0]	38%	40%	39%	34%	38%
Mean score of extent drove under influence (0=none - 4=all)	1.4	1.3	1.6	1.6	1.5

## Summary

- Seventy-two percent of the police detainees had used cannabis in the past 12months
- Detainees in Christchurch Central were more likely to have used cannabis in the previous 12 months than those in Auckland Central and Whangarei
- Detainees had used cannabis on a mean of 187 days in the past 12months
- Maori detainees were more likely to have used cannabis in the past year and the past month
- Thirty-eight percent of the detainees said they felt dependent on cannabis
- Detainees under the age of 25 years, Maori detainees, detainees who were unemployed or on a sickness benefit, those who did not complete the compulsory years of high school education and those who had been in prison in the past 12 months were all more likely to be heavier users of cannabis

- Eighteen percent of the detainees had been using cannabis at the time of their arrest
- Detainees in Christchurch Central and Wellington Central were more likely to have used cannabis at the time of their arrest than those in Auckland Central
- Only 4% of detainees reported stopping cannabis use in the previous 12 months
- The current availability of cannabis was reported to be 'very easy/ easy'
- The availability of cannabis was described as 'stable' during the past six months
- The median price of a 'tinny' of cannabis was \$20 and the median price of an ounce of cannabis was \$325
- The price of cannabis was reported to be 'stable'
- Seventy-eight percent of detainees could purchase cannabis in one hour or less
- Only two percent of the cannabis using detainees said using cannabis was 'more likely' or 'much more likely' to make them become angry
- Sixty-two percent of the detainees who used cannabis and drove had driven under the influence of cannabis



## Chapter 6 – Ecstasy

### Introduction

Ecstasy (3,4-methylenedioxymethamphetamine, MDMA) has both amphetamine and hallucinogenic effects (Gowing, et al., 2002; Gowing, et al., 2001; Kuhn, et al., 1998; Topp, et al., 1998). As with standard amphetamines MDMA use increases heart rate, blood pressure, and body temperature and produces a sense of energy and alertness, but MDMA also produces a state of empathy for others due to the increased release of serotonin (Kuhn, et al., 1998). High doses of MDMA cause teeth clenching, paranoia, anxiety and confusion (Kuhn, et al., 1998). MDMA can cause hyperthermia (extreme heat stroke) resulting in death when combined with sustained physical exercise and elevated temperatures, conditions commonly found in dance clubs and music events (Gowing, et al., 2002; Gowing, et al., 2001). MDMA can also cause water intoxication and death, when excessive amounts of water are consumed by users as the drug inhibits the body's ability to excrete fluid (Gowing, et al., 2002; Topp, et al., 1998). Although cases of serious adverse effects from MDMA use appear low relative to the extent of its use, it is the unpredictability of adverse events (dose is not predictive of adverse effects) including the risk of death that makes the risks significant (Gowing, et al., 2002). Long term effects from MDMA include insomnia, energy loss, depression, anxiety, irritability, muscle aches, and blurred vision (Topp, et al., 1998).

Ecstasy use emerged in the general population in New Zealand in the early 2000s (Wilkins, et al., 2003). Use of ecstasy increased steadily in subsequent years and it is now the second most widely used illegal drug in New Zealand (Wilkins & Sweetsur, 2008c). The proportion of New Zealanders who had used ecstasy in the previous year increased from 1.5% in 1998 to 3.9% in 2006 (i.e. among population aged 15-45 years old) (Wilkins & Sweetsur, 2008c). Ecstasy is also the second most widely used drug in Australia (Australian Institute of Health and Welfare, 2008).

It remains unclear to what extent drugs sold as 'ecstasy' contain MDMA or a mix of other substances. Pharmacological analysis of so called 'ecstasy' pills in a number of countries around the world has revealed they contain substances other than, or in addition to, MDMA including caffeine, methamphetamine, piperazines and sometimes ketamine (United Nations Office on Drugs and Crime, 2008). In New Zealand, 'ecstasy' tablets seized by the authorities have also been found to contain BZP (benzylpiperazine), MDPV (methylenedioxypurovalerone) , mephedrone and methylone (methylenedioxymethcathinone) (Wilkins, et al., 2008).

### *Use of ecstasy*

Forty-two percent of the police detainees had tried ecstasy, 22% had used ecstasy in the past year and 8% had used it in the past month (Table 6.1). The detainees in Wellington Central were more likely to have ever tried ecstasy than those in Whangarei (52% vs. 21%,  $p < 0.0001$ ) and Auckland Central (52% vs. 40%  $p = 0.014$ ).

Table 6.1: Police detainees' patterns of ecstasy use by location, 2010

Use of ecstasy	Whangarei (n=115)	Auckland Central (n=284)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=813)
Ever used (%)	21	40	52	47	42
Mean age first used (years)*	21	21	21	20	21
Used in past 12 months (%)	8	19	30	26	22
Mean number of years of use	2	4	4	5	4
Mean number of days used in past 12 months	4	18	14	5	11
Felt dependent in the past 12 months (%)**	9	6	5	0	4
Used in past month (%)	4	7	12	8	8
Mean number of days used in past month***	2	3	2	2	2

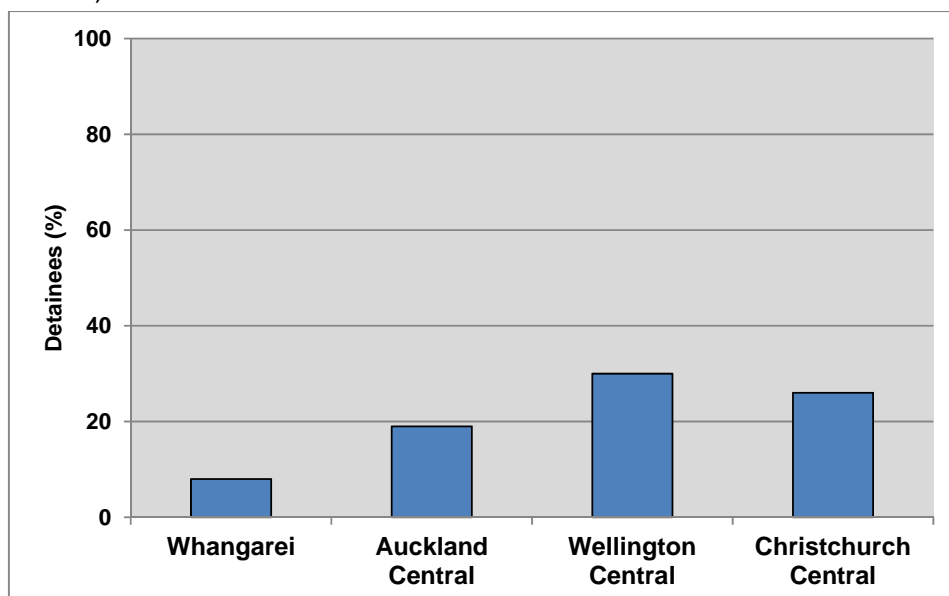
\* of those who had ever tried

\*\* of those who had used in the past 12 months

\*\*\* of those who had used in the past month

A higher proportion of detainees in Wellington Central had used ecstasy in the previous year than those in Whangarei (30% vs. 8%,  $p < 0.0001$ ) and Auckland Central (30% vs. 19%,  $p = 0.0064$ ) (Figure 6.1). A higher proportion of detainees in Christchurch Central had used ecstasy in the previous year than those in Whangarei (26% vs. 8%,  $p = 0.0002$ ) and Auckland Central (26% vs. 19%,  $p = 0.0326$ ). Last year use of ecstasy was higher in Auckland Central than in Whangarei (19% vs. 8%,  $p = 0.0112$ ). The low number of police detainees reporting recent use of ecstasy in Whangarei indicates some caution should be exercised when comparing findings in regard to ecstasy for Whangarei with the other sites.

Figure 6.1: Proportion of police detainees who used ecstasy in the past 12 months by location, 2010



#### *Frequency of ecstasy use*

The police detainees had used ecstasy on a mean of 11 days in the past 12 months (median 2, range 1-365 days). They had used ecstasy on a mean of two days in the past 30 days.

#### *Ecstasy use by ethnicity*

European/Asian and Other detainees were more likely to have ever tried ecstasy than Maori detainees (48% vs. 38%,  $p=0.0089$ ) and Pacific detainees (48% vs. 25%,  $p<0.0001$ ) (Table 6.2).

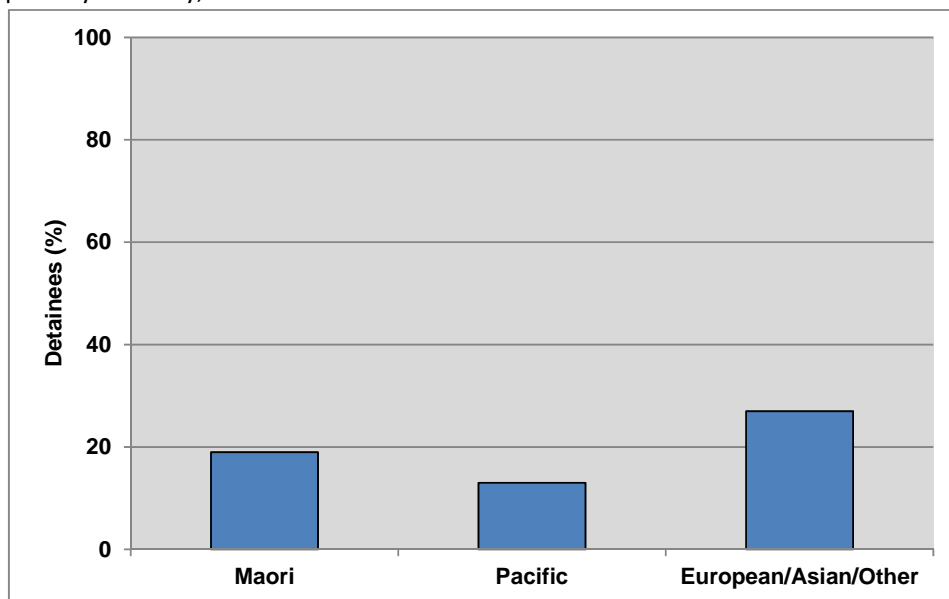
Table 6.2: Police detainees' patterns of ecstasy use by primary ethnicity, 2010

Use of ecstasy	Maori (n=307)	Pacific (n=110)	European/ Asian/Other* (n=395)	All (n=812)
Ever used (%)	38	25	48	42
Used in past 12 months (%)	19	13	27	22
Used in past month (%)	7	3	10	8

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

European/Asian and Other detainees were also more likely to have used ecstasy in the previous 12 months than Maori detainees (27% vs. 19%,  $p=0.0177$ ) and Pacific detainees (27% vs. 13%,  $p=0.003$ ) (Figure 6.2).

Figure 6.2: Proportion of police detainees who used ecstasy in the past 12 months by primary ethnicity, 2010



### *Dependency on ecstasy*

The police detainees who had used ecstasy in the past 12 months were asked if they had felt dependent on ecstasy during this time. Four percent of the ecstasy using detainees said they had felt dependent on ecstasy.

### *Ecstasy use at the time of arrest*

Only one percent of the police detainees had been using ecstasy at the time of their arrest.

### *Change in use of ecstasy*

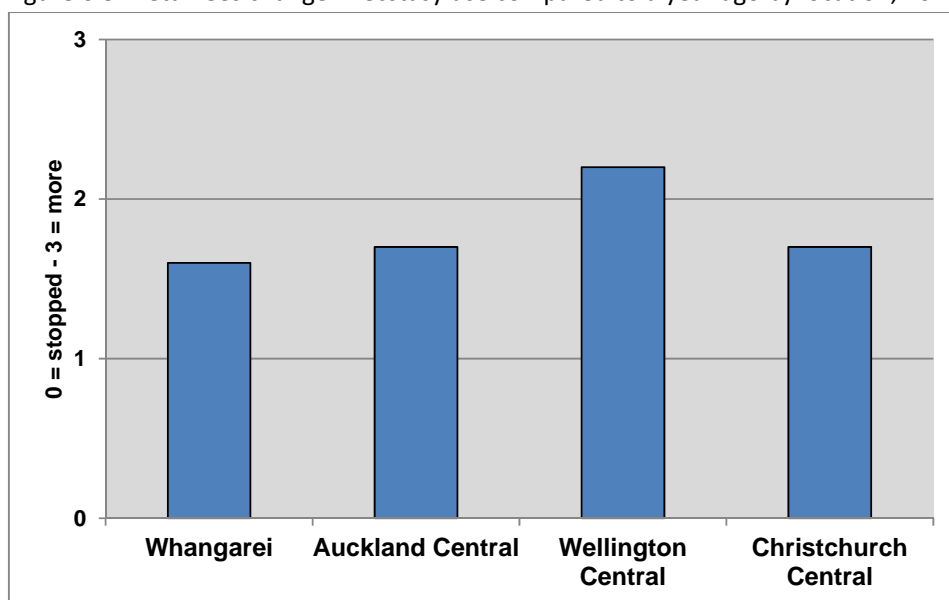
Those police detainees who had used ecstasy in the previous year were asked how their use had changed compared to a year ago. Thirty-six percent of the ecstasy using detainees were using 'more' ecstasy, 33% were using 'less' ecstasy and 22% were using the 'same' amount of ecstasy (Table 6.3).

Table 6.3 Last year ecstasy users' change in ecstasy use by location, 2010

Change in use of ecstasy	Whangarei (n=11)	Auckland Central (n=52)	Wellington Central (n=45)	Christchurch Central (n=61)	All (n=169)
More [3]	36%	31%	58%	23%	36%
Same [2]	18%	23%	13%	28%	22%
Less [1]	18%	35%	22%	41%	33%
Stopped [0]	27%	12%	7%	8%	10%
Mean score of change in use compared to 12 months ago (0=stopped – 3=more)	1.6	1.7	2.2	1.7	1.8
Overall change in use	More/ stopped	Less/ more	More/ less	Less/ same	More/ less

The ecstasy using detainees in Wellington Central were more likely to report using 'more' ecstasy than those in Auckland Central (2.2 vs. 1.7,  $p=0.0199$ ) and Christchurch Central (2.2 vs. 1.7,  $p=0.0039$ ) (Figure 6.3).

Figure 6.3: Detainees change in ecstasy use compared to a year ago by location, 2010



#### *Current availability of ecstasy*

The police detainees had mixed views about the current availability of ecstasy. Thirty-four percent reported the current availability of ecstasy to be 'easy', 28% said it was 'difficult' and 27% said it was 'very easy' (Table 6.4).

Table 6. 4: Police detainees' perceptions of the current availability of ecstasy by location, 2010

Current availability of ecstasy	Whangarei (n=10)	Auckland Central (n=49)	Wellington Central (n=39)	Christchurch Central (n=65)	All (n=163)
Very easy [4]	20%	35%	28%	22%	27%
Easy [3]	40%	39%	26%	34%	34%
Difficult [2]	10%	22%	28%	35%	28%
Very difficult [1]	30%	4%	18%	9%	11%
Average availability score (1=very difficult – 4=very easy)	2.5	3.0	2.6	2.7	2.8
Overall current status	Easy/very difficult	Easy/very easy	Very easy/difficult	Difficult/easy	Easy/difficult

#### *Change in availability of ecstasy*

The detainees also had mixed views about how the availability of ecstasy had changed in the previous six months. Thirty-four percent reported the availability of ecstasy had been 'stable' over the previous six months, 25% said it had become 'more difficult' and 24% said it had become 'easier' (Table 6.5).

Table 6.5: : Police detainees' perception of the change in availability of ecstasy by location, 2010

Change in availability of ecstasy (%)	Whangarei (n=12)	Auckland Central (n=45)	Wellington Central (n=31)	Christchurch Central (n=60)	All (n=148)
Easier [3]	25%	18%	26%	27%	24%
Stable [2]	33%	40%	45%	40%	41%
Fluctuates [2]	17%	11%	16%	7%	11%
More difficult [1]	25%	31%	13%	27%	25%
Average change in availability score (1=more difficult – 3=easier)	2.0	1.9	2.2	2.0	2.0
Overall recent change	Stable/more difficult	Stable/more difficult	Stable/easier	Stable/more difficult	Stable/more difficult



### *Current price of ecstasy*

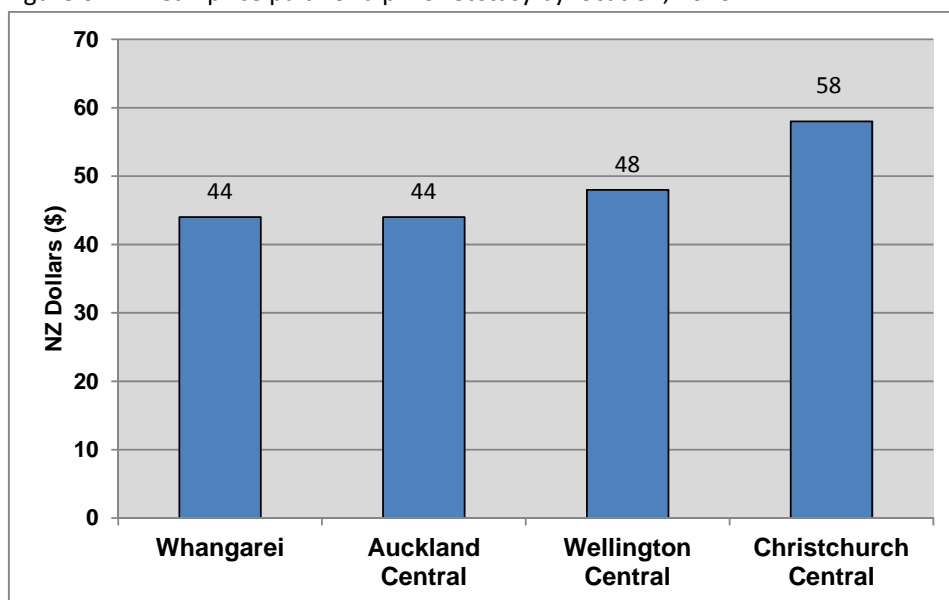
The police detainees reported paying a median price of \$50 for a pill of ecstasy (Table 6.6).

Table 6.6: Current median (mean) price paid by police detainees for a pill of ecstasy (NZD) by location, 2010

Current price of ecstasy (\$)	Whangarei	Auckland Central	Wellington Central	Christ church Central	All
Number with knowledge	n=7	n=43	n=38	n=65	n=153
Median (mean) price per pill	\$50 (\$44)	\$40 (\$44)	\$50 (\$48)	\$60 (\$58)	\$50 (\$51)

The mean price of a pill of ecstasy was higher in Christchurch Central than in Auckland Central (\$58 vs. \$44,  $p=0.0148$ ), Wellington Central (\$58 vs. \$48,  $p=0.0014$ ) and Whangarei (\$58 vs. \$44,  $p=0.0007$ ) (Figure 6.4).

Figure 6. 4: Mean price paid for a pill of ecstasy by location, 2010



### *Change in the price of ecstasy*

The police detainees reported the price of ecstasy had been 'stable/ decreasing' over the past six months (Table 6.7).

Table 6.7: Police detainees' perceptions of the change in the price of ecstasy in the past six months by location, 2010

Change in price of ecstasy (%)	Whangarei (n=9)	Auckland Central (n=43)	Wellington Central (n=32)	Christchurch Central (n=63)	All (n=147)
Increasing [3]	22%	14%	19%	14%	16%
Fluctuating [2]	22%	14%	9%	22%	17%
Stable [2]	44%	47%	50%	44%	46%
Decreasing [1]	11%	26%	22%	19%	21%
Average change in price score (1=decreasing – 3=increasing)	2.1	1.9	2.0	2.0	1.9
Overall recent change	Stable/ fluctuating	Stable/ decreasing	Stable/ decreasing	Stable/ fluctuating	Stable/ decreasing

### *Time taken to purchase ecstasy*

Forty-four percent of the police detainees were able to purchase ecstasy in one hour or less (Table 6.8).

Table 6.8: taken by police detainees to purchase ecstasy by location, 2010

Time to purchase (%)	Whangarei (n=9)	Auckland Central (n=45)	Wellington Central (n=37)	Christchurch Central (n=66)	All (n=157)
Months	0	2	0	0	1
Weeks	11	0	8	5	4
Days	33	11	19	8	13
About one day	11	16	14	27	20
Hours	11	22	14	24	20
1 Hour	33	20	24	15	20
Less than 20 mins	0	29	22	21	22

### *Effect of ecstasy on the likelihood to get angry*

Those police detainees who reported using ecstasy in the past 12 months were asked what effect using ecstasy has on their likelihood to become angry. Only 7% of the ecstasy using detainees said using ecstasy was 'more likely' or 'much more likely' to make them become angry (Table 6.9). Sixty percent of the detainees reported that using ecstasy was 'less likely' or 'much less' likely to make them become angry.

Table 6.9: Effect of ecstasy on police detainees' likelihood to become angry, 2010

Effect of ecstasy on likelihood to get angry	All (n=164)
Much more likely [5]	2%
More likely [4]	5%
No effect [3]	34%
Less likely [2]	24%
Much less [1]	36%
Mean impact on likelihood to get angry (1=much less - 5=much more)	2.1

### *Driving under the influence of ecstasy*

Those police detainees who had used ecstasy in the past year were asked how often they drove under the influence of ecstasy. Seventeen percent of the detainees said they did not drive and a further 10% said their licence was suspended. Seventeen percent of the ecstasy using detainees who drove had driven under the influence of ecstasy (Table 6.10).

Table 6. 10: Extent police detainees who drove and who used ecstasy in the past 12 months had driven under the influence of ecstasy by location, 2010

Extent drove under the influence of ecstasy	Whangarei (n=10)	Auckland Central (n=36)	Wellington Central (n=28)	Christchurch Central (n=47)	All (n=121)
All [4]	0%	3%	0%	0%	1%
Most [3]	0%	6%	0%	0%	2%
Some [2]	10%	8%	4%	2%	5%
Hardly any [1]	0%	14%	11%	6%	9%
None [0]	90%	69%	86%	91%	83%
Mean score of extent drove under influence (0=none - 4=all)	0.2	0.6	0.2	0.1	0.3

## Summary

- Twenty-two percent of the police detainees had used ecstasy in the past 12 months
- The prevalence of ecstasy use by the detainees was highest in Wellington Central and Christchurch Central
- The detainees had used ecstasy on a mean of 11 days in the past year
- The frequency of ecstasy use was highest in Auckland Central and Wellington Central
- European detainees were more likely to have used ecstasy
- Only four percent of the detainees who had used ecstasy in the past 12 months felt they were dependent on it
- Detainees who used ecstasy in Wellington Central were likely to report using 'more' ecstasy than detainees in Auckland Central and Christchurch Central

- The detainees had mixed views about the availability of ecstasy. Overall, the current availability of ecstasy was described as 'easy/ difficult'
- The detainees also had mixed views about how the availability of ecstasy had changed in the past six months. Overall, the availability of ecstasy was thought to have been 'stable/ more difficult'
- The median price of a pill of ecstasy was \$50
- The mean price of a pill of ecstasy was higher in Central Christchurch than the other sites
- The detainees reported the price of ecstasy had been 'stable/ decreasing' over the past six months
- Forty-four percent of the detainees could purchase ecstasy in one hour or less
- Only 7% of the ecstasy using detainees said using ecstasy was 'more likely' or 'much more likely' to make them become angry
- Seventeen percent of the detainees who used ecstasy and drove had driven under the influence of ecstasy

## Chapter 7 - Opioids

### Introduction

The police detainees were asked about a broad group of opioids in NZ-ADUM which the interviewer listed as ‘heroin, morphine, opiates/opioids, smack, skag, junk and misties’. This broad opioid category reflects the fragmented nature of unsanctioned opioid supply in New Zealand. The international supply of heroin to New Zealand was significantly disrupted by the arrest of the ‘Mr Asia’ international heroin trafficking gang in the late 1970s (New Zealand Customs Service, 2002; Newbold, 2000). Three domestic sources of opioids emerged to largely replace heroin in New Zealand: (1) ‘street morphine’ - pharmaceutical morphine illicitly diverted from the medical system; (2) ‘homebake heroin/ morphine’ – illegally manufactured morphine made from codeine diverted from the medical system and produced in make-shift ‘kitchen’ laboratories; and (3) opium extracted on a seasonal basis from locally grown opium poppies (Adamson & Sellman, 1998; New Zealand Customs Service, 2002). Pharmaceutical morphine is one of the principal opioids used by injecting drug users in New Zealand (Wilkins, et al., 2010). Pharmaceutical morphine is illicitly procured in a range of ways including the outright theft of supplies from pharmacies, forging or altering prescriptions, deception or manipulation of doctors, ‘doctor shopping’, ‘pharmacy hopping’ and accessing the legitimate prescriptions of family and friends (Royal Australasian College of Physicians, 2008; Sheridan & Butler, 2008; Wilkins, et al., 2010).

#### *Use of opioids*

Fifteen percent of the detainees had used an opioid in their lifetimes, 8% had used an opioid in the previous 12 months and 4% had used an opioid in the past 30 days (Table 7.1). The low number of detainees reporting recent opioid use prevented the comparison of opioid findings by location in some instances.

Table 7.1: Police detainees' patterns of opioid use by location, 2010

Use of opioids	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	12	15	11	20	15
Mean age first used (years)*	25	21	25	19	21
Used in past 12 months (%)	4	5	7	12	8
Mean number of years of use**	11	7	10	11	10
Mean number of days used in past 12 months**	29	112	46	110	94
Injected in past 12 months**	20	60	56	53	53
Felt dependent in past 12 months (%)**	40	47	25	43	41
Used in past month (%)	3	3	5	6	4
Mean number of days used in past month***	18	15	6	19	15

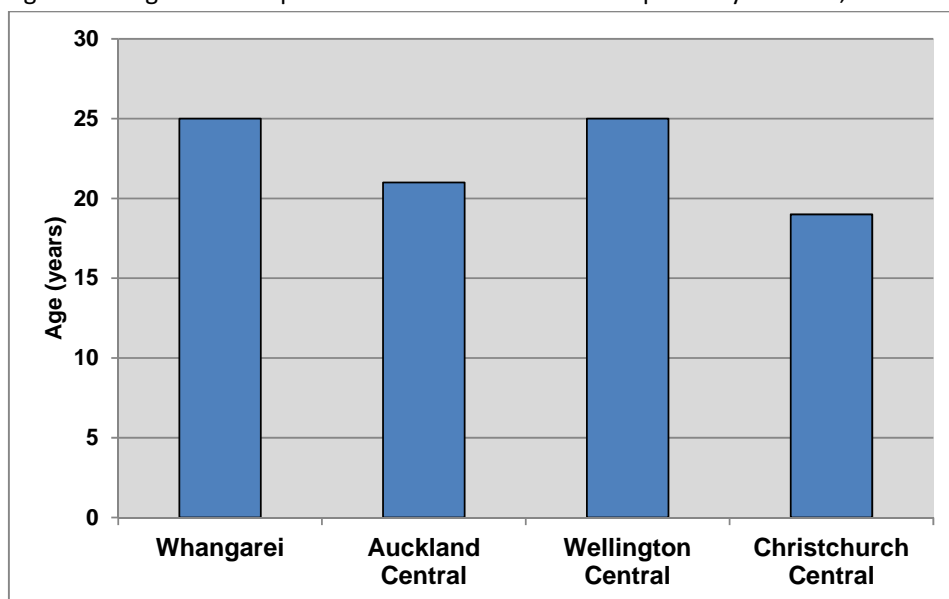
\* of those who had ever tried

\*\* of those who had used in the past 12 months

\*\*\* of those who had used in the past month

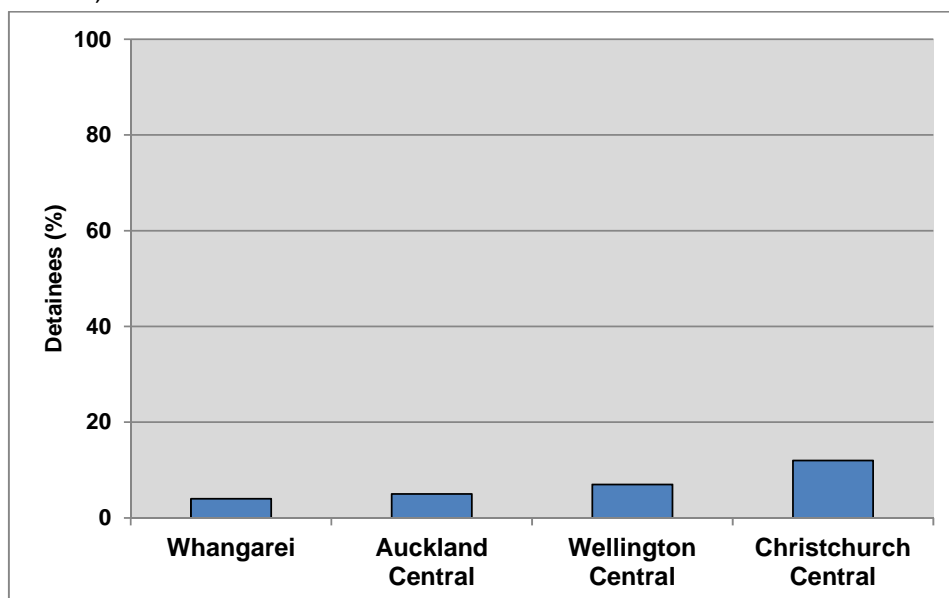
Fifty-three percent of the detainees who reported using an opioid in the past year had injected one in the previous 12 months. Detainees in Christchurch Central had first tried an opioid at a younger age than those in Wellington Central (19 vs. 25 years,  $p=0.0200$ ) (Figure 7.1).

Figure 7.1: Age at which police detainees had first tried opioids by location, 2010



Detainees in Christchurch Central were more likely to have used an opioid in the past year than those in Whangarei (12% vs. 4%,  $p=0.0174$ ) and Auckland Central (12% vs. 5%,  $p=0.0071$ ) (Figure 7.2).

Figure 7. 2: Proportion of police detainees who used opioids in the past 12 months by location, 2010





### *Frequency of opioid use*

The police detainees had used opioids on a mean of 94 days in the past 12 months (median 12, range 1-365 days).

### *Opioid use by ethnicity*

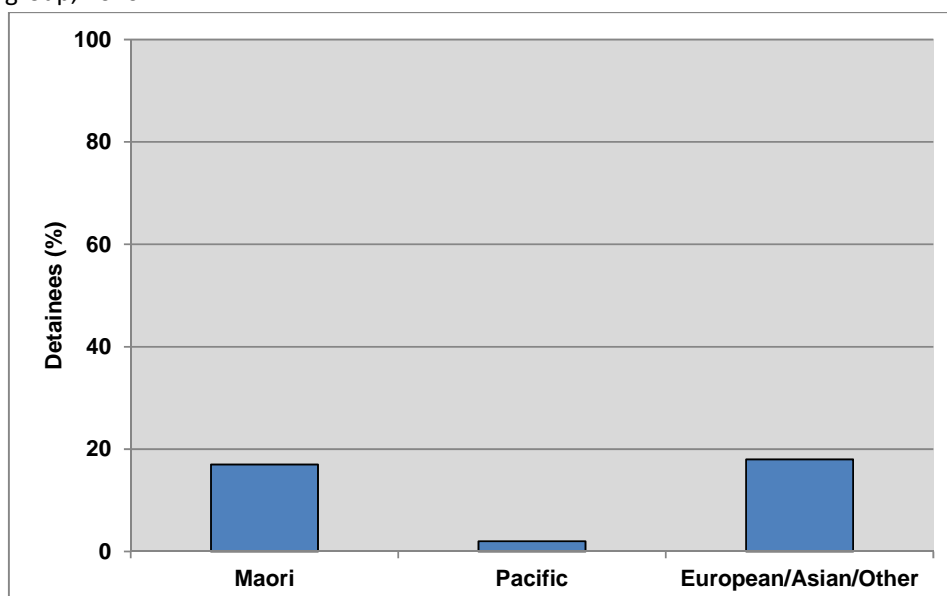
Pacific detainees were less likely to have ever tried opioids than Maori detainees (2% vs. 17%,  $p=0.0012$ ) and European/Asian/Other detainees (2% vs. 18%,  $p=0.0006$ ) (Table 7.2 and Figure 7.3).

Table 7. 2: Police detainees' patterns of opioid use by primary ethnicity, 2010

Use of opioids	Maori (n=307)	Pacific (n=110)	European/ Asian/Other* (n=395)	All (n=812)
Ever used (%)	17	2	18	15
Used in past 12 months (%)	8	2	8	8
Used in past month (%)	5	0	5	4

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

Figure 7. 3: Proportion of police detainees who had ever tried opioids by primary ethnic group, 2010



### *Dependency of opioids*

Forty-one percent of the police detainees who had used an opioid in the previous year reported they felt dependent on opioids.

### *Opioid use at the time of arrest*

Two percent of the police detainees reported they were using opioids at the time of their arrest.

### *Change in use of opioids*

Those police detainees who reported using opioids in the previous year were asked how their use of opioids had changed compared to a year ago. Forty five percent of the detainees said they were using 'more' opioids and 32% said they were using 'less' opioids compared to a year ago (Table 7.3).

Table 7. 3: Police detainees' change in opioid use, 2010

Change in use of opioids	All (n=60)
More [3]	45%
Same [2]	12%
Less [1]	32%
Stopped [0]	12%
Mean score of change in use (0=stopped - 3=more)	1.9
Overall change in use	More/less

### *Current availability of opioids*

The police detainees reported the current availability of opioids to be 'easy/ very easy' (Table 7.4).

Table 7.4: Police detainees' perceptions of the current availability of opioids, 2010

<b>Current availability of opioids</b>	<b>All (n=53)</b>
Very easy [4]	32%
Easy [3]	42%
Difficult [2]	17%
Very difficult [1]	9%
Average availability score (1=very difficult – 4=very easy)	3.0
Overall current status	Easy/ very easy

### *Change in availability of opioids*

Forty-seven percent of the police detainees reported the availability of opioids had been 'stable', 24% said availability had been 'easier' and 19% said the availability of opioids was 'more difficult' in the past six months (Table 7.5).

Table 7.5: Police detainees' perceptions of the change in availability of opioids, 2010

<b>Change in availability of opioids</b>	<b>All (n=51)</b>
Easier [3]	24%
Stable [2]	47%
Fluctuates [2]	10%
More difficult [1]	19%
Average change in availability score (1=more difficult – 3=easier)	2.0
Overall recent change	Stable/ easier

### *Current price of opioids*

The police detainees reported paying a median price of \$1 for a milligram of opioids or \$100 per 100 milligrams of opioids (median \$0.85 per milligram).

### *Change in the price of opioids*

Sixty-nine percent of the police detainees reported the price of opioids had been 'stable' over the previous six months (Table 7.6).

Table 7. 6: Police detainees' perceptions of the change in the price of opioids in the past six months, 2010

<b>Change in price of opioids</b>	<b>All (n=42)</b>
Increasing [3]	12%
Fluctuating [2]	12%
Stable [2]	69%
Decreasing [1]	7%
Average change in price score (1=decreasing – 3=increasing)	2.0
Overall recent change	Stable/ fluctuating

### *Time taken to purchase to purchase opioids*

Sixty-one percent of the police detainees could purchase opioids in one hour or less (Table 7.7).

Table 7.7: Time taken by police detainees to purchase opioids, 2010

Time to purchase opioids (%)	All (n=53)
Weeks	2
Days	6
About one day	4
Hours	28
1 Hour	25
Less than 20 mins	36

### *Effect of opioids on the likelihood to get angry*

Those police detainees who reported using opioids in the past 12 months were asked what effect using opioids has on their likelihood to become angry. Eleven percent of the opioid using detainees said using opioids was ‘more likely’ or ‘much more likely’ to make them become angry (Table 7.8). Sixty-eight percent of the police detainees reported that using opioids was ‘less likely’ or ‘much less likely’ to make them become angry.

Table 7.8: Effect of opioids on detainees’ likelihood to become angry, 2010

Effect of opiates/opioids on likelihood to get angry	All (n=56)
Much more likely [5]	2%
More likely [4]	9%
No effect [3]	21%
Less likely [2]	30%
Much less [1]	38%
Mean impact on likelihood to get angry (1=much less - 5=much more)	2.1

### *Driving under the influence of opioids*

Those police detainees who had used opioids in the past year were asked how often they drove under the influence of opioids. Twenty-six percent of the detainees said they did not drive and a further 14% said their licence was suspended. Fifty-two percent of the detainees who used opioids and drove had driven under the influence of opioids (Table 7.9).

Table 7. 9: Extent police detainees who drove and who had used opioids in the past 12 months had driven under the influence of opioids, 2010

Extent drove under the influence of opioids	All (n=35)
All [4]	14%
Most [3]	6%
Some [2]	20%
Hardly any [1]	12%
None [0]	48%
Mean score of extent drove under influence (0=none - 5=all)	1.3

## Summary

- Eight percent of the police detainees had used opioids in the past 12 months
- Detainees in Christchurch Central had tried opioids at a younger age than those in Wellington Central
- Detainees in Christchurch Central were more likely to have used an opioid in the past year than those in Whangarei and Auckland Central

- Detainees had used opioids on a mean of 94 days in the past 12 months
- Pacific detainees were less likely to have tried opioids than Maori and European detainees
- Forty-one percent of the detainees who had used opioids in the past year felt they were dependent on opioids
- The current availability of opioids was reported to be 'easy/ very easy'
- The availability of opioids was described as 'stable' during the past six months
- The median price of 100 milligrams of opioids was \$100
- The price of opioids was reported to be 'stable/ fluctuating'
- Sixty-one percent of the detainees could purchase opioids in one hour or less
- Eleven percent of the opioid using detainees said using opioids was 'more likely' or 'much more likely' to make them become angry
- Fifty-two percent of the detainees who used opioids and drove had driven under the influence of opioids

## Chapter 8 – Cocaine

### Introduction

Cocaine is derived from the coca plant and is cultivated clandestinely in only three South American countries: Columbia, Peru and Bolivia (National Drug Intelligence Bureau, 2005). Historically cocaine use has been rare in New Zealand (Field & Casswell, 1999; Wilkins & Sweetser, 2008c). The factors that have contributed to this low prevalence of use including cocaine's high price; its short duration of action (i.e. around 20 minutes); New Zealand's geographical isolation from coca producing countries; and New Zealand's tight border controls (New Zealand Customs Service, 2002). International experience suggests that cocaine and methamphetamine are close substitutes for each other (Weisheit & White, 2009). The high prevalence of methamphetamine use in New Zealand may therefore preclude the emergence of a large cocaine market.

#### *Use of cocaine*

Seventeen percent of the police detainees had tried cocaine and 4% had used cocaine in the past year (Table 8.1).



Table 8. 1: Police detainees' patterns of cocaine use, by location, 2010

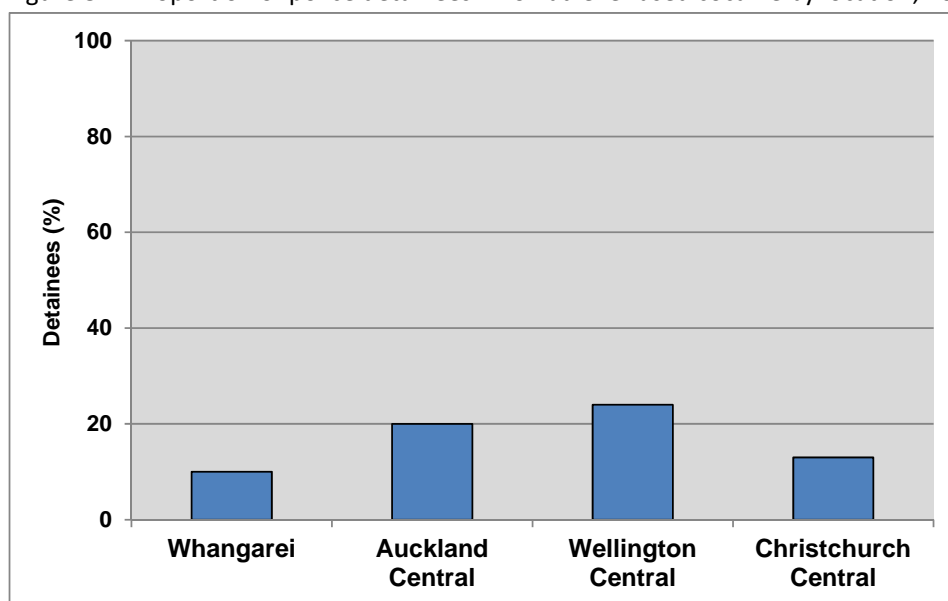
Use of cocaine	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	10	20	24	13	17
Mean age first used (years)*	23	21	22	22	22
Used in past 12 months (%)	0	5	7	3	4
Mean number of years of use**	0	5	8	9	7
Mean number of days used in past 12 months**	0	2	10	3	5

\* of those who had ever tried

\*\* of those who had used in the past 12 months

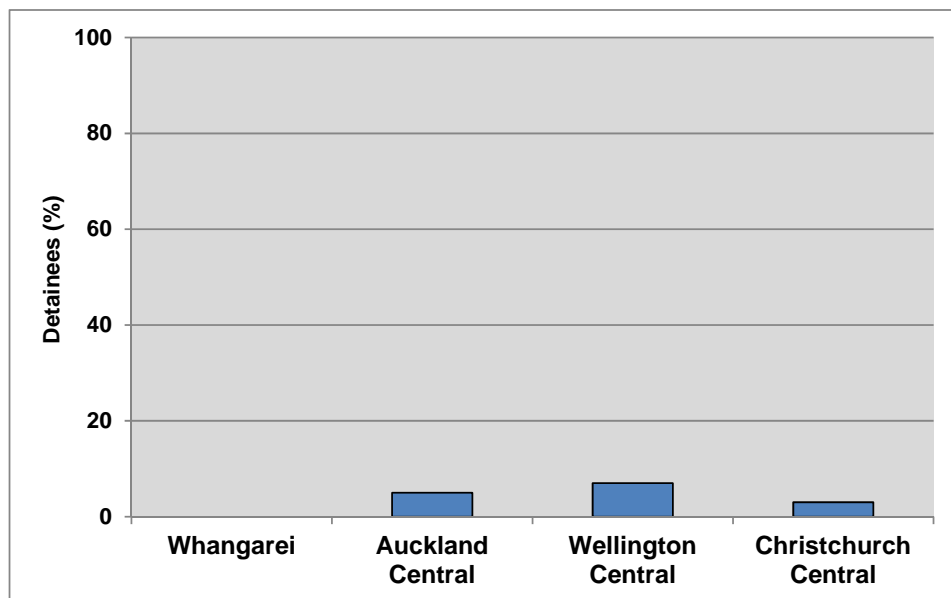
Detainees in Wellington Central were more likely to have ever tried cocaine than those in Christchurch Central (24% vs. 13%,  $p=0.0025$ ) and Whangarei (24% vs. 10%,  $p=0.0026$ ) (Figure 8.1). Detainees in Auckland Central were also more likely to have ever used cocaine than those in Christchurch Central (20% vs. 13%,  $p=0.0270$ ) and Whangarei (20% vs. 10%,  $p=0.0170$ ).

Figure 8.1: Proportion of police detainees who had ever used cocaine by location, 2010



A higher proportion of detainees had used cocaine in the past year in Wellington Central compared to Whangarei (7% vs. 0%,  $p=0.0180$ ).

Figure 8. 2: Proportion of police detainees who used cocaine in the past 12 months by location, 2010



#### *Frequency of cocaine use*

The police detainees had used cocaine on a mean of five days in the past 12 months (median 2, 1-52 days).

#### *Cocaine use by ethnicity*

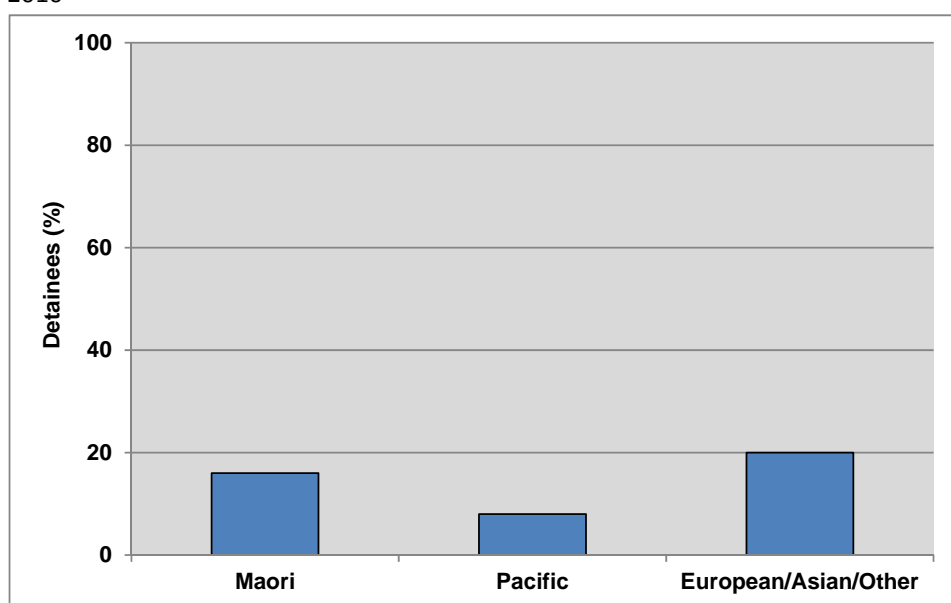
Pacific detainees were less likely to have ever tried cocaine than Maori detainees (8% vs. 16%,  $p=0.0475$ ) and European/Asian/Other detainees (8% vs. 20%,  $p=0.0062$ ) (Table 8.2 and Figure 8.3).

Table 8.2: Police detainees' patterns of cocaine use by primary ethnicity, 2010

Use of cocaine	Maori (n=307)	Pacific (n=110)	European/ Asian/Other* (n=395)	All (n=812)
Ever used (%)	16	8	20	17
Used in past 12 months (%)	4	2	4	4

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

Figure 8.3: Proportion of police detainees who had tried cocaine by primary ethnic group, 2010



### *Change in use of cocaine*

Those police detainees who reported using cocaine in the past year (n=34) were asked how their use of cocaine had changed compared to a year ago. Forty-four percent of the police detainees said they were using 'more' cocaine, 35% were using 'less' cocaine and 12% had 'stopped' using cocaine (Table 8.3).

Table 8.3: Police detainees' change in cocaine use by location, 2010

Change in use of cocaine	All (n=34)
More [3]	44%
Same [2]	9%
Less [1]	35%
Stopped [0]	12%
Mean score of change in use (0 = stopped – 3 = more)	1.9
Overall change in use	More/less

#### *Current availability of cocaine*

The police detainees reported the current availability of cocaine was 'difficult/ very difficult' (Table 8.4).

Table 8.4: Police detainees' perceptions of the current availability of cocaine, 2010

Current availability of cocaine	All (n=30)
Very easy [4]	7%
Easy [3]	13%
Difficult [2]	47%
Very difficult [1]	33%
Mean score of availability (1 = very difficult – 4 = very easy)	1.9
Overall current status	Difficult/very difficult

### *Change in availability of cocaine*

The police detainees reported the availability of cocaine had become 'stable/ more difficult' during the past six months (Table 8.5).

Table 8. 5: Police detainees' perceptions of the change in availability of cocaine, 2010

<b>Change in availability of cocaine</b>	<b>All (n=29)</b>
Easier [3]	17%
Stable [2]	31%
Fluctuates [2]	14%
More difficult [1]	38%
Mean score of availability (1 = more difficult – 3 = easier)	1.8
Overall current status	Stable/ more difficult

### *Current price of cocaine*

Only nineteen of the police detainees were able to provide a price for a gram of cocaine. They reported paying a median price of \$325 for a gram of cocaine (mean \$305).

### *Change in the price of cocaine*

Fifty-three percent of the police detainees reported the price of cocaine had been 'increasing' over the past six months (Table 8.6). Overall, the price of cocaine was described as 'increasing/ stable'.

Table 8. 6: Police detainees' perceptions of the change in the price of cocaine in the past six months, 2010

Change in price of cocaine	All (n=20)
Increasing [3]	53%
Fluctuating [2]	10%
Stable [2]	29%
Decreasing [1]	8%
Mean change in price (1 = decreasing – 3 = increasing)	2.5
Overall change in availability	Increasing/ stable

## Summary

- Four percent of the police detainees had used cocaine in the past 12 months
- Detainees in Wellington Central and Auckland Central were more likely to have tried cocaine than in the other two sites
- Detainees in Wellington Central were more likely to have used cocaine in the past year than those in Whangarei
- The detainees had used cocaine on a mean of only five days in the past 12 months
- The current availability of cocaine was reported to be 'difficult/ very difficult'
- The availability of cocaine had been 'stable/ more difficult' during the past six months

- The median price of a gram of cocaine was \$325
- The price of cocaine was reported to have been 'increasing/ stable' over the previous six months

## Chapter 9 – Hallucinogens

### Introduction

The police detainees were asked about ‘hallucinogens’ which the interviewer listed as including ‘LSD and magic mushrooms’. Lysergic acid diethylamide or LSD (‘trips’ or ‘acid’) is a hallucinogen which became popular in many Western countries during the 1960s youth counter culture (Newbold, 2000). While the use of LSD waned in many countries over subsequent decades, LSD remained relatively popular in New Zealand. The prevalence of LSD use in New Zealand declined in the early 2000s following the emergence of ecstasy (MDMA) and methamphetamine (Wilkins, et al., 2002a; Wilkins, et al., 2003). This decline in LSD use may have stabilised in more recent years among some groups of drug users as they have become wary of the health effects of methamphetamine and frustrated with the decline in the quality of ecstasy (MDMA) (Wilkins, et al., 2010).

#### *Use of hallucinogens*

Forty-seven percent of detainees had used a hallucinogen at some point in their lives and 20% had used one in the previous 12 months (Table 9.1).



Table 9.1: Police detainees' patterns of hallucinogen use, by location, 2010

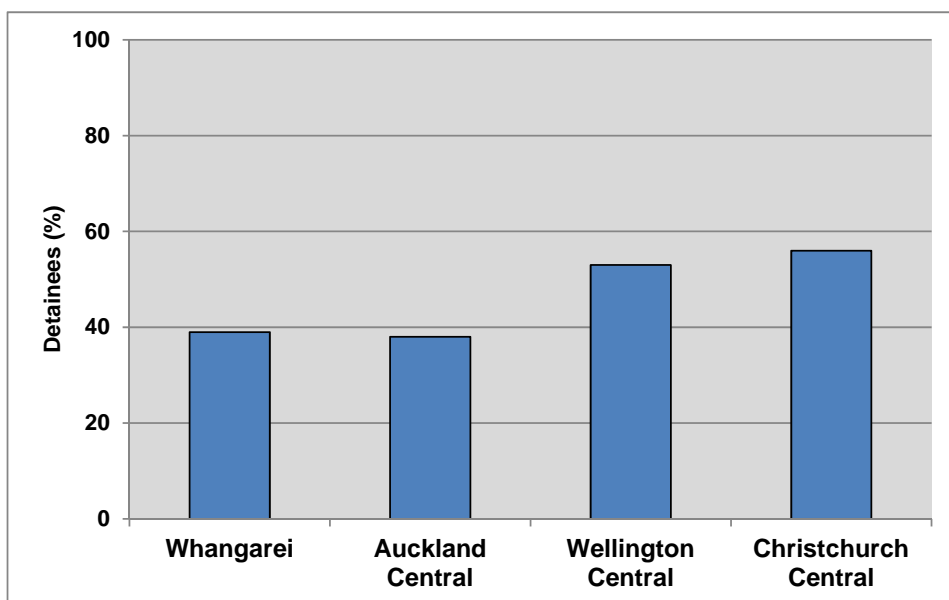
Use of hallucinogens	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	39	38	53	56	47
Mean age first used (years)*	17	18	18	17	18
Used in past 12 months (%)	10	13	27	29	20
Mean number of years used**	4	7	6	8	7
Mean number of days used in past 12 months **	4	25	14	11	14
Felt dependent in past 12 months (%) **	0	3	5	2	2

\* of those who had ever tried

\*\* of those who had used in the past 12 months

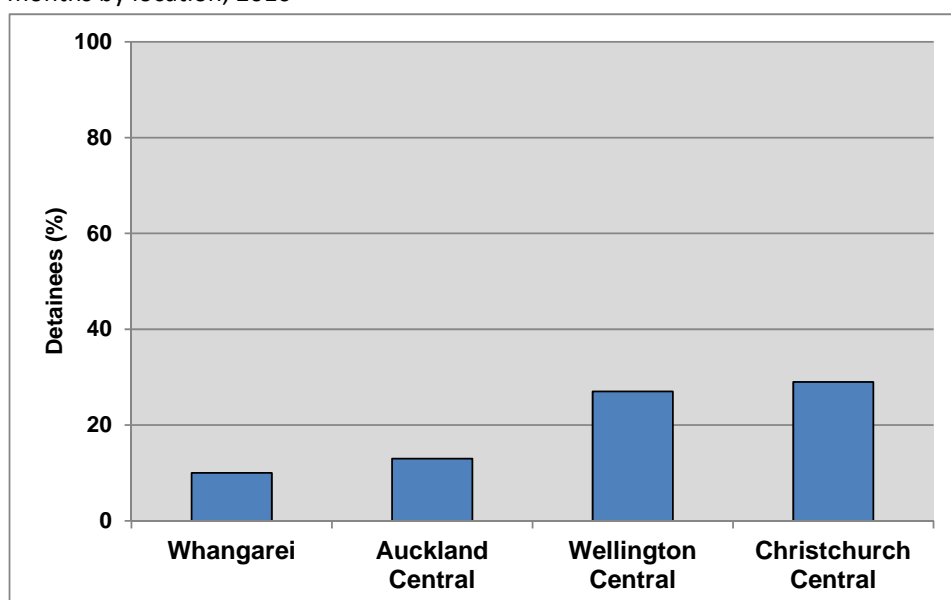
Detainees in Christchurch Central were more likely to have ever used a hallucinogen than detainees in either Whangarei (56% vs. 39%,  $p=0.0033$ ) or Auckland Central (56% vs. 38%,  $p<0.0001$ ) (Figure 9.1). Similarly, detainees in Wellington Central were more likely to have tried hallucinogens than those in Whangarei (53% vs. 39%,  $p=0.0226$ ) and Auckland Central (53% vs. 38%,  $p=0.0021$ ).

Figure 9.1: Proportion of the police detainees who had ever used a hallucinogen by location, 2010



Detainees in Christchurch Central were also more likely to have used hallucinogens in the past 12 months than those in Whangarei (29% vs. 10%,  $p=0.0001$ ) and Auckland Central (29% vs. 13%,  $p<0.0001$ ) (Figure 9.2). Detainees from Wellington Central were also more likely to have used hallucinogens in the past year than detainees in Whangarei (27% vs. 10%,  $p=0.0009$ ) and in Auckland Central (27% vs. 13%,  $p=0.0003$ ).

Figure 9.2: Proportion of the police detainees who had used a hallucinogen in the past 12 months by location, 2010



#### *Frequency of hallucinogen use*

The police detainees had used hallucinogens on a mean of 14 days in the past 12 months (median 3, range 1-365 days).

#### *Hallucinogen use by ethnicity*

Pacific detainees were less likely to have ever tried hallucinogens than Maori detainees (19% vs. 49%,  $p < 0.0001$ ) and European/Asian/Other detainees (19% vs. 53%,  $p < 0.0001$ ) (Table 9.2).

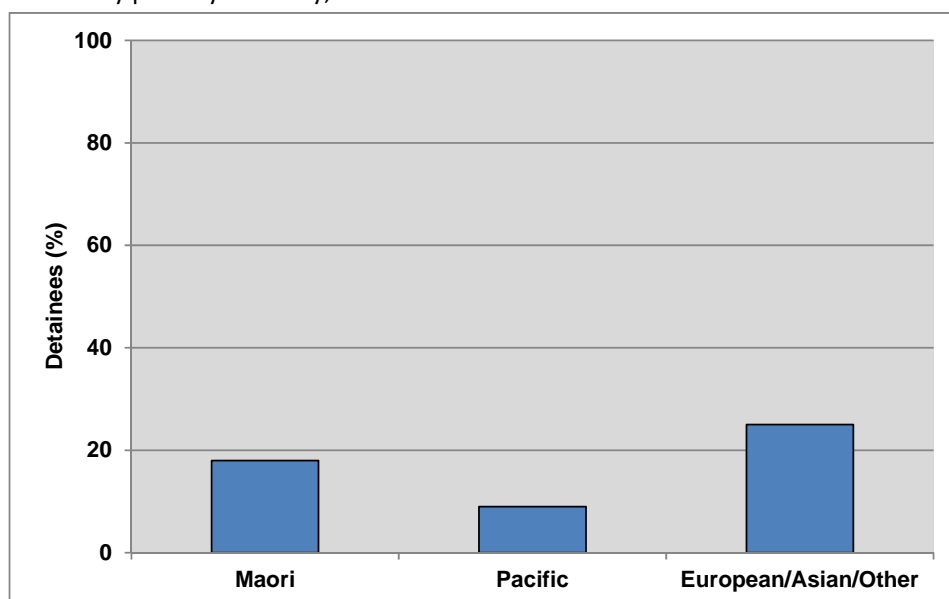
Table 9.2: Police detainees' patterns of hallucinogen use by primary ethnicity, 2010

Use of hallucinogens	Maori (n=307)	Pacific (n=110)	European/Asian/Other* (n=395)	All (n=812)
Ever used (%)	49	19	53	47
Used in past 12 months (%)	18	9	25	20

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

European/Asian and Other detainees were more likely to have used hallucinogens in the past 12 months than Maori detainees (25% vs. 18%,  $p=0.0259$ ) and Pacific detainees (25% vs. 9%,  $p=0.0006$ ) (Figure 9.3).

Figure 9.3: Proportion of the police detainees who had used a hallucinogen in the past 12 months by primary ethnicity, 2010



#### *Dependency of hallucinogens*

Only 2% of the police detainees who used hallucinogens in the past 12 months felt they were dependent on them.

#### *Change in use of hallucinogens*

Those police detainees who reported using hallucinogens in the past year were asked how their use of hallucinogens had changed compared to a year ago. Thirty-nine percent of the detainees said they were using 'less' hallucinogens, 28% were using the 'same' and 27% were using 'more' (Table 9.3).

Table 9.3: Police detainees' change in their level of hallucinogen use by location, 2010

Change in use of hallucinogens	Whangarei (n=14)	Auckland Central (n=36)	Wellington Central (n=41)	Christchurch Central (n=75)	All (n=166)
More [3]	36%	22%	32%	25%	27%
Same [2]	14%	19%	29%	33%	28%
Less [1]	29%	50%	37%	37%	39%
Stopped [0]	21%	8%	2%	4%	6%
Mean score of change in use (0 = stopped – 3 = more)	1.6	1.6	1.9	1.8	1.8
Overall change in use	More/less	Less/more	Less/more	Less/same	Less/same

### *Driving under the influence of hallucinogens*

Those police detainees who had used hallucinogens in the past year were asked how often they drove under the influence of hallucinogens. Nineteen percent of the detainees said they did not drive and a further 14% said their licence was suspended. Twenty-three percent of the detainees who used hallucinogens and drove had driven under the influence of hallucinogens (Table 9.4).

Table 9.4: Extent police detainees who drove and who had used a hallucinogen in the past 12 months had driven under the influence of a hallucinogen by location, 2010

Extent drove under the influence of hallucinogens	Whangarei (n=12)	Auckland Central (n=19)	Wellington Central (n=29)	Christchurch Central (n=49)	All (n=109)
All [4]	0%	0%	0%	2%	1%
Most [3]	8%	5%	3%	2%	4%
Some [2]	8%	16%	3%	10%	9%
Hardly any [1]	0%	16%	10%	8%	9%
None [0]	83%	63%	83%	78%	77%
Mean level of driving (0 = none – 4 = all)	0.4	0.6	0.3	0.4	0.4

## Summary

- Twenty percent of the police detainees had used a hallucinogen in the past 12 months
- Detainees in Christchurch Central and Wellington Central were more likely to have ever tried a hallucinogen than the other sites
- Detainees in Christchurch Central and Wellington Central were also more likely to have used a hallucinogen in the past 12 months than the other sites
- The police detainees had used hallucinogens on a mean of 14 days in the past year
- European detainees were more likely to have used hallucinogens in the past 12 months
- Only 2% of the detainees who used hallucinogens in the past 12 months said they felt dependent on them
- Twenty-three percent of the detainees who used hallucinogens and drove had driven under the influence of hallucinogens

## Chapter 10 - Tranquillisers

### Introduction

Tranquillisers are sometimes prescribed by medical professionals as part of a treatment programme for medical conditions such as insomnia, anxiety, seizures and alcohol withdrawal. To allow for instances of legitimate medical use the interviewer asked detainees about the 'illegal use of tranquillisers, such as benzodiazepines'.

#### *Use of tranquillisers*

Fifteen percent of police detainees reported illegally using tranquillisers at some point in their lives and 8% had illegally used a tranquilliser in the previous 12 months (Table 10.1). Five percent of the detainees who had used tranquillisers in the past year had injected them.

Table 10.1: Detainees' patterns of tranquilliser use, by location, 2010

Use of tranquillisers	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	7	13	7	24	15
Mean age first used (years)*	19	21	19	18	19
Used in past 12 months (%)	2	8	1	13	8
Mean number of years used	14	7	14	11	10
Mean number of days used in past 12 months **	184	51	84	53	58
Felt dependent in past 12 months (%) **	67	23	0	17	21

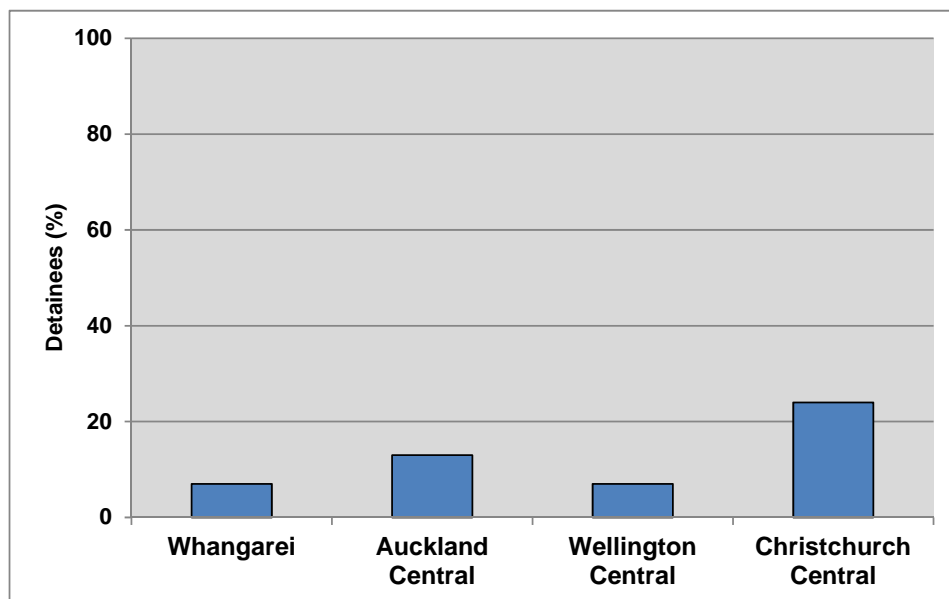
\* of those who had ever tried

\*\* of those who had used in the past 12 months

Detainees in Christchurch Central were more likely to have ever used tranquillisers illegally than those in Whangarei (24% vs. 7%,  $p=0.0002$ ), Auckland Central (24% vs.

13%,  $p=0.0010$ ) and Wellington Central (24% vs. 7%,  $p<0.0001$ ) (Figure 10.1). Detainees in Auckland Central were more likely to have ever used tranquillisers illegally than those in Wellington Central (13% vs. 7%,  $p=0.0355$ ).

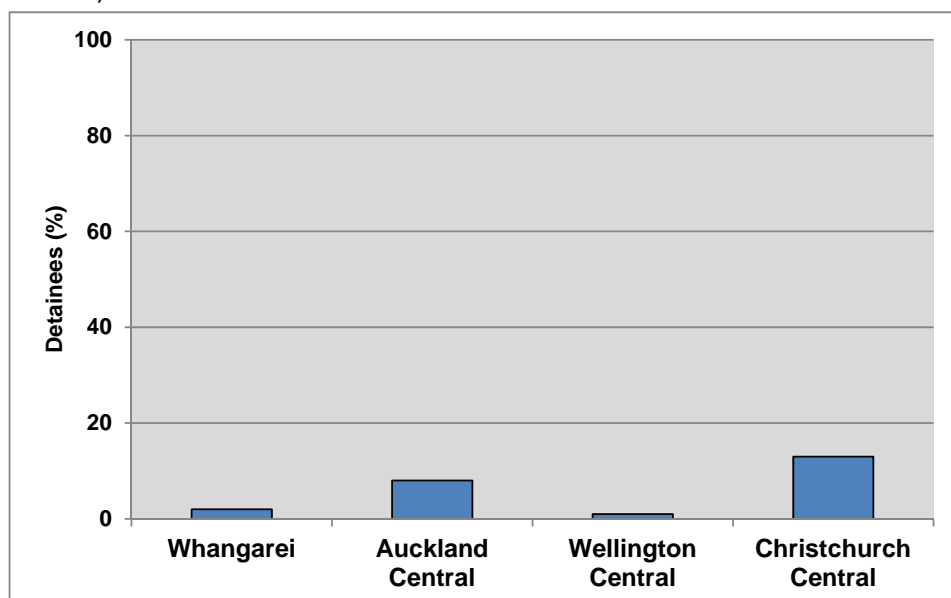
Figure 10.1: Proportion of police detainees who had ever tried tranquillisers by location, 2010



The level of illegal tranquilliser use in the past 12 months was higher among detainees in Christchurch Central than those in Whangarei (13% vs. 2%,  $p=0.0036$ ), Auckland Central (13% vs. 8%,  $p=0.0334$ ) and Wellington Central (13% vs. 1%,  $p=0.0009$ ) (Figure 10.2). Detainees in Auckland Central were also more likely to have illegally used tranquillisers in the past year than those in Whangarei (8% vs. 2%,  $p=0.0404$ ) and Wellington Central (8% vs. 1%,  $p=0.0140$ ).



Figure 10.2: Proportion of police detainees who used tranquillisers in the past 12 months by location, 2010



#### *Frequency of tranquilliser use*

The police detainees had used tranquillisers on a mean of 58 days in the previous 12 months (median 7, range 1-365 days).

#### *Tranquilliser use by ethnicity*

European/Asian and Other detainees were more likely to have illegally tried tranquillisers than Maori detainees (20% vs. 12%,  $p=0.0054$ ) and Pacific detainees (20% vs. 4%,  $p=0.0003$ ).

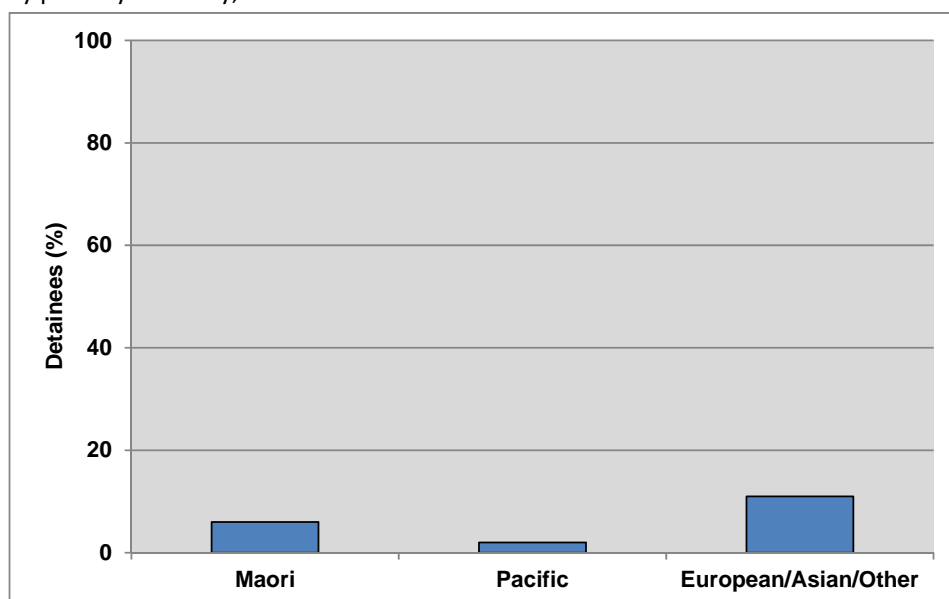
Table 10.2: Police detainees' patterns of tranquilliser use by primary ethnicity, 2010

Use of tranquillisers	Maori (n=307)	Pacific (n=110)	European/Asian/Other* (n=395)	All (n=812)
Ever used (%)	12	4	20	15
Used in past 12 months (%)	6	2	11	8

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

European/Asian and Other detainees were also more likely to have illegally used tranquillisers in the previous 12 months than Maori detainees (11% vs. 6%,  $p=0.019$ ) and Pacific detainees (11% vs. 2%,  $p=0.0112$ ) (Figure 10.3).

Figure 10.3: Proportion of the police detainees who used tranquillisers in the past 12 months by primary ethnicity, 2010



#### *Change in use of tranquillisers*

Those police detainees who reported illegally using tranquillisers in the past year were asked how their use of tranquillisers had changed compared to a year ago. Forty-seven percent of the detainees said they were using 'less' tranquillisers, 28% were using 'more' and 20% were using the 'same' (Table 10.3).

Table 10.3: detainees' change in tranquilliser use, 2010

Change in use of tranquillisers	All (n=60)
More [3]	28%
Same [2]	20%
Less [1]	47%
Stopped [0]	5%
Mean score of change in use (1 = stopped – 3 = more)	1.7
Overall change in use	Less/ more

#### *Driving under the influence of tranquillisers*

Those police detainees who had illegally used tranquillisers in the past year were asked how often they drove under the influence of tranquillisers. Twenty-four percent of the detainees said they did not drive and a further 11% said their licence was suspended. Forty-two percent of the detainees who used tranquillisers and drove had driven under the influence of tranquillisers (Table 10.4).

Table 10.4: Extent police detainees who drove and who had used tranquillisers in the past 12 months had driven under the influence of tranquillisers by location, 2010

Extent drove under the influence of tranquillisers	All (n=40)
All [4]	7%
Most [3]	13%
Some [2]	15%
Hardly any [1]	7%
None [0]	58%
Mean level of driving (1 = none – 4 = all)	1.1

## Summary

- Eight percent of the police detainees had illegally used tranquillisers in the past 12 months
- Detainees in Christchurch Central and Auckland Central were more likely to have illegally used tranquillisers in the previous 12 months than in the other two sites
- The police detainees had illegally used tranquillisers on a mean of 58 days in the past 12 months
- European detainees were more likely to have illegally used tranquillisers in the past 12 months
- Forty-two percent of the detainees who illegally used tranquillisers and drove had driven under the influence of tranquillisers

## Chapter 11 – Amphetamine sulphate

### *Use of amphetamine sulphate*

Seventeen percent of the police detainees had tried amphetamine sulphate at some point in their lives and 6% had used amphetamine sulphate in the past 12 months (Table 11.1).

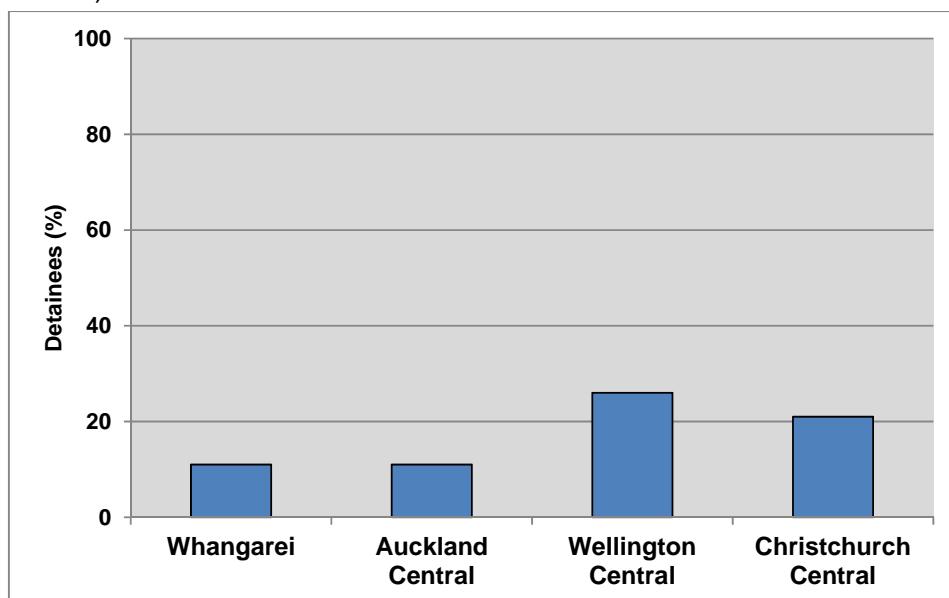
Table 11.1: Police detainees' patterns of amphetamine sulphate use by location, 2010

Use of amphetamine sulphate	Whangarei (n=115)	Auckland Central (n=284)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=813)
Ever used (%)	11	11	26	21	17
Mean age first used (years)*	23	20	21	19	20
Used in past 12 months (%)	3	4	7	10	6

\* of those who have ever tried

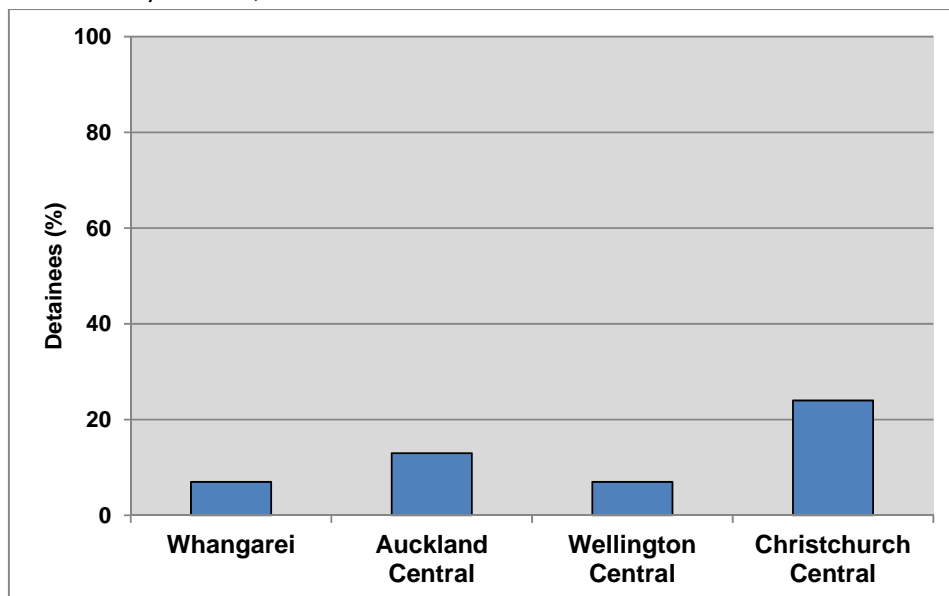
Detainees in Wellington Central were more likely to have tried amphetamine sulphate than those in Auckland Central (26% vs. 11%,  $p<0.0001$ ) and Whangarei (26% vs. 11%,  $p=0.0031$ ) (Figure 11.1). Detainees in Christchurch Central were more likely to have tried amphetamine sulphate than those in Auckland Central (21% vs. 11%,  $p=0.0016$ ) and Whangarei (21% vs. 11%,  $p=0.0224$ ).

Figure 11.1: Proportion of police detainees who had ever tried amphetamine sulphate by location, 2010



The proportion of police detainees who reported using amphetamine sulphate in the past year was higher in Christchurch Central than in Whangarei (10% vs. 3%,  $p=0.0230$ ) and higher in Christchurch Central than in Auckland Central (10% vs. 4%,  $p=0.0065$ ) (Figure 11.2).

Figure 11.2: Proportion of police detainees who had used amphetamine sulphate in the past 12 months by location, 2010



### *Amphetamine sulphate by ethnicity*

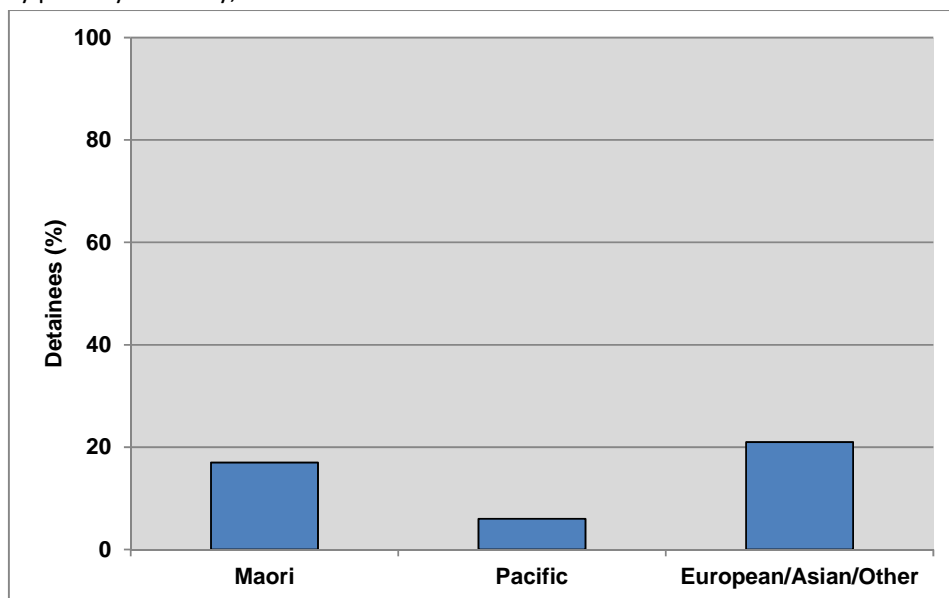
Pacific detainees were less likely to have ever tried amphetamine sulphate than Maori detainees (6% vs. 17%,  $p=0.0105$ ) and European/Asian/Other detainees (6% vs. 21%,  $p=0.001$ ) (Table 11.2 and Figure 11.3).

Table 11.2: Police detainees' patterns of amphetamine use by primary ethnicity, 2010

Use of amphetamine	Maori (n=307)	Pacific (n=110)	European/Asian/Other* (n=394)	All (n=811)
Ever used (%)	17	6	21	17
Used in past 12 months (%)	6	2	8	6

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

Figure 11.3: Proportion of police detainees who had used ever used amphetamine sulphate by primary ethnicity, 2010



### *Dependency on amphetamine sulphate*

Twelve percent of the police detainees who had used amphetamine sulphate in the past year reported feeling dependent on it.

### *Driving under the influence of amphetamine sulphate*

Those police detainees who had used amphetamine sulphate in the past year were asked how often they drove under the influence of amphetamine. Twenty-one percent of the detainees said they did not drive and a further 19% said their licence was suspended. Forty-one percent of the detainees who used amphetamine and drove had driven under the influence of amphetamine (Table 11.3).

Table 11.3: Extent amphetamine using police detainees drove under the influence of amphetamine sulphate, 2010

Extent drove under the influence of amphetamine	All (n=29)
All [4]	7%
Most [3]	10%
Some [2]	10%
Hardly any [1]	14%
None [0]	59%
Mean level of driving (0 = none – 4 = all)	0.9

## Summary

- Six percent of the police detainees had used amphetamine sulphate in the past 12 months
- Detainees in Central Wellington and Central Christchurch were more likely to have ever tried amphetamine sulphate than in the other two sites
- Detainees in Central Christchurch were more likely to have used amphetamine sulphate in the past 12 months than those in Whangarei and Auckland Central



- Pacific detainees were less likely to have ever tried amphetamine sulphate
- Twelve percent of the detainees who had used amphetamine sulphate in the past year reported feeling dependent on it
- Forty-one percent of the detainees who used amphetamine sulphate and drove had driven under the influence of amphetamine sulphate

## Chapter 12 - Tobacco

### Introduction

Smoking tobacco is the main cause of lung cancer, and is a prominent risk factor for cardiovascular disease, mouth and throat cancer, and many other cancers and chronic diseases (Ministry of Health, 2009b). Smoking tobacco also produces a health hazard for others in the smoker's immediate vicinity (Ministry of Health, 2009b). In New Zealand, smoking causes the deaths of 4,500-5,000 people each year (including deaths due to second-hand-smoke exposure) (Ministry of Health, 2009b). Around 1,500 of these smoking related deaths occur in middle age (Ministry of Health, 2009b). Surveys of the New Zealand population have found 21% of New Zealanders aged 15 to 64 years are current tobacco smokers (i.e. someone who has smoked more than 100 cigarettes in their lifetime and at the time of the survey was smoking at least once a month) (Ministry of Health, 2009b). Maori had a higher prevalence of tobacco use than the wider population, and Maori females show a particularly high level of smoking (Ministry of Health, 2009b). Socio-economic status is also a factor in the prevalence of smoking in New Zealand with the most deprived sections of society having the highest rates of tobacco use (Ministry of Health, 2009b). Studies have found cigarettes to have a higher potential for dependency than heroin (MacCoun & Reuter, 2001).

### *Use of tobacco*

Ninety percent of police detainees had tried tobacco at some point in their lives (Table 12.1). Eighty percent of the detainees had smoked tobacco in the past year and 78% had smoked in the past month.

Table 12.1: Police detainees' patterns of tobacco use, by location, 2010

Use of tobacco	Whangarei (n=115)	Auckland Central (n=285)	Wellington Central (n=152)	Christchurch Central (n=262)	All (n=814)
Ever used (%)	90	86	91	93	90
Mean age first used (years)*	14	14	14	13	13
Used in past 12 months (%)	81	77	8	82	80
Mean number of years of use**	11	13	12	11	12
Felt dependent in past 12 months (%)**	56	70	74	70	69
Used in past month***	79	76	77	80	78
Daily smokers in past month (%)	84	85	82	91	86
Mean number of cigarettes used each day ***	15	14	15	15	15

\* of those who had ever tried

\*\* of those who had used in the past 12 months

\*\*\* of those who had used in the past month

### *Frequency of smoking*

Eighty-six percent of the police detainees who smoked tobacco in the past month were daily smokers. The detainees who had smoked in the past month had smoked a mean of 15 cigarettes per day (median 13, range 0.5-100 cigarettes).

### *Smoking by ethnicity*

Maori detainees were more likely to have ever tried tobacco than Pacific Island detainees (94% vs. 81%,  $p=0.0002$ ) and European/Asian/Other detainees (94% vs. 89%,  $p=0.032$ ) (Table 12.2).

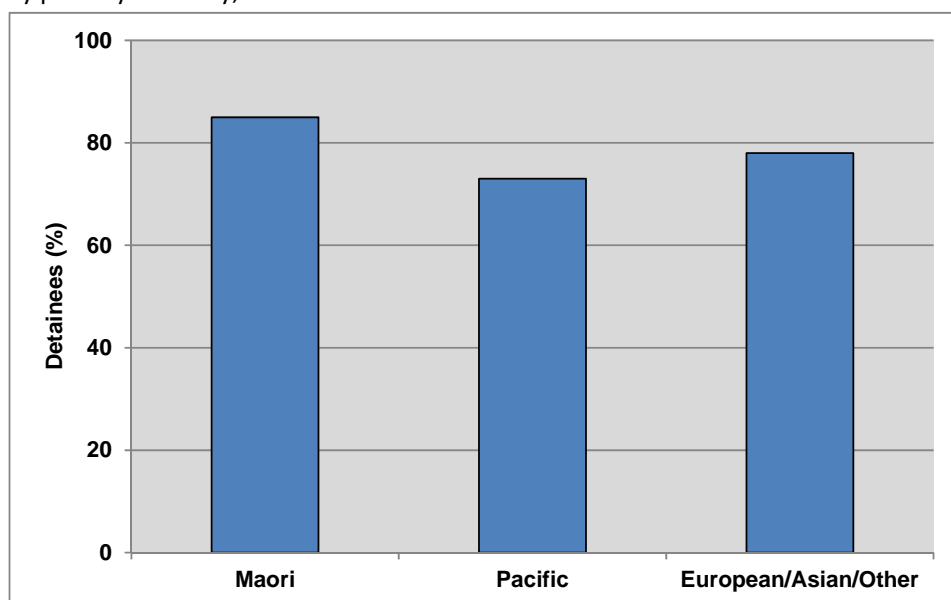
Table 12. 2: Police detainees' patterns of tobacco use by primary ethnicity, 2010

Use of tobacco	Maori (n=307)	Pacific (n=110)	European/ Asian/Other* (n=395)	All (n=812)
Ever used (%)	94	81	89	90
Used in past 12 months (%)	85	73	78	80
Used in past month (%)	84	71	75	78

\* There were not sufficient numbers of Asian detainees in the sample to separate them from European detainees for the purpose of this analysis

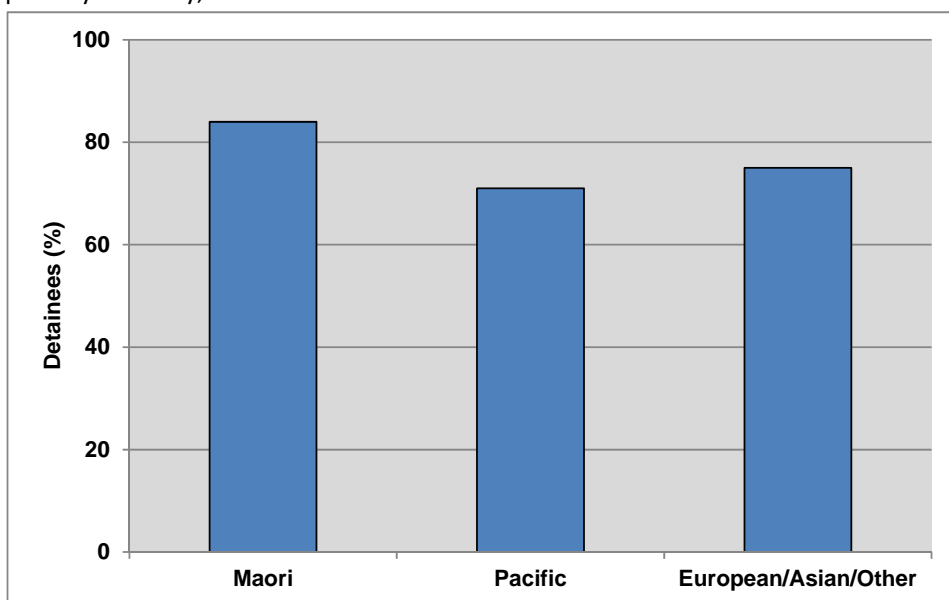
Maori detainees were more likely to have smoked in the previous 12 months than Pacific detainees (85% vs. 73%,  $p=0.0036$ ) and European/Asian/Other detainees (85% vs. 78%,  $p=0.018$ ) (Figure 12.1).

Figure 12.1: Proportion of police detainees who had smoked tobacco in the past 12 months by primary ethnicity, 2010



Maori detainees were also more likely to have smoked tobacco in the previous month than Pacific detainees (84% vs. 71%,  $p=0.0035$ ) and Europeans/Asian/Other detainees (84% vs. 78%,  $p=0.0037$ ) (Figure 12.2).

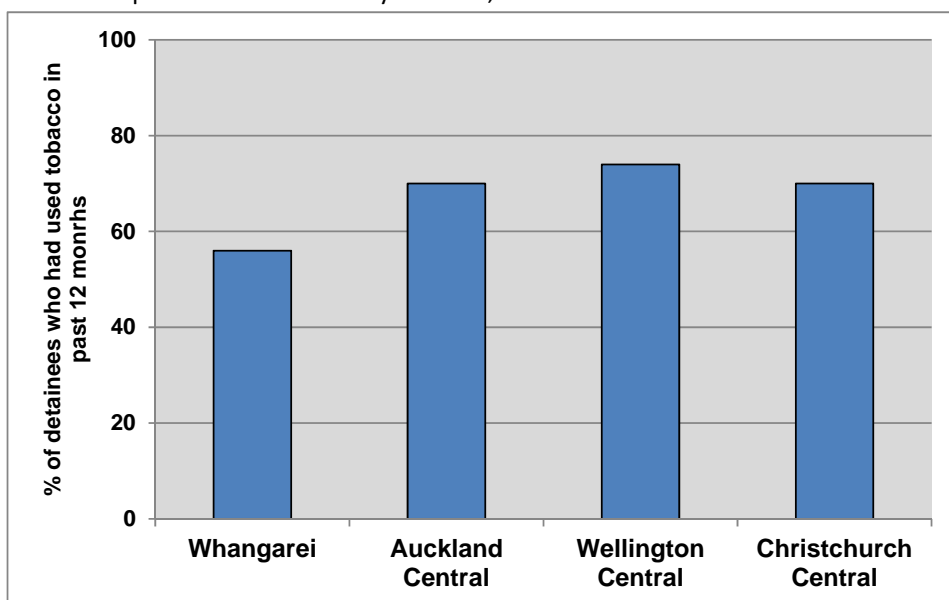
Figure 12.2: Proportion of police detainees who had smoked tobacco in the past month by primary ethnicity, 2010



#### *Dependency on tobacco*

Sixty-nine percent of the police detainees who had smoked tobacco in the past 12 months felt they were dependent on it. Detainees in Whangarei were less likely to feel dependent on tobacco than those in Auckland Central (56% vs. 70%,  $p=0.0148$ ), Wellington Central (56% vs. 74%,  $p=0.0051$ ) and Christchurch Central (56% vs. 70%,  $p=0.0171$ ) (Figure 12.3).

Figure 12.3: Proportion of police detainees who had smoked tobacco in the past 12 months who felt dependent on tobacco by location, 2010



## Summary

- Seventy-eight percent of the police detainees had smoked tobacco in the past month
- Eighty-six of the police detainees who smoked in the past month were daily smokers
- Maori detainees were more likely to be smokers
- Sixty-nine percent of the detainees who smoked in the past year felt they were dependent on tobacco
- Detainees in Whangarei who smoked tobacco were less likely to consider themselves dependent on tobacco compared to those in the other sites

## Chapter 13 – Urine test results for drug use

### Introduction

There is often concern about the validity of self reported survey data on illegal drug use and criminal behaviour. The Arrestee Drug Abuse Monitoring (ADAM) research studies conducted around the world have attempted to address this problem by collecting self-reported data on drug use from detainees and also taking samples of urine from detainees and testing for the presence of drugs. The comparison of the self reported data and urine test results for drug use in a number of ADAM style studies has indicated a high level of congruence between the two measures (see Office of National Drug Control Policy, 2009). The congruence rate tends to be dominated by respondents who did not use drugs and who subsequently do not test positive for drug use. The more relevant measure of truthfulness is the proportion of respondents who test positive for drug use and also self report drug use. This type of comparison indicates that the level of truthfulness in self-reporting of drug use varies according to the drug type in question. For example in the United States ADAM programme, 82% of those testing positive for cannabis use also self reported use, 55% of those testing positive for methamphetamine use also self-reported use and 48% of those testing positive for heroin use also self-reported use (Office of National Drug Control Policy, 2009). In the New Zealand ADAM programme, 92% of those testing positive for cannabis use also self reported use, 76% of those testing positive for methamphetamine use also self-reported use and 50% of those testing positive for methadone use also self-reported use (Hales & Manser, 2009). The redesigned NZ-ADUM methodology included the collection of 200 urine samples from the police detainees in the four sites. The analysis of the urine samples was completed by Environment Science and Research (ESR). This chapter presents the findings and comparisons of the 201 urine samples collected as part of the study.

### *Urine test results*

Sixty-five percent of the detainees who provided a urine sample tested positive for cannabis, 11% tested positive for methamphetamine and 8% tested positive for amphetamine (Table 13.1). None of the detainees tested positive for cocaine.

Table 13.1: Proportion of police detainees who tested positive for drug use at the time of interview (of the 200 detainees tested), 2010

Positive urine test for drug use (%)	Whangarei (n=20)	Auckland Central (n=72)	Wellington Central (n=53)	Christchurch Central (n=56)	All (n=201)
Cannabis	70	64	60	70	65
Meth-amphetamine	15	18	9	2	11
Amphetamine	10	13	8	2	8
Morphine	0	3	6	4	3
Benzodiazepines	0	1	0	5	2
Methadone	0	3	4	2	2
Codeine	0	4	0	0	1

## **Corroboration of self-reported drug use with urinalysis**

### *Cannabis use*

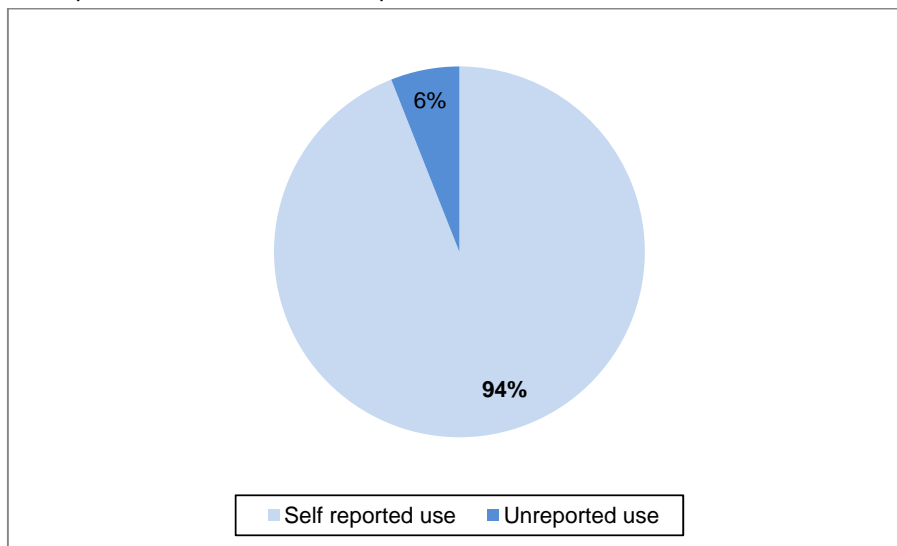
Table 13.2 compares the police detainees' urine test results for the presence of cannabis with their self-reporting of cannabis use in the past month from the questionnaire interview. Ninety-four percent of those detainees who tested positive for cannabis had also self reported using cannabis in the past month (Figure 13.1). Six percent who tested positive for cannabis had not self-reported use.



Table 13.2: Comparison of test results for the presence of cannabis use with self-reported cannabis use in the past month, 2010

Test positive for cannabis (%)	Self-reported cannabis use in past month (%)	
	No	Yes
No	89	11
Yes	6	94

Figure 13.1: Proportion of police detainees who tested positive for cannabis use who also self-reported cannabis use in the past month, 2010



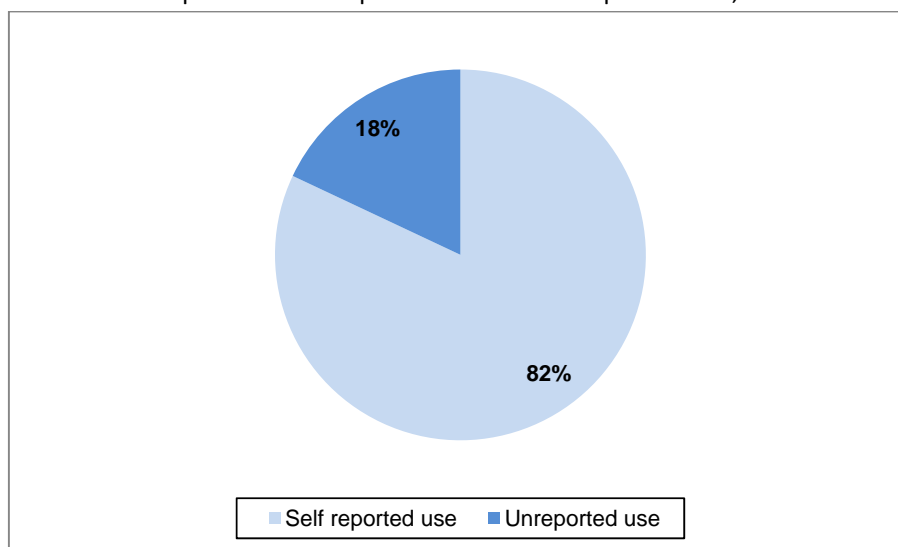
### *Methamphetamine use*

Table 13.3 compares the police detainees' urine test results for the presence of methamphetamine with levels of self-reporting of methamphetamine use in the previous month. Eighty-two percent of those detainees who tested positive for methamphetamine had also self reported using methamphetamine in the past month (Figure 13.2). Eighteen percent who tested positive for methamphetamine had not self-reported use.

Table 13.3: Comparison of test results for the presence of methamphetamine use with self-reported methamphetamine use in the past month, 2010

Test positive for methamphetamine (%)	Self-reported methamphetamine use in past month (%)	
	No	Yes
No	89	11
Yes	18	82

Figure 13.2: Proportion of police detainees who tested positive for methamphetamine use who also self-reported methamphetamine use in the past month, 2010



### *Opioid use*

Table 13.4 compares the police detainees' test results for the presence of opioids with levels of self-reporting of opioid use in the past month. The self-reported opioid category includes the self-reporting of morphine and methadone in the previous 30 days. Only 11 of the detainees who provided a urine sample tested positive for the presence of opioids. The low number of positive test results for opioid use indicates caution should be exercised when comparing the test results with levels of self-reporting of opioid use. Forty-five percent of those detainees who tested positive for opioids had self reported using opioids in the past month. Fifty-five percent of those detainees who tested positive for opioids had not self-reported use.

Table 13.4: Comparison of test results for the presence of opioid use with self-reported opioid use in the past month, 2010

Test positive for opioid use (%)	Self-reported opioid use in the past month (%)	
	No	Yes
No	97	3
Yes	55	45

## Summary

- Sixty-five percent of the police detainees tested positive for cannabis, 11% tested positive for methamphetamine and 8% tested positive for amphetamine
- Ninety-four percent of the detainees who tested positive for cannabis use had also self-reported use of cannabis in the previous month
- Eighty-two percent of the detainees who tested positive for methamphetamine had also self-reported using methamphetamine in the past month
- Forty-five percent of the detainees who tested positive for opioids had also self-reported using opioids in the past month

## Chapter 14 - Drug Harm

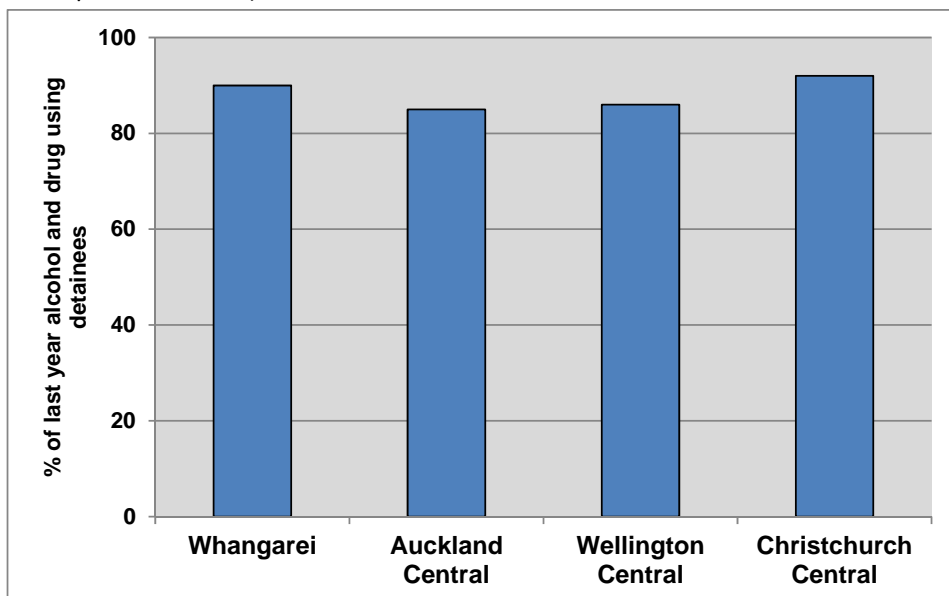
### Introduction

This chapter presents findings on a range of harmful incidents experienced by the police detainees as a result of their alcohol and drug use. This includes instances where alcohol and drug using detainees have harmed themselves, and instances where they have posed a risk to other people including family members, sexual partners, road users and the general public. It also includes situations where the detainees' own alcohol and drug use has made them vulnerable to victimisation by others.

#### *Extent of problems due to alcohol and drug use*

Those police detainees who had drunk alcohol, smoked tobacco or used other drugs in the past 12 months were asked if they had experienced any of a list of 34 drug-related problems in the past 12 months. Ninety-nine percent of the police detainees had used alcohol, tobacco or other drugs in the previous 12 months. Ninety percent had drunk alcohol, 80% had smoked tobacco, 72% had smoked cannabis, 26% had used methamphetamine, 22% had used ecstasy and 20% had used hallucinogens in the previous 12 months. Eighty-eight percent of the police detainees who had used alcohol and drugs had experienced at least one problem related to their alcohol and drug use in the past 12 months. Christchurch detainees were more likely to have experienced a problem related to their alcohol and drug use than detainees in Auckland Central (92% vs. 85%,  $p=0.0070$ ) and Wellington Central (92% vs. 86%,  $p=0.046$ ) (Figure 14.1).

Figure 14.1: Proportion of police detainees who experienced at least one problem from their alcohol and drug use in the past 12 months by location (of those who used alcohol and drugs in the past 12 months), 2010



#### *General problems due to alcohol and drug use*

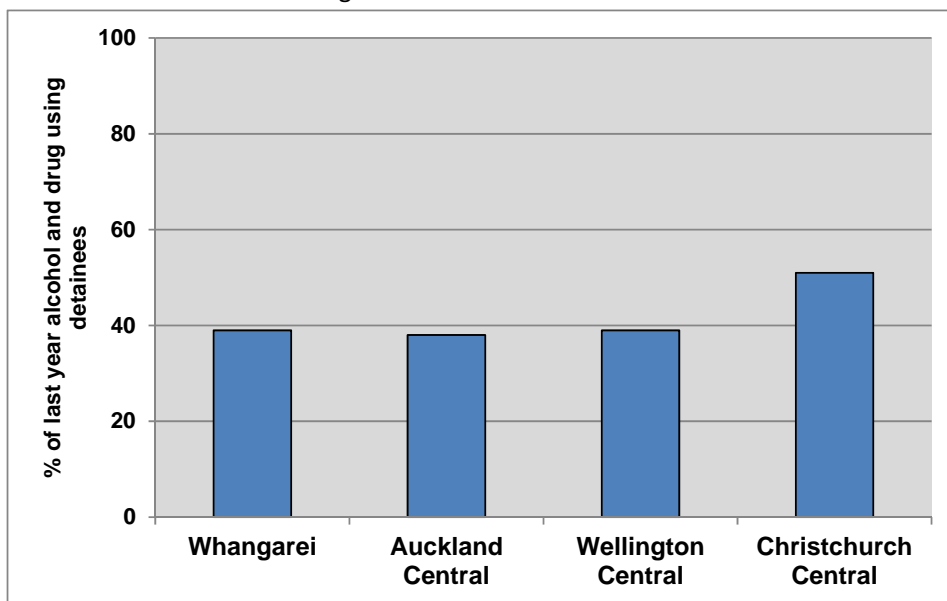
Fifty-seven percent of the alcohol and drug using police detainees reported that they 'couldn't remember what happened the night before' due to their alcohol and drug use (Table 14.1). Fifty percent had 'upset a family relationship' and 43% had 'damaged someone else's property' as a result of their alcohol and drug use in the previous year. Thirty four percent had 'ended a personal relationship' and 33% had 'got into debt' as a result of their alcohol and drug use. Nine percent of the alcohol and drug using detainees had suffered an 'overdose' from drugs during the past year.

Table 14.1: Problems experienced in the past 12 months due to police detainees alcohol and drug use, 2010

Harm (%)	Whangarei (n=112)	Auckland Central (n=269)	Wellington Central (n=148)	Christ- church Central (n=259)	Total (n=788)
Couldn't remember what happened the night before	58	54	54	63	57
Upset a family relationship	50	52	41	52	50
Damaged someone's property	39	38	39	51	43
Had reduced work/ study performance	32	46	38	36	39
Ended a personal relationship	32	36	28	37	34
Got into debt/owing money	38	34	24	34	33
Spent some nights sleeping rough (i.e. living on the streets)	35	33	30	36	33
Took sick leave/ did not attend class	30	36	27	29	31
Stole someone's property	23	30	27	35	30
Physically hurt yourself	26	26	26	34	29
Kicked out of where you were living	30	32	22	31	29
No money for food or rent	26	29	25	24	26
Sacked/ lose business/ quit study course	14	14	15	10	13
Overdosed from drugs	7	8	14	8	9

The detainees in Christchurch Central were more likely to report having damaged someone else's property as a result of their alcohol and drug use than those in Whangarei (51% vs. 39%,  $p=0.0398$ ), Auckland Central (51% vs. 38%,  $p=0.0027$ ) and Wellington Central (51 vs. 39%,  $p=0.0196$ ) (Figure 14.2).

Figure 14.2: Proportion of police detainees who damaged someone else's property as a result of their alcohol and drug use



#### *Aggression due to alcohol and drug use*

Fifty-seven percent of the alcohol and drug using police detainees reported losing their temper due to their alcohol and drug use during the past 12 months (Table 14.2). Fifty percent reported physically or verbally threatening someone due to alcohol and drug use. Many of the police detainees also reported being victims of aggression as a result of their alcohol and drug use.

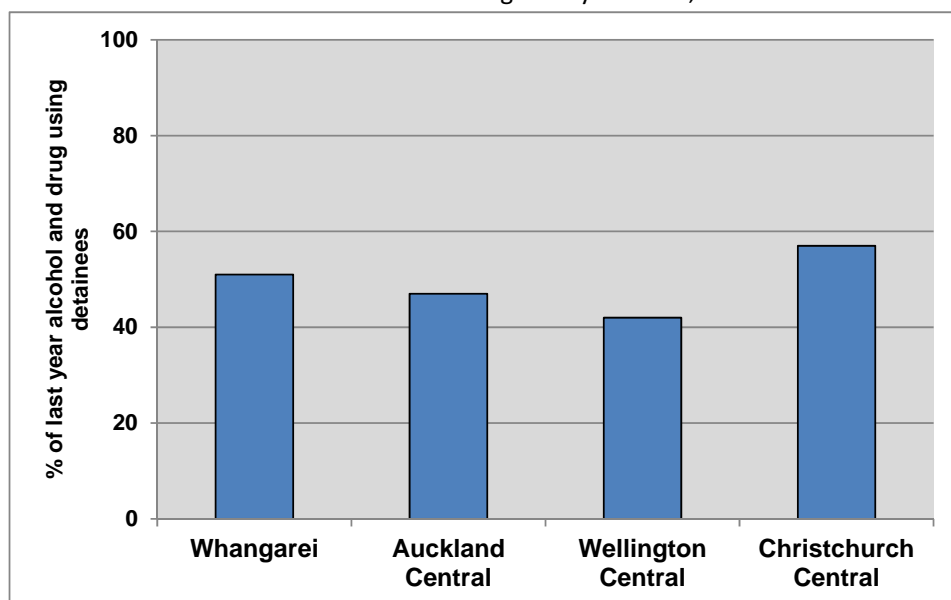
Table 14.2: Proportion of alcohol and drug using detainees who reported aggression due to their alcohol and drug use in the past 12 months, 2010

Harm (%)	Whangarei (n=112)	Auckland Central (n=269)	Wellington Central (n=148)	Christ- church Central (n=259)	Total (n=788)
Lost your temper	56	56	54	60	57
Physically or verbally threatened someone	51	47	42	57	50
Were physically or verbally threatened	38	49	40	37	42
Physically hurt someone	31	38	28	40	36
Were physically assaulted	31	36	33	35	34

The detainees in Christchurch Central were more likely to have physically or verbally threatened someone than those in Auckland Central (57% vs. 47%,  $p=0.0289$ ) and Wellington Central (57% vs. 42%,  $p=0.0034$ ) (Figure 14.3). The detainees in Auckland Central were more likely to report that they were physically or verbally threatened than those in Christchurch Central (49% vs. 37%,  $p=0.0074$ ).



Figure 14.3: Proportion of police detainees who had physically or verbally threatened someone as a result of their alcohol and drug use by location, 2010



#### *Driving incidents due to alcohol and drug use*

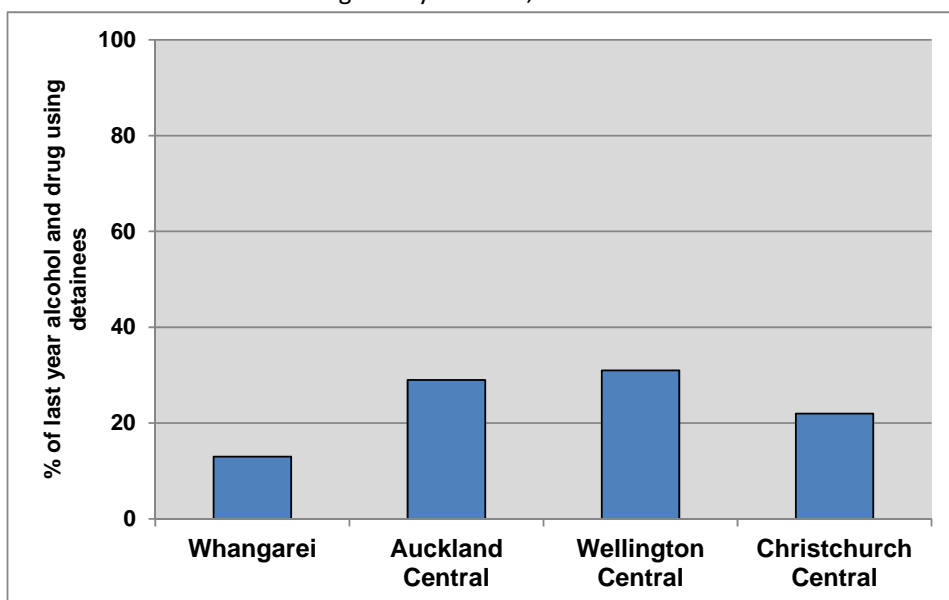
Thirty-one percent of the alcohol and drug using police detainees reported driving 'too fast' due to their alcohol and drug use in the previous 12 months (Table 14.3). Thirty percent were charged with a 'driving offence', 27% had received a 'traffic ticket', 24% had 'lost their temper at another driver' and 22% 'drove through a stop sign or red light' due to their alcohol and drug use in the previous year. Seventeen percent 'couldn't remember driving home' and 14% had 'had a car crash' due to their alcohol and drug use.

Table 14.3: Proportion of alcohol and drug using detainees who reported driving related incidents due to their alcohol and drug use in the past 12 months, 2010

Harm (%)	Whangarei (n=112)	Auckland Central (n=269)	Wellington Central (n=148)	Christ- church Central (n=259)	Total (n=788)
Drove too fast	25	38	28	30	31
Charged with a driving offence	36	35	30	24	30
Got a traffic ticket	27	32	29	22	27
Lost your temper at another driver	13	29	31	22	24
Drove through a stop sign or red light	22	29	20	16	22
Lost concentration while driving	16	26	20	17	20
Couldn't remember driving home	22	17	18	15	17
Nearly hit another a car	15	22	14	14	17
Had a car crash	14	15	15	13	14
Nearly hit a pedestrian	3	2	3	3	3

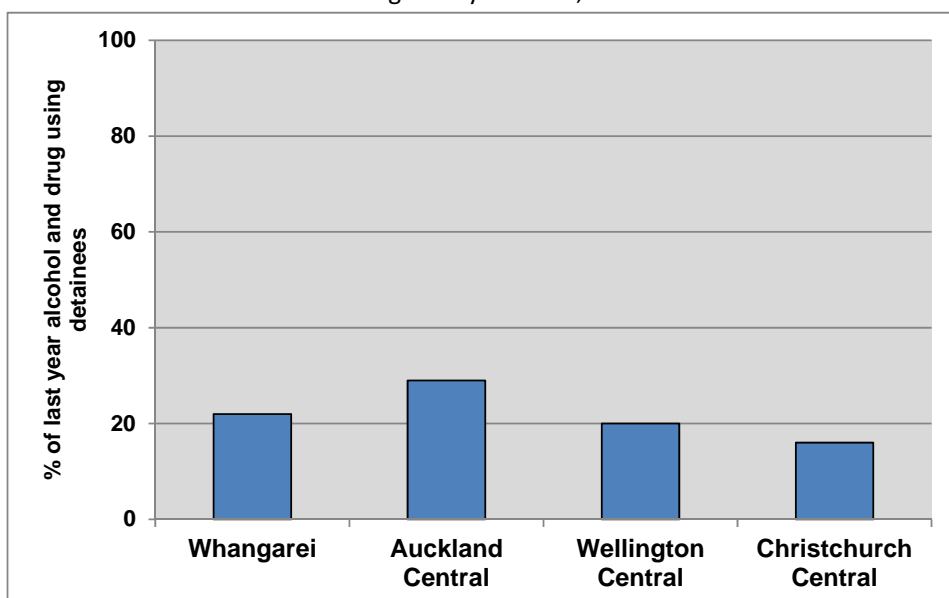
The detainees in Auckland Central were more likely to report having lost their temper at another driver due to their own alcohol and drug use than those in Whangarei (29% vs. 13%,  $p=0.0025$ ) (Figure 14.4). Detainees in Wellington Central were also more likely to have lost their temper at another driver due to their own alcohol and drug use than those in Whangarei (31% vs. 13%,  $p=0.0026$ ).

Figure 14.4: Proportion of police detainees who had lost their temper at another driver as a result of their alcohol and drug use by location, 2010



The detainees in Auckland Central were also more likely to have driven through a stop sign or red light than those in Christchurch Central (29% vs. 16%,  $p=0.0014$ ) (Figure 14.5).

Figure 14.5: Proportion of police detainees who had driven through a stop sign or red light as a result of their alcohol and drug use by location, 2010



### *Sexual harm incidents due to alcohol and drug use*

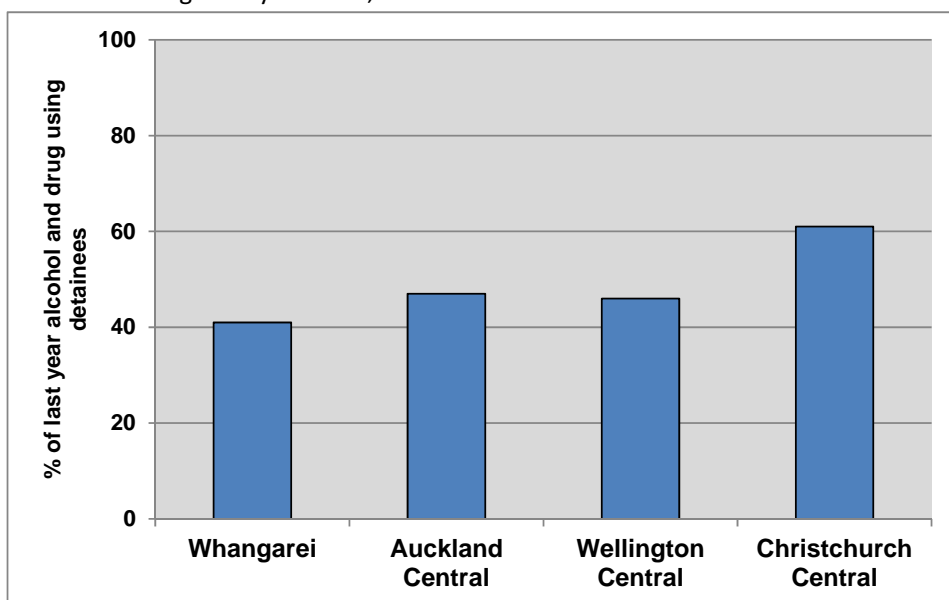
Fifty-one percent of the alcohol and drug using police detainees reported having 'unprotected sex' due to their alcohol and drug use in the previous 12 months (Table 14.4). Thirty-four percent had 'had sex and later regretted it'.

Table 14.4: Proportion of alcohol and drug using detainees who reported sexual harm incidents due to their alcohol and drug use in the past 12 months, 2010

Harm (%)	Whangarei (n=112)	Auckland Central (n=269)	Wellington Central (n=148)	Christ- church Central (n=259)	Total (n=788)
Had unprotected sex	41	47	46	61	51
Had sex and later regretted it	29	33	34	39	34
Had sex but felt you hadn't wholly consented	11	13	15	12	13
Were sexually harassed	2	7	9	6	6
Were sexually assaulted	1	3	6	3	3

The detainees in Christchurch Central were more likely to report having had unprotected sex due to their alcohol and drug use than those in Whangarei (61% vs. 41%,  $p=0.0005$ ), Auckland Central (61% vs. 47%,  $p=0.0012$ ) and Wellington Central (61 vs. 46%,  $p=0.0027$ ) (Figure 14.6).

Figure 14.6: Proportion of police detainees who had unprotected sex as a result of their alcohol and drug use by location, 2010



#### *Main drugs attributed to problems in the past 12 months*

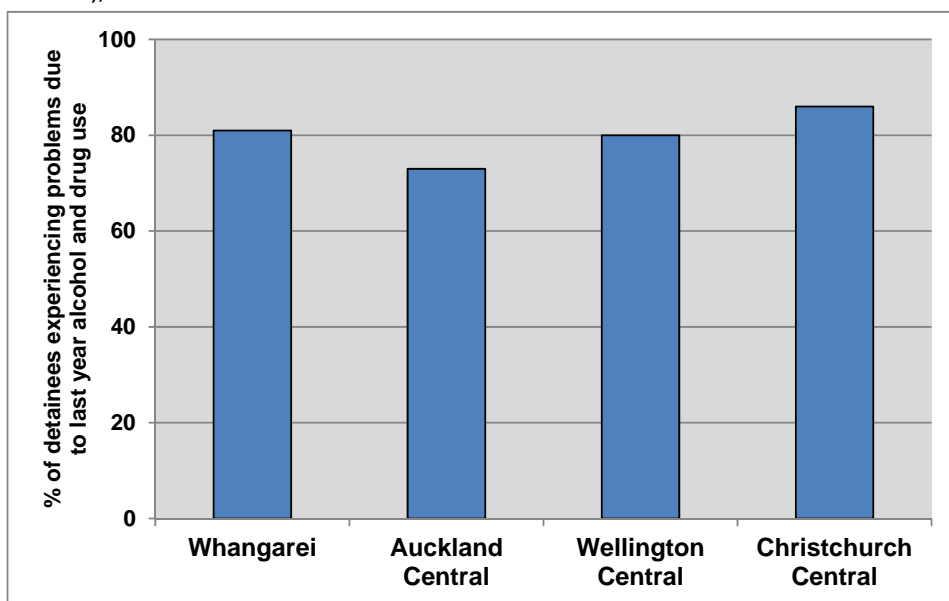
Those police detainees who had experienced problems from their alcohol and drug use in the previous 12 months were asked what drug or drug types they mainly attributed these problems. Eighty percent of the detainees attributed their problems to alcohol, 33% to cannabis and 14% to methamphetamine (Table 14.5).

Table 14.5: Drug type(s) which the police detainees identified as responsible for the problems experienced in the past 12 months, 2010

Drug (%)	Whangarei (n=105)	Auckland Central (n=229)	Wellington Central (n=130)	Christ- church Central (n=242)	Total (n=706)
Alcohol	81	73	80	86	80
Cannabis	30	33	32	36	33
Methamphetamine	12	21	14	8	14
Tobacco	4	3	2	11	6
Ecstasy	2	2	5	2	3
LSD	1	1	5	4	3
Benzodiazepines	2	2	1	4	2
Can't specify	2	4	0	2	2
Morphine	2	2	0	5	2
Magic mushrooms	1	1	3	2	2
Amphetamine	1	1	1	1	1
Street BZP	0	0	1	2	1
Heroin	1	1	2	<1	1
Homebake	0	0	0	2	1
Ice	3	<1	1	<1	1
Methadone	0	1	1	2	1
Other	0	2	3	0	1
Ritalin	0	0	1	3	1
Amyl nitrate	0	<1	0	1	<1
Antidepressants	1	<1	0	<1	<1
Buprenorphine	0	0	0	<1	<1
Cocaine	1	<1	0	0	<1
Codeine	0	0	0	1	<1
GHB	0	1	0	0	<1
Opium poppies	0	0	0	<1	<1
Tramadol	0	<1	0	<1	<1
Zopiclone	0	<1	0	<1	<1

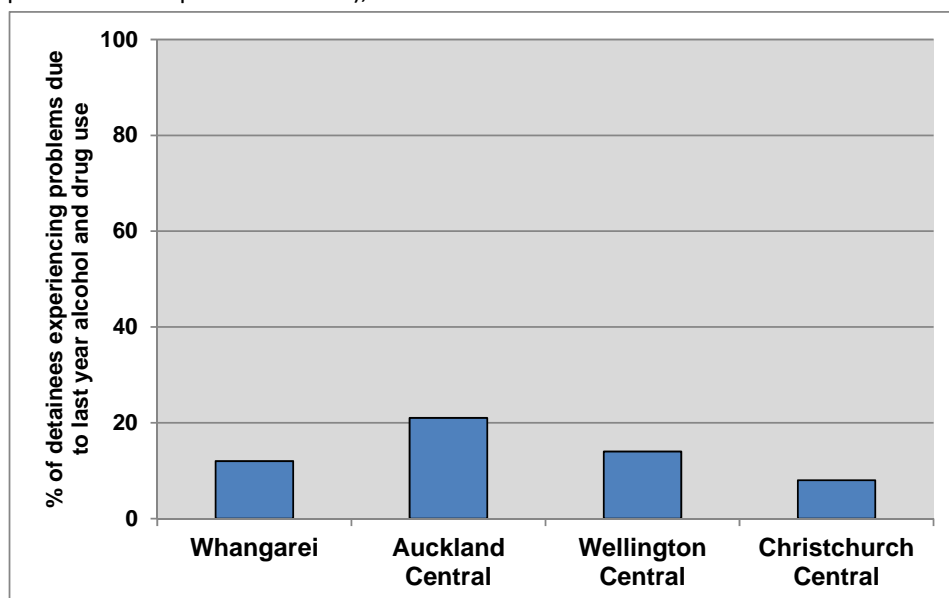
Detainees in Christchurch Central were more likely to attribute their problems to alcohol than those in Auckland Central (86% vs. 73%,  $p=0.0009$ ) (Figure 14.7).

Figure 14.7: Proportion of police detainees who attributed their problems to alcohol by location (of those detainees who experienced an alcohol and drug problem in the past 12 months), 2010



Detainees in Auckland Central were more likely to attribute their problems to methamphetamine than those in Christchurch Central (21% vs. 8%,  $p=0.0001$ ) (Figure 14.8).

Figure 14.8: Proportion of police detainees who attributed their problems to methamphetamine by location (of those detainees who experienced an alcohol and drug problem in the past 12 months), 2010



Detainees in Christchurch Central were more likely to attribute their problems to tobacco than those in Whangarei (11% vs. 4%,  $p=0.0440$ ), Auckland Central (11% vs. 3%,  $p=0.0012$ ) and Wellington Central (11% vs. 2%,  $p=0.0088$ ).

### *Alcohol and Driving*

The police detainees who had used alcohol and drugs in the past 12 months were asked how likely they thought it was that they would be stopped if they drove under the influence of alcohol. Fourteen percent of the detainees said they did not drive. Fifty-seven percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of alcohol (Table 14.6).

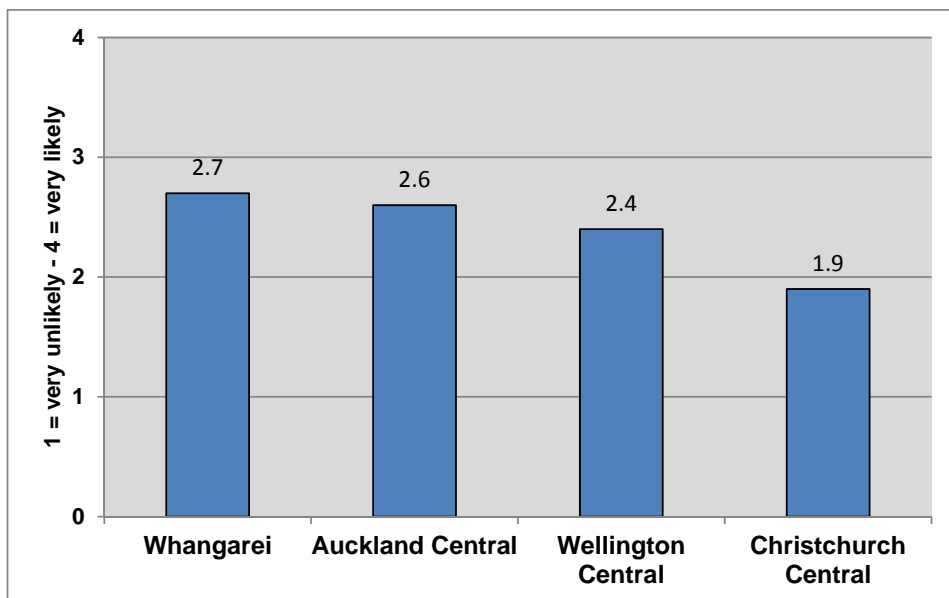


Table 14.6: Police detainees' perceptions of the likelihood of being stopped by police whilst driving under the influence of alcohol by location, 2010

Likelihood of being stopped by police while under influence of alcohol	Whangarei (n=29)	Auckland Central (n=153)	Wellington Central (n=110)	Christchurch Central (n=226)	Total (n=518)
Very likely (4)	28	22	25	16	20
Likely (3)	28	33	22	16	23
Unlikely (2)	31	25	22	15	20
Very unlikely (1)	14	20	32	54	37
Mean score of likelihood of being stopped (1=Very unlikely – 4=Very likely)	2.7	2.6	2.4	1.9	2.3

Police detainees in Christchurch Central thought they were less likely to be stopped while driving under the influence of alcohol than those in Auckland Central (1.9 vs. 2.6,  $p<0.0001$ ), Wellington Central (1.9 vs. 2.4,  $p=0.0010$ ) and Whangarei (1.9 vs. 2.7,  $p=0.0003$ ) (Figure 14.9).

Figure 14.9: Mean score of likelihood of being stopped while under the influence of alcohol by location (of those detainees who used alcohol and drugs in the past year and who drove), 2010



### *Drugs and Driving*

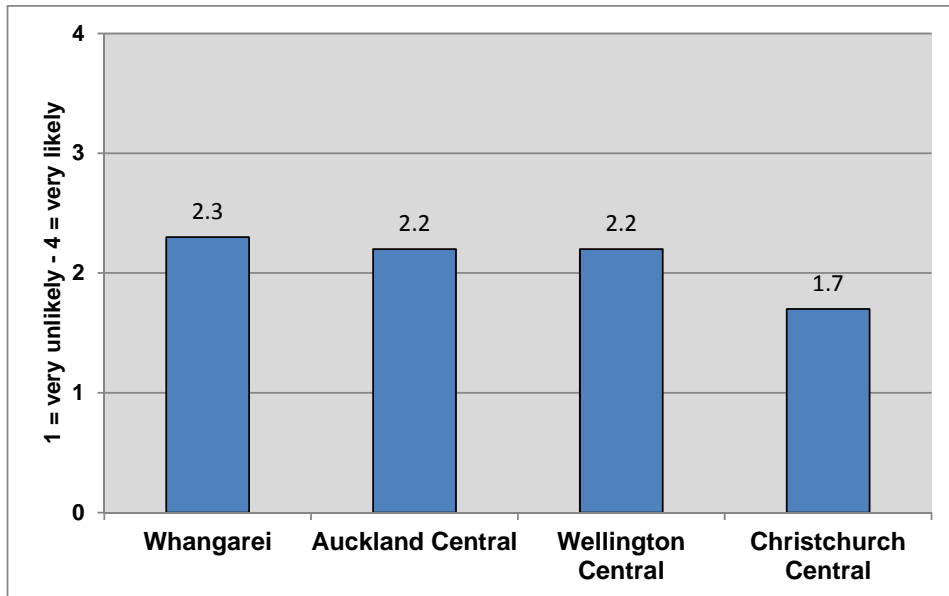
The police detainees who had used alcohol and drugs in the past 12 months were also asked how likely they thought it was that they would be stopped if they drove under the influence of drugs other than alcohol (e.g. cannabis, methamphetamine or heroin). Fourteen percent of the detainees indicated they did not drive. Sixty-eight percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of drugs (Table 14.7).

Table 14.7: Police detainees perceived likelihood of being stopped by the police whilst driving under the influence of drugs other than alcohol, 2010

Likelihood of being stopped by police while under influence of drugs	Whangarei (n=29)	Auckland Central (n=144)	Wellington Central (n=106)	Christchurch Central (n=219)	Total (n=498)
Very likely (4)	14	15	20	9	13
Likely (3)	24	24	19	16	19
Unlikely (2)	45	28	26	17	24
Very unlikely (1)	17	33	35	58	44
Mean score of likelihood of being stopped (1=Very unlikely – 4=Very likely)	2.3	2.1	2.2	1.7	2.0

Police detainees in Christchurch Central again thought they were less likely to be stopped by police while driving under the influence of drugs than those in Auckland Central (1.7 vs. 2.2,  $p<0.0001$ ), Wellington Central (1.7 vs. 2.2,  $p=0.0002$ ) and Whangarei (1.7 vs. 2.3,  $p=0.0013$ ) (Figure 14.10).

Figure 14.10: Mean score of likelihood of being stopped while under the influence of drugs other than alcohol by location (of those detainees who used alcohol and drugs in the past year and who drove), 2010



## Summary

- Nearly all the police detainees had used alcohol, tobacco and other drugs in the previous 12 months
- Eighty-eight percent of the detainees who used alcohol and drugs had experienced at least one problem from their alcohol and drug use in the past 12 months
- The detainees reported experiencing problems such as family issues, financial issues, low work performance, verbal and physical aggression, dangerous driving and risky sexual behaviour
- The detainees in Christchurch Central were more likely to report having damaged someone else's property as a result of their alcohol and drug use than detainees in the other sites
- The detainees in Christchurch Central were more likely to have physically or verbally threatened someone than those in Auckland Central and Wellington Central

- The detainees in Auckland Central and Wellington Central more likely to report having lost their temper at another driver due to their own alcohol and drug use than those in Whangarei
- The detainees in Auckland Central were more likely to have driven through a stop sign or red light than those in Christchurch Central
- The detainees in Christchurch Central were more likely to report having had unprotected sex due to their alcohol and drug use than detainees in the other sites
- Alcohol, cannabis and methamphetamine were the drug types to which the detainees most commonly attributed their problems
- Detainees in Christchurch Central were more likely to attribute their problems to alcohol than those in Auckland Central
- Detainees in Auckland Central were more likely to attribute their problems to methamphetamine than those in Christchurch Central
- Fifty-seven percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of alcohol
- Police detainees in Christchurch Central thought they were less likely to be stopped while driving under the influence of alcohol than those from the other sites
- Sixty-eight percent of the detainees who drove thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of drugs
- Police detainees in Christchurch Central thought they were less likely to be stopped by police while driving under the influence of drugs than those from the other sites

## Chapter 15 - Help seeking for drug use

### Introduction

People use alcohol and drugs for a range of reasons beyond their immediate hedonistic and social effects including to deal with stress and to alleviate unhappiness, anxiety and disempowerment (Babor, et al., 2010; Hough, 1996). Some alcohol and drug users have pre-existing mental health problems and abuse substances to mitigate the symptoms of these illnesses. Other frequent drug users use drugs to alleviate physical pain from an existing physical illness. Frequent alcohol and drug use can lead to psychological and physical dependency which makes it difficult for users to change their behaviour once they start experiencing serious negative outcomes. Ensuring alcohol and drug treatment services are readily available and easily accessible to those experiencing problems is an important aspect of a successful drug policy. It is increasingly recognised that the criminal justice system is an important avenue whereby problematic alcohol and drug users can be directed into treatment programmes (see Caulkins & Reuter, 2009; Hough, 1996). This chapter presents findings on the demand for alcohol and drug treatment by police detainees and their history of contact with treatment services.

#### *Extent needed help to reduce alcohol and drug use*

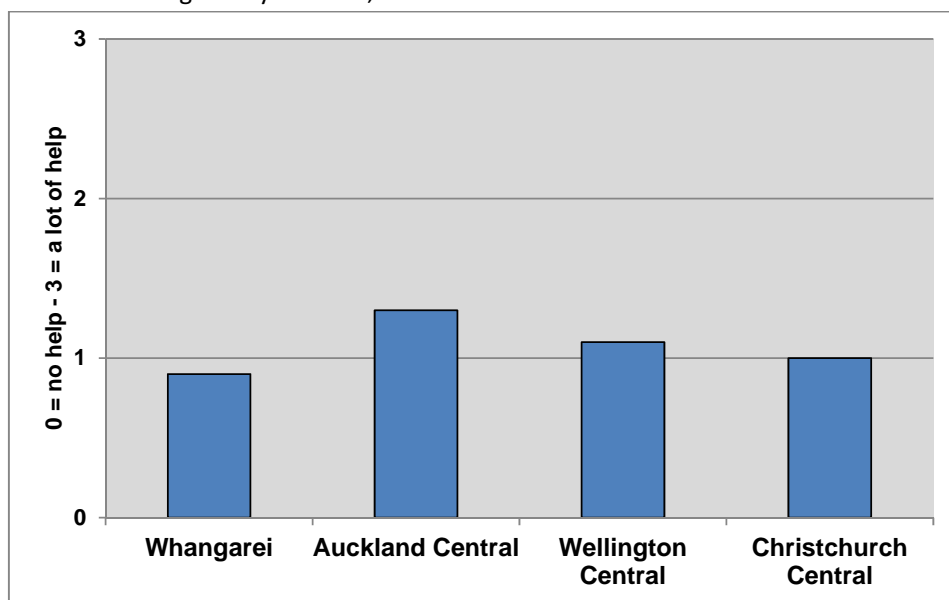
The police detainees who had used alcohol and other drugs in the previous 12 months were asked the extent to which they felt they needed help to reduce their alcohol and drug use (Table 15.1). The interviewers read options from a scale of 'no help' to 'a lot of help'. Thirty-six percent of the detainees felt they needed at least some help to reduce their alcohol and drug use. Forty-seven percent felt they needed 'no help' to reduce their alcohol and drug use.

Table 15.1: Extent police detainees' felt they needed help to reduce their alcohol and drug use, 2010

Extent needed help to reduce alcohol and drug use (%)	Whangarei (n=115)	Auckland Central (n=273)	Wellington Central (n=151)	Christchurch Central (n=261)	Total (n=800)
A lot of help (3)	13	22	19	16	18
Some help (2)	19	21	15	14	18
A little help (1)	14	18	18	18	18
No help (0)	54	39	48	51	47
Mean score of extent help needed (3=a lot – 0=none)	0.9	1.3	1.1	1.0	1.1

The detainees in Auckland Central were more likely to say they needed help to reduce their alcohol and drug use than those in Christchurch Central (1.3 vs. 1.0,  $p=0.0020$ ) and Whangarei (1.3 vs. 0.9,  $p=0.0058$ ) (Figure 15.1).

Figure 15. 1: Mean score of extent police detainees felt they needed help to reduce their alcohol and drug use by location, 2010



### *Drug types needed help for*

Those police detainees who said they needed at least a little help to reduce their alcohol and drug use were asked what drug types they thought they needed help for. The drug types the detainees most commonly reported needing help for were alcohol (64%), cannabis (38%), methamphetamine (15%) and tobacco (13%) (Table 15.2).

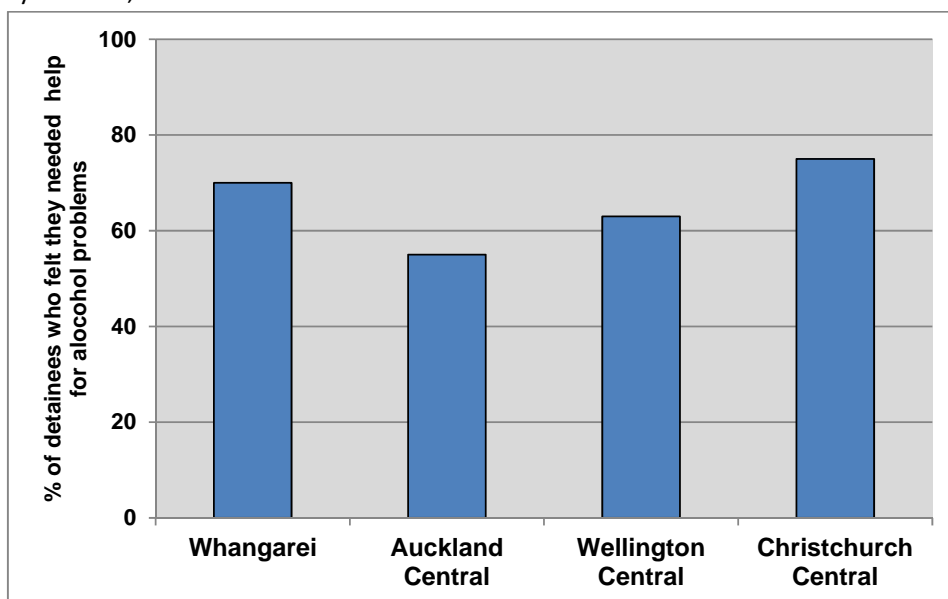
Table 15.2: Drug types police detainees reported needing needed help for by location, 2010

Drug types needed help for (%)	Whangarei (n=53)	Auckland Central (n=176)	Wellington Central (n=80)	Christchurch Central (n=127)	Total (n=436)
Alcohol	70	55	63	75	64
Cannabis	32	39	49	32	38
Methamphetamine	9	22	13	9	15
Tobacco	15	17	10	7	13
Morphine	4	2	0	6	3
Benzodiazepines	4	1	1	2	2
Ecstasy	0	3	3	1	2
Methadone	0	2	1	2	2
Amphetamine	0	2	1	1	1
Heroin	0	2	1	1	1
Homebake	0	0	0	2	1
LSD	0	1	3	0	1
Other	0	2	0	0	1
Ritalin	0	0	0	3	1
Street BZP	0	0	0	2	<1
Cocaine	0	1	0	0	<1
GHB	0	1	0	0	<1
Ice	0	1	0	1	<1
Magic mushrooms	0	1	0	0	<1
Viagra	0	1	0	0	<1



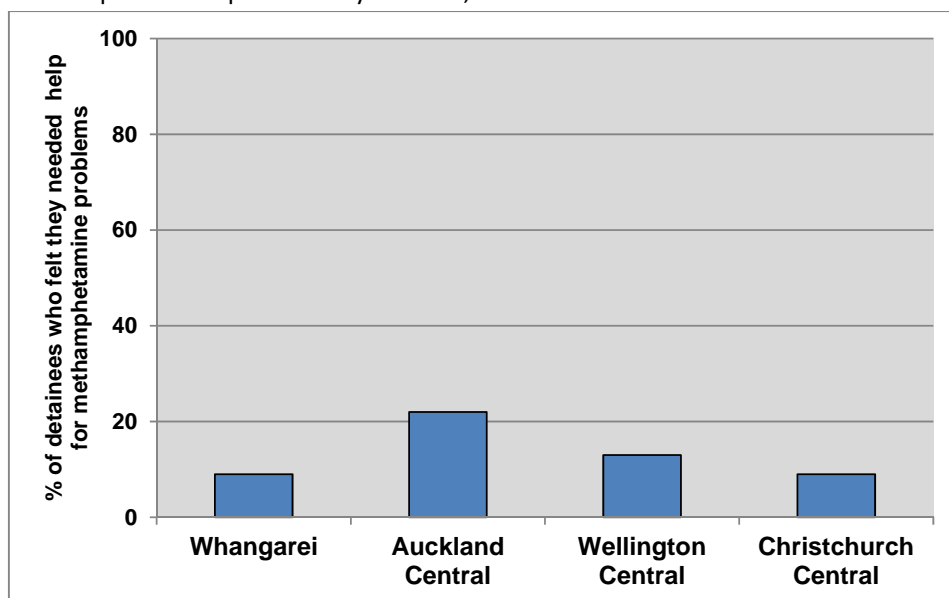
The detainees in Christchurch Central were more likely to report needing help for their alcohol use than those in Auckland Central (75% vs. 55%,  $p=0.0006$ ) (Figure 15.2).

Figure 15.2: Proportion of police detainees who felt they needed help for alcohol problems by location, 2010



The detainees in Auckland Central were more likely to report needing help for methamphetamine use than those in Christchurch Central (22% vs. 9%,  $p=0.0026$ ) and Whangarei (22% vs. 9%,  $p=0.0470$ ) (Figure 15.3).

Figure 15.3: Proportion of police detainees who felt they needed help for methamphetamine problems by location, 2010



#### *Sought help to reduce alcohol and drug use*

Those police detainees who indicated they needed at least a little help to reduce their alcohol and drug use were asked if they had sought help to reduce their alcohol and drug use in the past 12 months. Fifty-one percent of these detainees had sought help to reduce their alcohol and drug use in the previous 12 months (i.e. 27% of all the detainees).

#### *Wanted help but did not receive it*

Police detainees who had sought help to reduce their alcohol and drug use in the previous twelve months were asked if they had wanted help 'but did not receive it'. Sixty-six percent of the detainees who reported they had sought help to reduce their alcohol and drug use said they did not receive it (i.e. 18% of all the detainees).

### *Barriers to receiving help*

The police detainees who had sought help to reduce their alcohol and drug use but did not receive it were asked what barriers, if any, they had come across in trying to get help (Table 15.3). The interviewer read out a list of 17 barriers to reaching drug treatment. The detainees could also nominate a barrier that was not on the list. The detainees reported experiencing a mean of four different barriers to finding drug treatment (median 3). The barriers most commonly experienced by the detainees were 'had no transport to get there' (29%), 'fear of what might happen once made contact with the service' (28%), 'social pressure to keep on using' (28%), 'didn't know where to go' (26%), 'long waiting lists' (24%), 'couldn't get an appointment at a suitable time' (23%), 'fear of losing friends' (22%) and 'no local services available' (22%).

Table 15.3: Police detainees' barriers to receiving help for alcohol and drug use by location, 2010

Barrier to receiving help (%)	Whangarei (n=12)	Auckland Central (n=63)	Wellington Central (n=23)	Christchurch Central (n=46)	Total (n=144)
Had no transport to get there	8	32	30	30	29
Fear of what might happen once contact made with the service	25	32	35	20	28
Social pressure to keep using	17	37	26	22	28
Didn't know where to go	8	30	30	22	26
Long waiting lists	58	16	26	26	24
Couldn't get appointment soon enough/ at a suitable time	17	22	39	17	23
Fear of losing friends	0	21	39	20	22
No local service available	0	25	17	24	22
No appropriate local services	0	25	17	22	21
Concern about impact on job/ career prospects	0	24	35	11	19
Fear of the police	8	24	22	11	18
No after hours service	17	16	22	17	17
Service not appropriate for type of drug use/ problems	8	16	22	13	15
Costs too much	0	19	17	9	14
Fear of social welfare agencies	0	17	17	4	12
Not eligible for admission	0	10	4	15	10
Lack of self-motivation	0	6	9	9	7
Lack of childcare	0	6	4	7	6
Put off by rude/ unhelpful service	25	3	4	2	5
Other	0	6	0	4	4

### *Ever been in an alcohol and drug treatment programme*

Thirty-eight percent of the police detainee sample had been in an alcohol and drug treatment programme at some point in their lives. The detainees had been in a mean of 2.5 alcohol and drug treatment programmes in their lifetimes (median 1).

### *Currently in an alcohol and drug treatment programme*

Sixteen percent of the police detainee sample had been in an alcohol and drug treatment programme in the previous 12 months (Table 15.4). Six percent of detainees reported they were currently in an alcohol and drug treatment programme.

Table 15.4: Percentage of police detainees who had been in an alcohol and drug treatment programme in the previous 12 months by location, 2010

In treatment programme in the previous 12 months (%)	Whangarei (n=114)	Auckland Central (n=282)	Wellington Central (n=145)	Christchurch Central (n=261)	Total (n=802)
No	82	82	86	85	84
Yes, but not currently in one	10	11	8	9	10
Yes, currently enrolled	8	7	6	6	6

### *Type of treatment programme*

The police detainees who had been in a treatment programme for their alcohol and drug use in the previous 12 months were asked what kind of programme they were in or had recently been in (Table 15.5). The most commonly reported treatment programmes were 'rehabilitation programme/ therapeutic community' (33%), 'outpatient/ counselling' (33%) and a 'support group' such as Alcoholic Anonymous (AA), Narcotics Anonymous (NA) or church group.

Table 15 5: Type of alcohol and drug treatment programme police detainees were enrolled in the previous 12 months by location, 2010

Treatment programme (%)	Whangarei (n=21)	Auckland Central (n=49)	Wellington Central (n=27)	Christ-church Central (n=39)	Total (n=136)
Rehabilitation programme/ therapeutic community	33	33	30	36	33
Outpatient/ counselling	52	14	48	36	33
Support group (AA, NA, church, etc)	10	20	19	21	18
Detox	5	18	4	8	10
Community Alcohol and Drugs Service (CADS)	0	14	0	0	5

### *Drug maintenance*

The police detainees who had been in a treatment programme for their alcohol and drug use in the previous 12 months were asked if they had received any drug maintenance as part of the programme. Fourteen percent had received drug maintenance (i.e. 8% received methadone, 1% buprenorphine and 5% received another type of drug).

### *Reason for entering treatment programme*

The police detainees who had been in a treatment programme for their alcohol and drug use in the previous 12 months were asked the reason why they had entered the programme. The detainees were read five options: Drug court requirement; Police diversion scheme; Other legal order; Medical referral and Personal reasons. The latter two categories allowed detainees to provide more detailed answers. These more detailed answers were combined and coded together as appropriate. The most common reasons for entering an alcohol and drug treatment programme were 'drug court requirement' (40%), 'wanted help/ having problems due to use' (30%) and 'other legal order' (11%) (Table 15.6).

Table 15.6: Reasons police detainees entered alcohol and drug treatment programme in the previous 12 months, 2010

Reason entered treatment programme (%)	Total (n=137)
Court requirement	40
Wanted help/ having problems due to use	30
Other legal order	11
Personal reasons	6
Family relationship/ reasons	5
Police diversion scheme	3
Medical referral	3
Thought it might help with charges	2

#### *Substance mainly treated for in programme*

The police detainees who had been in a treatment programme for their alcohol and drug use in the previous 12 months were asked what substance(s) they were mainly treated for. The substances which the detainees were most commonly receiving treatment for were alcohol (69%), cannabis (28%), methamphetamine (15%) and morphine (7%) (Table 15.7).

Table 15.7: Substance police detainees mainly being treated for in alcohol and drug treatment programme in the previous twelve months, 2010

Substance (%)	Total (n=137)
Alcohol	69
Cannabis	28
Methamphetamine	15
Morphine	7
Benzodiazepines	3
Heroin	3
Other	2
Amphetamine	1
GHB	1
Homebake	1
Methadone	1
Magic mushrooms	1
Tobacco	1

### *Effectiveness of treatment programmes*

Police detainees who had ever been in an alcohol and drug treatment programme were asked to rate the effectiveness of the last programme they had attended (Table 15.8). Thirty-four percent of the detainees rated their treatment as 'mostly effective' or 'very effective'.

Table 15.8: Police detainees' ratings of the effectiveness of alcohol and drug treatment programmes, 2010

Effectiveness of alcohol and drug treatment programme (%)	Whangarei (n=34)	Auckland Central (n=101)	Wellington Central (n=58)	Christchurch Central (n=92)	Total (n=285)
Very effective (4)	12	26	17	22	21
Mostly effective (3)	12	12	16	12	13
Fairly effective (2)	44	30	26	25	29
Not very effective (1)	12	16	16	14	15
Not effective at all (0)	21	17	26	27	22
Mean score of effectiveness (5=very effective – 1=not effective at all)	1.8	2.1	1.8	1.9	2.0

## Summary

- Thirty-six percent of the police detainees felt they needed at least some help to reduce their alcohol and drug use
- The detainees in Auckland Central were more likely to say they needed help to reduce their alcohol and drug use than those in Christchurch Central and Whangarei
- The drug types the detainees most commonly reported needing help for were alcohol, cannabis, methamphetamine and tobacco



- The detainees in Christchurch Central were more likely to report needing help for their alcohol use than those in Auckland Central
- The detainees in Auckland Central were more likely to report needing help for methamphetamine use than those in Christchurch Central and Whangarei
- Sixty-six percent of the detainees who reported they had sought help to reduce their alcohol and drug use said they did not receive it (i.e. 18% of all the detainees)
- The detainees reported experiencing a mean of four different barriers to finding alcohol and drug treatment (median 3)
- The barriers most commonly experienced by the detainees looking for help to reduce their alcohol and drug use were 'had no transport to get there', 'fear of what might happen once made contact with the service', 'social pressure to keep on using', 'didn't know where to go', 'long waiting lists', 'couldn't get an appointment at a suitable time', 'fear of losing friends' and 'no local services available'
- The most common reasons the detainees entered an alcohol and drug treatment programme were 'drug court requirement', 'wanted help/ having problems due to use' and 'other legal order'
- The substances which the detainees were most commonly receiving treatment for were alcohol, cannabis, methamphetamine and morphine

## Chapter 16 - Violence

### Introduction

Alcohol and drug use can contribute to violence in a number of ways (Goldstein, 1985; MacCoun, et al., 2003). Intoxication from alcohol and drugs can increase the likelihood of aggressive behaviour by eroding users' self control, reducing inhibitions, heightening paranoia and contributing to misunderstandings and conflict between people. Coming down or recovering from heavy alcohol and drug use can make users irritable, short tempered and prone to aggression. Detainees may also use physical aggression in the process of committing drug related crime or to settle disputes in the drug market and with rivals. In addition to being perpetrators of violence, alcohol and drug users are also sometimes victims of violence. Intoxication can incapacitate drug users and make them vulnerable to physical attack and victimisation by others. Alcohol and drug users are also at risk of physical aggression from unstable alcohol and drug using colleagues and from violent drug sellers. Low socio-economic status and racism can also be drivers of interpersonal conflict and violence (Department of Corrections, 2007). This chapter examines the police detainees' recent experiences of physical aggression and the role alcohol and drug use plays in these incidents. It also investigates the role ethnicity plays in violence and discrimination.

### Physical aggression toward others

#### *Frequency of aggressive behaviour to others*

The police detainees were asked how often they had been physically aggressive toward someone (i.e. threatening, shoving, throwing something, slapping, hitting or punching them) including their partner, family, friend, social acquaintance or stranger in the previous 12 months (Table 16.1). Fifty-nine percent of the detainees

had been physically aggressive at least once during the past year, and 12% had been physically aggressive at least monthly.

Table 16.1: Frequency police detainees were physically aggressive toward others in the previous 12 months, 2010

Frequency physically aggressive towards someone (%)	Whangarei (n=112)	Auckland Central (n=266)	Wellington Central (n=148)	Christchurch Central (n=260)	Total (n=786)
Daily	1	2	2	<1	1
3-4 times per week	2	2	4	1	2
Once a week	3	2	4	3	3
Once or twice per month	5	7	7	3	6
3-4 times	13	10	11	12	11
1-2 times	36	30	36	42	36
Never	40	47	34	38	41

#### *Alcohol and drug related physical aggression to others*

Those police detainees who had been physically aggressive toward someone in the past 12 months were asked on how many of the occasions when they were physically aggressive they were under the influence of alcohol or drugs or withdrawing from alcohol or drugs. Sixty-two percent of the physically aggressive detainees reported being under the influence of alcohol and drugs on at least some of the occasions they were physically aggressive (Table 16.2). Thirty-four percent of the detainees reported being under influence of alcohol or drugs on every occasion they were physically aggressive.

Table 16.2: Frequency police detainee were under the influence of alcohol or drugs when being physically aggressive toward someone, 2010

Frequency under influence of alcohol or drugs when physically aggressive	Whangarei (n=67)	Auckland Central (n=137)	Wellington Central (n=97)	Christchurch Central (n=161)	Total (n=462)
All (4)	22%	31%	45%	33%	34%
Most (3)	13%	15%	8%	10%	11%
Some (2)	21%	12%	19%	17%	17%
Hardly any (1)	13%	10%	6%	17%	12%
None (0)	30%	31%	22%	23%	26%
Mean score of frequency under influence of alcohol and drugs when physically aggressive (4=all – 0=none)	1.9	2.0	2.5	2.1	2.1

#### *Drug types involved in physical aggression towards others*

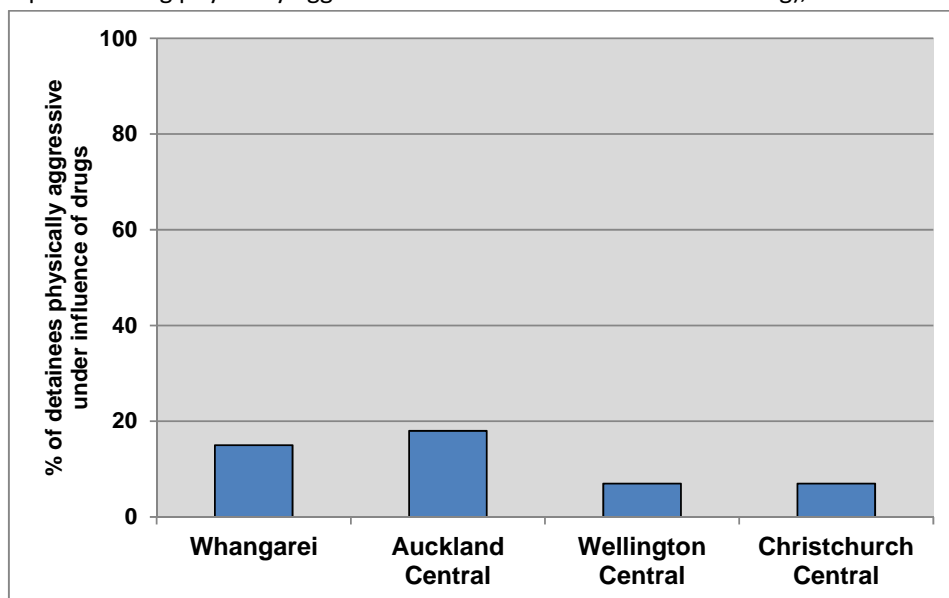
Those police detainees who reported being physically aggressive toward someone while under the influence of alcohol or drugs in the previous twelve months were asked what drug type or drug types they were under the influence of. The drug types which the detainees most commonly reported being under the influence of while being physically aggressive were alcohol (81%), cannabis (36%) and methamphetamine (11%) (Table 16.3).

Table 16.3: Drug types used by police detainees when being physically aggressive toward someone, 2010

Drug types used by police detainees when being physically aggressive (%)	Whangarei (n=47)	Auckland Central (n=94)	Wellington Central (n=76)	Christchurch Central (n=124)	Total (n=341)
Alcohol	83	80	79	83	81
Cannabis	38	30	34	40	36
Methamphetamine	15	18	7	7	11
Tobacco	4	0	3	8	4
Amphetamine	0	2	0	0	1
Benzodiazepines	0	0	0	2	1
Street BZP	0	0	1	2	1
Ecstasy	0	1	3	1	1
Heroin	0	0	3	0	1
Homebake heroin/morphine	0	0	0	2	1
Crystal methamphetamine	0	0	0	2	1
LSD	0	0	3	1	1
Methadone	0	0	1	1	1
Morphine	0	1	0	2	1
Mushrooms (psilocybin)	0	1	1	0	1
Other	0	1	0	1	1
Methylphenidate (Ritalin)	0	0	0	2	1
Cocaine	0	0	1	0	<1

The detainees in Auckland Central were more likely to report being under the influence of methamphetamine while being physically aggressive than those in Wellington Central (18% vs. 7%,  $p=0.0336$ ) and Christchurch Central (18% vs. 7%,  $p=0.0185$ ) (Figure 16.1).

Figure 16.1: Proportion of police detainees who reported being under the influence of methamphetamine while being physically aggressive by location (of those detainees who reported being physically aggressive and under the influence of a drug), 2010



#### *Types of people who were victims of physical aggression*

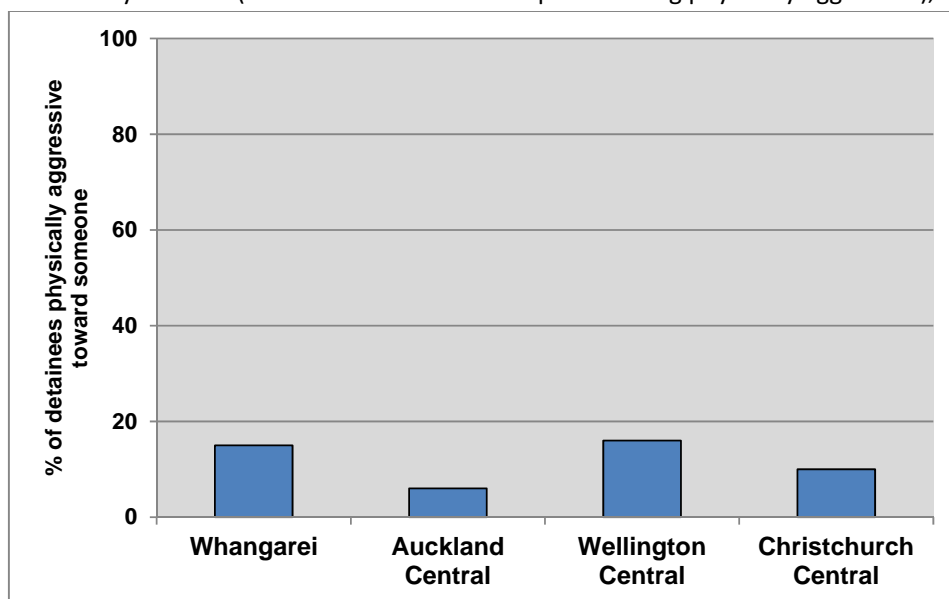
The police detainees who reported being physically aggressive in the previous 12 months were asked what types of people they had been physically aggressive toward during this time. The most common victims of the detainees' physical aggression were a 'stranger' (37%), 'partner' (33%), 'friend' (24%) and 'social acquaintance' (23%) (Table 16.4).

Table 16.4: Types of people police detainees were physically aggressive toward in the past 12 months, 2010

Types of people physically aggressive toward (%)	Whangarei (n=67)	Auckland Central (n=141)	Wellington Central (n=97)	Christchurch Central (n=162)	Total (n=467)
Stranger	25	35	37	43	37
Partner	40	35	31	29	33
Friend	21	18	22	33	24
Social acquaintance	12	27	25	23	23
Other family member	16	15	14	18	16
Gang member	15	6	16	10	11
Drug user/ drug dealer	6	6	10	6	7
Son/ daughter	0	2	2	2	2

The detainees in Wellington Central were more likely to have been physically aggressive toward a gang member than those in Auckland Central (16% vs. 6%,  $p=0.0093$ ) (Figure 16.2). Detainees in Whangarei were also more likely to have been physically aggressive toward a gang member than those in Auckland Central (6% vs. 15%,  $p=0.0331$ ).

Figure 16.2: Proportion of police detainees who reported being aggressive to a gang member by location (of those detainees who reported being physically aggressive), 2010



### *Weapon possession*

Twenty-five percent of the police detainees indicated they had carried a weapon for protection in the previous 12 months (Table 16.5).

Table 16.5: Proportion of police detainees who reported carrying a weapon for protection in the previous 12 months by location, 2010

	Whangarei (n=111)	Auckland Central (n=268)	Wellington Central (n=148)	Christ- church Central (n=260)	Total (n=787)
Carried weapon (%)	19	26	22	29	25

The detainees who had carried a weapon in the past 12 months were asked what type of weapons they had carried. The detainees most commonly carried a 'knife' (62%), a 'club or staff' (26%), 'gun' (22%), 'hammer' (12%), 'machete/ sword' (11%) and 'screwdriver' (11%) (Table 16.6).

Table 16.6: Types of weapons carried by police detainees in previous 12 months, 2010

Weapon type (%)	Whangarei (n=21)	Auckland Central (n=70)	Wellington Central (n=33)	Christ- church Central (n=75)	Total (n=199)
Knife	57	57	76	63	62
Club/ staff	24	20	24	32	26
Gun (pistol, shotgun etc)	19	26	24	17	22
Hammer	5	13	9	15	12
Machete/ sword	10	9	12	12	11
Screwdriver	14	11	12	9	11
Airgun	10	10	0	7	7
Other	10	10	3	1	6
Knuckle dusters	0	6	0	1	3
Axe	0	3	3	1	2
Crossbow	0	1	3	1	2
Wheel brace	0	0	0	4	2
Mace/ pepper spray	0	0	3	1	1
Patu	0	1	3	0	1
Saw	0	0	0	3	1

## Victims of physical aggression

### *Frequency of being a victim of physical aggression*

The police detainees were also asked if someone (i.e. 'partner, family, social acquaintance or stranger') had been physically aggressive toward them (i.e. threatening, shoving, throwing something, slapping, hitting or punching) in the past 12 months (Table 16.7). Sixty-one percent of the detainees reported being the victim of physical aggression at least once in the previous 12 months, and 17% had been the victim of physical aggression at least monthly.



Table 16.7: Frequency police detainees were the victims of physical aggression in the previous 12 months, 2010

Frequency victim of physical aggression (%)	Whangarei (n=111)	Auckland Central (n=267)	Wellington Central (n=148)	Christchurch Central (n=260)	Total (n=786)
Daily	3	3	1	1	2
3-4 times per week	2	4	3	2	3
Once a week	3	4	5	3	4
Once or twice per month	9	10	11	5	8
3-4 times	13	14	17	12	13
1-2 times	28	24	30	37	30
Never	43	40	33	40	39

#### *Alcohol and drug related physical aggression by others*

The police detainees who had been victims of physical aggression were asked on how many occasions they considered the perpetrator to have been under the influence of alcohol or drugs or withdrawing from alcohol or drugs. Seventy-three percent of the detainees thought their victimiser had been under the influence of alcohol and drugs on at least some of the occasions of physical aggression (Table 16.8). Thirty-nine percent of the detainees thought their perpetrator was under the influence of alcohol or drugs on every occasion they were victimised.

Table 16.8: Frequency perpetrator was under the influence of alcohol or drugs when being physically aggressive toward police detainee

Frequency perpetrator under influence of alcohol or drugs when physically aggressive	Whangarei (n=57)	Auckland Central (n=149)	Wellington Central (n=89)	Christchurch Central (n=149)	Total (n=444)
All (4)	32%	42%	46%	36%	39%
Most (3)	23%	19%	15%	16%	18%
Some (2)	21%	16%	11%	17%	16%
Hardly any (1)	7%	3%	6%	13%	7%
None (0)	18%	19%	22%	17%	19%
Mean score of frequency perpetrator under influence of alcohol and drugs (4=All – 0=None)	2.4	2.6	2.6	2.4	2.5

### *Drug types involved in physical aggression by others*

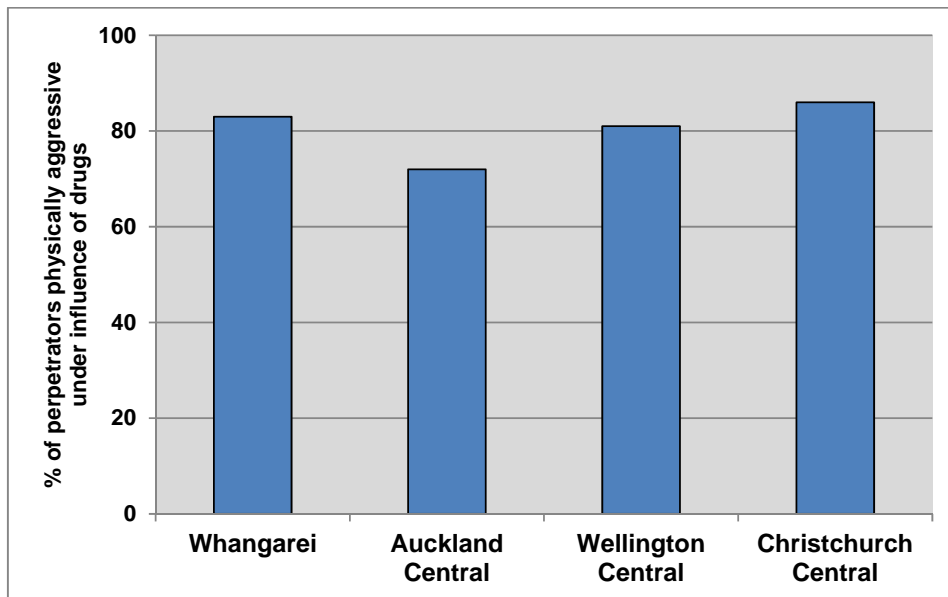
Police detainees who had been the victims of physical aggression from someone under the influence of alcohol or drugs in the previous 12 months were asked what drug type or drug types they thought their perpetrator was under the influence of. The most commonly reported drugs used by perpetrators of physical aggression were alcohol (80%), cannabis (29%) and methamphetamine (20%) (Table 16.9).

Table 16.9: Drug types perpetrators under the influence of when being physically aggressive toward police detainees, 2010

Drug types used by perpetrator when being physically aggressive (%)	Whangarei (n=47)	Auckland Central (n=120)	Wellington Central (n=69)	Christchurch Central (n=123)	Total (n=359)
Alcohol	83	72	81	86	80
Cannabis	36	19	32	34	29
Methamphetamine	9	30	16	16	20
Tobacco	6	2	3	6	4
Amphetamine	0	1	3	3	2
Benzodiazepines	0	0	0	2	1
Street BZP	0	0	1	3	1
Cocaine	0	1	1	0	1
Ecstasy	0	1	4	1	1
Homebake heroin/morphine	0	0	1	1	1
Crystal methamphetamine	0	0	1	2	1
LSD	0	0	1	1	1
Morphine	2	0	0	1	1
Other	0	0	1	1	1
Poppies (opium)	0	1	1	0	1
Methylphenidate (Ritalin)	0	0	0	2	1
Antidepressants	0	0	1	0	<1
Methadone	0	0	0	1	<1
Mushrooms (psilocybin)	0	1	0	0	<1
Viagra	0	1	0	0	<1

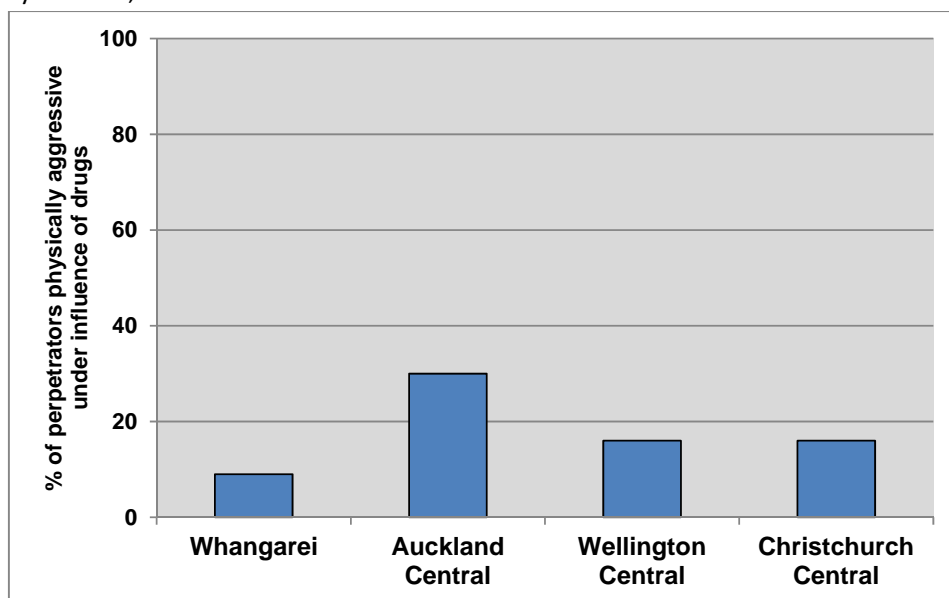
The detainees in Christchurch Central were more likely to report their perpetrator was under the influence of alcohol than those in Auckland Central (86% vs. 72%,  $p=0.0067$ ) (Figure 16.3).

Figure 16.3: Proportion of perpetrators who were under the influence of alcohol by location, 2010



The detainees in Auckland Central were more likely to report their perpetrator was under the influence of methamphetamine than those in Christchurch Central (30% vs. 16%,  $p=0.0125$ ), Wellington Central (30% vs. 16%,  $p=0.0350$ ) and Whangarei (30% vs. 9%,  $p=0.0066$ ) (Figure 16.4).

Figure 16.4: Proportion of perpetrators who were under the influence of methamphetamine by location, 2010



The detainees in Christchurch Central were more likely to report their perpetrator was under the influence of cannabis than those in Auckland Central (34% vs. 19%,  $p=0.0095$ ). Detainees in Whangarei were also more likely to report their perpetrator was under the influence of cannabis than those in Auckland Central (36% vs. 19%,  $p=0.0233$ ).

#### *Types of people who were perpetrators of physical aggression*

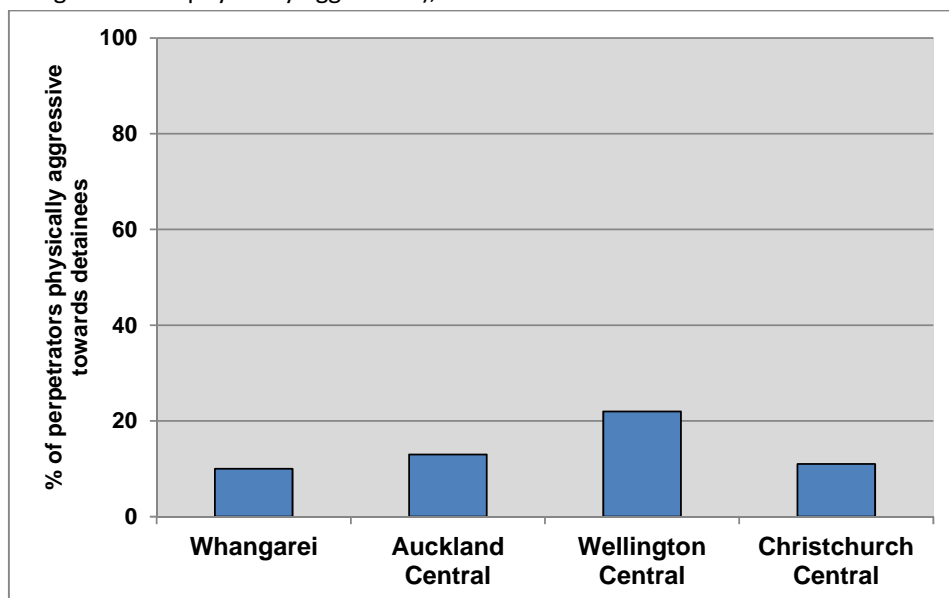
The police detainees who had been victims of physical aggression in the past 12 months were asked what types of people had victimised them. The types of people police detainees most commonly reported as being physically aggressive toward them were a 'stranger' (40%), 'partner' (34%) and 'friend' (23%) (Table 16.10).

Table 16.10: Types of people who were physically aggressive toward police detainees, 2010

Types of people physically aggressive (%)	Whangarei (n=63)	Auckland Central (n=160)	Wellington Central (n=99)	Christchurch Central (n=156)	Total (n=478)
Stranger	32	38	38	47	40
Partner	43	34	33	31	34
Friend	21	19	27	24	23
Social acquaintance	14	18	23	16	18
Gang member	10	13	22	11	14
Other family member	17	10	15	17	14
Drug user/ drug dealer	6	4	13	6	7
Son/ daughter	0	1	2	1	1

The detainees in Wellington Central were more likely to report a gang member had been physically aggressive toward them than those in Auckland Central (22% vs. 13%,  $p=0.0423$ ), Christchurch Central (22% vs. 11%,  $p=0.0166$ ) and Whangarei (22% vs. 10%,  $p=0.0435$ ) (Figure 16.5).

Figure 16.5: Proportion of police detainees who reported that the perpetrator of physical violence against them was a gang member by location (of those detainees who reported being victims of physically aggression), 2010



### *Victim of an ethnically motivated attack*

The police detainees were asked if they had ever been a victim of an ethnically motivated attack (i.e. verbal or physical abuse to person or property) in New Zealand. The detainees were asked to specify in their response whether the victimisation was physical or verbal and whether it had occurred in the past 12 months or longer ago. There were not sufficient numbers of Asian detainees in the sample to make a separate category for the purposes of the analysis of ethnic discrimination. Asians may well be subject to higher levels of ethnic discrimination than Europeans, and as a consequence it was not appropriate to combine them with Europeans into a single category. Fourteen percent of the detainees had been the victims of an ethnically motivated verbal attack in the previous 12 months, and 10% had been the victims of an ethnically motivated physical attack in the past 12 months (Table 16.11). There was no statistically significant difference in reports of ethnically motivated attacks between Maori, Pacific and European detainees.

Table 16.11: Police detainees' reports of being victims of ethnically motivated attacks in New Zealand by primary ethnic group, 2010

<b>Ethnically motivated attack (%)</b>	<b>Maori (n=294)</b>	<b>Pacific (n=106)</b>	<b>European (n=348)</b>	<b>Total (n=748)*</b>
Verbal within the past 12 months	16	11	14	14
Verbal more than 12 months ago	14	10	13	13
Physical within the past 12 months	11	9	9	10
Physical more than 12 months ago	12	8	12	12
Any ethnically motivated attack	33	22	28	29

\* Asian and 'Other' ethnicities have been removed from this comparison due to low sample numbers

Detainees in Auckland Central were more likely to have been the victims of an ethnically motivated verbal attack more than 12 months ago than those in Christchurch Central (18% vs. 11%,  $p=0.0296$ ) and Whangarei (18% vs. 8%,  $p=0.0226$ ).

### *Treated unfairly because of ethnicity*

The police detainees were asked if they had ever been treated unfairly due to their ethnicity in New Zealand, such as when they were 'looking for a job, wanting to rent a house or looking for help from a doctor or nurse'. As with the previous question, there were not sufficient numbers of Asian detainees to include them in the analysis. Twenty-two percent of the police detainees reported having been treated unfairly because of their ethnicity in New Zealand at some time in their lives, and 15% had been treated unfairly in this way in the previous 12 months (Table 16.12).

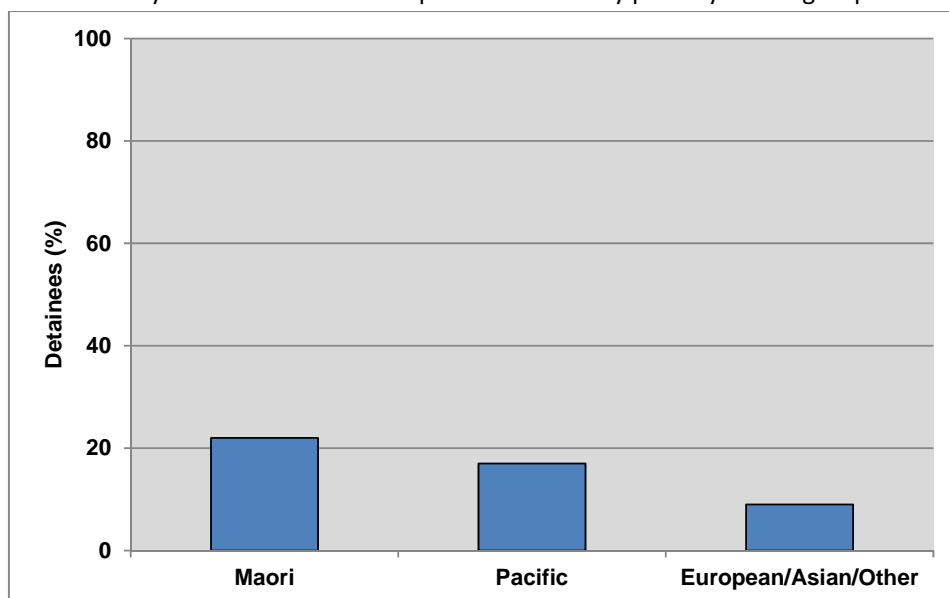
Table 16.12: Police detainees' reports of being treated unfairly because of their ethnicity in New Zealand by primary ethnic group, 2010

<b>Treated unfairly because of ethnicity in New Zealand (%)</b>	<b>Maori (n=289)</b>	<b>Pacific (n=105)</b>	<b>European (n=347)</b>	<b>Total (n=741)*</b>
Within the past 12 months	22	17	9	15
More than 12 months ago	16	21	5	12
Ever treated unfairly because of ethnicity	32	29	13	22

\* Asian and 'Other' ethnicities have been removed from this comparison due to low sample numbers

Maori detainees were more likely to report being treated unfairly because of their ethnicity in New Zealand in the past 12 months than European detainees (22% vs. 9%,  $p<0.0001$ ) (Figure 16.6). Pacific detainees were also more likely to report being treated unfairly because of their ethnicity in New Zealand in the past 12 months than Europeans (17% vs. 9%,  $p<0.0001$ ).

Table 16.13: Proportion of police detainees who reported being treated unfairly because of their ethnicity in New Zealand in the past 12 months by primary ethnic group



Maori detainees were also more likely to report having been treated unfairly because of their ethnicity in New Zealand more than 12 months ago than Europeans (16% vs. 5%,  $p < 0.0001$ ) (Figure 16.7). Pacific detainees were also more likely to reported having been treated unfairly because of their ethnicity in New Zealand more than the 12 months ago than Europeans (21% vs. 5%,  $p < 0.0001$ ).

## Summary

- Fifty-nine percent of the police detainees had been physically aggressive in the past 12 months
- Sixty-two percent of the physically aggressive detainees reported being under the influence of alcohol and drugs on at least some of the occasions they were physically aggressive
- The drug types which the detainees most commonly reported being under the influence of while being physically aggressive were alcohol, cannabis and methamphetamine



- The detainees in Auckland Central were more likely to report being under the influence of methamphetamine while being physically aggressive than those in Wellington Central and Christchurch Central
- The most common victims of the detainees' physical aggression were a 'stranger', 'partner', 'friend' and 'social acquaintance'
- The detainees in Wellington Central and Whangarei were more likely to have been physically aggressive toward a gang member than those in Auckland Central
- Twenty-five percent of the police detainees indicated they had carried a weapon for protection in the previous twelve months
- Sixty-one percent of the detainees reported being the victim of physical aggression in the previous 12 months
- Seventy-three percent of the detainees thought their victimiser had been under the influence of alcohol and drugs on at least some of the occasions of physical aggression
- The most commonly reported drugs used by perpetrators of physical aggression were alcohol, cannabis and methamphetamine
- The detainees in Christchurch Central were more likely to report their perpetrator was under the influence of alcohol than those in Auckland Central
- The detainees in Auckland Central were more likely to report their perpetrator was under the influence of methamphetamine than those in Christchurch Central
- The types of people police detainees most commonly reported as being physically aggressive toward them were a 'stranger', 'partner' and 'friend'
- The detainees in Wellington Central were more likely to report a gang member had been physically aggressive toward them than those in the other sites
- Fourteen percent of the detainees had been the victims of an ethnically motivated verbal attack in the previous 12 months
- Fifteen percent of the detainees reported having been treated unfairly because of their ethnicity in New Zealand in the previous 12 months

- Maori and Pacific detainees were more likely to report being treated unfairly because of their ethnicity in New Zealand in the past 12 months than European detainees

## Chapter 17 – Parenting and adolescence

### Introduction

Drug use and offending is often more common among ‘at risk’ individuals such as those with mental health issues, victims of physical and sexual abuse, delinquent youth and those with dysfunctional family backgrounds (Hough, 1996; Shiner, 2009). Drug use and offending is also often more common among marginalised social groups such as the long term unemployed, urban poor and other disadvantaged groups (Hough, 1996; Shiner, 2009). In New Zealand, Maori have been disadvantaged as a result of colonisation by Europeans and by their subsequent low socio-economic status. Maori are more likely to live in poverty, to be unemployed, have low educational achievement, to be imprisoned, to commit suicide, to suffer health problems, to be heavier alcohol and drug users and to experience domestic violence (Ajwani, et al., 2003; Department of Corrections, 2007; Ferguson, et al., 2004; Ministry of Health, 2009a; Robson & Harris, 2007; Robson, et al., 2010). The social and economic disparities of Maori are reflected in the family and adolescent experiences of the Maori detainees as presented in this chapter.

### *Family structure*

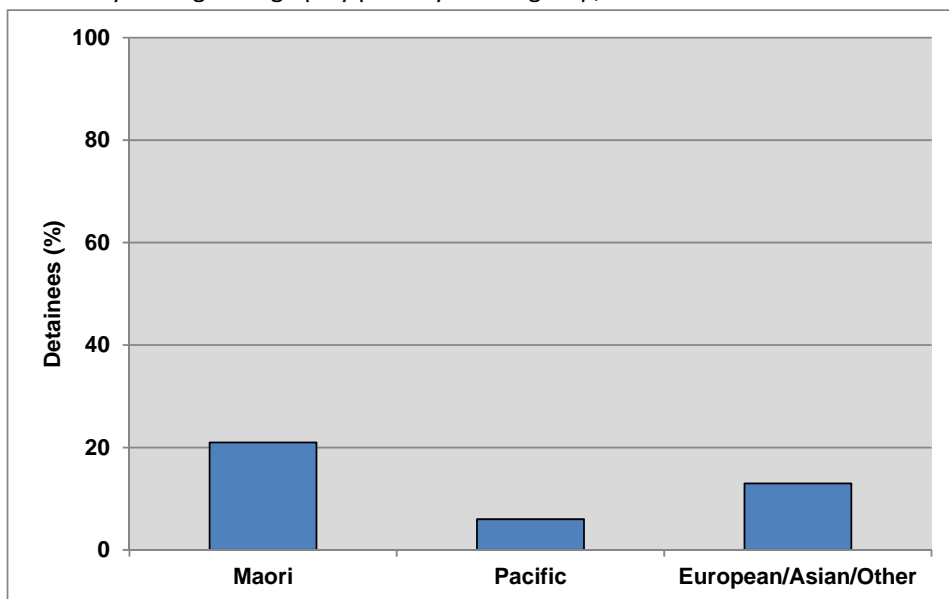
The police detainees were asked about all the different people they had lived with (i.e. for more than just holidays or visits) when they were growing up (i.e. before they were 17 years old), and were read a list of types of family members and other living arrangements. These questions were asked to obtain an idea of a detainee’s early family structure. Fifteen percent of the detainees had been in ‘Child, Youth and Family (CYF) care’, 12% had lived with ‘foster parents’ and 12% had been in ‘youth detention’ (Table 17.1).

Table 17.1: People that police detainees lived with before they were 17 years old by ethnicity, 2010

People that detainees lived with (%)	Maori (n=300)	Pacific (n=108)	European/Asian/Other (n=386)	All (n=794)
Two parents	68	82	73	73
Brother(s)	63	72	5	60
Sister(s)	64	67	55	60
One parent after separation	37	19	40	36
Grandparent(s)	45	30	22	31
Half-brother(s)	30	17	25	26
Half-sister(s)	28	17	26	25
Aunt(s)	37	28	15	25
Uncle(s)	37	29	13	24
One parent from start	24	16	21	21
Stepfather	19	17	20	19
Flatmate(s)	1	6	23	18
Mother's partner(s)	18	6	15	15
CYF's care	21	6	13	15
Stepmother	16	8	13	14
Boarder(s)	17	8	13	14
Father's partner(s)	13	3	13	12
Foster parent(s)	13	3	13	12
Youth detention	18	6	9	12
One parent after other parents death	10	13	6	9
Other	6	7	5	6
Cousin(s)	37	25	12	2

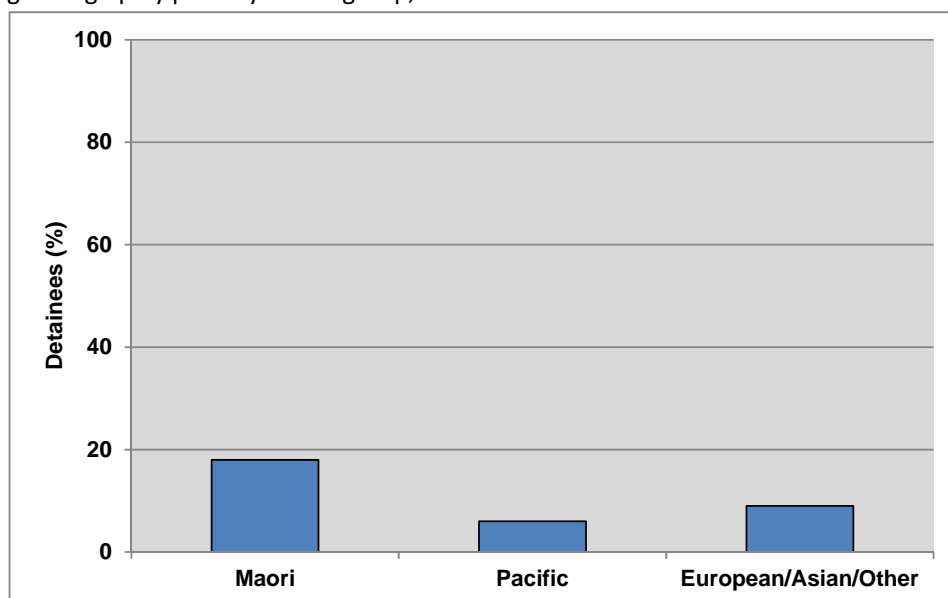
Pacific detainees were less likely to have lived with foster parents than Maori detainees (3% vs. 13%,  $p=0.0081$ ) and European/Asian/Other detainees (3% vs. 13%,  $p=0.0051$ ). Maori detainees were more likely to have lived in CYF care than Pacific detainees (21% vs. 6%,  $p=0.0009$ ) and European/Asian/Other detainees (21% vs. 13%,  $p=0.0142$ ) (Figure 17.1).

Figure 17.1: Proportion of police detainees who lived in Child Youth and Family (CYF) care when they were growing up by primary ethnic group, 2010



Maori detainees were also more likely to have lived in Youth Detention than Pacific detainees (18% vs. 6%,  $p=0.004$ ) and European/Asian/Other detainees (18% vs. 9%,  $p=0.0017$ ) (Figure 17.2).

Figure 17.2: Proportion of police detainees who lived in youth detention when they were growing up by primary ethnic group, 2010



#### *Number of houses lived in during childhood*

The police detainees had lived in a mean of six different houses before they were 17 years old (median 4). Detainees in Christchurch Central lived in a higher number of houses before they were 17 years old than detainees in Whangarei (8 vs. 4,  $p < 0.0001$ ), Auckland Central (8 vs. 6,  $p < 0.0001$ ) and Wellington Central (8 vs. 6,  $p = 0.0004$ ).

#### *Family life*

The police detainees were asked a series of questions about their family life at the time they were growing up (i.e. before they were 17 years old). The detainees were asked how often they experienced different family situations and were read a scale from 'never' to 'all the time'. Thirty-one percent of the police detainees said their parents were drunk 'often' or 'all the time' (Table 17.2). Twenty-two percent of the detainees said the main income earner in their family was unemployed or in temporary employment 'often' or 'all the time'. Twenty-one percent said their

parents were physically aggressive 'often' or 'all the time'. Thirteen percent said their parents were under the influence of drugs 'often' or 'all the time'.

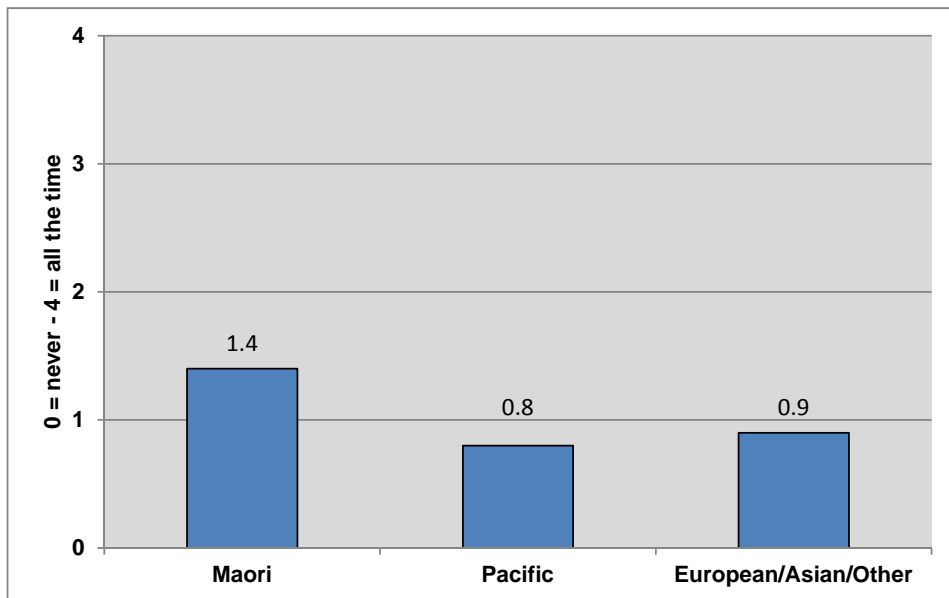
Table 17.2: Police detainees' family life when they were growing up (i.e. less than 17 years of age), 2010

Family life	Never = 0	Hardly ever = 1	Sometimes = 2	Often = 3	All the time = 4	Mean score (0=never – 4=all the time)
Main earner unemployed/ temporary employment	60%	9%	10%	9%	13%	1.1
Parent knew where you were	6%	5%	13%	20%	57%	3.2
Parent gave praise/ support	10%	8%	24%	21%	37%	2.7
Parent in trouble with police	69%	13%	11%	4%	3%	0.6
Parent drunk	29%	15%	25%	18%	13%	1.7
Parent under influence of drugs	74%	5%	8%	6%	7%	0.7
Parent physically aggressive	44%	12%	23%	14%	7%	1.3
Parent physically punish	36%	13%	25%	18%	9%	1.5



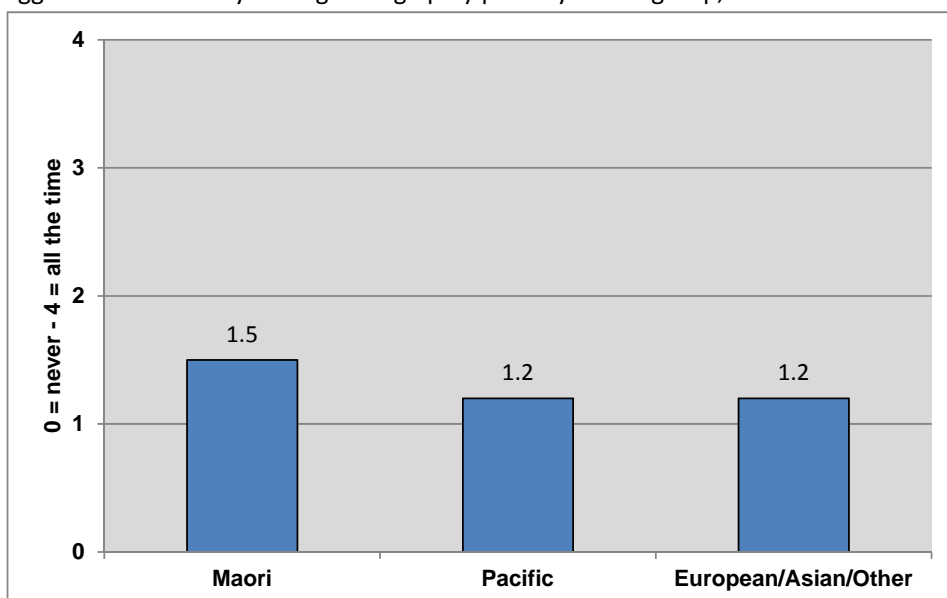
Maori detainees were more likely to have a main income earner who was often unemployed or in temporary employment than Pacific detainees (1.4 vs. 0.8,  $p=0.0005$ ) and Europeans/Asian/Other detainees (1.4 vs. 0.9,  $p=0.0001$ ) (Figure 17.3).

Figure 17.3: Mean score of how often the police detainees' main income earners were unemployed or in temporary work when they were growing up by primary ethnic group, 2010



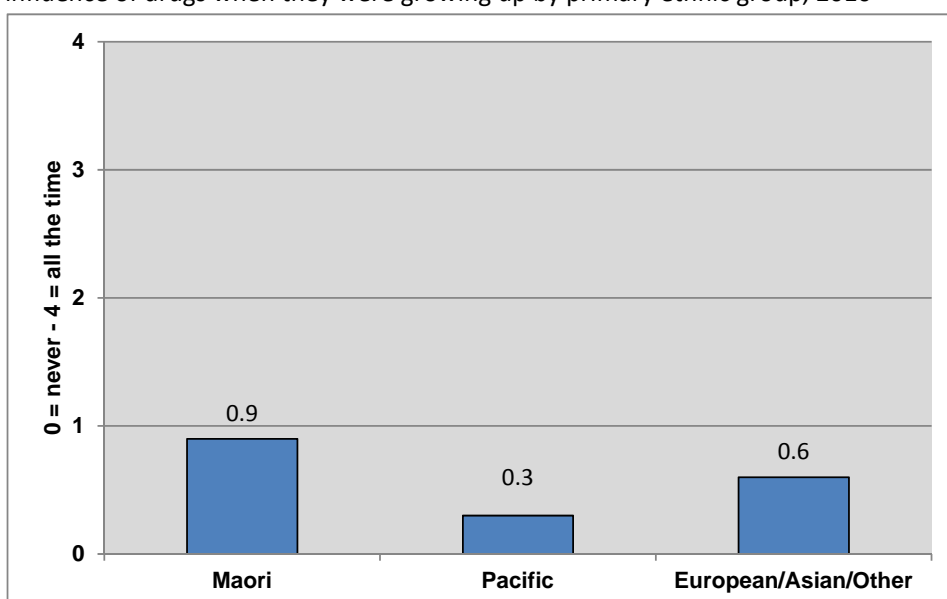
Maori detainees were more likely to have a parent who was often physically aggressive than Pacific detainees (1.5 vs. 1.2,  $p=0.0388$ ) and Europeans/Asian/Other detainees (1.5 vs. 1.2,  $p=0.0388$ ) (Figure 17.4).

Figure 17.4: Mean score of how often the police detainee's parents were physically aggressive when they were growing up by primary ethnic group, 2010



Maori detainees were more likely to have a parent who was often drunk than Pacific detainees (0.8 vs. 0.3,  $p < 0.0001$ ) and Europeans/Asian/Other detainees (0.8 vs. 0.4,  $p < 0.0001$ ). Maori detainees were also more likely to have a parent who was often under the influence of drugs than Pacific detainees (0.9 vs. 0.3,  $p < 0.0001$ ) and Europeans/Asian/Other detainees (0.9 vs. 0.6,  $p = 0.0011$ ) (Figure 17.5).

Figure 17.5: Mean score of how often the police detainee's parents were under the influence of drugs when they were growing up by primary ethnic group, 2010



### *Peer group during adolescence*

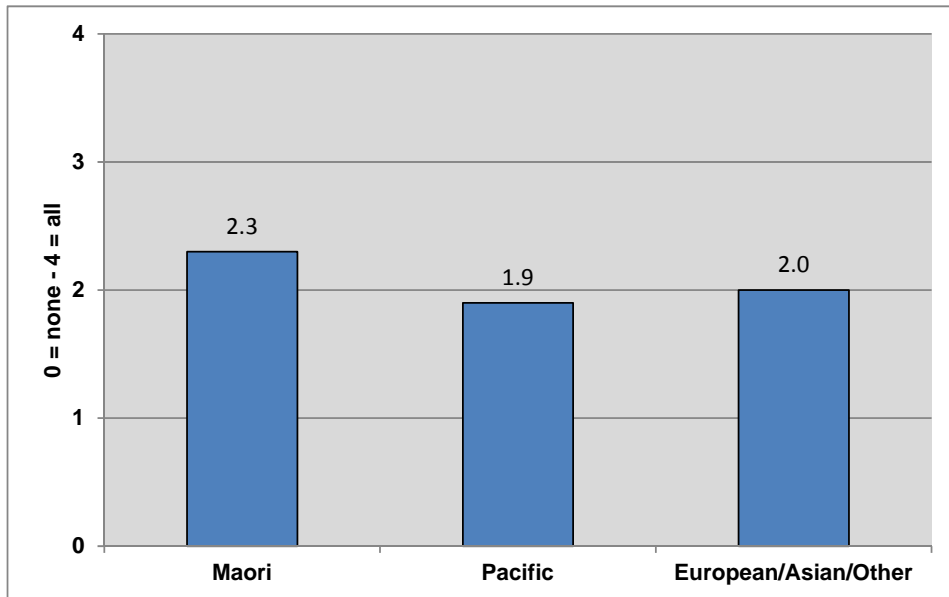
The police detainees were asked a series of questions about how many of their friends at school (i.e. before the age of 17 years) were involved in alcohol and drug use, truancy from school, serious disciplinary incidents at school and criminal offending. The interviewer read out a scale from 'none' to 'all'. Forty-one percent of the detainees said 'most' or 'all' of their school friends got drunk more than once a week (Table 17.3). Thirty-six percent of the detainees said that 'most' or 'all' their school friends smoked cannabis. Thirty-six percent- of the detainees said that 'most' or 'all' of their school friends were often truant from school.

Table 17.3: Police detainees' peer group during adolescence (i.e. less than 17 years of age), 2010

Peer group during adolescence	None = 0	Hardly any = 1	Some = 2	Most = 3	All = 4	Mean score (0=none – 4=all)
Friends drunk more than once a week	19%	10%	30%	26%	15%	2.1
Friends smoked cigarettes nearly every day	12%	8%	30%	30%	20%	2.4
Friends smoked cannabis	19%	11%	35%	23%	13%	2.0
Friends often got into fights	21%	17%	35%	15%	11%	1.8
Friends often skipped school	14%	8%	41%	24%	12%	2.1
Friends got expelled/suspended	28%	17%	39%	12%	5%	1.5
Friends shoplifted	34%	14%	35%	11%	6%	1.4
Friends broke into cars/ houses	47%	12%	28%	9%	5%	1.1
Friends warned/arrested by police	31%	12%	34%	15%	8%	1.6

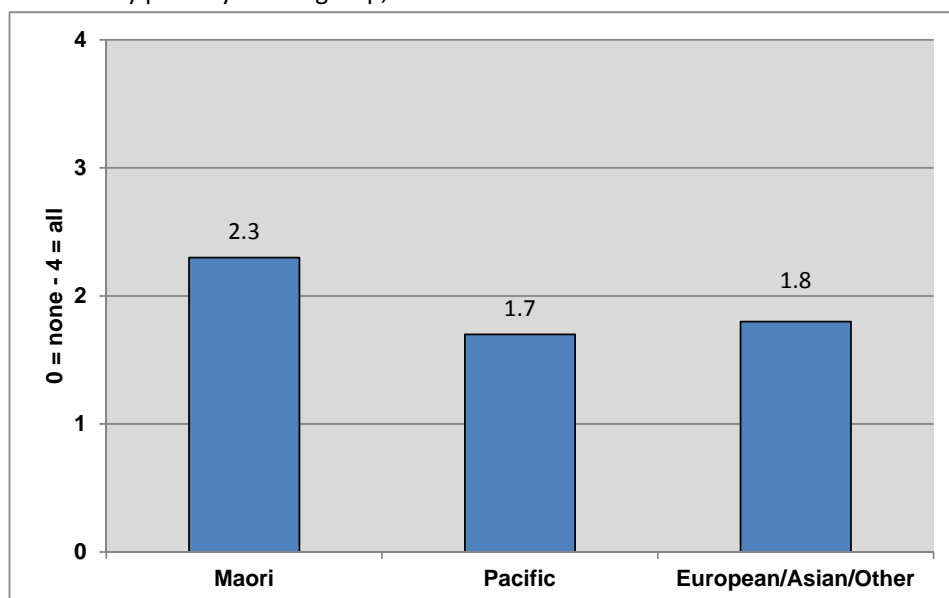
Maori detainees were more likely to have school friends who got drunk more than once a week than Pacific Island detainees (2.3 vs. 1.9,  $p=0.0051$ ) and European/ Asian/ Other detainees (2.3 vs. 2.0,  $p=0.0036$ ) (Figure 17.6).

Figure 17.6: Mean score of how many of the police detainees' school friends got drunk more than once a week by primary ethnic group, 2010



Maori detainees were more likely to have school friends who smoked cannabis than Pacific Island detainees (2.3 vs. 1.7,  $p=0.0001$ ) and European/ Asian/ Other detainees (2.3 vs. 1.8,  $p<0.0001$ ) (Figure 17.7).

Figure 17.7: Mean score of how many of the police detainees' school friends had smoked cannabis by primary ethnic group, 2010



Maori detainees were more likely to have school friends who often got into fights than Pacific detainees (2.1 vs. 1.7,  $p=0.0022$ ) and European/ Asian/ Other detainees (2.1 vs. 1.6,  $p<0.0001$ ). Maori detainees were more likely to have school friends who broke into cars or houses than Pacific detainees (1.5 vs. 1.1,  $p=0.002$ ) and European/ Asian/ Other detainees (1.5 vs. 0.8,  $p<0.0001$ ). Maori detainees were more likely to have school friends who were warned or arrested by police than Pacific detainees (1.8 vs. 1.4,  $p=0.0055$ ) and European/ Asian/ Other detainees (1.8 vs. 1.4,  $p<0.0001$ ).

#### *Behaviour during adolescence*

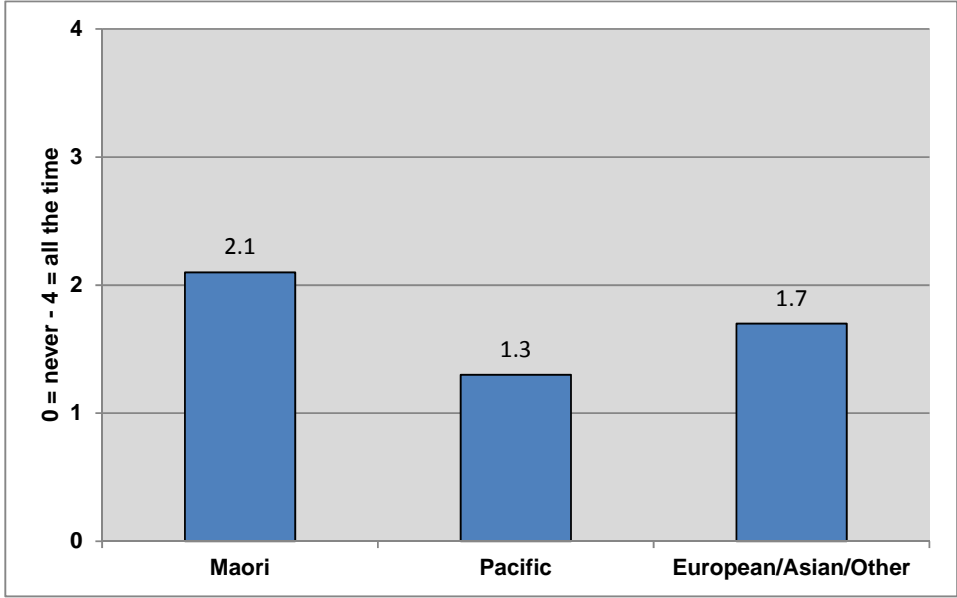
The police detainees were asked how often they had been involved in a range of behaviours before they were 17 years old. The interviewer read a scale from 'never' to 'all the time'. Sixty-three percent of the detainees had been warned or arrested by police before they were 17 years old (Table 17.4). Sixty-one percent of the detainees had been suspended or expelled from school. Fifty-two percent of the detainees had shoplifted and 40% had broken into a car or house during adolescence.

Table 17.4: Police detainees' behaviour during adolescence (i.e. before 17 years old), 2010

<b>Behaviour during adolescence</b>	<b>Never = 0</b>	<b>Hardly ever = 1</b>	<b>Sometimes = 2</b>	<b>Often = 3</b>	<b>All the time = 4</b>	<b>Mean score (0=never – 4=all the time)</b>
Got drunk	17%	21%	33%	22%	8%	1.8
Smoked cigarettes	25%	11%	18%	21%	25%	2.1
Smoked cannabis	29%	12%	23%	20%	15%	1.8
Got into fights	35%	17%	25%	12%	10%	1.4
Skipped school	22%	11%	32%	21%	14%	1.9
Were bullied, threatened/ intimidated	56%	14%	20%	7%	3%	0.9
Suspended/ expelled from school	39%	25%	22%	9%	5%	1.2
Shoplifted	48%	15%	24%	8%	5%	1.1
Broke into cars/ houses	60%	10%	18%	7%	5%	0.7
Warned/ arrested by police	37%	20%	27%	11%	6%	1.3

Maori detainees were more likely to have often smoked cannabis during adolescence than Pacific detainees (2.1 vs. 1.3,  $p<0.0001$ ) and European/ Asian/ Other detainees (2.1 vs. 1.7,  $p=0.0007$ ). European/ Asian/ Other detainees were also more likely to have often smoked cannabis during adolescence than Pacific detainees (1.7 vs. 1.3,  $p=0.0016$ ) (Figure 17.8).

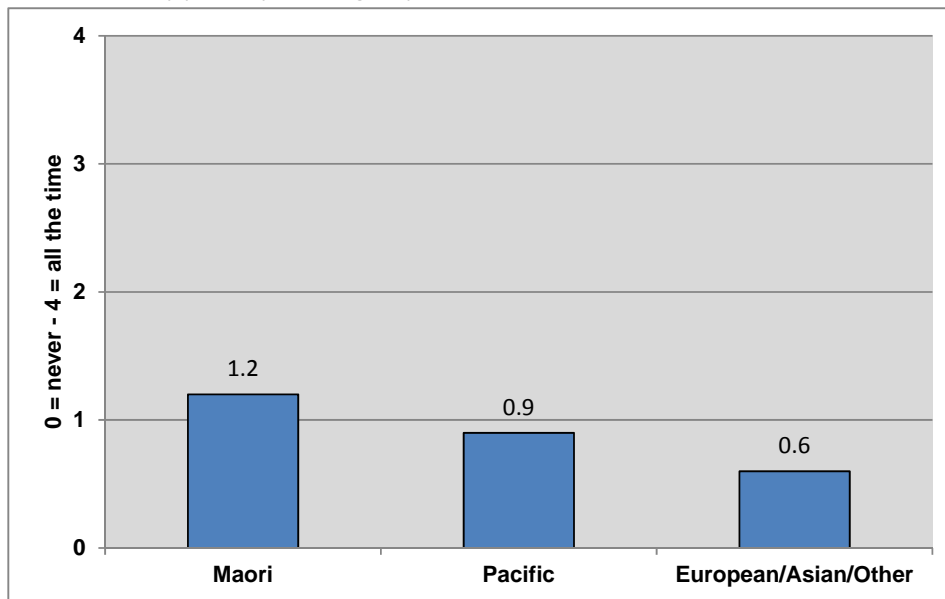
Figure 17.8: Mean score of how often police detainees smoked cannabis during adolescence by primary ethnic group, 2010



Maori detainees were more likely to have often broken into cars or houses during adolescence than Pacific detainees (1.2 vs. 0.9,  $p=0.0285$ ) and European/ Asian/ Other detainees (1.2 vs. 0.6,  $p<0.0001$ ) (Figure 17.9).



Figure 17.9: Mean score of how often police detainees broke into cars and houses during adolescence by primary ethnic group, 2010



Maori detainees were more likely to have often been warned or arrested by police during adolescence than Pacific detainees (1.5 vs. 1.3,  $p=0.0441$ ) and European/ Asian/ Other detainees (1.5 vs. 1.1,  $p<0.0001$ ).

### Statistical associations between quality of parenting, adolescent behaviour, adolescent peer group and heavier drugs use

In earlier chapters we investigated the statistical associations between the demographic characteristics of the police detainees and heavier alcohol and drug use. In this section we investigate the statistical associations between the quality of parenting, adolescent peer group and adolescent behaviour of the detainees and heavier alcohol and drug use. The analysis was completed using bivariate analysis. More sophisticated multivariate models will be developed in the near future. A variable for poor parenting was created by enumerating the scale used for the parenting questions (i.e. 0 = 'never', 4 = 'all the time') and then calculating a mean score for all eight questions of the parenting section. Those with a total mean score of 16 or higher for all eight questions of the parenting section were classified as experiencing poor parenting. This is the equivalent of a detainee saying they experienced on

average eight aspects of negative parenting at least ‘sometimes’ when they were growing up. A similar approach was used to create a variable for a detainee having a poorly behaved peer group. The scale for the peer group questions was enumerated (i.e. 0 = ‘none’, 4 = ‘all’) and those scoring 18 or more for all the nine peer behaviour questions were designated as having a poor peer group. This is the equivalent of a detainee saying at least ‘some’ of their peer group was poorly behaved with respect to nine different types of delinquent behaviour. Finally, the detainees’ own adolescent behaviour scale was enumerated (i.e. 0 = ‘never’, 4 = ‘all the time’) and those scoring 20 or more for all the 10 adolescent behaviour questions were categorised as having poor adolescent behaviour. This is the equivalent of a detainee saying that during their adolescence they were involved in 10 different types of delinquent behaviour at least ‘some’ of the time. The heavier use of alcohol, cannabis and methamphetamine were defined in the same way as previous chapters (Table 17.5).

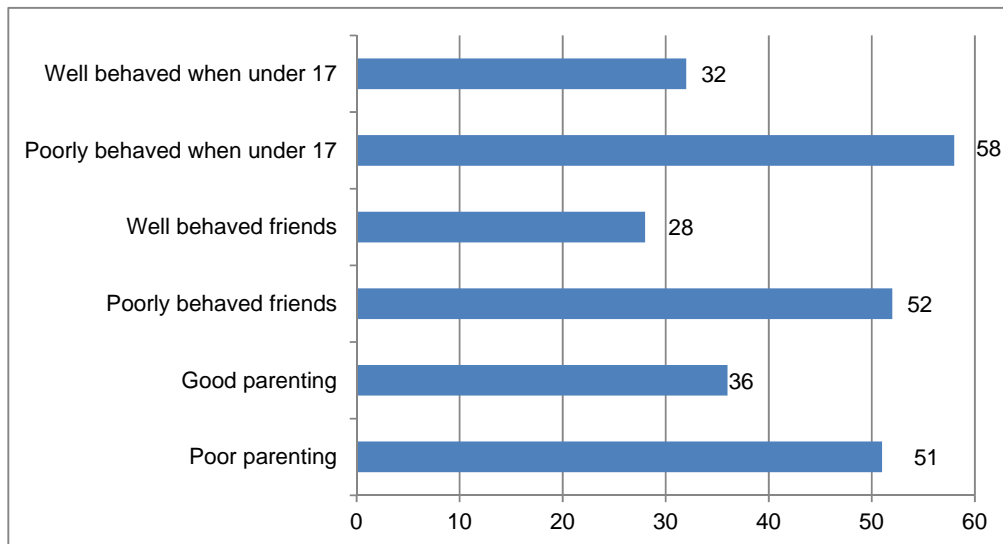
Table 17.5: The association between quality of parenting, adolescent behaviour, adolescent peer group and heavier alcohol and drug use, 2010

	High consumption of alcohol* at least twice a week in the past 30 days		Used cannabis at least three times a week in the past 30 days		Used meth-amphetamine at least once a week in the past 30 days	
	%	p-value	%	p-value	%	p-value
(n=806)						
Generally poor parenting when under 17 years old	26	0.7406	51	0.0031	13	0.0453
Generally good parenting when under 17 years old	28		36		7	
Generally poorly behaved friends when under 17 years old	35	<0.0001	52	<0.0001	12	<0.0001
Generally well behaved friends when under 17 years old	21		28		4	
Generally poorly behaved when under 17 year old	37	0.0005	58	<0.0001	16	<0.0001
Generally well behaved when under 17 year old	24		32		5	

\*Five or more drinks on a single occasion for males or three or more drinks on a single occasion for females

Detainees who experienced poor parenting were more likely than those who had good parenting to be heavier cannabis users (51% vs. 36%,  $p=0.0031$ ) (Figure 17.10) and heavier methamphetamine users (13% vs. 7%,  $p=0.0453$ ) (Figure 17.11).

Figure 17.10: Proportion of police detainees who used cannabis at least three times per week by quality of parenting, adolescent behaviour and adolescent peer group, 2010



Detainees who had badly behaved school friends were more likely than those who had well behaved school friends to be heavier alcohol drinkers (35% vs. 21%,  $p<0.0001$ ), to be heavier cannabis users (52% vs. 28%,  $p<0.0001$ ) and to be heavier methamphetamine users (12% vs. 4%,  $p<0.0001$ ) (Figure 17.11 and Figure 17.12). Detainees who were badly behaved as adolescents were more likely than those who were generally well behaved as adolescents to be heavier alcohol drinkers (37% vs. 24%,  $p=0.0005$ ), to be heavier cannabis users (58% vs. 32%,  $p<0.0001$ ) and to be heavier methamphetamine users (16% vs. 5%,  $p<0.0001$ ).

Figure 17.11: Proportion of police detainees who drank high amounts of alcohol at least twice per week by quality of parenting, adolescent behaviour and adolescent peer group, 2010

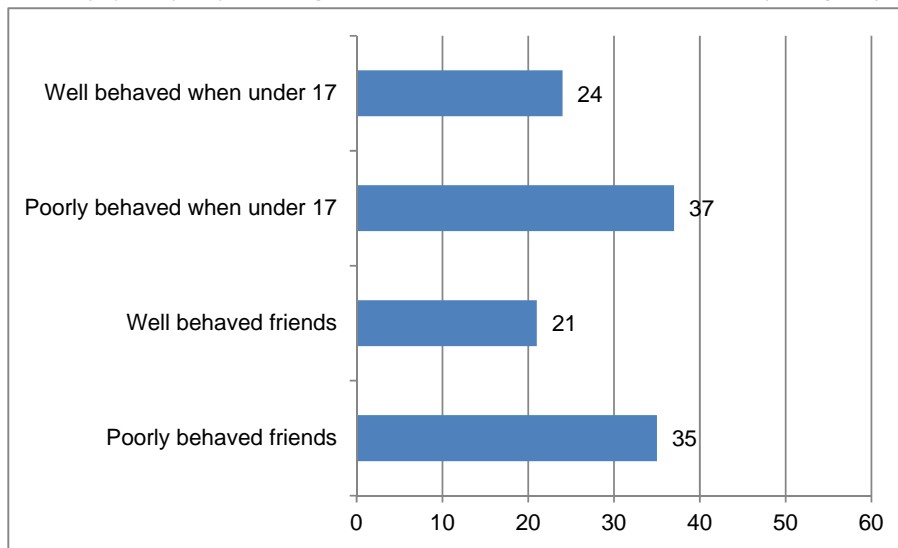
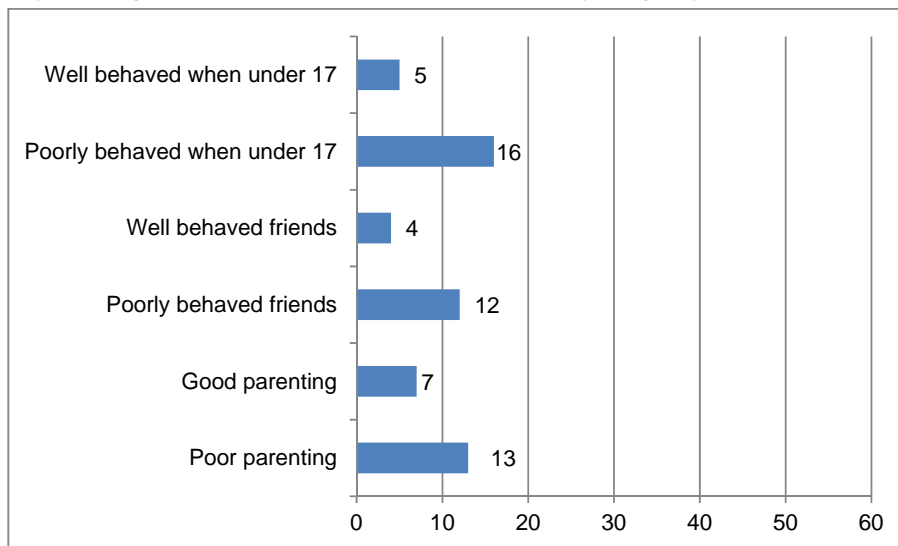


Figure 17.12: Proportion of police detainees who used methamphetamine at least weekly by quality of parenting, adolescent behaviour and adolescent peer group, 2010



## Sexual abuse

The police detainees were asked if they had ever been sexually abused and whether they had been sexually abused on a number of occasions (i.e. repeatedly by the same or different

people). Eighteen percent of the police detainees reported being sexually abused, and 13% reported being sexually abused on a number of occasions (Table 17.6).

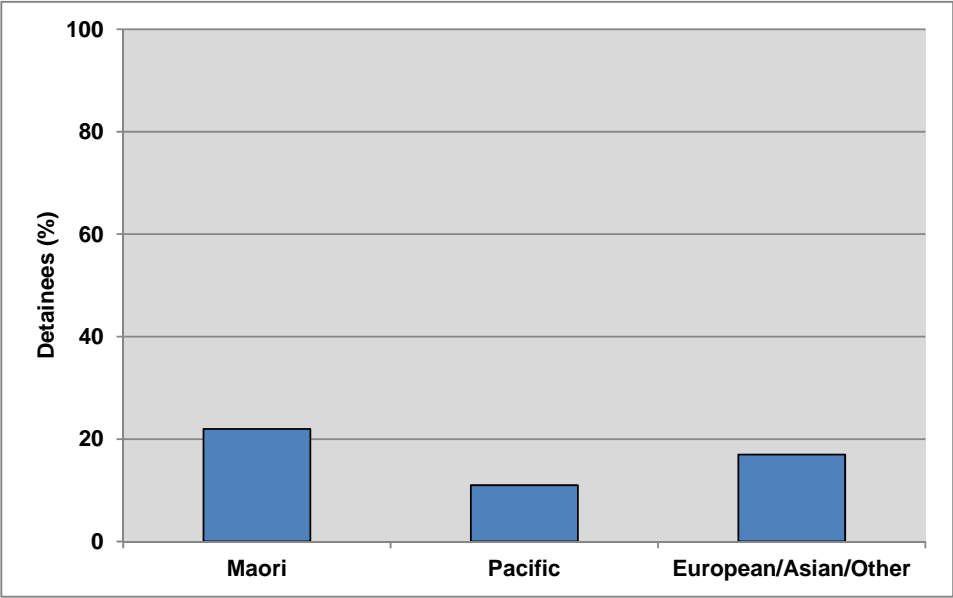
Table 17.6: Abuse of police detainees by ethnicity, 2010

	Maori (n=285)	Pacific Island (n=106)	European/ Asian/ Other (n=380)	All (n=771)
Ever sexually abused (%)	22	11	17	18
Sexually abused on a number of occasions (%)	14	10	12	13

\* There were not sufficient numbers of Asian detainees in the sample to separate them from Europeans for the purpose of this analysis

Maori detainees were more likely than Pacific Island detainees to have ever been sexually abused (22% vs. 11%,  $p=0.0217$ ) (Figure 17.13).

Figure 17.13: Proportion of police detainees who had ever been sexually abused by primary ethnicity, 2010



## Summary

- Fifteen percent of the police detainees had been in CYF care when they were growing up
- Twelve percent of the detainees had been in youth detention when they were growing up
- Maori detainees were more likely to have been in CYF care and youth detention when they were growing up
- Thirty-one percent of the police detainees said their parents were drunk 'often' or 'all the time'
- Twenty-two percent of detainees said the main income earner in their family was unemployed or in temporary employment 'often' or 'all the time'
- Maori detainees were more likely to report their parents were unemployed or in temporary work
- Maori detainees were more likely to report their parents were physically aggressive
- Thirty-six percent of the detainees said 'most' or 'all' of their school friends smoked cannabis
- Forty-one percent of the detainees said 'most' or 'all' of their school friends got drunk more than once a week
- Maori detainees were more likely to have school friends who smoked cannabis
- Sixty-three percent of the detainees had been warned or arrested by police before they were 17 years old

- Sixty-one percent of the detainees had been suspended or expelled from school before they were 17 years old
- Maori detainees were more likely to have broken into cars and houses during adolescence
- Detainees who were poorly behaved as adolescents and who had poorly behaved peers at school were more likely to be heavier alcohol drinkers
- Detainees who experienced poor parenting, were poorly behaved as adolescents and who had poorly behaved peers at school were more likely to be heavier cannabis users
- Detainees who experienced poor parenting, were poorly behaved as adolescents and who had poorly behaved peers at school were more likely to be heavier methamphetamine users
- Eighteen percent of the detainees had been sexually abused
- Maori detainees were more likely to have been sexually abused

## Chapter 18 – Offending behaviour

### Introduction

Criminal offenders are often found to have high levels of drug use but there remains considerable debate about the extent to which crime and drug use are causally connected (see Bennett & Holloway, 2005; Hammersley, et al., 1989; Seddon, 2000). Offenders often have long histories of delinquent behaviour that pre-date their use of drugs. Offenders also often come from dysfunctional family backgrounds which increases their risk of both drug use and criminal activity. What is clearer from the existing research is that among already criminally active populations, the frequent use of expensive drugs tends to accelerate levels of acquisitive offending (see Bennett & Holloway, 2005). Recent research in New Zealand has found a strong and consistent association between the level of spending on methamphetamine and level of earnings from property crime and drug dealing (Wilkins & Sweetsur, 2008a, 2010b). Those police detainees spending \$1,000 or more on methamphetamine in the past month earned \$2,735 from property crime in the past month compared to those detainees who spent no money on methamphetamine who earned only \$368 from property crime in the past month (Wilkins & Sweetsur, 2010a). The criminal justice system can be an important avenue for encouraging criminally active drug users into drug treatment and reducing drug related drivers of crime (Bull, 2005; Hough, 1996; Payne, et al., 2008). The criminal justice system provides strong institutional incentives for detainees to enter and stay in programmes (i.e. to avoid more punitive options such as incarceration). This chapter presents findings on the recent offending of the detainees and makes some initial investigations of the associations between demographic variables, developmental factors and drug use and crime.

#### *Shoplifting in the previous month*

Fifteen percent of the police detainees reported shoplifting in the previous month (Table 18.1). Eight percent of the detainees had shoplifted weekly or more often in the past month.



Table 18.1: Frequency police detainees shoplifted in the previous month by location, 2010

Frequency shoplifted in past month (%)	Whangarei (n=110)	Auckland Central (n=267)	Wellington Central (n=149)	Christ-church Central (n=259)	Total (n=785)
Never	91	85	85	82	85
1-2 times	5	6	9	11	8
Once a week	1	4	3	2	3
More than once per week (but not daily)	3	3	1	3	3
Daily	1	2	2	3	2

#### *Property crime in the previous month*

Nineteen percent of the police detainee sample reported that they had committed a property crime in the previous month (Table 18.2). Seven percent of the detainees had committed a property crime weekly or more often over the past month.

Table 18.2: Frequency police detainees committed property crime in the previous month by location, 2010

Frequency committed property crime in past month (%)	Whangarei (n=110)	Auckland Central (n=267)	Wellington Central (n=149)	Christ-church Central (n=259)	Total (n=785)
Never	85	81	85	77	81
1-2 times	13	12	7	17	13
Once a week	2	3	3	3	3
More than once per week (but not daily)	0	3	2	2	2
Daily	1	2	3	1	2

#### *Drug selling in the previous month*

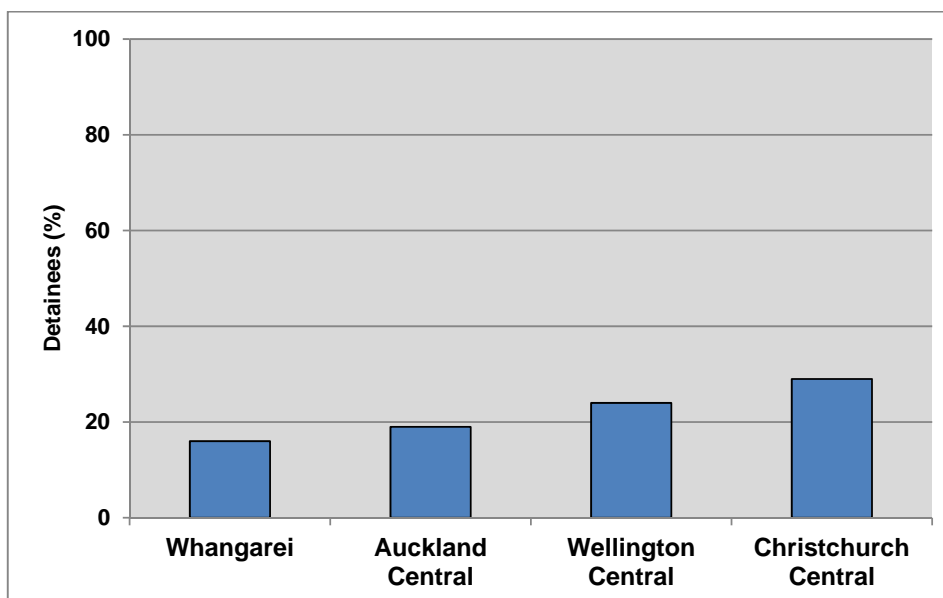
Twenty-three percent of the police detainees reported selling drugs in the previous month (Table 18.3). Seventeen percent of the detainees had sold drugs weekly or more often in the past month.

Table 18.3: Frequency police detainees sold drugs in the previous month by location, 2010

Frequency sold drugs in past month (%)	Whangarei (n=109)	Auckland Central (n=267)	Wellington Central (n=149)	Christchurch Central (n=259)	Total (n=784)
Never	84	81	76	71	77
1-2 times	4	4	3	8	5
Once a week	2	2	2	4	2
More than once per week (but not daily)	1	5	4	7	5
Daily	9	8	15	10	10

The detainees in Christchurch Central were more likely to have sold drugs in the previous month than those in Auckland Central (29% vs. 19%,  $p=0.0086$ ) and Whangarei (29% vs. 16%,  $p=0.0080$ ) (Figure 18.1).

Figure 18.1: Proportion of the police detainees who sold drugs in the previous month by location, 2010



### *Violent crime in the previous month*

Twenty-three percent of the police detainees reported they had committed a violent crime in the previous month (Table 18.4).

Table 18.4: Frequency police detainees committed violent crime in the previous month by location, 2010

Frequency committed violent crime in past month (%)	Whangarei (n=109)	Auckland Central (n=266)	Wellington Central (n=149)	Christchurch Central (n=259)	Total (n=783)
Never	75	81	75	73	77
1-2 times	22	17	18	24	20
Once a week	3	2	5	2	2
More than once per week (but not daily)	0	<1	2	1	1
Daily	0	0	1	<1	<1

### **Statistical associations between demographic characteristics and self-reported crime**

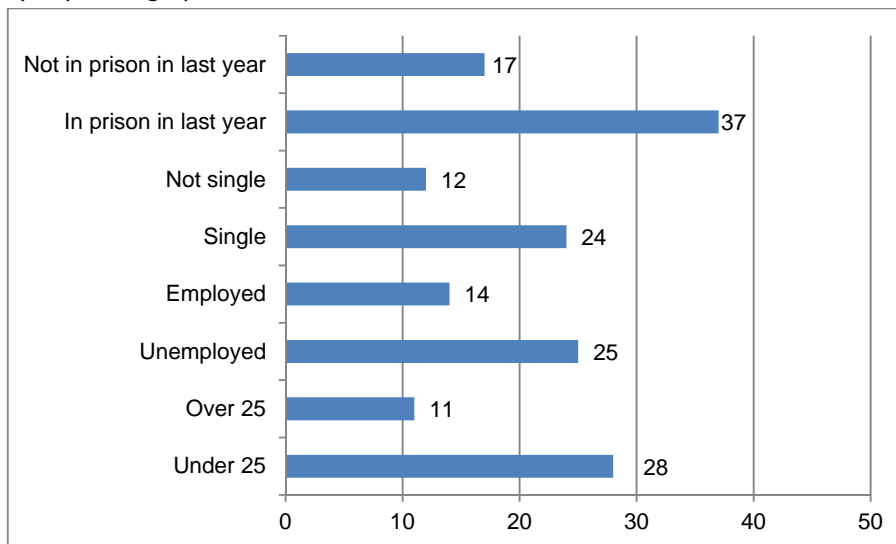
In earlier chapters we investigated the statistical associations between the demographic characteristics and adolescent development of the police detainees and heavier alcohol and drug use. In this section we investigated the statistical associations between the demographic characteristics of the police detainees and criminal activity in the previous 30 days (Table 18.5). The analysis was completed using bivariate analysis. More sophisticated multivariate models will be forthcoming.

Table 18.5: The association between demographic variables and self-reported criminal behaviour in the previous month, 2010

	Committed a property crime in past 30 days		Sold drugs in past 30 days		Committed a violent crime in past 30 days	
	%	p-value	%	p-value	%	p-value
<b>(n=784)</b>						
Male	20	0.1035	24	0.2121	24	0.4107
Female	12		17		20	
Under 25 years old	28	<0.0001	25	0.1055	24	1
25 years +	11		20		23	
Maori primary ethnicity	21	0.3068	25	0.3358	29	0.0070
Non-Maori primary ethnicity	18		22		20	
Unemployed/sickness benefit	25	0.0001	28	0.0021	27	0.0113
Not unemployed/sickness benefit	14		18		20	
Did not complete compulsory years of high school	22	0.0688	28	0.0011	28	0.0086
Completed compulsory years of high school	17		18		19	
Not living in a house or apartment	19	1	16	0.2104	23	1
Living in a house or apartment	19		23		24	
Single marital status	24	<0.0001	25	0.0970	21	0.0241
Not single marital status	12		20		28	
Prison in past 12 months	37	<0.0001	42	<0.0001	31	0.0775
No prison in past 12 months	17		20		22	

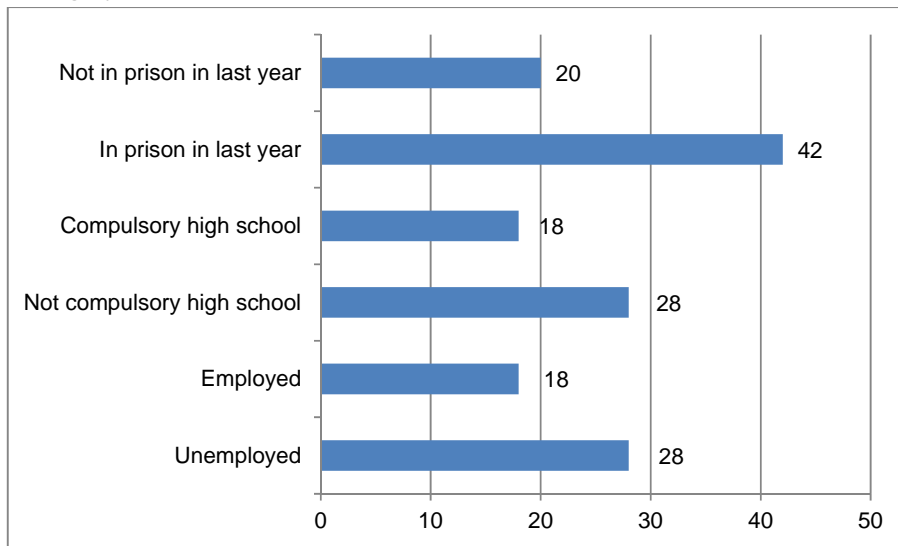
Police detainees who were younger than 25 years of age were more likely to have committed property crime in the previous 30 days than those aged 25 years or older (28% vs. 11%,  $p<0.0001$ ) (Figure 18.2). Detainees who were unemployed or on the sickness benefit were more likely than those not unemployed or on the sickness benefit to have committed a property crime in the previous 30 days (25% vs. 14%,  $p=0.0001$ ), to have sold drugs in the previous 30 days (28% vs. 18%,  $p=0.0021$ ) and to have committed a violent crime in the previous 30 days (27% vs. 20%,  $p=0.0113$ ) (Figure 18.3).

Figure 18.2: Proportion of police detainees who committed a property crime in the previous month by key demographic characteristics, 2010



Detainees who did not complete the compulsory years of high school education were more likely than those who did complete the compulsory years of high school education to have sold drugs in the previous 30 days (28% vs. 18%,  $p=0.0011$ ) and to have committed a violent crime in the previous 30 days (28% vs. 19%,  $p=0.0086$ ). Detainees who were of single marital status were more likely to have committed a property crime in the previous 30 days than those who were not of single marital status (24% vs. 12%,  $p<0.0001$ ).

Figure 18.3: Proportion of police detainees who sold drugs in the previous month by key demographic characteristics, 2010



Detainees who were not of single marital status were more likely to have committed a violent crime in the previous 30 days than those who were single (28% vs. 21%,  $p=0.0241$ ). Detainees who had been in prison in the previous 12 months were more likely than those who had not been in prison in the previous 12 months to have committed a property crime in the previous 30 days (37% vs. 17%,  $p<0.0001$ ) and to have sold drugs in the previous 30 days (42% vs. 20%,  $p<0.0001$ ). Maori detainees were more likely to have committed a violent crime in the previous 30 days than non-Maori detainees (29% vs. 20%,  $p=0.0070$ ).

### Statistical associations between the quality of parenting, adolescent behaviour, adolescent peer group and self-reported crime

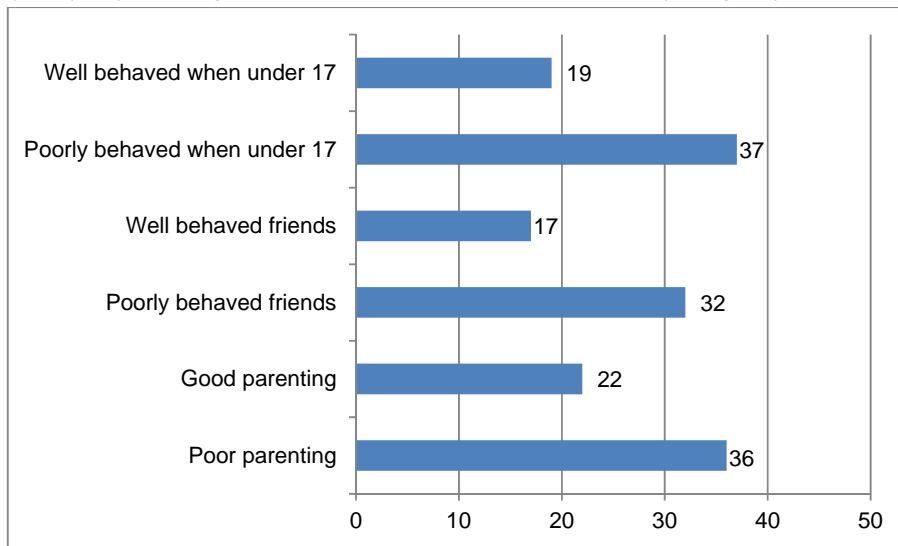
In a previous chapter we investigated the statistical associations between the quality of parenting, adolescent peer group and adolescent behaviour of the police detainees and heavier alcohol and drug use. Variables for poor parenting, poor adolescent behaviour and poorly behaved adolescent peer group were created from the relevant sections of the questionnaire. In this section we examined the associations between these same developmental variables and the detainees' self-reported criminal behaviour (Table 18.6).

Table 18.6: The association between the quality of parenting, adolescent behaviour, adolescent peer group and self-reported criminal behaviour in the previous month, 2010

(n=784)	Committed a property crime in past 30 days		Sold drugs in past 30 days		Committed a violent crime in past 30 days	
	%	p-value	%	p-value	%	p-value
Generally poor parenting when under 17 old	24	0.2658	29	0.1609	36	0.0011
Generally good parenting when under 17 years old	19		23		22	
Generally poorly behaved friends when under 17 years old	28	<0.0001	35	<0.0001	32	<0.0001
Generally well behaved friends when under 17 years old	15		16		17	
Generally poorly behaved when under 17 years old	29	0.0002	43	<0.0001	37	<0.0001
Generally well behaved when under 17 years old	16		17		19	

Police detainees who had experienced poor parenting were more likely to have committed a violent crime in the previous 30 days than those who had experienced good parenting (36% vs. 22%,  $p=0.0011$ ) (Figure 18.4).

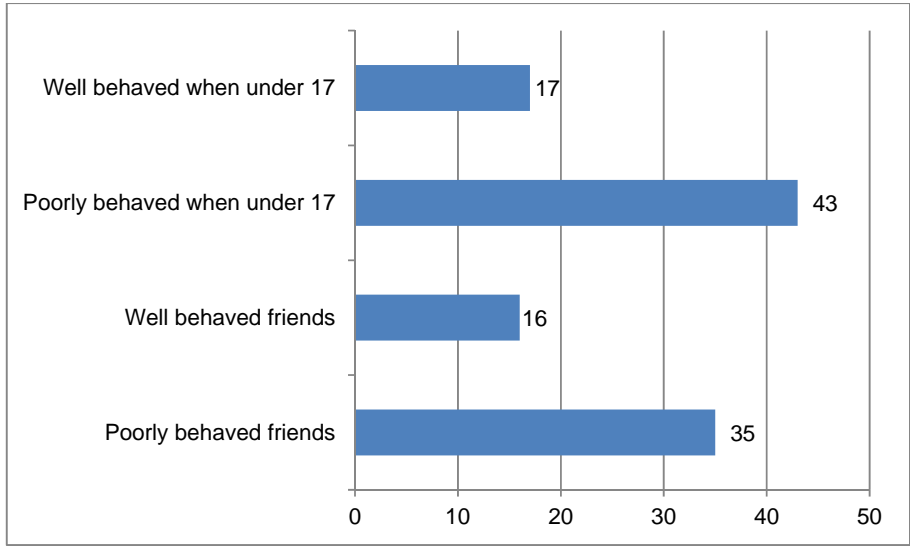
Figure 18.4: Proportion of police detainees who committed a violent crime in the previous month by quality of parenting, adolescent behaviour and adolescent peer group, 2010



Detainees who had poorly behaved school friends were more likely than those who had well behaved school friends to have committed a property crime in the previous 30 days (28% vs. 15%,  $p < 0.0001$ ), to have sold drugs in the previous 30 days (35% vs. 16%,  $p < 0.0001$ ) and to have committed a violent crime in the previous 30 days (32% vs. 17%,  $p < 0.0001$ ). Detainees who were poorly behaved as adolescents were more likely than those who were well behaved as adolescents to have committed a property crime in the previous 30 days (29% vs. 16%,  $p = 0.0002$ ), to have sold drugs in the previous 30 days (43% vs. 17%,  $p < 0.0001$ ) and to have committed a violent crime in the previous 30 days (37% vs. 19%,  $p < 0.0001$ ) (Figure 18.5).



Figure 18.5: Proportion of police detainees who sold drugs in the previous month by quality of parenting, adolescent behaviour and adolescent peer group, 2010



### Statistical associations between drug use and self-reported crime

Finally, we investigated the associations between heavier alcohol and drug use by the police detainees and self-reported criminal behaviour (Table 18.7).

Table 18.7: The association between heavier use of alcohol and drug use and self-reported criminal behaviour in the previous month, 2010

	Committed a property crime in past 30 days		Sold drugs in past 30 days		Committed a violent crime in past 30 days	
	%	p-value	%	p-value	%	p-value
High consumption of alcohol* at least twice a week in the past 30 days	26	0.0031	29	0.0126	28	0.0886
Did not consume high amounts of alcohol* at least twice a week in the past 30 days	17		21		22	
Used cannabis at least three times a week in the past 30 days	26	0.0004	44	<0.0001	31	0.0003
Did not use cannabis at least three times a week in the past 30 days	16		10		19	
Used methamphetamine at least once a week in the past 30 days	31	0.0173	58	<0.0001	30	0.2698
Did not use methamphetamine at least once a week in the past 30 days	18		20		23	

\*Five or more drinks on a single occasion for males or three or more drinks on a single occasion for females

Detainees who had consumed heavier quantities of alcohol were more likely than those who had not consumed heavier quantities of alcohol to have committed a property crime in the previous 30 days (26% vs. 17%,  $p=0.0031$ ) and to have sold drugs in the previous 30 days (29% vs. 21%,  $p=0.0126$ ) (Figure 18.6 and 18.7). Detainees who were heavier users of cannabis were more likely than those who were not heavier users of cannabis to have committed a property crime in the previous 30 days (26% vs. 16%,  $p=0.0004$ ), to have sold drugs in the previous 30 days (44% vs. 10%,  $p<0.0001$ ) and to have committed a violent crime in the previous 30 days (31% vs. 19%,  $p=0.0003$ ). Detainees who were heavier users of methamphetamine were more likely than those who were not heavier users of methamphetamine to have committed a property crime in the previous 30 days (31% vs. 18%,  $p=0.0173$ ) and to have sold drugs in the previous 30 days (58% vs. 20%,  $p<0.0001$ ).

Table 18.8: Proportion of alcohol and drug using police detainees who committed a property crime in the previous month, 2010

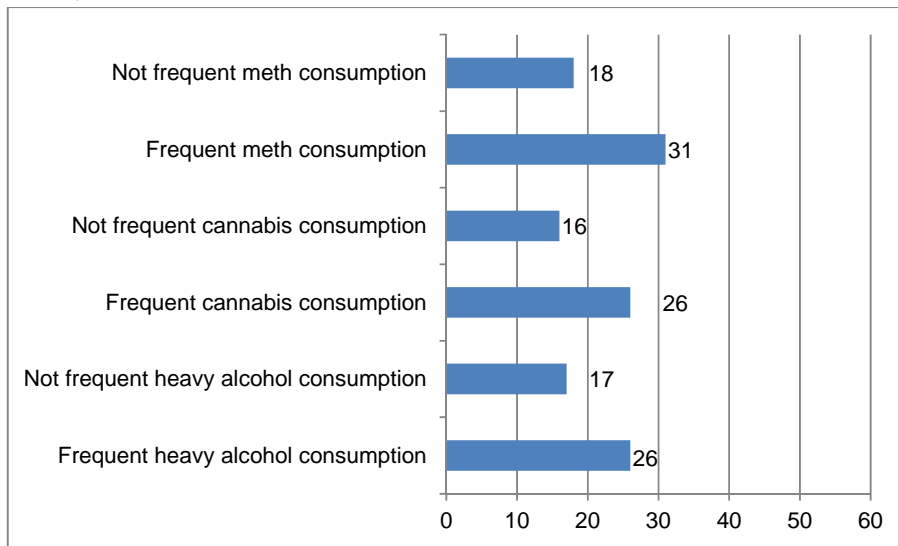
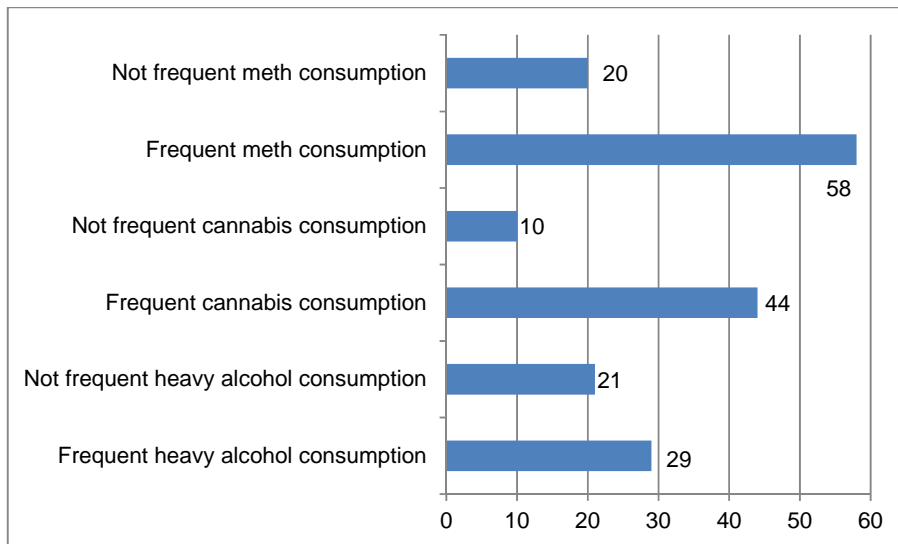


Table 18.9: Proportion of alcohol and drug using police detainees who sold drugs in the previous month, 2010



## Summary

- Fifteen percent of the police detainees reported shoplifting in the past month
- Nineteen percent of the detainees reported they had committed a property crime in the past month
- Twenty-three percent of the detainees reported they had sold drugs in the past month
- Twenty-three percent of the detainees reported they had committed a violent crime in the past month
- Detainees who were under 25 years old, unemployed or on a sickness benefit, of single marital status and who had been in prison in the past 12 months were more likely to have committed a property crime in the past 30 days
- Detainees who were unemployed or on a sickness benefit, who did not complete the compulsory years of high school education, and who had been in prison in the past 12 months were more likely to have sold drugs in the past 30 days
- Detainees who were of Maori ethnicity, who were unemployed or on a sickness benefit, who did not complete the compulsory years of high school education, and who were not of single marital status were more likely to have committed a violent crime in the past 30 days
- Detainees who had consumed heavier quantities of alcohol were more likely to have committed a property crime and sold drugs in the previous month
- Detainees who were heavier users of cannabis were more likely to have committed a property crime, sold drugs and committed a violent crime in the previous month
- Detainees who were heavier users of methamphetamine were more likely to have committed a property crime and to have sold drugs in the previous month

## Chapter 19 - History of contact with criminal justice system

### Introduction

Contact with the police and the criminal justice system is increasingly viewed as an important opportunity to find a 'circuit breaker' which will end a detainee's cycle of alcohol and drug use, criminal offending and arrest (Caulkins & Reuter, 2009). Contact with the criminal justice system potentially provides an opportunity to assess a detainee's alcohol and drug use and the role it plays in their offending, and include alcohol and drug treatment and other interventions as part of their sentencing requirements as appropriate. This chapter presents findings on the detainees' histories of arrest, conviction and imprisonment.

#### *Arrest history*

The police detainees reported they had been arrested a mean of 3 times (median=2, range 1-30) in the past year. The detainees had been first arrested at a mean age of 18 years. The detainees were asked to specify what offence(s) they were arrested for over the previous 12 months. Table 19.1 presents the percentage of detainees who were arrested for each type of offence during the previous 12 months. The offence 'Against Justice' refers to crimes against the justice system itself (i.e. the courts, the legal system and the police). Arrest for 'Against Justice' often occurs when detainees fail to comply with court orders related to a previous offence such as breach of bail, breach of a non-association order, failure to appear in court, breach of a protection order, breach of parole and breach of periodic detention. The interviewers were encouraged to ask the detainees to name the original offence in instances where the detainee had been arrested for 'Against Justice' to clarify this broad category. Where this information was available arrests for 'Against Justice' were coded by the original offence. The serious assault category included arrests for partner violence (i.e. 'male assaults female'). The detainees had been arrested for a wide range of different offences, including 'Against Justice' (39%), 'assault' (30%), 'driving offences' (16%), 'public disorder' (13%), 'burglary' (12%), 'cannabis offences' (11%) and 'theft' (9%) (Table 19.1).

Table 19.1: Proportion of police detainees who were arrested for different offences in the past 12 months by location, 2010

Offence arrested for in past 12 months (%)	Whangarei (n=104)	Auckland Central (n=253)	Wellington Central (n=143)	Christchurch Central (n=239)	Total (n=739)
Against Justice (unspecified)	25	42	35	45	39
Driving offence	22	14	17	15	16
Assault (unspecified)	20	10	13	13	13
Serious assault	13	11	15	15	13
Public disorder	12	10	15	14	13
Burglary	13	9	10	15	12
Drugs (cannabis only)	13	12	9	9	11
Theft	6	7	8	12	9
Warrant to arrest (unspecified)	3	10	10	9	9
Car conversion etc.	6	7	5	10	7
Shoplifting	10	4	6	7	6
By-laws breach	5	1	8	8	5
Wilful damage	5	3	3	8	5
Intimidation/ threat	8	2	4	5	4
Trespass	1	3	2	8	4
Drugs (not cannabis)	5	5	6	2	4
Destruction of property	2	4	2	2	3
Family offence	1	4	5	1	3
Fines	4	3	2	2	3
Fraud	4	3	4	1	3
Receiving	2	4	1	4	3
Robbery	1	5	1	2	3
Grievous assault	1	2	3	2	2
Minor assault	5	3	1	2	2
Drugs (unspecified)	4	2	2	<1	2
Arms act offence	2	2	1	<1	1
Group assembly	1	1	0	1	1
Sexual attack	1	1	2	0	1
Against justice (special)	0	0	0	<1	<1
Detox	0	0	0	<1	<1
Dishonesty miscellaneous	0	<1	0	0	<1
Immigration	0	0	1	<1	<1
Kidnapping and abduction	0	0	0	1	<1
No charge (detained)	0	0	1	0	<1
Other	0	0	0	<1	<1
Postal/ rail/ fire service abuse	0	<1	1	<1	<1
Vagrancy offences	1	<1	0	<1	<1

Those police detainees who had indicated that they had been arrested for a 'drug offence' in the past 12 months were asked what drug type(s) they had been arrested for. Seventy-six percent of the detainees reported they had been arrested for a cannabis offence, 21% said they had been arrested for a methamphetamine offence and 10% for an alcohol related offence (Table 19.2).

Table 19.2: Drug type(s) involved in arrest for a drug offence in the past 12 months, 2010

Drug involved in drugs offence (%)	Total (n=100)
Cannabis	76
Methamphetamine	21
Alcohol	10
Ecstasy	2
Morphine	1
LSD	1
Heroin	1

### *Conviction history*

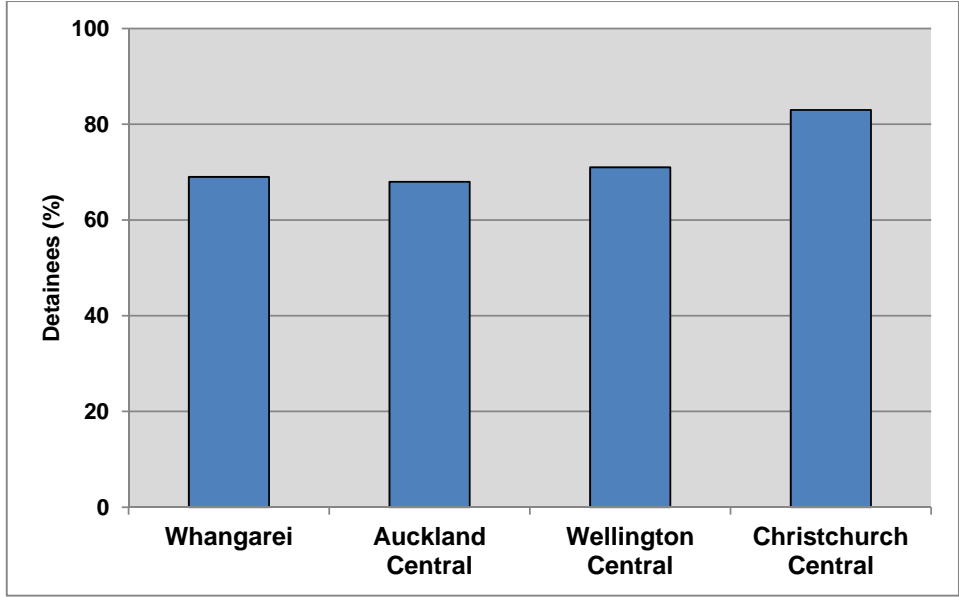
Seventy-three percent of the police detainees had been convicted of a criminal offence in their lifetimes (Table 19.3). The detainees had been first convicted of a crime at a mean age of 18 years old. Twenty percent of those convicted of a criminal offence received treatment for drug and alcohol issues as part of their sentence.

Table 19.3: Police detainees' conviction history

Arrest history	Whangarei (n=106)	Auckland Central (n=266)	Wellington Central (n=147)	Christchurch Central (n=259)	Total (n=778)
Ever convicted of a criminal offence	69	68	71	83	73
Ever been in prison	37	36	37	43	39
Imprisonment in past 12 months	9	11	14	16	13

Detainees in Christchurch Central were more likely to have ever been convicted of a criminal offence than those in Auckland Central (83% vs. 68%,  $p<0.0001$ ), Wellington Central (83% vs. 71%,  $p=0.0038$ ) and Whangarei (83% vs. 69%,  $p=0.0031$ ) (Figure 19.1).

Figure 19.1: Proportion of police detainees who had been convicted of a crime by location, 2010



Those detainees who had been convicted of a criminal offence were asked what crimes they had been convicted of. The detainees were most often convicted for ‘assault’ (30%), a ‘driving offence’ (29%), ‘burglary’ (25%), , ‘theft’ (14%), car conversion (13%) and cannabis offences (10%) (Table 19.4).



Table 19.4: Proportion of police detainees who were convicted of different crimes by location (of those who had been convicted of a crime), 2010

Criminal convictions (%)	Whangarei (n=70)	Auckland Central (n=161)	Wellington Central (n=89)	Christ- church Central (n=215)	Total (n=535)
Driving offence	19	24	40	32	29
Burglary	27	21	28	26	25
Assault (unspecified)	20	10	18	16	15
Theft	10	11	17	17	14
Car conversion etc.	10	14	9	15	13
Drugs (cannabis only)	13	9	18	7	10
Public disorder	6	6	19	9	9
Serious assault	13	6	10	8	8
Shoplifting	13	4	13	6	8
Robbery	6	7	10	6	7
Drugs (unspecified)	10	9	4	4	6
Wilful damage	4	3	4	7	5
Intimidation/ threat	1	4	6	7	5
Trespass	1	7	7	4	5
Fraud	4	2	11	4	5
Against justice (unspecified)	6	3	1	5	4
Receiving stolen goods	1	4	8	4	4
Grievous assault	4	3	3	6	4
Destruction of property	3	2	7	1	3
Minor assault	3	2	4	3	3
By-laws breach	4	0	3	4	3
Drugs (not cannabis)	0	2	6	2	2
Arms act offence	4	2	2	1	2
Family offence	1	0	0	1	1
Group assembly	1	2	1	1	1
Sexual attack	0	1	1	<1	1
Kidnapping and abduction	0	0	0	2	1
Homicide	1	1	1	0	1
Warrant to arrest (unspecified)	1	0	0	0	<1
Fines	0	1	1	0	<1
Dishonesty miscellaneous	0	1	0	0	<1
Postal/ rail/ fire services abuse	0	0	1	0	<1
Sexual affront	0	1	1	0	<1
Endangering	0	0	0	<1	<1
Littering	0	1	0	0	<1
Cruelty to animal	0	0	0	<1	<1

## Prison history

Thirty-nine percent of the police detainees had been in prison in their lifetimes and 13% had been in prison in the past 12 months. The mean age at which detainees first went to prison was 20 years. Fifty-two percent of the detainees who had been to prison reported they had used drugs while in prison. Twenty-six percent received treatment for alcohol and drug issues as part of their prison sentence. Of the detainees who had been in prison in the previous 12 months, 43% said they had used drugs while in prison and 17% reported they had received treatment for drug and alcohol issues as part of their sentence. Those detainees who had been to prison were asked what crime they had been sent to prison for. Twenty-six percent had been imprisoned for assault, 24% for burglary, 12% for car conversion, 11% for theft, 10% for driving offences, 10% for robbery, 5% for fraud and 4% for drugs (Table 19.5).

Table 19.5: Proportion of police detainees who were imprisoned for different crimes by location (of those who had been imprisoned), 2010

Prison history (%)	Whangarei (n=36)	Auckland Central (n=89)	Wellington Central (n=49)	Christ- church Central (n=111)	Total (n=285)
Burglary	19	20	37	23	24
Against justice (unspecified)	3	15	6	17	13
Assault (unspecified)	22	9	14	11	12
Car conversion etc.	11	11	10	14	12
Theft	6	8	12	15	11
Driving offence	0	10	14	12	10
Robbery	6	17	12	5	10
Grievous assault	6	6	8	6	6
Serious assault	11	7	2	5	6
Fraud	6	4	8	5	5
Drugs (unspecified)	3	6	2	3	4
Arms act offence	6	3	0	5	4
Intimidation/ threat	0	1	2	6	3
Disorder	6	2	0	3	2
Drugs (cannabis only)	14	1	0	1	2
Shoplifting	3	1	6	0	2
Trespass	0	3	0	3	2
Receiving	0	3	4	2	2
Destruction of property	6	1	2	1	2
Minor assault	0	3	0	2	2
Drugs (not cannabis)	3	2	4	1	2
Sexual attack	0	2	2	3	2
Fines	0	4	0	1	2
Wilful damage	0	0	0	2	1
Group assembly	0	2	4	0	1
Kidnapping and abduction	0	1	0	3	1
Homicide	3	1	0	2	1
Endangering	0	0	0	2	1
Other	0	2	0	0	1
Family offence	0	0	2	0	<1

Those detainees who had been imprisoned in the previous 12 months were asked what crime they had been imprisoned for. Twenty-eight percent had been imprisoned for assault, 20% had been imprisoned for burglary, 11% were imprisoned for a driving offence and 11% were imprisoned for robbery, 7% for theft and 7% for shoplifting (Table 19.6).

Table 19.6: Proportion of police detainees who were imprisoned for different crimes in the past 12 months (of those who had been imprisoned), 2010

Imprisonment in previous 12 months (%)	Total (n=97)
Against justice (unspecified)	23
Burglary	20
Assault (unspecified)	15
Driving offence	11
Robbery	11
Grievous assault	8
Theft	7
Shoplifting	7
Car conversion etc.	6
Serious assault	4
Intimidation/ threat	4
Receiving	4
Drugs (unspecified)	3
Disorder	3
Trespass	3
Other	3
Fraud	2
Sexual attack	2
Wilful damage	2
Minor assault	1
Kidnapping and abduction	1

## Summary

- The police detainees had been arrested a mean of three times in the past 12 months
- The detainees had been arrested for a wide range of different offences, including 'Against Justice', 'assault', 'driving offences', 'public disorder', 'burglary', 'cannabis offences' and 'theft'
- The most common drug offences the detainees were arrested for were 'cannabis' offences, 'methamphetamine' offences and 'alcohol' offences
- Sixty-three percent of the detainees had been convicted for a criminal offence

- Twenty percent of the detainees had received treatment for alcohol and drug issues as part of their conviction
- The detainees had been most commonly been convicted for 'assault', 'driving offences', 'burglary', 'theft', 'car conversion' and 'cannabis' offences
- Thirty-nine per cent of the detainees had been sent to prison and 13% had been in prison in the past 12 months
- The detainees had been most commonly imprisoned for 'assault', 'burglary', 'assault', 'car conversion', 'theft', 'driving offences', 'robbery', 'fraud' and 'drug offences'

## References

- Adamson, S., & Sellman, D. (1998). The pattern of intravenous drug use and associated criminal activity in patients on a methadone waiting list. *Drug and Alcohol Review*, 17, 159-166.
- Ajwani, S., Blakely, T., Robson, B., Tobias, M., & Bonne, M. (2003). *Decades of Disparity: Ethnic Mortality Trends in New Zealand 1980-1999*. Public Health Intelligence Occasional Bulletin Number 16. Wellington: Ministry of Health and University of Otago.
- Australian Institute of Health and Welfare. (2008). *National Drug Strategy Household Survey*. Drug Statistics, 22. Canberra.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. (2010). *Alcohol: No Ordinary Commodity Research and Public Policy* (Second Edition ed.). Oxford: Oxford University Press.
- Bennett, T., & Holloway, K. (2005). *Understanding Drugs, Alcohol and Crime*. Berkshire: Open University Press.
- Boreham, R., Cronberg, A., Dollin, L., & Pudney, S. (2007). *The Arrestee Survey 2003 – 2006*. Home Office Statistical Bulletin 12/07. London: Home Office
- Bull, M. (2005). A comparative review of best practice guidelines for the diversion of drug related offenders. *International Journal of Drug Policy*, 16, 223-234.
- Caulkins, J., & Reuter, P. (2009). Towards a harm-reduction approach to enforcement. *Safer Communities*, 8(1), 9-23.
- Department of Corrections. (2007). *Over-representation of Maori in the Criminal Justice System: An Exploratory Report*. Wellington: Police, Strategy and Research Group, Department of Corrections.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). (2009). *Drug Offences: Sentencing and Other Outcomes*. Lisbon: EMCDDA.
- Ferguson, S., Blakely, T., Allan, B., & Collings, S. (2004). *Suicide Rates in New Zealand: Exploring Associations with Social and Economic Factors*. Public Health Monograph Series No. 10. Wellington: Public Health Consultancy, Department of Public Health, Wellington School of Medicine and Health Sciences, University of Otago.
- Field, A., & Casswell, S. (1999). *Drug Use in New Zealand: Comparison Surveys 1990 & 1998*. University of Auckland: Alcohol and Public Health Research Unit.
- Gaffney, A., Jones, W., Sweeney, J., & Payne, J. (2010). *Drug use Monitoring in Australia: 2008 Annual Report on Drug Use Among Police Detainees*. Monitoring Report No. 9: Australian Institute of Criminology.
- Gawin, F., & Ellinwood, E. (1988). Cocaine and other stimulants: actions, abuse and treatment. *New England Journal of Medicine*, 318, 1173-1182.
- Goldstein, P. (1985). The drugs/violence nexus: A tripartite conceptual framework. *Journal of Drug Issues*, 14, 493-506.
- Gowing, L., Henry-Edwards, S., Irvine, R., & Ali, R. (2002). The health effects of ecstasy: a literature review. *Drug and Alcohol Review*, 21, 53-63.
- Gowing, L., Henry-Hedwards, S., Irvine, R., & Ali, R. (2001). *Ecstasy: MDMA and Other Ring-Substituted Amphetamines*. Geneva: World Health Organization.

- Hales, J., & Manser, J. (2009). *New Zealand Police ADAM*. Health Outcomes International.
- Hall, W., & Hando, J. (1994). Route of administration and adverse effects of amphetamine use among young adults in Sydney, Australia. *Drug and Alcohol Review*, 13, 277-284.
- Hammersley, R., Forsyth, A., Morrison, V., & Davies, J. (1989). The relationship between crime and opioid use. *British Journal of Addiction*, 84, 1029-1043.
- Hart, S. (2003) 2000 Arrestee Drug Abuse Monitoring: Annual Report. [National Institute of Justice]. Retrieved 11 November 2010, from <http://www.adam-nij.net/files/ar2000/193013.pdf>
- Hough, M. (1996). *Drugs Misuse and the Criminal Justice System: A Review of the Literature*. Drugs Prevention Initiative Paper 15. London: Home Office.
- Hunt, D., & Rhodes, W. (2001) Arrestee Drug Abuse Monitoring (ADAM) Program: Methodology Guide for ADAM. [National Institute of Justice]. Retrieved 11 November 2010, from <http://www.adam-nij.net/files/Admguid.pdf>
- Kleiman, M. (1992). *Against Excess: Drug Policy for Results*. New York: Basic Books.
- Kuhn, C., Swartzwelder, S., & Wilson, W. (1998). *Buzzed: The Straight Facts About the Most Used and Abused Drugs from Alcohol to Ecstasy*. New York: W.W.Norton & Co.
- MacCoun, R., Beau Kilmer, B., & Reuter, P. (2003). *Research on Drugs-Crime Linkages: The Next Generation*. Special Report. July: National Institute of Justice.
- MacCoun, R., & Reuter, P. (2001). *Drug War Heresies: Learning from Other Vices, Times, and Places*. New York: Cambridge University Press.
- Ministry of Health. (2009a). *A Focus on the Health of Maori and Pacific Children: Key Findings of the 2006/07 New Zealand Health Survey*. Wellington.
- Ministry of Health. (2009b). *Tobacco Trends 2008 - A Brief Update of Tobacco Use in New Zealand*. Wellington.
- National Drug Intelligence Bureau. (2005). *New Zealand Illicit Drug Report 2004*. Wellington: NDIB.
- National Institute of Justice. (2003). *2000 Arrestee Drug Abuse Monitoring: Annual Report*. Washington, DC: Office of Justice, Programs, US Department of Justice.
- New Zealand Customs Service. (2002). *Review of Customs Drug Enforcement Strategies 2002. Project Horizon Outcome Report*. Wellington: New Zealand Customs Service.
- Newbold, G. (2000). *Crime in New Zealand*. Palmerston North: Dunmore Press.
- Office of National Drug Control Policy. (2009). *Adam II 2008 Annual Report Arrestee Drug Abuse Monitoring Program II*. Washington, DC.
- Payne, J., Kwiatkowski, M., & Wundersitz, J. (2008). *Police Drug Diversion: A Study of Criminal Offending Outcomes*. AIC Reports Research and Public Policy Series 97. Canberra: Australian Institute of Criminology.
- Robson, B., & Harris, R. (Eds.). (2007). *Hauora: Māori Standards of Health IV. A study of the years 2000-2005*. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.
- Robson, B., Purdie, G., & Cormack, D. (2010). *Unequal Impact II: Māori and Non-Māori Cancer Statistics by Deprivation and Rural-Urban Status, 2002-2006*. Wellington: Ministry of Health.
- Royal Australasian College of Physicians. (2008). *Chronic Non-malignant Pain: Improving Management and Prevention of Problematic Opioid Use*. Sydney.
- Seddon, T. (2000). Explaining the drug-crime link: theoretical, policy and research issues. *Journal of Social Policy*, 29(1), 95-107.
- Shearer, J., Sherman, J., Wodak, A., & van Beek, I. (2002). Substitution theory for amphetamine users. *Drug and Alcohol Review*, 21, 179-185.

- Sheridan, J., & Butler, R. (2008). *Prescription Drug Misuse: Issues for Primary Care - Final Report of Findings*. Auckland: School of Pharmacy, University of Auckland.
- Shiner, M. (2009). *Drug Use and Social Change: The Distortion of History*. London: Palgrave Macmillan.
- Taylor, B. (Ed.). (2002). *I-ADAM in Eight Countries: Approaches and Challenges*: Office of Justice Programs & National Institute of Justice, US Department of Justice.
- Topp, L., Hando, J., Degenhardt, L., Dillon, P., Roche, A., & Solowij, N. (1998). *Ecstasy Use in Australia*. NDARC Technical Report No.39. Sydney: National Drug and Alcohol Research Centre & Queensland Alcohol and Drug Research Education Centre.
- United Nations Office on Drugs and Crime. (2008). *2008 World Drug Report*. Vienna: UNODC.
- Weisheit, R., & White, W. (2009). *Methamphetamine: Its History, Physiology, and Treatment*. Center City, MN: Hazelden.
- Wilkins, C., Bhatta, K., & Casswell, S. (2002a). The emergence of amphetamine use in New Zealand: findings from the 1998 and 2001 national drug surveys. *New Zealand Medical Journal*, 115(1166), 256-263.
- Wilkins, C., Bhatta, K., Pledger, M., & Casswell, S. (2003). Ecstasy use in New Zealand: findings from the 1998 and 2001 National Drug Surveys. *New Zealand Medical Journal*, 116, 383-393.
- Wilkins, C., & Casswell, S. (2002). The cannabis black market and the case for the legalisation of cannabis in New Zealand. *Social Policy Journal of New Zealand*, 18, 31-43.
- Wilkins, C., Casswell, S., Bhatta, K., & Pledger, M. (2002b). *Drug Use in New Zealand: National Surveys Comparison 1998 & 2001*. Auckland: Alcohol & Public Health Research Unit.
- Wilkins, C., Griffiths, R., & Sweetsur, P. (2010). *Recent Trends in Illegal Drug Use in New Zealand, 2006-2009: Findings from the 2006, 2007, 2008 and 2009 Illicit Drug Monitoring System (IDMS)* Auckland: Social and Health Outcomes Research and Evaluation, School of Public Health, Massey University.
- Wilkins, C., Pledger, M., Lee, A., Adams, R., & Rose, E. (2004). *A Local Pilot of the New Zealand Arrestee Drug Abuse Monitoring (NZ-ADAM) System*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki, Massey University.
- Wilkins, C., Reilly, J., & Casswell, S. (2005a). Cannabis 'tinny' houses in New Zealand; implications for the use of cannabis and other drugs in New Zealand. *Addiction*, 100, 971-980.
- Wilkins, C., Reilly, J., Pledger, M., & Casswell, S. (2005b). Estimating the dollar value of the illicit market for cannabis in New Zealand. *Drug and Alcohol Review*, 24(3), 227-234.
- Wilkins, C., & Rose, E. (2003). *A Scoping Report on NZ-ADAM*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University.
- Wilkins, C., & Sweetsur, P. (2006). Exploring the structure of the illegal market for cannabis in New Zealand. *De Economist*, 154(4), DOI 10.1007/s10645-10006-19029-10647.
- Wilkins, C., & Sweetsur, P. (2008a). *The economic relationship between high spending on methamphetamine and cannabis use and the dollar earnings from acquisitive crime among police detainees*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE), Massey University.
- Wilkins, C., & Sweetsur, P. (2008b). Tracking the Availability of Drugs in New Zealand: Implications for Policy Response. *Social Policy Journal of New Zealand*, 34, 163-171.



- Wilkins, C., & Sweetsur, P. (2008c). Trends in population drug use in New Zealand: Findings from national household surveying of drug use in 1998, 2001, 2003 and 2006. *New Zealand Medical Journal*, 121, 61-71.
- Wilkins, C., & Sweetsur, P. (2010a). The association between spending on methamphetamine and cannabis for personal use and earnings from acquisitive crime among police detainees in New Zealand. *Addiction*, Accepted manuscript online: 21 OCT 2010, doi: 10.1111/j.1360-0443.2010.03241.x.
- Wilkins, C., & Sweetsur, P. (2010b). The association between the number of days of methamphetamine use and the level of earnings from acquisitive crime among police detainees in New Zealand. *Bulletin on Narcotics*, in press.
- Wilkins, C., Sweetsur, P., & Girling, M. (2008). Patterns of benzylpiperazine/trifluoromethylphenylpiperazine (BZP/TFMPP) party pill use and adverse effects in a population sample in New Zealand. *Drug and Alcohol Review*, 27, 633-639.