New Zealand Arrestee Drug Use Monitoring

(NZ-ADUM)

2010 - 2014

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Executive Summary

Aims and methodology

The aim of the New Zealand Arrestee Drug Use Monitoring (NZ-ADUM) study is to monitor trends in alcohol and other drug use, and related harm, among police detainees in New Zealand. NZ-ADUM tracks the use of key drugs of concern, including alcohol and methamphetamine; illegal drug market indicators, such as availability and price; and identifies emergent new drug types, such as synthetic cannabinoids. NZ-ADUM informs the understanding of the drivers of crime and drug misuse, and strategic responses to alcohol and other drug issues. The 2014 NZ-ADUM interviewed 832 police detainees at four central city police watch houses (i.e. Whangarei, Auckland Central, Wellington Central and Christchurch Central) from mid-April to the end of July 2014. This report presents the findings from the 2014 NZ-ADUM and compares them with the previous four years of the study.

Methamphetamine use largely stable

Overall, the proportion of detainees who reported using methamphetamine in the previous 12 months remained unchanged from 2013 to 2014 (i.e. 30% in both years) (Table E1). Methamphetamine use was stable in Auckland (38% in 2013 to 34% in 2014) and Wellington (27% in 2013 to 28% in 2014). The overall availability of methamphetamine also did not change from 2013 to 2014. The exception to this general picture of stability was Christchurch where there was evidence of growing methamphetamine use and supply.

Methamphetamine use and supply continues to surge in Christchurch

The proportion of detainees in Christchurch Central who had used methamphetamine in the previous month increased from 10% in 2010 to 18% in 2014. The mean number of days Christchurch Central detainees had used methamphetamine increased from 35 days in 2010 to 105 days in 2014. The proportion of detainees from Christchurch Central who felt dependent on methamphetamine increased from 7% in 2011 to 45% in 2014. The proportion of

Christchurch Central detainees who reported methamphetamine was 'easier' to obtain increased from 6% in 2011 to 43% in 2014. The mean price of a 'point' of methamphetamine in Christchurch increased from $110 in 2010 to $127 in 2014, signaling growing demand. The surge in methamphetamine use in Christchurch (notably since 2011) may be driven by the large influx of workers to Christchurch for the rebuild of the city following the earthquakes there. Police have also noted a reorganization of the gang scene in Christchurch to facilitate greater drug supply (NDIB, 2014), and this may be a response to the expanding methamphetamine market there.

A surprising decline in heavier drinking among police detainees?

There was evidence of some decline in heavier alcohol drinking among the detainees, following a number of years of increasing consumption. The mean number of alcoholic drinks the detainees consumed on a typical day of use had previously been increasing since 2010, but then declined from 18 in 2013 to 16 drinks in 2014. The proportion of male detainees who had drunk five or more drinks in a single session in the previous month declined from 83% in 2013 to 77% in 2014. The proportion of detainees drinking prior to their arrest fell from 41% in 2013 to 30% in 2014. The decline in heavier drinking may reflect the changes made to alcohol premise opening hours in late 2013 (as part of the *Sale and Supply of Alcohol Act 2012*). Further research is required to confirm the decline in heavier drinking among detainees and the wider population, and to determine the extent to which policy change has been responsible for any decrease.

Some reduction in synthetic cannabinoid use and availability following the May 2014 legal high ban

The proportion of detainees who had used synthetic cannabinoids at some point in their lives increased from 54% in 2013 to 62% in 2014, reflecting the growth in synthetic cannabinoid use in recent years, including following the establishment of an interim legal high market from mid-2013 (following the passage of the *Psychoactive Substances Act* (PSA)). The proportion of detainees who felt dependent on synthetic cannabinoids in the previous year increased from

17% in 2013 to 30% in 2014. The banning of all legal highs in May 2014 has had some impact on levels of use and availability. The proportion of detainees who had used synthetic cannabinoids in the past month declined from 29% in 2013 to 24% in 2014. The proportion of detainees who reported synthetic cannabinoids were 'more difficult' to obtain increased from 16% in 2013 to 49% in 2014 (Table E2). The full impact of the May 2014 ban on synthetic cannabinoid use is unlikely to have been fully felt at the time of surveying (i.e. April-July 2014), as remaining legal stock is likely to have been made available via the illegal market.

The popularity of synthetic cannabinoids may have reduced cannabis use and supply

The proportion of detainees who had used cannabis in the previous year declined from 76% in 2011 to 68% in 2014. The mean number of days the detainees had used cannabis in the past year declined from 187 in 2010 to 173 in 2014. The availability of cannabis has declined in Auckland Central and Christchurch Central in recent years. For example, the proportion of detainees in Auckland Central who described the current availability of cannabis as 'very easy' declined from 58% in 2012 to 41% in 2014. A possible explanation for this decline in cannabis use and availability is the emergence of synthetic cannabinoid products which are marketed as 'legal' alternatives to cannabis. This explanation is supported by evidence of some recovery in the frequency of cannabis use following the banning of all synthetic cannabinoid products in May 2014 (up from 158 days in 2013 to 173 days in 2014).

The use of ecstasy continues to decline, but the wider picture is complicated

The use of ecstasy continued to decline in 2014. The proportion of detainees who had used ecstasy in the previous year declined from 24% in 2012 to 16% in 2014. The availability of ecstasy has declined in Whangarei and Central Auckland in recent years. The price of a tablet of ecstasy has also declined steadily from $50 in 2010 to $39 in 2014. There was a spike in the availability and strength of ecstasy in Central Wellington in 2014. These domestic ecstasy trends are difficult to interpret at present as the ecstasy market has been affected by a global shortage in MDMA and the subsequent use of replacement compounds for a number of years; successful New Zealand Police and Customs operations against local ecstasy syndicates in 2011/12; and

most recently a reported recovery in global MDMA supply which may be creating a niche market for high quality ecstasy in New Zealand (EMCDDA, 2015; UNODC, 2015b).

High proportions of detainees experience alcohol and other drug related harm

Eighty-nine percent of the substance using detainees had experienced at least one problem from their alcohol and other drug use in 2014, and this had not changed from previous years. High proportions of detainees reported aggression, physical assault, family issues, financial issues, dangerous driving, sexual assault and risky sexual behavior related to their own and others' substance use. For example, 43% of the substance using detainees had 'damaged someone's property', 32% had 'stole someone's property', and 37% had 'physically hurt someone' as a result of their alcohol and other drug use in 2014. Twenty-two percent had 'driven through a stop sign or red light', 14% 'couldn't remember driving home' and 11% had 'had a car crash' due to their alcohol and other drug use.

Alcohol, methamphetamine, cannabis and synthetic cannabinoids most responsible for substance related problems

The proportion of detainees who attributed their substance use problems to their alcohol use declined from 79% in 2012 to 69% in 2014, and this is consistent with the previously reported reduction in heavier alcohol use. The proportion of detainees who attributed their substance use problems to methamphetamine increased from 14% in 2010 to 20% in 2014. The proportion of Christchurch Central detainees who attributed their substance use related problems to methamphetamine increased from 8% in 2012 to 18% in 2014, and this is consistent with reports of rising methamphetamine use there. Fourteen percent of the detainees attributed their substance use problems to synthetic cannabinoids in 2014, up from less than 1% in 2012.

Little evidence of an increase in cocaine use

There has been a steady increase in the proportion of detainees who have tried cocaine at some point in their lifetimes, but little evidence of sustained increasing use and availability.

Some of the experimentation with cocaine may have occurred in Australia and other international holiday destinations which have much larger cocaine markets. Cocaine availability has consistently been described as 'very difficult' or 'difficult' over the past five years. The only notable change has been some increase in the strength of cocaine over the past three years. Seizures of cocaine in New Zealand vary greatly from year to year, with the larger seizures generally discovered at the border and thought to be destined for the Australian market (NDIB, 2014).

The disruption in opioid supply continues

A disruption in opioid supply was previously identified in Christchurch in 2012/13, with declining availability and increasing prices. The 2014 NZ-ADUM results suggest some recovery in opioid availability, although the price of opioids continues to rise suggesting some supply pressure in the market continues. There are a number of possible explanations for the disruption including stricter prescribing of opioids, local enforcement success, or some after effect from the Christchurch earthquakes.

Party pills considered low strength

The proportion of detainees who had ever tried 'party pills' increased from 16% in 2013 to 34% in 2014, most likely due to the commercial legal high market which operated in 2013/14. However, there was no change in last year use of party pills (6% both years) or the frequency of party pill use (only 12 days of use in past year) from 2013 to 2014. Party pills made up only a small segment of the recent market for legal highs which was largely dominated by synthetic cannabinoid products. The relatively low popularity of party pills might reflect perceptions of their low strength. Forty-five percent of detainees described the strength of party pills as 'low' in 2014.

Salvia remains a niche legal high

Similarly to other legal highs, the proportion of detainees who had ever tried salvia in their lifetimes increased sharply from 13% in 2013 to 30% in 2014. Sharp increases in lifetime use of

salvia were found in Whangarei (up from 14% to 30%), Auckland Central (up from 11% to 28%) and Wellington Central (up from 16% to 44%). However, again, the proportion of detainees who had used salvia in the previous 12 months remained the same from 2013 to 2014 (i.e. 8% in both years). The very short and intense hallucinogenic experience obtained from salvia use may have inhibited its wider appeal as a legal high.

Greater criminal justice focus on methamphetamine offending, assault and provision of drug treatment

The proportion of detainees arrested for (any) drug offence declined from 14% in 2010 to 7% in 2014. A growing proportion of arrests for drug offences involved methamphetamine (up from 21% in 2010 to 49% in 2014). There was a greater focus on assault (including domestic violence) over the past five years. The proportion of detainees who had ever been convicted for any assault increased from 26% in 2010 to 42% in 2014. There was also an increase in provision of drug treatment as part of sentencing. The proportion of detainees convicted of a crime who had received alcohol and drug treatment as part of their sentence increased from 20% in 2010 to 40% in 2014.

Table E 1: Overview of the drug use patterns of the police detainees, 2010-2014

	Alcohol					Methamphetamine					Cannabis					Ecstasy				
	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=848)	2014 (n=832)	2010 (n=813)	2011 (n=827)	2012 (n=802)	2013 (n=848)	2014 (n=832)	2010 (n=814)	2011 (n=827)	2012 (n=799)	2013 (n=848)	2014 (n=832)	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=848)	2014 (n=832)
Used in the past 12 months	90%	92%	90%	91%	87%	26%	29%	28%	30%	30%	72%	76%	70%	70%	68%	22%	28%	24%	21%	16%
Mean number of days used in past 12 months*	108 days	105 days	93 days	101 days	94 days	68 days	75 days	68 days	82 days	102 days	187 days	168 days	166 days	158 days	173 days	11 days	14 days	13 days	16 days	16 days
Felt dependent on drug in the last 12 months*	23%	23%	23%	26%	19%	25%	22%	25%	30%	37%	38%	35%	33%	34%	32%	4%	4%	2%	1%	4%
Using when arrested*	36%	41%	40%	41%	30%	3%	5%	4%	6%	6%	18%	17%	18%	17%	14%	1%	1%	1%	1%	1%
Current availability *	Very easy	Very easy	Very easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Easy/ very easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/easy	Very easy/ easy	Easy/ difficult	Easy/ difficult	Easy/ very easy	Easy/ difficult	Easy/ difficult
Change in availability *	Stable/ easier	Stable	Stable	Stable	Stable	Stable/ more difficult	Stable	Stable/easier	Stable/easier	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult
Median price ($)* (retail)						$100 per point	$100 per point	$100 per point	$100 per point	$100 per point	$20 per 'tinny'	$20 per 'tinny'	$20 per 'tinny'	$20 per 'tinny'	$20 per 'tinny'	$50 per pill	$40 per pill	$40 per pill	$40 per pill	$40 per pill
Median price ($)* (mid-level)						$700 per gram	$750 per gram	$650 per gram	$700 per gram	$700 Per gram	$325 per ounce	$325 per ounce	$325 per ounce	$350 per ounce						
Completed at least some driving under influence**	24%	21%	19%	19%	18%	42%	46%	45%	42%	53%	47%	50%	46%	42%	50%	8%	18%	11%	17%	21%

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

** of those who drove and used the drug

Table E 2: Overview of the drug use patterns of the police detainees (continued), 2010-2014

	Opioids					Cocaine					Synthetic Cannabis		Party Pills		Salvia Divinorum	
	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=848)	2014 (n=832)	2010 (n=814)	2011 (n=827)	2012 (n=799)	2013 (n=848)	2014 (n=832)	2013 (n=847)	2014 (n=832)	2013 (n=848)	2014 (n=833)	2013 (n=848)	2014 (n=834)
Used in the past 12 months	8%	6%	6%	6%	5%	4%	4%	5%	5%	6%	47%	47%	6%	6%	8%	8%
Mean number of days used in past 12 months*	94 days	104 days	82 days	118 days	83 days	5 days	29 days	17 days	4 days	15 days	67 Days	110 Days	4 Days	12 Days	7 Days	4 days
Felt dependent on drug in the last 12 months*	41%	43%	32%	40%	27%						17%	30%				
Using when arrested*	2%	1%	1%	1%	1%						7%	7%				
Current availability*	Easy/ very easy	Difficult/ very easy	Easy/ very easy	Very easy/ difficult	Easy/ very easy	Difficult/ very difficult	Difficult/ very difficult	Difficult/ very difficult	Very difficult/ difficult	Very difficult/ difficult	Very Easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Very difficult
Change in availability*	Stable/ easier	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ Easier	More difficult/ stable	Stable/ More Difficult	Stable/ More Difficult	Stable/ Easier	More difficult/ stable
Median price ($)* (retail)	$0.9 per milligram	$1.0 per milligram	$1.0 per milligram	$1.0 per milligram	$1.0 per milligram	$312 per gram	$300 per gram	$350 per gram	$300 per gram	$250 per gram	$10 per pack	$8 per pack	$7 per pack	$7 per pack	$20 per pack	$15 per pack
Median price ($)* (mid-level)																
Completed at least some driving under influence**	40%	50%	27%	34%	15%											

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

** of those who drove and used the drug

Chapter 1 - Methodology

Introduction

The New Zealand Arrestee Drug Use Monitoring (NZ-ADUM) study monitors levels of alcohol and other drug use, and related criminal offending, among police detainees in Whangarei, Auckland, Wellington and Christchurch central city police stations (see Wilkins et al., 2010b). NZ-ADUM tracks key drugs of concern, including methamphetamine, cannabis, opioids, pharmaceutical medicines and new psychoactive substances (NPS) (so called 'legal highs'), as well as the emergence of entirely new drugs. NZ-ADUM also documents levels of alcohol and drug related harm, demand for drug treatment services, and changes in key illegal drug market indicators, such as availability and price. This report presents the findings from the 2014 NZ-ADUM and compares them with the findings from the previous four years of the study.

Intended use

NZ-ADUM contributes to the understanding of the drivers of crime and substance misuse, informs strategic and policy responses to alcohol and other drug issues, and provides evaluation data on the effectiveness of policy interventions.

Background

NZ-ADUM[1] was adapted 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). Studies employing the core ADAM methodology are conducted in Australia (Drug Use Monitoring in Australia or DUMA) and England and Wales (New England and Wales Arrestee Drug Abuse Monitoring Research or NEW-ADAM) (see Boreham et al., 2007; Gaffney et al., 2010) and the United States (ADAM) (Office of National Drug Control Policy, 2009, 2011). The core component of the ADAM methodology is the interviewing of individuals detained in

[1] NZ-ADUM was originally known as the NZ-ADAM (New Zealand Arrestee Drug Abuse Monitoring System)

police stations about their alcohol and other drug use and criminal offending (Hunt & Rhodes, 2001; National Institute of Justice, 2003). Self-reported drug use is objectively verified through the scientific testing of urine samples from detainees.

NZ-ADUM was adapted from the international ADAM in 2003 (Wilkins & Rose, 2003) and a local pilot of the NZ-ADUM methodology was completed in 2004 at the Papakura Police Station (Wilkins et al., 2004). A national NZ-ADUM was conducted from 2005 to 2009 and the NZ-ADUM methodology refreshed in 2010 (Wilkins, et al., 2010b).

Aims

- To measure the level of alcohol, illegal drug, pharmaceutical drug, and 'legal high' use among police detainees
- To monitor trends in alcohol and other drug use including the emergence of new drug types
- To investigate the role alcohol and other drug use plays in criminal offending
- To document the level of harm related to alcohol and other drug use
- To monitor trends in the availability and price of key drugs of concern
- To identify the level of demand for help services for substance use problems among police detainees

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 approximately 800 police detainees at the four selected police watch houses. Interviews are conducted at each police watch house over a period of approximately

three months from mid-April to late July. The four police watch houses were selected as sites for the study as they are considered to be key strategic locations, and likely to provide a broadly representative picture of the police detainee population in each site location. The selected watch houses were required to have sufficient numbers of detainees to allow interviewing, and the facilities to accommodate private interviews and urine sampling.

It is not ethical, safe or practical to interview some detainees due to their violent behavior, intoxication, emotional state, mental illness or lack of English language competency. 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 behavior;
- 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 suitability of detainees to be interviewed (based on the factors outlined above). Those detainees who were interested in participating in the study were escorted to a private interview room where the ADUM interviewer introduced the study and invited them to participate in an interview. The interviewer explained to the detainee that they were an independent researcher from Massey University, participation in the study was voluntary, everything they said would be confidential, no individual information would be shared with police, the results of the study would only be reported in aggregate, and they could choose not to answer any question if they didn't want to. The interviewer specifically asked the detainee to not provide any information about specific people, places, times or events. The interviewers were directed to terminate an interview if detainees started to voluntarily provide specific details about offending to avoid the risk of the

study becoming embroiled in any subsequent legal proceedings. The ethical protocols used in NZ-ADUM have been reviewed and approved by the Massey University Human Subjects Ethics Committee.

Interviewing for the study was completed from mid-April to the end of July 2014. A total of 832 interviews, and 212 urine samples were collected, as part of the 2014 NZ-ADUM study. The interviewers were present at morning and evening shifts on every day of the week for the whole three months of interviewing. The interviewing shift times were selected to match the two periods of the day when the police cells were at their fullest (i.e. following the night shift and following the day shift), and in the hours before the detainees were transported to court and the cells cleared. Table 1.1 shows completed interviews by day of the week for 2010, 2011, 2012, 2013 and 2014. A higher proportion of interviews tend to be conducted on a Sunday as watch houses are often busiest on a Saturday night and no court is in operation on Sunday for them to attend.

Table 1 1: Distribution of interviews by day of the week by location, 2010-2014

Day (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=114)	2011 (n=150)	2012 (n=151)	2013 (n=153)	2014 (n=150)	2010 (n=282)	2011 (n=316)	2012 (n=247)	2013 (n=304)	2014 (n=315)	2010 (n=151)	2011 (n=171)	2012 (n=101)	2013 (n=98)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=301	2013 (n=288)	2014 (n=272)	2010 (n=809)	2011 (n=828)	2012 (n=800)	2013 (n=848)	2014 (n=832)
Sunday	7	25	19	22	23	23	31	26	25	27	23	22	21	19	22	20	20	18	17	18	20	26	21	21	23
Monday	25	13	14	12	15	9	9	15	13	12	15	11	14	9	15	15	13	13	12	14	14	11	14	12	13
Tuesday	7	7	13	11	13	8	10	9	12	13	13	8	11	10	15	14	17	14	11	7	11	11	12	11	11
Wednesday	24	15	11	13	8	13	10	12	11	12	12	12	10	7	12	11	16	14	16	23	14	13	12	13	15
Thursday	16	13	19	13	21	14	12	16	14	8	12	16	14	18	11	9	14	13	17	14	12	13	15	15	13
Friday	12	12	14	17	15	17	13	9	13	16	13	15	16	19	16	16	10	14	14	13	15	13	13	15	15
Saturday	9	14	11	13	5	16	16	13	11	13	13	15	15	16	10	15	10	16	13	11	14	14	14	13	10

Analysis

The 2011, 2012, 2013 and 2014 NZ-ADUM survey waves were weighted to match the locational distribution of interviews completed in 2010 to ensure consistent comparisons over time. The number of interviews completed in each site location has generally been fairly similar from year to year, so the impact of the weighting is low. The exception was Christchurch Central in 2011 where the earthquakes prevented the usual number of interviews being completed in that site.

The statistical analyses in this report compare the results from the 2014 wave with the previous four annual waves, and between the four locational sites of the study for 2014. When a statistically significant difference was found over the five years (i.e. 2010-2014), additional tests were conducted to compare specific years to each other, with the p-values adjusted for multiple comparisons using the simulation method in SAS. We report *all* the tests which were statistically significant (i.e. there is no selective reporting of particular measures or years of comparison). Differences between proportions (e.g. ever used cannabis) were tested using logistic regression and differences between continuous variables (e.g. age) were tested using ANOVA. Ordered categorical questions, such as availability measures, were assigned numbers and the means tested using ANOVA (e.g. very difficult=1 – very easy=4). Some continuous variables were highly positively skewed (e.g. frequency of use of drug use, number of alcoholic drinks consumed), hence statistical testing was run on the log-transformed values for these items to reduce the influence of outliers. Analysis was only completed for questions where there were sufficient numbers of detainees answering the question (i.e. n>10). All analysis was run using SAS version 9.2.

Chapter 2 - Demographics

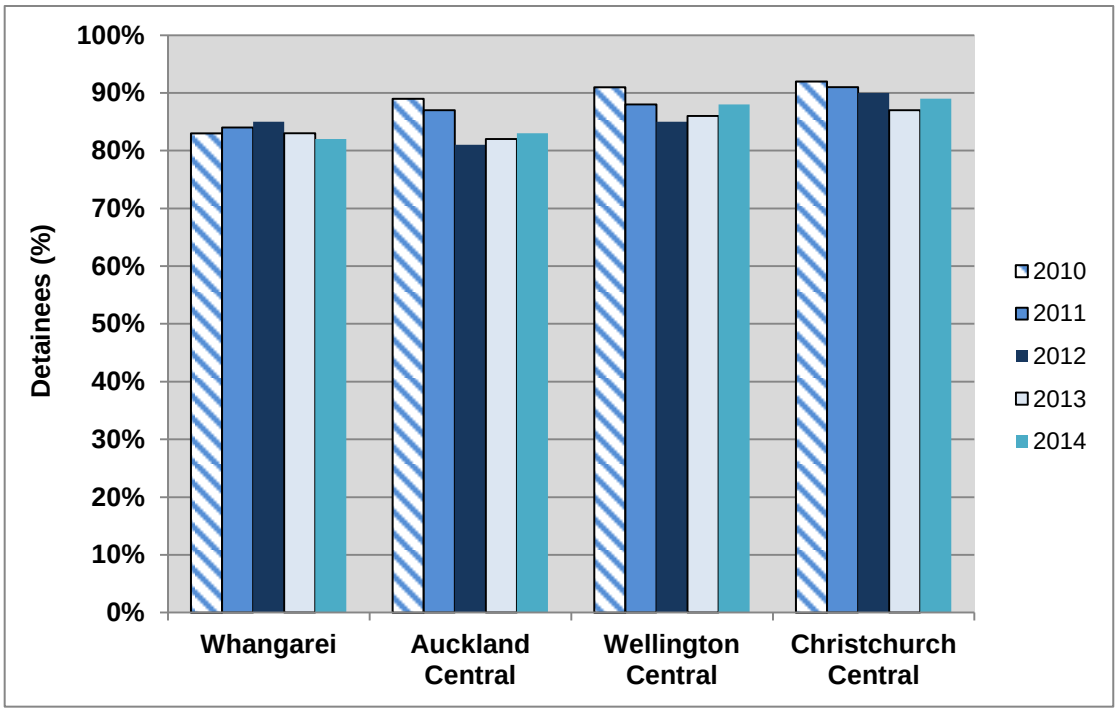
Introduction

Police detainee populations around the world tend to be disproportionately male, young, poorly educated, unemployed, have poor mental health, and belong to disadvantaged ethnic minorities (see Boreham, et al., 2007; Gaffney, et al., 2010; Office of National Drug Control Policy, 2009). As a consequence, they are 'at risk' of a range of health and social problems, in addition to criminal offending. The detainees interviewed for NZ-ADUM reflect these characteristics and problems. For example, in the 2013 NZ-ADUM sample, 85% of the detainees were male, 54% were unemployed or on a sickness benefit, 46% had not competed the compulsory years of high school education, 34% had suffered from a mental illness, 41% were Maori and 13% were Pacific people (Wilkins et al., 2012b). Seventy-five percent of the detainees interviewed in the 2013 NZ-ADUM had previously been convicted of a criminal offence, and 40% had previously been imprisoned (Wilkins, et al., 2012b). These demographic characteristics have largely remained the same over the past four years of the NZ-ADUM study (Wilkins et al., 2014a). This chapter presents the demographic characteristics of the detainees interviewed for the 2014 NZ-ADUM and compares them to the demographic characteristics of the samples from the past four years.

Gender

Eighty-six percent of the detainees interviewed in 2014 were male. The proportion of detainees who were female increased from 10% in 2010 to 14% in 2013, and this increase was close to being statistically significant (p=0.0530) (Figure 2.1).

Figure 2 1: Proportion of the police detainees who were male by location, 2010-2014



Age

The mean age of the detainees was 29 years in 2014 (median 25 years, range 17-74 years) (Table 2.1). There was no statistically significant change in the overall age of the detainee sample from 2010 to 2014 (i.e. 28 to 29 years, p=0.3472). The mean age of the detainees in Whangarei increased from 27 years in 2010 to 31 years in 2014 (p=0.0218). In 2014, the detainees in Whangarei were older than those in Auckland Central (31 vs. 28 years, p=0.0268).

Table 2 1: Mean age of the police detainees by location, 2010-2014

	2010		2011		2012		2013		2014	
Site	**Mean age (years)**	**Age range**	**Mean age (years)**	**Age range**	**Mean age (years)**	**Age range**	**Mean age (years)**	**Age range**	**Mean age (years)**	**Age range**
	n=114	**n=114**	**n=148**	**n=148**	**n=151**	**n=151**	**n=153**	**n=153**	**n=150**	**n=150**
Whangarei	27	17-60	28	17-62	28	17-56	30	17-71	31	17-78
	n=284	**n=284**	**n=311**	**n=311**	**n=246**	**n=246**	**n=300**	**n=300**	**n=315**	**n=315**
Auckland Central	29	17-63	28	17-67	28	17-58	29	17-65	28	17-69
	n=152	**n=152**	**n=171**	**n=171**	**n=99**	**n=99**	**n=106**	**n=106**	**n=95**	**n=95**
Wellington Central	28	17-62	28	17-61	27	17-58	29	17-66	28	17-63
	n=262	**n=262**	**n=191**	**n=191**	**n=302**	**n=302**	**n=288**	**n=288**	**n=273**	**n=273**
Christchurch Central	27	17-63	29	17-77	29	17-70	30	17-61	29	17-69
	n=812	**n=812**	**n=821**	**n=821**	**n=798**	**n=798**	**n=847**	**n=847**	**n= 834**	**n= 834**
All sites	28	17-63	28	17-77	28	17-70	29	17-71	29	17 -74

Ethnicity

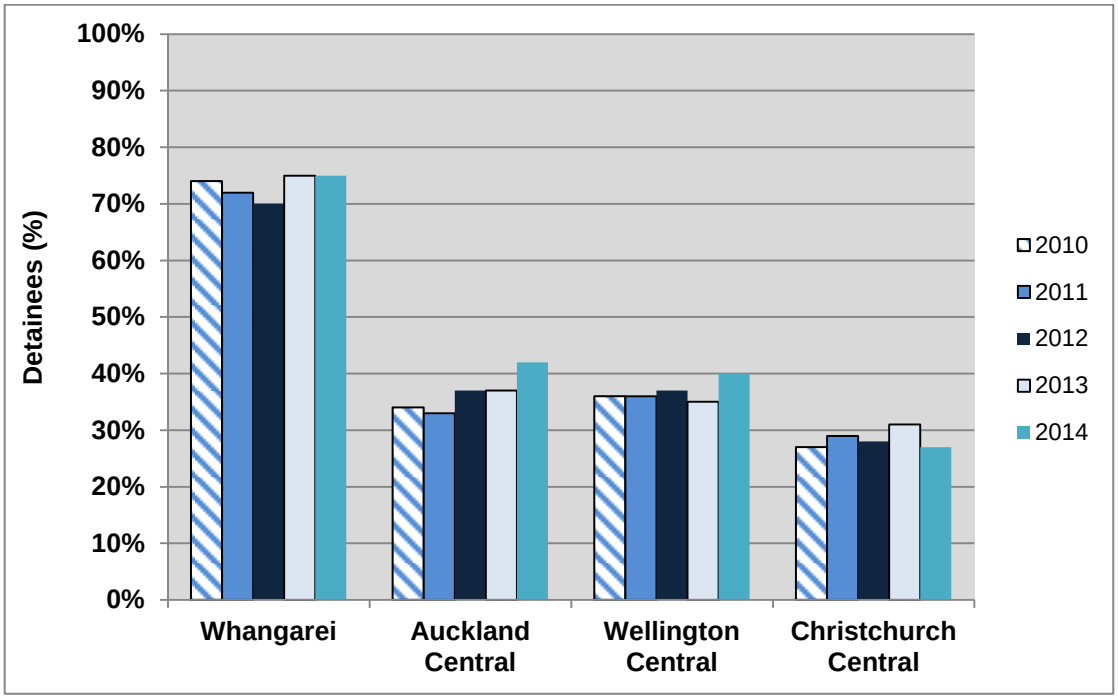
The detainees were asked two questions about their ethnicity: 'Which ethnic group do you mainly belong to?'; and, 'Is there any other ethnic group you belong to?'. For the purposes of this report we classified the detainees by their primary ethnicity. In 2014, 43% of the detainees were Maori, 40% were European, 13% were Pacific and 1% were Asian (Table 2.2). There was no statistically significant change in the proportion of detainees who were Maori over the past five years.

Table 2.2: Primary ethnicity of the police detainees by location, 2010-2014

Primary ethnicity (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
	n=114	n=148	n=150	n=153	n=150	n=285	n=315	n=246	n=300	n=315	n=151	n=169	n=101	n=104	n=95	n=262	n=191	n=303	n=289	n=273	n=812	n=823	n=801	n=846	n=833
European	23	24	26	18	22	32	29	34	31	28	42	43	44	47	34	67	64	64	62	66	44	39	45	41	40
Maori	74	72	70	75	75	34	33	37	37	42	36	36	37	35	40	27	29	28	31	27	38	40	40	41	43
Pacific	4	4	4	5	3	24	31	25	24	24	15	11	9	12	18	5	6	5	5	5	14	16	11	13	13
Asian	0	0	0	1	0	5	4	2	3	2	1	7	3	4	3	0	0	1	1	1	2	3	1	2	1
Other	0	0	0	1	0	5	3	2	6	3	6	3	8	3	5	<1	1	1	1	1	3	2	2	3	2

In 2014, a much higher proportion of detainees in Whangarei were Maori compared to Auckland Central (75% vs. 42%, p<0.0001), Wellington Central (75% vs. 40%, p<0.0001) and Christchurch Central (75% vs. 27%, p<0.0001) (Figure 2.2).

Figure 2.2: Proportion of the police detainees who were Maori by location, 2010-2014



Iwi affiliation

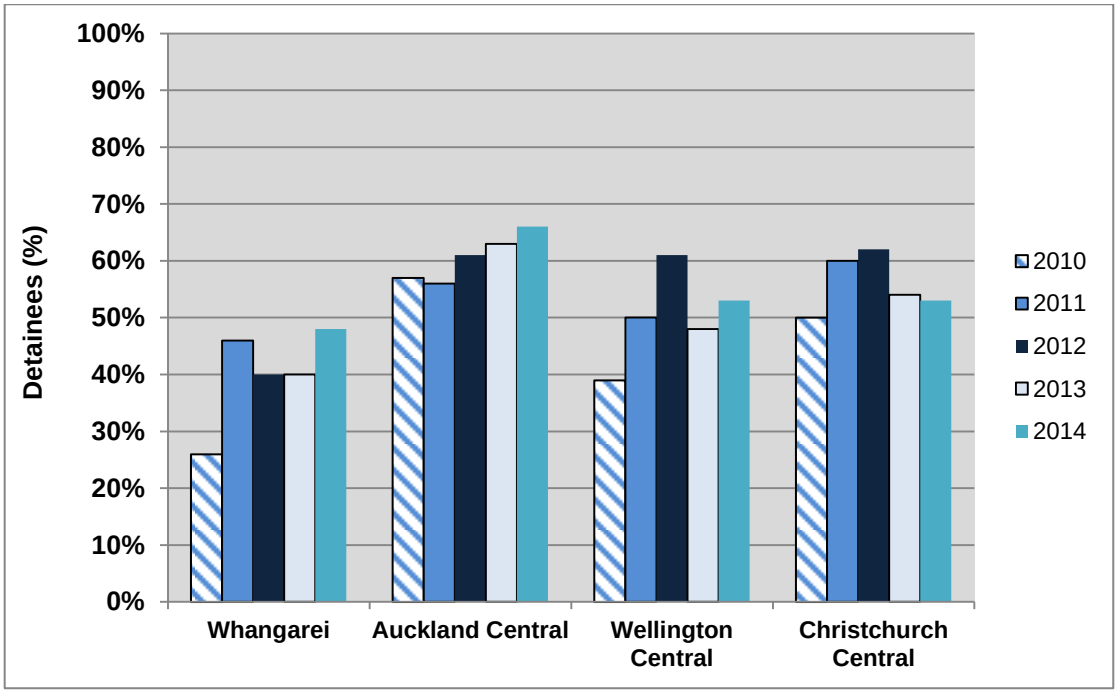
The detainees who identified as Maori were asked if they knew their iwi affiliation. Ninety-two percent of the Maori detainees knew their iwi in 2014.

Education

The proportion of the detainees who had completed the compulsory years of high school education increased from 47% in 2010 to 56% in 2014 (p=0.0011). The overall rate of completion of high school education was also higher in 2013, 2012 and 2011 compared to 2010 (p<0.0001). The proportion of detainees from Whangarei who had completed the compulsory years of high school years of education increased from 26% in 2010 to 48% in 2014 (p=0.0055). Similarly, the proportion of Auckland Central detainees who had completed high school increased from 56% in 2011 to 66% in 2014 (p=0.0453). In 2014, Auckland Central detainees were more likely to have

completed the compulsory years of high school than detainees in Christchurch Central (66% vs. 53%, p=0.0059) and Whangarei (66% vs. 48%, p=0.0007) (Figure 2.3).

Figure 2.3: Proportion of police detainees who completed the compulsory years of high school education by location, 2010-2014



Employment status

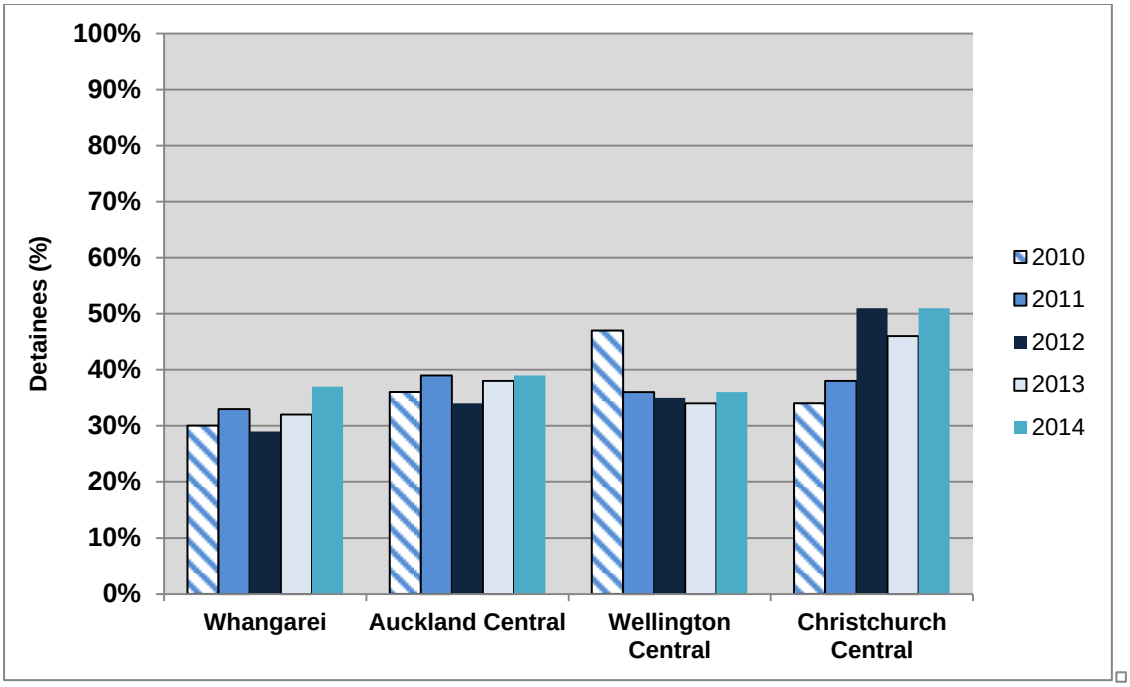
In 2014, 52% of the detainees were unemployed or on a sickness benefit, 42% were employed (9% part-time and 33% full-time), and 6% were students (Table 2.3).

Table 2.3: Employment status of police detainees by location 2010-2014

Employment status (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=150)	2013 (n=151)	2014 (n=150)	2010 (n=283)	2011 (n=315)	2012 (n=247)	2013 (n=298)	2014 (n=314)	2010 (n=152)	2011 (n=170)	2012 (n=101)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=297)	2013 (n=289)	2014 (n=273)	2010 (n=812)	2011 (n=825)	2012 (n=796)	2013 (n=847)	2014 (n=834)
Unemployed/ sickness	64	61	61	63	56	55	54	55	51	52	45	52	55	55	57	61	56	45	53	48	56	55	55	54	52
Employed	30	33	29	32	37	36	39	34	38	39	47	36	35	34	36	34	38	51	46	51	37	37	38	39	42
Students	5	6	10	5	7	9	7	11	11	10	8	12	10	11	7	5	6	4	1	2	7	8	8	7	6

The proportion of detainees from Christchurch Central who were employed increased from 34% in 2010 to 51% in 2014 (p=0.0125). Much of the increase in employment in Christchurch Central occurred from 2010 to 2012 (up from 34% to 51%, p=0.0010), and this most likely reflects the increase in employment opportunities following the earthquakes there in 2011 (Figure 2.4).

Figure 2.4: Proportion of the police detainees who were employed by location, 2010-2014



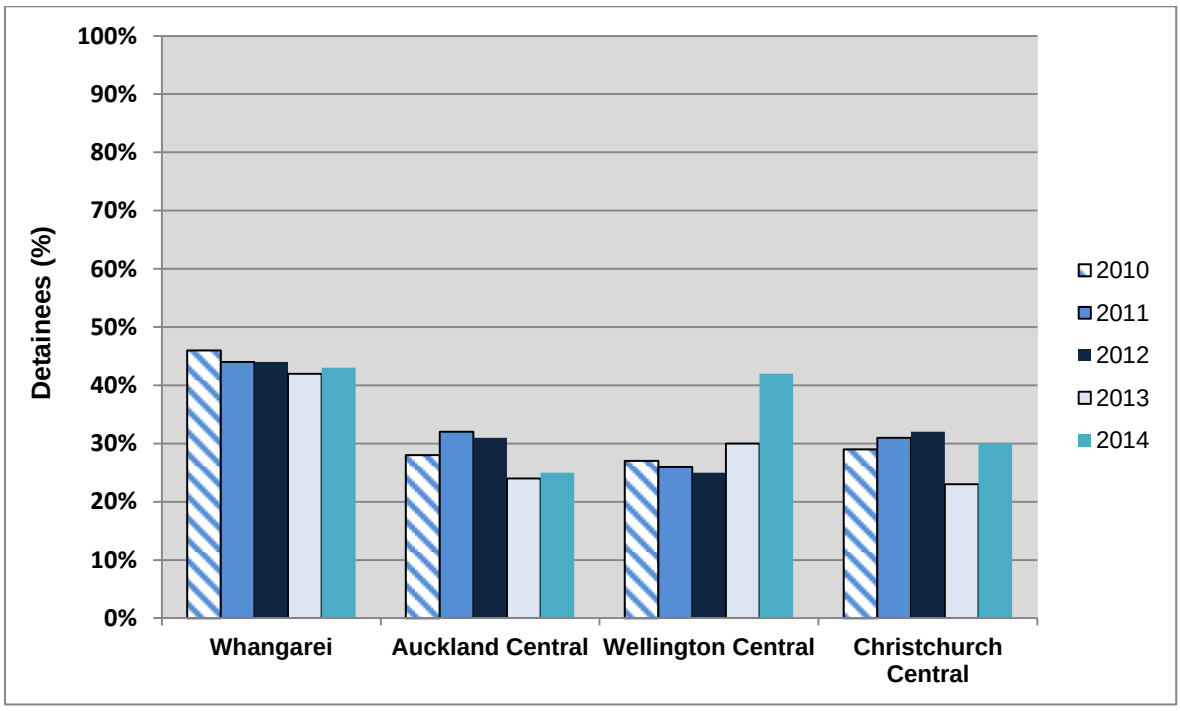
Marital status

Fifty–seven percent of the detainees were single, 31% were living in a de facto relationship and 5% were married in 2014. There was no statistically significant change in the marital status of the detainees from 2010 to 2014. In 2014, Whangarei detainees were less likely to be single than those in Auckland Central (43% vs. 63%, p=0.0004) and Christchurch Central (43% vs. 59%, p=0.0101).

Number of dependent children

Thirty–three percent of the detainees had dependent children in 2014. There was no overall change in the proportion of detainees who had dependent children from 2010 to 2014 (31% to 33%, p=0.1948). The proportion of Wellington Central detainees who had dependent children increased from 27% in 2011 to 42% in 2014 (p=0.0478). In 2014, the detainees in Whangarei were more likely to have dependent children than those in Auckland Central (42% vs. 25%, p<0.0001) and Christchurch Central (42% vs. 30%, p<0.0001) (Figure 2.5).

Figure 2.5: Proportion of the police detainees with dependent children by location, 2010-2014



Accommodation

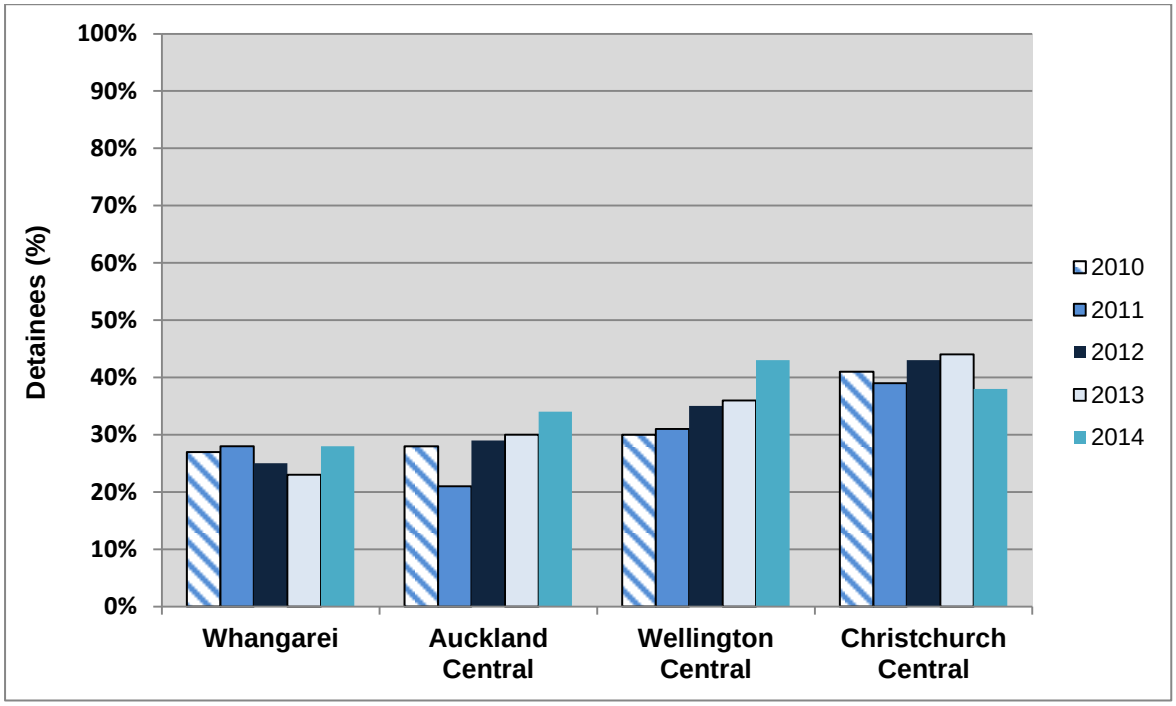
In 2014, 45% of the detainees had been living in their own house or apartment (either owned or rented) and 40% were living in someone else's house or apartment in the previous 30 days. Eight percent were living in some 'other house location' (e.g. a caravan or boarding house) and 5% had no fixed address (e.g. living on the street). The proportion of detainees living in 'other accommodation' (i.e. caravan, boarding house or no fixed address) increased from 8% in 2010 to 15% in 2014 (p=0.0013). The proportion of detainees from Whangarei living in 'other accommodation' increased from 5% in 2011 to 20% in 2014 (p=0.0040). The

proportion of detainees from Christchurch Central living in 'other accommodation' increased from 6% in 2010 to 15% in 2012 (p=0.0107), and again this most likely reflects the accommodation shortages following the earthquakes there.

Mental illness

Thirty-six percent of the detainees reported suffering from a mental illness at some stage in their lives in 2014. The proportion of detainees who had ever suffered from a mental illness increased from 30% in 2011 to 36% to 2014 (p=0.0418). The proportion of Auckland Central detainees who had ever suffered from a mental illness increased from 21% in 2011 to 34% in 2014 (p=0.0013) (Figure 2.6).

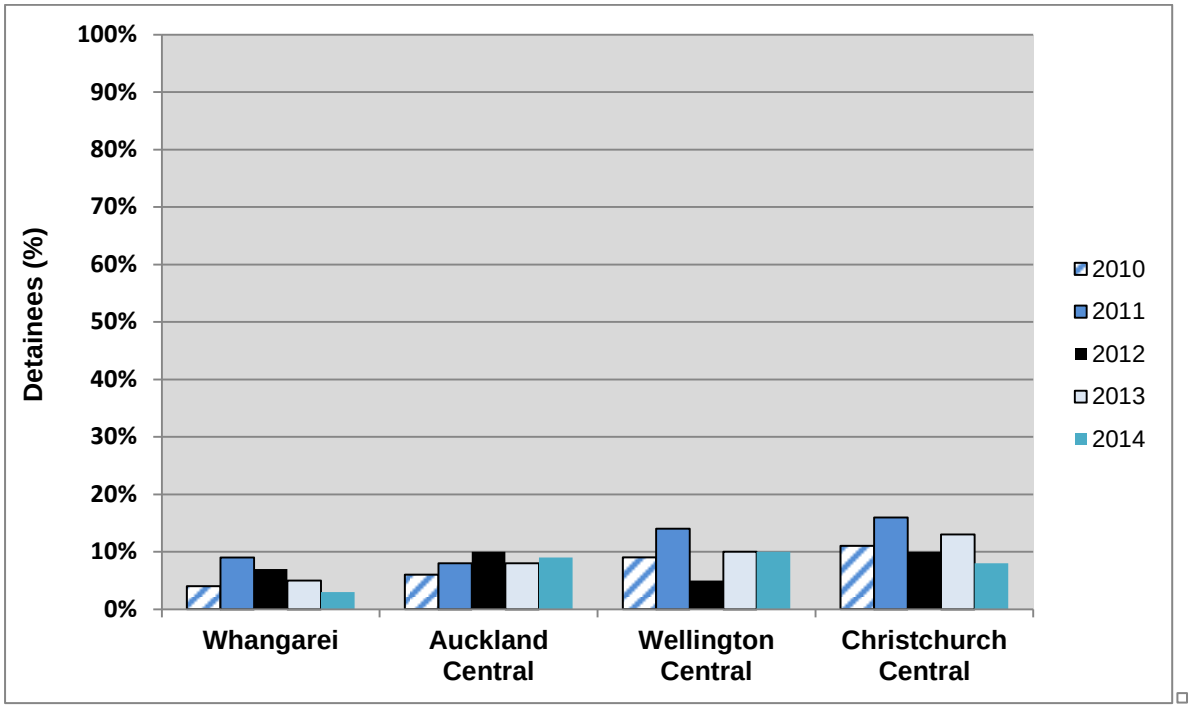
Figure 2.6: Proportion of the police detainees who had ever suffered from a mental illness by location, 2010-2014



Psychiatric inpatient

Eight percent of the detainees had been a patient in a psychiatric ward or hospital for an overnight stay or longer at some point in their lives in 2014. There was no statistically significant change in the proportion of detainees who had ever been in a psychiatric ward or hospital due to a mental illness from 2010 to 2014 (8% in both 2010 and 2014).

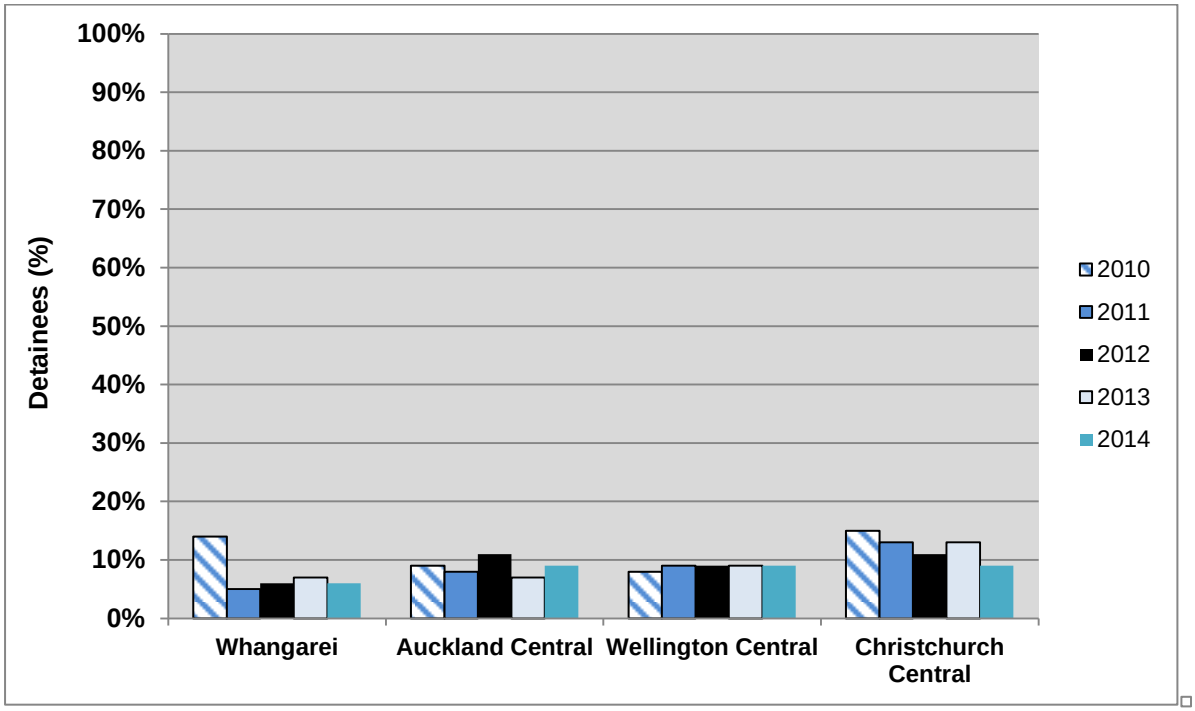
Figure 2.7: Proportion of police detainees who had ever been a patient in a psychiatric ward or hospital for an overnight stay or longer by location, 2010-2014



Current treatment or medication for mental illness

Eight percent of the detainees were currently receiving treatment or medication for a mental illness at the time of their arrest in 2014. There was no statistically significant change in the proportion of detainees who were receiving treatment or medication for a mental illness from 2010 to 2014 (12% to 8%).

Figure 2.8: Proportion of police detainees currently receiving treatment or medication for a mental illness by location, 2010-2014



Summary

- Eighty-six percent of the detainee sample was male in 2014
- The proportion of the detainees who were female increased from 10% in 2010 to 14% in 2014
- The mean age of the detainees was 29 years in 2014
- The mean age of the detainees in Whangarei increased from 27 years in 2010 to 31 years in 2014
- In 2014, 43% of the detainees were Maori, 40% were European, 13% were Pacific and 1% were Asian
- A much higher proportion of detainees in Whangarei were Maori than in the other three sites
- The proportion of the detainees who had completed the compulsory years of high school education increased from 47% in 2010 to 56% in 2014

- In 2014, 52% of the detainees were unemployed or on a sickness benefit, 42% were employed and 6% were students

- The proportion of detainees in Christchurch Central who were employed had previously increased from 34% in 2010 to 51% in 2012, and remained at 51% in 2014

- Thirty–three percent of the detainees had dependent children in 2014

- In 2014, detainees in Whangarei were more likely to have dependent children than those in Auckland Central and Christchurch Central

- The proportion of detainees living in 'other accommodation' (e.g. caravan, boarding house or no fixed abode) increased from 8% in 2010 to 15% in 2014

- The proportion of detainees from Whangarei living in 'other accommodation' increased from 5% in 2011 to 20% in 2014

- Thirty-six percent of the police detainees had suffered from a mental illness in their lifetimes in 2014

- Eight percent of the detainees were currently receiving treatment or medication for a mental illness in 2014

Chapter 3 – Alcohol

Introduction

The use of alcohol contributes to a range of social problems including public nuisance, disorderly behavior, physical and sexual assault, family violence, dangerous driving, accidents, suicide, low work and study performance, and unsafe work practices (Babor et al., 2010a; Kleiman, 1992). Alcohol use is also a risk factor in many health disorders including lethal overdose, liver damage, cardiovascular disease, pancreatitis, hypertension, cancer, brain damage and alcoholism (Babor, et al., 2010a).

Forty-one percent of the police detainees interviewed for the 2013 NZ-ADUM had been drinking alcohol prior to their arrest, and this had not changed from previous years. The number of standard alcoholic drinks the detainees had consumed before their arrest increased from 12 in 2010 to 17 in 2013. Nineteen percent of detainees who drove and drank alcohol had completed at least some of their driving under the influence of alcohol. Twenty-six percent of the alcohol using detainees felt they were dependent on alcohol in 2013.

In response to public concern about alcohol supply the Government passed the *Sale and Supply of Alcohol Act 2012* which brought changes to alcohol licensing and alcohol premise opening hours. These changes took effect in the latter half of 2013. As of 18 December 2013, national maximum trading hours for alcohol retail outlets were introduced (i.e. 8am-4am for on-licenses and 7am–11pm for off-licenses). These changes to opening hours are more likely to impact younger and heavier drinkers who are involved in extended drinking sessions.

Use of alcohol

In 2014, 87% of the police detainees had consumed alcohol in the previous year and 76% had drunk alcohol in the past month (Table 3.1). The detainees had first tried alcohol at a mean age of 13 years, and this had not changed from previous years (Figure 3.1). The

proportion of detainees who had consumed alcohol in the previous 12 months decreased from 92% in 2010 to 87% in 2014 (p=0.0119) (Figure 3.2).

Figure 3.1: Mean age at which police detainees first tried alcohol by location, 2010-2014

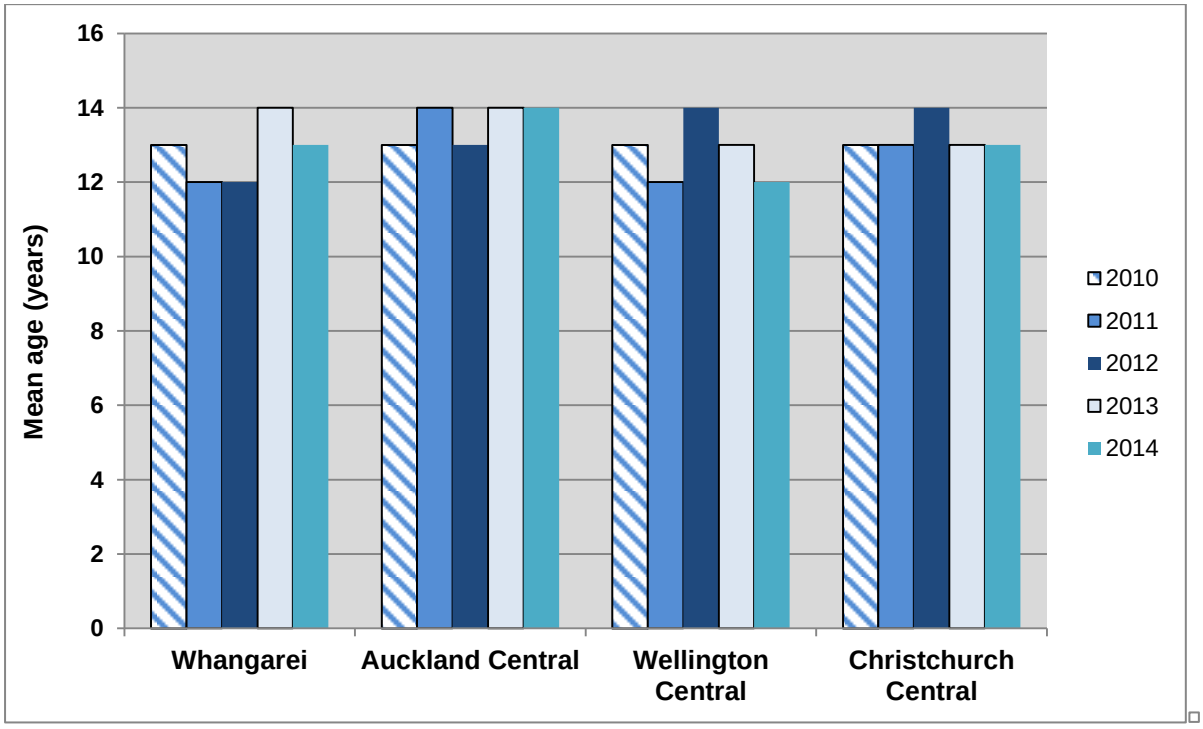
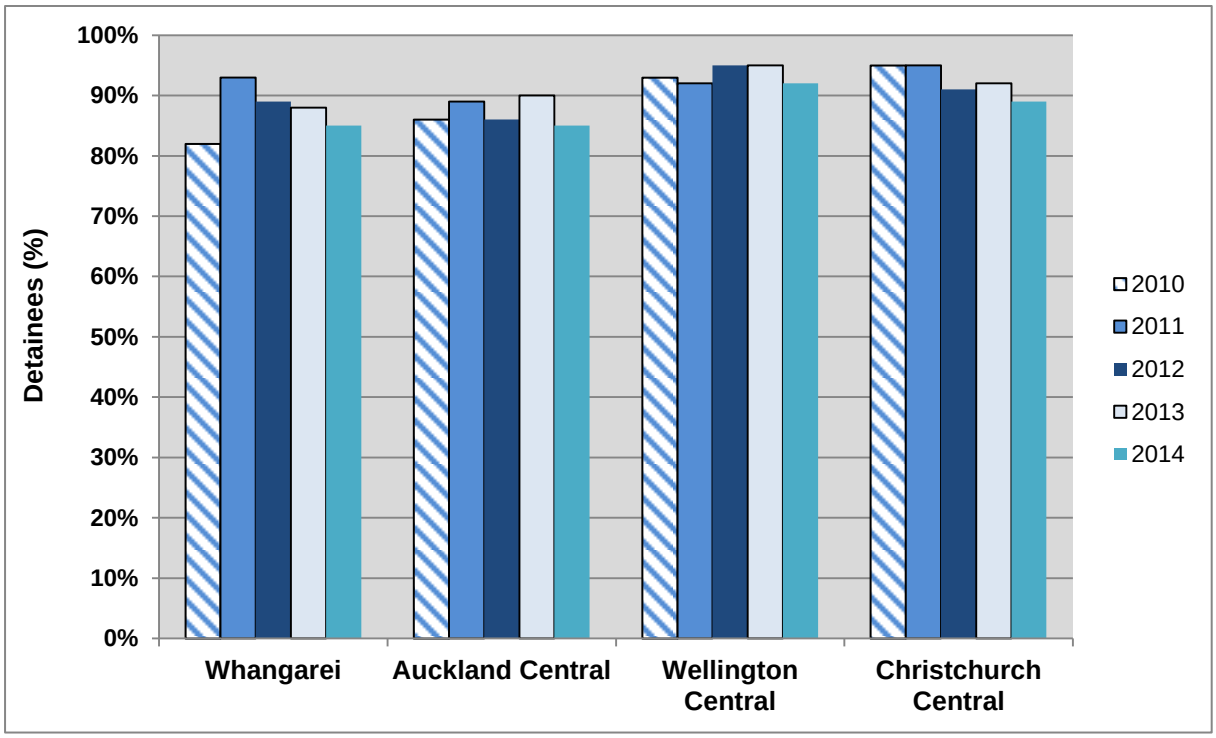


Table 3.1: Police detainees' patterns of alcohol use by location, 2010-2014

Use of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=153	2014 (n=151)	2010 (n=285)	2011 (n=316)	2012 (n=247)	2013 (n=299)	2014 (n=315)	2010 (n=152)	2011 (n=171)	2012 (n=101)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=303)	2013 (n=289)	2014 (n=273)	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=850)	2014 (n=835)
Ever used (%)	97	99	100	99	98	97	99	98	98	98	99	99	100	100	97	100	100	99	99	100	98	99	99	99	99
Mean age first used (years)	13	12	13	14	13	13	14	13	14	14	13	12	14	13	12	13	13	14	13	13	13	13	13	13	14
Used in past 12 months (%)	82	93	89	88	85	86	89	86	90	85	93	92	95	95	92	95	95	91	92	89	90	92	90	91	87
Mean number of days used in past 12 months*	89	85	70	84	86	118	107	92	101	95	100	111	100	98	81	109	107	100	109	103	108	105	93	101	94
Mean number of standard drinks per day*	15	19	18	20	19	11	13	18	18	18	13	17	18	16	15	12	15	16	19	15	12	15	17	18	16
Felt dependent in past 12 months (%)*	21	19	22	26	19	26	26	21	26	24	26	24	23	30	20	21	21	25	22	15	23	23	23	26	19
Used in past month (%)	74	83	77	75	70	76	78	80	78	74	84	81	87	84	79	86	85	84	81	79	80	81	82	80	76
Mean number of days used in past month**	8	8	6	9	8	10	10	8	10	9	8	10	8	10	8	9	10	9	9	9	9	9	8	9	9
Mean number of days males had 5 or more drinks in past month**	6	7	6	8	7	8	10	7	8	8	8	9	8	10	8	9	9	8	9	8	8	9	7	9	8
Mean number of days females had 3 or more drinks in past month**	7	11	7	11	9	8	6	10	11	8	2	9	7	3	8	7	12	11	11	12	7	9	9	10	9

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

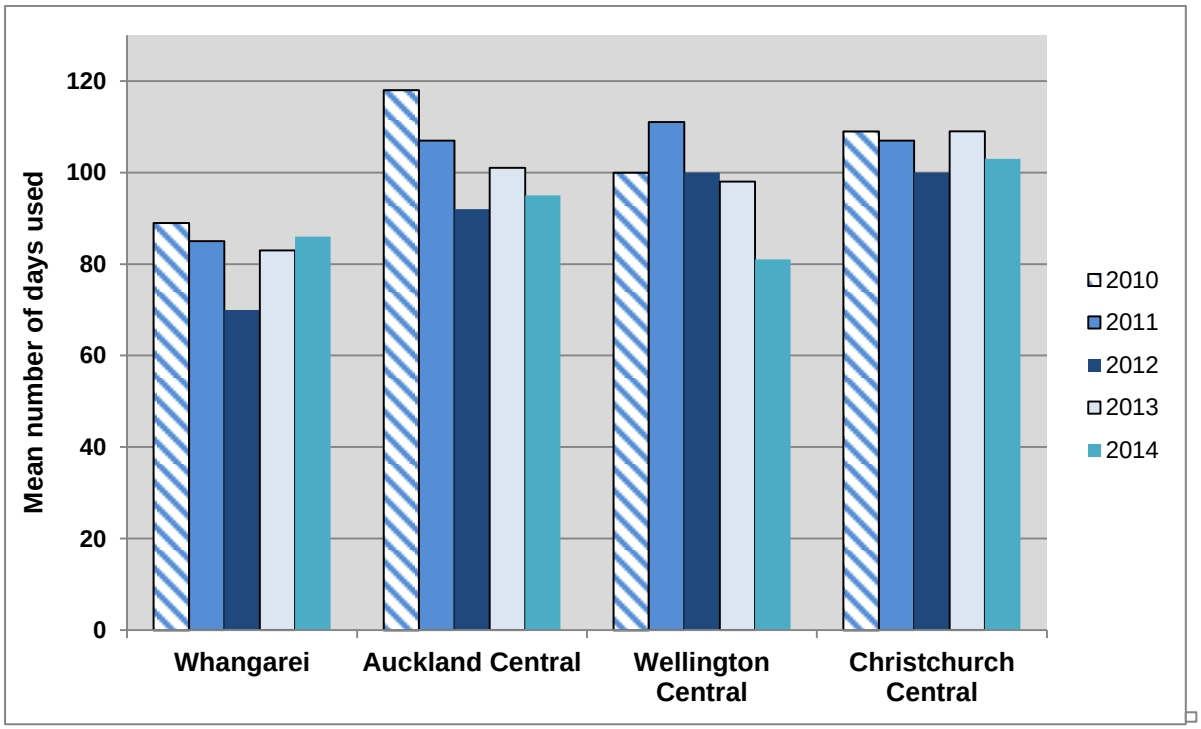
Figure 3.2: Proportion of police detainees who used alcohol in the past 12 months by location, 2010-2014



Frequency of alcohol use

The detainees drank alcohol on a mean of 94 days in the previous 12 months in 2014 (median 52, range 1-365 days). The number of days the detainees consumed alcohol fell from 108 days in 2010 to 94 days in 2014, and this decline was close to being statistically significant (p=0.0636) (Figure 3.3).

Figure 3.3: Number of days alcohol consumed in the previous 12 months by location, 2010-2014



The detainees had consumed alcohol on an average of nine days in the previous month in 2014, and this did not change from previous years.

Quantity of alcohol consumed

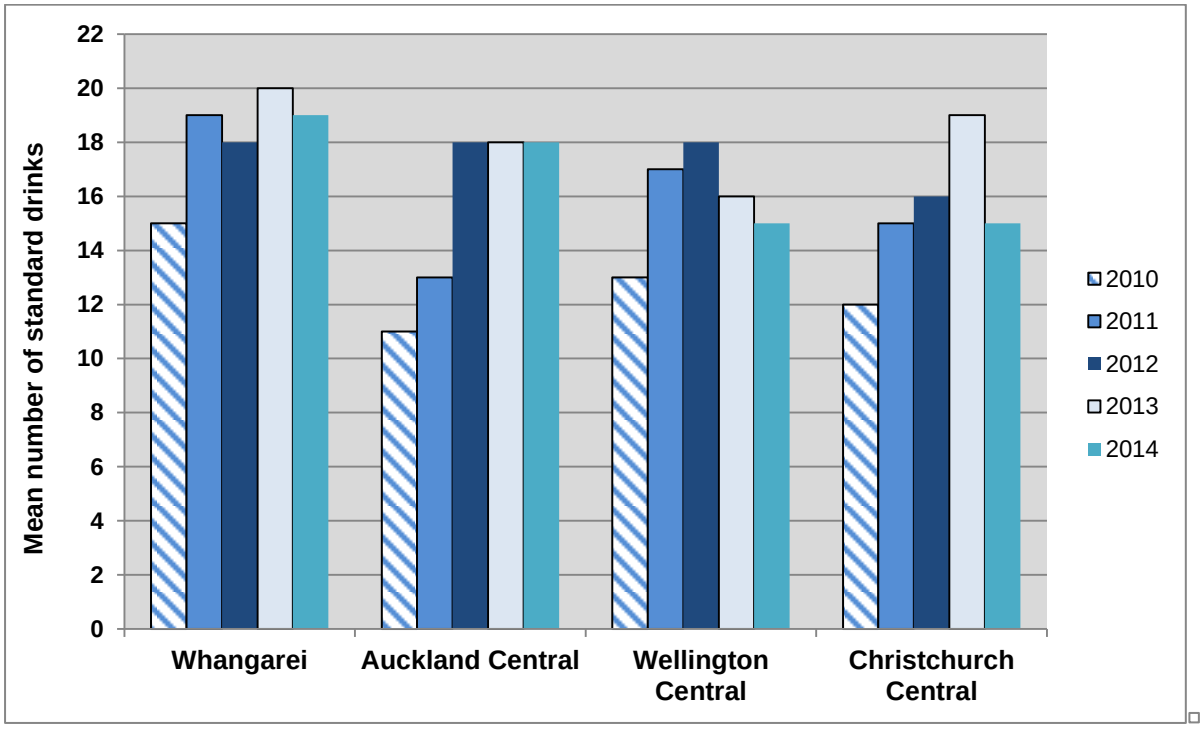
The detainees were asked how much alcohol they would consume on a typical day of use. The interviewers collected detailed information on each detainee's alcohol consumption including the alcohol type they consumed (e.g. beer, spirits), the container size (e.g. bottle, shots) and number of units. This allowed us to calculate a detainee's alcohol consumption as 'standard drinks'. Some detainees reported extraordinarily high levels of alcohol consumption (i.e. over 90 standard drinks per day). These extremely high levels of alcohol consumption are possible for heavy daily drinkers.

The mean number of standard alcoholic drinks the detainees consumed on a typical day of use increased from 12 in 2010 to 16 in 2014 ($p<0.0001$). The number of drinks consumed fell from 18 in 2013 to 16 in 2014, and this decrease was very close to being statistically significant ($p=0.0587$). We capped consumption at a maximum of 60 standard drinks to

control for the influence of extreme outliers, and found a similar overall increase from 2010 to 2014 (p=0.0002), but the decrease from 2013 to 2014 was no longer statistically significant (p=0.1287).

The number of drinks consumed by Auckland Central detainees on a typical day of use increased from 11 in 2010 to 18 in 2014 (p<0.0001) (Figure 3.4). The number of drinks consumed by Christchurch Central detainees decreased from 19 in 2013 to 15 in 2014 (p=0.0144). A similar Christchurch trend was found when the consumption data was capped to a maximum of 60 drinks, although this difference was no longer statistically significant (p=0.0807).

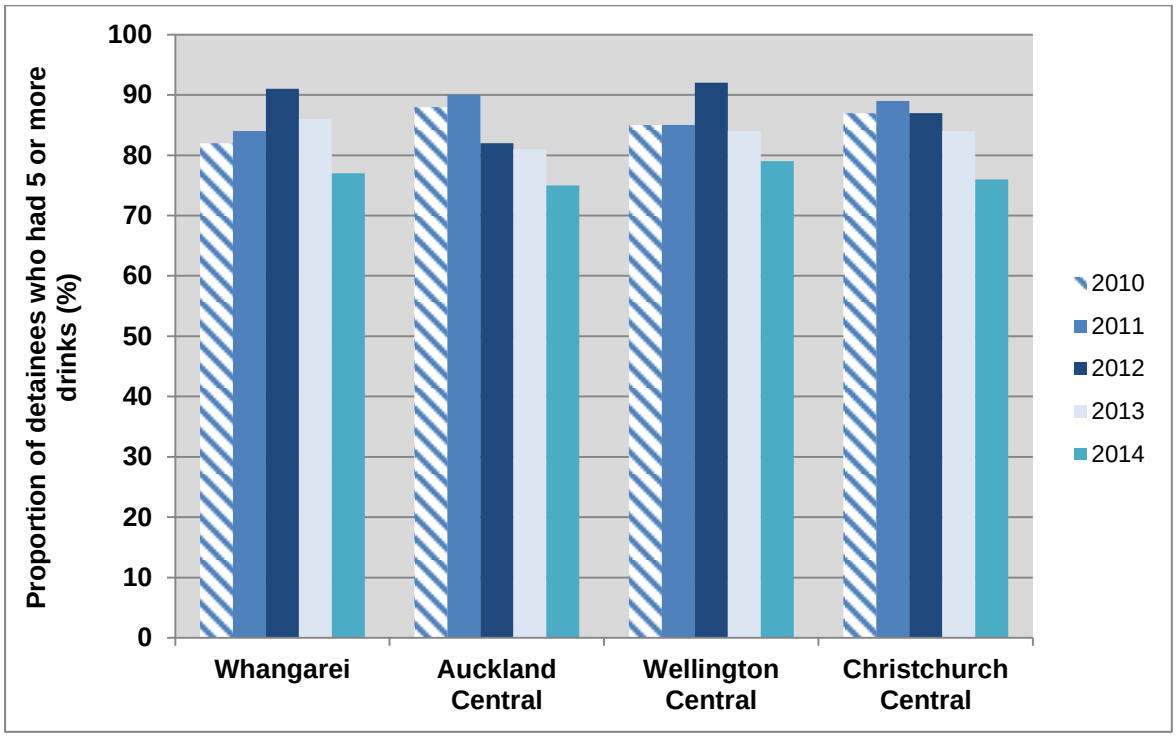
Figure 3.4: Mean number of standard alcohol drinks consumed by police detainees on a typical day by location (of those who had drunk alcohol in the previous 12 months), 2010-2014



The detainees who had drunk alcohol in the past month were asked on how many days during the past month they had drunk 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). Seventy-seven percent of the male detainees had drunk five or more drinks in a single

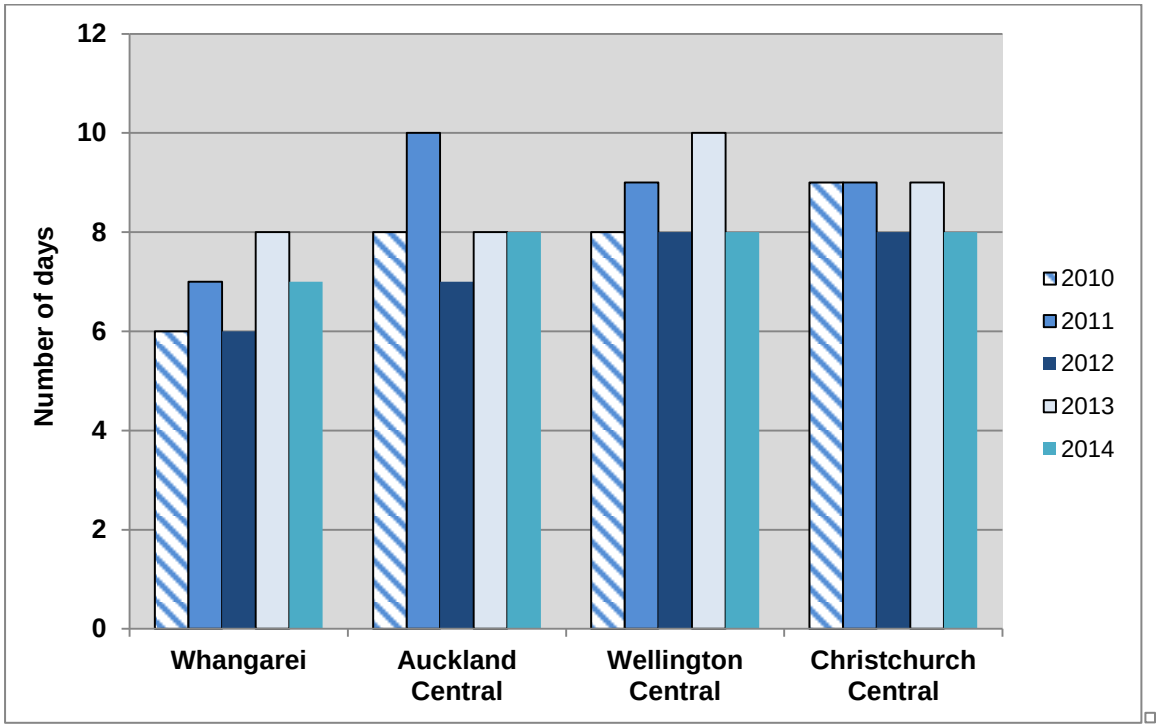
session in the past month in 2014. The proportion of male detainees who had drunk five or more drinks in a single session declined from 87% in 2012 to 77% in 2014 (p<0.0001). Similar declines were found from 2010 to 2014 (p=0.0002), 2011 to 2014 (p<0.0001) and 2013 to 2014 (p=0.0433). These declines in heavier drinking occurred in Whangarei, Auckland Central and Christchurch Central (Figure 3.5). The proportion of male Auckland Central detainees who drank five or more drinks in a single session declined from 88% in 2010 to 75% in 2014 (p=0.0092), and from 90% in 2011 to 75% in 2014 (p=0.0010). The proportion of male Christchurch Central detainees who consumed larger amounts in a single session declined from 87% in 2010 to 76% in 2014 (p=0.0500), from 89% in 2011 to 76% in 2014 (p=0.0244), and from 87% in 2012 to 76% in 2014 (p=0.0292).

Figure 3.5: Proportion of male detainees who had drunk five or more standard alcoholic drinks in the past 30 days by location (of those who had drunk alcohol in the previous month), 2010-2014



Male detainees had drunk five or more standard drinks on an average of eight days in the previous month in 2014. The mean number of days of heavier alcohol consumption in the previous month fell from nine days in 2011 to eight days in 2014 (p=0.0267) (Figure 3.6).

Figure 3.6: Mean number of days on which male detainees had drunk five or more standard alcoholic drinks in the past 30 days by location (of those who had drunk alcohol in the previous month), 2010-2014



Dependency on alcohol

The detainees who had drunk alcohol in the past 12 months were asked if they felt they were dependent on alcohol during this time. Nineteen percent of the alcohol using detainees felt they were alcohol dependent in 2014. There was a decline in the proportion of detainees who felt dependent on alcohol from 26% in 2013 to 19% in 2014 (p=0.0386). The decline was particularly strong in Christchurch Central where the proportion who considered themselves alcohol dependent declined from 25% to 15% (p=0.0468).

Alcohol use at time of arrest

Thirty percent of the detainees had been drinking alcohol prior to their arrest in 2014. The proportion of detainees drinking prior to arrest declined from 41% in 2013 to 30% in 2014 (p=0.0003). The incidence of drinking prior to arrest was also lower in 2014 compared to 2012 (p=0.0007) and 2011 (p=0.0015). The proportion of Whangarei detainees who had been drinking prior to arrest declined from 53% in 2012 to 31% in 2014 (p=0.0013), and from 47% in 2013 to 31% in 2014 (p=0.0367). The proportion of Auckland Central detainees

who had been drinking before arrest declined from 42% in 2011 to 30% in 2014 (p=0.0402), and from 43% in 2013 to 30% in 2014 (p=0.0243) (Table 3.2 and Figure 3.7).

Figure 3.7: Proportion of police detainees who had been drinking alcohol prior to their arrest by location, 2010-2014

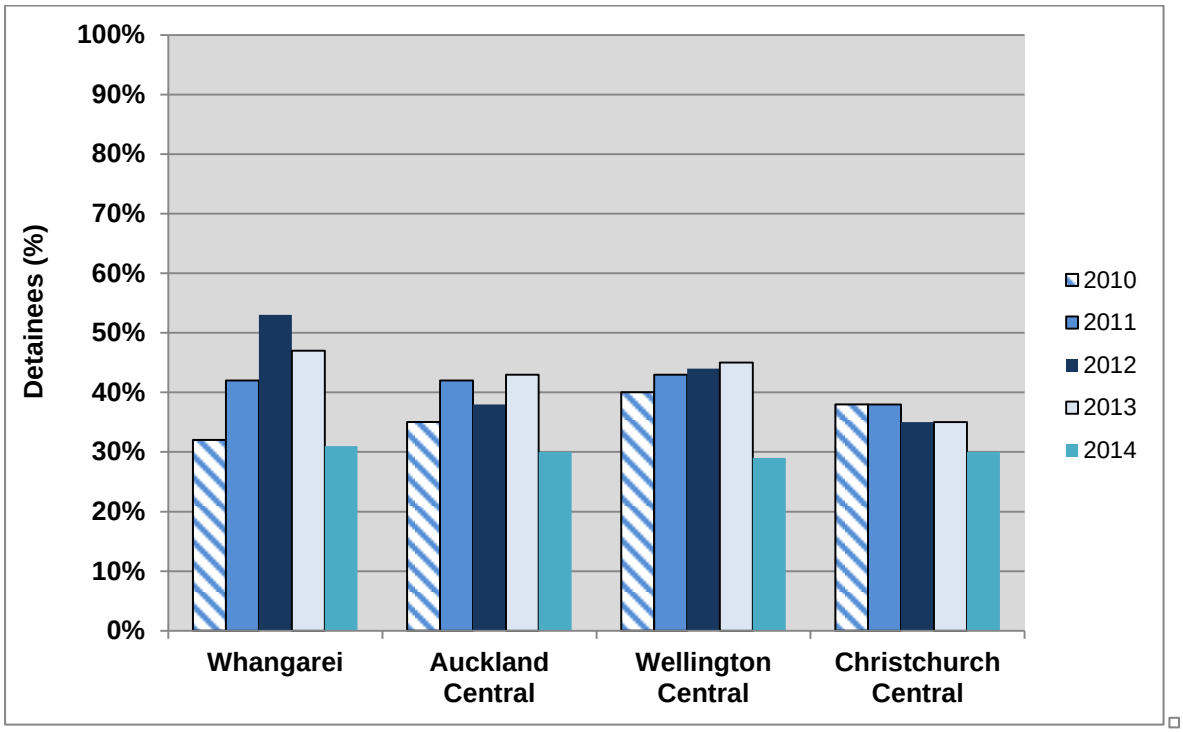


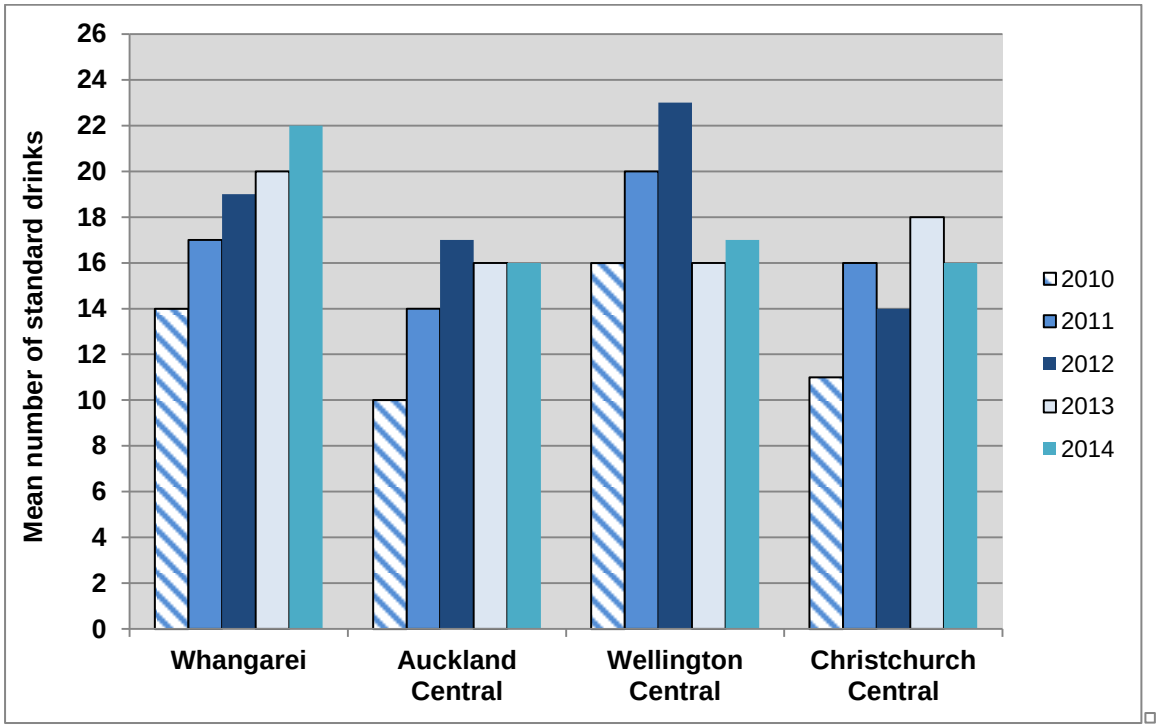
Table 3.2: Proportion of police detainees who had been drinking alcohol prior to their arrest by location, 2010-2014

Use of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=111)	2011 (n=149)	2012 (n=146)	2013 (n=150)	2014 (n=151)	2010 (n=283)	2011 (n=310)	2012 (n=243)	2013 (n=293)	2014 (n=315)	2010 (n=147)	2011 (n=170)	2012 (n=98)	2013 (n=104)	2014 (n=95)	2010 (n=262)	2011 (n=189)	2012 (n=299)	2013 (n=288)	2014 (n=273)	2010 (n=803)	2011 (n=818)	2012 (n=786)	2013 (n=838)	2014 (n=835)
Using when arrested (%)	32	42	53	47	31	35	42	38	43	30	40	43	44	45	29	38	38	35	35	30	36	41	40	41	30
Mean number of standard drinks before arrest*	14	17	19	20	22	10	14	17	16	16	16	20	23	16	17	11	16	14	18	16	12	16	18	17	17

* of those who had been drinking alcohol when arrested

The number of alcoholic drinks the detainees consumed before their arrest increased from 12 in 2010 to 17 in 2014 (p=0.0229). When consumption was capped at a maximum of 60 drinks we obtained a similar increase, although the increase was no longer statistically significant (p=0.0853).

Figure 3.8: Mean number of standard alcoholic drinks consumed at the time of arrest by location, 2010-2014



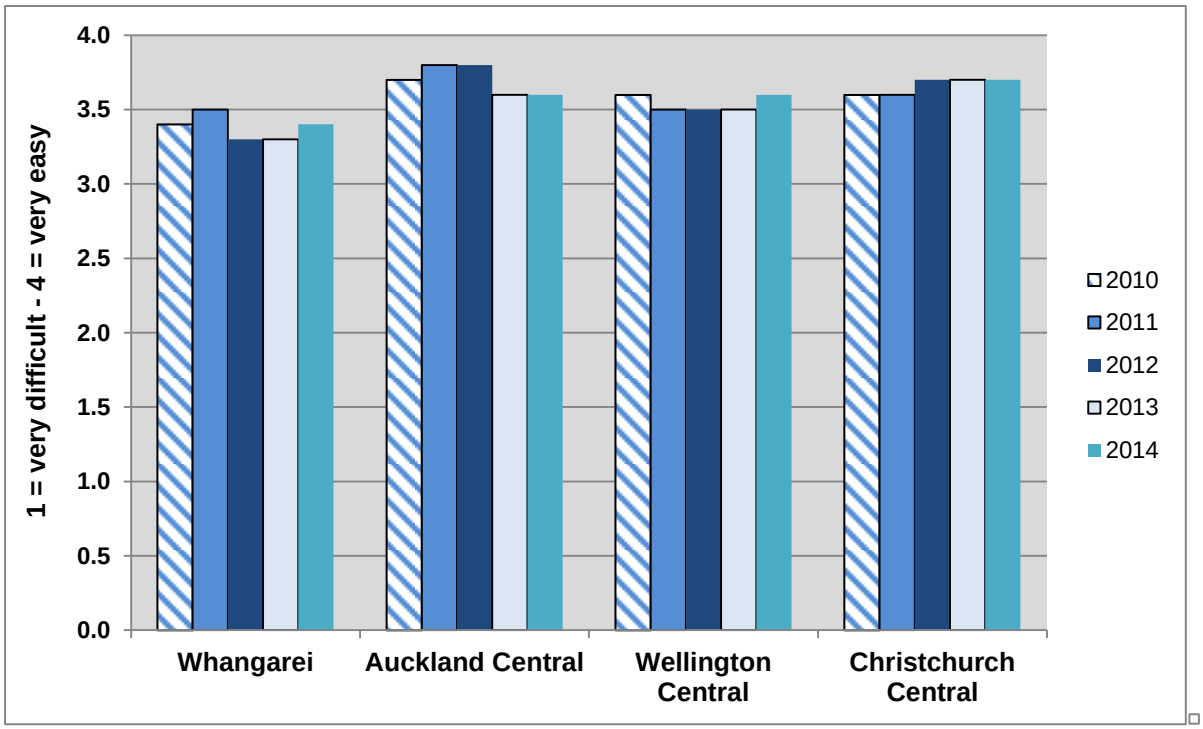
Current availability of alcohol

The detainees reported the current availability of alcohol was 'very easy/easy' in 2014 (Table 3.3). Sixty-eight percent of detainees described alcohol as 'very easy' to obtain in 2014. There was no overall change in the current availability of alcohol in 2014 compared to previous years (p=0.4129). The current availability of alcohol declined slightly in Auckland Central from 2011 to 2014 (down from 3.8 to 3.6, p=0.0006), and from 2012 to 2014 (down from 3.8 to 3.6, p=0.0017) (Figure 3.9).

Table 3.3: Police detainees' perceptions of the current availability of alcohol by location, 2010-2014

Current availability of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=97)	2011 (n=139)	2012 (n=131)	2013 (n=117)	2014 (n=123)	2010 (n=245)	2011 (n=278)	2012 (n=211)	2013 (n=269)	2014 (n=261)	2010 (n=138)	2011 (n=155)	2012 (n=94)	2013 (n=94)	2014 (n=85)	2010 (n=248)	2011 (n=181)	2012 (n=275)	2013 (n=265)	2014 (n=241)	2010 (n=728)	2011 (n=753)	2012 (n=712)	2013 (n=745)	2014 (n= 710)
Very easy [4]	49%	60%	49%	46%	59%	77%	85%	85%	69%	68%	70%	61%	57%	67%	64%	72%	69%	73%	77%	75%	70%	71%	71%	69%	68%
Easy [3]	41%	28%	37%	38%	28%	17%	12%	11%	25%	24%	23%	28%	35%	24%	28%	18%	24%	22%	15%	20%	22%	21%	23%	23%	24%
Difficult [2]	7%	10%	9%	12%	8%	4%	2%	3%	3%	7%	5%	8%	5%	4%	7%	9%	6%	3%	5%	3%	6%	6%	4%	4%	6%
Very difficult [1]	2%	2%	5%	3%	4%	2%	1%	1%	3%	2%	1%	3%	2%	4%	1%	2%	2%	1%	3%	2%	2%	2%	2%	3%	2%
Average availability (1 = very difficult – 4 = very easy)	3.4	3.5	3.3	3.3	3.4	3.7	3.8	3.8	3.6	3.6	3.6	3.5	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.6
Overall current availability	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy	Very easy	Very easy	Very easy/ easy	Very easy/ Easy	Very easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy	Very easy/ easy	Very easy	Very easy	Very easy	Very easy	Very easy	Very easy	Very easy/ easy	Very easy/ Easy

Figure 3.9: Current availability of alcohol by location, 2010-2014



Change in availability of alcohol

Seventy-eight percent of the detainees described the availability of alcohol as 'stable' in 2014. The proportion of detainees describing the availability of alcohol as becoming 'easier' declined from 2010 to 2014 (down from 2.2 to 2.1, p=0.0034), with most (78%) describing it as 'stable' in 2014. Alcohol availability was lower in 2014 compared to 2012 (p=0.0309), and in 2014 compared to 2011, the latter being very close to statistical significance (p=0.0529). The availability of alcohol in Auckland Central was also lower in 2014 than in 2011 (2.0 compared to 2.2, p=0.0279) (Table 3.4 and Figure 3.10).

Figure 3.10: Change in availability of alcohol by location, 2010-2014

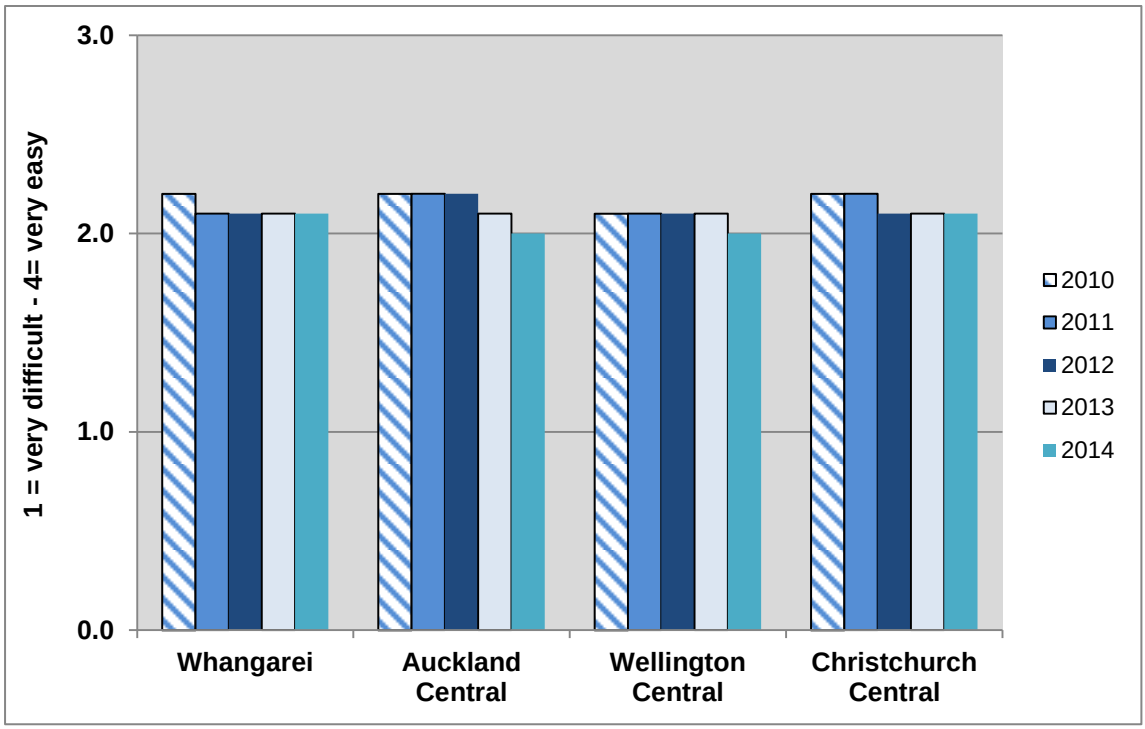


Table 3.4: Change in the availability of alcohol by location, 2010-2014

Change in availability of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=96)	2011 (n=137)	2012 (n=125)	2013 (n=113)	2014 (n=119)	2010 (n=242)	2011 (n=269)	2012 (n=204)	2013 (n=262)	2014 (n=254)	2010 (n=137)	2011 (n=151)	2012 (n=92)	2013 (n=93)	2014 (n=84)	2010 (n=248)	2011 (n=180)	2012 (n=275)	2013 (n=263)	2014 (n=240)	2010 (n=723)	2011 (n=737)	2012 (n=697)	2013 (n=731)	2014 (n=697)
Easier [3]	26%	18%	15%	19%	17%	22%	19%	19%	18%	17%	19%	11%	21%	12%	4%	21%	23%	20%	21%	13%	22%	18%	19%	18%	13%
Stable [2]	64%	67%	69%	64%	68%	69%	77%	76%	70%	67%	71%	83%	68%	83%	95%	67%	69%	73%	68%	81%	68%	74%	73%	71%	78%
Fluctuates [2]	5%	4%	6%	5%	8%	2%	2%	1%	2%	3%	3%	1%	4%	4%	0%	6%	0%	1%	2%	<1%	4%	2%	3%	3%	2%
More difficult [1]	5%	11%	10%	12%	8%	7%	2%	3%	10%	13%	7%	5%	7%	1%	1%	6%	7%	5%	9%	5%	6%	6%	6%	8%	7%
Mean change in availability (1 = more difficult – 3 = easier)	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1
Overall change in availability	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ easier	Stable/ Easier	Stable/ easier	Stable	Stable	Stable	Stable/ Easier	Stable	Stable	Stable/ easier	Stable	Stable	Stable/ easier	Stable/ easier	Stable	Stable/ easier	Stable	Stable/ easier	Stable	Stable	Stable	Stable

Change in the price of alcohol

The detainees reported the price of alcohol had been 'stable/increasing' over the previous six months in 2014 (Table 3.5 & 3.6). A lower proportion of detainees reported the price of alcohol to be 'increasing' in 2014 compared to 2012 (2.3 compared to 2.5, $p<0.0001$), 2014 compared to 2011 (2.3 compared to 2.5, $p<0.0001$) and 2014 compared to 2010 (2.3 compared to 2.5, $p=0.0002$). This decline in the proportion of detainees saying the price of alcohol was increasing occurred in all sites (Figure 3.11).

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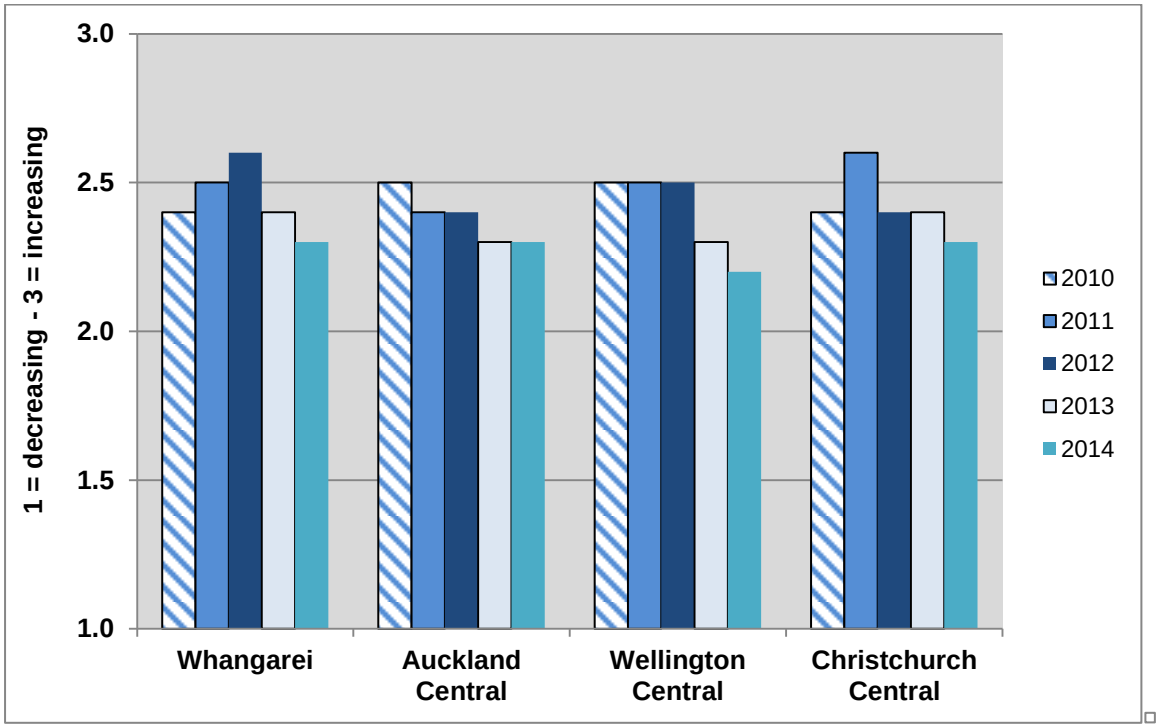
Table 3.5: Police detainees' perceptions of the change in the price of alcohol in the past six months by location, 2010-2014

Change in price of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=91)	2011 (n=121)	2012 (n=127)	2013 (n=120)	2014 (n=116)	2010 (n=224)	2011 (n=256)	2012 (n=197)	2013 (n=249)	2014 (n=242)	2010 (n=116)	2011 (n=143)	2012 (n=85)	2013 (n=85)	2014 (n=79)	2010 (n=238)	2011 (n=171)	2012 (n=257)	2013 (n=257)	2014 (n=229)
Increasing [3]	46%	56%	66%	47%	34%	54%	52%	48%	41%	43%	57%	52%	51%	31%	24%	53%	65%	47%	49%	36%
Fluctuating [2]	22%	12%	5%	18%	22%	9%	12%	13%	15%	9%	9%	13%	19%	15%	15%	5%	8%	9%	13%	16%
Stable [2]	24%	22%	25%	26%	34%	29%	29%	32%	35%	38%	28%	30%	25%	49%	58%	32%	22%	40%	34%	45%
Decreasing [1]	8%	10%	4%	9%	9%	8%	7%	7%	8%	9%	6%	4%	6%	5%	3%	9%	5%	4%	5%	3%
Mean change in price (1 = decreasing – 3 = increasing)	2.4	2.5	2.6	2.4	2.3	2.5	2.4	2.4	2.3	2.3	2.5	2.5	2.5	2.3	2.2	2.4	2.6	2.4	2.4	2.3
Overall change in availability	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ Stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ Stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Stable/ increasing	Stable/ Increasing	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Stable/ Increasing

Table 3.6: Police detainees' perceptions of the change in the price of alcohol in the past six months all sites, 2010-2014

Change in price of alcohol	All sites				
	2010 (n=669)	2011 (n=691)	2012 (n=667)	2013 (n=711)	2014 (n=666)
Increasing [3]	53%	57%	51%	43%	36%
Fluctuating [2]	10%	11%	11%	15%	15%
Stable [2]	29%	26%	32%	36%	44%
Decreasing [1]	8%	7%	5%	7%	6%
Mean change in price (1 = decreasing – 3 = increasing)	2.5	2.5	2.5	2.4	2.3
Overall change in availability	Increasing/ stable	Increasing/ stable	Increasing/ stable	Increasing/ stable	Stable/ Increasing

Figure 3.11: Police detainees' perceptions of the change in the price of alcohol in the past six months by location, 2010-2014



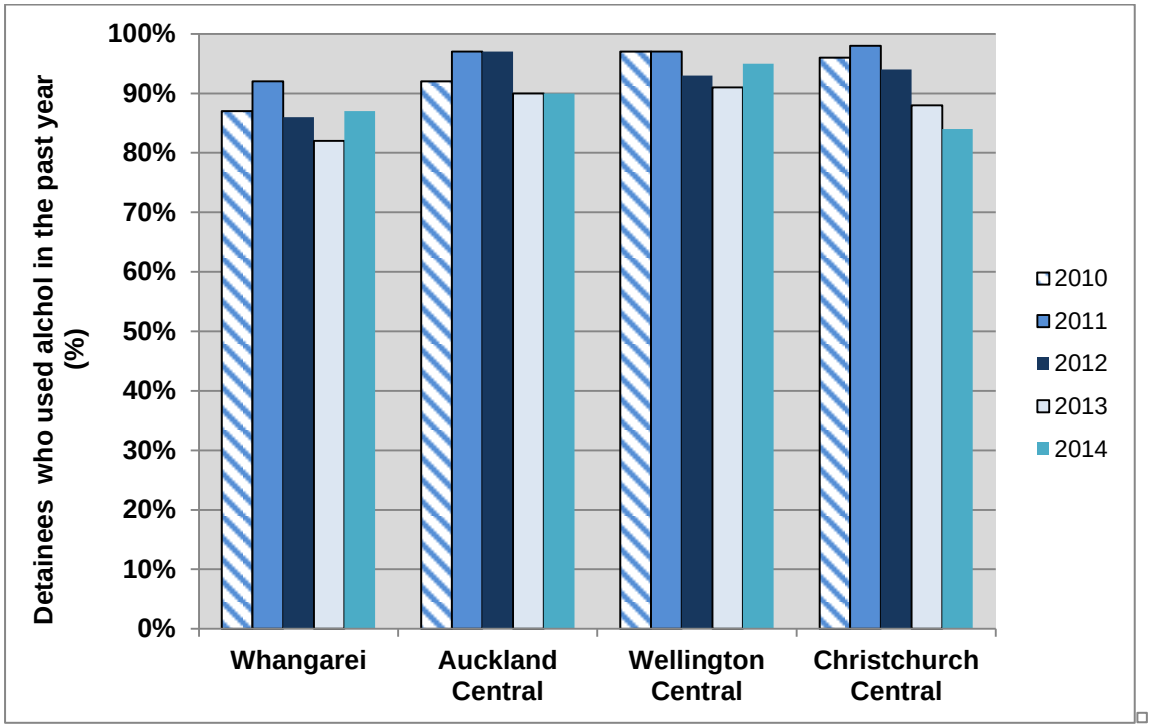
Time taken to purchase alcohol

Eighty-eight percent of the detainees could purchase alcohol in one hour or less in 2014. Seventy-seven percent could purchase it in less than 20 minutes. A slightly lower proportion of the detainees could purchase alcohol in one hour or less in 2014 compared to 2012 (88% compared to 94%, p=0.0098), 2014 compared to 2011 (88% compared to 97%, p<0.0001), and 2014 compared to 2010 (88% vs. 94%, p=0.0028) (Table 3.7). The proportion of Auckland Central detainees who could purchase alcohol in one hour or less declined from 97% in 2012 to 90% in 2014 (p=0.0299) and from 97% in 2011 to 90% in 2014 (p=0.0118) (Figure 3.12). The proportion of Christchurch Central detainees who could purchase alcohol in one hour or less declined from 93% in 2012 to 84% in 2014 (p=0.0078), from 98% in 2011 to 84% in 2014 (p=0.0009) and from 96% in 2010 to 84% in 2014 (p=0.0003).

Table 3.7: Time taken by police detainees to purchase alcohol by location, 2010-2014

Time taken to purchase alcohol (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=96)	2011 (n=138)	2012 (n=133)	2013 (n=129)	2014 (n=126)	2010 (216)	2011 (n=276)	2012 (n=209)	2013 (n=270)	2014 (n=268)	2010 (n=137)	2011 (n=154)	2012 (n=93)	2013 (n=98)	2014 (n=84)	2010 (n=247)	2011 (n=181)	2012 (n=273)	2013 (n=267)	2014 (n=238)	2010 (n=696)	2011 (n=752)	2012 (n=708)	2013 (n=769)	2014 (n=720)
Months	0%	0%	0%	0%	1%	0%	1%	<1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	<1%	1%	0%	0%	<1%	<1%	1%	<1%
Weeks	2%	2%	1%	2%	2%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	<1%	0%	1%	<1%	1%	1%	<1%	<1%	1%	1%
Days	6%	2%	0%	2%	2%	1%	<1%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%
About 1 day	1%	1%	6%	5%	0%	3%	<1%	1%	3%	3%	1%	1%	2%	1%	2%	0%	1%	1%	2%	1%	1%	1%	2%	2%	2%
Hours	4%	2%	8%	9%	8%	3%	1%	<1%	5%	4%	3%	3%	2%	7%	2%	3%	2%	4%	8%	13%	3%	2%	3%	7%	8%
1 hour	13%	18%	16%	17%	19%	14%	9%	8%	7%	7%	15%	11%	6%	16%	10%	12%	16%	12%	10%	13%	13%	13%	10%	11%	11%
Less than 20 mins	74%	74%	70%	65%	67%	78%	88%	89%	83%	83%	82%	86%	87%	74%	86%	84%	82%	82%	78%	71%	80%	83%	84%	77%	77%

Figure 3.12: Proportion of the police detainees who could purchase alcohol in one hour or less by location, 2010-2014



Effect of alcohol on the likelihood of becoming angry

Those detainees who reported drinking alcohol in the past 12 months were asked what effect drinking alcohol had on their likelihood of becoming angry. Thirty-two percent of the alcohol using detainees in 2014 said using alcohol was 'more likely' or 'much more likely' to make them become angry (Table 3.8).

Table 3.8: Effect of alcohol on police detainees' likelihood of becoming angry, 2010-2014

Effect of alcohol on likelihood of becoming angry	All sites				
	2010 (n=720)	2011 (n=741)	2012 (n=707)	2013 (n=762)	2014 (n=713)
Much more likely	11%	8%	9%	11%	11%
More likely	26%	27%	28%	22%	21%
No effect	32%	41%	41%	40%	38%
Less likely	23%	19%	17%	21%	19%
Much less likely	8%	5%	6%	6%	11%

Driving under the influence of alcohol

Those detainees who had drunk alcohol in the past year were asked how often they drove under the influence of alcohol. Twenty-one percent of the alcohol using detainees said they did not drive and a further 8% said their driver license was suspended in 2014. Eighteen percent of the detainees who drove and drank alcohol had completed at least some of their driving under the influence of alcohol in 2014 (Table 3.9).

Table 3.9: Extent police detainees who drove and who had used alcohol in the past 12 months had driven under the influence of alcohol by location, 2010-2014

Extent drove under the influence of alcohol (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=79)	2011 (n=100)	2012 (n=96)	2013 (n=95)	2014 (n=98)	2010 (n=165)	2011 (n=198)	2012 (n=145)	2013 (n=910)	2014 (n=174)	2010 (n=91)	2011 (n=98)	2012 (n=72)	2013 (n=56)	2014 (n=59)	2010 (n=54)	2011 (n=124)	2012 (n=208)	2013 (n=182)	2014 (n=178)	2010 (n=489)	2011 (n=520)	2012 (n=521)	2013 (n=520)	2014 (n=513)
All	3%	2%	1%	2%	2%	2%	2%	1%	3%	1%	4%	2%	1%	5%	5%	2%	0%	1%	2%	2%	3%	1%	1%	3%	2%
Most	3%	0%	5%	8%	4%	3%	5%	6%	4%	3%	3%	3%	3%	2%	7%	6%	3%	2%	2%	3%	4%	3%	4%	4%	4%
Some	14%	8%	14%	13%	12%	18%	20%	15%	14%	14%	14%	14%	6%	11%	5%	19%	18%	19%	11%	15%	17%	16%	14%	12%	12%
Hardly any	37%	26%	25%	17%	13%	19%	20%	16%	32%	21%	18%	18%	22%	20%	24%	18%	19%	22%	23%	23%	21%	20%	21%	25%	21%
None	44%	64%	55%	60%	68%	58%	54%	61%	47%	61%	60%	62%	68%	63%	59%	55%	60%	56%	62%	57%	55%	59%	60%	56%	60%

Summary

- The proportion of detainees who had consumed alcohol in the past year declined slightly from 92% in 2010 to 87% in 2014
- The number of days the detainees had drunk alcohol in the past year also declined somewhat from 108 days in 2010 to 94 days in 2014
- Overall, the mean number of drinks the detainees consumed on a typical day of use increased from 12 in 2010 to 16 in 2014. However, the number of drinks consumed fell from 18 in 2013 to 16 in 2014
- The number of drinks consumed by Christchurch Central detainees on a typical day of use decreased from 19 in 2013 to 15 in 2014
- The proportion of male detainees who had drunk five or more drinks in a single day in the previous month declined from 87% in 2012 to 77% in 2014
- The number of days the male detainees had consumed five or more drinks in a single session in the previous month declined from nine days in 2011 to eight days in 2014
- The proportion of detainees who felt they were dependent on alcohol declined from 26% in 2013 to 19% in 2014, with a strong decline in Christchurch Central
- The proportion of detainees drinking prior to their arrest fell from 41% in 2011 to 30% in 2014. Drinking prior to arrest fell in Whangarei and Auckland Central
- The number of alcoholic drinks the detainees consumed before arrest increased from 12 in 2010 to 17 in 2014
- The current availability of alcohol declined slightly in Auckland Central in 2014 compared to recent years
- The proportion of detainees who thought the price of alcohol was 'increasing' declined in 2014 compared to previous years
- The proportion of detainees who could purchase alcohol in one hour or less declined slightly in Auckland Central and Christchurch Central
- Thirty-two percent of the alcohol using detainees in 2014 said drinking alcohol was 'more likely' or 'much more likely' to make them become angry

- Eighteen percent of the detainees who drove and drank alcohol had completed at least some of their driving under the influence of alcohol in 2014

Chapter 4 - Methamphetamine

Introduction

Methamphetamine, known colloquially in New Zealand as 'P', is a powerful and addictive psychostimulant (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 behavior, and psychosis resembling schizophrenia (Hall & Hando, 1994; Kuhn, et al., 1998; Shearer, et al., 2002). Methamphetamine also has a high dependency potential (Hall & Hando, 1994; Kuhn, et al., 1998; Shearer, et al., 2002).

Methamphetamine use emerged in New Zealand in the late 1990s and early 2000s. Its population prevalence of use peaked at 5.0% of the population (aged 15-45 years) in 2001, before declining to 3.4% by 2006 (Wilkins et al., 2002b; Wilkins & Sweetsur, 2008). The most recently available national data from a household survey conducted in 2013/14 found 1% of New Zealanders aged 16-64 years reported using amphetamines[2] in the previous year (Department of the Prime Minister and Cabinet, 2014; Ministry of Health, 2014). Although direct comparisons are not possible due to some differences in methodology between survey waves, similar rates of amphetamine use (i.e. around 1%) were found in similar 2011/12 and 2012/13 household surveys (Ministry of Health, 2013). In Australia, 2.1% of the general population (aged 14 years or older) had used meth/amphetamine in the previous 12 months in 2013, and this had not changed compared to 2010 (AIHW, 2015). The use of crystal methamphetamine (Ice) increased in Australia in 2013, and there was also an increase in the frequency of methamphetamine use (AIHW, 2015).

In New Zealand, high levels of methamphetamine use and related harm have persisted among specific 'at risk' populations, including frequent drug users and police detainees (Wilkins, et al., 2012b; Wilkins et al., 2011b). For example, 30% of police detainees interviewed for the 2013

[2] In this survey the term 'amphetamines' referred to a number of amphetamine type drugs including methamphetamine, crystal methamphetamine (Ice) and amphetamine sulphate ('speed')

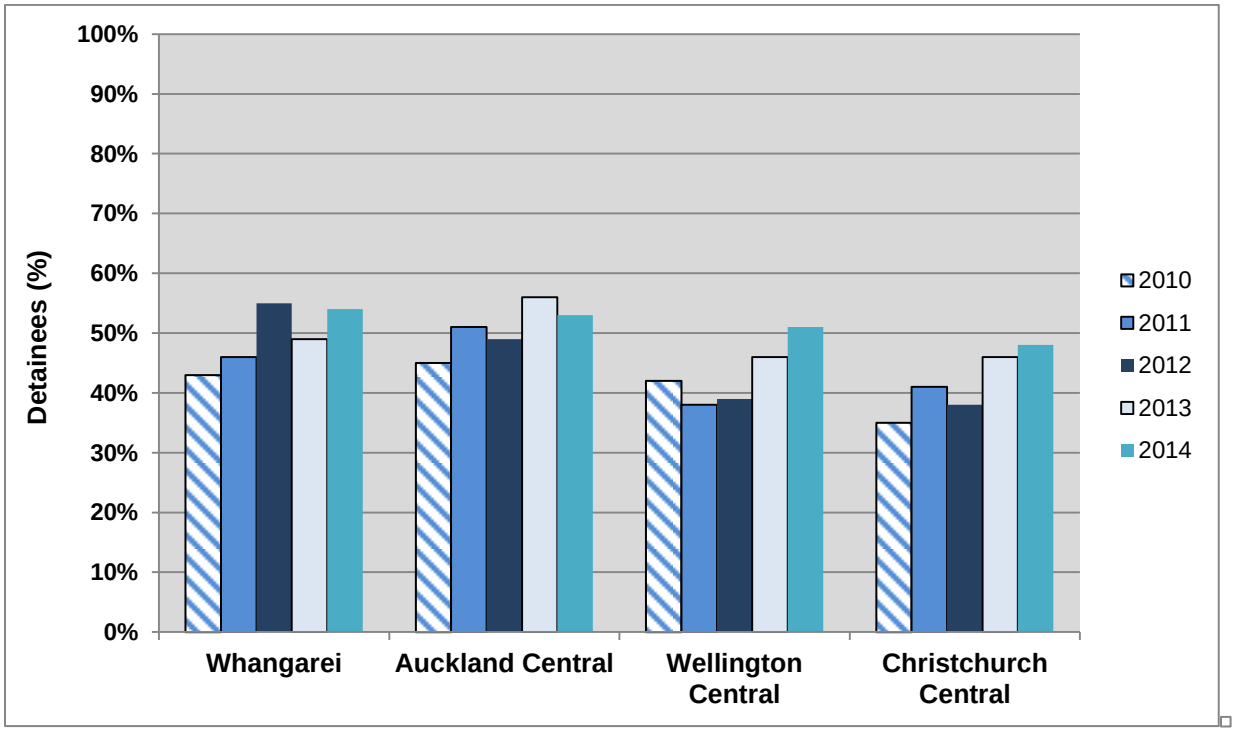
NZ-ADUM had used methamphetamine in the previous 12 months. Detainees in Auckland Central (38%) were more likely to have used the drug than those in Christchurch Central (25%) and Whangarei (25%). The availability of methamphetamine was reported to be fairly stable, except in Christchurch where reported availability has steadily increased since the earthquakes in 2011.

The Illicit Drug Monitoring System (IDMS), which interviews frequent drug users in the community from the three main centres, confirmed an increase in availability of methamphetamine in Christchurch. The proportion of frequent drug users in Christchurch who reported methamphetamine was 'easier' to obtain increased from 14% in 2012 to 26% in 2013. The proportion who could purchase methamphetamine in one hour or less in Christchurch increased dramatically from 56% in 2012 to 92% in 2013. The influx of construction workers to Christchurch as part of the city rebuild may be playing a part in the resurgence of methamphetamine use there, while police have also noted a re-organisation of the gang scene in Christchurch which may be facilitating greater supply of the drug (NDIB, 2014).

Patterns of methamphetamine use

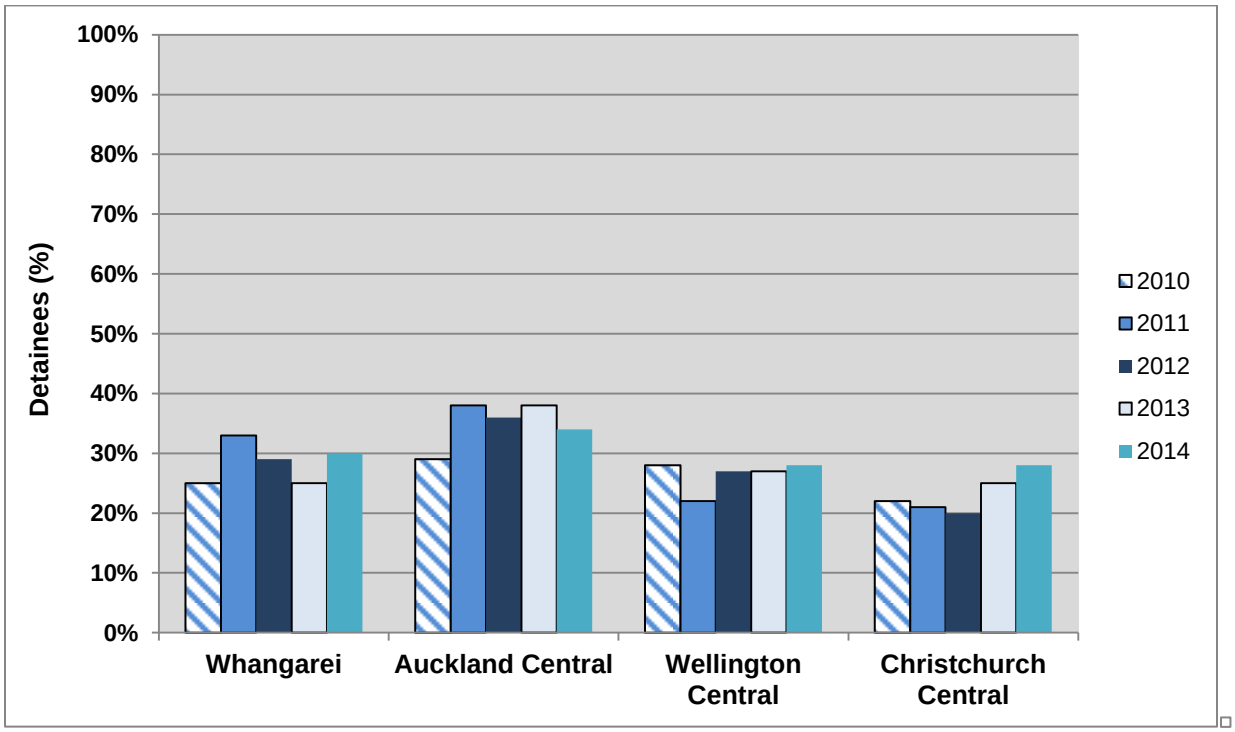
Fifty-one percent of the police detainees had tried methamphetamine in their lifetimes, 30% had used it in the previous year and 19% had used it in the past month in 2014 (Table 4.1). The proportion of detainees who had ever tried methamphetamine increased from 41% in 2010 to 51% in 2014 (p=0.0008). This included a substantial rise in the lifetime use of methamphetamine in Christchurch Central (up from 36% in 2010 to 48% in 2014, p=0.0288) (Figure 4.1).

Figure 4.1: Proportion of police detainees who had ever used methamphetamine by location, 2010-2014



There was no statistically significant change in the overall prevalence of methamphetamine use in the previous year from 2010 to 2014. There was also no change in the last year prevalence of methamphetamine use from 2013 to 2014 (30% in both years). However, the proportion of detainees from Christchurch who had used methamphetamine in the previous year increased from 20% in 2012 to 28% in 2014, although this increase was not statistically significant (p=0.1182) (Figure 4.2).

Figure 4.2: Proportion of police detainees who used methamphetamine in the past 12 months by location, 2010-2014



The proportion of detainees who had used methamphetamine in the previous month increased from 14% in 2010 to 19% in 2014 (p=0.0369). There was no overall change in monthly use between 2013 and 2014 (19% in both years). The proportion of Christchurch Central detainees who had used methamphetamine in the previous month increased from 10% in 2012 to 18% in 2014 (p=0.0405) (Figure 4.3).

Figure 4.3: Proportion of police detainees who used methamphetamine in the past month by location, 2010-2014

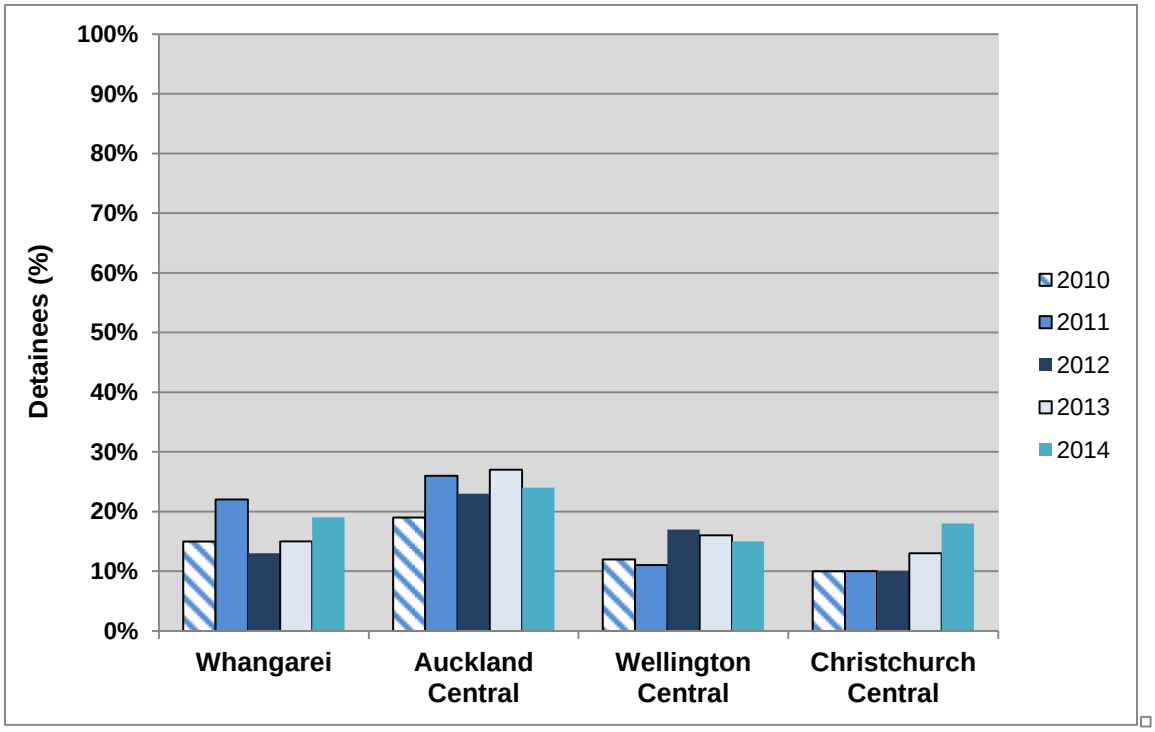


Table 4.1: Police detainees' patterns of methamphetamine use by location, 2010- 2014

Use of meth-amphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=153)	2014 (n=151)	2010 (n=284)	2011 (n=316)	2012 (n=247)	2013 (n=294)	2014 (n=315)	2010 (n=152)	2011 (n=171)	2012 (n=101)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=303)	2013 (n=287)	2014 (n=273)	2010 (n=813)	2011 (n=827)	2012 (n=802)	2013 (n=843)	2014 (n=835)
Ever used (%)	43	46	55	49	54	45	51	49	56	53	42	38	39	46	51	35	41	38	46	48	41	45	44	50	51
Mean age first used (years)*	22	21	21	20	22	22	22	21	22	21	22	23	21	20	21	22	22	23	21	21	22	22	21	21	21
Used in past 12 months (%)	25	33	29	25	30	29	38	36	38	34	28	22	27	27	28	22	21	20	25	28	26	29	28	30	30
Mean number of days used in past 12 months**	44	77	55	45	86	102	82	81	105	117	67	77	58	90	78	35	59	58	55	105	68	75	68	82	102
Injected in past 12 months**	10	8	8	6	5	29	20	28	22	14	18	16	7	17	12	15	19	28	15	11	20	17	21	17	12
Felt dependent in past 12 months (%)**	19	16	24	19	26	36	31	29	37	37	28	24	21	37	31	7	8	20	18	45	25	23	25	30	37
Used in past month (%)	15	22	13	15	19	19	26	23	27	24	12	11	17	16	15	10	10	10	13	18	14	18	16	19	19
Mean number of days used in past month***	7	10	9	7	12	12	8	11	12	13	9	10	10	14	12	5	8	10	7	12	9	8	10	10	13

* of those who had ever tried

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

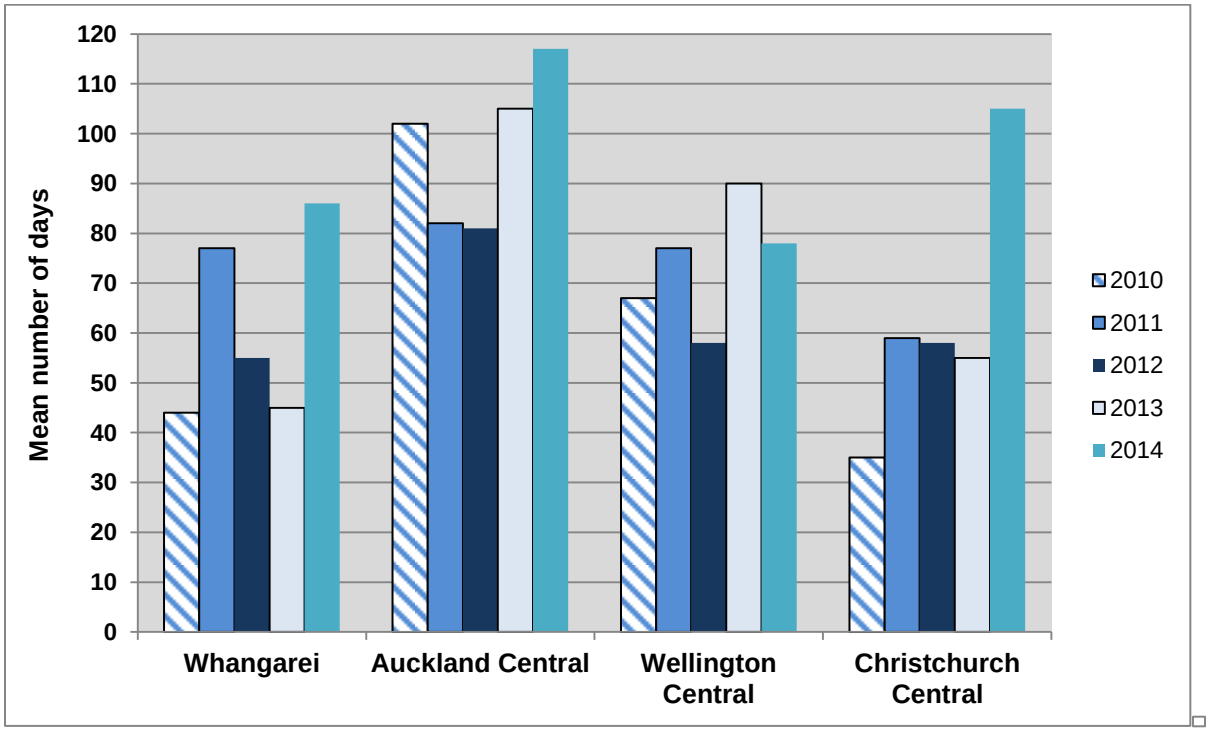
*** of those who had used in the past month

Twelve percent of the detainees who had used methamphetamine in the past 12 months in 2014 reported they had injected it. There was a decrease in the level of injecting methamphetamine from 2012 to 2014 (down from 21% to 12%) and this decline was very close to being statistically significant (p=0.0504). The decrease in methamphetamine injection was particularly pronounced in Auckland Central (down from 28% in 2012 to 14% in 2014) (Table 4.1).

Frequency of methamphetamine use

The detainees had used methamphetamine on a mean of 102 days in the previous 12 months in 2014 (median 30 days, range of 1-365 days). There was an increase in the mean number of days the detainees had used methamphetamine in 2014 compared to previous years, and this increase occurred largely in Christchurch Central. The number of days Christchurch Central detainees had used methamphetamine was higher in 2014 compared to the previous four years (p=0.0001) (Figure 4.4).

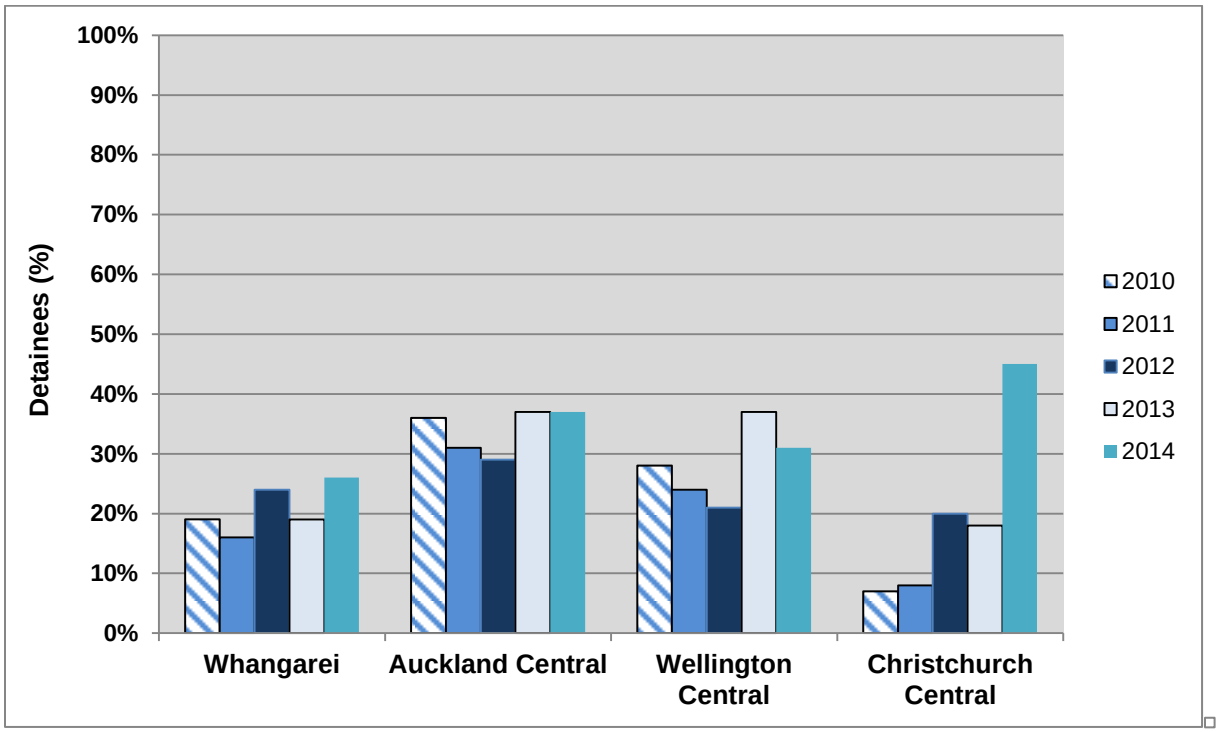
Figure 4.4: Mean number of days police detainees used methamphetamine in the past 12 months by location, 2010- 2014



Dependency on methamphetamine

The detainees who had used methamphetamine in the previous year were asked if they felt dependent on the drug. Thirty-seven percent of the methamphetamine using detainees felt they were dependent on methamphetamine. The proportion of detainees who felt they were dependent on methamphetamine increased from 22% in 2011 to 37% in 2014 (p=0.0034). This was largely due to a substantial rise in methamphetamine dependency in Christchurch Central (up from 7% in 2011 to 45% in 2014) (Figure 4.5).

Figure 4.5: Proportion of police detainees who felt they were dependent on methamphetamine in the past 12 months by location (of those who had used methamphetamine in the past 12 months), 2010-2014



Methamphetamine use at the time of arrest

Six percent of the detainees (i.e. entire sample) reported they were using methamphetamine prior to being arrested in 2014 (Table 4.2). The proportion of detainees using methamphetamine at the time of their arrest increased from 3% in 2010 to 6% in 2014 (p=0.0376). Again, this increase was largely fueled by an increase in use before arrest in Christchurch Central (up from 2% in 2011 to 7% in 2014) (Figure 4.6).

Figure 4.6: Proportion of police detainees who were using methamphetamine prior to their arrest by location, 2010-2014

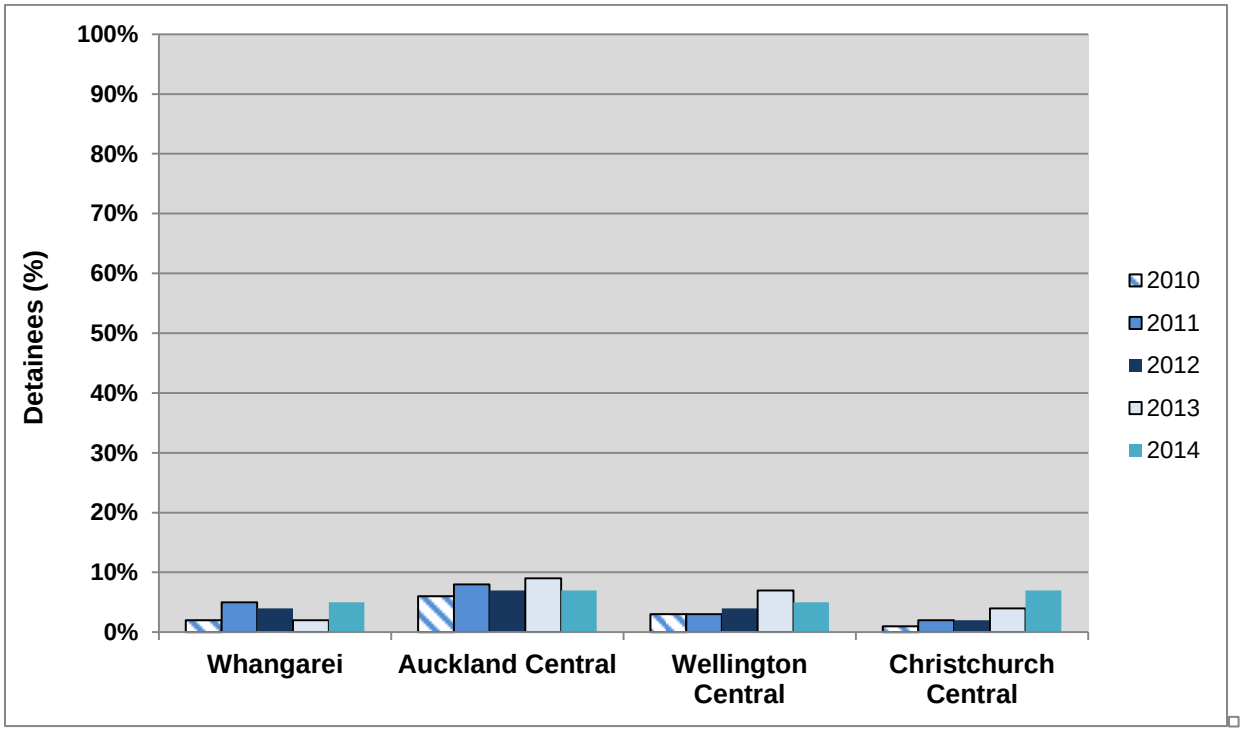


Table 4.2: Methamphetamine use by police detainees at time of arrest by location, 2010-2014

Use of meth-amphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=113	2011 (n=148)	2012 (n=144)	2013 (n=145)	2014 (n=150	2010 (n=280)	2011 (n=309)	2012 (n=243)	2013 (n=290)	2014 (n=314)	2010 (n=149)	2011 (n=170)	2012 (n=99)	2013 (n=106)	2014 (n=93)	2010 (n=262)	2011 (n=190)	2012 (n=299)	2013 (n=281)	2014 (n=270)	2010 (n=804)	2011 (n=817)	2012 (n=785)	2013 (n=827)	2014 (n=827)
Using when arrested (%)	2	5	4	2	5	6	8	7	9	7	3	3	4	7	5	1	2	2	4	7	3	5	5	6	6

Current availability of methamphetamine

The detainees reported the current availability of methamphetamine to be 'very easy/easy' in 2014 (Table 4.3). There was no change in the current availability of methamphetamine from 2010 to 2014 (p=0.7663). The current availability of methamphetamine increased in Whangarei from a mean score of 2.6 in 2010 to 3.2 in 2014 (i.e. 1=very difficult-4=very easy), but this increase was not statistically significant (p=0.1168) (Figure 4.7).

Figure 4.7: Mean score of current availability of methamphetamine by location, 2010-2014

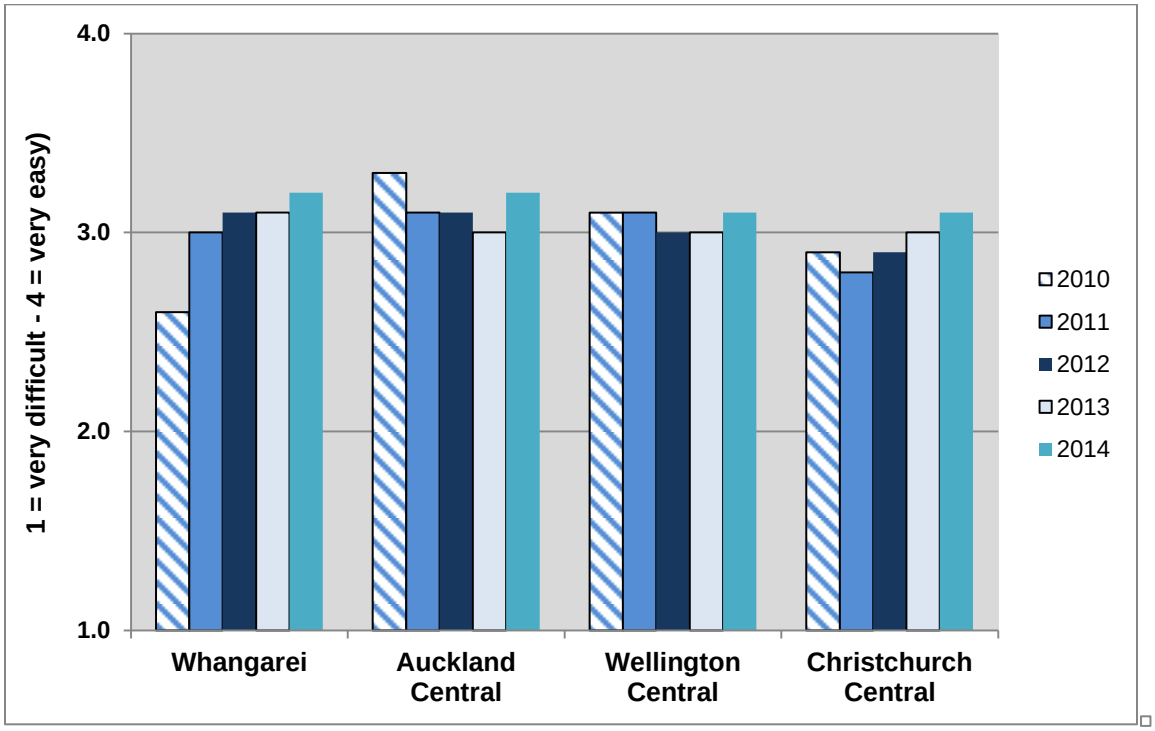


Table 4.3: Police detainees' perceptions of the current availability of methamphetamine by location, 2010-2014

Current availability of meth-amphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=29)	2011 (n=48)	2012 (n=37)	2013 (n=37)	2014 (n=43)	2010 (n=82)	2011 (n=112)	2012 (n=83)	2013 (n=110)	2014 (n=100)	2010 (n=39)	2011 (n=33)	2012 (n=25)	2013 (n=26)	2014 (n=25)	2010 (n=54)	2011 (n=34)	2012 (n=53)	2013 (n=72)	2014 (n=75)	2010 (n=204)	2011 (n=227)	2012 (n=198)	2013 (n=245)	2014 (n=241)
Very easy [4]	17%	35%	41%	35%	51%	50%	38%	41%	41%	45%	44%	36%	32%	35%	36%	35%	29%	36%	43%	43%	40%	36%	38%	40%	44%
Easy [3]	38%	33%	32%	43%	30%	28%	38%	36%	32%	30%	31%	45%	36%	35%	44%	33%	29%	28%	28%	29%	31%	37%	34%	32%	32%
Difficult [2]	34%	27%	19%	22%	2%	20%	18%	13%	18%	20%	13%	12%	24%	23%	12%	19%	32%	23%	18%	20%	20%	21%	18%	19%	16%
Very difficult[1]	10%	4%	8%	0%	16%	2%	5%	10%	9%	5%	13%	6%	8%	8%	8%	13%	9%	13%	11%	8%	8%	6%	10%	8%	8%
Average availability score (1=very difficult – 4=very easy)	2.6	3.0	3.1	3.1	3.2	3.3	3.1	3.1	3.0	3.2	3.1	3.1	3.0	3.0	3.1	2.9	2.8	2.9	3.0	3.1	3.0	3.0	3.0	3.0	3.1
Overall current status	Easy/ difficult	Very easy/ easy	Very easy/ easy	Easy/ very easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Easy/ very easy	Easy/ very easy	Very easy/ easy	Easy/ Very easy	Very easy/ easy	Difficult/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Easy/ very easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy

Change in availability of methamphetamine

There was no overall change in the availability of methamphetamine from 2010 to 2014 (2.0 in 2010 to 2.1 in 2014, p=0.1728) (Table 4.4). However, the availability of methamphetamine increased in Christchurch Central from 2011 to 2014 (up from 1.7 in 2011 to 2.2 in 2014, p=0.0057) (Figure 4.8). The proportion of detainees from Christchurch Central who considered methamphetamine to be 'easier' to obtain increased from 6% in 2011 to 43% in 2014.

Figure 4.8: Mean score of change in the availability of methamphetamine by location, 2010-2014

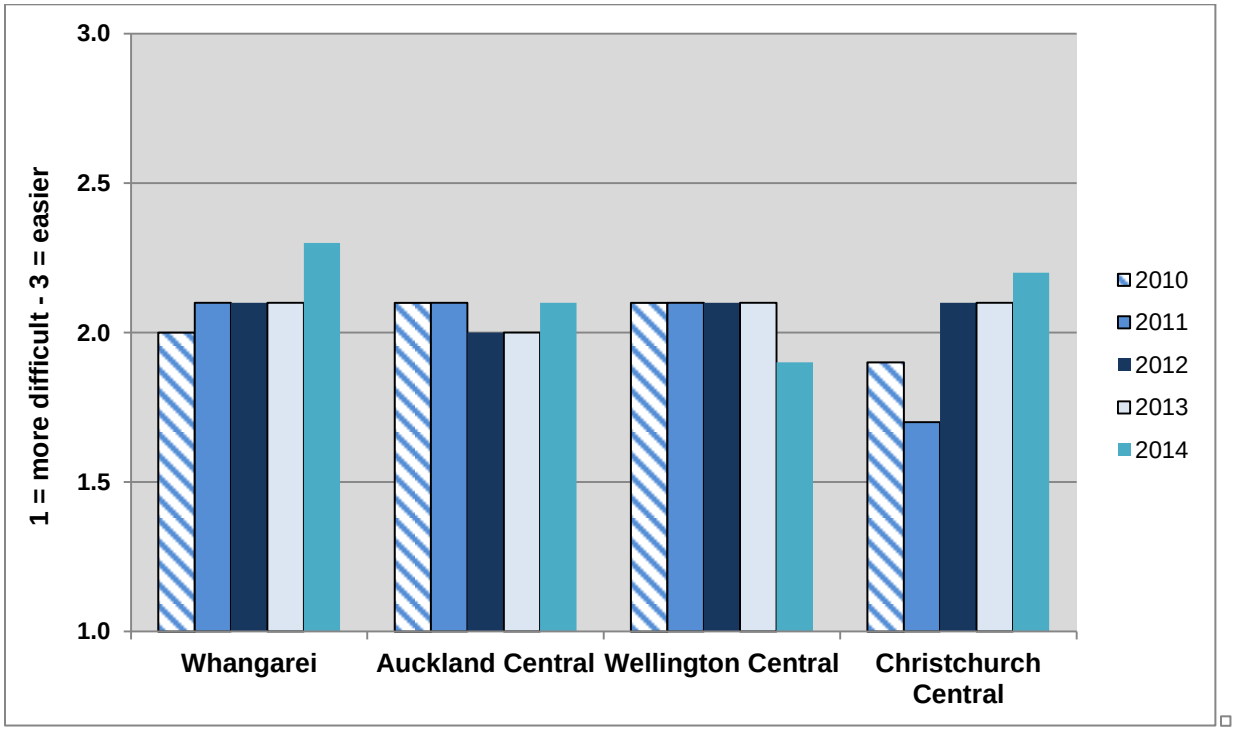


Table 4.4: Police detainees' perceptions of the change in availability of methamphetamine by location, 2010-2014

Change in availability of meth-amphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=27)	2011 (n=48)	2012 (n=37)	2013 (n=36)	2014 (n=39)	2010 (n=76)	2011 (n=104)	2012 (n=73)	2013 (n=99)	2014 (n=94)	2010 (n=30)	2011 (n=30)	2012 (n=25)	2013 (n=24)	2014 (n=23)	2010 (n=51)	2011 (n=34)	2012 (n=48)	2013 (n=67)	2014 (n=72)	2010 (n=184)	2011 (n=216)	2012 (n=183)	2013 (n=226)	2014 (n=226)
Easier [3]	19%	31%	30%	22%	46%	32%	20%	21%	24%	24%	27%	20%	28%	21%	17%	16%	6%	27%	31%	43%	24%	20%	25%	25%	33%
Stable [2]	33%	33%	41%	53%	36%	32%	50%	48%	39%	50%	33%	63%	28%	50%	57%	39%	47%	38%	39%	26%	34%	48%	41%	43%	41%
Fluctuates [2]	26%	19%	14%	11%	5%	12%	15%	8%	12%	12%	27%	7%	24%	17%	0%	16%	12%	17%	10%	8%	17%	14%	14%	12%	8%
More difficult [1]	22%	17%	16%	14%	13%	25%	14%	23%	24%	14%	13%	10%	20%	13%	26%	29%	35%	19%	19%	22%	24%	18%	21%	20%	18%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.1	2.1	2.1	2.3	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	1.9	1.9	1.7	2.1	2.1	2.2	2.0	2.0	2.0	2.1	2.1
Overall recent change	Stable/ fluctuates	Stable/ easier	Stable/ easier	Stable/ easier	Easier/ Stable	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ easier	Stable/ Easier	Stable/ fluctuates	Stable/ easier	Easier/ stable	Stable/ easier	Stable/ More difficult	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ easier	Easier/ Stable	Stable/ more difficult	Stable/ easier	Stable/ easier	Stable/ easier	Stable/ Easier

Current price of methamphetamine

The detainees reported the median price of a 'point' (0.1 grams) of methamphetamine was $100 (mean $111) (Table 4.5). The mean price of a 'point' of methamphetamine increased from $102 in 2011 to $111 in 2014 (p=0.0585), and this was largely due to an increase in price in Christchurch. The mean price of a 'point' of methamphetamine in Christchurch Central increased from $110 in 2010 to $127 in 2014 (p=0.0504) (Figure 4.9). In 2014, the mean price paid for a 'point' of methamphetamine was higher in Christchurch Central than in Whangarei ($127 vs. $100, p=0.0002), Wellington Central ($127 vs. $105, p=0.0113) and Auckland Central ($127 vs. $103, p<0.0001).

Figure 4.9: Mean price paid for a point (0.1 grams) of methamphetamine by location, 2010-2014

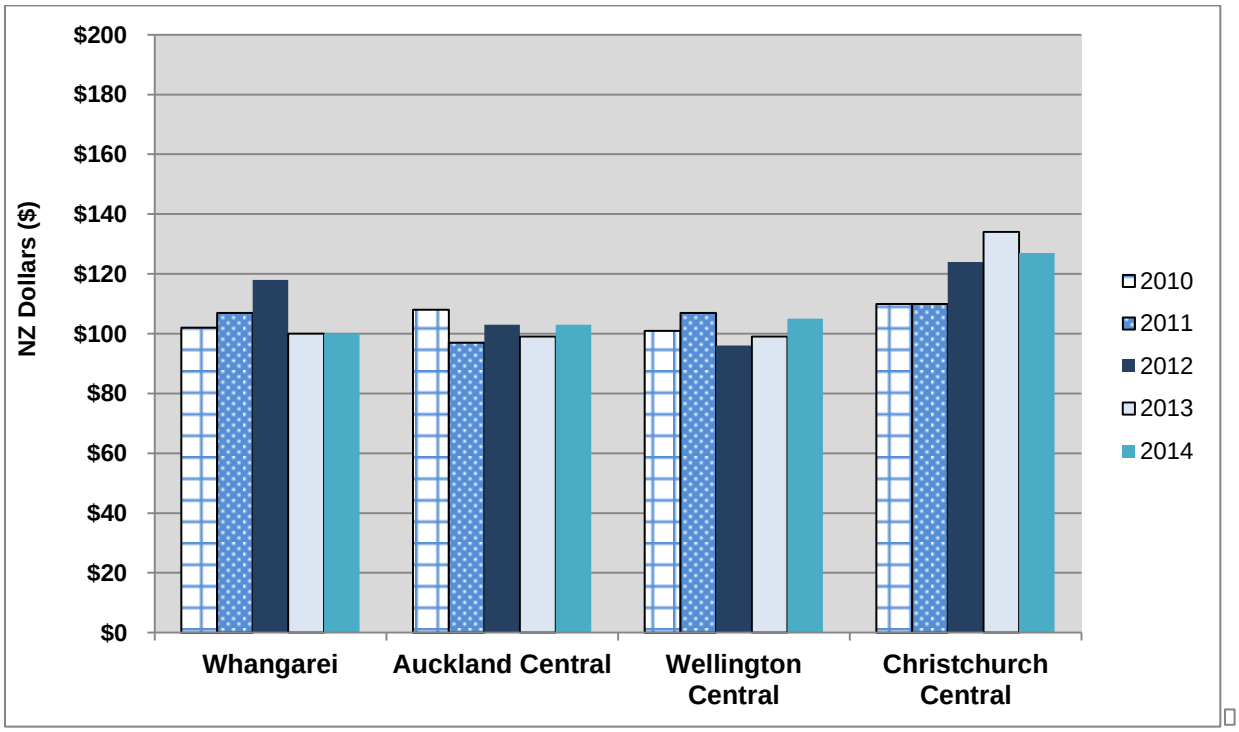
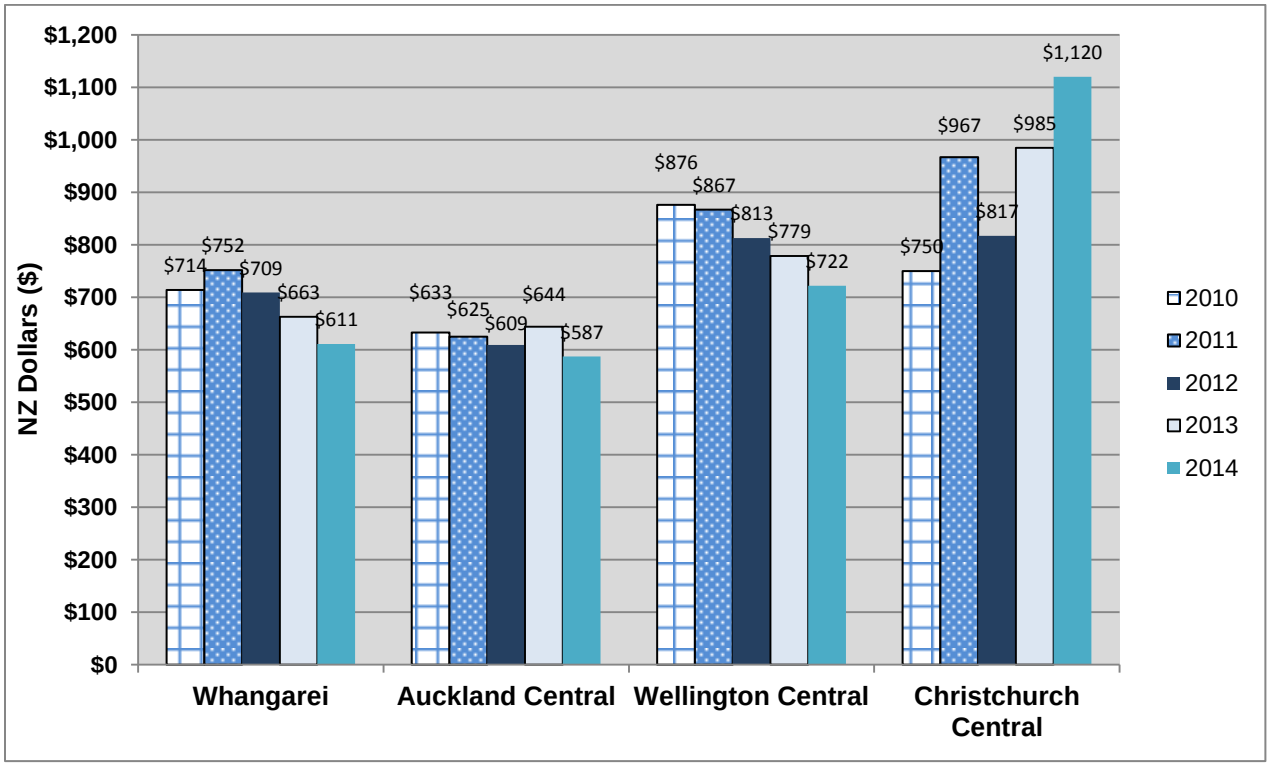


Table 4.5: Current median (mean) price paid by police detainees for a 'point' and gram of methamphetamine (NZD) by location, 2010 - 2014

Current price of methamphetamine ($)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
Number with knowledge	**2010 (n=24)**	**2011 (n=36)**	**2012 (n=28)**	**2013 (n=25)**	**2014 (n=35)**	**2010 (n=63)**	**2011 (n=89)**	**2012 (n=59)**	**2013 (n=92)**	**2014 (n=93)**	**2010 (n=22)**	**2011 (n=25)**	**2012 (n=15)**	**2013 (n=20)**	**2014 (n=20)**	**2010 (n=47)**	**2011 (n=20)**	**2012 (n=41)**	**2013 (n=58)**	**2014 (n=68)**	**2010 (n=156)**	**2011 (n=170)**	**2012 (n=143)**	**2013 (n=195)**	**2014 (n=216)**
Median (mean) price 'point' (0.1 grams)	$100 ($102)	$100 ($107)	$100 ($118)	(100 ($100)	$100 ($100)	$100 ($108)	$100 ($97)	$100 ($103)	$100 ($99)	$100 ($103)	$100 ($101)	$100 ($107)	$100 ($96)	$100 ($99)	$100 ($105)	$100 ($110)	$100 ($110)	$120 ($124)	$150 ($134)	$138 ($127)	$100 ($107)	$100 ($102)	$100 ($109)	$100 ($109)	$100 ($111)
Number with knowledge	**2010 (n=7)**	**2011 (n=22)**	**2012 (n=19)**	**2013 (n=23)**	**2014 (n=29)**	**2010 (n=34)**	**2011 (n=34)**	**2012 (n=35)**	**2013 (n=70)**	**2014 (n=77)**	**2010 (n=18)**	**2011 (n=16)**	**2012 (n=6)**	**2013 (n=13)**	**2014 (n=18)**	**2010 (n=12)**	**2011 (n=15)**	**2012 (n=18)**	**2013 (n=48)**	**2014 (n=55)**	**2010 (n=71)**	**2011 (n=87)**	**2012 (n=78)**	**2013 (n=154)**	**2014 (n=179)**
Median (mean) price gram	$800 ($714)	$775 ($752)	$700 ($708)	$700 ($663)	$600 ($611)	$600 ($633)	$600 ($625)	$600 ($609)	$625 ($644)	$600 ($587)	$850 ($876)	$888 ($867)	$825 ($813)	$750 ($779)	$800 ($722)	$900 ($750)	$1000 ($967)	$900 ($817)	$1000 ($985)	$1000 ($1120)	$700 ($723)	$750 ($778)	$650 (691)	$700 ($766)	$700 ($788)

The median price of a gram of methamphetamine was $700 in 2014 (mean $788). The overall mean price of a gram of methamphetamine increased from $723 in 2010 to $788 in 2014, although this increase was not statistically significant (p=0.3766). The price of a gram of methamphetamine decreased in Wellington Central from $876 in 2010 to $722 in 2014, and this decrease was close to being statistically significant (p=0.0668). The mean price of a gram of methamphetamine in Christchurch Central also increased from $750 in 2010 to $1,120 in 2014, but this increase was not statistically significant (p=0.328). The failure of the Christchurch price increase to achieve statistical significance, despite the large increase in price, may reflect the low numbers of respondents in some years of comparison (i.e. less than 20 respondents in 2010-2012) and the high level of variation in the price data. The price of a gram of methamphetamine in 2014 was higher in Christchurch Central than in Wellington Central ($1,120 vs. $722, p=0.0008), Whangarei ($1,120 vs. $611, p<0.0001) and Auckland Central ($1,120 vs. $587, p<0.0001).

Figure 4.10: Mean price paid for a gram of methamphetamine by location, 2010-2014



Change in the price of methamphetamine

Fifty-one percent of the detainees said the price of methamphetamine had been 'stable', 25% said it had been 'fluctuating', and 13% said it had been 'increasing' over the previous six months in 2014 (Table 4.6 & 4.7). There was no overall change in perceptions of the change in price of methamphetamine from 2010 to 2014 (p=0.3252) (Figure 4.11). Whangarei and Auckland Central detainees were more likely to describe the price of methamphetamine as decreasing over this time, and these changes were close to statistical significance (i.e. p=0.0695 and p=0.0805 respectively).

Figure 4.11: Mean score of the change in the price of methamphetamine by location, 2010-2014

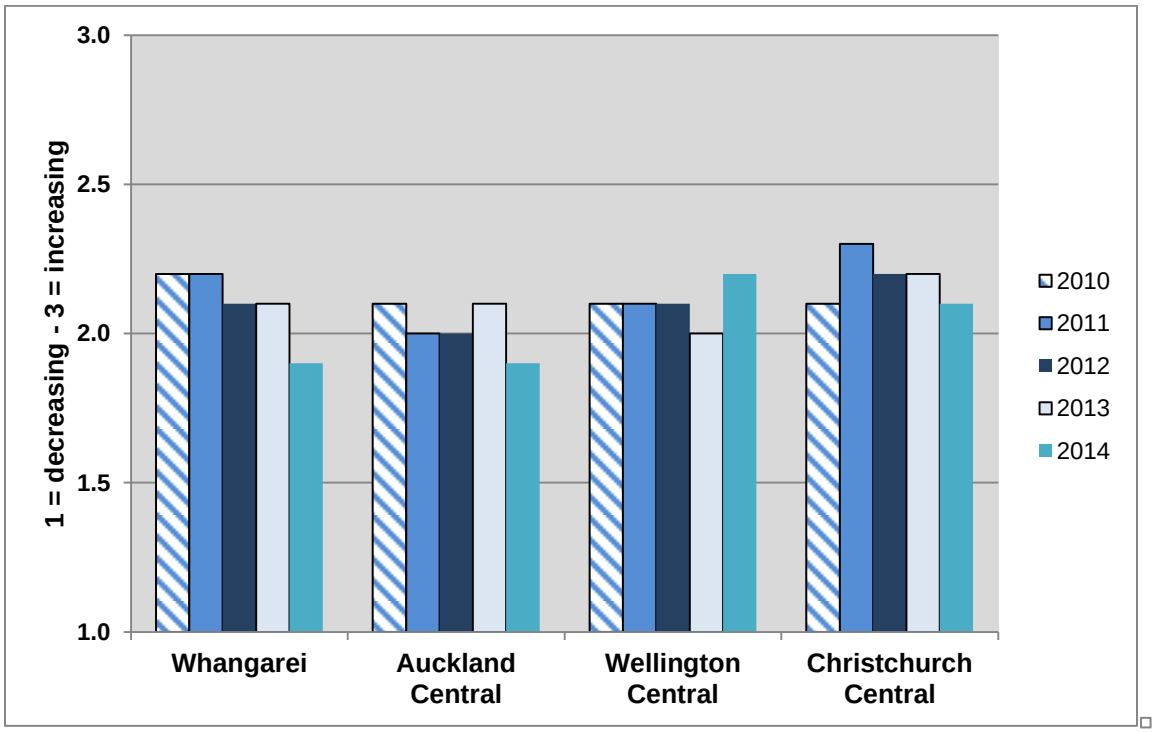


Table 4.6: Police detainees' perceptions of the change in the price of methamphetamine in the past six months by location, 2010-2014

Change in price of meth amphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=28)	2011 (n=42)	2012 (n=36)	2013 (n=32)	2014 (n=39)	2010 (n=81)	2011 (n=100)	2012 (n=)	2013 (n=96)	2014 (n=99)	2010 (n=31)	2011 (n=32)	2012 (n=22)	2013 (n=24)	2014 (n=22)	2010 (n=50)	2011 (n=33)	2012 (n=45)	2013 (n=67)	2014 (n=71)
Increasing [3]	21%	29%	17%	19%	13%	22%	8%	12%	16%	7%	23%	16%	18%	0%	27%	20%	30%	24%	24%	14%
Fluctuating [2]	18%	21%	17%	28%	21%	10%	22%	14%	24%	20%	10%	19%	18%	29%	27%	8%	9%	18%	15%	31%
Stable [2]	57%	43%	56%	41%	41%	58%	58%	66%	51%	61%	52%	59%	55%	67%	41%	64%	58%	53%	57%	48%
Decreasing [1]	4%	7%	11%	13%	26%	10%	12%	8%	9%	12%	16%	6%	9%	4%	5%	8%	3%	4%	4%	7%
Average change in price score (1=decreasing – 3=increasing)	2.2	2.2	2.1	2.1	1.9	2.1	2.0	2.0	2.1	1.9	2.1	2.1	2.1	2.0	2.2	2.1	2.3	2.2	2.2	2.1
Overall recent change	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ fluctuating	Stable/ Decreasing	Stable/ increasing	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable / Fluctuating	Stable/ increasing	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ Fluctuating	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ Fluctuating

Table 4.7: Police detainees' perceptions of the change in the price of methamphetamine in the past six months all sites, 2010-2014

Change in price of meth amphetamine	All sites				
	2010 (n=190)	2011 (n=207)	2012 (n=176)	2013 (n=792)	2014 (n=231)
Increasing [3]	22%	17%	17%	16%	13%
Fluctuating [2]	11%	19%	16%	23%	25%
Stable [2]	58%	55%	60%	54%	51%
Decreasing [1]	9%	9%	8%	7%	11%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.1	2.1	2.1	2.0
Overall recent change	Stable/ increasing	Stable/ fluctuating	Stable/ increasing	Stable/ fluctuating	Stable/ Fluctuating

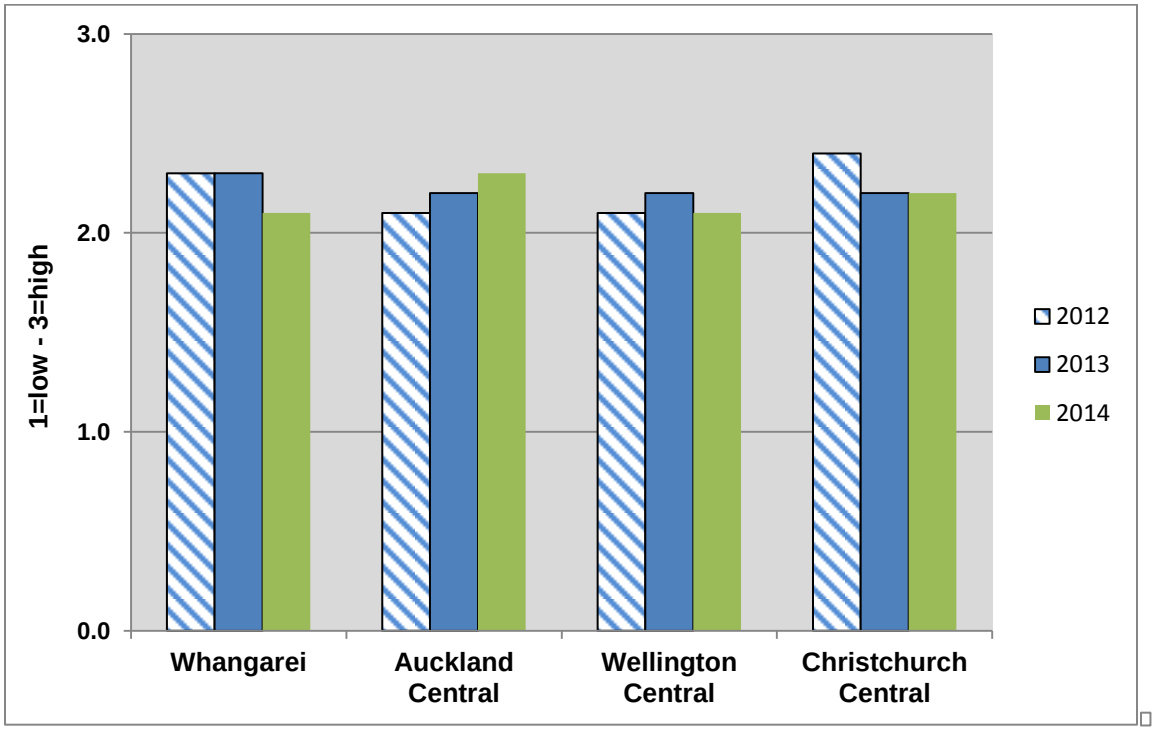
Current strength of methamphetamine

Questions concerning the strength of methamphetamine were included for the first time in the 2012 NZ-ADUM. In 2014, 38% of the detainees described the current strength of methamphetamine as 'high', 23% said it was 'medium' and 25% said it 'fluctuates' (Table 4.8). The strength of methamphetamine did not change from 2012 to 2014 (2.2 in all years) (p=0.8929), and did not vary across the four sites (p=0.8449) (Figure 4.12).

Table 4.8: Police detainees' perceptions of current strength of methamphetamine in 2012-2014

Current strength methamphetamine (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=36)	2013 (n=37)	2014 (n=40)	2012 (n=80)	2013 (n=100)	2014 (n=100)	2012 (n=23)	2013 (n=25)	2014 (n=22)	2012 (n=49)	2013 (n=69)	2014 (n=74)	2012 (n=188)	2013 (n=231)	2014 (n=236)
High [3]	31%	49%	38%	30%	33%	38%	26%	48%	23%	51%	42%	43%	35%	40%	38%
Medium [2]	39%	14%	28%	29%	18%	24%	39%	16%	27%	24%	22%	18%	31%	18%	23%
Fluctuates [2]	28%	22%	18%	20%	34%	27%	22%	12%	41%	18%	17%	20%	21%	25%	25%
Low [1]	3%	16%	18%	21%	15%	11%	13%	24%	9%	6%	19%	19%	13%	17%	14%
Average strength score (1=low – 3=high)	2.3	2.3	2.1	2.1	2.2	2.3	2.1	2.2	2.1	2.4	2.2	2.2	2.2	2.2	2.2
Overall current status	Medium/ high	High/ fluctuating	High/ Medium	High/ medium	Fluctuates / high	High/ Fluctuates	Med/ High	High/ low	Fluctuates / Medium	High/ medium	High/ medium	High/ Fluctuates	High/ medium	High/ fluctuating	High/ Fluctuates

Figure 4.12: Mean score of the current strength of methamphetamine by location, 2012-2014



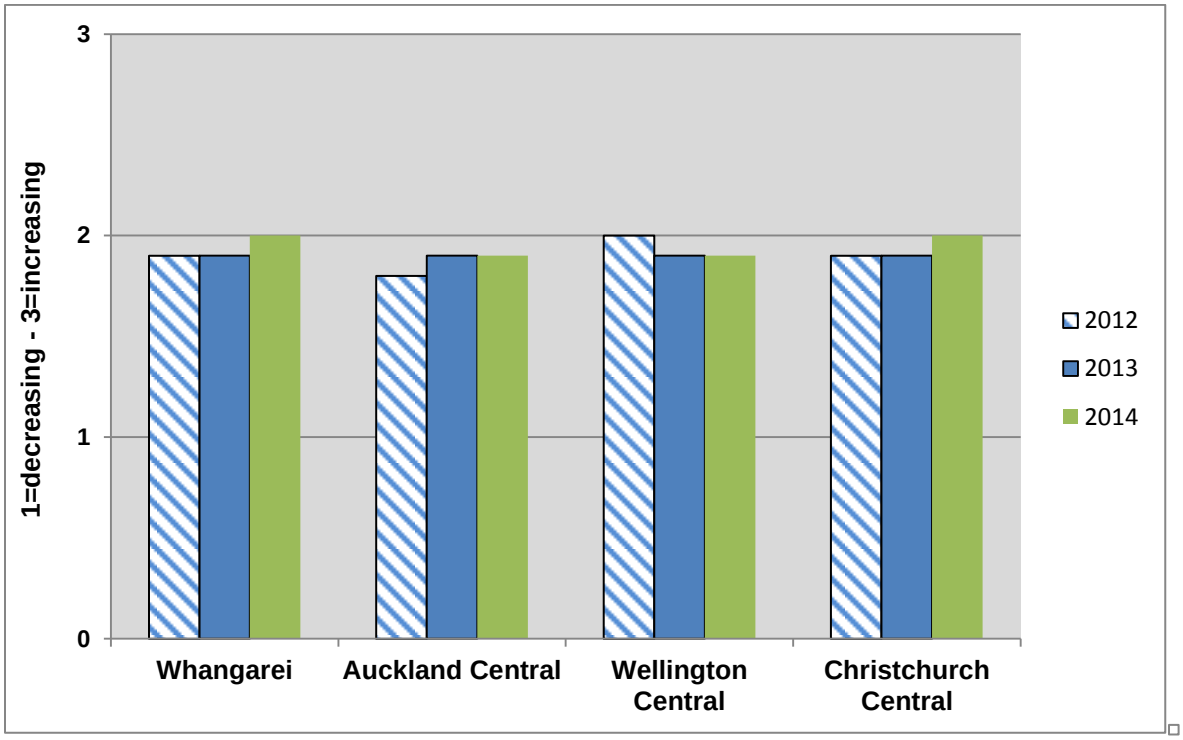
Change in strength of methamphetamine

Thirty-seven percent of the detainees reported the strength of methamphetamine had been 'stable', 27% said it had been 'fluctuating' and 20% said it had been 'declining' during the previous six months in 2014 (Table 4.9). Twenty-five percent of detainees in Auckland Central and 19% of detainees in Whangarei reported the strength of methamphetamine had been 'decreasing' in 2014 (Figure 4.13). There was no statistically significant change in the detainees' perceptions of the change in the strength of methamphetamine from 2012 to 2014 (p=0.3542).

Table 4.9: Police detainees' perceptions of change in strength of methamphetamine in the past six months in 2012-2014

Change in strength of meth-amphetamine (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=33)	2013 (n=28)	2014 (n=36)	2012 (n=74)	2013 (n=95)	2014 (n=92)	2012 (n=21)	2013 (n=23)	2014 (n=19)	2012 (n=41)	2013 (n=61)	2014 (n=69)	2012 (n=169)	2013 (n=207)	2014 (n=216)
Increasing [3]	12%	21%	22%	12%	12%	14%	14%	13%	11%	5%	11%	17%	11%	13%	16%
Stable [2]	42%	25%	42%	35%	37%	36%	57%	43%	32%	46%	48%	38%	42%	39%	37%
Fluctuating [2]	21%	21%	17%	23%	29%	25%	19%	22%	37%	32%	18%	32%	24%	25%	27%
Decreasing [1]	24%	25%	19%	30%	22%	25%	10%	22%	21%	17%	23%	13%	23%	23%	20%
Average change in strength (1=decreasing – 3=increasing)	1.9	2.0	2.0	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0
Overall recent change	Stable / decreasing	Stable/ fluctuating	Stable/ Increasing	Stable/ decreasing	Stable/ fluctuating	Stable/ Fluctuating	Stable/ fluctuating	Stable/ fluctuating	Fluctuating/ Stable	Stable/ fluctuating	Stable/ decreasing	Stable/ Fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ Fluctuating

Figure 4.13: Change in strength of methamphetamine by location, 2012-2014



Time taken to purchase methamphetamine

Sixty-six percent of the detainees who used methamphetamine in the previous 12 months were able to purchase it in one hour or less in 2014 (44% in less than 20 minutes) (Table 4.10). There was no statistically significant change in the proportion of the entire sample of detainees who could purchase methamphetamine in one hour or less from 2010 to 2014 (i.e. 57% in 2010, 60% in 2011, 61% in 2012, 65% in 2013 and 66% 2014) (p=0.2821). However, the proportion of detainees in Christchurch Central who could purchase methamphetamine in one hour or less increased from 30% in 2011 to 61% in 2014 (p=0.0236) (Figure 4.14). There was also an increase in the proportion of detainees in Whangarei who could purchase methamphetamine in one hour or less from 58% in 2010 to 80% in 2014, and this was close to being statistically significant (p=0.0910).

Figure 4.14: Proportion of police detainees who could purchase methamphetamine in one hour or less by location, 2010-2014

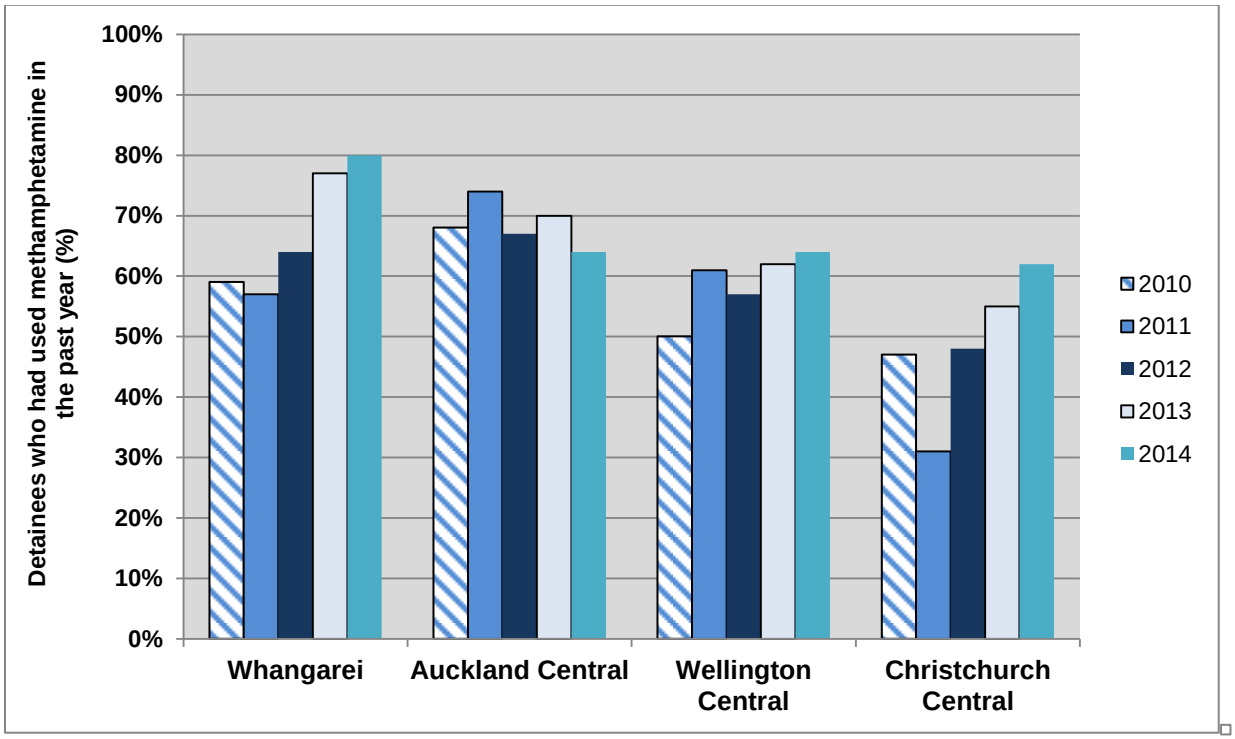


Table 4.10: Time taken by police detainees to purchase methamphetamine by location, 2010-2014

Time to purchase meth-amphetamine (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=29)	2011 (n=49)	2012 (n=39)	2013 (n=35)	2014 (n=44)	2010 (n=81)	2011 (n=106)	2012 (n=83)	2013 (n=103)	2014 (n=106)	2010 (n=31)	2011 (n=31)	2012 (n=21)	2013 (n=26)	2014 (n=25)	2010 (n=50)	2011 (n=36)	2012 (n=52)	2013 (n=71)	2014 (n=73)	2010 (n=194)	2011 (n=214)	2012 (n=199)	2013 (n=236)	2014 (n=244)
Months	0	0	5	0	5	0	2	2	1	2	0	3	0	8	0	0	3	6	1	1	0	2	3	2	2
Weeks	7	4	3	3	0	3	2	1	1	2	3	3	0	0	0	4	0	4	0	3	4	2	2	1	2
Days	7	18	8	6	2	5	0	4	3	5	11	6	14	8	0	4	17	12	11	4	6	8	8	6	3
About one day	10	4	13	3	5	8	8	7	7	8	8	6	0	4	12	16	17	10	4	8	11	9	7	5	8
Hours	17	16	8	11	9	16	14	18	18	20	28	19	29	19	24	29	33	21	28	22	22	19	19	21	20
1 Hour	34	22	33	37	32	34	37	27	30	19	11	23	29	27	16	25	11	21	28	23	27	27	27	30	22
Less than 20 mins	24	35	31	40	48	34	37	41	40	44	39	39	29	35	48	22	19	27	27	38	30	33	34	35	44

Effect of methamphetamine on the likelihood of becoming angry

Those detainees who reported using methamphetamine in the previous 12 months were asked what effect using methamphetamine had on their likelihood of becoming angry. Thirty-five percent of the methamphetamine using detainees said using methamphetamine was 'more likely' or 'much more likely' to make them become angry in 2014 (Table 4.11).

Table 4.11: Effect of methamphetamine on police detainees' likelihood of becoming angry, 2010-2014

Effect of meth-amphetamine on likelihood of becoming angry	All sites				
	2010 (n=201)	2011 (n=232)	2012 (n=201)	2013 (n=238)	2014 (n=251)
Much more likely	13%	11%	9%	16%	16%
More likely	19%	24%	25%	15%	19%
No effect	44%	45%	43%	44%	41%
Less likely	15%	14%	14%	17%	15%
Much less	8%	5%	9%	8%	9%

Driving under the influence of methamphetamine

Those detainees who had used methamphetamine in the past year were asked how often they drove under the influence of methamphetamine. Seventeen percent of the methamphetamine using detainees said they 'did not drive' and a further 11% said their 'driver license was suspended'. Fifty-three percent of the detainees who used methamphetamine and drove had completed at least some of their driving under the influence of methamphetamine (Table 4.12). There was an increase in the extent of driving under the influence of methamphetamine among the detainees from 2012 to 2014, and this increase was close to being statistically significant (p=0.0820). This increase was largely due to a rise in methamphetamine related driving in Christchurch Central (p=0.0485). The proportion of methamphetamine using Christchurch Central detainees who completed at least some of their driving under the influence of methamphetamine increased from 23% in 2010 to 56% in 2014.

Table 4.12: Extent to which police detainees who drove and who had used methamphetamine in the past 12 months had driven under the influence of methamphetamine by location, 2010-2014

Extent drove under the influence of methamphetamine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=26)	2011 (n=34)	2012 (n=34)	2013 (n=26)	2014 (n=38)	2010 (n=54)	2011 (n=73)	2012 (n=61)	2013 (n=69)	2014 (n=67)	2010 (n=29)	2011 (n=23)	2012 (n=21)	2013 (n=21)	2014 (n=21)	2010 (n=30)	2011 (n=26)	2012 (n=36)	2013 (n=55)	2014 (n=54)	2010 (n=139)	2011 (n=151)	2012 (n=157)	2013 (n=173)	2014 (n=180)
All [4]	8%	12%	18%	15%	21%	7%	10%	7%	6%	19%	28%	43%	10%	29%	24%	10%	8%	11%	11%	17%	12%	14%	10%	13%	20%
Most [3]	12%	9%	9%	12%	8%	17%	10%	15%	22%	10%	10%	9%	5%	0%	10%	3%	8%	6%	7%	15%	12%	9%	10%	12%	11%
Some [2]	27%	24%	24%	31%	34%	20%	34%	23%	17%	15%	14%	4%	38%	10%	19%	10%	12%	19%	15%	24%	18%	23%	25%	17%	22%
Hardly any [1]	15%	9%	0%	8%	3%	13%	15%	15%	17%	19%	10%	17%	5%	5%	14%	17%	23%	14%	18%	15%	14%	16%	10%	14%	14%
None [0]	38%	47%	50%	35%	34%	43%	31%	41%	38%	36%	38%	26%	43%	57%	33%	60%	50%	50%	49%	30%	44%	38%	45%	44%	33%
Mean score of extent drove under influence (0=none -4=all)	1.3	1.3	1.4	1.7	1.8	1.3	1.5	1.3	1.4	1.6	1.8	2.3	1.3	1.4	1.8	.9	1.0	1.1	1.1	1.7	1.3	1.5	1.3	1.3	1.7

Summary

- The proportion of the detainees who had ever tried methamphetamine increased from 41% in 2010 to 51% in 2014
- The proportion of detainees in Christchurch Central who had ever tried methamphetamine increased from 36% in 2010 to 48% in 2014
- There was no overall change in the last year prevalence of methamphetamine from 2010 to 2014
- The proportion of detainees in Christchurch Central who had used methamphetamine in the previous month increased from 10% in 2010 to 18% in 2014
- The proportion of methamphetamine users who had injected methamphetamine decreased from 21% in 2012 to 12% in 2014
- The number of days Christchurch Central detainees had used methamphetamine increased dramatically from 35 days in 2010 to 105 days in 2014
- The proportion of detainees from Christchurch Central who felt dependent on methamphetamine also increased substantially from 7% in 2011 to 45% in 2014
- The proportion of detainees from Christchurch Central using methamphetamine prior to their arrest increased from 2% in 2011 to 7% in 2014
- The proportion of Christchurch Central detainees who reported methamphetamine was 'very easy' to obtain increased from 6% in 2011 to 43% in 2014
- The proportion of detainees in Christchurch Central who could purchase methamphetamine in one hour or less increased from 31% in 2011 to 62% in 2014
- The median price reported for methamphetamine was $100 per 'point' and $700 per gram in 2014
- The mean price of a 'point' of methamphetamine increased in Christchurch Central from $110 in 2010 to $127 in 2014
- In 2014, the mean price paid for a 'point' of methamphetamine was higher in Christchurch Central than Whangarei, Wellington Central and Auckland Central
- In 2014, the mean price of a gram of methamphetamine was higher in Christchurch Central than in Wellington Central, Whangarei and Auckland Central

- Detainees in Whangarei and Auckland Central were more likely to describe the price of methamphetamine as decreasing from 2010 to 2014
- The proportion of Christchurch Central detainees who completed at least some of their driving under the influence of methamphetamine increased from 23% in 2010 to 56% in 2014

Chapter 5 - Cannabis

Introduction

Cannabis has been the most widely used illegal drug in New Zealand for many decades (Wilkins et al., 2002). The retail black market for cannabis in New Zealand has been estimated to have an annual turnover of $131-$190 million (NZD) (Wilkins & Casswell, 2002; Wilkins et al., 2005e). 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 pay for their own cannabis consumption by selling cannabis to others (Wilkins & Sweetsur, 2006). Adolescent cannabis users have been found to be more likely than adult users to purchase their cannabis from semi-public 'tinny' houses (Wilkins et al., 2005d).

The 2013 NZ-ADUM found a slight decline in cannabis use compared to previous years. The proportion of detainees who had used cannabis in the previous year declined from 76% in 2011 to 70% in 2013. These declines in self-reported use were confirmed by a decrease in the number of positive urine tests for cannabis among the detainees. The number of days the Auckland Central detainees had used cannabis in the past year declined from 196 in 2010 to 146 in 2013. The availability of cannabis also declined in both Auckland and Christchurch from 2010 to 2013. This decline in cannabis use and availability may reflect the emergence of legal synthetic cannabinoid products. Detainees may be using cannabinoid products instead of natural cannabis to avoid positive drug tests and related sanctions (Perrone et al., 2013).

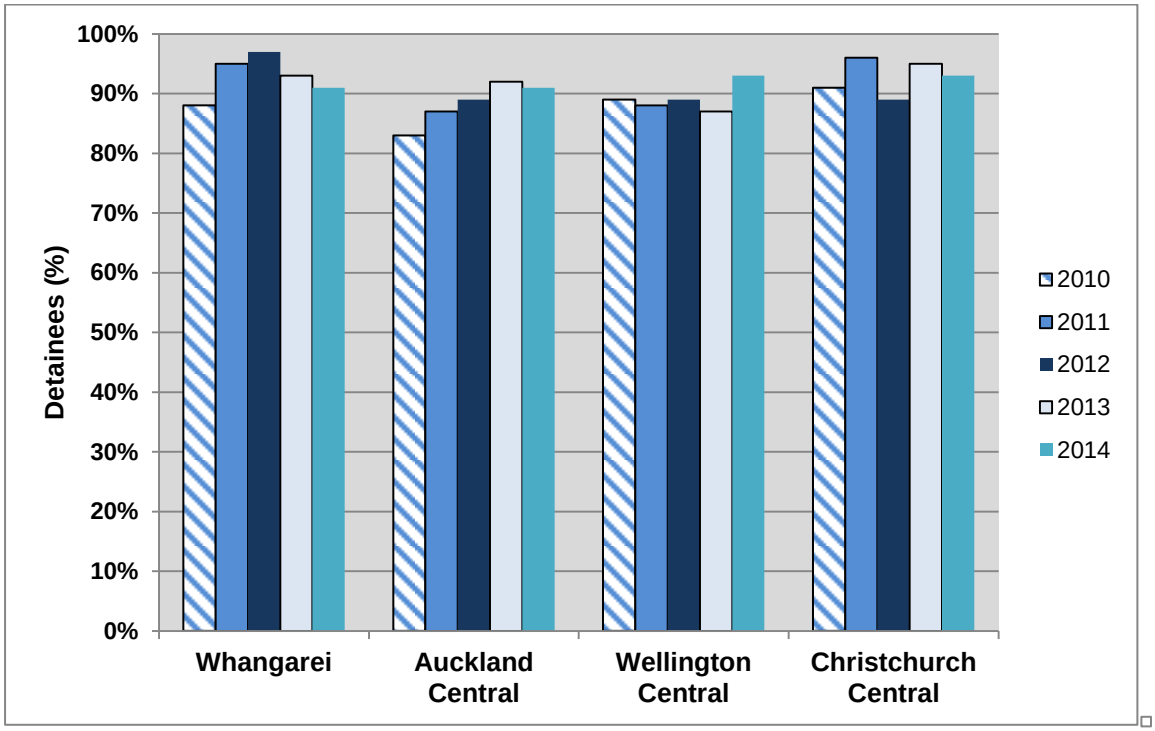
Synthetic cannabis products emerged in New Zealand from around 2010 with dozens of different products legally available from a range of convenience outlets (Wilkins, 2011; Wilkins et al., 2013). The passage of the *Psychoactive Substances Act* (PSA) in July 2013 reduced the number of legal high outlets from 3,000–4,000 largely convenience stores to 156 specialty stores, and the number of legally available products from 200 to fewer than 46 (Wilkins, 2014a). This interim regime was brought to an abrupt halt in early May 2014 when

all product licenses were suspended; effectively ending the legal high market (Wilkins, 2014b).

Use of cannabis

Ninety-two percent of the police detainees had ever tried cannabis, 68% had used cannabis in the past 12 months, and 56% had used it in the past month in 2014 (Table 5.1). The proportion of detainees who had tried cannabis in their lifetimes increased slightly from 87% in 2010 to 93% in 2014 (p=0.0145) (Figure 5.1).

Figure 5.1: Proportion of police detainees who have ever used cannabis by location, 2010-2014



The detainees had first tried cannabis at a mean age of 14 years in 2014 (Figure 5.2).

Figure 5.2: Mean age at which cannabis was first used by location, 2010-2014

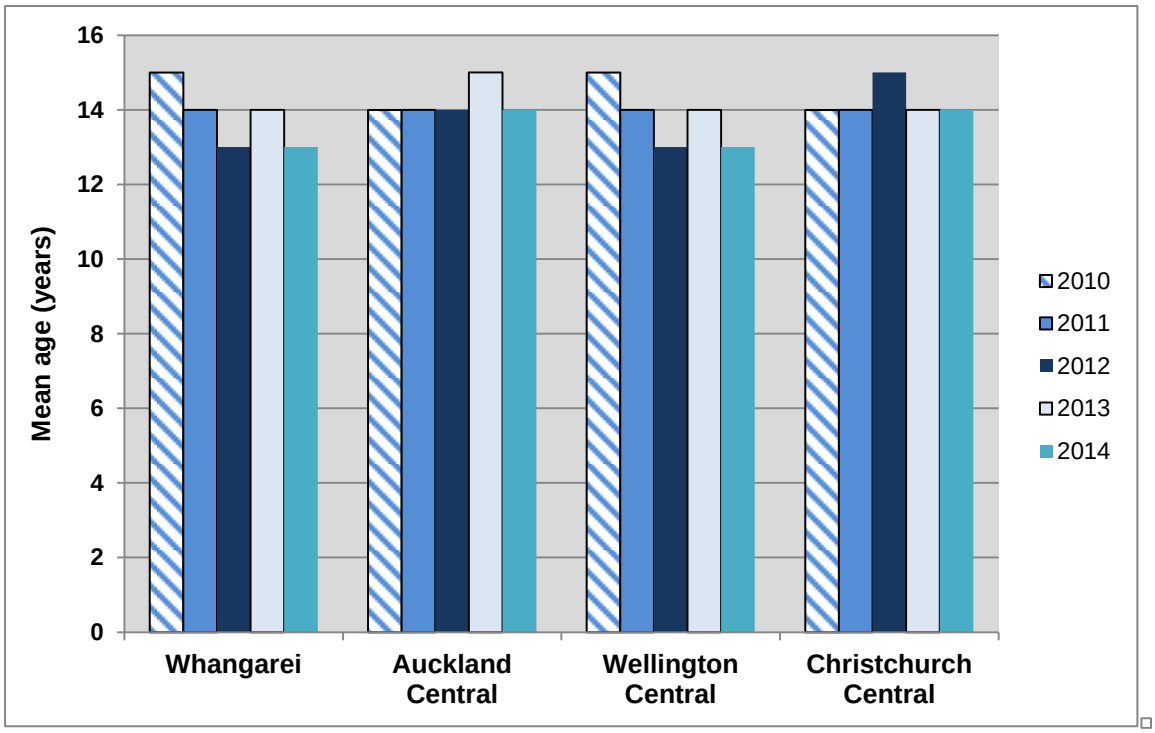


Table 5.1: Police detainees' patterns of cannabis use by location, 2010-2014

Use of cannabis	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All Sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=153)	2014 (n=151)	2010 (n=285)	2011 (n=316)	2012 (n=246)	2013 (n=299)	2014 (n=314)	2010 (n=152)	2011 (n=171)	2012 (n=100)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=303)	2013 (n=288)	2014 (n=273)	2010 (n=814)	2011 (n=827)	2012 (n=799)	2013 (n=849)	2014 (n =834)
Ever used (%)	88	95	97	93	91	83	87	89	92	91	89	88	89	87	93	91	96	89	95	93	87	91	90	92	92
Mean age first used (years)*	15	14	13	14	13	14	14	14	15	14	15	14	13	14	13	14	14	15	14	14	14	14	14	14	14
Used in past 12 months (%)	68	83	78	64	67	63	69	64	70	67	76	75	74	70	73	81	79	70	74	67	72	76	70	70	68
Mean number of days used in past 12 months**	160	186	186	155	156	196	151	150	146	162	181	178	183	156	210	191	169	162	173	169	187	168	166	158	173
Felt dependent in the past 12 months (%)**	30	36	37	42	31	43	30	31	32	36	44	42	39	40	40	34	34	29	32	24	38	35	33	34	32
Used in past month (%)	58	73	64	45	59	57	58	52	56	54	63	63	63	59	61	71	67	57	62	54	63	64	58	57	56
Mean number of days used in past month***	16	17	20	17	15	17	15	15	15	16	18	17	17	14	20	18	16	16	16	17	18	16	17	15	17

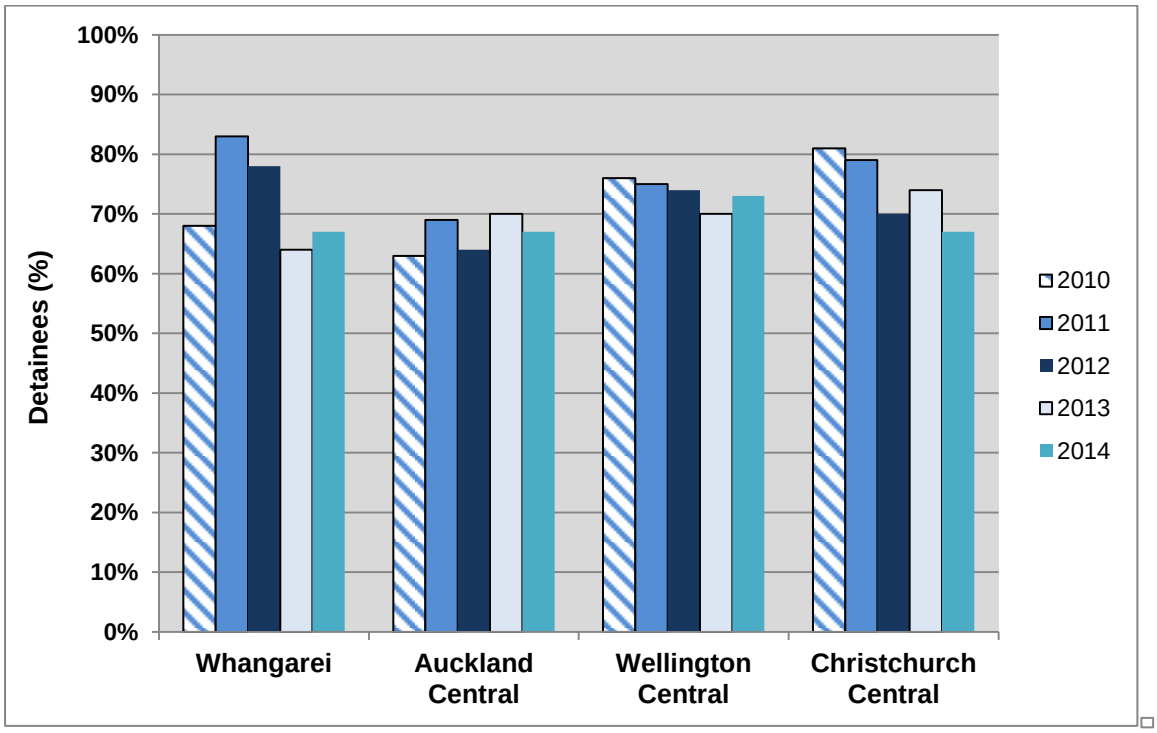
* of those who had ever tried

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

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

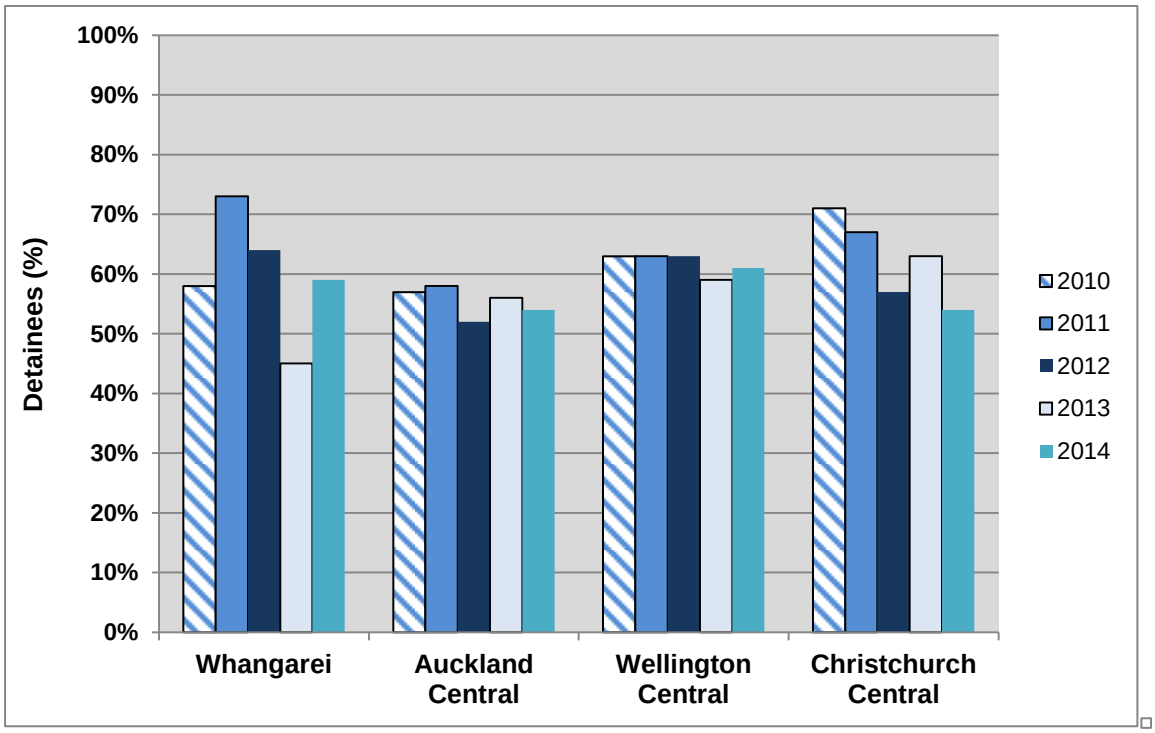
The proportion of detainees who had used cannabis in the previous 12 months declined from 76% in 2011 to 68% in 2014 (p=0.0106). The proportion of Whangarei detainees who had used cannabis in the previous 12 months declined from 83% in 2011 to 67% in 2014 (p=0.0104). The proportion of Christchurch Central detainees who had used cannabis in the previous year also declined from 79% in 2010 to 67% in 2014 (p=0.0372) (Figure 5.3).

Figure 5.3: Proportion of police detainees who had used cannabis in the past 12 months by location, 2010-2014



The proportion of detainees who reported using cannabis in the past month decreased from 64% in 2011 to 56% in 2014 (p=0.0106). The proportion of detainees in Christchurch Central who had used cannabis in the previous month decreased from 71% in 2010 to 54% in 2014 (p=0.0008) (Figure 5.4). The proportion of detainees in Whangarei who had used cannabis in the past month declined from 73% in 2011 to 45% in 2013 (p<0.0001) and then increased to 54% in 2014, although the later increase was not statistically significant (p=0.0944).

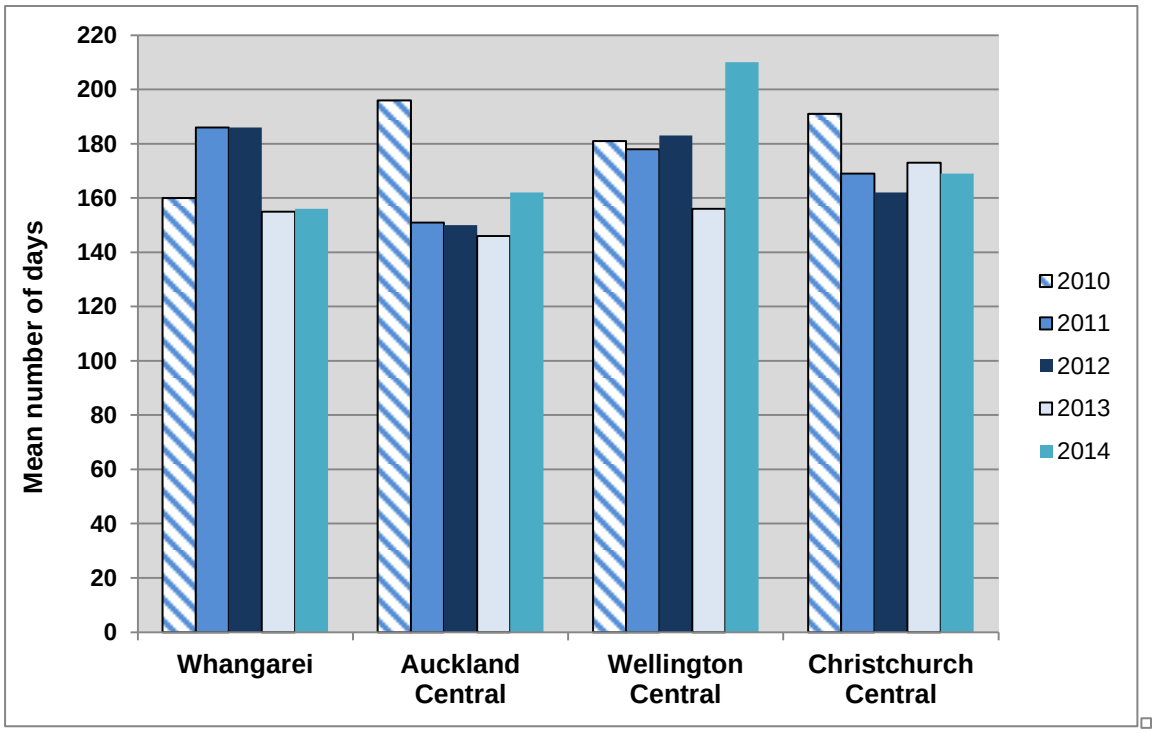
Figure 5.4: Proportion of police detainees who used cannabis in the past 30 days by location, 2010-2014



Frequency of cannabis use

The detainees had used cannabis on a mean of 173 days in the past 12 months in 2014 (median 150, 1-365 days). The mean number of days the detainees had used cannabis in the past year had previously declined from 187 days in 2010 to 158 days in 2013 (p=0.0095). The number of days of cannabis use in 2014 was not significantly different from 2012 (i.e. 173 vs. 166, p=0.9505). Similarly, the Auckland Central detainees had used cannabis on fewer days from 2010 to 2013 (down from 196 days to 146 days, p=0.0104) (Figure 5.5). The number of days the Auckland detainees used cannabis in 2014 was the same as in 2012 (p=0.9399).

Figure 5.5: Mean number days of cannabis use in the past 12 months by location, 2010-2014

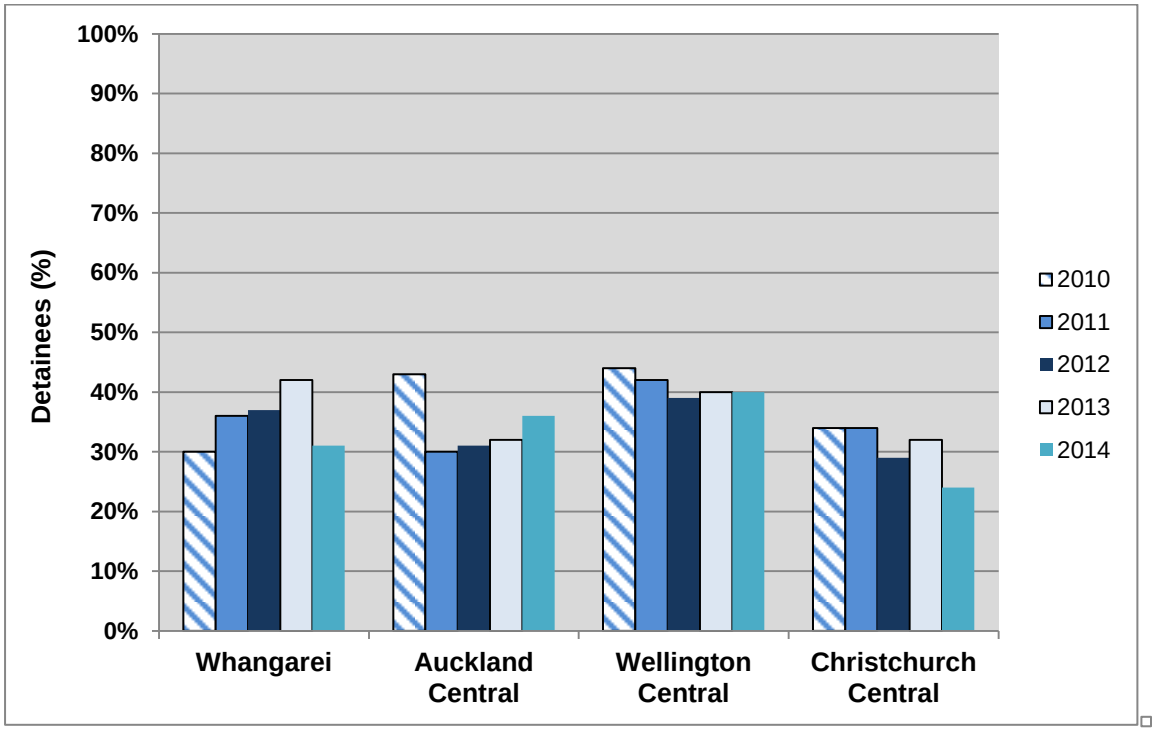


There was also a decrease in the mean number of days the detainees had used cannabis in the previous month, down from 18 days in 2010 to 15 days in 2013 (p=0.0334). The days of cannabis use in the past month in 2014 were the same as in 2012.

Dependency on cannabis

Thirty-two percent of the detainees who had used cannabis in the previous year felt they were dependent on it in 2014. The proportion who felt dependent on cannabis declined from 38% in 2010 to 32% in 2014, although this decrease was not statistically significant (p=0.1819). The proportion of detainees in Auckland Central who felt dependent on cannabis decreased from 43% in 2010 to 36% in 2014, but again this decline was not statistically significant (p=0.6713) (Figure 5.6).

Figure 5.6: Proportion of police detainees who felt dependent on cannabis in the past year by location (of those who had used cannabis in the past 12 months), 2010-2014



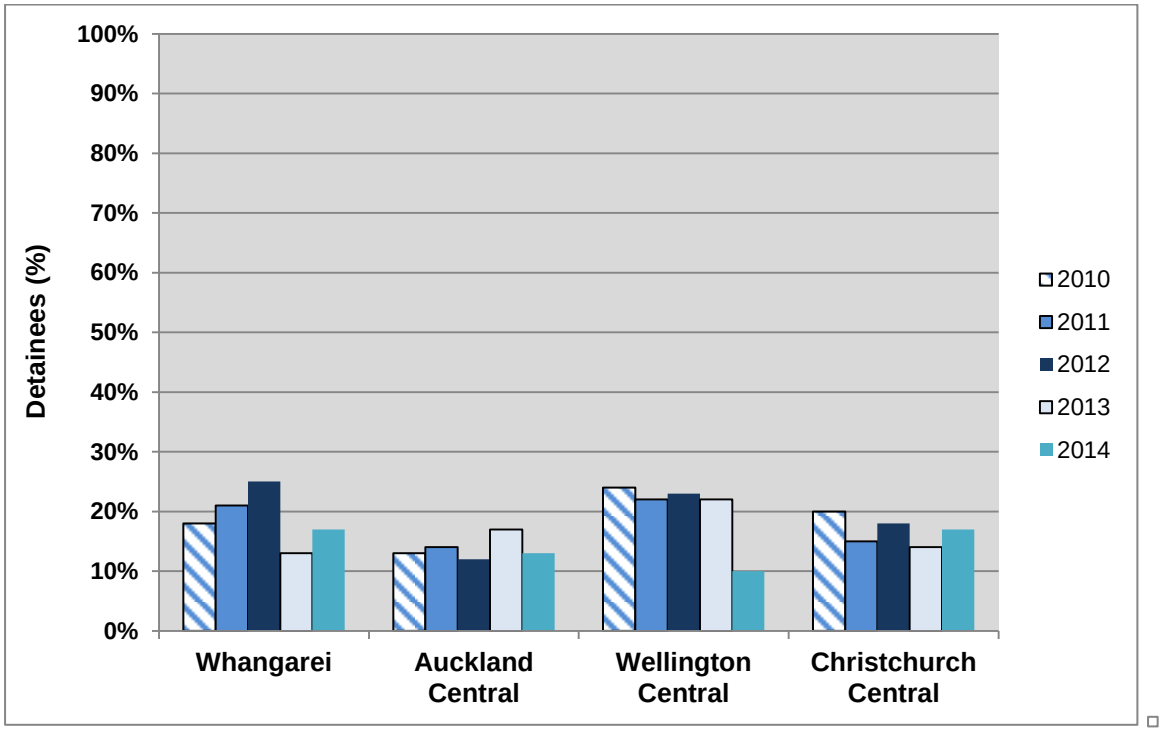
Cannabis use at the time of arrest

Fourteen percent of the detainees reported using cannabis prior to their arrest in 2014 (Table 5.2). There was no statistically significant change in the incidence of cannabis use at the time of arrest from 2010 to 2014 (p=0.2857). The proportion of detainees in Wellington Central who reported using cannabis prior to their arrest decreased from 24% in 2010 to 10% in 2014 (p=0.0468) (Figure 5.7).

Table 5.2: Cannabis use by police detainees at time of arrest by location, 2010-2014

Use of cannabis	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All Sites				
	2010 (n=110)	2011 (n=149)	2012 (n=147)	2013 (n=145)	2014 (n=150)	2010 (n=281)	2011 (n=310)	2012 (n=240)	2013 (n=288)	2014 (n=311)	2010 (n=150)	2011 (n=168)	2012 (n=96)	2013 (n=104)	2014 (n=93)	2010 (n=259)	2011 (n=188)	2012 (n=)	2013 (n=283)	2014 (n=273)	2010 (n=800)	2011 (n=815)	2012 (n=780)	2013 (n=824)	2014 (n=828)
Using when arrested (%)	18	21	25	13	17	13	14	12	17	13	24	22	23	22	10	20	15	18	14	17	18	17	18	17	14

Figure 5.7: Proportion of police detainees who were using cannabis prior to being arrested by location, 2010-2014



Current availability of cannabis

The detainees described the current availability of cannabis as 'very easy/easy' in 2014 (Table 5.3 & 5.4). The current availability of cannabis declined from 2010 to 2014 (down from 3.3 to 3.1, p=0.0010). The availability of cannabis was lower in Auckland Central in 2014 compared to 2012 (3.1 vs. 3.4, p=0.0205), in 2014 compared to 2011 (3.1 vs. 3.4, p=0.0130) and in 2014 compared to 2010 (3.4 vs. 3.1, p=0.0111). The availability of cannabis in Christchurch Central fell also from 2010 to 2014 (from 3.4 to 3.1, p=0.0225) (Figure 5.8).

Figure 5.8: Current availability of cannabis by location, 2010-2014

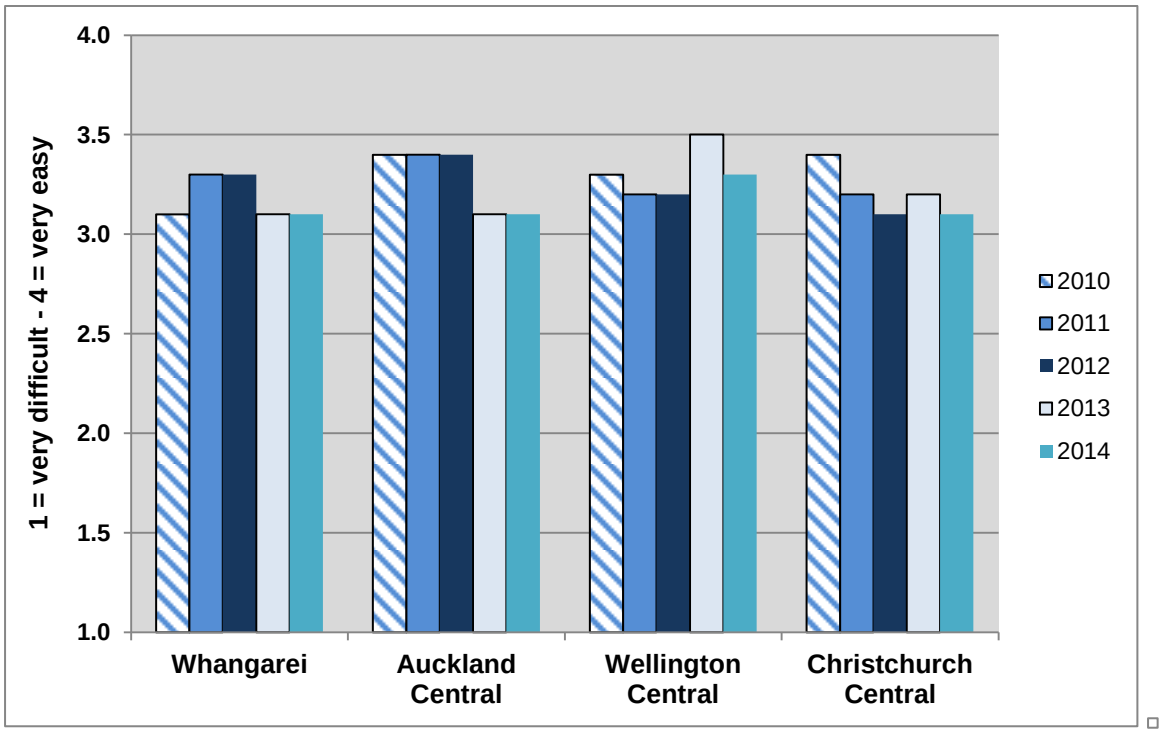


Table 5.3: Police detainees' perceptions of the current availability of cannabis by location, 2010-2014

Current availability of cannabis	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=80)	2011 (n=121)	2012 (n=114)	2013 (n=89)	2014 (n=95)	2010 (n=175)	2011 (n=205)	2012 (n=151)	2013 (n=207)	2014 (n=201)	2010 (n=110)	2011 (n=125)	2012 (n=71)	2013 (n=72)	2014 (n=66)	2010 (n=209)	2011 (n=143)	2012 (n=204)	2013 (n=215)	2014 (n=179)
Very easy [4]	41%	45%	57%	40%	40%	55%	53%	58%	40%	41%	54%	46%	45%	54%	45%	58%	48%	40%	50%	48%
Easy [3]	34%	39%	25%	38%	39%	30%	34%	24%	40%	33%	31%	31%	35%	39%	38%	28%	31%	36%	26%	27%
Difficult [2]	21%	12%	10%	16%	13%	13%	11%	17%	14%	19%	11%	15%	13%	6%	14%	12%	15%	21%	16%	15%
Very difficult [1]	4%	3%	8%	6%	8%	2%	4%	2%	6%	6%	5%	7%	7%	1%	3%	2%	5%	3%	9%	10%
Average availability score (1=very difficult – 4=very easy)	3.1	3.3	3.3	3.1	3.1	3.4	3.4	3.4	3.1	3.1	3.3	3.2	3.2	3.5	3.3	3.4	3.2	3.1	3.2	3.1
Overall current status	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy

Table 5.4: Police detainees' perceptions of the current availability in all sites, 2010-2014

Current availability of cannabis	All Sites				
	2010 (n=574)	2011 (n=594)	2012 (n=541)	2013 (n=583)	2014 (n=541)
Very easy [4]	54%	49%	49%	46%	44%
Easy [3]	30%	33%	30%	35%	33%
Difficult [2]	13%	13%	16%	13%	16%
Very difficult [1]	3%	5%	4%	6%	7%
Average availability score (1=very difficult – 4=very easy)	3.3	3.3	3.2	3.2	3.1
Overall current status	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ easy	Very easy/ Easy

Change in availability of cannabis

The detainees reported the availability of cannabis had been 'stable/more difficult' over the previous six months in 2014 (Table 5.5 & 5.6). The availability of cannabis declined from 2010 to 2014 (down from 2.1 to 1.9, p=0.0009). The availability of cannabis declined in Auckland Central (down from 2.1 in 2010 to 2.0 in 2014, and was close to being statistical significant, p=0.0578) and in Christchurch Central (down from 2.1 in 2010 to 1.9 in 2014, p=0.0213) (Figure 5.9).

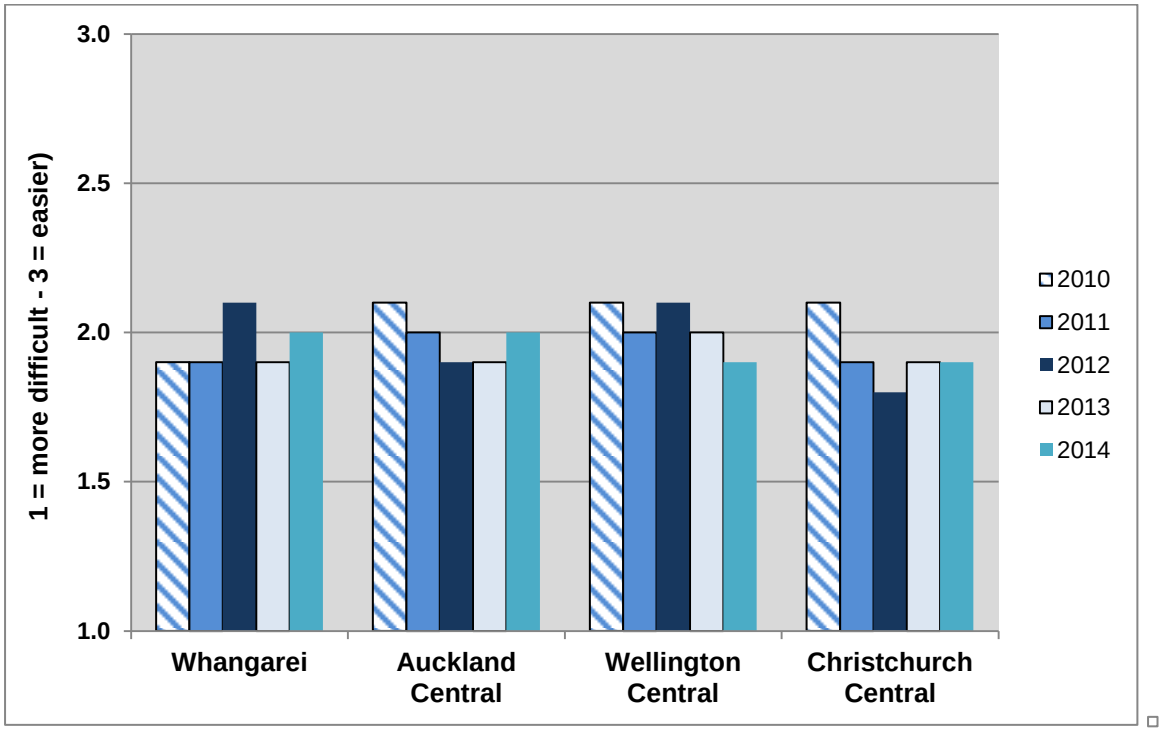
Table 5.5: Police detainees' perceptions of the change in availability of cannabis by location, 2010 - 2014

Change in availability of cannabis (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=78)	2011 (n=120)	2012 (n=108)	2013 (n=84)	2014 (n=91)	2010 (n=167)	2011 (n=203)	2012 (n=142)	2013 (n=199)	2014 (n=190)	2010 (n=109)	2011 (n=117)	2012 (n=69)	2013 (n=67)	2014 (n=63)	2010 (n=206)	2011 (n=141)	2012 (n=191)	2013 (n=214)	2014 (n=180)
Easier [3]	12%	15%	25%	17%	21%	25%	17%	14%	17%	14%	21%	13%	19%	16%	14%	18%	12%	7%	17%	16%
Stable [2]	58%	45%	52%	48%	44%	49%	63%	54%	54%	58%	62%	64%	55%	63%	57%	59%	50%	47%	38%	48%
Fluctuates [2]	10%	18%	9%	10%	15%	13%	7%	9%	7%	9%	7%	11%	13%	4%	6%	12%	13%	18%	13%	8%
More difficult [1]	21%	23%	14%	26%	20%	13%	13%	23%	22%	18%	9%	12%	13%	16%	22%	11%	25%	28%	32%	28%
Average change in availability score (1=more difficult – 3=easier)	1.9	1.9	2.1	1.9	2.0	2.1	2.0	1.9	1.9	2.0	2.1	2.0	2.1	2.0	1.9	2.1	1.9	1.8	1.9	1.9
Overall recent change	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ Easier	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ More difficult	Stable/ easier	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ More difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ More difficult	Stable/ More difficult

Table 5.6: Police detainees' perceptions of the change in availability of cannabis in all sites, 2010 - 2014

Change in availability of cannabis (%)	All Sites				
	2010 (n=560)	2011 (n=581)	2012 (n=511)	2013 (n=564)	2014 (n=524)
Easier [3]	20%	15%	15%	17%	16%
Stable [2]	57%	56%	51%	49%	52%
Fluctuates [2]	11%	12%	13%	9%	9%
More difficult [1]	13%	18%	21%	25%	23%
Average change in availability score (1=more difficult – 3=easier)	2.1	2.0	1.9	1.9	1.9
Overall recent change	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ More difficult

Figure 5.9: Change in the availability of cannabis by location, 2010-2014



Current price of cannabis

The detainees reported paying a median price of $20 for a 'tinny' of cannabis, $320 for an ounce of cannabis and $3,200 for a pound of cannabis in 2014 (Table 5.7 & 5.8). There was no change in the mean price paid for a 'tinny' of cannabis from 2010 to 2014 ($20 in all years, p=0.3315). There was also no overall change in the price of an ounce of cannabis from 2010 to 2014 ($322 vs. $323, p=0.9994). The price of an ounce of cannabis declined in Wellington Central from $359 in 2012 to $302 in 2014 (p=0.0263) (Figure 5.10). Conversely, the price of an ounce of cannabis increased in Christchurch Central from $316 in 2012 to $334 in 2014 (p=0.0071). In 2014, the mean price of an ounce of cannabis was higher in Christchurch Central than in Wellington Central ($334 vs. $302, p=0.0012) and in Christchurch Central than in Whangarei ($334 vs. $289, p<0.0001). The mean price of an ounce of cannabis was also higher in Auckland Central than in Wellington Central ($330 vs. $302, p=0.0044) and in Auckland Central than in Whangarei ($330 vs. $289, p<0.0001).

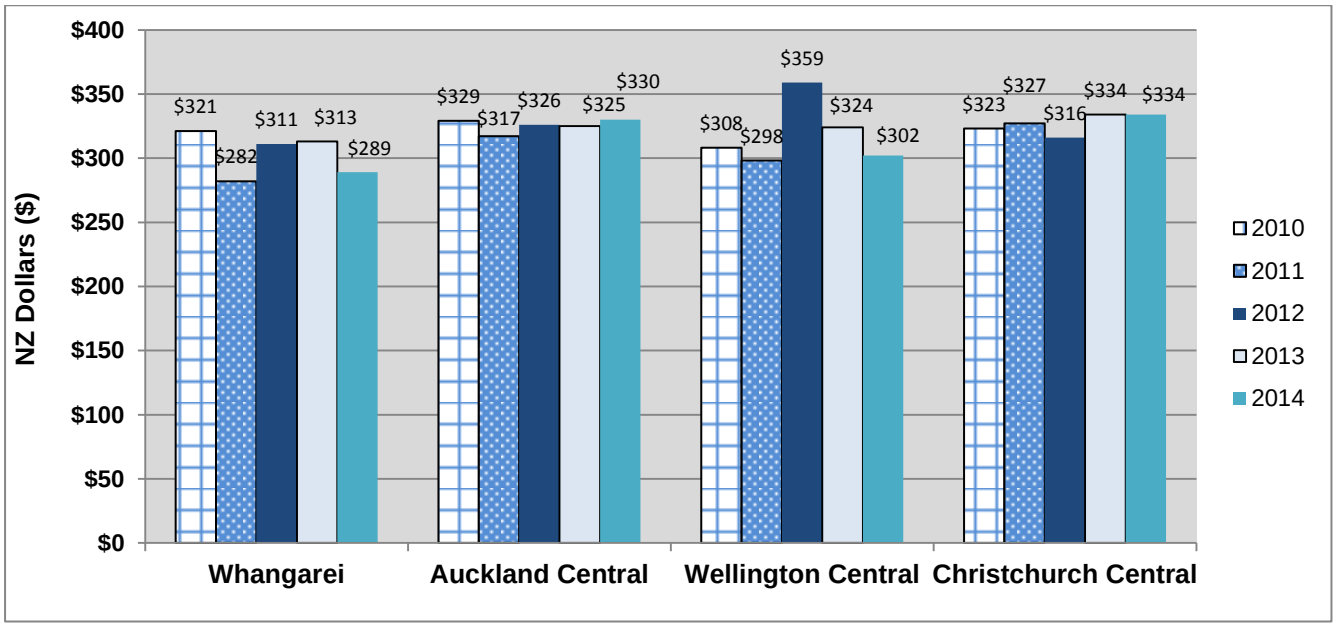
Table 5.7: Current median (mean) price paid by police detainees for cannabis (NZD) by location, 2010-2014

Current price of cannabis ($)	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
Number with knowledge	**2010 (n=73)**	**2011 (n=106)**	**2012 (n=97)**	**2013 (n=74)**	**2014 (n=88)**	**2010 (n=124)**	**2011 (n=187)**	**2012 (n=130)**	**2013 (n=195)**	**2014 (n=202)**	**2010 (n=87)**	**2011 (n=93)**	**2012 (n=59)**	**2013 (n=59)**	**2014 (n=67)**	**2010 (n=191)**	**2011 (n=135)**	**2012 (n=169)**	**2013 (n=211)**	**2014 (n=178)**
Median (mean) price per 'tinny'	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)
Number with knowledge	**2010 (n=6)**	**2011 (n=42)**	**2012 (n=74)**	**2013 (n=51)**	**2014 (n=56)**	**2010 (n=41)**	**2011 (n=58)**	**2012 (n=41)**	**2013 (n=145)**	**2014 (n=166)**	**2010 (n=26)**	**2011 (n=30)**	**2012 (n=16)**	**2013 (n=20)**	**2014 (n=36)**	**2010 (n=33)**	**2011 (n=66)**	**2012 (n=108)**	**2013 (n=187)**	**2014 (n=157)**
Median (mean) price per 'ounce'	$325 ($321)	$275 ($282)	$330 ($311)	$300 ($313)	$300 ($289)	$350 ($329)	$350 ($317)	$350 ($326)	$350 ($325)	$350 ($330)	$300 ($308)	$300 ($298)	$350 ($359)	$350 ($324)	$300 ($302)	$340 ($323)	$345 ($327)	$320 ($316)	$350 ($334)	$350 ($334)
Number with knowledge	**2010 (n=2)**	**2011 (n=11)**	**2012 (n=47)**	**2013 (n=25)**	**2014 (n=33)**	**2010 (n=16)**	**2011 (n=12)**	**2012 (n=15)**	**2013 (n=71)**	**2014 (n=57)**	**2010 (n=10)**	**2011 (n=1)**	**2012 (n=4)**	**2013 (n=10)**	**2014 (n=15)**	**2010 (n=14)**	**2011 (n=13)**	**2012 (n=38)**	**2013 (n=81)**	**2014 (n=73)**
Median (mean) price per 'pound'	$1925 ($1925)	$2500 ($2582)	$3000 ($3042)	$3000 ($3022)	$3000 ($2674)	$3100 ($2677)	$2550 ($2558)	$4000 (3496)	$3700 ($3312)	$3000 ($3037)	$1240 ($2152)	$2500 ($2500)	$4150 ($3950)	$2625 ($2605)	$3500 ($2987)	$3500 ($3700)	$4500 ($4346)	$3000 ($2955)	$4000 ($3363)	$3500 ($3414)

Table 5.8: Current median (mean) price paid by police detainees for cannabis (NZD) in all sites, 2010-2014

Current price of cannabis ($)	All sites				
Number with knowledge	**2010 (n=475)**	**2011 (n=521)**	**2012 (n=455)**	**2013 (n=539)**	**2014 (n=535)**
Median (mean) price per 'tinny'	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)	$20 ($20)
Number with knowledge	**2010 (n=107)**	**2011 (n=197)**	**2012 (n=239)**	**2013 (n=403)**	**2014 (n=415)**
Median (mean) price per 'ounce'	$325 ($322)	$325 ($313)	$325 ($321)	$350 ($328)	$350 ($323)
Number with knowledge	**2010 (n=41)**	**2011 (n=37)**	**2012 (n=104)**	**2013 (n=187)**	**2014 (n=178)**
Median (mean) price per 'pound'	$3100 ($2857)	$3500 ($3298)	$3000 ($3156)	$3500 ($3244)	$3200 ($3137)

Figure 5.10: Mean price of an ounce of cannabis by location, 2010-2014



Change in the price of cannabis

Seventy-seven percent of the detainees reported the price of cannabis had been 'stable' over the previous six months in 2014 (Table 5.9 & 5.10). There was no change in perceptions of the change in the price of cannabis from 2010 to 2014 (i.e. 2.1 in the five years).

Table 5.9: Police detainees' perceptions of the change in the price of cannabis in the past six months by location, 2010-2014

Change in price of cannabis (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=77)	2011 (n=122)	2012 (n=109)	2013 (n=84)	2014 (n=86)	2010 (n=168)	2011 (n=203)	2012 (n=136)	2013 (n=200)	2014 (n=203)	2010 (n=97)	2011 (n=120)	2012 (n=69)	2013 (n=66)	2014 (n=67)	2010 (n=204)	2011 (n=143)	2012 (n=185)	2013 (n=213)	2014 (n=180)
Increasing [3]	8%	16%	18%	15%	10%	9%	10%	7%	8%	9%	11%	7%	13%	5%	6%	8%	10%	14%	15%	11%
Fluctuating [2]	9%	7%	7%	10%	16%	5%	9%	4%	6%	3%	10%	8%	10%	8%	10%	8%	6%	14%	10%	17%
Stable [2]	82%	70%	70%	74%	65%	85%	80%	88%	83%	85%	76%	81%	77%	88%	82%	82%	82%	70%	73%	71%
Decreasing [1]	1%	6%	5%	1%	8%	1%	1%	2%	4%	3%	2%	4%	0%	0%	0%	1%	2%	3%	1%	2%
Average change in price score (1= decreasing – 3= increasing)	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
Overall recent change	Stable	Stable	Stable	Stable	Stable/ Fluctuating	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable

Table 5.10: Police detainees' perceptions of the change in the price of cannabis in the past six in all sites, 2010-2014

Change in price of cannabis (%)	All sites				
	2010 (n=546)	2011 (n=588)	2012 (n=500)	2013 (n=563)	2014 (n=536)
Increasing [3]	9%	11%	12%	11%	9%
Fluctuating [2]	8%	8%	9%	8%	11%
Stable [2]	82%	79%	77%	79%	77%
Decreasing [1]	1%	3%	2%	2%	3%
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

Current strength of cannabis

The current strength of cannabis was reported to be 'high/medium' in 2014 (Table 5.11). The strength of cannabis was perceived to have declined slightly from 2012 to 2014 (down from 2.3 to 2.2, and close to being statistically significant, p=0.0574).

Table 5.11: Police detainees' perceptions of current strength of cannabis in the past six months, 2012-2014

Current strength of cannabis (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=105)	2013 (n=84)	2014 (n=91)	2012 n=145)	2013 (n=202)	2014 (n=202)	2012 (n=70)	2013 (n=68)	2014 (n=63)	2012 (n=200)	2013 (n=215)	2014 (n=183)	2012 (n=520)	2013 (n=569)	2014 (n=539)
High [3]	30%	33%	29%	38%	37%	33%	31%	26%	24%	38%	35%	34%	36%	35%	31%
Medium [2]	35%	32%	38%	32%	28%	27%	27%	37%	22%	27%	27%	26%	30%	29%	28%
Fluctuates [2]	30%	26%	14%	23%	25%	28%	31%	28%	43%	27%	25%	29%	27%	25%	28%
Low [1]	6%	8%	19%	8%	10%	12%	10%	9%	11%	9%	13%	11%	8%	11%	13%
Average strength score (1=low – 3=high)	2.3	2.3	2.1	2.3	2.3	2.2	2.2	2.2	2.1	2.3	2.2	2.2	2.3	2.2	2.2
Overall current status	Medium High	High/ medium	Medium/ High	High/ medium	High/ medium	High/ Fluctuates	High/ fluctuates	Medium/ fluctuates	Fluctuates / High	High/ medium	High/ medium	High/ Fluctuates	High/ medium	High/ medium	High/ medium

Change in strength of cannabis

The detainees were asked if the strength of cannabis had changed in the previous six months in 2014 (Table 5.12). They reported the strength of cannabis had been 'stable/fluctuating' in 2014. The strength of cannabis declined from 2012 to 2014 (down 2.1 to 2.0, p=0.0378). The decline in the strength of cannabis was strongest in Wellington Central (down from 2.2 to 2.0, and close to being statistically significant, p=0.0526).

Table 5.12: Police detainees' perceptions of change in strength of cannabis in the past six months, 2012-2014

Change in strength of cannabis (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=100)	2013 (n=75)	2014 (n=86)	2012 (n=130)	2013 (n=185)	2014 (n=193)	2012 (n=63)	2013 (n=67)	2014 (n=62)	2012 (n=189)	2013 (n=203)	2014 (n=178)	2012 (n=483)	2013 (n=530)	2014 (n=519)
Increasing [3]	12%	13%	10%	18%	17%	12%	25%	9%	8%	15%	22%	12%	17%	17%	11%
Stable [2]	54%	45%	51%	45%	57%	56%	41%	52%	63%	38%	40%	48%	43%	48%	54%
Fluctuating [2]	21%	25%	21%	19%	11%	15%	27%	31%	21%	39%	27%	29%	28%	22%	21%
Decreasing [1]	13%	16%	17%	18%	15%	17%	6%	7%	8%	8%	11%	11%	12%	13%	14%
Average change in strength (1=decreasing – 3=increasing)	2.0	2.0	1.9	2.0	2.0	2.0	2.2	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0
Overall recent change	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ increasing	Stable/ increasing	Stable/ decreasing	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating

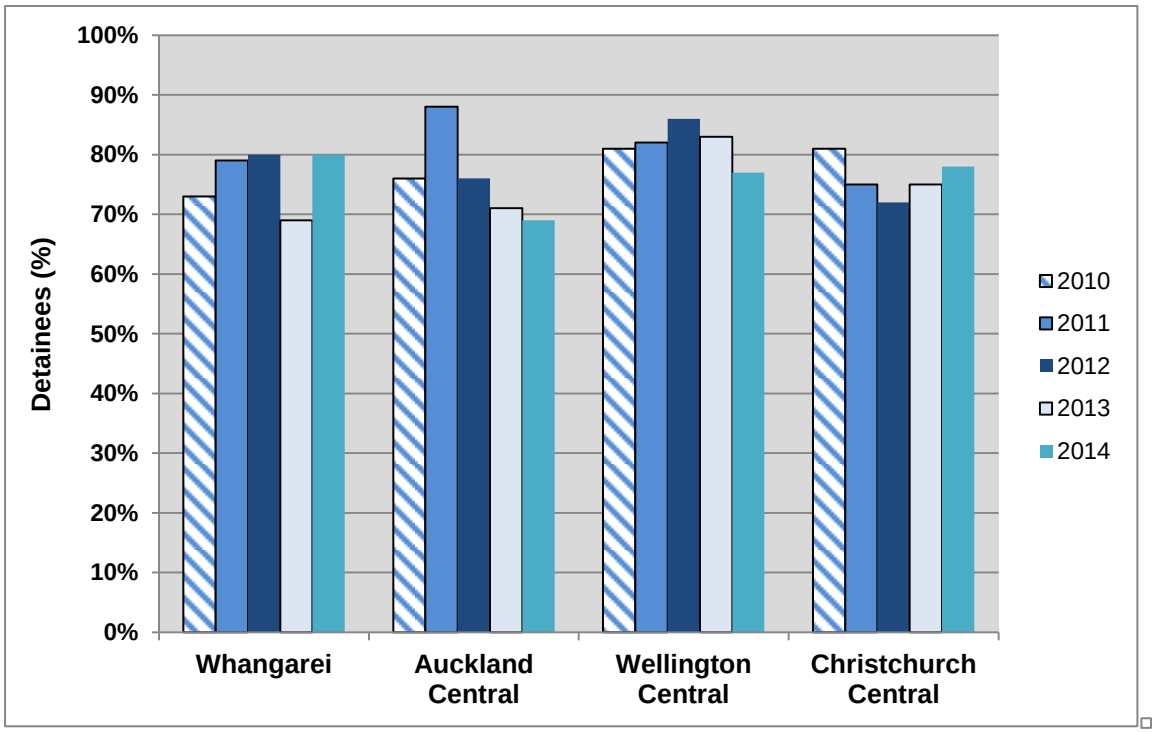
Time taken to purchase cannabis

Seventy-five percent of the detainees who had used cannabis in the past 12 months were able to purchase it in one hour or less in 2014 (Table 5.13). Fifty-four percent could purchase it in 20 minutes or less. The proportion of the detainees who were able to purchase cannabis in one hour or less decreased from 81% in 2011 to 75% in 2014 (p=0.0503). The proportion of the detainees who were able to purchase cannabis in one hour or less also decreased from 81% in 2011 to 74% in 2013 (p=0.0110). Similarly the proportion of detainees in Auckland Central who were able to purchase cannabis in one hour or less declined from 88% in 2011 to 69% in 2014 (p=0.0002) and from 88% in 2011 to 71% in 2013 (p=0.0002) (Figure 5.11).

Table 5.13: Time taken by police detainees to purchase cannabis by location, 2010-2014

Time to purchase cannabis (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=79)	2011 (n=124)	2012 (n=112)	2013 (n=87)	2014 (n=96)	2010 (n=152)	2011 (n=201)	2012 (n=148)	2013 (n=200)	2014 (n=204)	2010 (n=110)	2011 (n=117)	2012 (n=72)	2013 (n=71)	2014 (n=64)	2010 (n=208)	2011 (n=146)	2012 (n=198)	2013 (n=216)	2014 (n=179)	2010 (n=549)	2011 (n=591)	2012 (n=528)	2013 (n=578)	2014 (n=546)
Months	1	1	1	3	1	1	0	0	1	1	2	0	0	0	0	0	0	1	<1	0	1	0	<1	1	<1
Weeks	3	2	0	3	2	1	0	1	2	<1	0	1	0	1	0	<1	0	1	2	1	1	0	1	2	1
Days	6	2	3	3	3	7	0	5	4	5	1	3	3	4	2	3	4	6	4	3	4	2	5	4	3
About one day	4	6	9	11	6	8	3	6	7	11	8	7	1	6	5	5	8	8	5	4	6	6	6	6	7
Hours	13	10	7	9	7	8	9	12	16	14	8	8	10	6	17	11	13	12	13	14	10	10	11	12	13
1 Hour	19	25	6	13	16	20	31	16	21	16	31	25	26	30	23	23	27	20	27	26	23	27	19	24	21
Less than 20 mins	54	54	63	56	65	56	57	60	50	53	50	57	60	54	53	58	48	52	48	52	55	54	58	51	54

Figure 5.11: Proportion of police detainees who could purchase cannabis in one hour or less, 2010-2014



Effect of cannabis on the likelihood of becoming angry

Those detainees who reported using cannabis in the past 12 months were asked what effect using cannabis had on their likelihood of becoming angry. In 2014, 44% of the detainees said that using cannabis was 'much less likely' to make them become angry, and a further 29% said it was 'less likely' to make them become angry (Table 5.14).

Table 5.14: Effect of cannabis on police detainees' likelihood of becoming angry, 2010-2014

Effect of cannabis on likelihood of becoming angry	All sites				
	2010 (n=575)	2011 (n=613)	2012 (n=544)	2013 (n=584)	2014 (n=562)
Much more likely	1%	1%	1%	1%	<1%
More likely	2%	2%	1%	2%	2%
No effect	29%	33%	30%	23%	25%
Less likely	27%	31%	36%	34%	29%
Much less	41%	33%	32%	41%	44%

Driving under the influence of cannabis

Those detainees who had used cannabis in the past year were asked how often they drove under the influence of cannabis. In 2014, 23% of the cannabis using detainees said they did not drive and a further 8% said their driver license was suspended. Fifty percent of the detainees who drove and used cannabis had completed at least some of their driving under the influence of cannabis (Table 5.15). There was no change in the level of driving under the influence of cannabis by the detainees from 2010 to 2014 (p=0.4165).

Table 5.15: Mean score of extent to which police detainees who drove and who had used cannabis in the past 12 months had driven under the influence of cannabis by location, 2010 - 2014

Extent drove under the influence of cannabis	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=63)	2011 (n=83)	2012 (n=84)	2013 (n=63)	2014 (n=71)	2010 (n=110)	2011 (n=143)	2012 (n=106)	2013 (n=139)	2014 (n=134)	2010 (n=80)	2011 (n=80)	2012 (n=55)	2013 (n=40)	2014 (n=43)	2010 (n=125)	2011 (n=96)	2012 (n=145)	2013 (n=145)	2014 (n=134)	2010 (n=378)	2011 (n=402)	2012 (n=389)	2013 (n=385)	2014 (n=384)
All	10%	16%	13%	11%	15%	8%	7%	8%	10%	10%	18%	24%	16%	20%	30%	14%	14%	17%	10%	13%	12%	14%	13%	12%	16%
Most	13%	13%	18%	10%	8%	13%	8%	10%	9%	9%	11%	14%	9%	13%	9%	14%	12%	10%	11%	18%	13%	10%	11%	10%	12%
Some	24%	13%	19%	24%	28%	22%	33%	19%	14%	21%	20%	23%	22%	20%	9%	22%	25%	26%	24%	28%	22%	26%	22%	20%	22%
Hardly any	16%	13%	19%	14%	8%	17%	15%	13%	23%	14%	13%	10%	9*%	23%	14%	15%	14%	14%	19%	13%	15%	13%	13%	20%	13%
None	38%	45%	31%	41%	39%	40%	37%	49%	44%	46%	39%	30%	44%	25%	37%	34%	35%	34%	36%	28%	38%	37%	40%	38%	37%

Summary

- The proportion of detainees who had ever tried cannabis increased slightly from 87% in 2010 to 92% in 2014

- The proportion of detainees who had used cannabis in the previous year declined from 76% in 2011 to 68% in 2014

- Declines in the prevalence of cannabis use were found in Whangarei and Christchurch Central

- The mean number of days the detainees had used cannabis in the past year had previously declined from 187 in 2010 to 158 in 2013. The number of days of use recovered in 2014 to 173

- The number of days the Auckland Central detainees had used cannabis in the past year also declined from 196 in 2010 to 146 in 2013, and then recovered to 162 in 2014

- Thirty-two percent of the cannabis using detainees felt they were dependent on cannabis in 2014

- Fourteen percent of the detainees had been using cannabis prior to their arrest in 2014

- The availability of cannabis declined in Auckland Central and Christchurch Central from 2010 to 2014

- The median price of cannabis was $20 for a 'tinny', $320 for an ounce and $3,200 for a pound in 2014

- The proportion of detainees who were able to purchase cannabis in one hour or less decreased from 81% in 2011 to 75% in 2014

- The proportion of detainees in Auckland Central who were able to purchase cannabis in one hour or less also decreased from 88% in 2011 to 69% in 2014

- Fifty percent of the cannabis using detainees who drove had completed at least some of their driving under the influence of cannabis in 2014

Chapter 6 – Ecstasy

Introduction

The term 'ecstasy' has evolved into an umbrella term which can refer to a range of compounds including the traditional MDMA (3,4-methylenedioxymethamphetamine), mixtures of MDMA and other compounds, and/or entirely new psychoactive substances (NPS) which mimic the effects of MDMA (UNODC, 2014) . It is believed that this diversification in the active compounds in 'ecstasy' came about because of greater controls imposed over key MDMA precursors during the mid-2000s. As a result, there are now some distinct variations in the composition of 'ecstasy' based on the compounds most available in different regions (UNODC, 2014).

Reflecting these global trends, the frequent drug users interviewed for the IDMS in New Zealand have reported a decline in the strength of ecstasy from around 2008 onwards (Wilkins, et al., 2011b). The price of ecstasy also declined around this time and has stayed low in subsequent years. This appears to reflect the greater use of cheaper substitute compounds for MDMA, and the emergence of local 'ecstasy' manufacture in New Zealand. Laboratory analysis of ecstasy tablets seized in New Zealand has found they contain BZP (benzylpiperazine), TFMPP (trifluoromethylphenylpiperazine), mephedrone (methylmethcathinone), 4-MEC (methylethcathinone), DMAA (dimethylamylamine), methylone (methylenedioxymethcathinone) and caffeine, and also occasionally MDMA (ESR, 2014).

The 2013 NZ-ADUM suggested the ecstasy market in New Zealand continued to be disrupted due to the ongoing international shortage of MDMA and New Zealand law enforcement successes against local ecstasy syndicates (Wilkins, et al., 2014a). The proportion of detainees who had used ecstasy in the previous year decreased from 28% in 2011 to 21% in 2013 (Wilkins, et al., 2014a). The availability of ecstasy was described as 'stable/more difficult' in 2013 (Wilkins, et al., 2014a). The mean price of a pill of ecstasy declined from $50 in 2010 to $41 in 2013, and the current strength was reported to be 'low/medium' (Wilkins, et al., 2014a). Thirty-

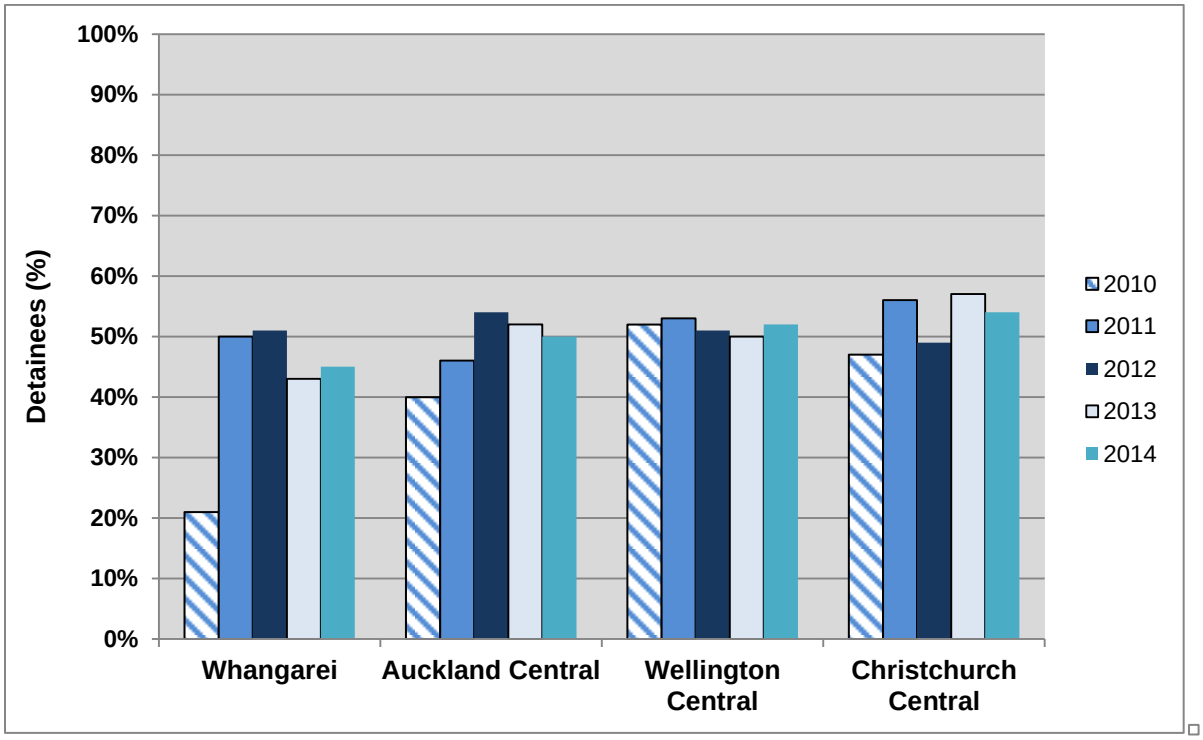
four percent of the Auckland Central and 33% of the Wellington Central detainees described the strength of ecstasy as 'decreasing' in 2013 (Wilkins, et al., 2014a).

In recent years there have been some reports of an improvement in the strength of ecstasy which may indicate some recovery in the international supply of MDMA, and the possibility of a two-tier market of high quality international sourced ecstasy containing MDMA and locally made ecstasy containing a range of new psychoactive substances (UNODC, 2014, 2015a; Wilkins et al., 2012c). Improvements in MDMA supply have also been noted in Europe in recent years and this may lead to resurgence in use (EMCDDA, 2015; UNODC, 2015b). Increasing levels of MDMA in ecstasy are thought to be behind the recovery in the preference for ecstasy in Australia (Sindicich & Burns, 2012). The 2013 IDMS confirmed the return of higher strength MDMA. The proportion of users saying they thought their ecstasy contained 'MDMA' increased from 89% in 2011 to 96% in 2013, and the proportion who thought their ecstasy contained 'nothing or almost nothing' decreased from 22% in 2012 to 9% in 2013.

Use of ecstasy

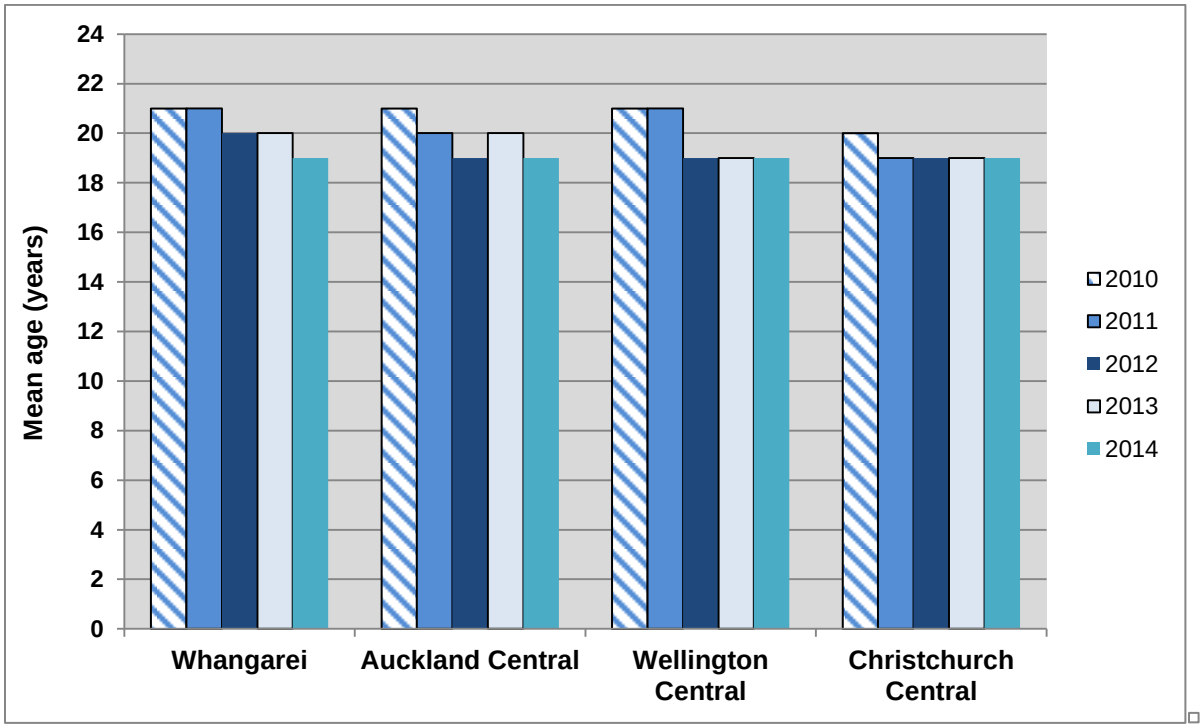
In 2014, 51% of the police detainees had tried ecstasy in their lifetimes, 16% had used it in the past 12 months and 5% had used it in the past month (Table 6.1). The proportion of detainees who had ever tried ecstasy increased from 42% in 2010 to 51% in 2014 (p=0.0011). The proportion of detainees from Whangarei who had tried ecstasy increased from 21% in 2010 to 45% in 2014 (p=0.0007) (Figure 6.1). The proportion of Auckland Central detainees who had tried ecstasy also increased from 40% in 2010 to 50% in 2014, and this increase was close to being statistically significant (p=0.0562).

Figure 6.1: Proportion of police detainees who had ever used ecstasy by location, 2010-2014



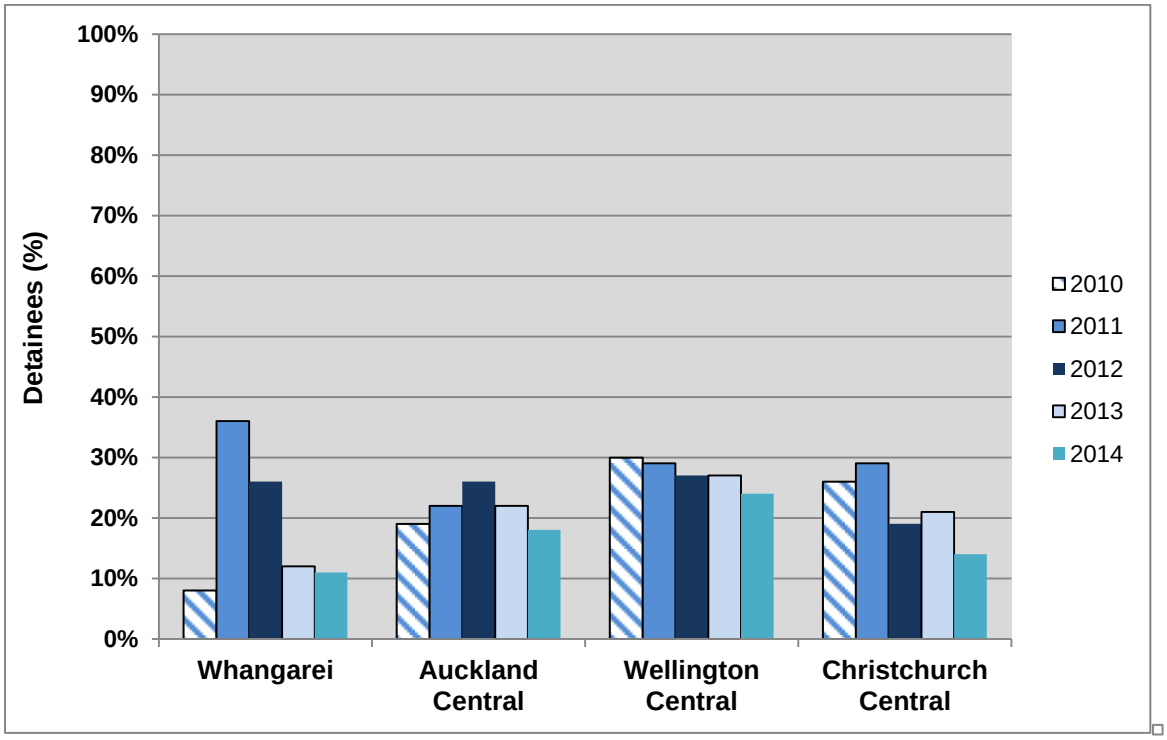
The detainees had used ecstasy for the first time at a mean age of 19 years in 2014. The mean age at which the detainees had first used ecstasy declined from 21 years 2010 to 19 years in 2014 (p=0.0003) (Figure 6.2).

Figure 6.2: Mean age at which detainees had first tried ecstasy by location, 2010-2014



The proportion of detainees who had used ecstasy in the previous year decreased from 28% in 2011 to 16% in 2014 ($p<0.0001$), and from 24% in 2012 to 16% in 2014 ($p=0.0025$). The proportion of Whangarei detainees who had used ecstasy in the previous year declined from 36% in 2011 to 11% in 2014 ($p<0.0001$), and from 26% in 2012 to 11% in 2014 ($p=0.0096$) (Figure 6.3). The proportion of Christchurch Central detainees who had used ecstasy in the previous year also fell from 29% in 2011 to 14% in 2014 ($p=0.0005$), and from 26% in 2010 to 14% in 2014 ($p=0.0019$).

Figure 6.3: Proportion of police detainees who used ecstasy in the past 12 months by location, 2010-2014



The proportion of detainees who had used ecstasy in the previous month decreased from 11% in 2011 to 5% in 2014 (p=0.0002), from 10% in 2012 to 5% in 2014 (p=0.0059), and from 9% in 2013 to 5% in 2014, with the latter decrease being close to statistical significance (p=0.0678) (Figure 6.4).

Figure 6.4: Proportion of police detainees who had used ecstasy in the past month by location, 2010-2014

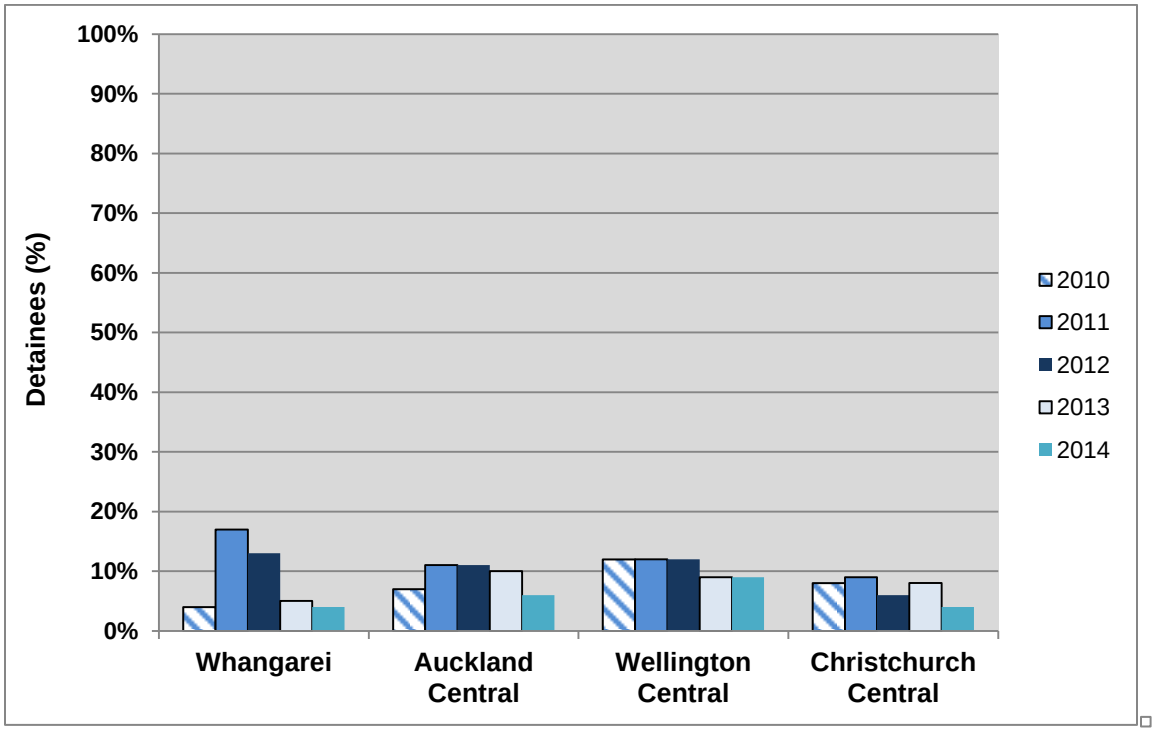


Table 6.1: Police detainees' patterns of ecstasy use by location, 2010-2014

Use of ecstasy	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=152)	2014 (n=151)	2010 (n=284)	2011 (n=316)	2012 (n=247)	2013 (n=295)	2014 (n=315)	2010 (n=152)	2011 (n=171)	2012 (n=101)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=303)	2013 (n=285)	2014 (n=273)	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=841)	2014 (n=835)
Ever used (%)	21	50	51	43	45	40	46	54	52	50	52	53	51	50	52	47	56	49	57	54	42	51	51	52	51
Mean age first used (years)*	21	21	21	20	19	21	20	19	20	19	21	21	19	19	19	20	19	19	19	19	21	20	19	20	19
Used in past 12 months (%)	8	36	26	12	11	19	22	26	22	18	30	29	27	27	24	26	29	19	21	14	22	28	24	22	16
Mean number of days used in past 12 months	4	12	13	23	27	18	25	11	19	13	14	12	25	11	21	5	8	8	14	11	11	14	13	16	16
Felt dependent in the past 12 months (%)**	9	6	3	0	19	6	5	5	2	2	5	6	0	0	5	0	2	0	0	0	4	4	2	1	4
Used in past month (%)	4	17	13	5	4	7	11	11	10	6	12	12	12	9	9	8	9	6	8	4	8	12	10	9	5
Mean number of days used in past month***	2	3	3	4	5	3	3	2	3	3	2	3	4	4	2	2	2	3	3	1	2	3	3	3	2

* of those who had ever tried

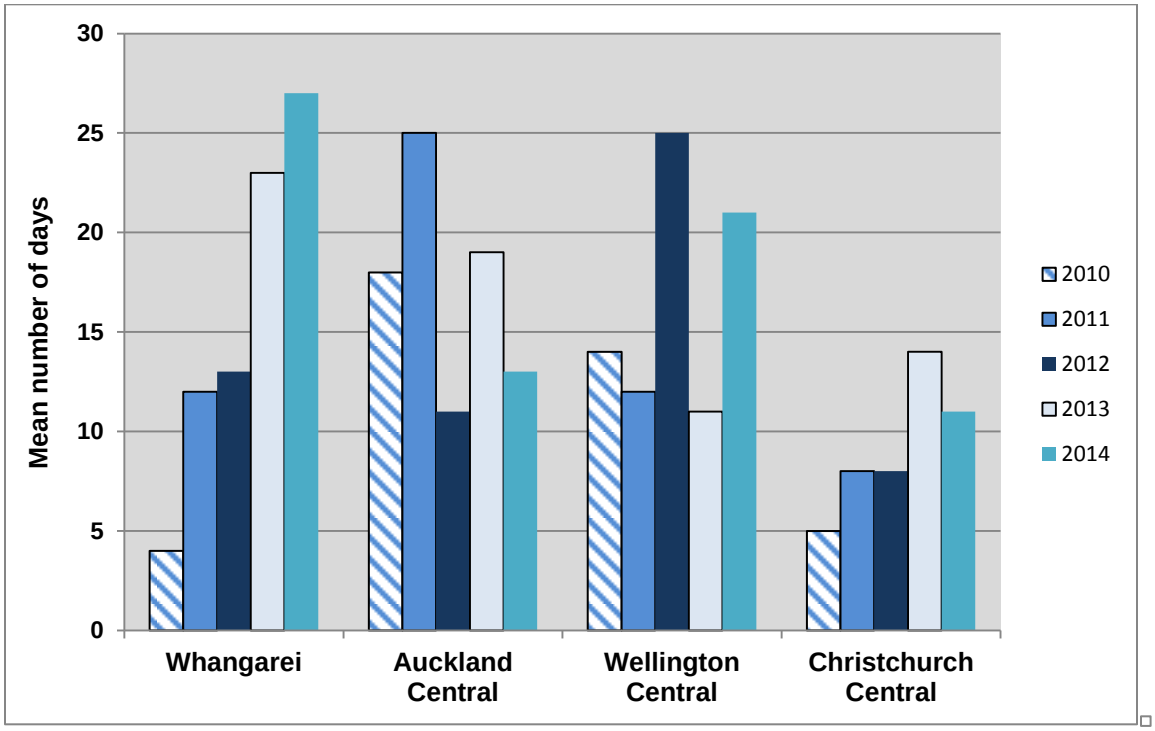
** of those who had used in the past 12 months

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

Frequency of ecstasy use

The detainees had used ecstasy on a mean of 16 days in the past 12 months in 2014 (median 2, range 1-216 days). The number of days the detainees had used ecstasy in the past year increased from 11 in 2010 to 16 in 2014 (p=0.0005), and from 13 in 2013 to 16 in 2014 (p=0.0278). The number of days of ecstasy use in Christchurch Central increased from 5 in 2010 to 14 in 2013 (p=0.0004), then declined to 11 in 2014 (p=0.0382) (Figure 6.5).

Figure 6.5: Mean number of days police detainees used ecstasy in the past year by location, 2010-2014



Dependency on ecstasy

The detainees who had used ecstasy in the past 12 months were asked if they had felt dependent on ecstasy during this time. Only 4% of the ecstasy using detainees said they had felt dependent on ecstasy in 2014, and this was similar to previous years.

Ecstasy use at the time of arrest

Only one percent of the detainees had been using ecstasy prior to their arrest in 2014. This had not changed from previous years.

Current availability of ecstasy

Thirty-eight percent of the detainees considered the current availability of ecstasy to be 'easy', 23% said it was 'very easy', and 28% said it was 'difficult' in 2014 (Table 6.2 & 6.3). Overall, there was no change in perceptions of the current availability of ecstasy from 2010 to 2014 (p=0.9786). However, the current availability of ecstasy in Auckland Central declined from 2010 to 2014 (down from 3.0 to 2.6, p=0.0833), and from 2011 to 2014 (down from 3.0 to 2.6, 0.0816), although these decreases were not statistically significant.

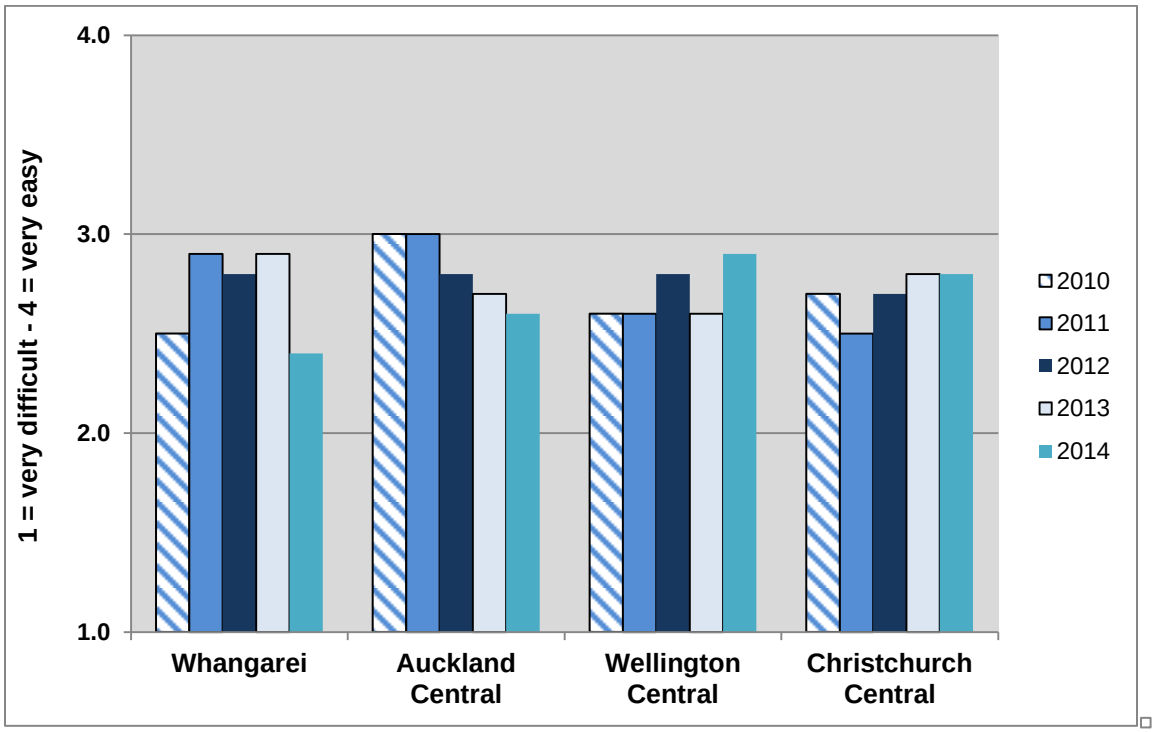
Table 6.2: Police detainees' perceptions of the current availability of ecstasy by location, 2010-2014

Current availability of ecstasy	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=10)	2011 (n=51)	2012 (n=34)	2013 (n=18)	2014 (n=15)	2010 (n=49)	2011 (n=62)	2012 (n=57)	2013 (n=63)	2014 (n=49)	2010 (n=39)	2011 (n=45)	2012 (n=26)	2013 (n=28)	2014 (n=21)	2010 (n=65)	2011 (n=51)	2012 (n=47)	2013 (n=65)	2014 (n=35)
Very easy [4]	20%	24%	32%	33%	13%	35%	34%	28%	25%	16%	28%	20%	15%	21%	24%	22%	24%	23%	28%	31%
Easy [3]	40%	45%	32%	33%	40%	39%	39%	35%	35%	37%	26%	31%	58%	29%	43%	34%	20%	36%	31%	34%
Difficult [2]	10%	25%	15%	28%	20%	22%	23%	23%	24%	33%	28%	36%	19%	39%	33%	35%	39%	28%	32%	20%
Very difficult [1]	30%	6%	21%	6%	27%	4%	5%	14%	16%	14%	18%	13%	8%	11%	0%	9%	18%	13%	9%	14%
Average availability score (1=very difficult – 4=very easy)	2.5	2.9	2.8	2.9	2.4	3.0	3.0	2.8	2.7	2.6	2.6	2.6	2.8	2.6	2.9	2.7	2.5	2.7	2.8	2.8
Overall current status	Easy/ very difficult	Easy/ difficult	Very easy/ easy	Very easy/easy	Easy/ very difficult	Easy/ very easy	Every easy/ difficult	Easy/ very easy	Easy/ very easy	Easy/ difficult	Very easy/ difficult	Difficult/ easy	Easy/ difficult	Difficult/ easy	Easy/ difficult	Difficult/ easy	Difficult/ very easy	Easy/ difficult	Difficult/ easy	Easy/ very easy

Table 6.3: Police detainees' perceptions of the current availability of ecstasy in all sites, 2010-2014

Current availability of ecstasy	All sites				
	2010 (n=163)	2011 (n=209)	2012 (n=164)	2013 (n=180)	2014 (n=125)
Very easy [4]	27%	26%	25%	26%	23%
Easy [3]	34%	33%	40%	32%	38%
Difficult [2]	28%	31%	22%	31%	28%
Very difficult [1]	11%	11%	13%	12%	12%
Average availability score (1=very difficult – 4=very easy)	2.8	2.7	2.8	2.7	2.7
Overall current status	Easy/ difficult	Easy/ difficult	Easy/ Very easy	Easy/ difficult	Easy/ difficult

Figure 6.6: Mean score of the current availability of ecstasy by location, 2010-2014



Change in availability of ecstasy

In 2014, 46% of the detainees reported the availability of ecstasy had been 'stable', 22% said it had become 'more difficult', and 15% said it had been 'fluctuating' over the previous six months (Table 6.4 & 6.5). There was no change in the perception of the change in the availability of ecstasy from 2010 to 2014, with most describing it as 'stable/more difficult'. The detainees in Whangarei reported declining availability of ecstasy from 2011 to 2014 (down from 2.3 to 1.6, p=0.0190) (Figure 6.7).

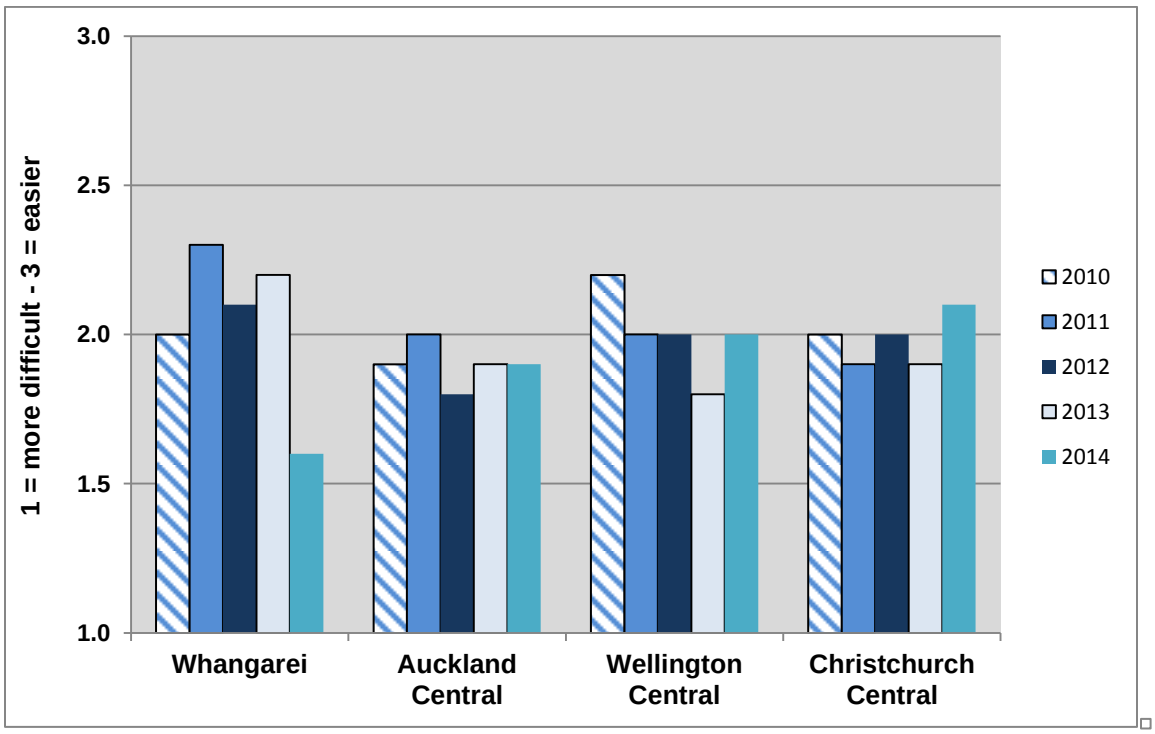
Table 6.4: Police detainees' perceptions of the change in availability of ecstasy by location, 2010-2014

Change in availability of ecstasy (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=12)	2011 (n=51)	2012 (n=30)	2013 (n=18)	2014 (n=13)	2010 (n=45)	2011 (n=52)	2012 (n=49)	2013 (n=55)	2014 (n=44)	2010 (n=31)	2011 (n=35)	2012 (n=26)	2013 (n=23)	2014 (n=20)	2010 (n=60)	2011 (n=51)	2012 (n=44)	2013 (n=61)	2014 (n=34)
Easier [3]	25%	41%	23%	33%	8%	18%	21%	16%	16%	16%	26%	20%	12%	9%	20%	27%	16%	20%	11%	21%
Stable [2]	33%	37%	50%	33%	46%	40%	48%	41%	47%	41%	45%	57%	62%	39%	50%	40%	39%	28%	48%	47%
Fluctuates [2]	17%	8%	10%	17%	0%	11%	10%	10%	11%	14%	16%	9%	8%	22%	15%	7%	16%	28%	15%	21%
More difficult [1]	25%	14%	17%	17%	46%	31%	21%	33%	25%	30%	13%	14%	19%	30%	15%	27%	29%	25%	26%	12%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.3	2.1	2.2	1.6	1.9	2.0	1.8	1.9	1.9	2.2	2.0	2.0	1.8	2.0	2.0	1.9	2.0	1.9	2.1
Overall recent change	Stable/ more difficult	Easier/ stable	Stable/ easier	Easier/ stable	Stable/ more difficult	Stable/ more difficult	Stable/ easier/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ fluctuates	Stable/ more difficult	Stable/ fluctuates

Table 6.5: Police detainees' perceptions of the change in availability of ecstasy in all sites, 2010-2014

Change in availability of ecstasy (%)	All sites				
	2010 (n=148)	2011 (n=189)	2012 (n=149)	2013 (n=161)	2014 (n=116)
Easier [3]	24%	24%	17%	14%	18%
Stable [2]	41%	44%	44%	44%	46%
Fluctuates [2]	11%	11%	14%	15%	15%
More difficult [1]	25%	21%	25%	26%	22%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0	1.9	1.9	2.0
Overall recent change	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult

Figure 6.7: Mean score of the change in the availability of ecstasy by location, 2010-2014



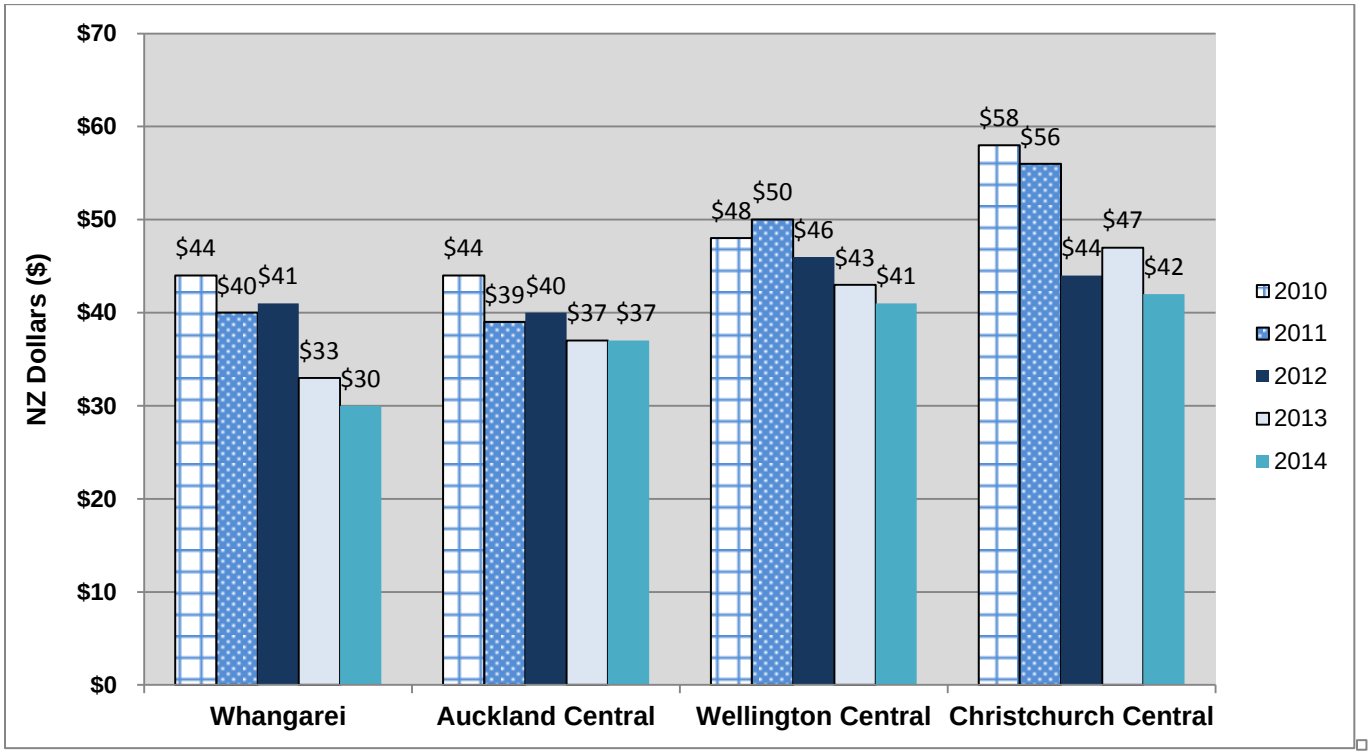
Current price of ecstasy

The detainees reported the median price of a pill of ecstasy was $40 in 2014 (mean $39) (Table 6.6). The price of a pill of ecstasy decreased from $50 in 2010 to $39 in 2014 ($p<0.0001$) and from $47 in 2011 to $39 in 2014 ($p=0.0002$). The detainees in Wellington Central reported a decline in the price of an ecstasy pill from $50 in 2011 to $41 in 2014 ($p=0.0307$). The price paid for a pill of ecstasy by the Christchurch Central detainees declined from $59 in 2010 to $42 in 2014 ($p=0.0002$), and from $56 in 2011 to $42 in 2014 ($p=0.0044$). Despite these price decreases, Christchurch Central still reported a higher price for a pill of ecstasy than detainees in Whangarei ($42 vs. $30, $p=0.0752$) in 2014

Table 6.6: Current median (mean) price paid by police detainees for a pill of ecstasy (NZD) by location, 2010-2014

Current price of ecstasy ($)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=7)	2011 (n=50)	2012 (n=30)	2013 (n=18)	2014 (n=11)	2010 (n=43)	2011 (n=60)	2012 (n=59)	2013 (n=58)	2014 (n=50)	2010 (n=38)	2011 (n=39)	2012 (n=23)	2013 (n=27)	2014 (n=19)	2010 (n=65)	2011 (n=46)	2012 (n=44)	2013 (n=61)	2014 (n=32)	2010 (n=153)	2011 (n=195)	2012 (n=156)	2013 (n=164)	2014 (n=112)
Median (mean) price per pill	$50 ($44)	$40 ($40)	$40 ($41)	$30 ($33)	$25 ($30)	$40 ($44)	$40 ($39)	$40 ($40)	$34 ($37)	$40 ($37)	$50 ($48)	$50 ($50)	$45 ($46)	$40 ($$43)	$40 ($41)	$60 ($58)	$60 ($56)	$40 ($44)	$40 ($47)	$40 ($42)	$50 ($50)	$40 ($46)	$40 ($42)	$40 ($41)	$40 ($39)

Figure 6.8: Mean price paid for a pill of ecstasy by location, 2010-2014



Change in the price of ecstasy

The detainees reported the price of ecstasy had been 'stable/fluctuating' over the past six months in 2014 (Table 6.7 & 6.8). Fifty-nine percent of the detainees said the price had been 'stable' and 23% said it had been fluctuating in 2014. There was no difference in the detainees' perceptions of the change in the price of ecstasy from 2010 to 2014 (p=0.5293).

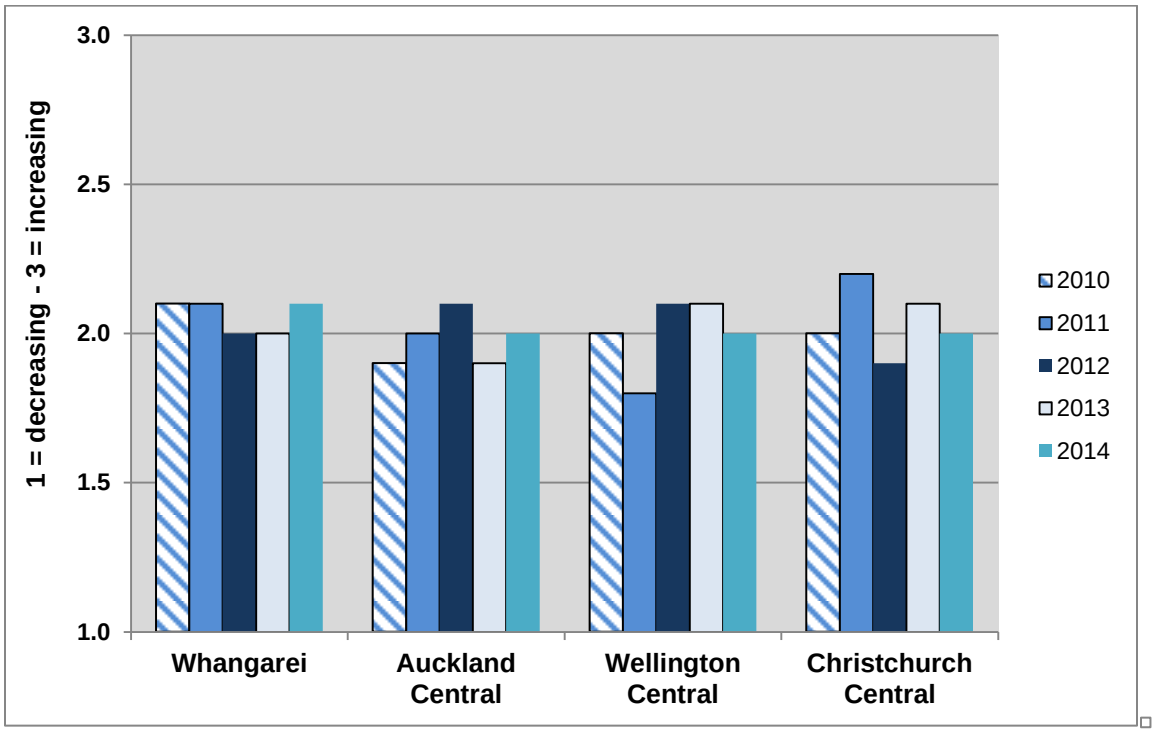
Table 6.7: Police detainees' perceptions of the change in the price of ecstasy in the past six months by location, 2010-2014

Change in price of ecstasy (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central				
	2010 (n=9)	2011 (n=46)	2012 (n=31)	2013 (n=18)	2014 (n=10)	2010 (n=43)	2011 (n=54)	2012 (n=53)	2013 (n=57)	2014 (n=45)	2010 (n=32)	2011 (n=35)	2012 (n=26)	2013 (n=23)	2014 (n=17)	2010 (n=63)	2011 (n=44)	2012 (n=40)	2013 (n=55)	2014 (n=35)
Increasing [3]	22%	20%	10%	11%	20%	14%	17%	19%	9%	7%	19%	6%	19%	9%	6%	14%	23%	13%	20%	9%
Fluctuating [2]	22%	20%	13%	39%	30%	14%	24%	11%	12%	29%	9%	34%	27%	17%	12%	22%	11%	33%	20%	23%
Stable [2]	44%	48%	61%	39%	40%	47%	46%	60%	61%	53%	50%	31%	42%	74%	76%	44%	59%	33%	49%	57%
Decreasing [1]	11%	13%	10%	11%	10%	26%	13%	9%	18%	11%	22%	29%	12%	0%	6%	19%	7%	23%	11%	11%
Average change in price score (1=decreasing – 3=increasing)	2.1	2.1	2.0	2.0	2.1	1.9	2.0	2.1	1.9	2.0	2.0	1.8	2.1	2.1	2.0	2.0	2.2	1.9	2.1	2.0
Overall recent change	Stable/ fluctuating	Stable/ increasing/ fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ Fluctuating	Stable / increasing /fluctuating	Stable/ increasing /fluctuating	Stable/ increasing	Stable/ decreasing	Stable/ Fluctuating	Stable/ decreasing	Fluctuating / stable	Stable/ fluctuating	Stable	Stable	Stable / Fluctuating	Stable / Increasing	Fluctuating/ stable	Stable/ fluctuating	Stable/ Fluctuating

Table 6.8: Police detainees' perceptions of the change in the price of ecstasy in the past six months in all sites, 2010-2014

Change in price of ecstasy (%)	All sites				
	2010 (n=147)	2011 (n=179)	2012 (n=150)	2013 (n=153)	2014 (n=107)
Increasing [3]	16%	17%	16%	13%	8%
Fluctuating [2]	17%	21%	21%	18%	23%
Stable [2]	46%	48%	50%	58%	59%
Decreasing [1]	21%	14%	13%	11%	10%
Average change in price score (1=decreasing – 3=increasing)	1.9	2.0	2.0	2.0	2.0
Overall recent change	Stable / decreasing	Stable / Fluctuating	Stable/ fluctuating	Stable/ fluctuating	Stable/ fluctuating

Figure 6.8: Mean score of the change in the price of ecstasy by location, 2010-2014



Current strength of ecstasy

In 2014, 29% of the detainees described the strength of ecstasy as 'medium', 27% said it was 'high' and 24% said it was 'low' (Table 6.9). There was no change in perceptions of the current strength of ecstasy from 2012 to 2014 (p=0.2783). The strength of ecstasy increased in Wellington Central from 2013 to 2014 (up from 1.5 to 2.3, p=0.0021). In 2014, 32% of Wellington Central detainees described the strength of ecstasy as 'high', and a further 34% said it was 'medium'.

Table 6.9: Police detainees' perceptions of the current strength of ecstasy in the past six months by location, 2012-2014

Current strength of ecstasy (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=28)	2013 (n=19)	2014 (n=10)	2012 (n=58)	2013 (n=60)	2014 (n=50)	2012 (n=26)	2013 (n=22)	2014 (n=19)	2012 (n=49)	2013 (n=66)	2014 (n=35)	2012 (n=161)	2013 (n=167)	2014 (n=114)
High [3]	29%	26%	20%	28%	27%	22%	19%	9%	32%	35%	29%	34%	35%	25%	27%
Medium [2]	25%	42%	40%	24%	18%	22%	23%	23%	32%	24%	32%	34%	24%	27%	29%
Fluctuates [2]	29%	21%	10%	21%	18%	22%	23%	14%	32%	18%	21%	14%	18%	19%	20%
Low [1]	18%	11%	30%	28%	37%	34%	35%	55%	5%	22%	18%	17%	25%	29%	24%
Average strength score (1=low – 3=high)	2.1	2.2	1.9	2.0	1.9	1.9	1.8	1.5	2.3	2.1	2.1	2.6	2.0	2.0	2.0
Overall current status	High/ fluctuates	Medium/ high	Medium/ Low	High/ low	Low/ high	Low/	Low/ Medium	Low/ medium	High / medium/ fluctuates	High/ medium	Medium/ high	High/ Medium	High/ low	Low/ Medium	Medium/ High

Change in strength of ecstasy

Forty-eight percent of the detainees reported the strength of ecstasy had been 'stable', 23% said it had been 'fluctuating ', and 17% said it had been 'decreasing ' in the previous six months in 2014 (Table 6.10). There was no difference in perceptions of the change in the strength of ecstasy from 2012 to 2014 (i.e. 'stable/fluctuating') (p=0.2363).

Table 6.10: Police detainees' perceptions of change in strength of ecstasy in the past six months by location, 2012- 2014

Change in strength of ecstasy (%)	Whangarei			Auckland Central			Wellington Central			Christchurch Central			All sites		
	2012 (n=25)	2013 (n=14)	2014 (n=9)	2012 (n=45)	2013 (n=50)	2014 (n=42)	2012 (n=21)	2013 (n=18)	2014 (n=14)	2012(n=40)	2013 (n=54)	2014 (n=33)	2012 (n=131)	2013 (n=136)	2014 (n=98)
Increasing [3]	16%	14%	11%	11%	14%	17%	10%	0%	0%	18%	6%	9%	14%	9%	11%
Stable [2]	60%	57%	33%	22%	34%	43%	33%	33%	57%	30%	52%	55%	34%	43%	48%
Fluctuating [2]	8%	14%	22%	29%	18%	21%	19%	33%	43%	35%	26%	18%	25%	23%	23%
Decreasing [1]	16%	14%	33%	38%	34%	19%	38%	33%	0%	18%	17%	18%	27%	25%	17%
Average change in strength (1= decreasing – 3= increasing)	2.0	2.0	1.8	1.7	1.8	2.0	1.7	1.7	2.0	2.0	1.9	1.9	1.9	1.8	1.9
Overall recent change	Stable/ decreasing	Stable/ decreasing	Stable/ decreasing	Decreasing/ fluctuating	Stable/ decreasing	Stable/ fluctuating	Decreasing/ stable	Stable/ decreasing	Stable/ fluctuating	Fluctuating/ stable	Stable/ fluctuating	Stable/ decreasing	Stable/ decreasing	Stable/ decreasing	Stable/ fluctuating

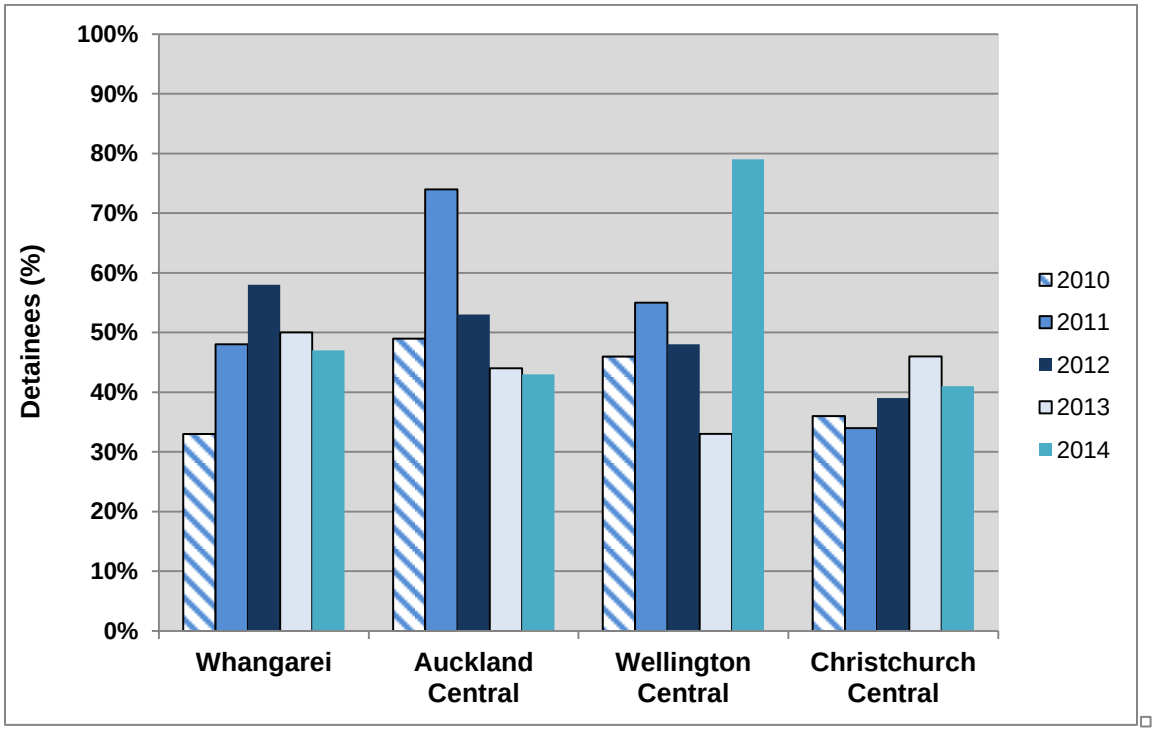
Time taken to purchase ecstasy

Fifty-one percent of the detainees who had used ecstasy in the previous year were able to purchase it in one hour or less in 2014 (Table 6.11). The proportion of detainees in Auckland Central who were able to purchase ecstasy in one hour or less decreased from 74% in 2011 to 43% in 2014 (p=0.0075) (Figure 6.10). The proportion of Wellington Central detainees who could purchase ecstasy in one hour or less increased dramatically from 33% in 2013 to 79% in 2014 (p=0.0313), although the number of detainees providing reports in recent years is low (i.e. 27=2013, 19=2014).

Table 6.11: Time taken by police detainees to purchase ecstasy by location, 2010-2014

Time to purchase (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=9)	2011 (n=54)	2012 (n=33)	2013 (n=18)	2014 (15)	2010 (n=45)	2011 (n=61)	2012 (n=58)	2013 (n=61)	2014 (n=54)	2010 (n=37)	2011 (n=42)	2012 (n=25)	2013 (n=27)	2014 (n=19)	2010 (n=66)	2011 (n=50)	2012 (n=51)	2013 (n=69)	2014 (n=37)	2010 (n=157)	2011 (n=206)	2012 (n=171)	2013 (n=181)	2014 (n=128)
Months	0	0	0	6	7	2	0	2	3	4	0	2	0	0	0	0	2	2	6	3	1	1	1	4	3
Weeks	11	2	12	0	7	0	0	3	3	6	8	5	0	4	0	5	4	8	6	5	4	3	5	4	4
Days	33	19	9	11	20	11	7	10	5	9	19	10	8	26	11	8	20	7	22	5	13	14	13	16	9
About one day	11	11	9	11	0	16	3	17	23	19	14	10	12	7	0	27	24	12	6	14	20	12	14	12	11
Hours	11	20	12	22	20	22	16	14	21	20	14	19	32	30	11	24	16	18	14	32	20	18	18	21	22
1 Hour	33	20	27	17	13	20	49	22	21	24	24	31	24	15	37	15	12	22	26	14	20	28	23	21	23
Less than 20 mins	0	28	30	33	33	29	25	31	23	19	22	24	24	19	42	21	22	18	20	27	22	24	26	22	28

Figure 6.9: Proportion of police detainees who could purchase ecstasy in one hour or less, 2010-2014



Effect of ecstasy on the likelihood of becoming angry

Those detainees who reported using ecstasy in the past 12 months were asked what effect using ecstasy had on their likelihood of becoming angry. In 2014, 42% of detainees reported that using ecstasy was 'less likely' or 'much less' likely to make them become angry. The detainees were more likely to report that ecstasy made them feel angry in 2014 than in 2010 (p=0.0171) (Table 6.12).

Table 6.12: Effect of ecstasy on police detainees' likelihood of becoming angry, 2010-2014

Effect of ecstasy on likelihood of becoming angry	All sites				
	2010 (n=164)	2011 (n=213)	2012 (n=167)	2013 (n=187)	2014 (n=134)
Much more likely [5]	2%	2%	4%	3%	1%
More likely [4]	5%	5%	3%	7%	12%
No effect [3]	34%	39%	42%	45%	43%
Less likely [2]	24%	24%	28%	25%	18%
Much less [1]	36%	30%	23%	21%	24%
Mean impact on likelihood of becoming angry (1=much less - 5=much more)	2.1	2.3	2.4	2.5	2.5

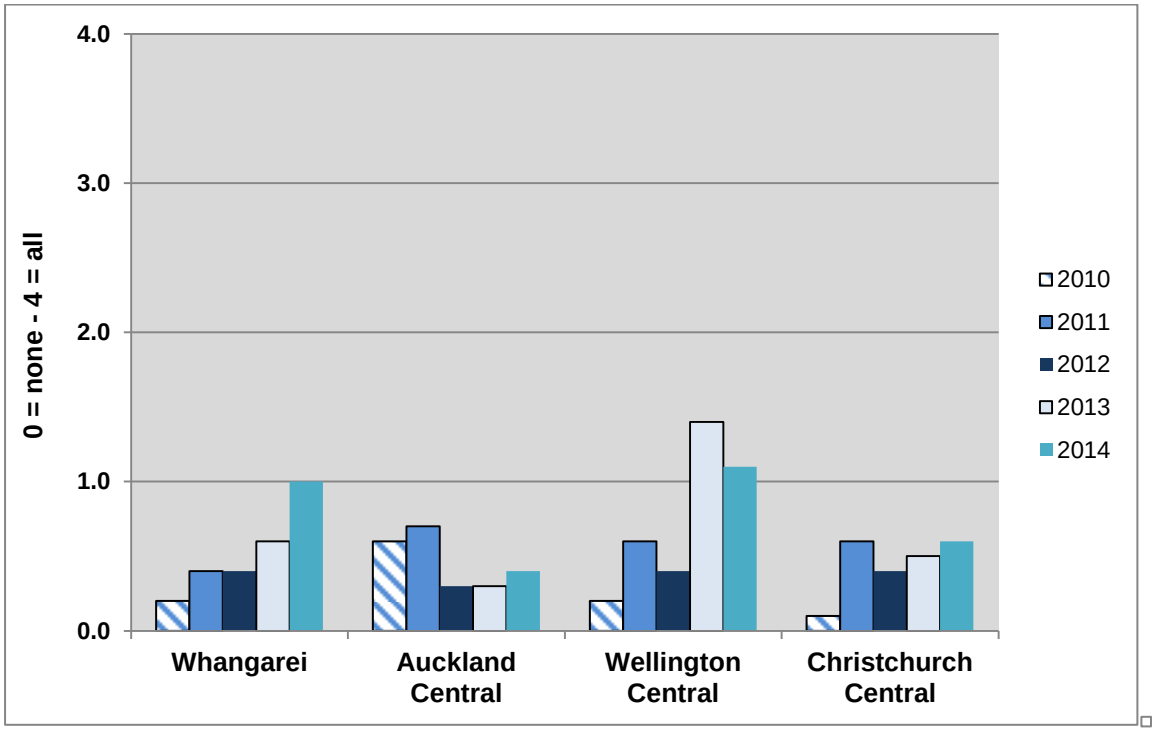
Driving under the influence of ecstasy

Those detainees who had used ecstasy in the past year were asked how often they drove under the influence of ecstasy. Thirteen percent of the detainees said they did not drive and a further 7% said their driver license was suspended. In 2014, 21% of the ecstasy using detainees had completed at least some of their driving under the influence of ecstasy (Table 6.13). The detainees completed more of their driving under the influence of ecstasy from 2010 to 2014 ($p=0.0063$) and from 2012 to 2014 ($p=0.0330$). A higher proportion of Wellington Central detainees had completed at least some of their driving under the influence of ecstasy from 2010 to 2014, and this increase was close to being statistically significant ($p=0.0758$), although the number of Wellington respondents answering this question was fairly modest (i.e. around 20 in each year). The proportion of Christchurch Central detainees who had completed at least some of their driving under the influence of ecstasy also increased from 2010 to 2014, and this was close to statistical significance ($p=0.0824$), but again the number making reports is fairly modest (i.e. 31=2014).

Table 6.13: Extent police detainees who drove and who used ecstasy in the past 12 months had driven under the influence of ecstasy by location, 2010 - 2014

Extent drove under the influence of ecstasy	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=10)	2011 (n=39)	2012 (n=29)	2013 (n=13)	2014 (n=13)	2010 (n=36)	2011 (n=47)	2012 (n=47)	2013 (n=46)	2014 (n=39)	2010 (n=28)	2011 (n=31)	2012 (n=19)	2013 (n=20)	2014 (n=18)	2010 (n=47)	2011 (n=37)	2012 (n=44)	2013 (n=54)	2014 (n=31)	2010 (n=121)	2011 (n=153)	2012 (n=141)	2013 (n=137)	2014 (n=105)
All [4]	0%	5%	3%	0%	0%	3%	0%	0%	0%	5%	0%	6%	0%	25%	17%	0%	3%	0%	2%	3%	1%	3%	1%	6%	7%
Most [3]	0%	3%	0%	8%	23%	6%	2%	4%	0%	0%	0%	3%	5%	0%	6%	0%	3%	2%	4%	6%	2%	3%	3%	2%	6%
Some [2]	10%	3%	10%	15%	15%	8%	19%	6%	9%	5%	4%	3%	0%	15%	11%	2%	16%	11%	6%	6%	5%	11%	7%	9%	8%
Hardly any [1]	0%	10%	10%	8%	0%	14%	21%	4%	15%	10%	11%	16%	21%	10%	6%	6%	11%	7%	22%	16%	9%	15%	9%	16%	10%
None [0]	90%	79%	76%	69%	62%	69%	57%	85%	76%	79%	86%	71%	74%	50%	61%	91%	68%	80%	67%	68%	83%	68%	80%	66%	69%
Mean score of extent drove under influence (0=none -4=all)	0.2	0.4	0.4	0.6	1.0	0.6	0.7	0.3	0.3	0.4	0.2	0.6	0.4	1.4	1.1	0.1	0.6	0.4	0.5	0.6	0.3	0.6	0.4	0.7	0.7

Figure 6.10: Mean score of the extent to which police detainees who drove and who used ecstasy in the past 12 months had driven under the influence of ecstasy by location, 2010-2014



Summary

- The proportion of detainees who had ever tried ecstasy in their lifetimes increased from 42% in 2010 to 51% in 2014
- The overall proportion of detainees who had used ecstasy in the previous year declined from 28% in 2011 to 16% in 2014
- The proportion of Whangarei detainees who used ecstasy in the previous year declined from 36% in 2011 to 11% in 2014
- The proportion of Christchurch Central detainees who used ecstasy in the previous year from declined 29% in 2011 to 14% in 2014
- The number of days the detainees had used ecstasy in the previous year increased from 11 in 2010 to 16 in 2014
- The mean number of days the Christchurch Central detainees used ecstasy in the previous year increased from 5 in 2010 to 14 in 2013, before declining to 11 in 2014
- Only four percent of the ecstasy using detainees felt they were dependent on the drug in 2014, and this was similar to previous years
- Only one percent of the detainees had been using ecstasy prior to their arrest in 2014, and this was the same as previous years
- The current availability of ecstasy was reported to be 'easy/difficult' in 2014
- The availability of ecstasy in Central Auckland declined from 2010 to 2014
- The change in the availability of ecstasy was described as 'stable/more difficult' in 2014 , and this had not changed from previous years
- The mean price of a pill of ecstasy declined from $50 in 2010 to $39 in 2014
- The mean price of a pill of ecstasy declined in Christchurch Central and in Wellington Central
- The current strength of ecstasy was reported to be 'medium/high' in 2014

- The strength of ecstasy increased in Wellington Central. In 2014, 32% of Wellington Central detainees described the strength of ecstasy as ‘high’

- The proportion of detainees in Auckland Central who were able to purchase ecstasy in one hour or less decreased from 74% in 2011 to 43% in 2014

- The proportion of Wellington Central detainees who were able to purchase ecstasy in one hour or less increased dramatically from 33% in 2011 to 79% in 2014

- In 2014, 42% of detainees thought ecstasy was ‘less likely’ or ‘much less likely’ to make them feel angry

- The detainees were more likely to report that ecstasy increased their likelihood of becoming angry from 2010 to 2014

- The detainees had competed more of their driving under the influence of ecstasy from 2010 to 2014

Chapter 7 - Opioids

Introduction

The international supply of heroin to New Zealand was substantially disrupted in the late 1970s by the arrest of members of the 'Mr Asia' international heroin syndicate (New Zealand Customs Service, 2002; Newbold, 2000). In the subsequent decades three domestic sources of opioids emerged to largely replace internationally sourced heroin: (1) 'street morphine' - pharmaceutical morphine illicitly diverted from the medical system; (2) 'homebake heroin/morphine' – morphine made by users from diverted codeine 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). To obtain a clear picture of opioid drug use among the detainees, they were asked about the use of a range of opioids including 'heroin, morphine, opiates/opioids, smack, skag, junk and misties'.

While morphine has traditionally been the principal opioid used by injecting drug users in New Zealand, there is evidence that newer pharmaceutical opioid products, such as oxycodone, are increasingly being used (Wilkins et al., 2011a). The IDMS found the proportion of frequent injecting drug users who had used oxycodone in the past six months increased from 8% in 2008 to 46% in 2013 (Wilkins, et al., 2012c). There has also been a gradual increase in the use of methylphenidate (Ritalin™) and anti-depressants over the past eight years**.** The frequent drug users increasingly reported obtaining drugs by using 'someone else's prescription'. The over-prescribing of oxycodone in the United States has resulted in increased treatment admissions, hospital emergencies and overdose deaths (Maxwell, 2011; Nicholas et al., 2011).

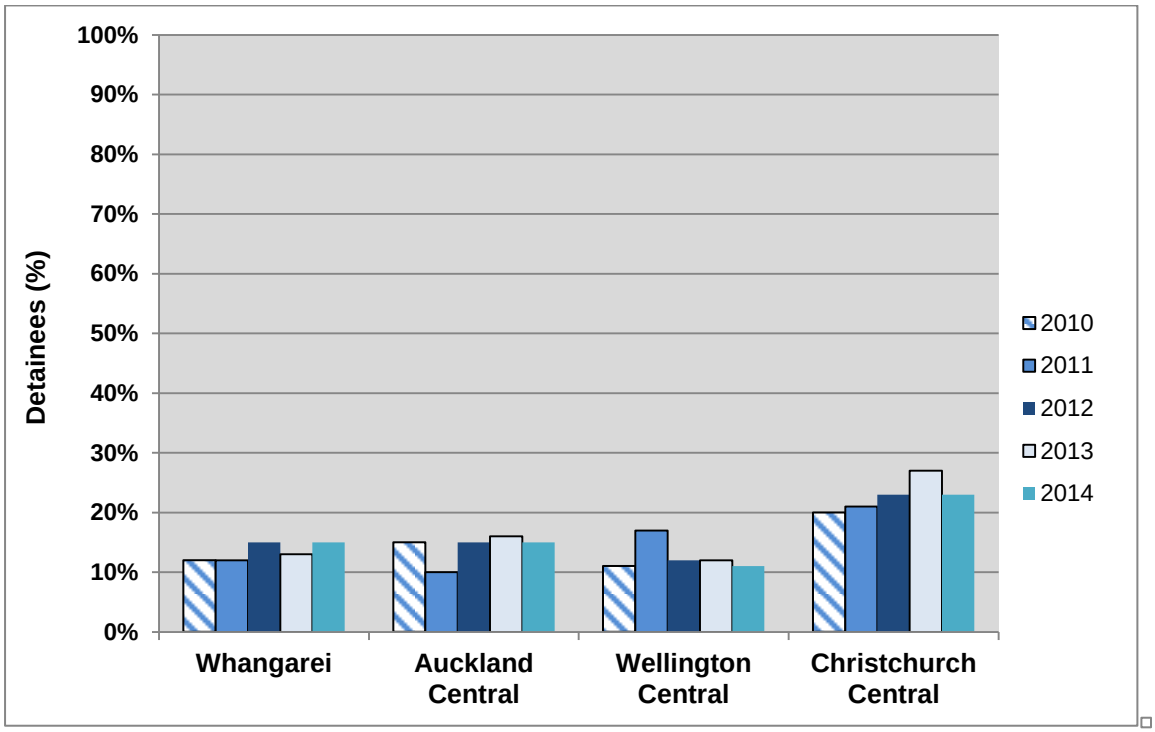
The 2012 IDMS reported a disruption in the Christchurch opioid market with a sharp decline in availability and purity, and rise in price (Wilkins, et al., 2013). This disruption in local opioid supply continued in 2013 (Wilkins et al., 2014b). The proportion of frequent drug users in Christchurch who reported that street morphine was 'more difficult' to obtain increased markedly from 11% in 2011 to 59% in 2013 (Wilkins, et al., 2014b). The 2013 NZ-

ADUM supported these findings, and suggested the disruption in opiod markets may have occurred in other centres, such as Auckland (Wilkins, et al., 2014a). Both Christchurch and Auckland Central detainees reported the availability of opioids had become 'more difficult' from 2012 to 2013 (Wilkins, et al., 2014a). The mean price of a milligram of opioids increased from $0.85 in 2010 to $1.10 in 2013 (Wilkins, et al., 2014a). The Christchurch Central detainees were more likely to report the price of opioids was 'increasing', and to report a decline in current strength of opioids (Wilkins, et al., 2014a).

Use of opioids

Seventeen percent of the police detainees had used an opioid in their lifetimes, 5% had used an opioid in the previous 12 months and 3% had used an opioid in the past 30 days in 2014 (Table 7.1). There was no statistically significant change in the proportion of detainees who had ever tried opioids from 2010 to 2014 (p=0.3880). In 2014, detainees in Christchurch Central were more likely to have ever tried an opioid than detainees in Wellington Central (23% vs. 11%, p=0.0539) and this was close to being statistically significant (Figure 7.1).

Figure 7.1: Proportion of police detainees who had ever used opioids by location, 2010-2014



There was no change in the proportion of detainees who had used an opioid in the previous 12 months from 2010 to 2014 (i.e. 8% to 5%, p=0.4306). In 2014, detainees in Christchurch Central were more likely to have used an opioid in the previous 12 months than detainees in Auckland Central (9% vs. 4%), although this difference was not statistically significant (p=0.09440) (Figure 7.2).

Figure 7.2: Proportion of police detainees who had used opioids in the past 12 months by location, 2010-2014

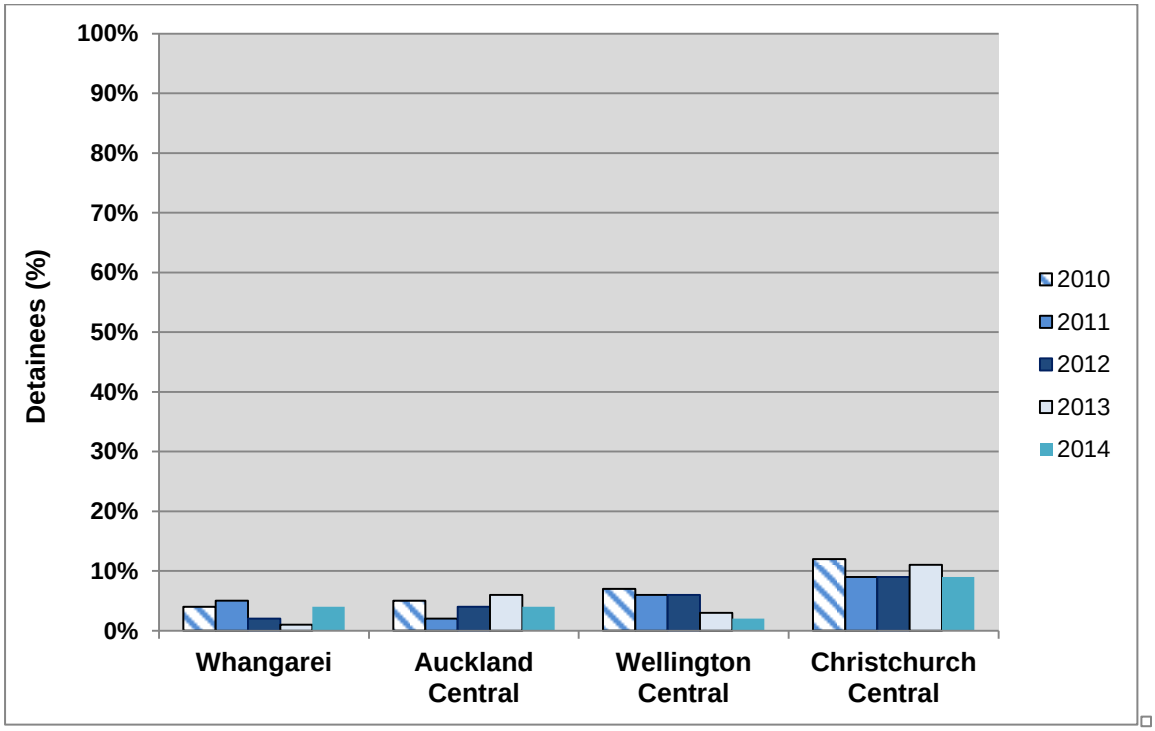


Table 7.1: Police detainees' patterns of opioid use by location, 2010-2014

Use of opioids	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=152)	2014 (n=151)	2010 (n=285)	2011 (n=316)	2012 (n=247)	2013 (n=294)	2014 (n=314)	2010 (n=152)	2011 (n=171)	2012 (n=101)	2013 (n=106)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=303)	2013 (n=284)	2014 (n=273)	2010 (n=814)	2011 (n=827)	2012 (n=802)	2013 (n=839)	2014 (n=834)
Ever used (%)	12	12	15	13	15	15	10	15	16	15	11	17	12	12	11	20	21	23	27	23	15	15	17	19	17
Mean age first used (years)*	25	21	22	21	22	21	21	20	20	21	25	21	20	22	19	19	20	20	20	20	21	21	20	21	20
Used in past 12 months (%)	4	5	2	1	4	5	2	4	6	4	7	6	6	3	2	12	9	9	11	9	8	6	6	6	5
Mean number of days used in past 12 months**	29	12	1	4	3	112	95	45	27	44	46	123	69	198	21	110	122	114	166	123	94	104	82	118	83
Injected in past 12 months**	20	50	33	0	67	60	57	73	47	30	56	73	17	50	0	53	82	55	53	57	53	72	51	48	48
Felt dependent in past 12 months (%)**	40	0	0	0	0	47	43	18	25	8	25	45	0	25	50	43	53	58	53	38	41	43	32	40	27
Used in past month (%)	3	2	1	1	3	3	2	2	3	3	5	5	2	3	2	6	6	6	8	4	4	4	3	4	3
Mean number of days used in past month***	18	3	0	1	2	15	11	7	4	5	6	14	10	17	16	19	20	18	17	19	15	16	12	13	12

* 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

The proportion of detainees who reported injecting opioids decreased from 72% in 2011 to 48% in 2014, but this decline was not statistically significant (p=0.1377). The levels of opioid injection in 2014 were similar to those found in previous years (i.e. 53% in 2010, 51% in 2012, 48% in 2013).

Frequency of opioid use

The detainees had used opioids on a mean of 83 days in the past 12 months in 2014 (median 6, range 1-365 days). There was no statistically significant change in the number of days opioids were used in the previous 12 months from 2010 to 2014 (p=0.4396).

Dependency on opioids

Twenty–seven percent of the detainees who had used an opioid in the previous year reported they felt dependent on them in 2014. There was no statistically significant change in level of dependency on opioids from 2010 to 2014 (p=0.4659).

Opioid use at the time of arrest

Only 1% of the detainees reported they were using an opioid at the time of their arrest in 2014, and this had not changed from previous years (p=0.4293).

Current availability of opioids

The detainees who had used an opioid in the previous 12 months reported the current availability of opioids to be 'easy/very easy' in 2014 (Table 7.2). There was no statistically significant change in the current availability of opioids from 2010 to 2014 (p=0.6189).

Table 7.2: Police detainees' perceptions of the current availability of opioids, 2010-2014

Current availability of opioids	All sites				
	2010 (n=53)	2011 (n=41)	2012 (n=44)	2013 (n=51)	2014 (n=50)
Very easy [4]	32%	30%	18%	33%	20%
Easy [3]	42%	28%	60%	21%	46%
Difficult [2]	17%	35%	12%	28%	18%
Very difficult [1]	9%	8%	11%	18%	16%
Average availability score (1=very difficult – 4=very easy)	3.0	2.8	2.9	2.7	2.7
Overall current status	Easy/ very easy	Difficult/ very easy	Easy / very easy	Very easy/ difficult	Easy/ very easy

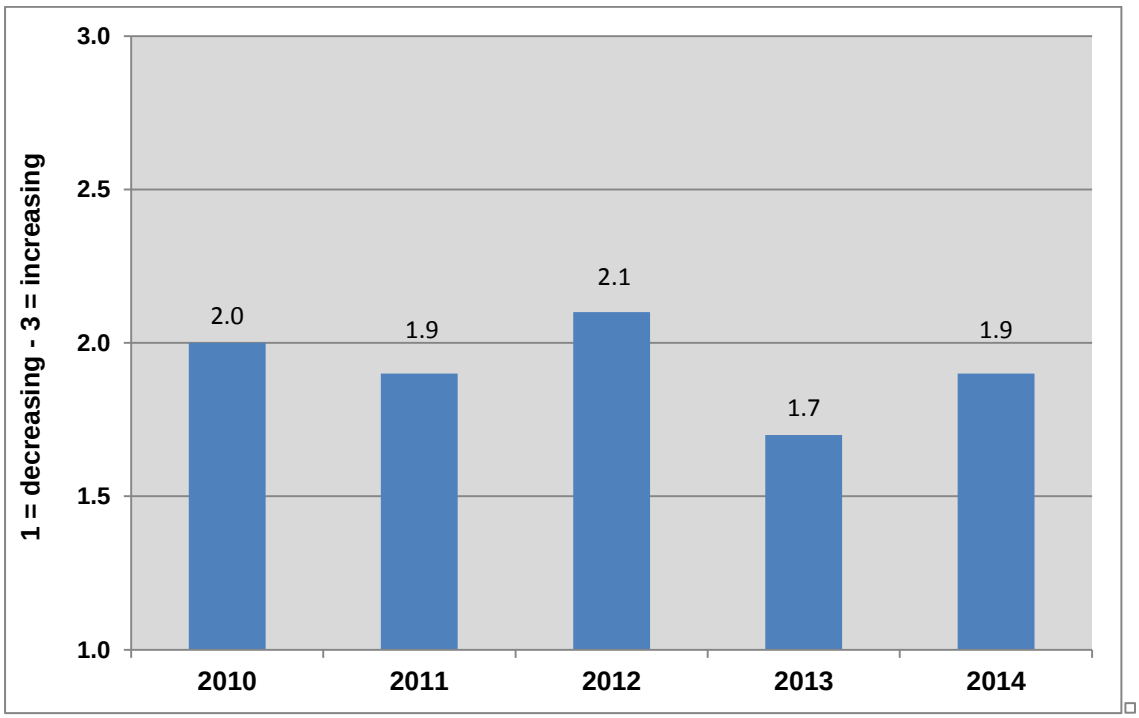
Change in availability of opioids

Forty-one percent of the opioid using detainees reported the availability of opioids had been 'stable', 30% said availability was 'more difficult' and 12% said it had 'fluctuated' compared to the previous six months in 2014 (Table 7.3). The detainees were more likely to describe the availability of opioids as 'more difficult' from 2012 to 2013 (p=0.0469). There was no change in perceptions of the change in the availability of opioids from 2013 to 2014 (i.e. both 'stable/more difficult') (p=0.7335), suggesting the previous disruption had continued to some extent into 2014 (Figure 7.3).

Table 7.3: Police detainees' perceptions of the change in availability of opioids, 2010-2014

Change in availability of opioids	All sites				
	2010 (n=51)	2011 (n=37)	2012 (n=36)	2013 (n=46)	2014 (n=39)
Easier [3]	24%	16%	24%	8%	16%
Stable [2]	47%	42%	41%	40%	41%
Fluctuates [2]	10%	14%	21%	12%	12%
More difficult [1]	19%	27%	14%	39%	30%
Average change in availability score (1=more difficult – 3=easier)	2.0	1.9	2.1	1.7	1.9
Overall recent change	Stable/ easier	Stable/ more difficult	Stable/ easier	Stable/ more difficult	Stable/ more difficult

Figure 7.3: Change in the availability of opioids, 2010-2014



Current price of opioids

Only 26 of the detainees reported the price of opioids in 2014. This is a similar number of respondents to previous years. The median price of opioids was reported to be $1 per milligram or $100 per 100 milligrams (mean $2 per milligram). The mean price of a milligram of opioids increased from $0.85 in 2010 to $2.00 in 2014 (p=0.0431).

Change in the price of opioids

Sixty-six percent of the opioid using detainees reported the price of opioids had been 'stable' and 13% said the price had been 'increasing' over the previous six months in 2014 (Table 7.4). There was no statistically significant change in the perceptions of the change in the price of opioids from 2010 to 2014 (p=0.5275).

Table 7.4: Police detainees' perceptions of the change in the price of opioids in the past six months, 2010-2014

Change in price of opioids	All sites				
	2010 (n=42)	2011 (n=36)	2012 (n=32)	2013 (n=37)	2014 (n=28)
Increasing [3]	12%	17%	22%	28%	13%
Fluctuating [2]	12%	10%	9%	10%	13%
Stable [2]	69%	71%	59%	52%	66%
Decreasing [1]	7%	3%	10%	6%	8%
Average change in price score (1=decreasing – 3=increasing)	2.0	2.1	2.1	2.2	2.0
Overall recent change	Stable/ fluctuating	Stable	Stable/ increasing	Stable/ increasing	Stable/ fluctuating

Current strength of opioids

The opioid using detainees described the current strength of opioids as 'high/medium' in 2014 (Table7.5). Forty-nine percent of the detainees reported the current strength as 'high'.

Table 7.5: Police detainees' perceptions of the current strength of opioids in the past six months, 2012-2014

Current strength of opioids (%)	All sites		
	2012 (n=39)	2013 (n=46)	2014 (n=37)
High [3]	54%	37%	49%
Medium [2]	26%	44%	30%
Fluctuates [2]	18%	13%	16%
Low [1]	3%	7%	5%
Average strength score (1=low – 3=high)	2.5	2.3	2.4
Overall current status	High/ medium	Medium/ high	High/ medium

Change in purity of opioids

The strength of opioids was reported to have been 'stable' over the previous six months in 2014 (Table 7.6). Seventy-seven percent of the opioid using detainees described the strength of opioids as 'stable' in 2014.

Table 7.6: Police detainees' perceptions of change in strength of opioids in the past six months in 2014

Change in strength of opioids (%)	All sites		
	2012 (n=31)	2013 (n=41)	2014 (n=31)
Increasing [3]	0%	5%	3%
Stable [2]	90%	80%	77%
Fluctuating [2]	3%	10%	19%
Decreasing [1]	6%	5%	0%
Average change in strength (1=decreasing – 3=increasing)	1.9	2.0	2.0
Overall recent change	Stable	Stable	Stable

Time taken to purchase opioids

Fifty-five percent of the detainees who had used an opioid in the previous 12 months reported they could purchase an opioid in one hour or less in 2014 (Table 7.7). There was no statistically significant change in the proportion of detainees who could purchase an opioid in one hour or less from 2010 to 2014 (i.e. 60% in 2010, 49% in 2011, 53% in 2012 52% in 2013 and 55% in 2014, p=0.8283).

Table 7.7: Time taken by police detainees to purchase opioids, 2010-2014

Time to purchase opioids (%)	All sites				
	2010 (n=53)	2011 (n=48)	2012 (n=38)	2013 (n=47)	2014 (n=41)
Months	0	5	7	9	5
Weeks	2	4	0	2	0
Days	6	14	0	7	12
About one day	4	13	24	10	11
Hours	28	16	16	19	17
1 Hour	25	17	21	20	31
Less than 20 mins	36	31	32	32	24

Effect of opioids on the likelihood of becoming angry

Those detainees who reported using opioids in the past 12 months were asked what effect using opioids had on their likelihood of becoming angry. Thirty-nine percent of the detainees reported that using opioids was 'less likely' or 'much less likely' to make them become angry (Table 7.8).

Table 7.8: Effect of opioids on detainees' likelihood of becoming angry, 2010-2014

Effect of opioids on likelihood to become angry	All sites				
	2010 (n=56)	2011 (n=43)	2012 (n=44)	2013 (n=50)	2014 (n=43)
Much more likely	2%	5%	3%	0%	4%
More likely	9%	8%	5%	2%	5%
No effect	21%	30%	36%	46%	52%
Less likely	30%	26%	29%	23%	13%
Much less	38%	31%	27%	30%	26%

Driving under the influence of opioids

Those detainees who had used opioids in the past year were asked how often they drove under the influence of opioids. In 2014, 22% of the opioid using detainees said they did not drive and a further 11% said their license was suspended. Fifteen percent of the detainees who used opioids and drove had completed at least some of their driving under the influence of opioids in 2014 (Table 7.9). There was no statistically significant change in the extent of driving under the influence of opioids from 2010 to 2014 (p=0.1369).

Table 7.9: Extent to which police detainees who drove and who had used opioids in the past 12 months had driven under the influence of opioids, 2010-2014

Extent drove under the influence of opioids	All sites				
	2010 (n=35)	2011 (n=26)	2012 (n=27)	2013 (n=53)	2014 (n=41)
All	14%	17%	15%	8%	8%
Most	6%	22%	6%	14%	3%
Some	20%	10%	6%	12%	4%
Hardly any	12%	5%	18%	16%	11%
None	48%	44%	55%	50%	74%

Summary

- Seventeen percent of the detainees in 2014 had tried an opioid in their lifetimes, and this had not changed from previous years

- In 2014, detainees in Christchurch Central were more likely to have ever tried an opioid than those in Wellington Central and Auckland Central

- There was no statistically significant change in the proportion of detainees who had used an opioid in the previous year from 2010 to 2014

- Twenty-seven percent of the opioid using detainees felt they were dependent on opioids in 2014, and this had not changed compared to previous years

- Only 1% of the detainees had been using opioids at the time of their arrest in 2014

- The availability of opioids was described as 'stable/more difficult' in 2014 and this had not changed from 2013

- The availability of opioids had previously declined from 2012 to 2013 signaling a disruption in supply

- The mean price of a milligram of opioids increased from $0.85 in 2010 to $1.10 in 2013 and $2.00 in 2014. This is consistent with the existence of a disruption in supply.

- The current strength of opioids was reported to be 'high/medium' in 2014

- Fifteen percent of the detainees who used opioids and drove had completed at least some of their driving under the influence of opioids in 2014

Chapter 8 – Cocaine

Introduction

Cocaine use has historically been very low in New Zealand (Field & Casswell, 1999; Wilkins & Sweetsur, 2008). There are a number of possible reasons for this, including cocaine's high price, the short duration of its action (i.e. around 20 minutes), the high availability of domestically made methamphetamine, and tight border controls (New Zealand Customs Service, 2002). International experience suggests that cocaine and methamphetamine are close substitutes for one another, and consequently one tends to dominate at the expense of the other in a given geographical area (Weisheit & White, 2009). The established market for methamphetamine in New Zealand may therefore inhibit any expansion of cocaine use.

New South Wales has a larger cocaine market, and New Zealand and other Pacific countries have been used as transit points for the smuggling of cocaine into Australia (NDIB, 2012). The large seizures of cocaine periodically made at the New Zealand border appear to be destined for the Australian market rather domestic consumption. However, there is a concern that being part of the international supply route to Australia could facilitate the development of a larger cocaine market in New Zealand (NDIB, 2012).

Previous NZ-ADUM and IDMS surveys have found a growing number of people who have tried cocaine at some point in their lives, but little evidence of a significant domestic market in New Zealand (Wilkins et al., 2012a; Wilkins, et al., 2013). The 2013 NZ-ADUM found the proportion of detainees who had ever tried cocaine increased from 17% in 2010 to 24% in 2013 (Wilkins, et al., 2014a). Growing lifetime experience of cocaine use was found in Auckland Central and Christchurch Central (Wilkins, et al., 2014a), however, there was little change in the proportion of detainees who had used cocaine in the previous year from 2010 to 2013 (i.e. 4% to 5%) (Wilkins, et al., 2014a). Furthermore, the detainees had used cocaine on a mean of only 4 days in the previous 12 months, suggesting use could have occurred in another country, perhaps during a holiday (Wilkins, et al., 2014a). Forty-six percent of detainees described the current availability of cocaine as 'very difficult' in 2013, and 38% reported availability had become 'more difficult' during the previous six months (Wilkins, et

al., 2014a). The 2013 IDMS supports this understanding of a small domestic market for cocaine use in New Zealand with only a small number of the frequent illegal drug users having any knowledge of market trends for cocaine (Wilkins, et al., 2014b).

Use of cocaine

Twenty-three percent of the police detainees had tried cocaine in their lifetimes, and 6% had used cocaine in the previous year in 2014 (Table 8.1). The proportion of detainees who had ever used cocaine increased from 17% in 2010 to 23% in 2014 (p=0.0102). The proportion of Christchurch Central detainees who had ever tried cocaine increased from 13% in 2010 to 21% in 2014, and this increase was close to being statistically significant (p=0.0814).

Figure 8.1: Proportion of police detainees who had ever used cocaine by location, 2010-2014

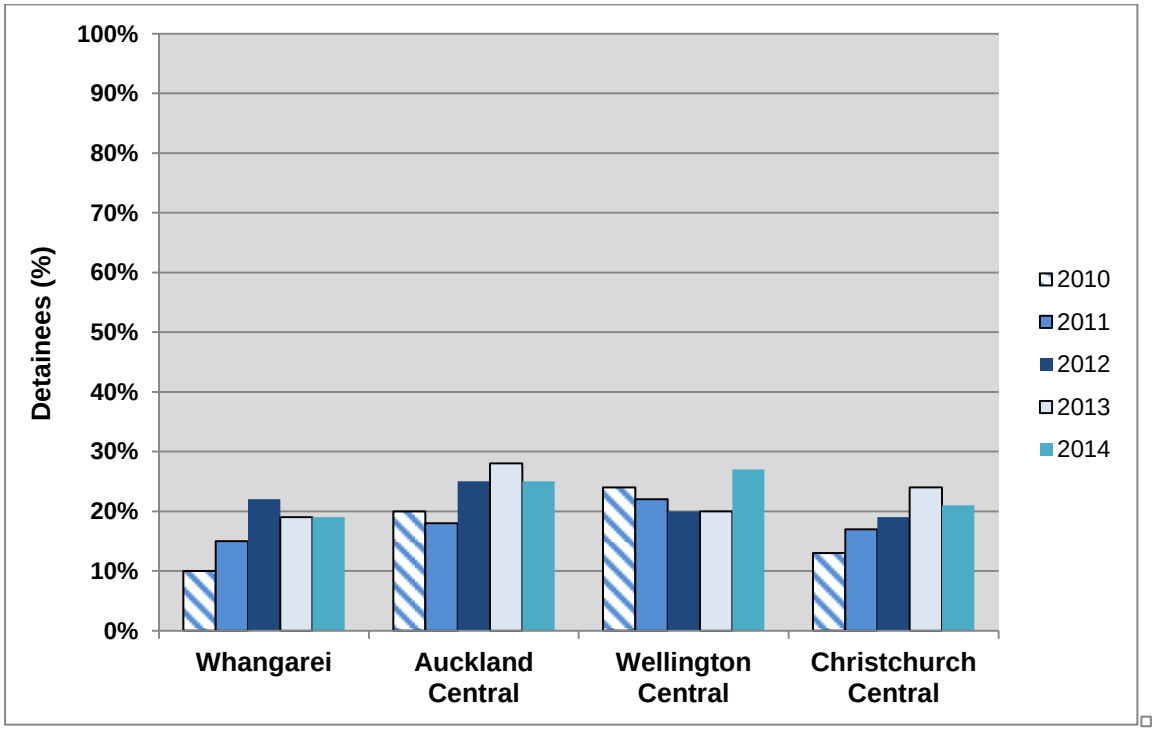


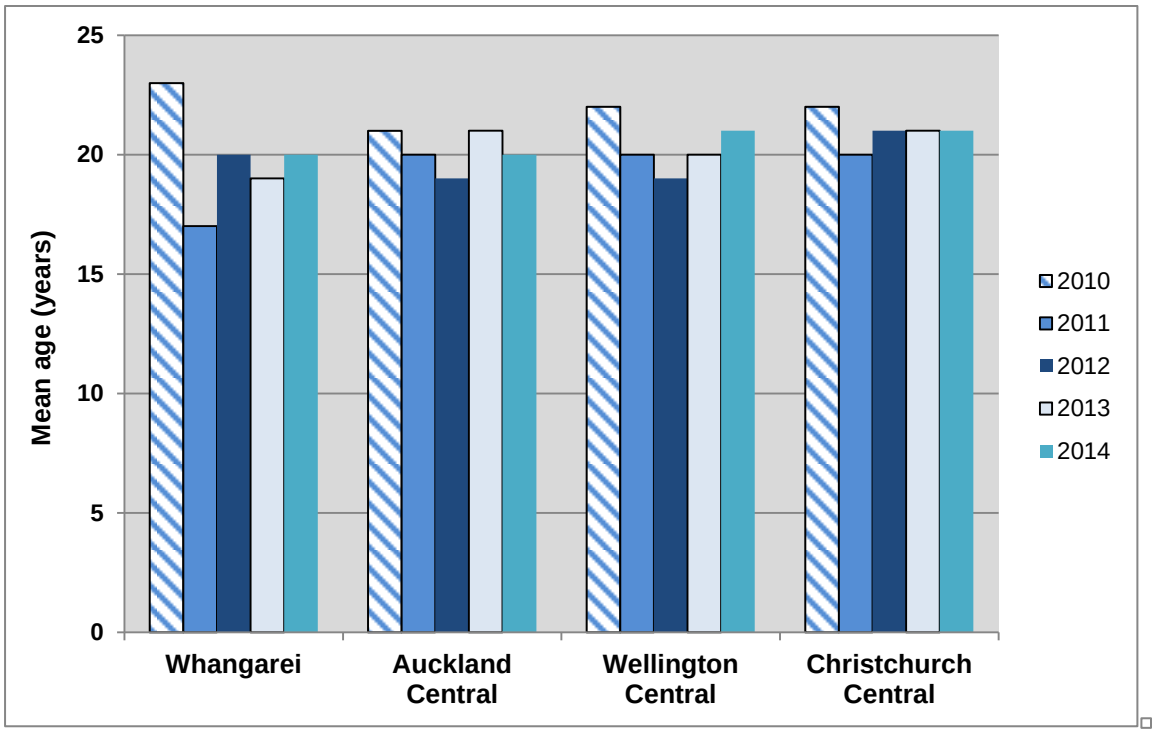
Table 8.1: Police detainees' patterns of cocaine use by location, 2010-2014

Use of cocaine	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=115)	2011 (n=149)	2012 (n=151)	2013 (n=152)	2014 (n=151)	2010 (n=285)	2011 (n=316)	2012 (n=246)	2013 (n=292)	2014 (n=315)	2010 (n=152)	2011 (n=171)	2012 (n=100)	2013 (n=103)	2014 (n=95)	2010 (n=262)	2011 (n=191)	2012 (n=302)	2013 (n=287)	2014 (n=273)	2010 (n=814)	2011 (n=827)	2012 (n=799)	2013 (n=839)	2014 (n=835)
Ever used (%)	10	15	22	19	19	20	18	25	28	25	24	22	20	20	27	13	17	19	24	21	17	18	22	24	23
Mean age first used (years)*	23	17	20	19	20	21	20	19	21	20	22	20	19	20	21	22	20	21	21	21	22	20	20	21	20
Used in past 12 months (%)	0	4	5	1	3	5	4	6	6	6	7	5	6	8	9	3	3	3	4	5	4	4	5	5	6
Mean number of days used in past 12 months**	-	93	7	3	10	2	24	13	4	11	10	23	15	5	5	3	1	37	2	28	5	29	17	4	15

* of those who had ever tried

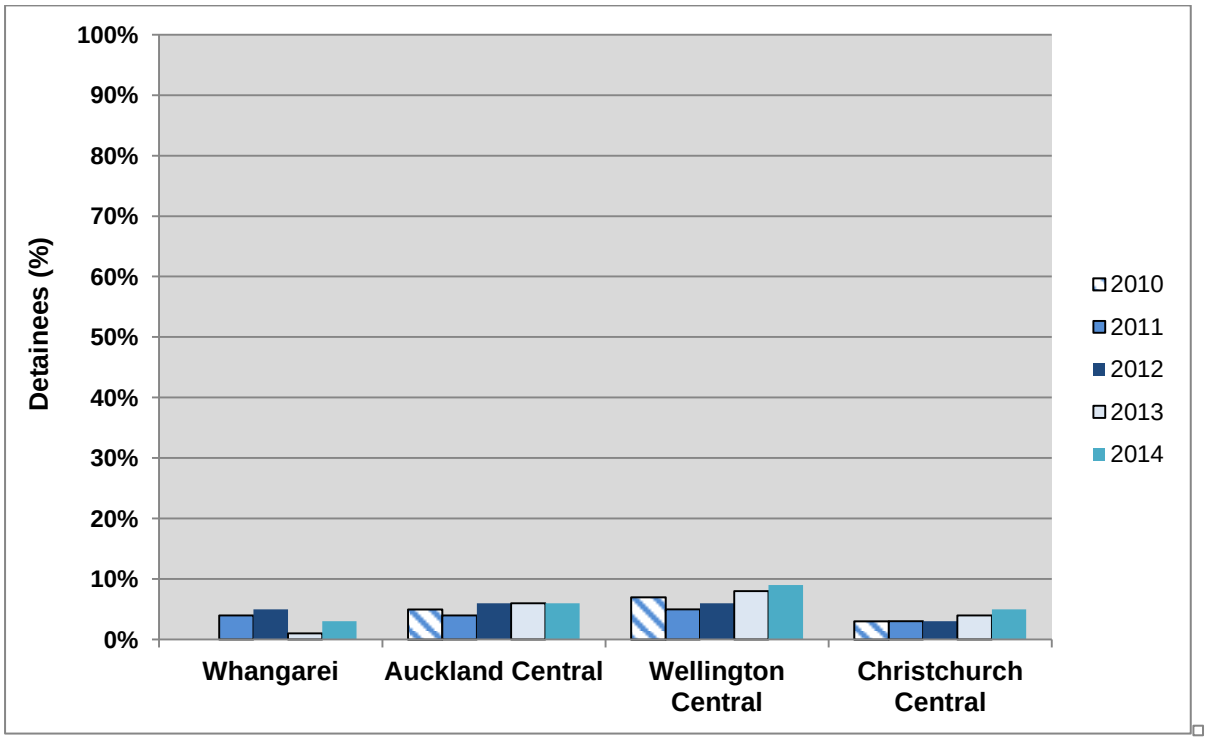
** of those who had used in the past 12 months

Figure 8.2: Mean age detainees had first used cocaine by location, 2010-2014



There was no change in the proportion of detainees who had used cocaine in the previous year from 2010 to 2014 (i.e. 4% to 6%, p=0.3216) (Figure 8.3).

Figure 8.3: Proportion of police detainees who had used cocaine in the past 12 months by location, 2010-2014



Frequency of cocaine use

The detainees who had used cocaine in the previous year had used it on a mean number of 15 days in the past 12 months in 2014 (median 2, 1-365 days). There was no statistically significant change in the frequency of cocaine use from 2010 to 2014 (p=0.4949).

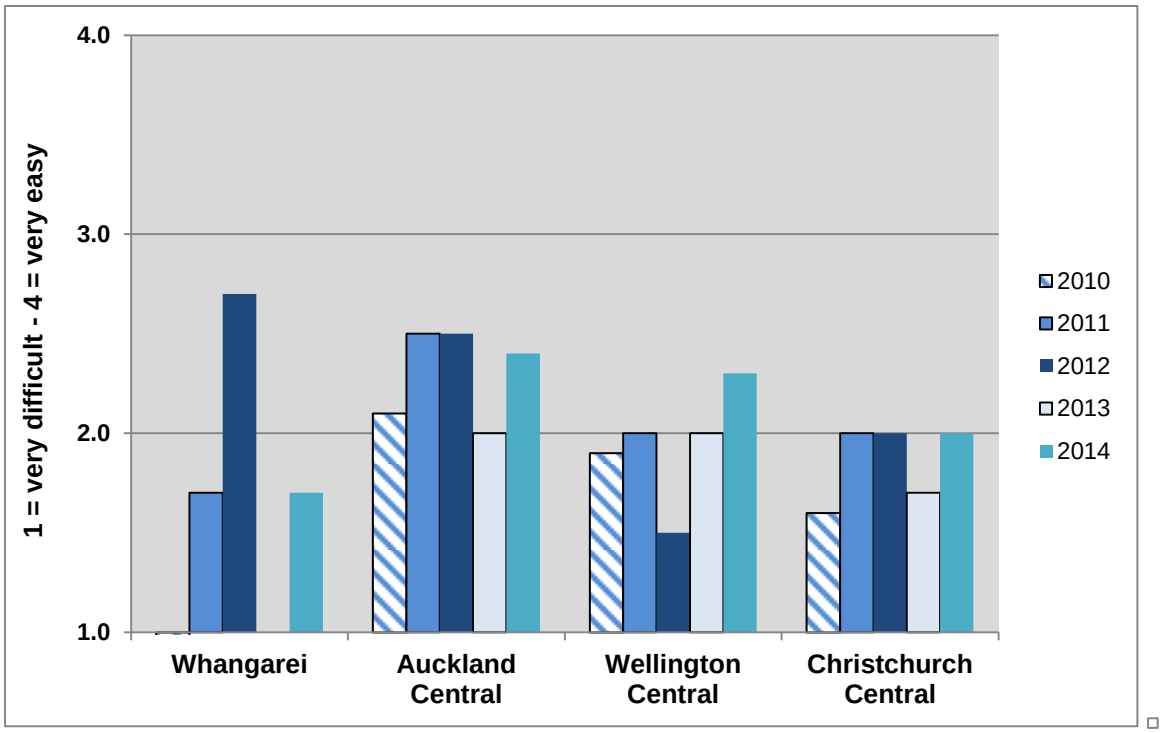
Current availability of cocaine

Thirty-nine percent of the detainees described the current availability of cocaine as 'very difficult', and a further 23% described it as 'difficult' in 2014 (Table 8.2). There was no statistically significant change in the current availability of cocaine from 2010 to 2014 (p=0.6235) (Figure 8.4).

Table 8.2: Police detainees' perceptions of the current availability of cocaine, 2010-2014

Current availability of cocaine	**All sites**				
	2010 (n=30)	**2011 (n=31)**	**2012 (n=31)**	**2013 (n=36)**	**2014 (n=39)**
Very easy [4]	7%	16%	14%	10%	17%
Easy [3]	13%	13%	28%	16%	21%
Difficult [2]	47%	37%	25%	28%	23%
Very difficult [1]	33%	33%	33%	46%	39%
Mean score of availability (1 = very difficult – 4 = very easy)	1.9	2.1	2.2	1.9	2.2
Overall current status	Difficult/ very difficult	Difficult/ very difficult	Very difficult/ easy	Very difficult/ difficult	Very difficult/ difficult

Figure 8.4: Police detainees' perceptions of the current availability of cocaine, 2010-2014



Change in availability of cocaine

The detainees reported the availability of cocaine had been 'stable/more difficult' over the previous six months in 2014 (Table 8.3). Twenty-six percent described the availability of cocaine as becoming 'more difficult' in 2014. There was no change in the availability of cocaine from 2010 to 2014 (p=0.9288).

Table 8.3: Police detainees' perceptions of the change in availability of cocaine, 2010-2014

Change in availability of cocaine	All sites				
	2010 (n=29)	2011 (n=26)	2012 (n=27)	2013 (n=31)	2014 (n=34)
Easier [3]	17%	16%	14%	8%	7%
Stable [2]	31%	39%	41%	51%	54%
Fluctuates [2]	14%	7%	15%	3%	13%
More difficult [1]	38%	39%	31%	38%	26%
Mean score of availability (1 = more difficult – 3 = easier)	1.8	1.8	1.8	1.7	1.8
Overall current status	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult	Stable/ more difficult

Current price of cocaine

Only twenty-nine of the detainees were able to provide a price for cocaine in 2014. They reported paying a median price of $250 for a gram of cocaine (mean $409). There was no statistically significant change in the mean price of a gram of cocaine from 2010 to 2014 (p=0.5800).

Change in the price of cocaine

Fifty-two percent of the detainees reported the price of cocaine had been 'stable', and 32% said the price had been 'fluctuating' over the previous six months in 2014 (Table 8.4). There was no statistically significant change in perceptions of the change in the price of cocaine from 2010 to 2014 (p=0.8456).

Table 8.4: Police detainees' perceptions of the change in the price of cocaine in the past six months, 2010-2014

Change in price of cocaine	All sites				
	2010 (n=20)	2011 (n=18)	2012 (n=18)	2013 (n=22)	2014 (n=28)
Increasing [3]	15%	10%	30%	21%	13%
Fluctuating [2]	0%	16%	10%	12%	32%
Stable [2]	75%	74%	51%	59%	52%
Decreasing [1]	10%	0%	8%	8%	3%
Mean change in price (1 = decreasing – 3 = increasing)	2.1	2.1	2.2	2.1	2.1
Overall change in availability	Stable	Stable	Stable/ increasing	Stable/ increasing	Stable/ fluctuating

Current strength of cocaine

Thirty-eight percent of the detainees described the current strength of cocaine as 'high', 26% said it was 'medium', and 21% said it was 'low' in 2014 (Table 8.5). There was no statistically significant change in perceptions of the current strength of cocaine from 2012 to 2014 (p=0.5495).

Table 8.5: Police detainees' perceptions of current strength of cocaine in the past six months, 2012-2014

Current strength of cocaine (%)	All sites		
	2012 (n=27)	2013 (n=31)	2014 (n=34)
High [3]	26%	42%	38%
Medium [2]	37%	13%	26%
Fluctuates [2]	7%	19%	15%
Low [1]	30%	26%	21%
Average strength score (1=low – 3=high)	2.0	2.1	2.2
Overall current status	Medium/ low	High/ low	High/ Medium

Change in strength of cocaine

The strength of cocaine was reported to have been 'stable/fluctuating' over the past six months in 2014 (Table 8.6). A lower proportion of detainees said the strength of cocaine was 'decreasing' from 2012 to 2014 (up from 1.7 to 2.1), and this difference was close to being statistically significant (p=0.0810). The proportion who said the strength of cocaine was 'decreasing' fell from 40% in 2010 to 7% in 2014.

Table 8.6: Police detainees' perceptions of change in strength of cocaine in the past six months, 2012-2014

Change in strength of cocaine (%)	All sites		
	2012 (n=20)	2013 (n=23)	2014 (n=28)
Increasing [3]	10%	4%	14%
Stable [2]	40%	52%	50%
Fluctuating [2]	10%	22%	29%
Decreasing [1]	40%	22%	7%
Average change in strength (1=decreasing – 3=increasing)	1.7	1.8	2.1
Overall recent change	Stable/ decreasing	Stable/ decreasing	Stable/ fluctuating

Summary

- The proportion of detainees who had tried cocaine in their lifetimes increased from 17% in 2010 to 23% in 2014
- There was no change in the proportion of detainees who had used cocaine in the previous year from 2010 to 2014 (4% to 6%)
- The detainees had used cocaine on a mean of 15 days in the previous 12 months in 2014
- Thirty-nine percent of detainees described the current availability of cocaine as 'very difficult' and further 23% described it as 'difficult' in 2014
- Twenty-six eight percent of detainees reported the availability of cocaine had become 'more difficult' over the previous six months in 2014
- The median price of a gram of cocaine was $250 (mean $409) in 2014
- The detainees reported the price of cocaine had been 'stable/fluctuating' over the past six months in 2014
- The detainees described the current strength of cocaine as 'high/medium' in 2014
- The strength of cocaine was reported to have increased from 2012 to 2014

Chapter 9 - New Drugs

Introduction

A range of new psychoactive substances (NPS) have emerged around the world over the past five years including synthetic cannabinoids (e.g. JWH-018), piperazines (e.g. benzylpiperazine), cathinones (e.g. mephedrone, methylone), tryptamines (e.g. DMT), phenethylamines (e.g. 2C-B, 2C-I) and plant extracts, such as salvia divinorum (Griffiths et al., 2013; UNODC, 2013a). Some of these compounds have been sold in so called 'legal high' products which mimic the effects of traditional illegal drugs, such as cannabis, LSD and MDMA.

The number of new NPS compounds identified by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has steadily increased from 13 in 2008 to 101 in 2014 (EMCDDA, 2015). The number of NPS reported worldwide has increased from 166 at the end of 2009 to 450 at the end of 2014 (UNODC, 2014, 2015b). The number of identified NPS exceeded the total number of drugs controlled under the United Nations Drug Conventions for the first time in 2013 (i.e. 251 vs. 234) (UNODC, 2013b).

Approximately one-third of the frequent drug users interviewed for the 2013 IDMS reported 'trying' and/or 'noticing' a new drug type (Wilkins, et al., 2014b). The 'new drugs' most commonly mentioned in 2013 were synthetic psychedelics (e.g. 25I-NBOMe), MDMA powder, '2C' drugs and oxycodone (Wilkins, et al., 2014b). An increasing proportion of the frequent drug users reported using methylone, tramadol, and mephedrone for the first time in 2013 (Wilkins, et al., 2014b).

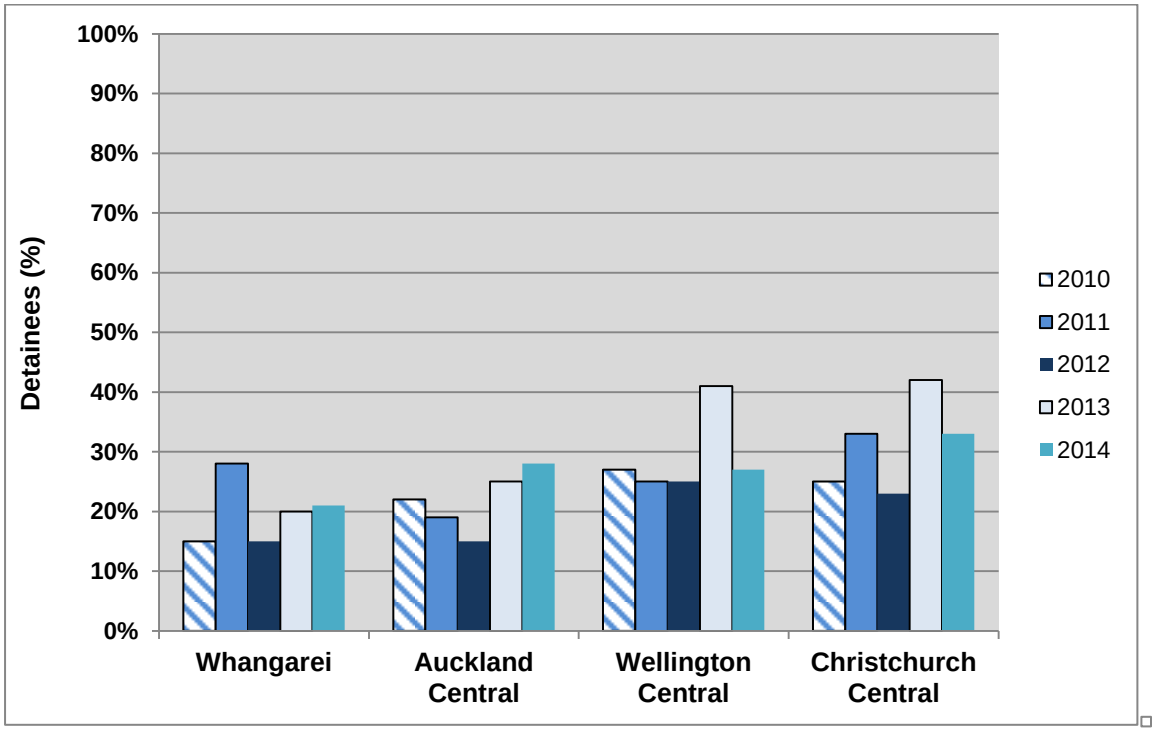
The 2013 NZ-ADUM also found growing levels of drug experimentation. The proportion of detainees who had tried a drug for the first time increased from 23% in 2010 to 33% in 2013 (Wilkins, et al., 2014a). A sharp rise in the proportion of detainees who had tried a drug for the first time occurred from 2012 to 2013 (up from 19% to 33%) (Wilkins, et al., 2014a). The drug types which the detainees had most commonly used for the first time in 2013 were synthetic cannabinoids (46%), methamphetamine (11%), 'ecstasy' (7%), LSD (6%), 'magic'

mushrooms (psilocybin) (5%), cocaine (4%), GHB/GBL (4%) and benzodiazepines (4%) (Wilkins, et al., 2014a). The proportion of detainees who had tried synthetic cannabis for the first time increased from 0% in 2010 to 46% in 2013 (Wilkins, et al., 2014a).

Drug types used for the first time in 2014

Twenty-nine percent of the detainees had tried a drug for the first time in the previous 12 months in 2014. The proportion of detainees who had tried a drug for the first time increased from 19% in 2012 to 29% in 2014 ($p=0.0003$). A sharp rise in the proportion of detainees who used a drug for the first time occurred from 2012 to 2013 (up from 19% to 33%, $p<0.0001$). The proportion of detainees in Auckland Central who had tried a drug for the first time increased from 15% in 2012 to 28% in 2014 ($p=0.0062$), with a sharp increase from 15%in 2012 to 25% in 2013 ($p=0.0329$) (Figure 9.1). Detainees in Christchurch Central were also more likely to have tried a drug for the first time from 2012 to 2014 (up from 23% to 33%, $p=0.0367$). Again, there was a sharp rise in the rate of trying a drug for the first time in Christchurch Central from 2012 to 2013 (up from 23% to 42%, $p<0.0001$). In 2014, detainees in Christchurch Central were more likely than those in Whangarei to have tried a drug for the first time (33% vs. 21%, $p=0.0473$).

Figure 9.1: Proportion of police detainees who had tried a drug for the first time in the past 12 months by location, 2010-2014



The drug types which the detainees had most commonly used for the first time in 2014 were synthetic cannabinoids (e.g. 'Diablo', 'Giggle') (36%), methamphetamine (9%), LSD (9%), ecstasy (7%), 'magic mushrooms' (psilocybin) (7%), cocaine (6%), amphetamine (5%), and GHB (4%) (Table 9.1).

Table 9.1: Drug types tried for the first time in the previous 12 months by location (of those detainees who had tried a drug for the first time), 2010-2014

	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=17)	2011 (n=42)	2012 (n=22)	2013 (n=30)	2014 (n= 32)	2010 (n=63)	2011 (n=59)	2012 (n=35)	2013 (n=73)	2014 (n=87)	2010 (n=41)	2011 (n=42)	2012 (n=25)	2013 (n=42)	2014 (n=26)	2010 (n=65)	2011 (n=61)	2012 (n=67)	2013 (n=116)	2014 (n=91)	2010 (n=186)	2011 (n=209)	2012 (n=150)	2013 (n=269)	2014 (n= 239)
Synthetic cannabinoids (%)	0	10	5	67	44	0	20	6	32	29	0	10	12	26	23	0	49	10	63	43	0	28	9	46	36
Methamphetamine (%)	35	12	5	0	0	17	17	20	14	14	20	5	12	19	8	18	5	13	7	8	20	9	14	11	9
LSD (%)	0	5	5	10	6	2	3	3	5	10	10	7	8	5	4	8	10	15	5	11	5	7	9	6	9
Ecstasy (%)	12	26	27	0	3	19	20	14	12	7	27	36	4	7	12	28	13	16	6	7	23	21	14	7	7
Magic Mushrooms (psilocybin) (%)	12	19	23	7	9	8	8	14	7	9	7	7	8	5	4	11	15	7	3	4	9	12	11	5	7
Cocaine (%)	0	5	0	0	3	3	8	11	4	8	7	5	4	5	4	5	0	4	4	7	4	4	6	4	6
Amphetamine (%)	6	5	5	0	0	3	5	0	3	7	0	7	20	10	4	3	3	12	3	5	3	5	10	4	5
GHB/GBL (%)	0	0	0	0	6	3	3	3	5	5	0	0	0	10	0	0	2	0	0	3	1	2	1	4	4
Rinse (%)	0	0	0	0	3	0	0	0	0	0	0	2	0	0	19	0	0	0	0	2	0	<1	0	0	3
Other drugs	0	0	0	0	3	0	0	0	0	2	0	0	0	0	4	0	0	0	0	2	0	0	0	0	3
Methylphenidate (Ritalin) (%)	6	0	5	7	0	3	0	0	3	0	0	2	0	0	8	0	5	4	2	3	2	2	2	2	2
Street BZP (%)	0	0	0	0	0	5	0	0	0	0	0	2	0	0	0	14	18	6	3	4	6	8	2	1	2
Cannabis (%)	0	2	0	3	0	5	12	14	3	2	7	2	0	0	0	11	3	5	1	3	7	5	5	1	2

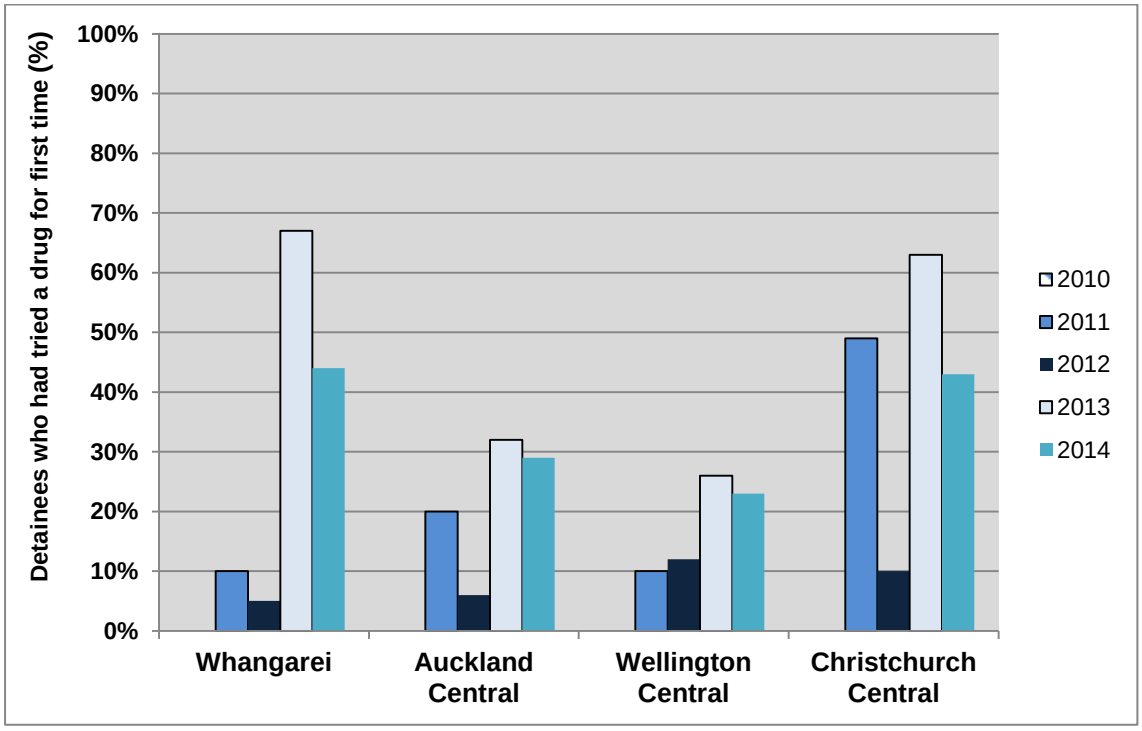
Alcohol (%)	0	0	0	0	0	2	3	0	0	2	0	0	0	0	0	2	2	1	0	2	1	2	1	0	2
Phencyclidine (PCP)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	2
Benzodiazepines (%)	0	2	9	0	0	10	0	0	5	1	0	5	8	5	0	6	7	3	3	2	5	4	4	4	1
Ketamine (%)	0	2	0	0	3	13	2	0	1	1	0	5	12	7	0	2	0	0	1	1	4	2	3	3	1
Salvia Divinorum (%)	1	5	9	0	0	0	0	0	1	2	1	2	0	7	0	0	2	1	3	0	2	1	2	3	1
Morphine (%)	6	7	5	0	0	2	0	6	1	1	0	2	0	2	0	3	3	6	3	2	2	3	4	2	1
Non-BZP party pills (dimethylamylamine) (%)	0	2	0	7	0	1	3	3	3	1	1	2	4	0	4	1	2	1	1	0	2	2	2	2	1
Methadone (%)	0	2	0	0	0	0	2	0	3	0	2	0	0	5	0	0	0	1	0	1	1	1	1	2	<1
Tobacco (%)	12	0	0	0	0	2	2	6	0	2	5	2	0	2	0	0	2	0	0	1	3	2	2	1	1
Crystal Methamphetamine (%)	0	2	0	0	0	0	0	0	0	1	0	0	4	0	0	0	2	0	1	0	0	1	1	<1	<1
Codeine (%)	0	5	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	1	0	1	0	1	1	<1	<1
Amyl nitrate (%)	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	<1	0	<1	<1
Heroin (%)	0	2	0	0	3	3	0	3	5	1	12	0	0	0	0	3	0	1	0	0	5	<1	1	1	1
Oxycodone (%)	0	0	0	<1	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0	1	1	<1	2	<1	<1
Tramadol (%)	0	0	0	3	0	0	0	0	1	0	0	2	0	0	0	2	0	3	0	1	1	<1	1	1	<1

Homebake morphine/heroin (%)	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	1	0	1	0	<1
Nitrous oxide (%)	0	0	0	0	3	0	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
Poppies (%)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	<1
Steroids	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1
Mescaline/Cactus (%)	0	0	0	0		0	0	3	3		0	0	8	2		0	0	1	1		0	0	3	2	0
DMT (dimethyltryptamine) (%)	1	5	0	0	0	1	0	6	1	0	1	0	0	0	0	0	0	1	0	0	2	1	2	<1	0
Zopiclone (%)	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	<1	0	0	0
Dexamphetamine (%)	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	<1	0	0	0
MDA (%)	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0
MDPV (%)	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0
Duromine (%)	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0
Solvents (%)	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Methylone (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Dimethoxybro amphetaimne (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	<1	0
25I-NBOMe (%)	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0

Mephedrone (%)	0	0	0	0	0	0	2	0	0	0	1	2	4	0	0	0	0	0	0	0	1	1	1	0	0
2C drugs (e.g. 2CE, 2CB) (%)	1	0	5	0	0	1	0	6	0	0	1	7	12	0	0	0	0	1	0	0	2	1	6	0	0
Antidepressants (%)	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0

The proportion of detainees who had used synthetic cannabinoids for the first time had previously increased from 0% in 2010 to 28% in 2011. First time use of synthetic cannabinoids then declined from to 9% in 2012 ($p<0.0001$), before increasing again to 46% in 2013 ($p<0.0001$). Most recently, the first time use of synthetic cannabinoids declined somewhat to 35% in 2014, and this was very close to being statistically significant ($p=0.0532$). Similar dramatic waves of first time use of synthetic cannabinoids have been found in each of the four sites (Figure 9.2).

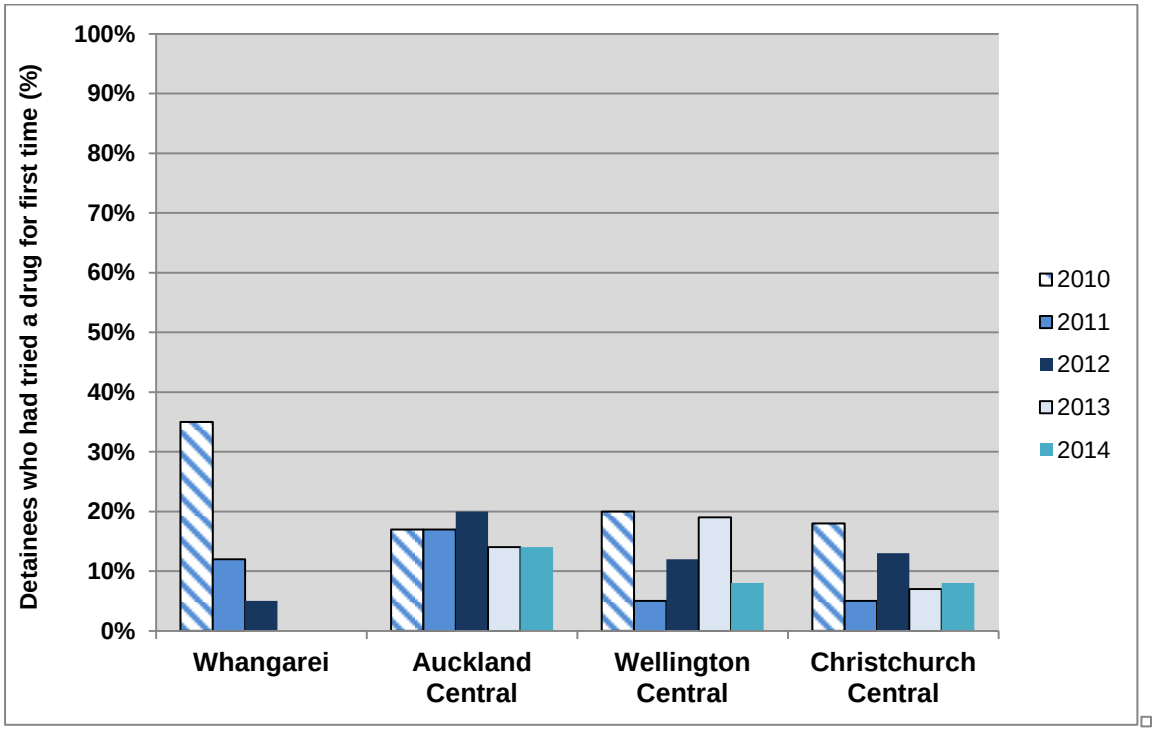
Figure 9.2: Proportion of police detainees who had tried synthetic cannabinoids for the first time in the past 12 months by location (of those who had tried a drug for the first time), 2010-2014



Conversely, the proportion of detainees who had used natural cannabis for the first time declined from 7% in 2010 to 1% in 2013 ($p=0.0389$).

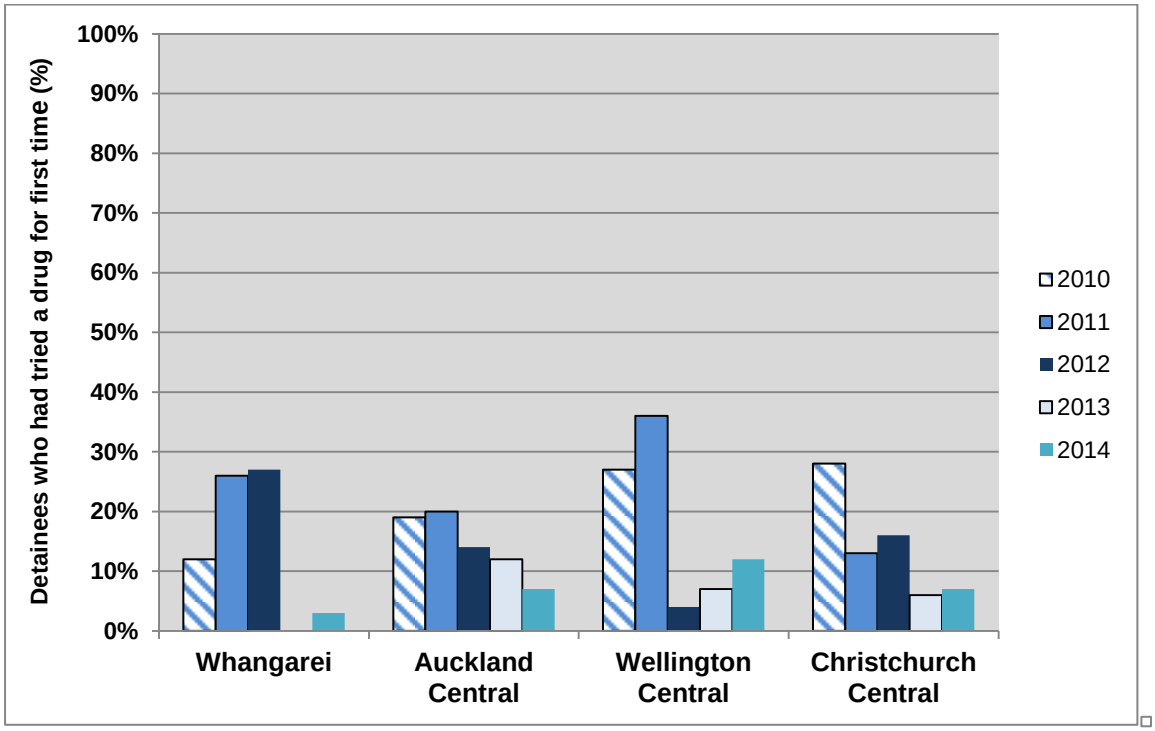
There was an overall decline in the proportion of detainees who had tried methamphetamine for the first time in the previous 12 months from 20% in 2010 to 9% in 2014 ($p=0.0095$). A similar trend has been found in all the sites (Figure 9.3).

Figure 9.3: Proportion of police detainees who had tried methamphetamine for the first time in the past 12 months by location (of those who had tried a drug for the first time), 2010-2014



The proportion of detainees who had tried ecstasy for the first time declined from 23% in 2010 to 7% in 2014 (p=0.0001), and from 21% in 2011 to 7% in 2014 (p=0.0004). The proportion of detainees who had tried ecstasy for the first time in Christchurch Central also declined from 28% in 2010 to 7% in 2014(p=0.0064), and from 28% in 2010 to 6% in 2014 (p=0.0014).

Figure 9.4: Proportion of police detainees who had tried ecstasy for the first time in the past 12 months by location (of those who had tried a drug for the first time), 2010-2014

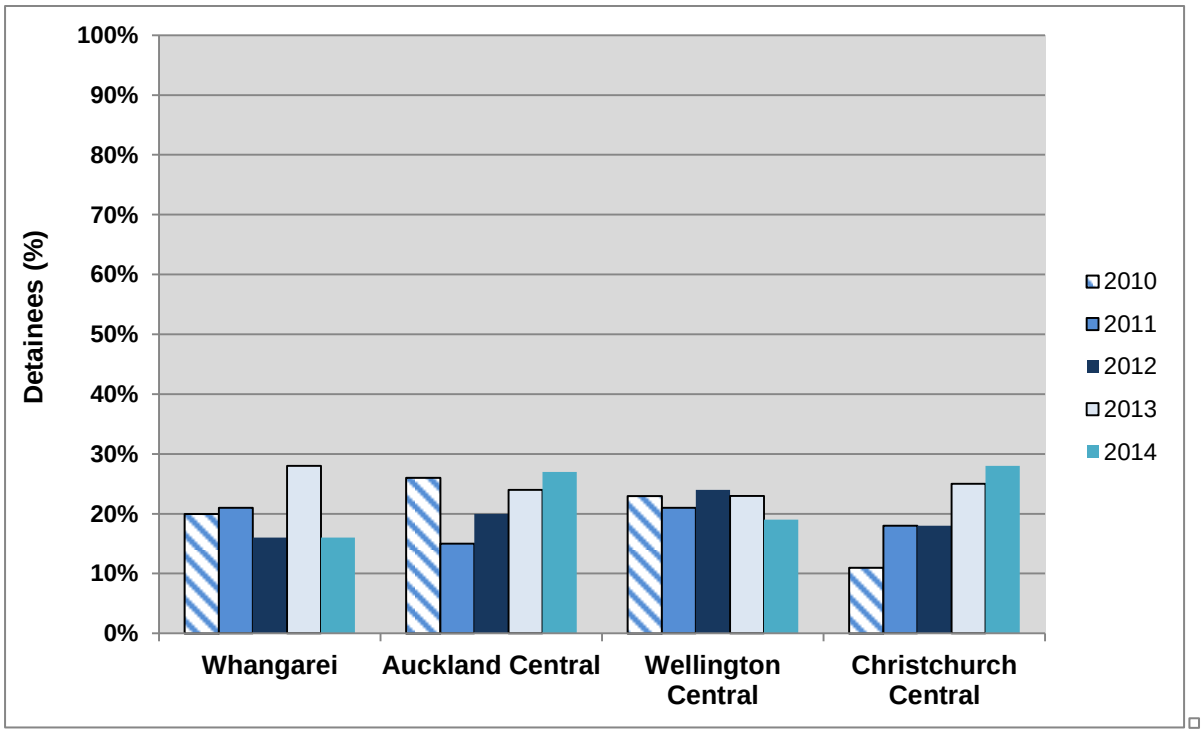


The proportion of detainees who had tried 'street BZP' for the first time declined from 8% in 2011 to 2% in 2014 (p=0.0419).

New drugs noticed

The detainees were also asked whether they had heard of any 'new drugs' being used in 2014. The proportion of detainees who had heard of a new drug(s) being used increased from 18% in 2011 to 24% 2014 (p<0.0001), and from 20% in 2012 to 24% in 2014 (p=0.0025). The proportion of detainees in Auckland Central who had heard of new drugs being used increased from 15% in 2011 to 27% in 2014 (p=0.0013) (Figure 9.5). The proportion of detainees in Christchurch Central who had heard of new drugs being used also increased from 11% in 2010 to 28% in 2014 (p<0.0001) and from 18% in 2012 to 28% in 2014 (p=0.0451). Detainees in Christchurch Central were more likely to have heard of new drugs being used than detainees in Whangarei (28% vs. 16%, p=0.0424).

Figure 9.5: Proportion of police detainees who had heard of a new drug being used by location, 2010-2014



The 'new' drug types which the detainees had most commonly heard of being used in 2014 were synthetic cannabinoids (15%), 'other synthetics' (11%), PCP (10%), inhalants (9%), ecstasy (8%), methamphetamine (6%), GHB (5%), 'other legal highs' (5%), MDPV (4%), LSD (4%), cocaine (3%) and ketamine (3%) (Table 9.2).

Table 9.2: New drug types which the police detainees had heard were being used by location 2010-2014

	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=22)	2011 (n=30)	2012 (n=23)	2013 (n=42)	2014 (n=24)	2010 (n=73)	2011 (n=45)	2012 (n=48)	2013 (n=69)	2014 (n=85)	2010 (n=31)	2011 (n=31)	2012 (n=24)	2013 (n=23)	2014 (n=18)	2010 (n=28)	2011 (n=33)	2012 (n=50)	2013 (n=68)	2014 (n=76)	2010 (n=154)	2011 (n=139)	2012 (n=145)	2013 (n=200)	2014 (n=203)
Synthetic cannabimimetics (%)	0	23	4	49	46	0	16	6	30	9	0	16	4	22	11	4	9	12	43	12	1	15	7	36	15
Other synthetics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	11
PCP (%)	0	0	0	0	4	0	4	2	0	2	3	0	0	0	0	0	0	0	0	22	1	1	1	0	10
Inhalants (%)	0	0	0	7	4	0	0	0	4	1	0	0	0	0	0	0	0	0	1	22	0	0	0	3	9
Ecstasy (%)	5	0	35	5	0	5	7	10	3	8	10	10	17	4	6	0	6	12	3	11	5	6	15	3	8
Methamphetamine (%)	59	17	4	5	4	12	7	6	3	6	16	0	4	0	17	14	12	14	3	4	20	9	8	3	6
GHB (%)	5	13	9	2	4	11	16	9	10	11	13	0	9	9	0	0	0	4	0	0	8	7	7	5	5
Other legal highs (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	5
Can't specify	0	0	0	0	8	0	0	0	0	7	0	0	0	0	0	0	0	0	0	4	0	0	0	0	5
MDPV (%)	0	0	0	7	4	0	0	13	7	5	0	0	0	4	11	0	0	8	1	3	0	0	7	5	4
LSD (%)	5	3	0	5	4	4	7	2	1	5	3	10	0	0	5	4	6	2	6	3	4	7	1	3	4
Cocaine (%)	0	10	0	0	0	1	4	2	4	2	3	3	0	0	0	7	3	2	3	5	3	5	1	2	3
Ketamine (%)	0	0	0	0	0	14	2	2	3	6	6	0	0	4	0	4	6	0	0	3	8	3	1	2	3
Rinse (%)	0	0	0	0	8	0	0	0	0	1	0	6	0	0	0	0	0	0	0	5	0	1	0	0	3
Mephedrone (%)	0	3	0	0	0	12	9	0	9	4	10	3	0	9	6	0	0	4	7	0	8	4	1	7	2
Non-BZP party pills (dimethylamylamine) (%)	0	0	0	0	0	0	0	6	1	1	3	0	0	0	11	7	0	6	4	1	2	0	4	2	2
Heroin (%)	0	7	0	0	0	3	0	0	3	2	3	0	0	0	6	4	0	0	1	3	3	1	0	1	2
Salvia Divinorum (%)	0	0	9	2	0	3	2	0	0	1	6	0	4	26	6	0	0	0	6	0	3	1	2	7	1

Crystal Methamphetamine (%)	0	0	0	0	4	0	0	2	0	1	0	0	0	0	0	0	0	0	4	1	0	0	1	2	1
Cannabis (%)	5	0	4	0	0	4	4	2	0	0	3	10	4	0	6	0	0	2	1	1	3	3	3	<1	1
Amphetamine (%)	0	0	4	0	0	1	0	2	1	1	0	3	0	0	0	4	3	6	0	0	1	2	3	<1	<1
Street BZP (%)	5	0	9	0	0	1	0	0	0	1	0	0	0	0	0	7	3	8	3	3	3	1	3	1	1
Benzodiazepines (%)	0	3	0	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	1	0	1	2	<1	<1
Methylphenidate (Ritalin) (%)	0	0	4	0	0	0	0	2	0	1	3	3	0	0	0	4	0	2	1	1	1	1	2	<1	1
Magic mushrooms (psilocybin) (%)	5	0	9	0	0	0	0	0	3	1	3	0	0	0	0	0	3	0	0	3	1	1	1	1	1
Mescaline/ Cactus (%)	0	0	0	0	0	0	0	2	1	1	0	0	0	4	0	0	0	2	0	0	0	0	1	1	<1
2C drugs (e.g. 2CB, 2CE) (%)	0	0	0	0	0	4	2	2	0	2	0	13	26	0	0	7	3	2	0	0	3	4	7	0	1
Solvents (%)	0	0	4	0	4	0	0	0	0	0	0	0	4	0	6	0	0	2	0	0	0	0	2	0	1
Morphine (%)	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	2	1	0	<1
Methoxetamine (%)	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	<1
Nitrous oxide (%)	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Opium poppies (%)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	<1
Alcohol	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	<1
Tramadol	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Other drugs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	<1
Synthetic smokables (%)	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	3	0	0	0	0	3	0
Drug mixture (%)	0	0	9	2	0	0	0	2	0	0	0	0	0	4	0	0	0	6	3	0	0	0	4	2	0
Datura (%)	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	2	1	0	0	0	3	<1	0
Other pharmaceuticals (%)	0	0	9	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0

Methadone (%)	0	0	0	0	0	1	2	0	1	0	0	0	4	4	0	0	0	0	0	0	1	1	1	1	0
Amyl nitrate (%)	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	2	0	1	1	0
Date rape drugs (%)	0	0	4	4	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Oxycodone (%)	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	0	1	0
Benzo Fury/ 6-APB (%)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0
25i-NBOMe (%)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0
Research chemicals (%)	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Sex drugs (%)	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Dime (%)	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Yerba (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0
Other hallucinogen (%)	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	2	0	0
Homebake morphine/heroin (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	2	0	0	1	1	1	0	0
Antidepressants	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Viagra (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0
Dexamphetamine (%)	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0
4-MEC (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0
Pseudoephedrine (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0
Bromo-Dragon Fly (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0
DMT (dimethyltryptamine) (%)	0	3	0	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0
Codeine (%)	0	0	0	0	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Steroids	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buprenorphine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zopiclone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	00	0	0	0	0	0	0	0
Dextropropoxyphene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Duromine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nootropics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dimethoxybromoamphetamine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary

- The proportion of detainees who had tried a drug for the first time increased from 19% in 2012 to 29% in 2014
- There was a sharp rise in the proportion of detainees who had tried a drug for the first time from 19% in 2012 to 33% in 2013
- This rise in drug experimentation was strongest in Auckland Central and Christchurch Central
- The drug types which the detainees had most commonly used for the first time in 2014 were synthetic cannabinoids (36%), methamphetamine (9%), LSD (9%), ecstasy (7%), 'magic mushrooms' (7%), cocaine (6%), amphetamine (5%), and GHB (4%)
- The proportion of detainees who had tried synthetic cannabinoids for the first time increased sharply from 0% in 2010 to 28% in 2011, before declining to 9% in 2012, increasing to 46% in 2013, and finally declining slightly to 35% in 2014
- Similar waves of the first trying of synthetic cannabinoids were seen in all sites
- The proportion of detainees who had tried methamphetamine for the first time declined from 20% in 2010 to 9% in 2014
- The proportion of detainees who had tried ecstasy for the first time declined from 23% in 2010 to 7% in 2014
- The proportion of detainees who noticed a new drug being used increased from 18% in 2011 to 24% in 2014
- The 'new' drug types which the detainees had most commonly noticed being used in 2014 were synthetic cannabis (15%), 'other synthetics' (11%), PCP (10%), inhalants (9%), ecstasy (8%), methamphetamine (6%), GHB (5%), 'other legal highs' (5%), MDPV (4%), LSD (4%), cocaine (3%) and ketamine (3%)

Chapter 10 – Synthetic cannabinoids

Introduction

An increasing number of new psychoactive substances (NPS) have emerged around the world during the past five years, with many sold as so called 'legal highs' (EMCDDA, 2013, 2015; UNODC, 2013b, 2015b). New Zealand has been at the forefront of the legal high phenomenon, experiencing successive waves of legal 'party pills' containing benzylpiperazine (BZP) and dimethylamylamine (DMAA), synthetic cannabinoids products, and plant extracts such as salvia divinorum (Wilkins & Sweetsur, 2013).

New Zealand has a long history of legal high use and at times high prevalence of use. For example, in 2006, 40% of males aged 18-24 years reported using legal BZP party pills in the previous year (Wilkins et al., 2007). In 2011, 45% of frequent ecstasy users had used synthetic cannabinoids in the previous six months (Wilkins, et al., 2012c). Manufacturers of legal highs claim their products offer a safer alternative to existing illegal drugs (Birdwell et al., 2011), but little research has been completed on the health risks of these products outside of clinical contexts (Wilkins, 2014b). Use of legal highs has been associated with hospital emergency department admissions and poisoning notifications, involving seizure, renal toxicity, respiratory failure, hyperthermia, serotonin syndrome, rhabdomyolsis and psychosis (Every-Palmer, 2011; Gee & Fountain, 2007; Gee et al., 2005; Hermanns-Clausen et al., 2013) and a number of deaths overseas (EMCDDA & Europol, 2014, 2015).

In July 2013, New Zealand established the world's first regulated legal market for 'low risk' psychoactive products (i.e. 'legal highs') with the passing of the *Psychoactive Substances Act 2013* (PSA) (New Zealand Parliament, 2013) (Wilkins, 2014a). Under this new regulatory regime, psychoactive products shown to be 'low risk' with the required toxicology and clinical trial data will be approved for legal manufacture and sale subject to new retail restrictions (i.e. R18, no sales from convenience stores, limited advertising) and licensing requirements (Wilkins, 2014a). The stated aims of the PSA are to put the onus on sellers to provide evidence that their psychoactive products are low risk, ensure the psychoactive products available on the legal market are low risk, and

establish regulations around the manufacture, advertisement and retail sale of legally available psychoactive products (New Zealand Parliament, 2013). This regulated market approach to NPS has received international attention as a possible solution to the ongoing problems with legal highs in other countries (Meacher, 2013; New Psychoactive Substances Review Expert Panel, 2014).

However, implementation of the PSA has proven to be challenging and controversial (Wilkins, 2014b). The transitory interim regime which allowed a limited number of existing products to continue to be sold was brought to an abrupt on 7th May 2014 following reports of adverse effects from products and social disruption around licensed stores (Ministry of Health, 2015). The ending of the interim regime also introduced a ban on the animal testing of psychoactive products; potentially making the testing regime unworkable (Rychert & Wilkins, 2015). There are a number of possible options to 'work around' the animal test ban, but it is yet to be seen what approaches might be acceptable to regulators and politicians (Rychert & Wilkins, 2015).

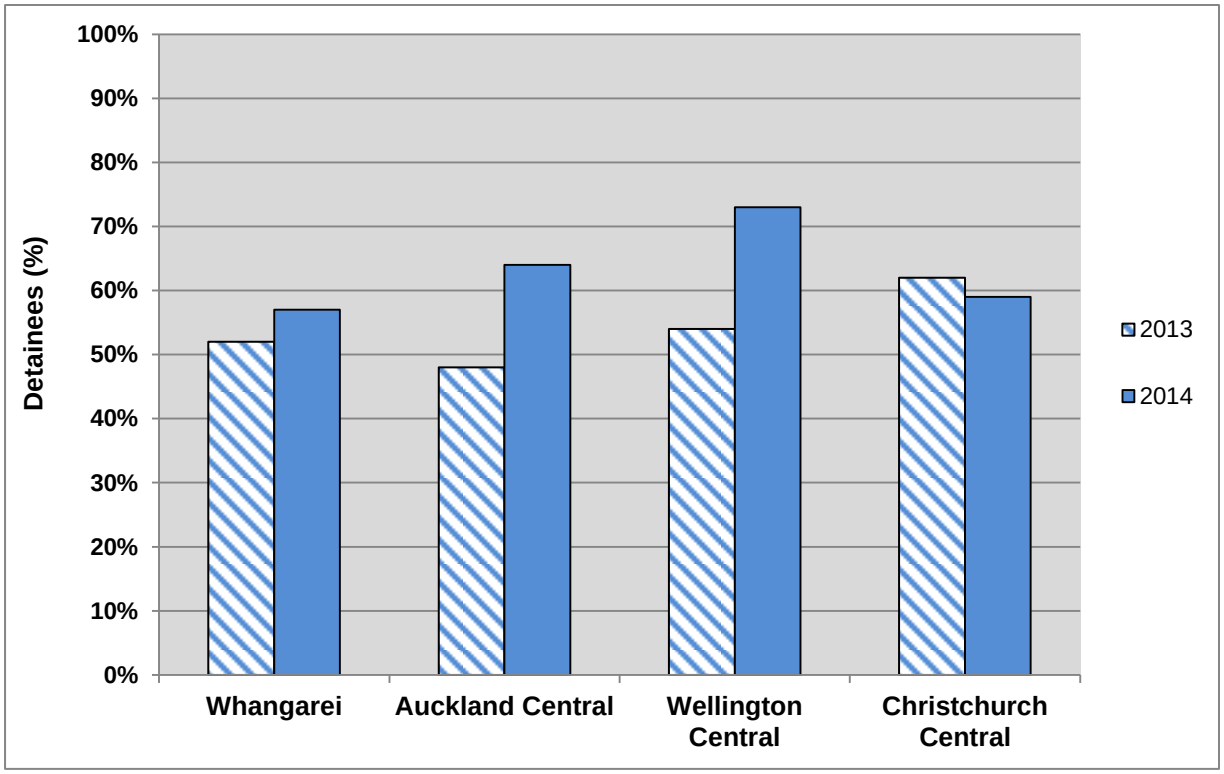
The 2014 NZ-ADUM study was completed from mid-April to the end of July 2014, so a small proportion of interviews were conducted before the early May bans, and some measures asked respondents to report on changes during their lifetimes, in the past 12 months, and past six months from interview, so the full impact of the bans may not be within the respective reporting time frames. Furthermore, due to the leakage of previous legal stocks to the illegal drugs market, the bans may take many months to negatively impact supply and availabilty.

Use of synthetic cannabinoids

Sixty-two percent of the police detainees had tried synthetic cannabinoids at some point in their lives, 47% had used synthetic cannabinoids in the previous 12 months, and 24% had used them in the previous month in 2014 (Table 10.1). The proportion of detainees who had ever tried synthetic cannabinoids increased from 54% in 2013 to 62% in 2014 ($p=0.0007$). It is important to note that this is a measure of use at any time in the detainees' lifetimes, and consequently the May bans are not likely to impact this measure. Lifetime experience of using synthetic cannabinoids increased sharply in Auckland Central (up from 48% in 2013 to 64% in 2014, $p<0.0001$) and Wellington Central (up from 54% in 2013 to 73% in 2014, $p=0.0064$) (Figure 10.1). The proportion of detainees in Christchurch Central who had ever tried synthetic cannabinoids declined from 62% in 2013 to 59%

in 2014, but this decrease was not statistically significant (p=0.3956). Detainees in Wellington Central were more likely to have ever tried synthetic cannabinoids than those in Whangarei (73% vs. 57%, p=0.0679) and Christchurch Central (73% vs. 59%, p=0.0760), although these differences were not statistically significant.

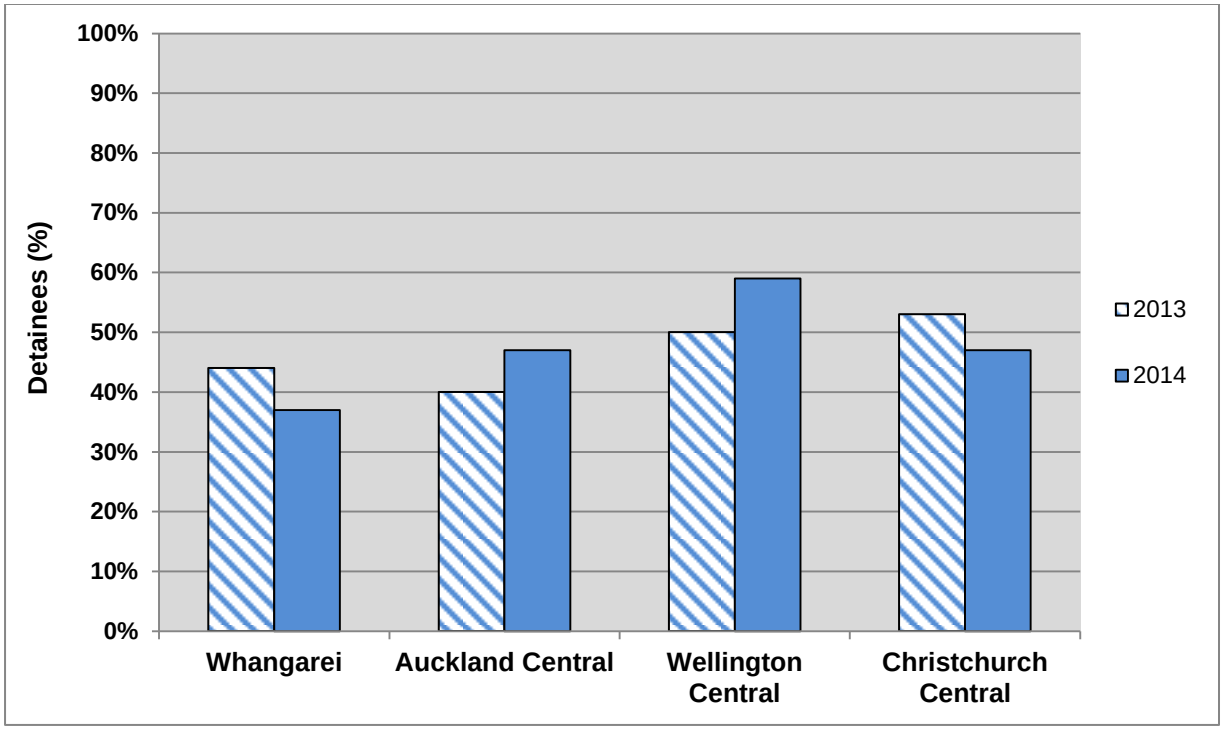
Figure 10.1: Proportion of police detainees who had ever used synthetic cannabinoids by location, 2013-2014



There was no change in the proportion of detainees who used synthetic cannabinoids in the previous 12 months (i.e. 47% in both years). It is important to note that the 12 month prevalence measure in 2014 included some months before the May 2014 bans were imposed, so detainees who reported use in the previous year may be referring to use before the bans were imposed. The proportion of detainees from Auckland Central who used synthetic cannabinoids in the past year increased from 40% in 2013 to 47% in 2014, although this increase was not statistically significant (p=0.0834) (Figure 10.2). Similarly, the proportion of detainees from Wellington Central who used synthetic cannabinoids in the past year increased from 50% in 2013 to 59% in 2014, and again this increase was not statistically significant (p=0.2048). Conversely, the proportion of detainees in Whangarei who used synthetic cannabinoids in the past 12 months decreased from 44% in 2013 to 37% in 2014, but this decrease was not statistically significant (p=0.1846). Similarly, the proportion

of detainees in Christchurch Central who used synthetic cannabinoids in the past 12 months decreased from 53% in 2013 to 47% in 2014, but again this decrease was not statistically significant (p=0.1411).

Figure 10.2: Proportion of police detainees who had used synthetic cannabinoids in the past 12 months by location, 2013-2014



The proportion of detainees who had used synthetic cannabinoids in the past month declined from 29% in 2013 to 24% in 2014 (p=0.0491). This is the best measure from NZ-ADUM to provide an indication of how synthetic cannabinoid use changed immediately following the May 2014 bans. However, the detainees who were interviewed early in the survey may still have used prior to the imposition of the bans, and as outlined in the introduction, there may have been leakage of previously legal stocks to the illegal drugs market, reducing the impact of the bans on availability and use. There were no statistically significant changes in last month prevalence for the individual sites from 2013 to 2014 (Figure 10.3).

Figure 10.3: Proportion of police detainees who had used synthetic cannabinoids in the past month by location, 2013-2014

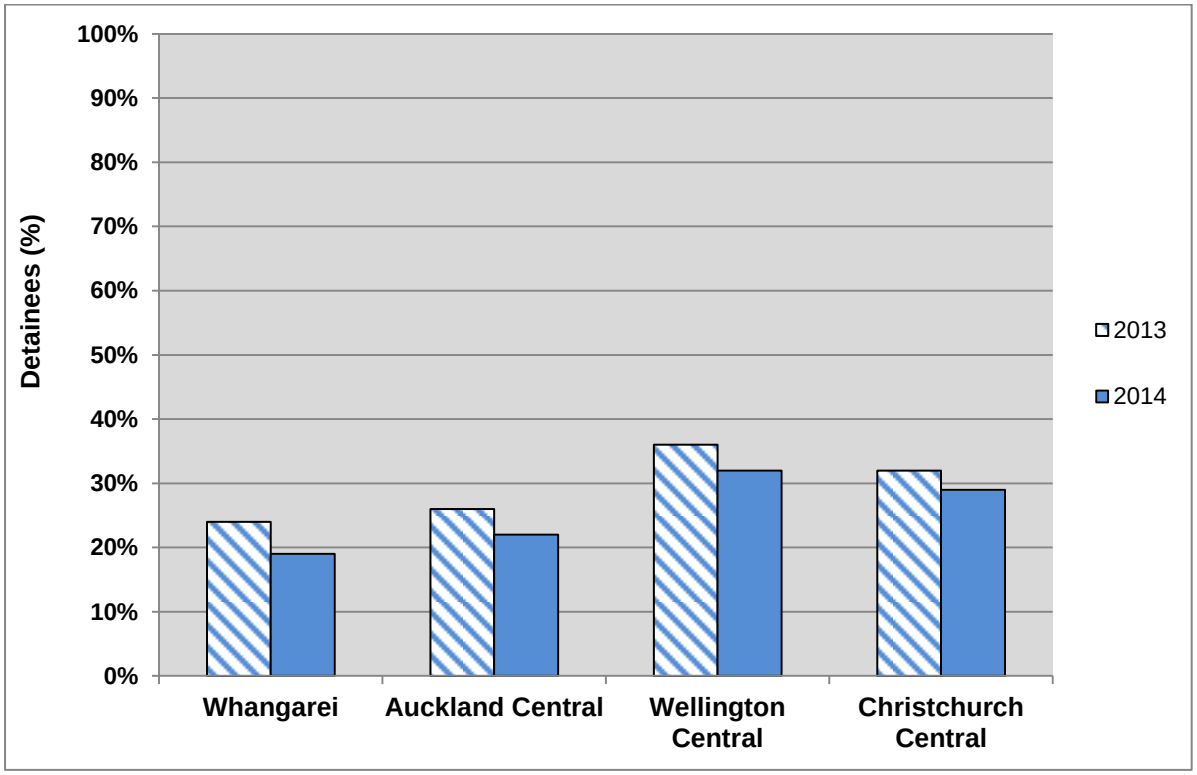


Table 10.1: Police detainees' patterns of synthetic cannabinoids' use by location, 2013-2014

Use of synthetic cannabinoids	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=149)	2014 (n=151)	2013 (n=287)	2014 (n=315)	2013 (n=106)	2014 (n=95)	2013 (n=280)	2014 (n=273)	2013 (n=822)	2014 (n=834)
Ever used (%)	52	57	48	64	54	73	62	59	54	62
Used in past 12 months (%)	44	37	40	47	50	59	53	47	47	47
Mean number of days used in past 12 months**	54	86	60	87	74	109	74	140	67	110
Felt dependent in the past 12 months (%)**	10	25	12	28	16	29	24	36	17	30
Used in past month (%)	24	19	26	22	36	32	32	29	29	24
Mean number of days used in past month***	10	12	10	14	11	15	12	14	11	14

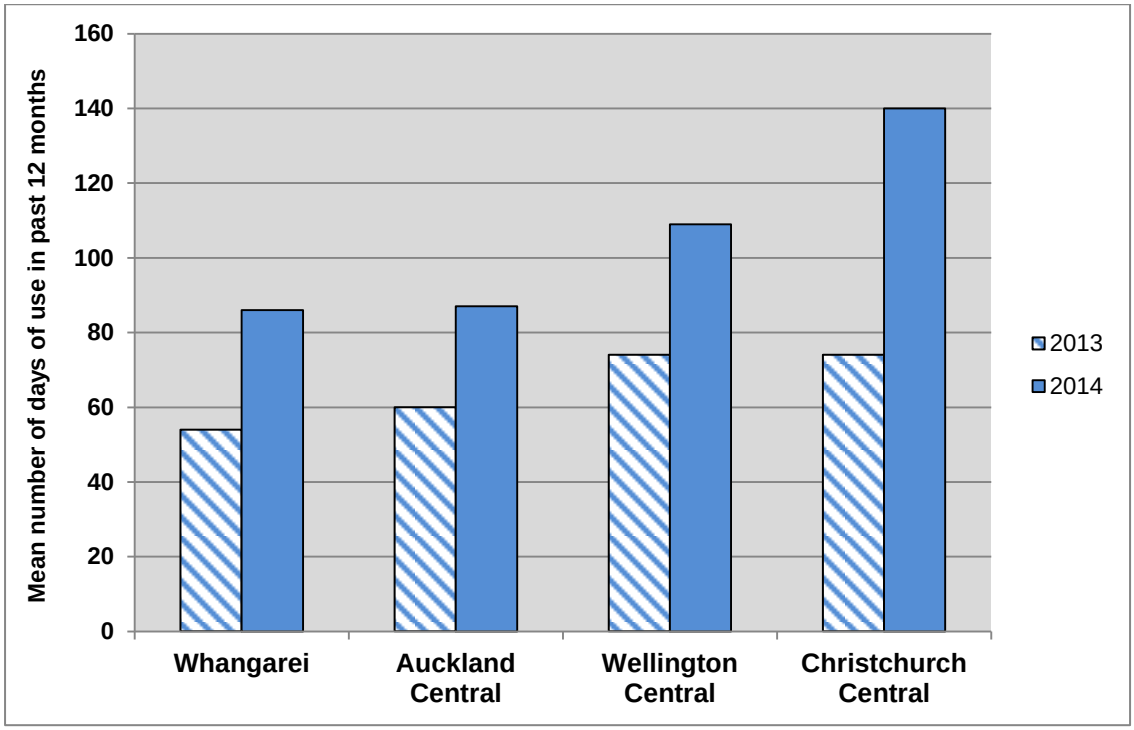
** of those who had used in the past 12 months

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

Frequency of synthetic cannabinoid use

The detainees had used synthetic cannabinoids on a mean of 110 days in the previous 12 months in 2014 (median 15, 1-365 days). The number of days the detainees had used synthetic cannabinoids in the previous 12 months increased from 67 days in 2013 to 110 days in 2014 (p=0.0004). As outlined above, the 12 month reporting period will include some months before the May 2014 bans were imposed. The number of days the detainees in Christchurch Central had used synthetic cannabinoids in the previous 12 months increased from 74 days in 2013 to 140 days in 2014 (p=0.0027) (Figure 10.4). The number of days the detainees in Whangarei had used synthetic cannabinoids in the previous 12 months also increased from 54 in 2013 to 86 in 2014, and this increase was close to being statistically significant (p=0.0642).

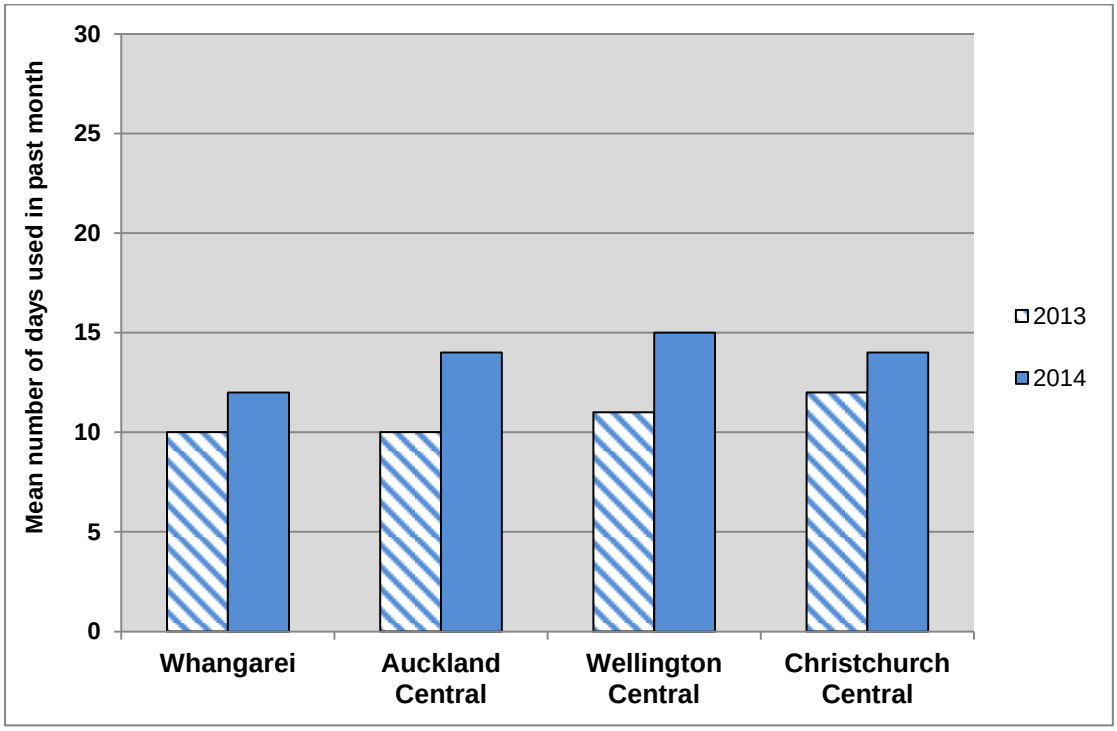
Figure 10.4: Mean number of days police detainees used synthetic cannabinoids in the past 12 months by location, 2013-2014



The detainees had used synthetic cannabinoids on an average of 14 days in the previous month in 2014 (median 10, 1-30 days). The number of days the detainees had used synthetic cannabinoids in the previous month increased from 11 in 2013 to 14 in 2014

(p=0.0175). While this frequency of synthetic cannabinoid use in the previous month measure is the best to compare the impact of the May 2014 ban, this reporting time period may still have included time before the bans were imposed, and stockpiling may have reduced the immediate impact on supply and availability. The number of days the detainees in Central Auckland had used synthetic cannabinoids in the past month increased from 10 to 14 days, and this increase was close to being statistically significant (p=0.0586) (Figure 10.5). There were no other statistically significant changes in frequency of use in the past month among the other sites.

Figure 10.5: Mean number of days police detainees used synthetic cannabinoids in the past month by location, 2013-2014

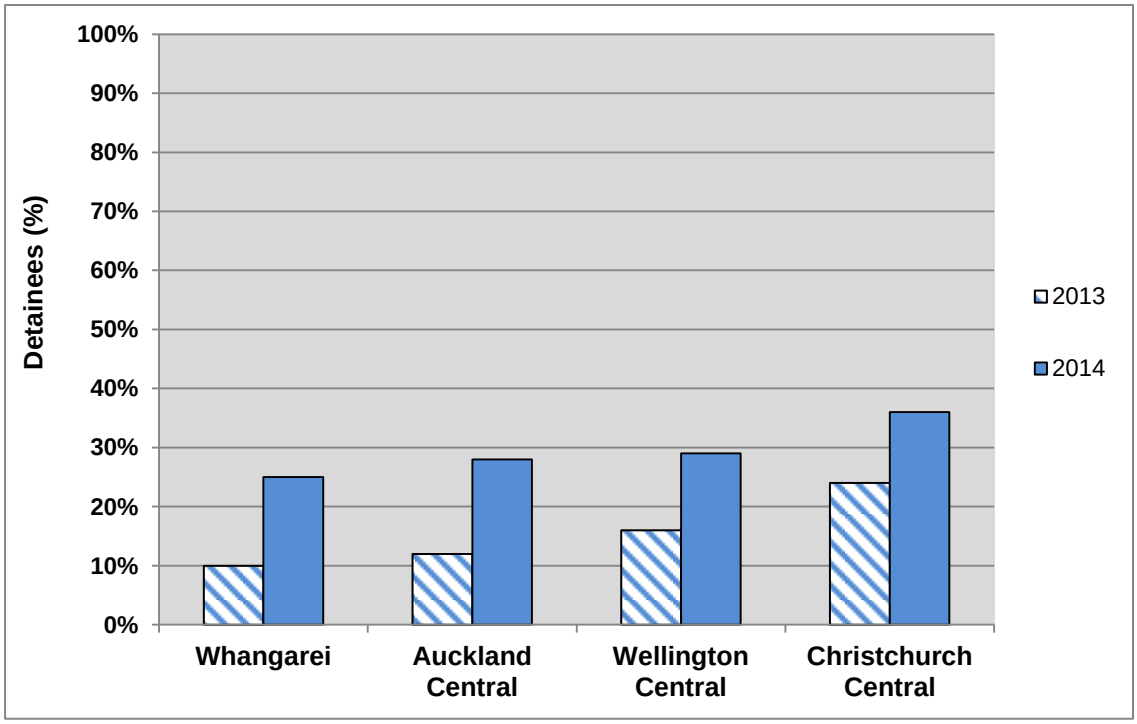


Dependency on synthetic cannabinoids

Thirty percent of the detainees who had used synthetic cannabinoids in the previous year felt they were dependent on them in 2014. The proportion of detainees who felt dependent on synthetic cannabinoids in the previous year increased from 17% in 2013 to 30% in 2014 (p<0.0001). The proportion of detainees who felt dependent on synthetic cannabinoids in the previous year increased in Whangarei (up from 10% in 2013 to 25% in 2014, p=0.0326),

Auckland Central (up from 12% in 2013 to 28% in 2014, p=0.0010) and in Christchurch Central (up from 24% in 2013 to 36% in 2014, p=0.0429) (Figure 10.6). A similar increase in synthetic cannabinoid dependency occurred in Wellington Central (up from 16% to 29%), but this increase was not statistically significant (p=0.0994).

Figure 10.6: Proportion of police detainees who felt dependent on synthetic cannabinoids in the past year by location (of those who had used synthetic cannabinoids in the past 12 months), 2013-2014



Synthetic cannabinoids use at the time of arrest

Seven percent of the detainees had been using synthetic cannabinoids prior to their arrest in 2014, and this did not change from 2013 (p=0.9188) (Table 10.2). The proportion of Whangarei detainees using synthetic cannabinoids before their arrest declined from 5% in 2013 to 1% in 2014 (p=0.0331).

Table 10.2: Synthetic cannabinoids use by police detainees at time of arrest by location, 2013-2014

Use of synthetic cannabinoids	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=153)	2014 (n=151)	2013 (n=300)	2014 (n=315)	2013 (n=106)	2014 (n=95)	2013 (n=289)	2014 (n=273)	2014 (n=848)	(n=834)
Using when arrested (%)	5	1	6	6	9	12	8	9	7	7

Current availability of synthetic cannabinoids

Fifty-eight percent of the detainees described the current availability of synthetic cannabinoids as 'very easy' and a further 20% described it as 'easy' in 2014 (Table 10.3). The current availability of synthetic cannabinoids declined from 2013 to 2014 (down from 3.6 to 3.2, $p<0.0001$). The availability of synthetic cannabinoids declined from 2013 to 2014 in Whangarei (down from 3.4 to 3.0, $p=0.0774$), Auckland Central (down from 3.5 to 3.0, $p=0.0006$) and Wellington Central (down from 3.8 to 3.0, $p<0.0001$) (Figure 10.7). In contrast, there was no statistically significant change in the availability of synthetic cannabinoids in Christchurch Central from 2013 to 2014 (3.7 to 3.6, $p=0.4235$). In 2014, the availability of synthetic cannabinoids was reported to be higher in Christchurch Central compared to Auckland Central (3.6 vs. 3.0, $p<0.0001$), Wellington Central (3.6 vs. 3.0, $p=0.0168$) and Whangarei (3.6 vs. 3.0, $p=0.0153$).

Figure 10.7: Current availability of synthetic cannabinoids by location, 2013-2014

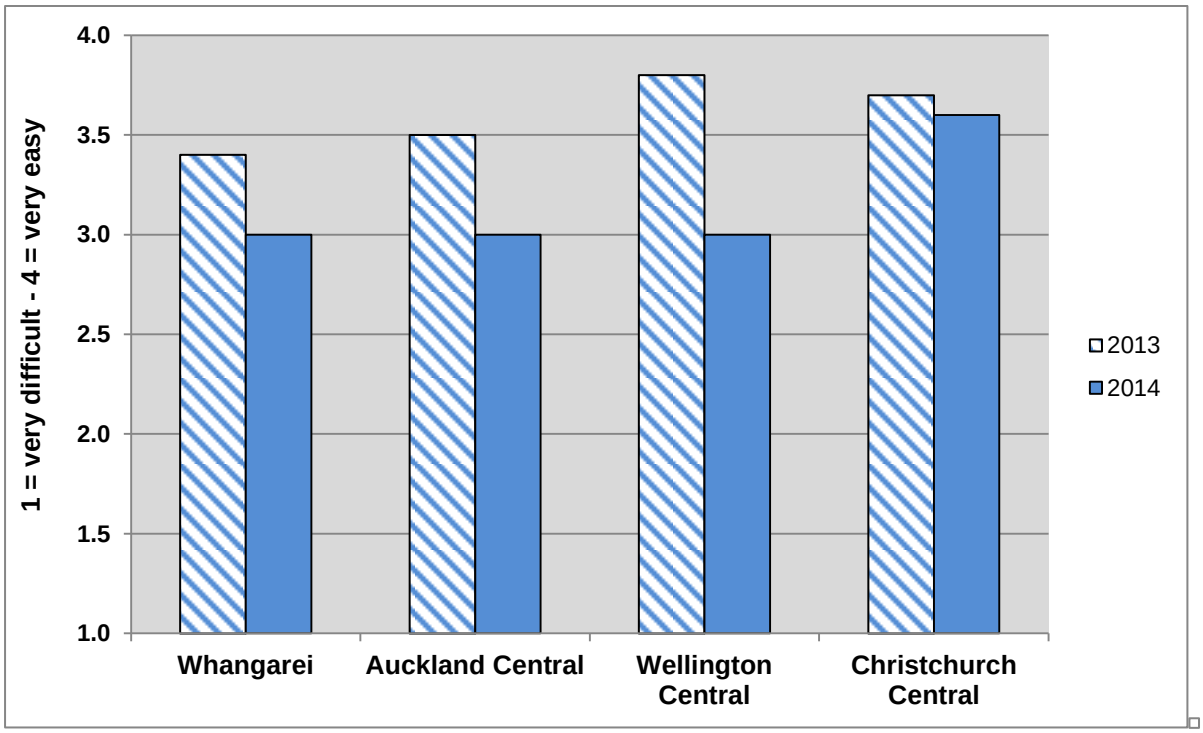


Table 10.3: Police detainees' perceptions of the current availability of synthetic cannabinoids by location, 2013-2014

Current availability of synthetic cannabinoids (%)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=57)	2014 (n=45)	2013 (n=117)	2014 (n=129)	2013 (n=53)	2014 (n=48)	2013 (n=151)	2014 (n=123)	2013 (n=378)	2014 (n=345)
Very easy [4]	61%	44%	65%	50%	85%	50%	78%	76%	72%	58%
Easy [3]	25%	31%	21%	21%	13%	21%	13%	15%	17%	20%
Difficult [2]	5%	7%	10%	9%	0%	13%	5%	2%	6%	7%
Very difficult [1]	9%	18%	4%	20%	2%	17%	3%	7%	4%	15%
Average availability score (1=very difficult – 4=very easy)	3.4	3.0	3.5	3.0	3.8	3.0	3.7	3.6	3.6	3.2
Overall current status	Very easy/ easy	Very easy/easy	Very easy/ easy	Very easy/easy	Very easy	Very easy/easy	Very easy	Very easy	Very easy	Very easy/easy

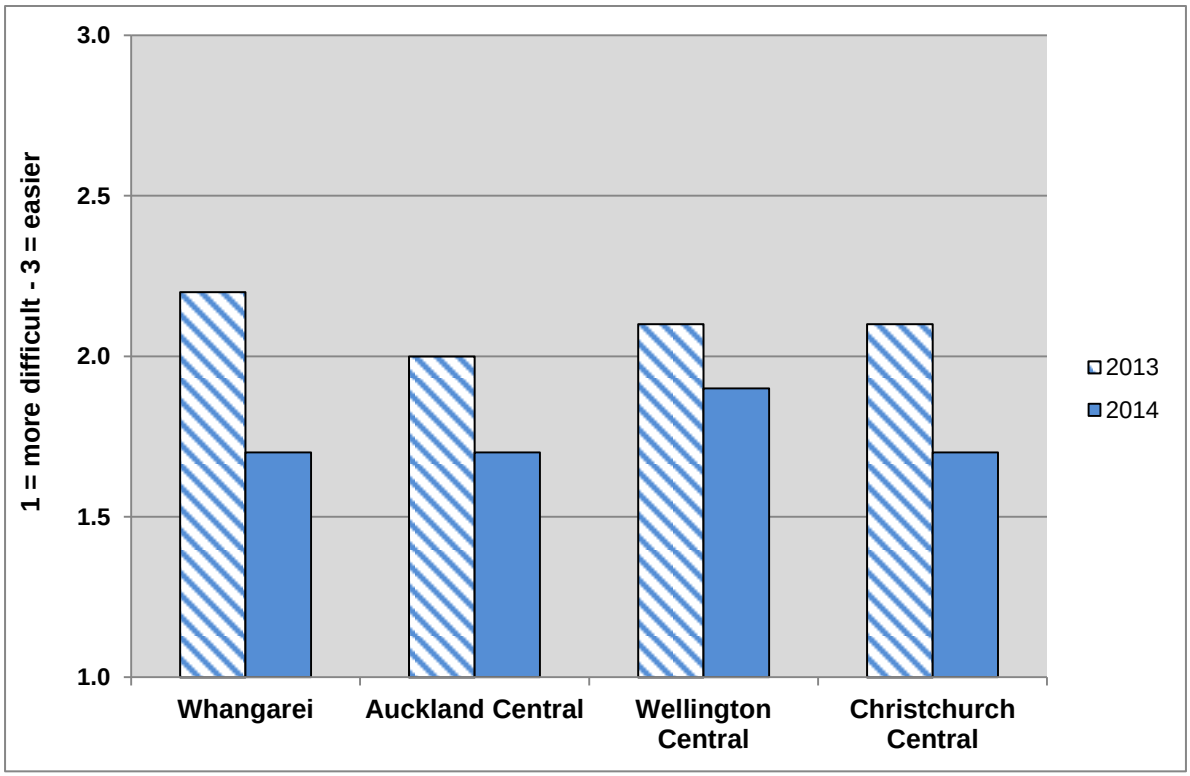
Change in availability of synthetic cannabinoids

Nearly half of the detainees described the availability of synthetic cannabinoids as 'more difficult' over the previous six months in 2014 (compared to only 16% in 2013) (Table 10.4). The availability of synthetic cannabinoids declined from 2013 to 2014 (down from 2.1 in 2013 to 1.7 in 2014, p<0.0001). The availability of synthetic cannabinoids declined in Whangarei (down from 2.2 in 2013 to 1.7, p=0.0018), Auckland Central (down from 2.0 in 2013 to 1.7 in 2014, p=0.0017), Wellington Central (down from 2.1 to 1.9, p=0.0644) and Christchurch Central (down from 2.1 in 2013 to 1.7 in 2014, p<0.0001) (Figure 10.8).

Table 10.4: Police detainees' perceptions of the change in availability of synthetic cannabinoids by location, 2014

Change in availability of synthetic cannabinoids (%)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=56)	2014 (n=45)	2013 (n=112)	2014 (n=129)	2013 (n=47)	2014 (n=47)	2013 (n=146)	2014 (n=121)	2013 (n=361)	2014 (n=341)
Easier [3]	38%	13%	17%	20%	21%	32%	26%	18%	24%	20%
Stable [2]	36%	31%	58%	24%	70%	21%	51%	26%	53%	26%
Fluctuates [2]	5%	11%	8%	7%	2%	2%	6%	2%	6%	5%
More difficult [1]	21%	44%	17%	49%	6%	45%	16%	53%	16%	49%
Average change in availability score (1=more difficult – 3=easier)	2.2	1.7	2.0	1.7	2.1	1.9	2.1	1.7	2.1	1.7
Overall recent change	Easier/ stable	More difficult/ stable	Stable/ easier	More difficult/ Stable	Stable	More difficult/ easier	Stable/ easier	More difficult/ Stable	Stable/ easier	More difficult/ stable

Figure 10.8: Change in availability of synthetic cannabinoids by location, 2013-2014



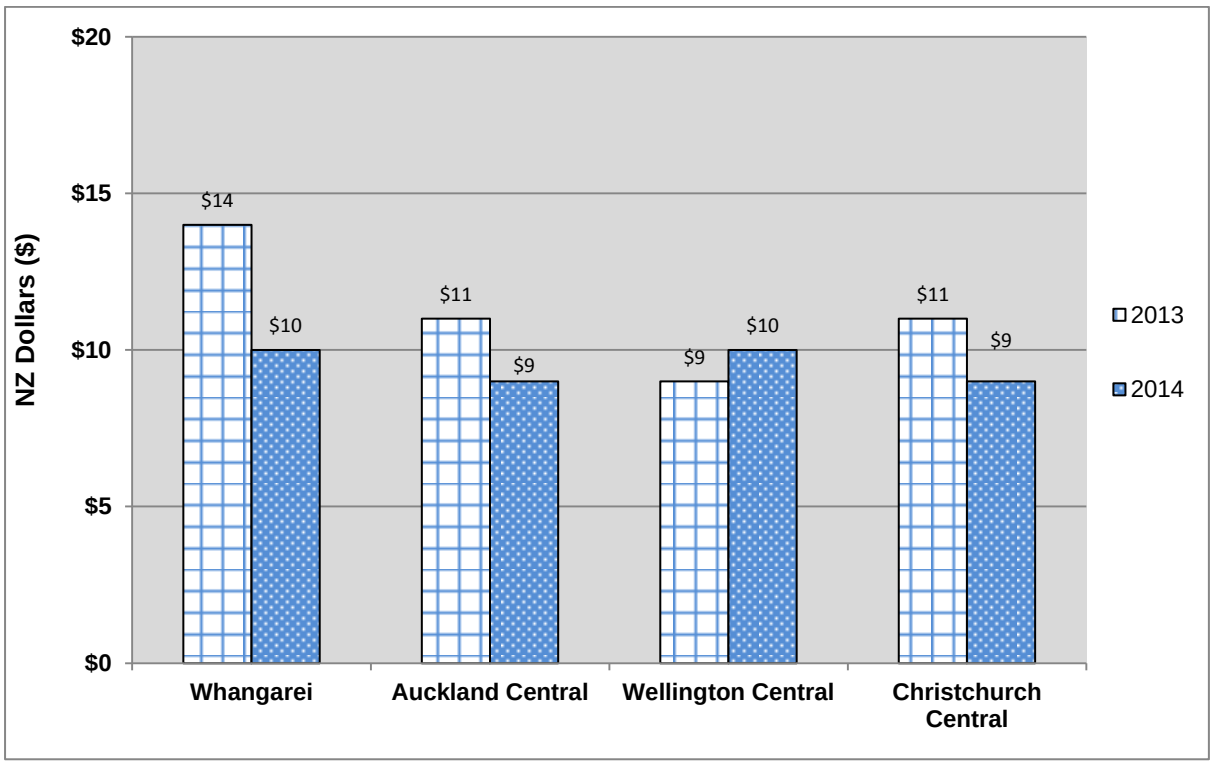
Current price of synthetic cannabinoids

The detainees reported paying a median price $8 for a gram of synthetic cannabinoids in 2014 (Table 10.5). The mean price per gram of synthetic cannabinoids declined from 2013 to 2014 (down from $11 to $9, p<0.0001). The mean price of a gram of synthetic cannabinoids declined in Whangarei from $14 in 2013 to $10 in 2014 (p=0.0028), in Auckland Central from $11 in 2013 to $9 in 2014 (p=0.0098), and in Christchurch Central from $11 in 2013 to $9 in 2014 (p<0.0001) (Figure 10.9). A possible explanation for the reported decline in price in 2014, despite the May 2014 bans, is the last occasion on which most of the detainees had purchased synthetic cannabinoids would have been made before the bans were enacted (i.e. when synthetic cannabinoid products were still legal).

Table 10.5: Current median (mean) price paid by police detainees for synthetic cannabinoids (NZD) by location, 2013-2014

Current price of synthetic cannabinoids ($)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=52)	2014 (n=37)	2013 (n=110)	2014 (n=104)	2013 (n=46)	2014 (n=44)	2013 (n=131)	2014 (n=108)	2013 (n=339)	2014 (n=293)
Median (mean) price per 'gram'	$12 ($14)	$8 ($10)	$10 ($11)	$8 ($9)	$8 ($9)	$10 ($10)	$10 ($11)	$8 ($9)	$10 ($11)	$8 ($9)

Figure 10.9: Mean price of synthetic cannabinoid per gram by location, 2013-2014



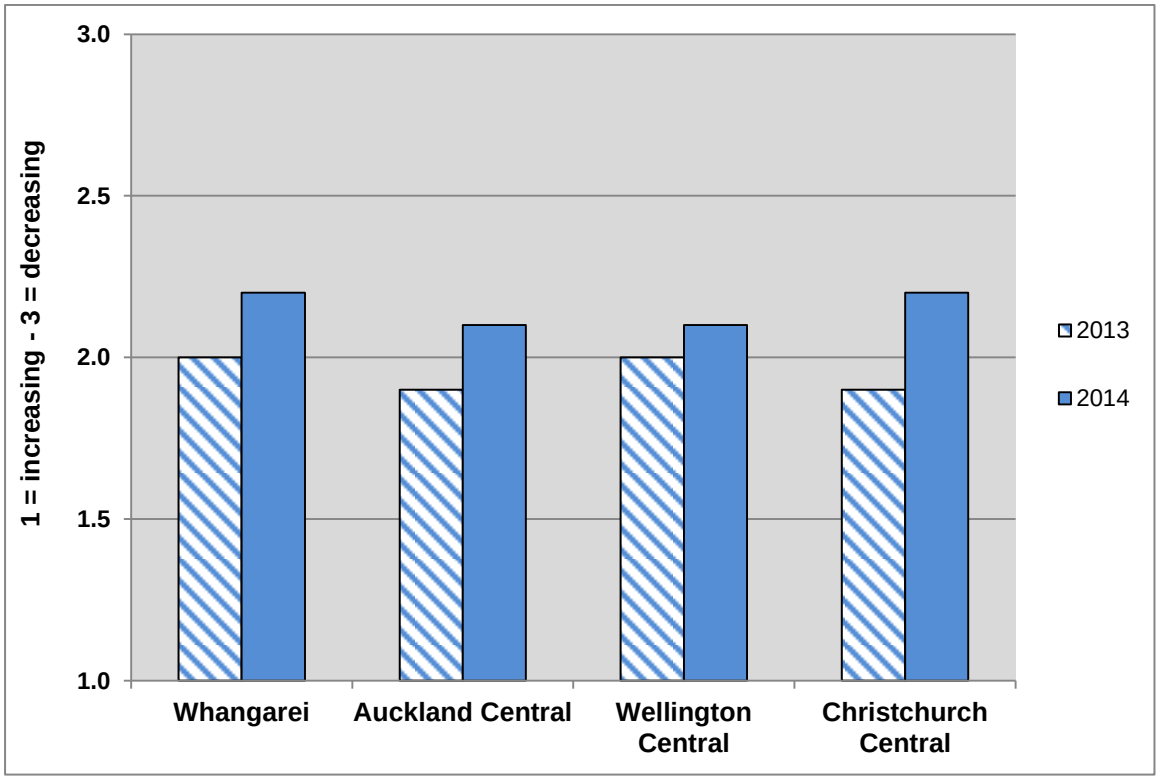
Change in the price of synthetic cannabinoids

The detainees were asked to report how the price of synthetic cannabinoids had changed over the previous six months. Note, this time frame would clearly include the period after the bans in May 2014. Thirty-two percent of detainees described the price of synthetic cannabis as 'increasing' in 2014 (compared to only 6% in 2013) (Table 10.6). The price of synthetic cannabinoids was reported to have increased from 2013 to 2014 (up from 1.9 to 2.1, $p<0.0001$). The price of synthetic cannabinoids was reported to be increasing from 2013 to 2014 in Whangarei (up from 2.0 to 2.2, $p=0.0576$), Auckland Central (up from 1.9 to 2.1, $p=0.0407$), and Christchurch Central (up from 1.9 to 2.2, $p<0.0001$) (Figure 10.10).

Table 10.6: Police detainees' perceptions of the change in the price of synthetic cannabinoids in the past six months by location, 2014

Change in price of synthetic cannabinoids (%)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=46)	2014 (n=37)	2013 (n=99)	2014 (n=99)	2013 (n=44)	2014 (n=40)	2013 (n=130)	2014 (n=102)	2013 (n=319)	2014 (n=278)
Increasing [3]	4%	46%	8%	29%	5%	30%	6%	30%	6%	32%
Fluctuating [2]	2%	14%	8%	11%	2%	5%	2%	17%	4%	13%
Stable [2]	85%	16%	70%	41%	84%	43%	72%	41%	75%	38%
Decreasing [1]	9%	24%	14%	18%	9%	23%	20%	12%	15%	17%
Average change in availability score (1=decreasing – 3=increasing)	2.0	2.2	1.9	2.1	2.0	2.1	1.9	2.2	1.9	2.1
Overall recent change	Stable	Increasing/ decreasing	Stable	Stable/ increasing	Stable	Stable/ increasing	Stable	Stable/ increasing	Stable	Stable/ increasing

Figure 10.10: Mean score of the change in the price of synthetic cannabinoids by location, 2013-2014



Current strength of synthetic cannabinoids

Sixty-four percent of the detainees described the current strength of synthetic cannabinoids as 'high' (Table 10.7). There was no overall change in the strength of synthetic cannabinoids from 2013 to 2014 (2.4 to 2.5, p=0.2055). The current strength of synthetic cannabinoids increased in Auckland Central from 2013 to 2014 (up from 2.2 to 2.5 p=0.0278). In 2014, there was no statistically significant difference between the sites with respect to perceptions of the strength of synthetic cannabinoids (p=0.6268).

Table 10.7: Police detainees' perceptions of current strength of synthetic cannabinoids in the past six months, 2013-2014

Current strength of synthetic cannabinoids (%)	**Whangarei**		**Auckland Central**		**Wellington Central**		**Christchurch Central**		**All sites**	
	2013 (n=55)	2014 (n=43)	2013 (n=118)	2014 (n=129)	2013 (n=51)	2014 (n=45)	2013 (n=149)	2014 (n=121)	2013 (n=373)	2014 (n=338)
High [3]	65%	72%	47%	61%	51%	47%	68%	70%	59%	64%
Medium [2]	16%	7%	22%	13%	29%	31%	13%	7%	19%	12%
Fluctuates [2]	5%	2%	7%	10%	10%	16%	3%	7%	6%	9%
Low [1]	13%	19%	24%	16%	10%	7%	15%	16%	17%	15%
Average strength score (1=low – 3=high)	2.5	2.5	2.2	2.5	2.4	2.4	2.5	2.5	2.4	2.5
Overall current status	High/ medium	High	High/ low	High/ low	High/ medium	High/ medium	High/ low	High	High/ medium	High/ Low

Change in strength of synthetic cannabinoids

The detainees were asked if the strength of synthetic cannabinoids had changed in the past six months in 2014 (Table 10.8). Forty-four percent reported the strength had been 'stable', 23% said it had been 'increasing', and 18% said it had been 'decreasing' in 2014. There was no difference in perceptions of the change in strength of synthetic cannabinoids from 2013 to 2014 (2.1 in both years). There was also no difference between the sites with respect to perceptions of the change in the strength of synthetic cannabinoids (p=0.7477).

Table 10.8: Police detainees' perceptions of change in strength of synthetic cannabinoids in the past six months, 2014

Change in strength of synthetic cannabinoids (%)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All sites	
	2013 (n=42)	2014 (n=30)	2013 (n=93)	2014 (n=104)	2013 (n=41)	2014 (n=35)	2013 (n=136)	2014 (n=103)	2013 (n=312)	2014 (n=272)
Increasing [3]	14%	%	13%	22%	27%	26%	18%	23%	17%	23%
Stable [2]	71%	47%	69%	47%	46%	46%	60%	40%	63%	44%
Fluctuating [2]	5%	7%	5%	11%	22%	9%	13%	24%	11%	15%
Decreasing [1]	10%	23%	13%	20%	5%	20%	9%	13%	10%	18%
Average change in strength (1=decreasing – 3=increasing)	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.1	2.1
Overall recent change	Stable	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ increasing	Stable/ Fluctuating	Stable/ increasing	Stable/ increasing

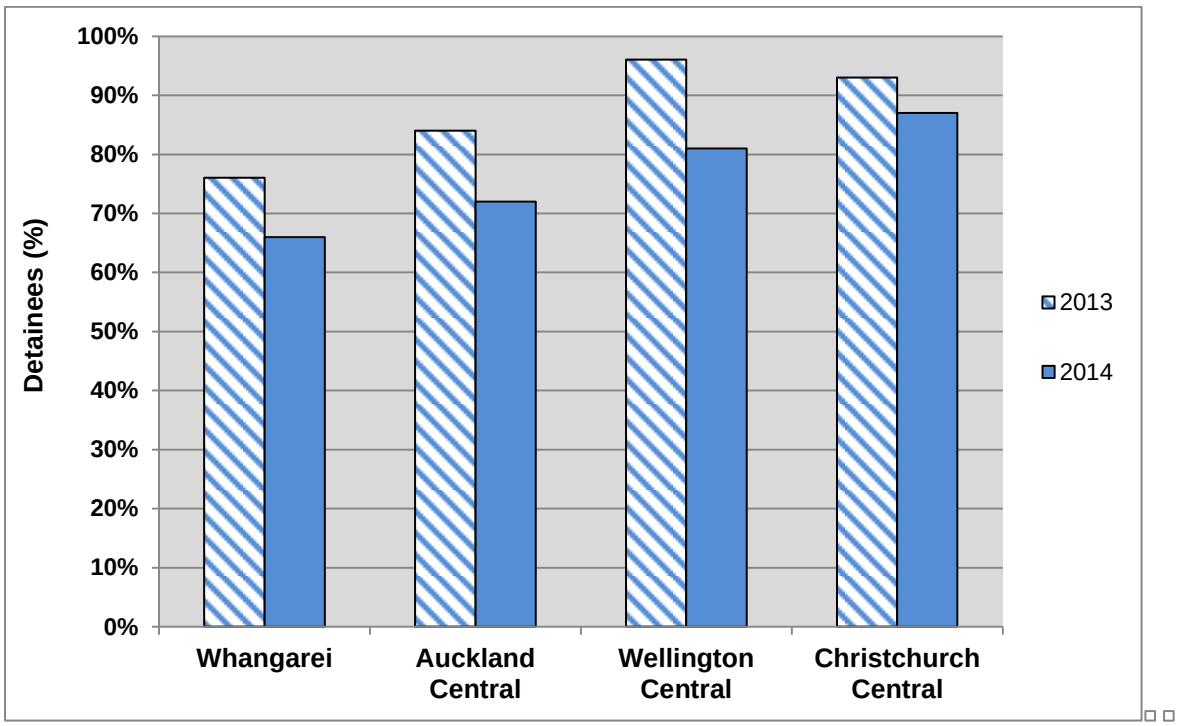
Time taken to purchase synthetic cannabinoids

Seventy-eight percent of the detainees who had used synthetic cannabinoids in the previous year were able to purchase them in one hour or less in 2014 (Table 10.9). Sixty-five percent could do so in 20 minutes or less. The proportion of detainees who could purchase synthetic cannabinoids in one hour or less declined from 88% in 2013 to 78% in 2014 (p=0.0118). Declines in the proportion who could purchase synthetic cannabinoids in one hour or less from 2013 to 2014 occurred in Auckland Central (down from 84% to 72%, p=0.0774) and in Christchurch Central (down from 93% to 87%, p=0.0858), and these declines were close to being statistically significant. Detainees in Whangarei were less likely to be able to purchase synthetic cannabinoids in one hour or less than those in Christchurch Central (66% vs. 87%, p=0.0164) and those in Auckland Central (66% vs. 72%, p=0.0271) (Figure 10.11).

Table 10.9: Time taken by police detainees to purchase synthetic cannabinoids by location, 2014

Time to purchase synthetic cannabinoids (%)	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All sites	
	2013 (n=53)	2014 (n=44)	2013 (n=117)	2014 (n=125)	2013 (n=48)	2014 (n=46)	2013 (n=148)	2014 (n=115)	2013 (n=366)	2014 (n=330)
Months	6	9	1	2	2	2	3	3	2	3
Weeks	2	2	1	2	0	2	1	2	1	2
Days	2	7	2	5	0	9	1	0	1	4
About one day	8	5	3	9	2	2	1	2	3	5
Hours	8	11	9	10	0	4	1	7	4	8
1 Hour	23	9	10	17	13	11	8	11	11	13
Less than 20 minutes	53	57	74	55	83	70	85	76	77	65

Figure 10.11: Proportion of police detainees who could purchase synthetic cannabinoids in one hour or less by location, 2013-2014



Effect of synthetic cannabinoids on the likelihood of becoming angry

Those detainees who reported using synthetic cannabinoids in the past 12 months were asked what effect using synthetic cannabinoids had on their likelihood of becoming angry. In 2014, 49% of the detainees said that using synthetic cannabinoids had 'no effect' on their likelihood of becoming angry. Eighteen percent said using synthetic cannabinoids was 'more likely' or 'much more likely' to make them become angry (Table 10.10). Conversely, 33% said using synthetic cannabinoids was 'less likely' or 'much less likely' to make them feel angry.

Table 10.10: Effect of synthetic cannabinoids on police detainees' likelihood of becoming angry, 2014

Effect of synthetic cannabinoids on likelihood of becoming angry	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All sites	
	2013 (n=61)	2014 (n=54)	2013 (n=112)	2014 (n=140)	2013 (n=53)	2014 (n=55)	2013 (n=148)	2014 (n=124)	2013 (n=374)	2014 (n=373)
Much more likely [5]	5%	11%	6%	6%	9%	7%	5%	10%	6%	8%
More likely [4]	5%	11%	4%	10%	13%	11%	12%	9%	9%	10%
No effect [3]	44%	35%	51%	49%	57%	45%	54%	57%	52%	49%
Less likely [2]	23%	20%	27%	21%	13%	18%	17%	11%	20%	17%
Much less likely [1]	23%	22%	12%	15%	8%	18%	11%	12%	13%	16%
Mean impact on likelihood to become angry (1=much less - 5=much more)	2.5	2.7	2.7	2.7	3.0	2.7	2.8	2.9	2.8	2.8

Summary

- The 2014 NZ-ADUM study was completed from mid-April to the end of July 2014, so a small proportion of interviews were conducted before 7th May ban of all legal high products, and some measures asked respondents to report on changes during their lifetimes, past 12 months, and past six months from interview, so the full impact of the May bans may not be within the respective reporting time frames

- The proportion of detainees who had ever tried synthetic cannabinoids increased from 54% in 2013 to 62% in 2014

- Lifetime experience of using synthetic cannabinoids increased sharply in Auckland Central (up from 48% in 2013 to 64% in 2014) and Wellington Central (up from 54% in 2013 to 73% in 2014)

- There was no overall change in the proportion of detainees who used synthetic cannabinoids in the previous 12 months (i.e. 47% in both years). However, the proportion of detainees from Auckland Central who had used synthetic cannabinoids increased from 40% in 2013 to 47% in 2014

- Conversely, the proportion of detainees who had tried synthetic cannabinoids in the past month declined from 29% in 2013 to 24% in 2014

- The number of days the detainees had used synthetic cannabinoids in the previous year increased from 67 days in 2013 to 110 days in 2014

- Sharp increases in the number of days synthetic cannabinoids were used occurred in Christchurch Central (up from 74 days in 2013 to 140 days in 2014) and Whangarei (up from 54 in 2013 to 86 in 2014)

- The proportion of detainees who felt dependent on synthetic cannabinoids in the previous year increased from 17% in 2013 to 30% in 2014

- The proportion of Whangarei detainees using synthetic cannabinoids before their arrest declined from 5% in 2013 to 1% in 2014

- The current availability of synthetic cannabinoids declined from 2013 to 2014

- The availability of synthetic cannabinoids declined in all sites from 2013 to 2014

- The price paid per gram of synthetic cannabinoids declined from $11 in 2013 to $9 in 2014

- The price of synthetic cannabinoids was reported to be increasing in Whangarei, Auckland Central and Christchurch Central over the previous six months

- Sixty-four percent of detainees described the current strength of synthetic cannabinoids as ‘high’ in 2014

- The proportion of detainees who could purchase synthetic cannabinoids in one hour or less declined from 88% in 2013 to 78% in 2014

- Decreases in the proportion who could purchase synthetic cannabinoids in one hour or less occurred in Auckland Central and Christchurch Central

Chapter 11 – Party pills

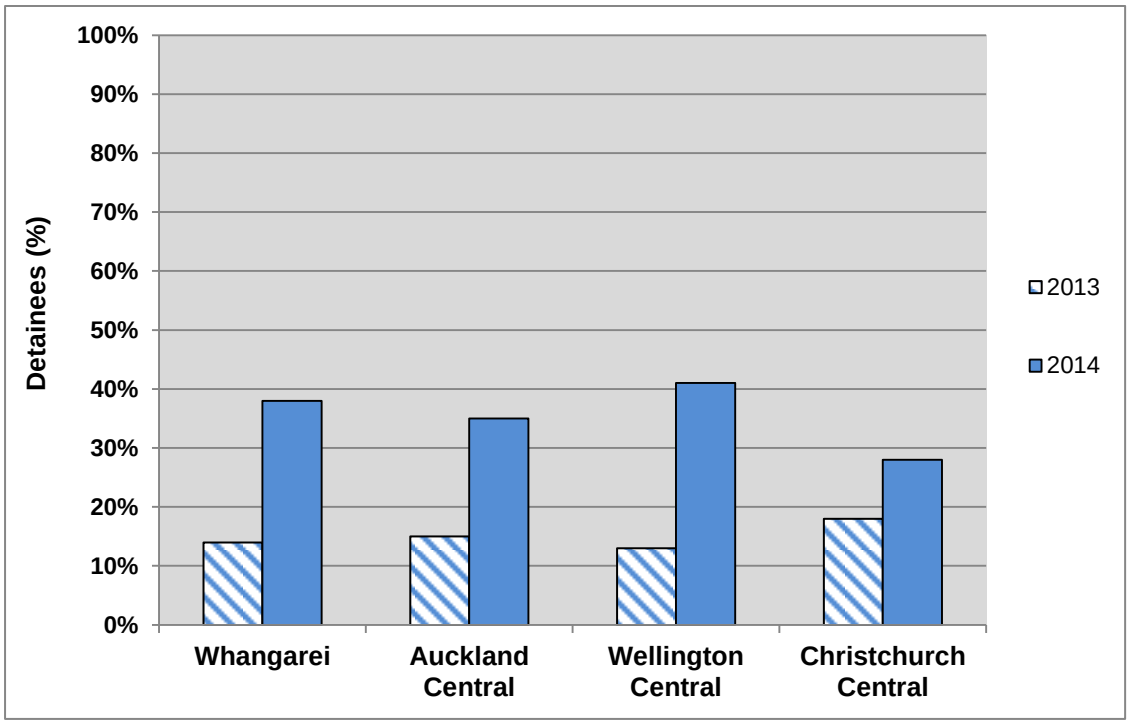
The term 'party pills' is a colloquial term used in New Zealand to describe a range of 'legal highs' which mimic the effects of ecstasy and are generally sold in tablet form from legal high stores and websites. The term is most clearly associated with 'BZP party pills' which contained combinations of benzylpiperazine and trifluoromethylphenylpiperazine and were legally sold during the mid-2000s (Wilkins, et al., 2007). A range of 'non-BZP party pills', containing compounds such as DMAA, were subsequent developed in the years following the scheduling of BZP in 2008 (Wilkins & Sweetsur, 2013).

The 2013 IDMS found approximately 10% of frequent illegal drug users reported using 'party pills' in the previous six months (Wilkins, et al., 2014b). Fifty-nine percent of these frequent drug users described the current strength of party pills as 'low' and 36% said the strength was 'decreasing' (Wilkins, et al., 2014b). A small number of party pill products were approved for legal sale during the interim psychoactive substances regime (Wilkins, et al., 2014b). However, significant minorities of frequent drug users reported purchasing party pills from a 'drug dealer' (22%), 'friend' (19%) and a 'pub/bar/club' (19%) during this time, indicating sales often occur within the black market. This established presence of party pills in the black market may diminish the impact of prohibiting previously approved party pills which occurred in May 2014.

Use of party pills

Thirty-four percent of the police detainees had tried party pills at some point in their lives, 6% had used them in the previous 12 months, and <1% had used them in the previous month in 2014 (Table 11.1 and Figure 11.1). The proportion of detainees who had ever tried party pills increased from 16% in 2013 to 34% in 2014 ($p<0.0001$). There was an increase in the proportion of detainees who had tried party pills in Whangarei (up from 14% to 38%, $p<0.0001$), Auckland Central (up from 15% to 34%, $p<0.0001$), Wellington Central (up from 13% to 41%, $p<0.0001$) and Christchurch Central (up from 18% to 28%, $p=0.0047$).

Figure 11.1: Proportion of police detainees who had ever used party pills by location, 2013-



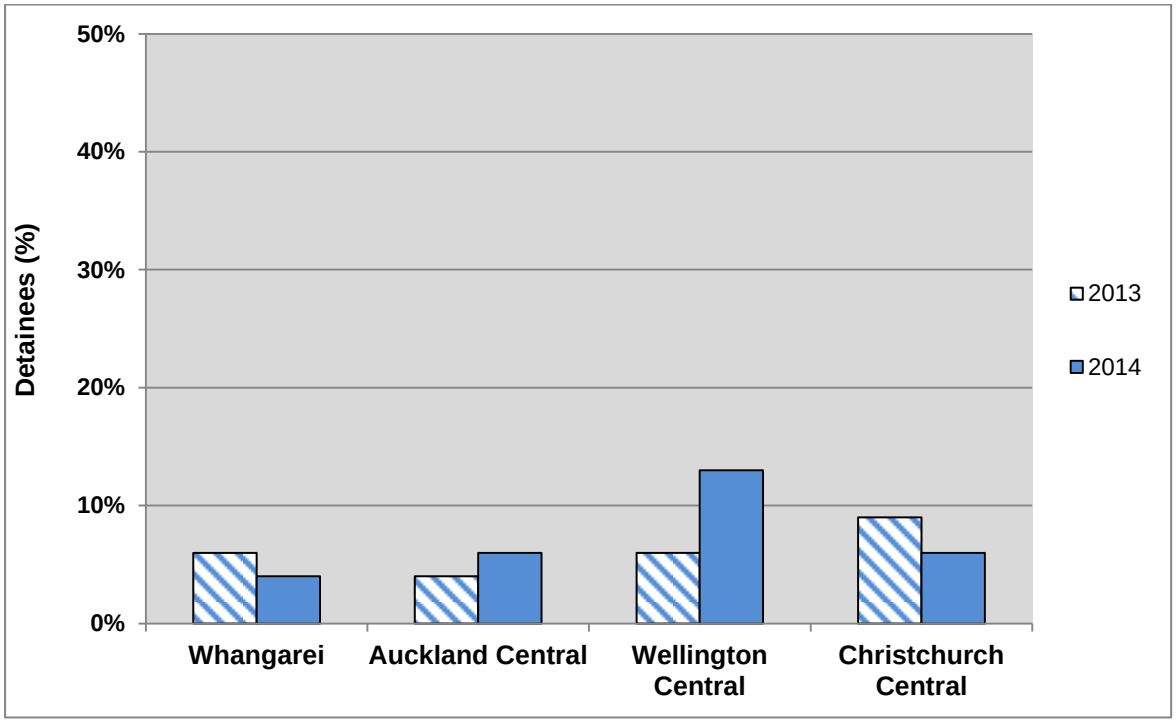
There was no change in the use of party pills in the previous year from 2013 to 2014 (6% in both years). The proportion of detainees who used party pills in the past year increased in Wellington Central from 6% in 2013 to 13% in 2014, and this increase was close to being statistically significant (p=0.0840) (Figure 11.2). In 2014, Wellington Central detainees were more likely than those from Whangarei to have used party pills in the previous 12 months (12% vs. 3%), and again this difference was close to being statistically significant (p=0.0729).

Table 11.1: Police detainees' patterns of party pill use by location, 2013-2014

Use of party pills	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=147)	2014 (n=151)	2013 (n=288)	2014 (n=315)	2013 (n=106)	2014 (n=95)	2013 (n=275)	2014 (n=273)	2013 (n=816)	2014 (n=834)
Ever used (%)	14	38	15	35	13	41	18	28	16	34
Used in past 12 months (%)	6	4	4	6	6	13	9	6	6	6
Mean number of days used in past 12 months**	3	1	3	11	6	24	4	4	4	12

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

Figure 11.2: Proportion of police detainees who had used party pills in the previous 12 months by location, 2013-2014



Frequency of party pill use

The detainees had used party pills on a mean of 12 days in the past year, and this had not changed from 2013 (p=0.6116).

Dependency on party pills

Four percent of the detainees reported feeling dependent on party pills in 2014. In comparison none of the detainees reported feeling dependent of party pills in 2013.

Using at time arrest

Less than <1% of detainees were using party pills at the time of their arrest, and this had not changed from previous years (p=0.9906).

Current availability of party pills

The detainees described the current availability of party pills as 'very easy/easy' in 2014 (Table 11.2). There was no change in the current availability of party pills from 2013 to 2014 (i.e. 3.4 in both years). There was also no difference between the locations with respect to the current availability of party pills (p=0.2231).

Table 11.2: Police detainees' perceptions of the current availability of party pills, 2013-2014

Current availability of party pills (%)	All Sites	
	2013 (n=51)	2014 (n=47)
Very easy [4]	55%	57%
Easy [3]	33%	28%
Difficult [2]	6%	6%
Very difficult [1]	6%	9%
Average availability score (1=very difficult – 4=very easy)	3.4	3.4
Overall current status	Very easy/ easy	Very easy/ easy

Change in availability of party pills

Fifty-four percent of the detainees described the availability of party pills as 'stable', 23% said it was 'more difficult', and 21% 'easier' in 2014 (Table 11.3). There was no difference in perceptions of the change in the availability of party pills from 2013 to 2014 (p=0.8999).

Table 11.3: Police detainees' perceptions of the change in availability of party pills, 2013-2014

Change in availability of party pills (%)	All Sites	
	2013 (n=45)	2014 (n=48)
Easier [3]	16%	21%
Stable [2]	62%	54%
Fluctuates [2]	4%	2%
More difficult [1]	18%	23%
Average change in availability score (1=more difficult – 3=easier)	2.0	2.0
Overall recent change	Stable/ more difficult	Stable/ more difficult

Change in the price of party pills

The detainees reported the price of party pills had been 'stable/fluctuating' over the previous six months in 2014 (Table 11.4). Sixty-four percent described the price of party pills as 'stable' and 18% as 'fluctuating'. There was no statistically significant change in perceptions of the change in price of party pills from 2013 to 2014 (p=0.3557).

Table 11.4: Police detainees' perceptions of the change in price of party pills in the past six months, 2013-2014

Change in price of party pills (%)	All Sites	
	2013 (n=34)	2014 (n=33)
Increasing [3]	6%	12%
Fluctuating [2]	6%	18%
Stable [2]	79%	64%
Decreasing [1]	9%	6%
Average change in availability score (1=decreasing – 3=increasing)	2.0	2.1
Overall recent change	Stable	Stable/ fluctuating

Current strength of party pills

Forty-five percent of the detainees described the current strength of party pills as 'low' in 2014. However, 27% described the current strength as 'high' (Table 11.5). There was no change in the current strength of party pills from 2013 to 2014 (p=0.8114).

Table 11.5: Police detainees' perceptions of current strength of party pills in the past six months, 2013-2014

Current strength of party pills (%)	All sites	
	2013 (n=50)	2014 (n=49)
High [3]	18%	27%
Medium [2]	42%	24%
Fluctuates [2]	6%	4%
Low [1]	34%	45%
Average strength score (1=low – 3=high)	1.8	1.9
Overall current status	Medium/ low	Low/ high

Change in strength of party pills

The detainees described the change in the strength of party pills as 'stable/decreasing' in 2014 (Table 11.6). Twenty-six percent reported the strength of party pills had been 'decreasing' in 2014. There was no difference in perceptions of the change in strength of party pills from 2013 to 2014 (p=0.9727).

Table 11.6: Police detainees' perceptions of change in strength of party pills in the past six months, 2013-2014

Change in strength of party pills (%)	All sites	
	2013 (n=38)	2014 (n=34)
Increasing [3]	3%	15%
Stable [2]	74%	53%
Fluctuating [2]	8%	6%
Decreasing [1]	16%	26%
Average change in strength (1=decreasing – 3=increasing)	1.9	1.9
Overall recent change	Stable	Stable/ decreasing

Time taken to purchase party pills

Seventy-five percent of the detainees who had used party pills in the past year were able to purchase them in one hour or less in 2014 (Table 11.7). Fifty-four percent could purchase party pills in 20 minutes or less. There was no change in the proportion of detainees who could purchase party pills in one hour or less from 2013 to 2014 (p=0.6638).

Table 11.7: Time taken by police detainees to purchase party pills, 2013-2014

Time to purchase party pills (%)	All sites	
	2013 (n=50)	2014 (n=48)
Months	6	2
Weeks	0	0
Days	2	8
About one day	6	4
Hours	8	10
1 Hour	20	21
Less than 20 minutes	58	54

Effect of party pills on the likelihood of becoming angry

Those detainees who reported using party pills in the past 12 months were asked what effect using party pills had on their likelihood of becoming angry. In 2014, 64% of the detainees said that using party pills had 'no effect' on their likelihood of becoming angry, and 15% said party pills were ' much less likely' to make them become angry (Table 11.8).

Table 11.8: Effect of party pills on police detainees' likelihood of becoming angry, 2014

Effect of party pills on likelihood of becoming angry	All sites	
	2013 (n=52)	2014 (n=53)
Much more likely [5]	6%	6%
More likely [4]	8%	9%
No effect [3]	63%	64%
Less likely [2]	15%	6%
Much less [1]	8%	15%
Mean impact on likelihood to become angry (1=much less -5=much more)	2.9	2.9

Summary

- The proportion of detainees who had ever tried party pills in their lifetimes increased from 16% in 2013 to 34% in 2014
- The proportion of detainees who had tried party pills at some point in their lives increased in all four locations in 2014
- There was no overall change in the use of party pills in the previous year from 2013 to 2014 (6% in both years)
- However, the proportion of detainees who had used party pills in the past year increased in Wellington Central from 6% in 2013 to 13% in 2014
- The detainees had used party pills on a mean of 12 days in the previous year in 2014, and this had not changed from 2013
- Only 4% of party pill users reported feeling dependent on party pills in 2014
- The current availability of party pills was described as 'very easy/easy' in 2014
- There was no statistically significant change in the availability of party pills from 2013 to 2014

- Forty-five percent of detainees described the current strength of party pills as ‘low’ in 2014

- Sixty-four percent of the detainees who had used party pills said they had ‘no impact’ on their likelihood of becoming angry

Chapter 12 – Salvia divinorum

Introduction

Salvia divinorum is a hallucinogenic plant indigenous to the Oaxaca region of southern Mexico. Salvia is generally smoked and can induce profound, but brief, hallucinations which last from 5-10 minutes immediately following ingestion (Lange et al., 2010). Salvia is generally understood to have low toxicity and addictive potential. Salvia has been prohibited outright in a number of countries, including Australia and Japan, or subject to various levels of regulatory control of use and sale in others, such as in France and Spain.

Salvia was widely sold in legal high stores in New Zealand prior to passage of the *Psychoactive Substances Act 2013* (PSA) in mid-July-2013. It was sold in the form of dried leaves, concentrated leaf extracts, and in blends with other herbs such as Damiana leaves. These products are sometimes fortified with the active ingredient (i.e. salvinorin A) to provide greater potency, and are labelled according to the multiplicative factor present (e.g. 5x, 10x, etc).

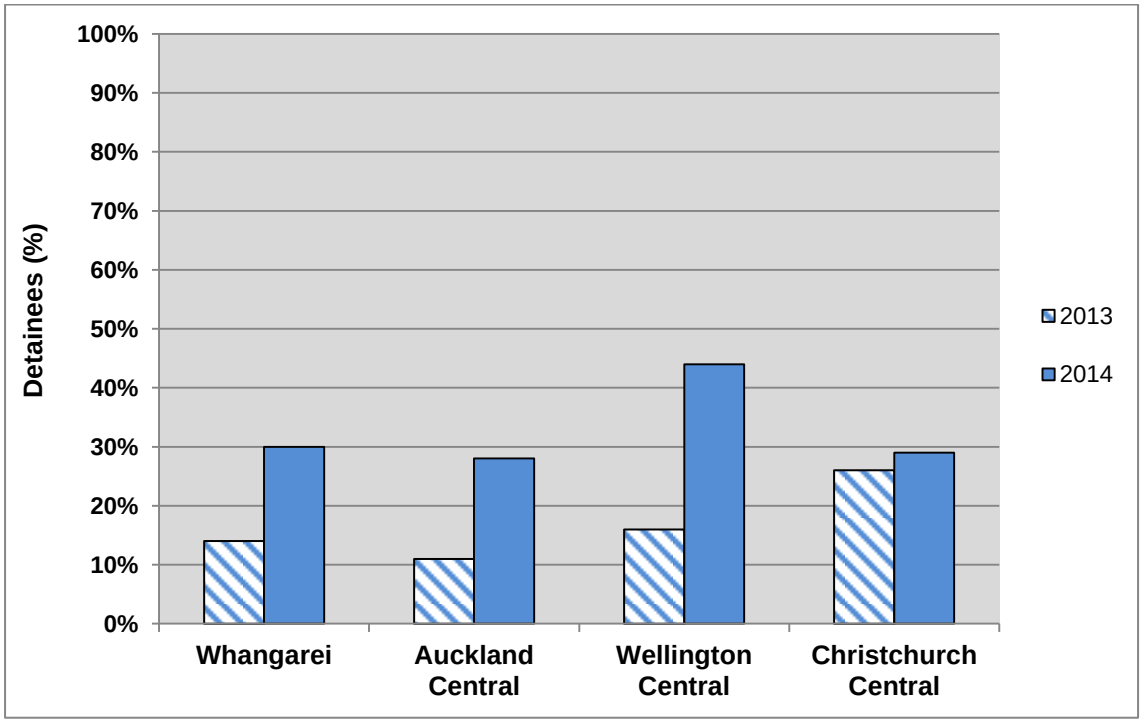
Following passage of the PSA, recreational products containing salvia were withdrawn from the market under the provisions of the PSA which prohibited the sale of unapproved psychoactive products. However, some specialized retailors continued to sell live salvia plants on the basis the plant form was covered by the herbal remedies regulations.

Use of salvia divinorum

Thirty percent of the police detainees had tried salvia divinorum at some point in their lives, 8% had used it in the previous 12 months, and 1% had used it in the previous month in 2014 (Table 12.1). The proportion of detainees who had ever tried salvia increased sharply from 13% in 2013 to 30% in 2014 ($p<0.0001$). Sharp increases in the lifetime use of salvia were found in Whangarei (up from 14% to 30%, $p=0.0004$), Auckland Central (up from 11% to 28%, $p<0.0001$) and Wellington Central (up from 16% to 44%, $p<0.0001$) (Figure 12.1). Detainees in Wellington Central were more likely to have ever tried salvia than those in

Auckland Central (44% vs. 28%, p=0.0166) and Christchurch Central (44% vs. 29%, p=0.0271).

Figure 12.1 Proportion of police detainees who had ever used salvia divinorum by location, 2013-2014



There was no overall change in the proportion of detainees who had used salvia in the previous 12 months from 2013 to 2014 (i.e. 8% in both years). However, the proportion of detainees who had used salvia in the previous year decreased in Christchurch Central from 13% in 2013 to 7% in 2014 (p=0.0190) (Figure 12.2).

Figure 12.2: Figure 12.2: Proportion of police detainees who had used salvia divinorum in the past 12 months by location, 2013-2014

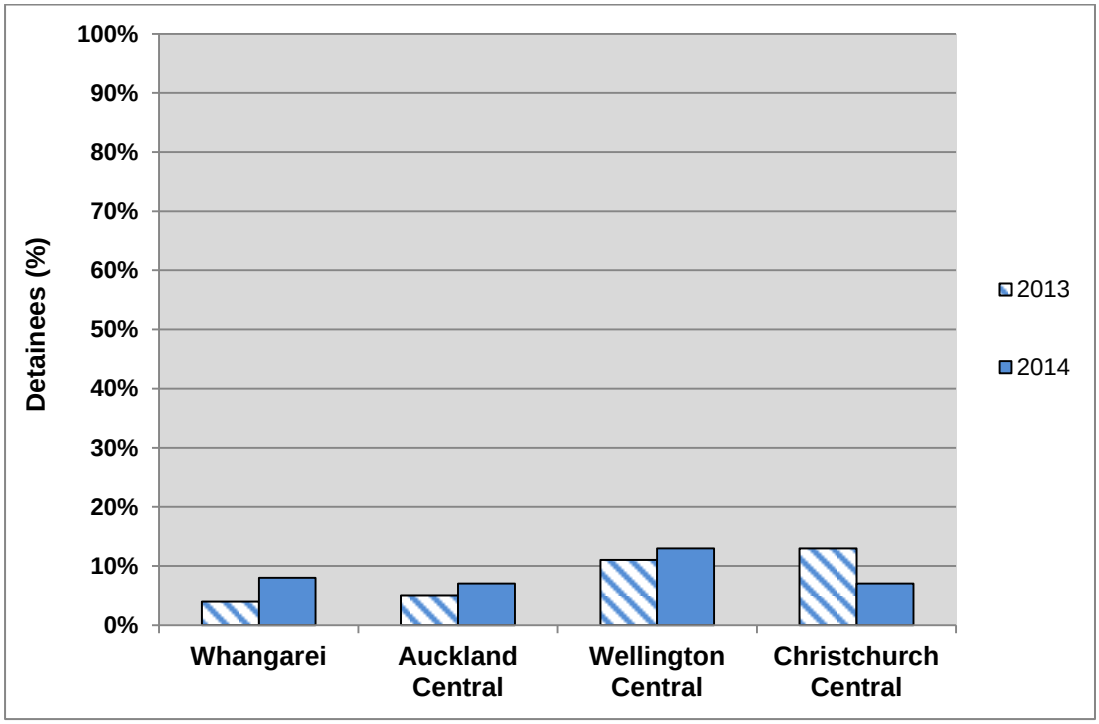


Table 12.1: Police detainees' patterns of salvia divinorum use by location, 2014

Use of salvia divinorum	Whangarei		Auckland Central		Wellington Central		Christchurch Central		All Sites	
	2013 (n=148)	2014 (n=151)	2013 (n=285)	2014 (n=315)	2013 (n=106)	2014 (n=95)	2013 (n=278)	2014 (n=273)	2013 (n=817)	2014 (n=834)
Ever used (%)	14	30	11	28	16	44	26	29	17	30
Used in past 12 months (%)	4	8	5	7	11	13	13	7	8	8
Mean number of days used in past 12 months**	25	2	23	10	2	2	2	3	7	4

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

The detainees had used salvia on a mean of only four days in 2014. Only one detainee reported they felt dependent on salvia in 2014, and only one detainee had been using salvia at the time of their arrest.

Current availability of salvia divinorum

While 38% of the detainees described the current availability of salvia as 'very easy', 24% described it as 'very difficult' to obtain (Table 12.2). The current availability of salvia decreased from 2013 to 2014, although this decline was not statistically significant

(p=0.0964). The decline in the availability of salvia was greatest in Christchurch Central (down from 3.3 in 2013 to 2.6 in 2014, p=0.0330) (Figure 12.3).

Figure 12.3: Current availability of salvia divinorum by location, 2013-2014

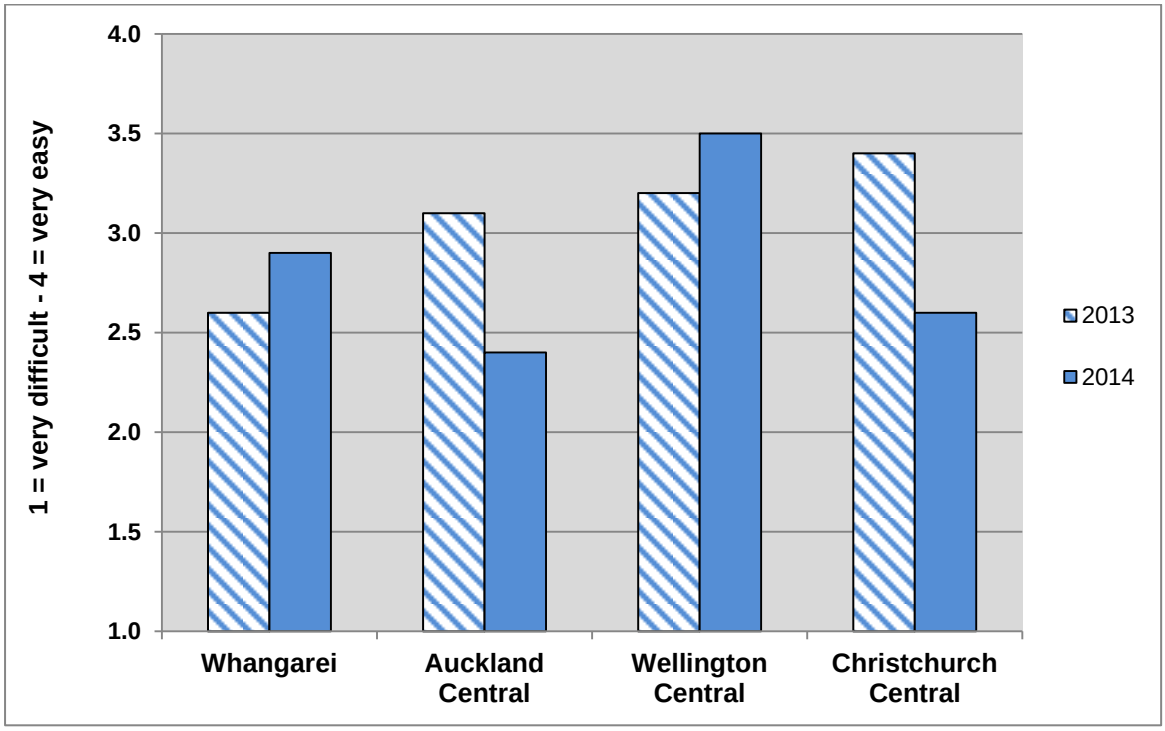


Table 12.2: Police detainees' perceptions of the current availability of salvia divinorum, 2013-2014

Current availability of salvia divinorum (%)	All Sites	
	2013 (n=65)	2014 (n=55)
Very easy [4]	52%	38%
Easy [3]	26%	22%
Difficult [2]	8%	16%
Very difficult [1]	14%	24%
Average availability score (1=very difficult – 4=very easy)	3.2	2.8
Overall current status	Very easy/ easy	Very easy/ very difficult

Change in availability of salvia divinorum

The detainees reported the availability of salvia had been 'more difficult/stable' over the previous six months in 2014 (Table 12.3). Forty-one percent of the detainees described the availability of salvia as 'more difficult' in 2014. Again, there was a large fall in the availability of salvia in Christchurch Central (down from 2.2 to 1.6, p=0.0102) (Figure 12.4).

Figure 12.4: Change in availability of salvia divinorum by location, 2013-2014

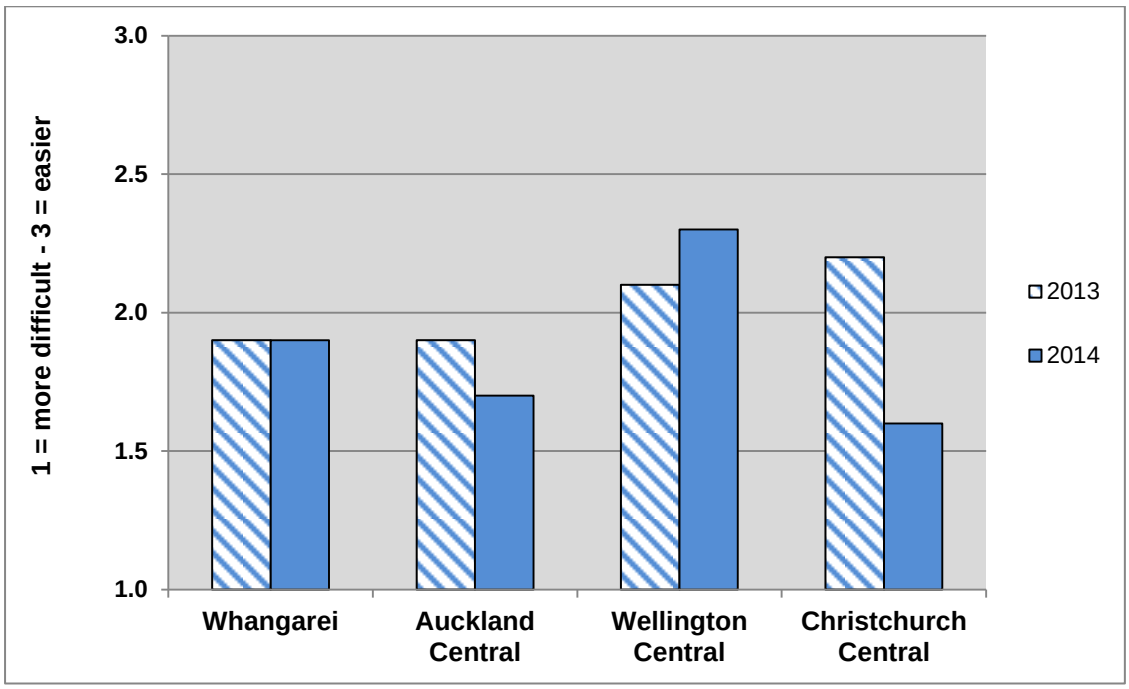


Table 12.3: Police detainees' perceptions of the change in availability of salvia divinorum, 2013-2014

Change in availability of salvia divinorum (%)	All Sites	
	2013 (n=57)	2014 (n=49)
Easier [3]	18%	22%
Stable [2]	68%	31%
Fluctuates [2]	4%	6%
More difficult [1]	11%	41%
Average change in availability score (1=more difficult – 3=easier)	2.1	1.9
Overall recent change	Stable/ easier	More difficult/ stable

Change in the price of salvia divinorum

The detainees reported the price of salvia to be 'stable/increasing' over the previous six months in 2014. The detainees were more likely to say the price of salvia was increasing from 2013 to 2014 (up from 2.0 to 2.2), but this change was not statistically significant (p=0.1620) (Table 12.4).

Table 12.4: Police detainees' perceptions of the change in the price of salvia divinorum in the past six months by location, 2013-2014

Change in price of salvia divinorum (%)	All Sites	
	2013 (n=47)	2014 (n=31)
Increasing [3]	6%	23%
Fluctuating [2]	9%	10%
Stable [2]	83%	61%
Decreasing [1]	2%	6%
Average change in availability score (1=decreasing – 3=increasing)	2.0	2.2
Overall recent change	Stable	Stable/ increasing

Current strength of salvia divinorum

The detainees described the current strength of salvia to be 'high/fluctuating' in 2014. Sixty–eight percent described the current strength of salvia as 'high' in 2014 (Table 12.5). The strength of salvia declined from 2013 to 2014 (down from 2.8 to 2.5, p=0.0308).

Table 12.5: Police detainees' perceptions of current purity of salvia divinorum in the past six months, 2013-2014

Current strength of salvia divinorum (%)	All sites	
	2013 (n=64)	2014 (n=53)
High [3]	85%	68%
Medium [2]	5%	4%
Fluctuates [2]	2%	15%
Low [1]	8%	13%
Average strength score (1=low – 3=high)	2.8	2.5
Overall current status	High	High/ fluctuates

Change in strength of salvia divinorum

Sixty-seven percent of the detainees described the strength of salvia as 'stable' over the previous six months in 2014 (Table 12.6). There was no statistically significant difference in perceptions of the change in strength of salvia from 2013 to 2014 (p=0.5117).

Table 12.6: Police detainees' perceptions of change in strength of salvia divinorum in the past six months, 2013-2014

Change in strength of salvia divinorum (%)	All sites	
	2013 (n=46)	2014 (n=42)
Increasing [3]	17%	14%
Stable [2]	78%	67%
Fluctuating [2]	2%	14%
Decreasing [1]	2%	5%
Average change in strength (1=decreasing – 3=increasing)	2.2	2.1
Overall recent change	Stable	Stable/ increasing

Time taken to purchase salvia divinorum

Seventy-one percent of the detainees who had used salvia in the past year were able to purchase it in one hour or less in 2014 (Table 12.7). Fifty-one percent could purchase salvia in 20 minutes or less. There was no statistically significant change in the proportion of users who could purchase salvia in one hour or less from 2013 to 2014 (79% to 71%, p=0.5569).

Table 12.7: Time taken by police detainees to purchase salvia divinorum by location, 2014

Time to purchase salvia divinorum (%)	All sites	
	2013 (n=67)	2014 (n= 49)
Months	6	6
Weeks	0	0
Days	3	2
About one day	5	8
Hours	7	12
1 Hour	12	20
Less than 20 minutes	67	51

Effect of salvia divinorum on the likelihood of becoming angry

Those detainees who reported using salvia in the past 12 months were asked what effect using it had on their likelihood of becoming angry. In 2014, 56% of the detainees said that using salvia had 'no effect' on their likelihood of becoming angry (Table 12.8). A further 31% said it was 'less likely' or 'much less likely' to make them feel angry.

Table 12.8: Effect of salvia divinorum on police detainees' likelihood of becoming angry, 2014

Effect of salvia divinorum on likelihood of becoming angry	All sites	
	2013 (n=65)	2014 (n= 61)
Much more likely [5]	0%	5%
More likely [4]	5%	8%
No effect [3]	55%	56%
Less likely [2]	23%	13%
Much less likely [1]	17%	18%
Mean impact on likelihood to become angry (1=much less -5=much more)	2.5	2.7

Summary

- The proportion of detainees who had ever tried salvia in their lifetimes increased sharply from 13% in 2013 to 30% in 2014
- Sharp increases in the lifetime use of salvia were found in Whangarei (up from 14% to 30%), Auckland Central (up from 11% to 28%) and Wellington Central (up from 16% to 44%)
- In 2014, detainees in Wellington Central were more likely to have ever tried salvia than those in Auckland Central (44% vs. 28%) and Christchurch Central (44% vs. 29%)
- There was no overall change in the proportion of detainees who had used salvia in the previous 12 months from 2013 to 2014 (i.e. 8% in both years)
- However, the proportion of detainees who had used salvia in the previous year decreased in Christchurch Central from 13% in 2013 to 7% in 2014
- The detainees had used salvia on a mean of only four days in 2014
- Only one detainee had been using salvia prior to their arrest
- The availability of salvia declined from 2013 to 2014
- The decline in the availability of salvia was greatest in Christchurch Central

- The detainees were more likely to say the price of salvia was ‘increasing’ from 2013 to 2014

- Sixty-eight percent of users reported the strength of salvia as ‘high’ in 2014

- Seventy-one percent of the detainees who had used salvia were able to purchase it in one hour or less in 2014

- Fifty-six percent of the detainees said that using salvia had ‘no effect’ on their likelihood of becoming angry, and a further 31% said it was less likely to make them angry

Chapter 13 – Drug testing results

Introduction

The original United States ADAM research methodology included the capacity to verify detainees' self-reported information on recent drug use with biological testing for the presence of drug use in urine samples. Subsequent comparisons of the self-reported data on drug use and urine test results suggests there is a fairly high level of truthfulness among the interviewed detainees, although this can vary according to the drug type in question and related legal penalties and social stigma (see Office of National Drug Control Policy, 2009). For example, in the United States ADAM programme, 82% of those testing positive for cannabis use had also self-reported use, 55% of those testing positive for methamphetamine use had self-reported use, and 48% of those testing positive for heroin use had self-reported use (Office of National Drug Control Policy, 2009).

The validity of the comparison between self-reported data and the corresponding urine test is also affected by the capacity of the test to detect different drug types, and the ability of users to correctly recall and identify the drug types they have used. Some drug types, such as cannabis, can stay in a user's system for many weeks, while others, such as methamphetamine, may only be detectable up to a few days after use. A drug user may honestly believe they have consumed one drug type, for example MDMA, but may have actually been sold a tablet containing a range of other substitute compounds which mimic the effects of MDMA, such as BZP, mephedrone and ketamine.

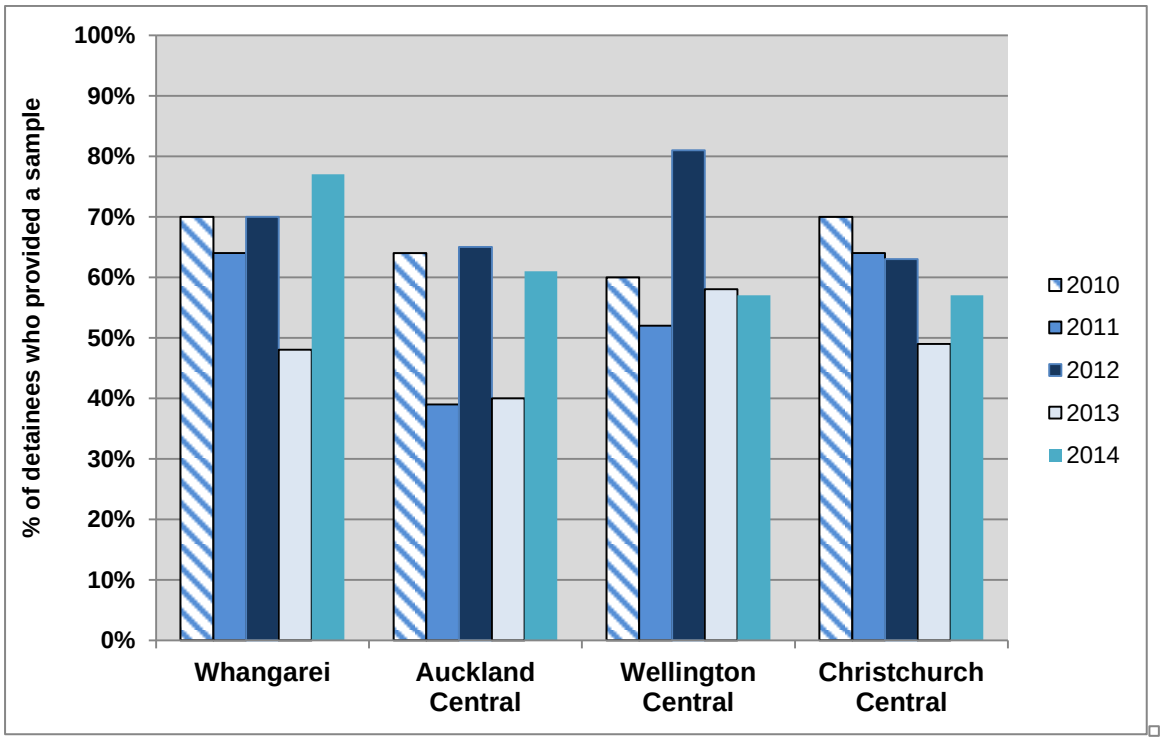
Many synthetic cannabinoid compounds are currently not detectable by routine drug testing, and legal high users have indicated they choose to use synthetic cannabinoid products specifically to avoid a positive drug test (Perrone, et al., 2013). Developing routine drug tests to detect synthetic cannabinoids is complicated by the large number of synthetic cannabinoid compounds available, and the speed at which manufacturers change the active compounds in products to avoid the most recent bans. The ESR drug testing completed for

NZ-ADUM is able to detect (natural) cannabis, methamphetamine, amphetamine, cocaine, morphine, methadone, codeine and BZP. A total of 212 detainees provided urine samples for testing as part of the 2014 NZ-ADUM survey wave. These samples were collected from the four sites in the same distribution as previous years to facilitate consistent year-to-year comparisons.

Urine test results for cannabis use

The proportion of the detainees testing positive for cannabis use decreased from 68% in 2012 to 50% in 2013 (p=0.0006), and then increased to 61% in 2014, although the later increase was not statistically significant (p=0.1307) (Table 13.1). This 'decline and recovery' trend was strongest in Auckland Central where positive tests for cannabis decreased from 65% in 2012 to 40% in 2013 (p=0.0294), and then increased to 61% in 2014, and in this case the final increase was close to being statistically significant (p=0.0808) (Figure 13.1).

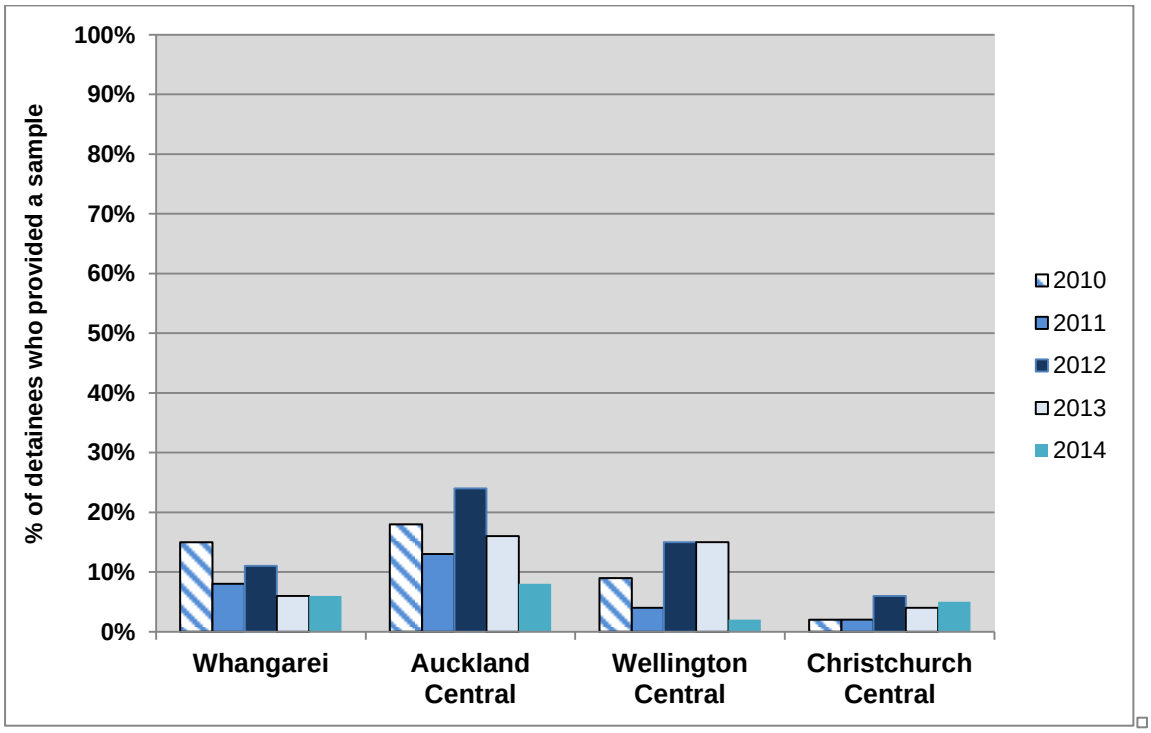
Figure 13.1: Proportion of detainees who tested positive for cannabis at the time of interview by location (of the 209 detainees tested), 2010-2014



Urine test results for methamphetamine use

The proportion of detainees testing positive for methamphetamine declined from 15% in 2012 to 5% in 2014 (p=0.0120). Positive tests for methamphetamine also declined slowly from 12% in 2013 to 5% in 2014, although this decline was not statistically significant (p=0.1111). There were insufficient numbers of positive tests for methamphetamine use within each site to make reliable comparisons over the five years. However, (Figure 13.2) suggests the decline in positive tests for methamphetamine occurred in all sites *except for Christchurch*.

Figure 13.2: Proportion of detainees who tested positive for methamphetamine at the time of interview by location (of the 209 detainees tested), 2010-2014



Urine test results for amphetamine use

The proportion of detainees testing positive for amphetamine increased from 6% in 2011 to 16% in 2012 (p=0.0271). Positive tests for amphetamine declined from 16% in 2012 to 8% in 2014, although this decline was not statistically significant (p=0.1453).

Urine test results for morphine use

A lower proportion of detainees tested positive for morphine use from 2011 to 2014 (down from 6% to 1%), although this decline was not statistically significant (p=0.1989).

Table 13.1: Proportion of police detainees who tested positive for drug use at the time of interview (of the 209 detainees tested), 2010-2014

Positive urine test for drug use (% detainees)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=20)	2011 (n=25)	2012 (n=37)	2013 (n=31)	2014 (n=31)	2010 (n=72)	2011 (n=71)	2012 (n=66)	2013 (n=68	2014 (n=77)	2010 (n=53)	2011 (n=54)	2012 (n=27)	2013 (n=53)	2014 (n=44)	2010 (n=56)	2011 (n=50)	2012 (n=78)	2013 (n=57)	2014 (n=44)	2010 (n=201)	2011 (n=200)	2012 (n=208)	2013 (n=209)	2014 (n=196)
Cannabis	70	64	70	48	77	64	39	65	40	61	60	52	81	58	57	70	64	63	49	57	65	53	68	50	61
Amphetamine	10	8	11	6	6	13	13	26	18	13	8	4	15	15	9	2	2	8	4	2	8	6	16	12	8
Methamphetamine	15	8	11	6	6	18	13	24	16	8	9	4	15	15	2	2	2	6	4	5	11	7	15	12	5
Benzodiazepines	0	0	3	0	3	1	1	3	4	3	0	2	0	0	2	5	8	3	2	2	2	3	2	2	3
Codeine	0	8	5	3	0	4	1	2	0	1	0	2	0	0	0	0	4	3	4	5	1	3	2	1	1
Morphine	0	8	3	0	0	3	3	0	1	1	6	2	0	0	0	4	10	1	4	5	3	6	1	1	1
Methadone	0	0	0	0	-	3	0	2	0	0	4	2	4	0	0	2	2	4	0	0	2	1	2	0	0
Benzylpiperazine	0	0	0	0	-	0	3	0	0	0	0	0	0	0	-	2	4	0	0	0	1	2	0	0	0

Corroboration of self-reported drug use with urinalysis

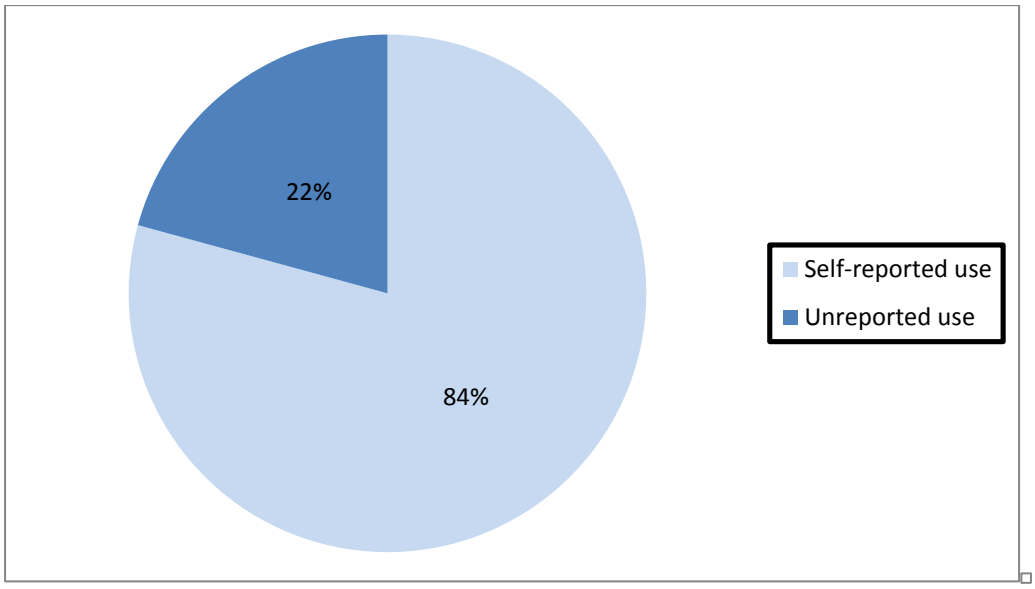
Cannabis use

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 face-to-face interviews. In 2014, 84% of those detainees who tested positive for cannabis (n=120) had also self-reported using cannabis in the past month (Figure 13.3). Interestingly, 22% of the detainees who did not test positive for cannabis self-reported use in the previous month.

Table 13.2: Comparison of test results for the presence of cannabis use with self-reported cannabis use in the past month, 2010-2014

	Self-reported cannabis use in past month (%)									
	2010		2011		2012		2013		2014	
Tested positive for cannabis (%)	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
No	89	11	71	29	75	25	68	32	78	22
Yes	6	94	11	89	16	84	21	79	16	84

Figure 13.3: Proportion of police detainees who tested positive for cannabis use and who also self-reported cannabis use in the previous month, 2014



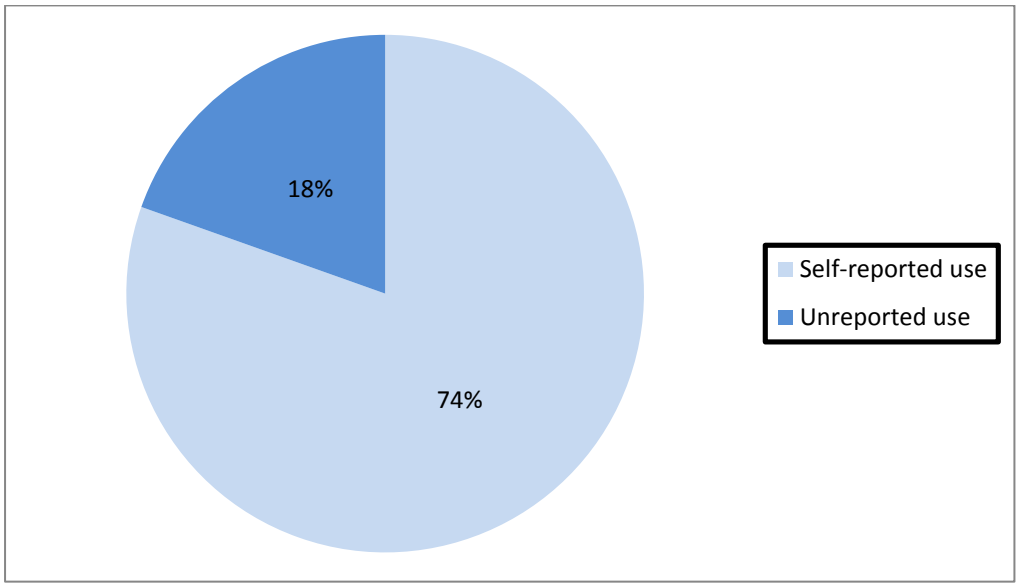
Methamphetamine use

Table 13.3 compares the police detainees' urine test results for the presence of methamphetamine with levels of self-reported methamphetamine use in the previous month. In 2014, 74% percent of those detainees who tested positive for methamphetamine had also self-reported using methamphetamine in the previous month (Figure 13.4). As only 11 of the detainees provided a urine sample which tested positive for the presence of methamphetamine, the comparison should be treated with some caution. Eighteen percent of the detainees who did not test positive for methamphetamine self-reported use in the past month in 2014.

Table 13.3: Comparison of test results for the presence of methamphetamine use with self-reported methamphetamine use in the past month, 2010-2014

	Self-reported methamphetamine use in past month (%)									
	2010		2011		2012		2013		2014	
Tested positive for methamphetamine (%)	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**
No	89	11	89	11	89	11	87	13	82	18
Yes	18	82	42	58	24	76	19	81	26	74

Figure 13.4: Proportion of police detainees who tested positive for methamphetamine use and who also self-reported methamphetamine use in the past month, 2014



Opioid use

Table 13.4 compares the police detainees' test results for the presence of opioids with levels of self-reported opioid use in the previous month. The self-reported opioid category includes the self-reporting of morphine and methadone in the previous 30 days. Only three of the detainees provided a urine sample which tested positive for the presence of opioids in 2014, and this low number does not allow statistical comparison with levels of self-reported use. Only one of the three detainees who tested positive for opioids also self-reported use in 2014.

Table 13.4: Comparison of test results for the presence of opioid use with self-reported opioid use in the past month, 2010 - 2014

	Self-reported opioid use in past month (%)									
	2010		2011		2012		2013		2014	
Tested positive for opioid use (%)	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
No	97	3	98	2	98	2	96	4	96	4
Yes	55	45	58	42	67	33	67	33	36	64

Summary

- In 2014, 61% of the detainees tested positive for cannabis use, 8% tested positive for amphetamine, 5% tested positive for methamphetamine, and 1% tested positive for morphine

- The proportion of the detainees testing positive for cannabis use decreased from 68% in 2012 to 50% in 2013, and then increased to 61% in 2014

- This 'decline and recovery' trend was strongest in Auckland Central where positive tests for cannabis decreased from 65% in 2012 to 40% in 2013 and then increased to 61% in 2014

- The proportion of detainees testing positive for methamphetamine declined from 15% in 2012 to 5% in 2014

- Positive tests for amphetamine also declined from 16% in 2012 to 8% in 2014

- The proportion of detainees testing positive for morphine declined from 6% in 2011 to 1% in 2014

- Eighty-four percent of the detainees who tested positive for cannabis use had also self-reported use of cannabis in the previous month in 2014

- Seventy-four percent of the detainees who tested positive for methamphetamine use had also self-reported use of methamphetamine in the previous month in 2014

Chapter 14 - Contact with the criminal justice system

Introduction

Alcohol and drug use is an important driver of crime contributing to anti-social behavior, assault, family violence, property crime and dangerous driving (Wilkins, et al., 2012b). Alcohol and drug dependent people can become locked in a cycle of substance use, offending and detention, which imposes substantial time demands on police and significant financial costs on the wider criminal justice system. In recognition of the role substance use can play in facilitating offending, the criminal justice system is increasingly being utilized to direct problematic alcohol and drug users into alcohol and drug (AOD) treatment programmes in an attempt to break this cycle (see Caulkins & Reuter, 2009; Hough, 1996). 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 AOD treatment as part of their pre-trial diversion, sentencing and parole conditions (Strang et al., 2012).

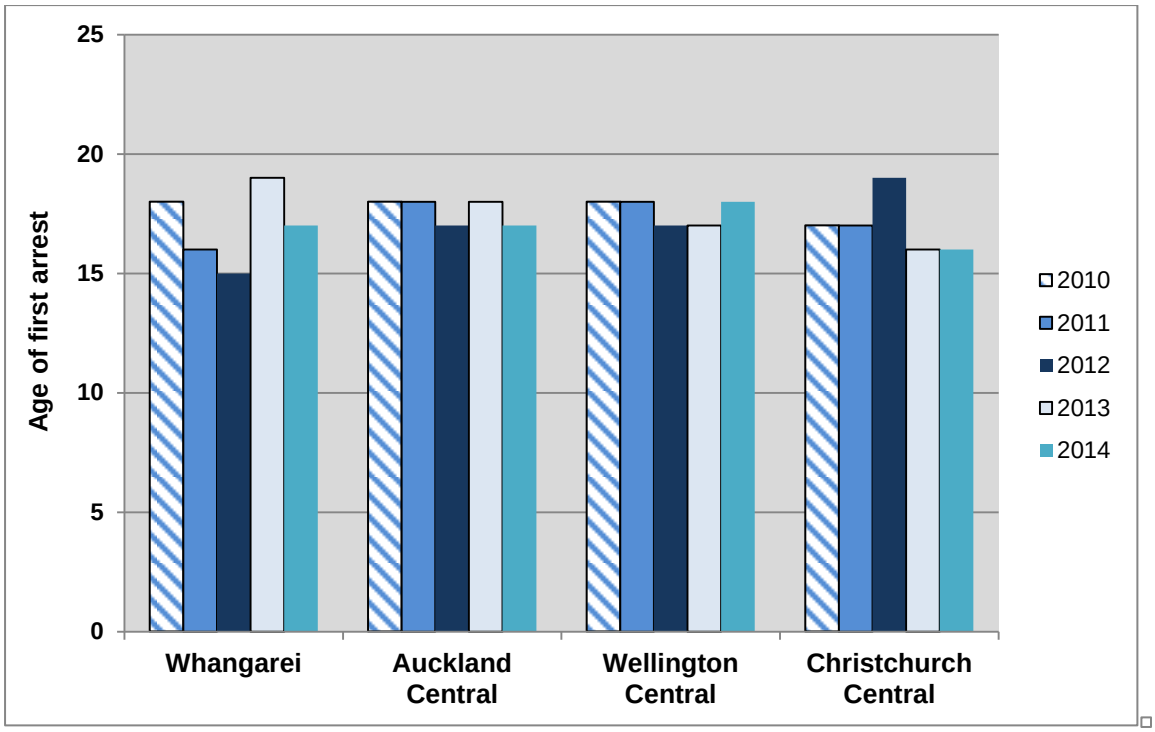
In October 2009, the Government announced a broad programme of policy measures, known as the Methamphetamine Action Plan (MAP), to significantly reduce methamphetamine use in New Zealand (Department of the Prime Minister and Cabinet, 2009). This included initiatives to reduce methamphetamine supply by controlling precursors, actively targeting methamphetamine supply chains through intelligence-led policing and new legislative tools (e.g. criminal proceeds recovery), as well as reducing demand for methamphetamine through community action programmes (i.e. Community Alcohol Youth and Drugs [CAYAD] initiatives) and community policing, and by helping users into AOD treatment programmes and funding additional residential AOD treatment placements. The various components of the plan have been implemented over the past five years with six-monthly progress reports available (Department of the Prime Minister and Cabinet, 2010a, 2010b).

In November 2012, two Alcohol and Drug Treatment Courts were established in Auckland. Offenders who are substance dependent and plead guilty to an offence (excluding arson, serious violence or sexual offences) and who would otherwise be sentenced to a prison term of up to three years are eligible. Offenders are required to comply with a treatment plan imposed by the courts, which includes mandatory drug testing and attendance at treatment meetings. The judge will take into account the completion of a treatment programme when sentencing the offender for their original offence.

Age of first arrest

The detainees had been arrested for the first time at a mean age of 17 years old (median 15 years, range 15-61 years). There was no statistically significant change in the mean age at which the detainees were first arrested from 2010 to 2014 (Figure 14.1).

Figure 14.1: Age of the detainees when they were arrested for the first time by location, 2010-2014



Recent arrest history

The detainees reported they had been arrested a mean of 4.7 times in the previous 12 months in 2014 (median 2 times, range 1-260 times). There was no statistically significant

change in the mean number of times the detainees had been arrested in the previous year from 2010 to 2014 (i.e. 2010=3.6, 2011=3.3, 2012=3.7, 2013=3.7, 2014=4.7, p=0.2065).

The detainees were asked what offence type(s) they had been arrested for over the previous 12 months (including the offence they were currently being held for). The responses are summarized in Table 14.1. Note, Table 14.1 presents the offence *categories* the detainees were arrested for over the previous year, not the number of times they were arrested for each offence type. The offence category 'Against Justice' refers to situations where a detainee has failed to comply with a court order in relation to a previous offence and includes charges 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'. In these situations the interviewers encouraged the detainee to name their original offence in order to obtain a clearer picture of the detainee's offending history. In instances where this additional information was divulged the 'Against Justice' offence was recoded as the original offence. The 'serious assault' category includes arrests for partner violence (i.e. 'male assaults female').

The offence types the detainees had most commonly been arrested for in 2014 were 'Against Justice' (unspecified) (51%), driving offences (16%) [i.e. Drunk driving, disqualified driving, driving unregistered vehicle, stopped by police, etc], serious assaults (14%), assaults (unspecified) (14%), warrant to arrest (unspecified) (9%), burglary (9%), fines (9%), theft (8%), public disorder (6%), car conversion (6%), wilful damage (6%), shoplifting (5%), trespass (5%), minor assaults (4%) and drugs (cannabis only) (4%).

Table 14.1: Proportion of police detainees who were arrested for different offence categories in the previous 12 months by location, 2010-2014

Self-reported offence arrested for in past 12 months (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=104)	2011 (n=122)	2012 (n=129)	2013 (n=140)	2014 (n=136)	2010 (n=253)	2011 (n=273)	2012 (n=231)	2013 (n=284)	2014 (n=292)	2010 (n=143)	2011 (n=149)	2012 (n=97)	2013 (n=96)	2014 (n=87)	2010 (n=239)	2011 (n=212)	2012 (n=293)	2013 (n=267)	2014 (n=257	2010 (n=739)	2011 (n=756)	2012 (n=752)	2013 (n=789)	2014 (n=773)
Against Justice (unspecified)	23	35	47	40	54	41	37	40	45	51	35	38	37	43	51	43	43	44	42	51	38	39	42	42	51
Driving offence (including alcohol impaired driving)	20	22	19	15	19	14	15	16	14	16	16	15	10	9	14	15	19	22	18	14	16	17	17	14	16
Assault (unspecified)	19	16	13	15	20	10	16	11	10	10	13	11	14	16	14	13	11	11	14	15	13	14	12	13	14
Serious assault	12	15	17	13	18	11	10	9	9	14	14	12	18	13	15	14	7	9	10	11	13	11	12	11	14
Warrant to arrest (unspecified)	3	5	5	4	3	10	5	7	11	12	10	7	11	11	8	8	7	11	13	9	8	6	9	11	9
Burglary	13	11	10	11	10	9	10	9	10	8	10	9	7	7	6	14	16	11	9	12	12	12	10	9	9
Fines	4	2	4	4	6	3	5	7	9	9	2	1	0	3	0	2	1 1	8	10	15	2	2	6	8	9
Theft	6	10	5	1	8	6	8	6	9	9	8	13	8	8	9	12	14	5	7	7	9	11	6	7	8

Public disorder	12	18	11	5	6	10	14	8	7	5	15	13	12	14	8	14	14	11	12	7	12	14	10	9	6
Car conversion etc.	6	1	5	4	4	7	10	10	13	7	5	2	11	9	9	9	3	6	7	5	7	5	8	9	6
Wilful damage	5	0	9	4	4	3	0	7	9	7	3	0	8	14	13	7	0	9	8	5	5	0	8	9	6
Shoplifting	9	4	0	3	1	4	7	4	5	7	6	9	7	3	6	7	3	9	4	6	6	6	6	4	5
Trespass	1	2	3	0	0	3	3	8	4	6	2	2	2	3	3	8	3	5	4	6	4	3	5	3	5
Minor assault	5	2	8	3	1	3	4	6	1	6	1	5	11	6	6	2	3	6	5	3	2	4	7	3	4
Drugs (cannabis only)	8	6	9	2	4	10	2	4	2	4	6	3	4	4	2	7	3	8	4	5	8	3	6	3	4
Robbery	1	4	5	4	2	5	4	3	4	3	1	3	4	3	3	2	1	1	2	4	3	3	3	3	3
Drugs (new drugs)	0	0	0	1	1	0	0	3	5	3	0	0	1	4	3	0	0	1	1	3	0	0	2	3	3
By-laws breach	5	5	3	3	1	1	4	6	4	1	8	5	15	8	3	8	2	7	5	2	5	4	8	5	2
Drugs (unspecified)	9	4	0	1	2	6	5	3	7	3	6	3	3	2	1	3	2	<1	3	1	6	3	2	4	2
Intimidation/ threats	7	3	7	4	4	2	3	3	4	2	4	5	5	3	5	5	4	4	3	1	4	4	4	3	2
Receiving stolen property	2	4	2	2	1	4	7	3	3	1	1	3	0	1	2	4	6	3	2	4	3	6	2	2	2
Fraud	4	1	0	1	2	3	2	4	1	2	4	3	2	3	5	1	3	1	1	1	3	2	2	1	2
Other	0	1	5	0	0	0	1	6	1	<1	0	1	4	0	1	<1	0	3	1	1	<1	<1	4	1	1

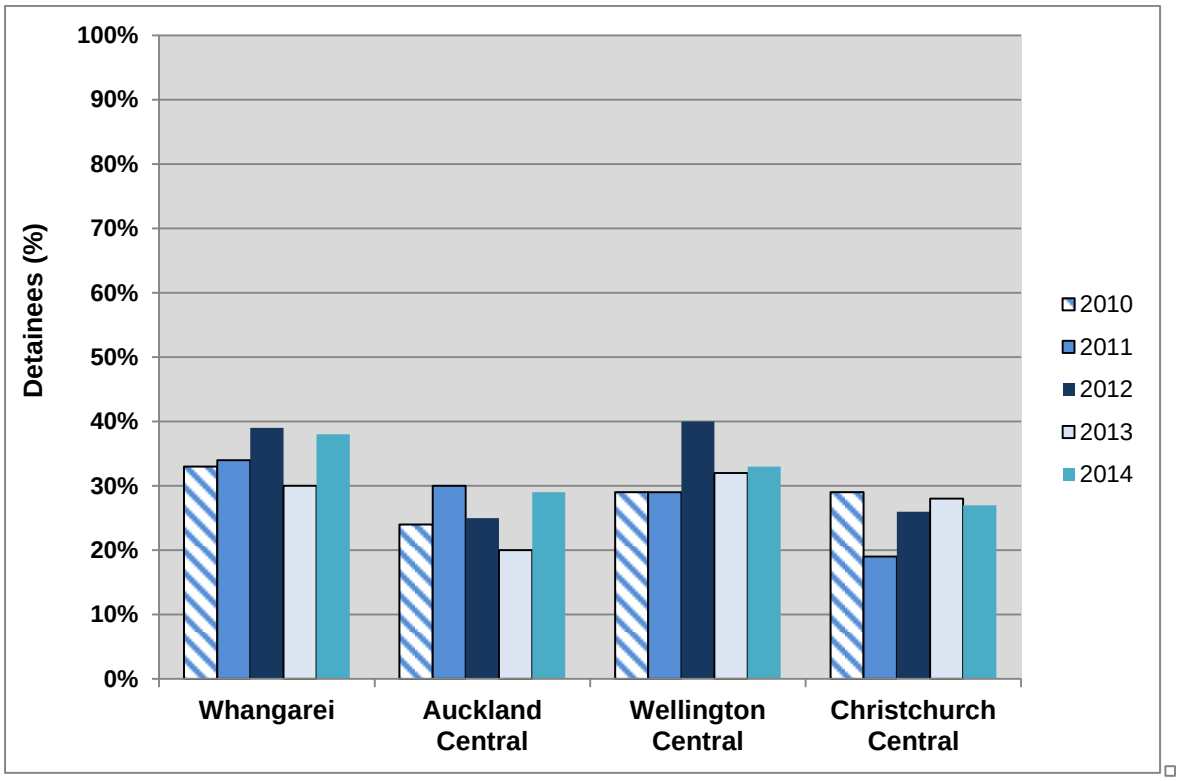
Destruction of property	2	10	0	0	1	4	6	2	0	1	2	8	0	1	1	2	11	1	0	2	3	9	1	<1	1
Grievous assault	1	4	4	0	1	2	2	2	1	0	3	2	0	0	1	2	0 0	<1	2	1	2	2	1	1	1
Sexual attack	1	0	1	1	1	1	0	<1	0	<1	2	2	1	0	1	0	0	<1	1	<1	1	<1	1	<1	1
Detox	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	<1	1	1	2	<1	<1	<1	<1	1	1
Family offence	1	1	0	1	0	4	2	0	0	0	5	3	0	0	1	1	1	0	0	0	3	2	0	<1	<1
Arms Act offence	2	2	1	3	0	2	2	<1	1	1	1	0	0	1	1	<1	2	<1	1	2	1	1	0	1	1
No charge (detained)	0	0	0	1	1	0	0	0	0	<1	1	0	0	0	0	0	0	0	<1	0	<1	0	0	<1	<1
Dishonesty miscellaneous	0	0	2	0	0	<1	0	1	0	1	0	0	0	0	2	0	0	1	0	1	<1	0	1	0	1
Sexual affronts	0	0	1	0	0	0	0	0	0	<1	0	0	1	0	1	0	0	0	0	0	0	0	<1	0	<1
Abnormal sex	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0o	0	0	0	<1	0	<1
Immoral behaviour	0	0	0	0	0	0	0	<1	0	<1	0	0	1	0	0	0	0	<1	0	0	0	0	<1	0	<1
Kidnapping and abduction	0	<1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	<1	1	0	0	<1
Cruelty to animals	0	0	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	<1	0	0	<1
Vagrancy offences	1	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	<1	0	0	0	<1	<1	0	0	0	<1

Homicide	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1
Against National interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	<1
Drugs (not cannabis)	4	4	1	0	0	3	5	2	<1	0	4	3	1	0	0	<1	1	1	<1	0	3	3	1	<1	0
Immigration offences	0	0	0	0	0	0	2	0	<1	0	1	0	0	1	0	<1	1	1	0	0	<1	1	<1	<1	0
Immoral behavior (miscellaneous)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0
Endangering	0	0	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0
Group assembly	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Postal/ rail/ fire service abuse	0	0	0	0	0	<1	0	0	0	0	1	0	0	0	0	<1	0	0	0	0	<1	0	0	0	0
Against justice (special)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	<1	0	0	0	0

Recent arrest for assault

There was no overall change in the proportion of detainees who had been arrested for (any) assault [i.e. minor assault, serious assault, grievous assault, assault unspecified] from 2010 to 2014 (28% to 31%, p=0.6855). The proportion of Auckland Central detainees who had been arrested for assault increased from 20% in 2013 to 29% in 2014 (p=0.0466) (Figure 14.2).

Figure 14.2: Proportion of detainees who had been arrested for (any) assault by location, 2010-2014

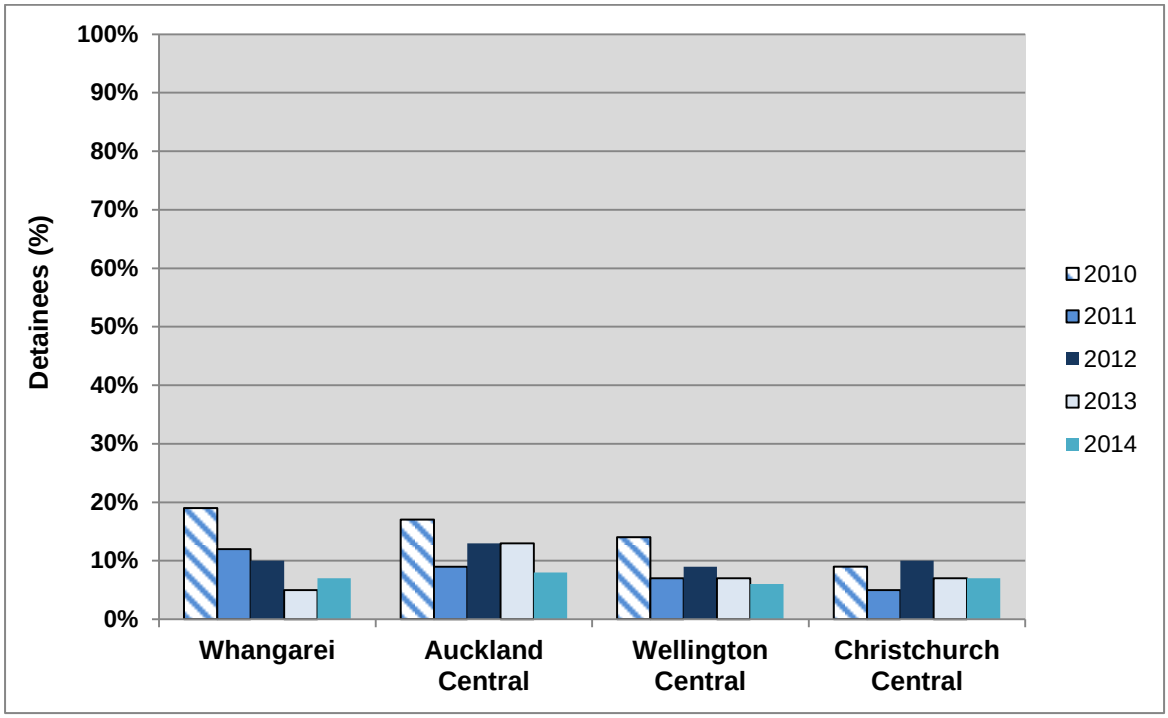


Recent arrest for drug offences

The proportion of detainees who had been arrested for (any) drug offence [i.e. cannabis offence, non-cannabis drug offence, new drug, drugs unspecified] declined from 14% in 2010 to 7% in 2014 (p<0.0001). There was a decrease in the proportion of Whangarei detainees who had been arrested for a drug offence (down from 19% in 2010 to 7% in 2014, p=0.0404) (Figure 14.3). Similarly, the proportion of Auckland Central detainees who had been arrested for a drug offence decreased from 17% in 2010 to 8% in 2014 (p=0.0142). The proportion of Wellington Central detainees who were arrested for a drug offence also

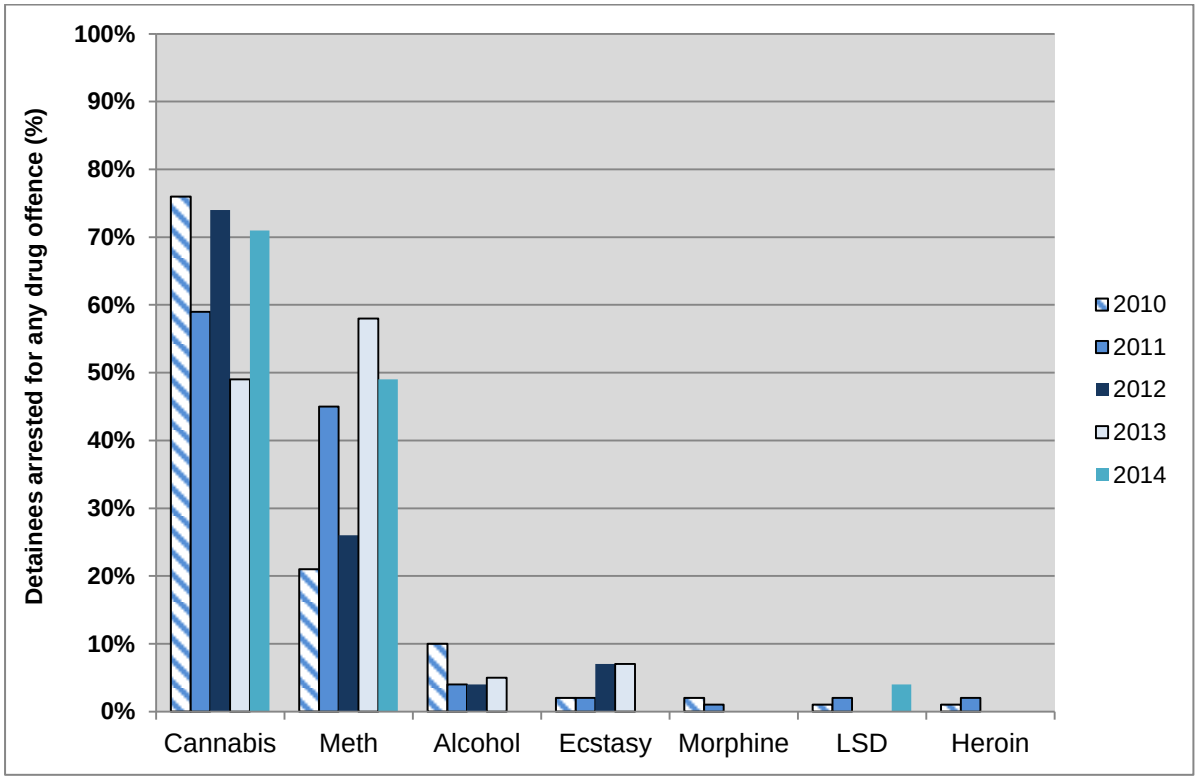
declined from 14% in 2010 to 6% in 2014, but this decrease was not statistically significant (p=0.2849).

Figure 14.3: Proportion of detainees who had been arrested for (any) drug offence by location, 2010-2014



The proportion of the detainees arrested for a drug offence who had been arrested for a methamphetamine related offence had previously increased from 21% in 2010 to 58% in 2013 (p=0.0334) (Figure 14.4). There was no change in the proportion of detainees arrested for a methamphetamine offence from 2013 to 2014 (58% to 49%, p=0.8574). The proportion of detainees arrested for a cannabis offence increased from 59% in 2011 to 71% in 2014 (p=0.0387) (Figure 14.4). The proportion of detainees arrested for a cannabis offence also increased from 49% in 2013 to 71% in 2014, although this increase was not statistically significant (p=0.0868). As outlined in the previous section, the number of detainees arrested for any drug offence has been declining in recent years, and as a result, the number of respondents available for the breakdown of drug arrests by drug type is fairly modest (i.e. 41=2013, 43=2014), and this explains some of the variation in the proportions reported for particular drug types.

Figure 14.4 Drug type(s) involved in arrest for a drug offence in the past 12 months (of those who had been arrested for a drug offence in the past year), 2010-2014



Conviction history

Seventy-seven percent of the detainees had been convicted of a criminal offence at some point in their lives in 2014 (Table 14.2). The proportion of detainees who had ever been convicted of a crime increased from 73% in 2010 to 77% in 2014, although this increase was not statistically significant (p=0.0719). There was an increase in the proportion of detainees who had ever been convicted of a crime in Auckland Central from 68% in 2010 to 77% in 2014 (p=0.0126) (Figure 14.5).

Figure 14.5: Proportion of police detainees who had ever been convicted of a crime by location, 2010-2014

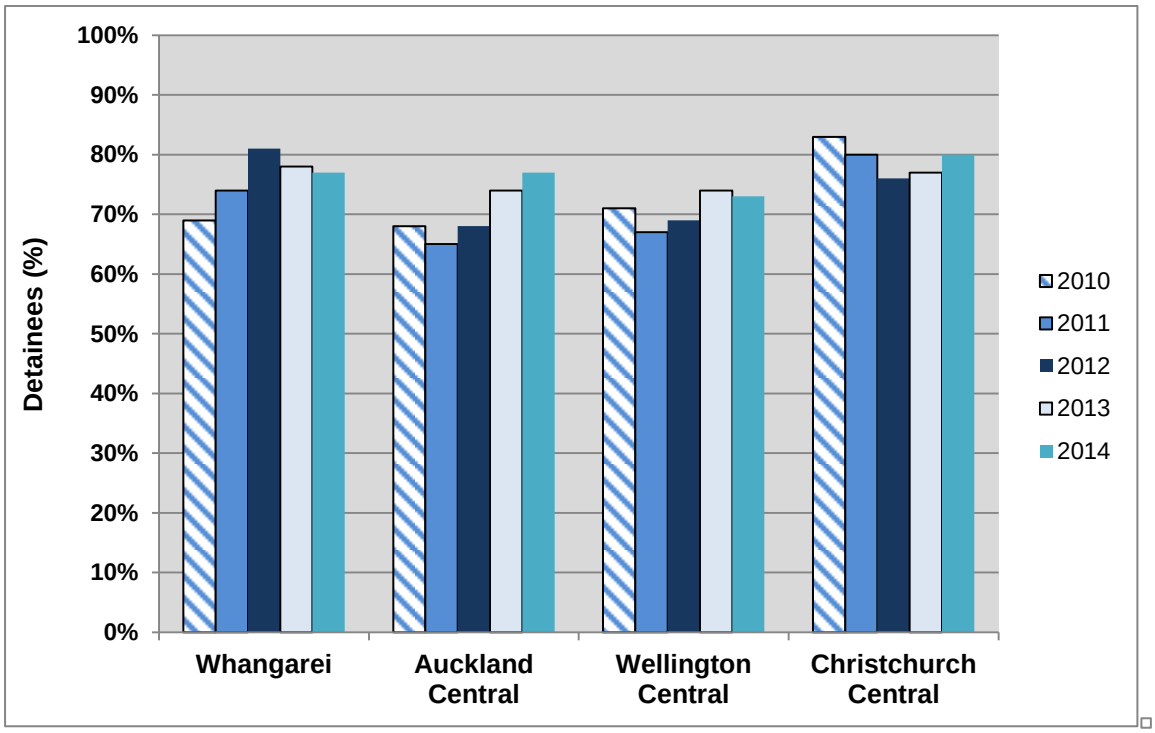


Table 14.2: Police detainees' history of conviction and imprisonment by location, 2010-2014

Arrest history	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=106)	2011 (n=145)	2012 (n=144)	2013 (n=143)	2014 (n=150)	2010 (n=266)	2011 (n=298)	2012 (n=240)	2013 (n=285)	2014 (n=311)	2010 (n=147)	2011 (n=163)	2012 (n=100)	2013 (n=99)	2014 (n=95)	2010 (n=259)	2011 (n=189)	2012 (n=302)	2013 (n=278)	2014 (n=273)	2010 (n=777)	2011 (n=795)	2012 (n=786)	2013 (n=807)	2014 (n=831)
Ever convicted of a criminal offence	69	74	81	78	77	68	65	68	74	77	71	67	69	74	73	83	80	76	77	80	73	72	73	75	77
Ever been in prison	37	44	45	38	49	36	34	34	39	41	37	35	37	42	37	43	43	43	41	45	39	39	39	40	43
Imprisonment in past 12 months	9	14	20	19	17	11	15	15	18	13	14	16	19	16	9	16	17	17	15	11	13	16	17	17	12

Those detainees who had been convicted of a crime were asked about the criminal offences for which they had been convicted. The offences the detainees had most often been convicted for were (any) assault (42%), a 'driving offence' (34%), 'assault (unspecified)' (28%),'burglary' (23%), 'car conversion' (19%), 'theft' (17%), (any) drug offence (16%), 'serious assault' [Including male assault female] (11%) and 'wilful damage' (10%) (Table 14.3).

Conviction for assault

The proportion of convicted detainees who had ever been convicted for (any) assault increased from 26% in 2010 to 42% in 2014 ($p<0.0001$) and from 31% in 2011 to 42% in 2014 ($p=0.0110$). There was no statistically significant change between 2013 and 2014 (i.e. 47% to 42%, p0.5211). Similarly, the proportion of convicted detainees in Auckland Central who had been convicted for (any) assault increased from 18% in 2010 to 36% in 2014 ($p=0.0002$) (Figure 14.6). The proportion of convicted detainees from Christchurch Central who had been convicted of (any) assault also increased from 30% in 2010 to 46% in 2014 ($p=0.0079$). The proportion of convicted detainees from Wellington Central who had been convicted for (any) assault also increased from 27% in 2010 to 45% in 2014, but this increase was not statistically significant ($p=0.1209$).

Figure 14.6: Proportion of convicted detainees who had been convicted for (any) assault by location, 2010-2014

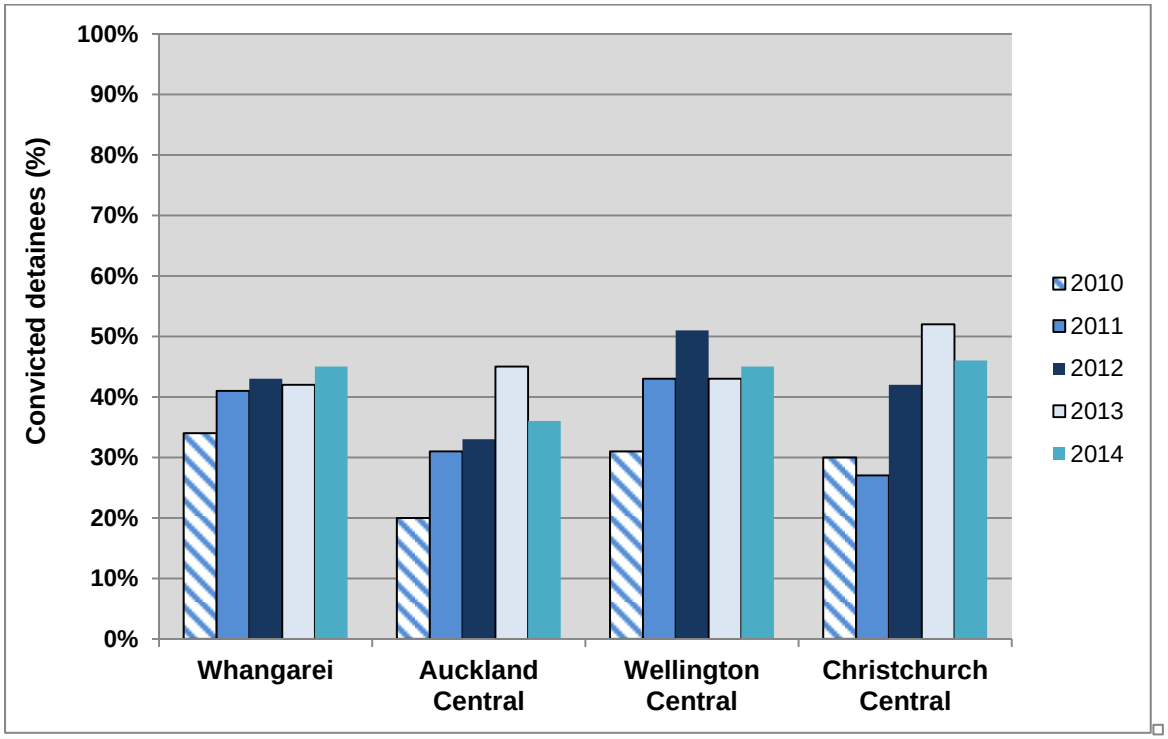


Table 14.3: Proportion of police detainees who had been convicted of different offence types by location (of those who had ever been convicted of a crime), 2010 -2014

Criminal convictions (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=70)	2011 (n=104)	2012 (n=116)	2013 (n=107)	2014 (n=109)	2010 (n=161)	2011 (n=183)	2012 (n=163)	2013 (n=204)	2014 (n=229)	2010 (n=89)	2011 (n=105)	2012 (n=69)	2013 (n=68)	2014 (n=67)	2010 (n=215)	2011 (n=145)	2012 (n=)231	2013 (n=216)	2014 (n=213)	2010 (n=535)	2011 (n=537)	2012 (n=571)	2013 (n=593)	2014 (n=619)
Driving offence (including alcohol impaired driving)	17	34	32	45	32	21	16	24	37	30	35	36	32	28	31	32	36	46	39	40	29	31	35	37	34
Assault (unspecified)	20	23	31	25	30	10	22	24	27	19	18	21	38	31	31	16	18	31	38	32	15	21	30	31	28
Burglary	27	24	24	31	26	21	28	23	21	22	28	25	16	29	25	26	28	27	24	23	25	27	24	25	23
Car conversion etc.	10	5	17	10	13	14	11	13	19	27	9	9	17	22	6	15	4	12	21	21	13	7	14	19	19
Theft	10	17	12	7	11	11	30	23	17	14	17	24	17	13	21	17	33	16	21	19	14	27	18	16	17
Serious assault (incl. male assaults female)	13	15	11	18	14	6	8	5	13	13	10	11	13	10	9	8	7	7	13	10	8	9	8	13	11
Willful damage	4	4	6	6	4	3	4	10	10	11	4	7	9	10	12	7	6	10	10	9	5	5	9	9	10
Drugs (cannabis only)	13	8	17	7	10	9	3	7	10	10	18	12	10	12	6	7	11	9	14	9	10	8	10	11	9
Robbery	6	13	13	7	9	7	15	11	10	10	10	10	10	15	13	6	5	5	7	7		11	9	10	9
Against justice (unspecified)	6	5	6	9	7	3	5	8	8	7	1	4	13	7	12	5	5	11	10	11	4	5	10	9	9
Shoplifting	13	8	3	5	6	4	4	5	5	10	13	10	6	9	7	6	4	7	6	6	8	6	6	6	7
Fraud	4	6	2	3	6	2	7	7	7	8	11	6	4	5	9	4	7	6	6	6	5	7	5	6	7
Public disorder	6	8	16	4	5	6	9	6	6	6	19	19	16	7	10	9	17	4	10	5	9	13	9	8	6
Receiving stolen goods	1	1	3	4	3	4	3	3	6	4	8	4	3	4	9	4	4	3	5	7	4	3	3	5	6
Drugs (unspecified)	10	8	6	6	6	9	9	7	11	6	4	2	9	15	4	4	11	4	8	5	6	8	6	10	5

Minor assault	3	2	2	7	2	2	2	3	11	8	4	12	7	6	4	3	3	7	6	5	3	4	5	8	5
Trespass	1	5	2	1	2	7	2	5	2	6	7	3	4	6	0	4	1	4	5	5	5	2	4	4	4
Drug (new drugs)	0	0	4	2	3	0	0	3	7	5	0	0	1	7	1	0	0	3	3	3	0	0	3	3	3
Arms Act offence	4	2	4	4	3	2	1	2	2	2	2	4	0	0	1	1	4	2	2	5	2	3	2	2	3
Intimidation/ threat	1	8	2	6	0	4	5	1	3	3	6	6	4	3	1	7	7	4	3	2	5	6	3	3	2
Grievous assault	4	5	3	4	1	3	3	4	4	2	3	7	0	0	1	6	2	2	3	3	4	4	2	3	2
Dishonesty miscellaneous	0	0	0	1	1	1	0	1	1	1	0	0	1	0	0	0	0	<1	5	4	<1	0	1	2	2
By-laws breach	4	0	0	0	2	0	1	2	2	1	3	1	3	3	1	4	3	2	2	<1	3	2	2	2	1
Other	0	0	1	2	0	0	0	2	1	1	0	0	3	0	0	0	0	1	<1	<1	0	<1	2	1	<1
Drugs (not cannabis)	0	4	1	0	0	2	4	1	0	0	6	7	0	0	0	2	1	0	<1	<1	2	4	1	<1	<1
Sexual attack	0	0	0	0	0	1	2	1	1	1	1	2	0	1	0	<1	1	2	1	1	1	1	<1	<1	1
Kidnapping and abduction	0	1	0	0	1	0	0	1	<1	0	0	3	0	0	0	2	1	1	<1	1	1	1	1	<1	<1
Homicide	1	3	0	0	0	1	1	0	0	2	1	0	1	0	1	0	1	0	1	2	1	1	<1	<1	1
Fines	0	0	1	1	0	1	0	1	<1	0	1	1	0	0	0	0	0	0	0	1	<1	<1	1	<1	<1
Group assembly	1	0	0	0	0	2	0	0	<1	<	1	0	0	0	0	1	0	0	0	0	1	0	0	<1	<1
Destruction of property	3	3	1	0	1	2	5	1	0	0	7	5	0	0	1	1	5	0	0	<1	3	4	<1	0	1
Sexual affront	0	0	0	0	1	1	0	0	0	<1	1	0	0	0	0	0	0	<1	0	0	<1	0	<1	0	<1
Abnormal sex	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	<1	0	<1	0	0	<1	0	<1
Family offence	1	3	0	0	0	0	0	0	0	<1	0	4	0	0	0	1	0	0	0	0	1	1	0	0	<1
Endangering	0	0	0	0	1	0	0	0	0	<1	0	0	0	0	1	<1	0	0	0	0	<1	0	0	0	1

Cruelty to animals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	<1	0	0	0	0	<1	0	0	0	<1
Vagrancy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	<1
Racial	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1
Against national interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	<1
Warrant to arrest (unspecified)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	<1	0	0	<1	0
Indecent videos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	<1	0	0
Sale of liquor act (1989)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	<1	0	0	0
Postal/ rail/ fire services abuse	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0
Littering	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0

Conviction for a drug offence

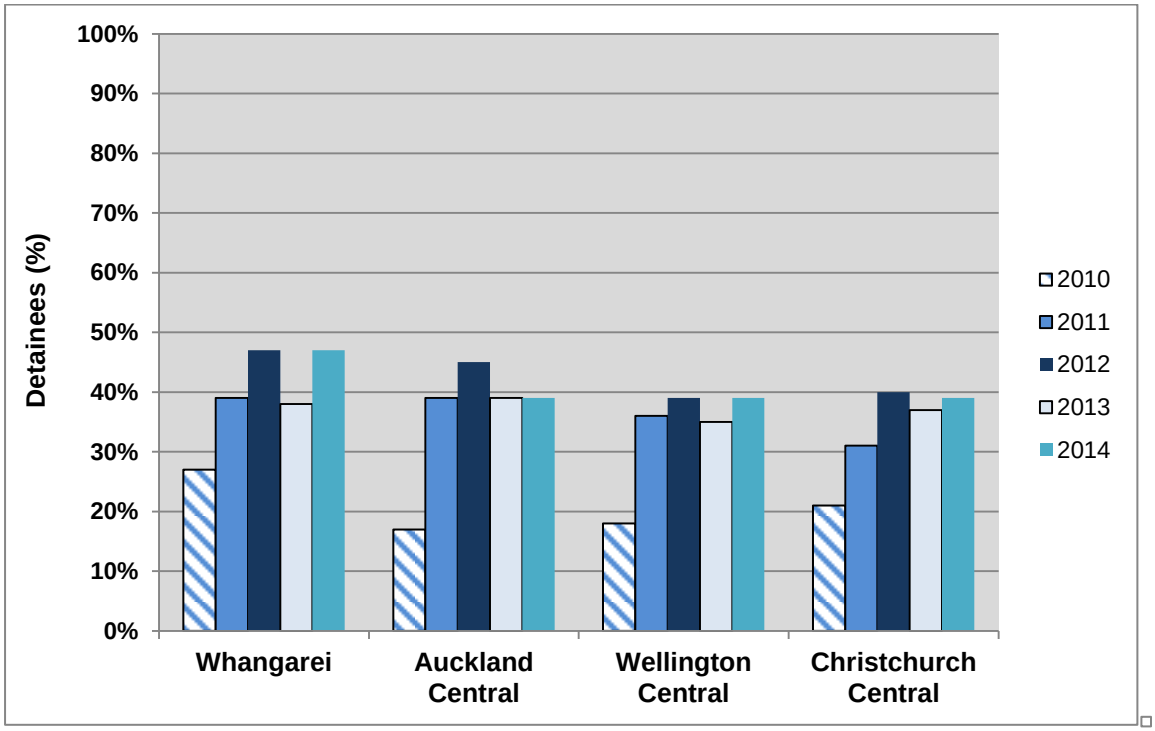
There was a small decrease in the proportion of convicted detainees who had been convicted for (any) drug offence from 21% in 2013 to 16% in 2014, but this decrease was not statistically significant (p=0.1825).

Drug treatment as part of sentencing

The detainees who had been convicted of a criminal offence were asked if they had ever received any treatment for drug and alcohol issues as part of their sentence. There was an overall increase in the proportion of convicted detainees who had ever received treatment for substance abuse problems increased from 20% in 2010 to 40% in 2014 (p=0.0009). The proportion receiving treatment decreased slightly from 42% in 2012 to 40% in 2014 (p<0.0001).

A breakdown of the data by site location indicates most of the increase in treatment provision occurred in 2011/12. The proportion of detainees in Auckland Central who had received alcohol and drug treatment as part of their sentence increased from 17% in 2010 to 39% in 2014 (p=0.0002), with large increases from 17% in 2010 to 39% in 2011 (p=0.0002) and from 17% in 2010 to 45% in 2012 (p=<0.0001) (Figure 14.7). Similarly, the proportion of Wellington Central detainees who received treatment as part of their sentence increased from 18% in 2010 to 39% in 2014 (p=0.0203), with large increases from 18% in 2010 to 36% in 2011 (p=0.0310) and from 18% in 2010 to 39% in 2012 (p=0.0249). Christchurch Central detainees were also more likely to have received treatment as part of their sentence from 21% in 2010 to 39% in 2014 (p=0.0003), with large increases from 21% in 2010 to 40% in 2012 (p=0.0002) and from 21% in 2010 to 37% in 2013 (p=0.0023). Finally, the proportion of detainees in Whangarei who had ever received treatment as part of their sentence also increased from 27% in 2010 to 47% in 2014, and this increase was close to being statistically significant (p=0.0528), with a large increase from 27% in 2010 to 47% in 2012, and again this was close to statistical significance (p=0.0595). The weaker test results for Whangarei likely reflect the smaller numbers of detainees in that site.

Figure 14.7: Proportion of police detainees who had ever received treatment for drug and alcohol issues as part of their sentence (of those who had ever been convicted of a crime) by location, 2010-2014



Ever been to prison

Forty-three percent of the detainees had been imprisoned at some point in their lifetimes in 2014. There was no change in the proportion of detainees who had ever been to prison from 2010 to 2014 (39%=2010, 39%=2011, 38%=2012, 40%=2013, 43%=2014 - p=0.3596). Those detainees who had ever been to prison were asked what crime they had been sent to prison for. In 2014, 39% had been imprisoned for (any) assault [i.e. minor assault, serious assault, grievous assault and assault (unspecified)], 25% for burglary, 23% for assault (unspecified), 18% for driving offences, 18% for car conversion, 14% for 'Against Justice' (unspecified), 12% for robbery, 10% for serious assaults [including male assault females] and10% for grievous assault (Table 14.4).

Table 14.4: Proportion of police detainees who had been imprisoned for different offence types by location (of those who had ever been imprisoned), 2010-2014

Prison history (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=36)	2011 (n=63)	2012 (n=62)	2013 (n=51)	2014 (n=71)	2010 (n=89)	2011 (n=97)	2012 (n=75)	2013 (n=104)	2014 (n=121)	2010 (n=49)	2011 (n=53)	2012 (n=36)	2013 (n=41)	2014 (n=35)	2010 (n=111)	2011 (n=77)	2012 (n=123)	2013 (n=110)	2014 (n=120)	2010 (n=285)	2011 (n=290)	2012 (n=289)	2013 (n=309)	2014 (n=347)
Assault (unspecified)	22	24	19	35	24	9	18	15	18	17	14	8	22	22	26	11	18	32	39	28	12	16	23	28	23
Driving offence (including alcohol impaired driving)	0	25	23	24	23	9	9	9	20	13	13	26	6	20	14	12	15	28	29	21	10	18	17	24	18
Burglary	17	22	16	31	27	20	31	27	22	28	37	21	22	17	23	23	36	36	25	21	22	29	27	23	25
Car conversion etc.	10	3	10	12	8	11	6	13	15	26	10	4	19	12	6	14	3	7	18	18	11	4	11	15	18
Against justice (unspecified)	3	11	21	14	18	15	8	15	14	12	6	8	17	12	20	17	16	15	15	13	12	11	16	14	14
Theft	5	14	10	6	4	8	19	19	16	7	11	14	8	7	11	15	26	15	15	11	10	19	14	13	8
Robbery	6	16	18	14	13	1	21	15	8	13	12	13	17	12	11	5	8	7	15	9	10	14	13	12	12
Serious assault (incl. male assaults female)	11	14	19	4	13	7	6	5	13	12	2	11	14	10	6	5	4	7	5	7	5	7	10	9	10
Drugs (unspecified)	3	2	5	6	4	6	4	7	8	7	2	2	6	7	6	3	14	2	8	4	4	7	5	8	5
Fraud	6	3	0	6	3	4	11	9	8	5	8	4	6	7	9	5	12	5	6	6	5	9	6	7	5
Drugs (new drugs)	0	0	5	2	3	0	0	8	14	4	0	0	3	5	6	0	0	1	2	3	0	0	4	7	4
Drugs (cannabis only)	12	3	5	4	1	1	1	5	9	4	0	11	8	5	0	1	4	4	4	7	2	4	5	6	4
Grievous assault	5	6	3	6	13	6	1	8	6	12	8	8	3	0	6	6	3	6	6	7	6	4	5	5	10

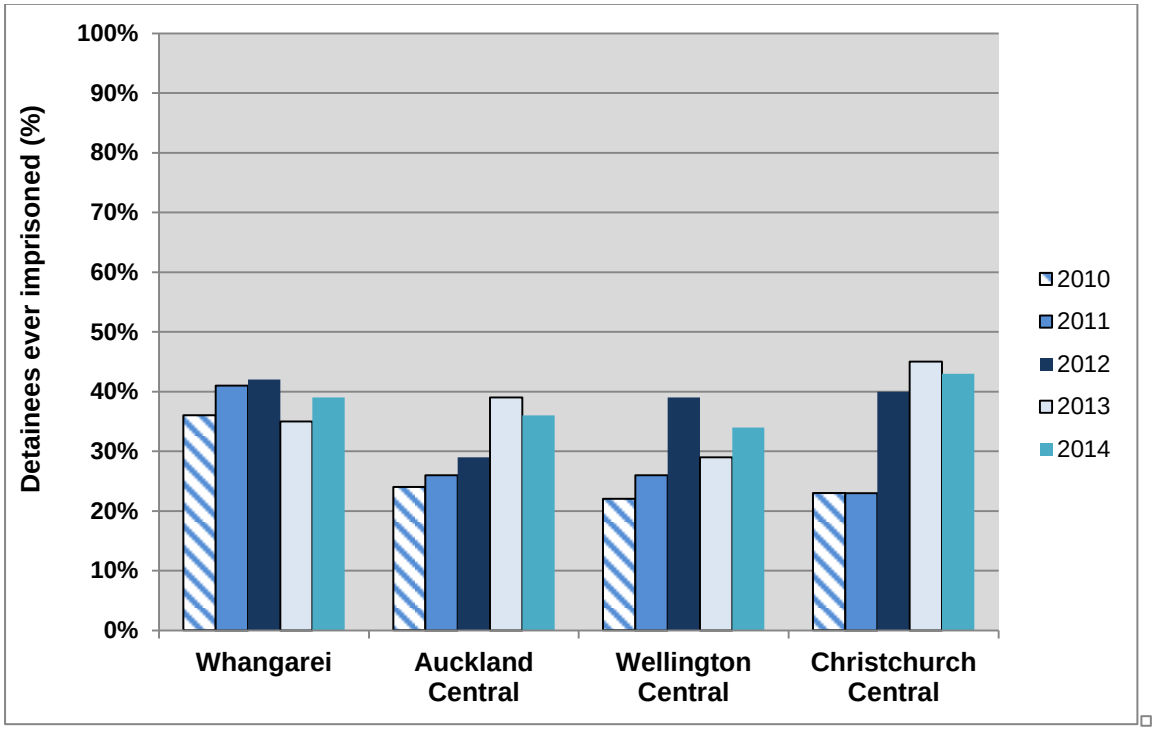
Minor assault	0	3	2	4	1	3	2	4	11	7	0	2	0	0	3	2	0	4	2	3	2	2	3	5	4
Willful damage	0	0	2	8	3	0	2	5	5	3	0	0	6	2	3	2	0	2	5	5	1	1	4	5	4
Receiving stolen goods	0	2	5	0	3	3	4	3	4	3	4	0	0	3	9	2	4	3	4	2	2	3	3	3	3
Arms Act offence	5	2	2	10	1	3	4	0	2	1	0	4	0	0	3	5	4	0	4	6	4	4	1	3	3
Dishonesty	0	0	0	0	1	0	0	0	3	1	0	0	0	2	0	0	0	1	5	3	0	0	<1	3	2
Intimidation/ threat	0	2	5	4	1	1	1	1	4	3	2	8	3	0	3	6	3	4	1	2	3	3	3	2	2
Shoplifting	3	3	0	2	3	1	1	3	1	7	6	9	6	2	3	0	3	3	4	2	2	3	3	2	4
Trespass	0	2	0	0	1	3	0	1	1	2	0	2	0	2	0	3	0	2	3	1	2	1	1	2	1
Fines	0	2	0	0	1	4	0	0	2	0	0	7	0	0	0	1	0	1	3	0	2	1	<1	2	<1
Public disorder	6	0	2	0	0	2	3	1	0	2	0	2	6	0	6	3	4	2	3	3	2	3	2	1	2
Sexual attack	0	0	0	0	1	2	3	1	3	0	2	4	0	2	0	3	2	4	0	3	2	2	2	1	1
Drugs (not cannabis)	3	6	2	0	0	2	5	0	0	0	4	2	0	0	0	1	1	0	0	0	2	3	<1	0	0
Kidnapping and abduction	0	3	0	0	1	1	1	1	1	0	0	6	0	0	0	3	1	2	1	2	1	2	1	1	1
Indecent videos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	<1	0	0
Postal/rail/fire services abuses	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0
Immigration	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0
Against justice (special)	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	<1	0	0
Other	0	0	0	2	1	2	0	0	2	2	0	0	0	0	0	0	0	1	1	2	1	0	<1	1	1
Destruction of property	5	0	0	0	0	1	2	0	0	0	2	4	0	2	0	1	0	0	0	2	2	1	0	<1	1
Homicide	2	3	0	0	0	1	1	0	0	3	0	0	0	0	3	2	1	0	1	3	1	1	0	<1	3
Family offence	0	0	0	0	0	0	1	0	0	1	2	4	0	0	0	0	0	0	0	0	<1	1	0	0	<1

Vagrancy offences	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0
Endangering	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0
Group assembly	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0
No charge (detained)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	<1	<1	0	0	0
Sexual affronts	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1
By-law breaches	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<1

Imprisonment for assault

The proportion of detainees who had ever been imprisoned who had been imprisoned for (any) assault increased from 24% in 2010 to 39% in 2014 (p=0.0002). The proportion of Christchurch Central detainees ever imprisoned for assault increased from 23% in 2010 to 43% in 2014 (p=0.0190) (Figure 14.8).

Figure 14.8: Proportion of detainees who had been imprisoned for (any) assault by location (of those who had ever been imprisoned), 2010-2014

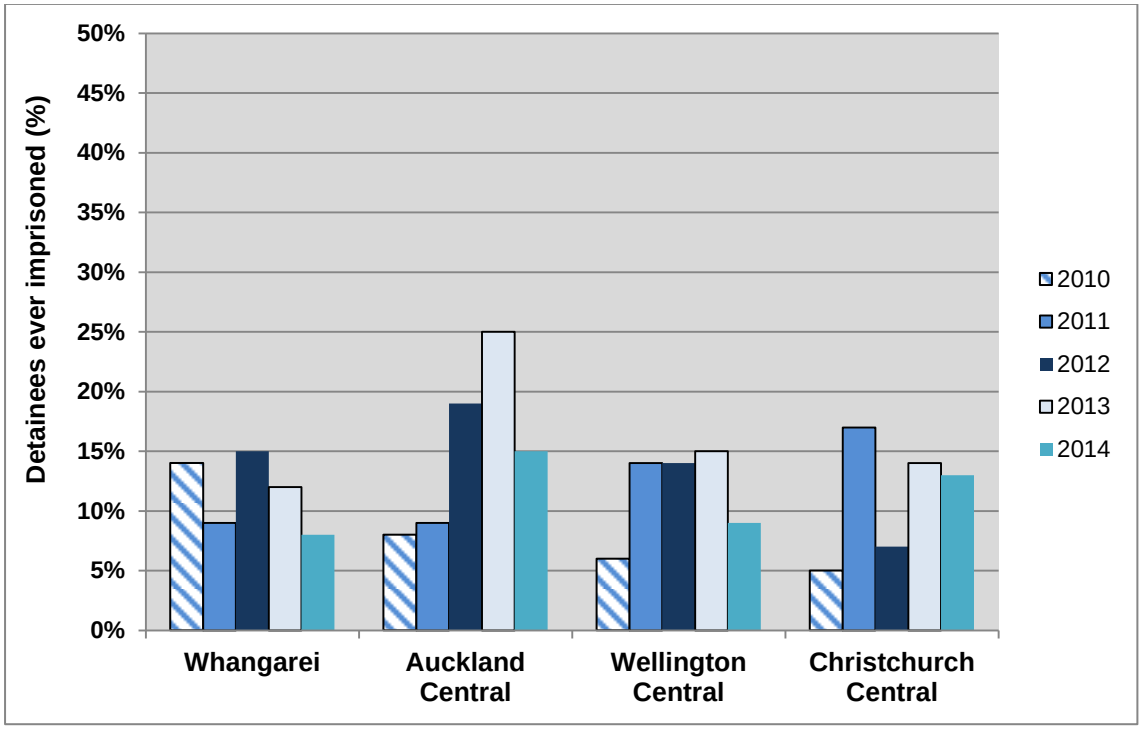


Imprisonment for drug offences

In 2014, 12% of the detainees who had ever been imprisoned had been imprisoned for (any) drug charge. The proportion of detainees ever imprisoned for a drug charge had previously increased from 7% in 2010 to 17% in 2013 (p=0.0020). There was no statistically significant change in the proportion ever imprisoned for a drug charge from 2013 to 2014 (i.e. 17% to 12%, p=0.3334).

There had also previously been an increase in the proportion of Auckland Central detainees who had ever been imprisoned for (any) drug offence from 2010 to 2013 (up from 3% to 25%, p=0.0186) (Figure 14.9).

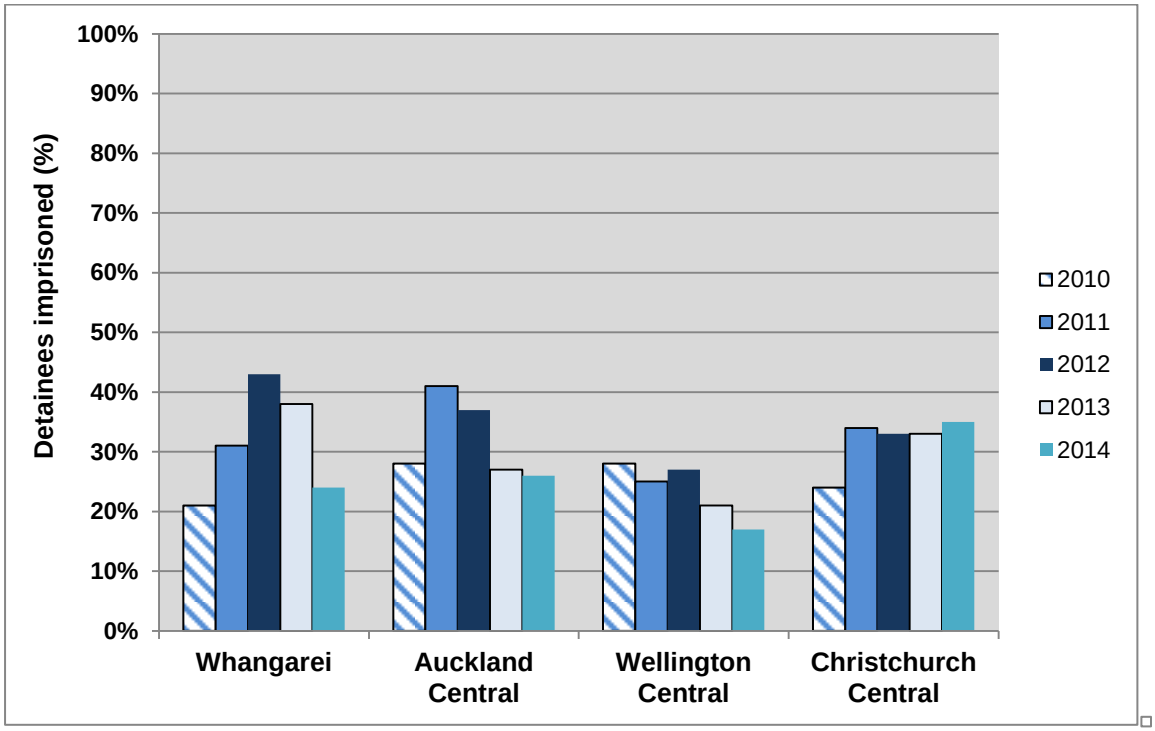
Figure 14.9: Proportion of detainees who had been imprisoned for (any) drug offence by location (of those who had ever been imprisoned), 2010-2014



Alcohol and drug treatment while in prison

In 2014, 28% of these detainees who had ever been to prison had received treatment for alcohol and drug issues as part of their prison sentence. The proportion of imprisoned detainees who had received alcohol and drug treatment as part of their prison sentence did not change from 2010 to 2014 (p=0.9844) (Figure 14.10).

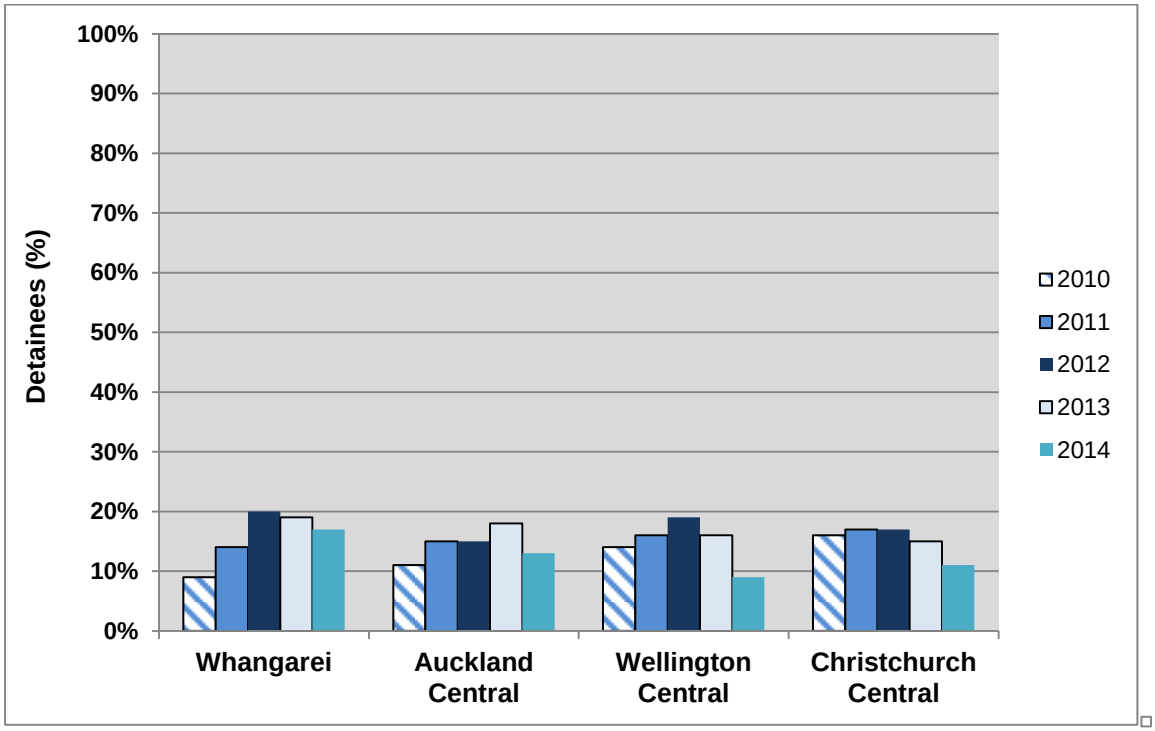
Figure 14.10: Proportion of police detainees who had ever received treatment for drug and alcohol issues as part of their prison sentence by location (of those who had ever been to prison), 2010-2014



Prison in the previous 12 months

Twelve percent of the detainees in 2014 had been in prison in the previous 12 months. The proportion of detainees who had been imprisoned in the past 12 months declined from 16% in 2011 to 12% in 2014 (p=0.0096), from 17% in 2012 to 12% in 2014 (p=0.0008) and from 17% in 2013 to 12% in 2014 (p=0.0068) (Figure 14.11).

Figure 14.11: Proportion of detainees who had been in prison in the previous 12 months by location, 2010-2014

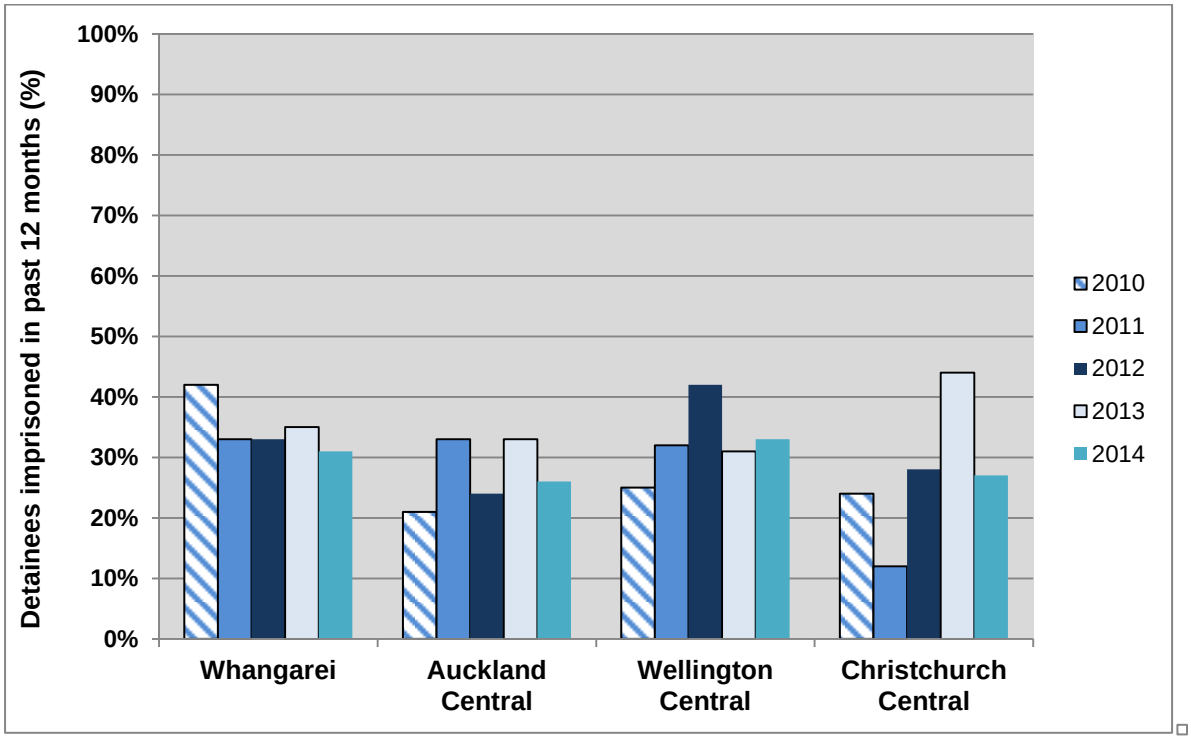


Those detainees who had been imprisoned in the previous 12 months were asked what crime they had been sent to prison for. Twenty-eight percent had been imprisoned for (any) assault, 22% for burglary, 20% for 'Against Justice' (unspecified), 17% for car conversion, 15% for assault (unspecified), 12% for a driving offence, 11% for serious assaults (including male assault female) and 8% for (any) drug offence (Table 14.5).

Imprisonment for assault in the past year

There was no change in the proportion of detainees who had been imprisoned for (any) assault in the previous 12 months from 2010 to 2014 (25% to 28%, p=0.9883) (Figure 14.12).

Figure 14.12: Proportion of police detainees who had been imprisoned for (any) assault in the past 12 months (of those who had been imprisoned in past 12 months), 2010-2014



Imprisonment for a drug offence in the past year

There was no statistically significant change in the proportion of detainees who had been imprisoned for (any) drug offence in the previous 12 months from 2010 to 2014 (p=0.1983) (Figure 14.13). Only eight detainees had been imprisoned for a drug offence in the past 12 months in 2014 (i.e. four for cannabis offences, three for methamphetamine offences, and two for alcohol). One detainee had been imprisoned for both methamphetamine and cannabis offences.

Figure 14.13: Proportion of police detainees who had been imprisoned for any drug offence in the past 12 months (of those who had been imprisoned in past 12 months), 2010-2014

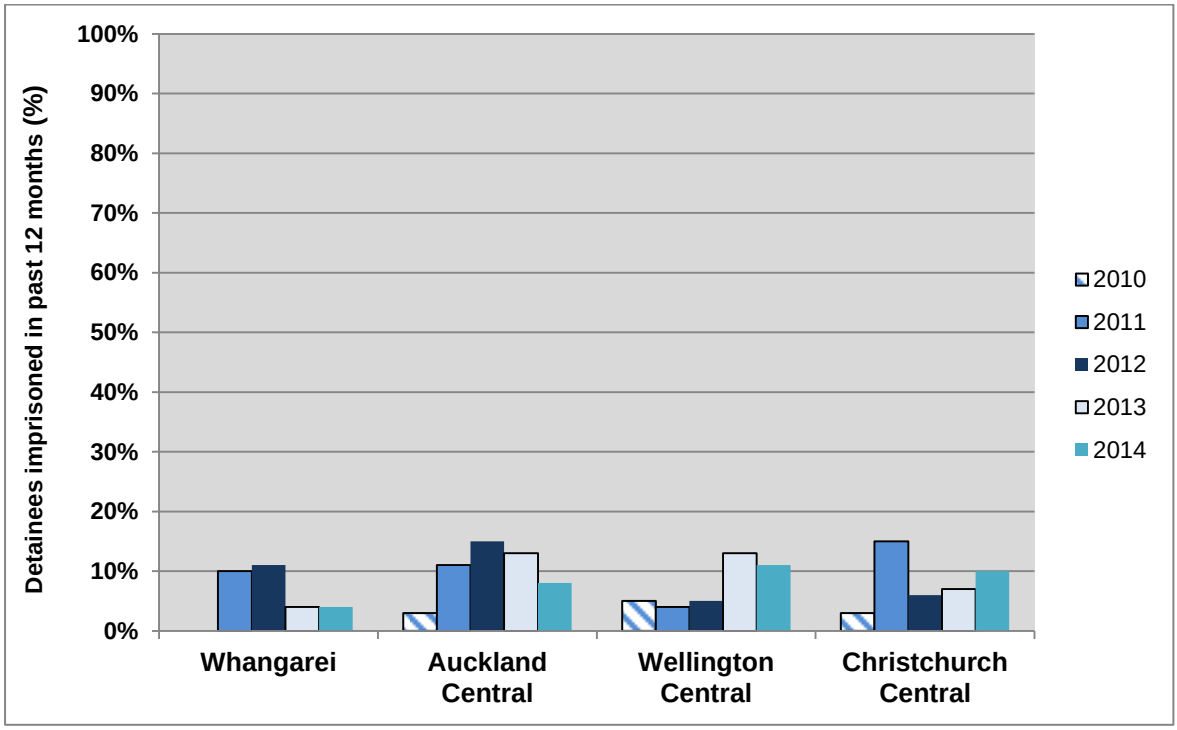


Table 14.5: Proportion of police detainees who had been imprisoned for different offence types in the past 12 months (of those who had been imprisoned in past 12 months), 2010-2014

Imprisonment in previous 12 months (%)	All sites				
	2010 (n=107)	2011 (n=126)	2012 (n=126)	2013 (n=131)	2014 (n=101)
Burglary	18	25	23	20	22
Against justice (unspecified)	21	20	29	22	20
Car conversion	6	7	13	11	17
Assault (unspecified)	14	12	17	18	15
Driving offence(including alcohol impaired driving)	10	12	11	12	12
Serious assault (incl. male assaults female)	4	7	9	17	11
Trespass	3	0	5	1	7
Theft	7	1	11	8	6
Robbery	10	5	7	5	6
Fraud	2	5	2	5	5
Wilful damage	2	2	2	4	5
Other	3	0	2	1	5
Minor assault	1	3	1	4	4
Drugs (new drugs)	0	0	4	2	4
Drugs (cannabis only)	1	4	2	2	4
Shoplifting	7	2	3	1	4
Arms act offences	0	5	1	6	3
Receiving stolen goods	4	2	5	5	3
Public disorder	3	2	4	0	3
Drugs (unspecified)	3	2	5	7	2
Intimidation/ threat	4	3	3	4	2
Grievous assault	7	5	4	3	2
Sexual attack	2	2	0	2	2
Dishonesty	0	0	1	1	1
Property destruction	0	0	0	0	1
Racial	0	0	0	0	1
Fines	0	1	0	1	0
Immigration	0	0	1	0	0
Drugs (not cannabis)	1	8	0	0	0
Kidnapping and abduction	1	2	0	0	0
Family offences	0	1	0	0	0
No charge (detained)	0	1	0	0	0
By law breaches	0	0	0	1	0

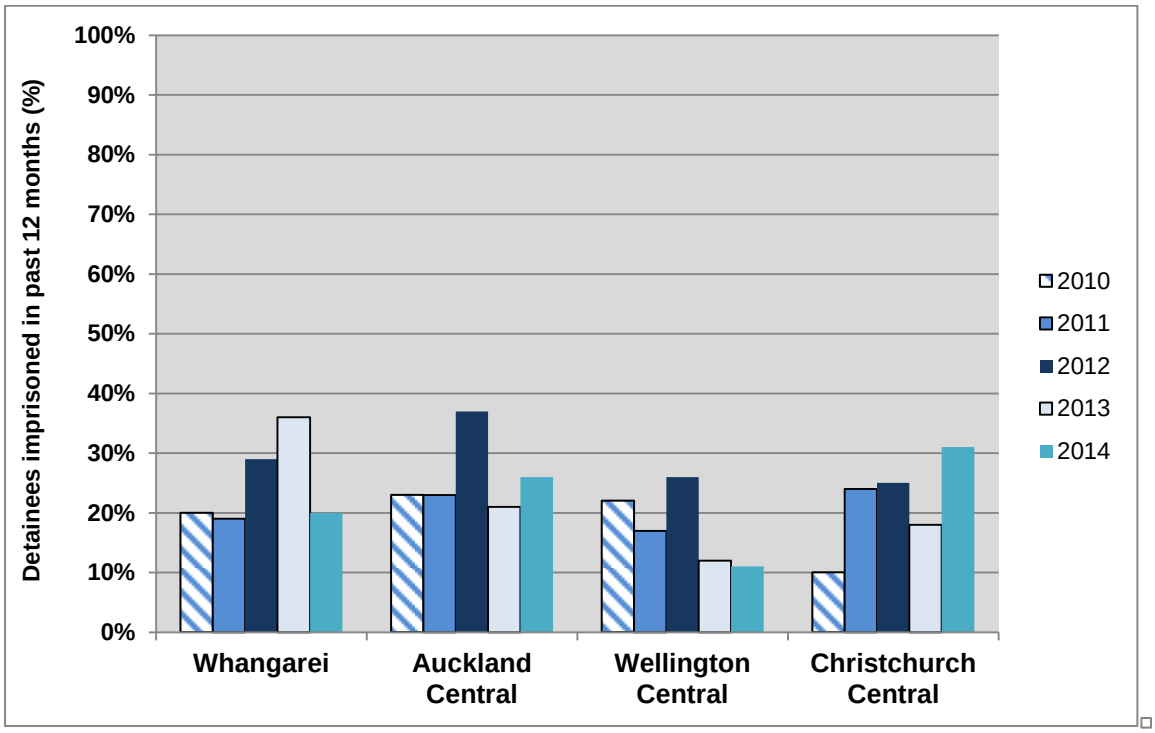
Drug use in prison in the previous 12 months

Forty-one percent of the detainees who had been to prison in the past 12 months reported they had used drugs while in prison in 2014. There was no change in the proportion of detainees who had used drugs while in prison from 2010 to 2014 (p=0.8281).

Alcohol and drug treatment while in prison in previous 12 months

Twenty-four percent of the detainees who had been in prison in the past 12 months had received treatment for alcohol and drug issues as part of their prison sentence. There was no statistically significant change in the proportion of recently imprisoned detainees who had received alcohol and drug treatment from 2010 to 2014 (p=0.2355). The low numbers of detainees in the sample who had been imprisoned in the previous 12 months prevented any reliable tests of trends within the study sites (Figure 14.14).

Figure 14.14: Proportion of police detainees who had received treatment for drug and alcohol issues in the previous 12 months as part of their prison sentence by location (of those who had been to prison in the previous 12 months), 2010-2014



Summary

- The detainees had been arrested a mean of 4.7 times in the previous 12 months in 2014 (median 2 times, range 1-260 times)

- There was no change in the mean number of times the detainees had been arrested in the previous year from 2010 to 2014

- The offence types the detainees had been most commonly been arrested for in 2014 were 'Against Justice' (unspecified) (51%), (any) assault (31%), driving offences (16%), serious assault (14%), assault (unspecified) (14%), warrant to arrest (unspecified) (9%), burglary (9%), fines (9%), theft (8%), car conversion (6%), wilful damage (6%), shoplifting (5%), trespass (5%), minor assaults (4%) and drugs (cannabis only) (4%)

- There was no overall change in the proportion of detainees who had been arrested for (any) assault from 2010 to 2014

- However, the proportion of Auckland Central detainees who had been arrested for (any) assault increased from 20% in 2013 to 29% in 2014

- The proportion of detainees arrested for (any) drug offence declined from 14% in 2010 to 7% in 2014

- Decreases in arrests for (any) drug offence occurred from 2010 to 2014 in Whangarei, Auckland Central and Wellington Central

- The proportion of the detainees arrested for a drug offence who had been arrested for a methamphetamine offence increased from 21% in 2010 to 58% in 2013, but did not change from 58% in 2013 to 49% in 2014

- The proportion of detainees arrested for a drug offence who had been arrested for a cannabis offence increased from 59% in 2011 to 71% in 2014

- Seventy-seven percent of the detainees had been convicted of a criminal offence in their lifetimes in 2014 , and this had not changed from previous years

- The crimes the detainees had most often been convicted of in 2014 were (any) assault (42%), a 'driving offence' (34%), 'assault (unspecified)' (28%), 'burglary' (23%), 'car conversion' (19%), 'theft' (17%), (any) drug offence (16%), 'serious assault' (11%) and 'wilful damage' (10%)

- The proportion of convicted detainees who had ever been convicted for (any) assault increased from 26% in 2010 to 42% in 2014

- The rise in convictions for (any) assault was found in Auckland Central, Wellington Central and Christchurch Central in 2014.

- The proportion of detainees who had been convicted of a crime who had received treatment for drug and alcohol problems increased from 20% in 2010 to 40% in 2014. Large increases in treatment occurred in 2011/12

- Increasing rates of accessing drug treatment through the criminal justice system were found in all the study sites from 2010 to 2014

- The proportion of the detainees who had been imprisoned in the past 12 months declined from 16% in 2011 to 12% in 2014

- The offence categories for which the detainees had been imprisoned in the past 12 months were (any) assault (28%), burglary (22%), 'Against Justice' (unspecified) (20%), car conversion (17%), assault (unspecified) (15%), driving offences (12%), serious assault (11%) and (any) drug offence (8%)

- There was no change in the proportion of detainees who had been imprisoned for (any) assault in the previous 12 months from 2010 to 2014 (25% to 28%)

- The proportion of detainees imprisoned in the past year who had been imprisoned for (any) drug offence increased from 3% in 2010 to 8% in 2014

- Eight detainees had been imprisoned for a drug offence in the past 12 months in 2014 (i.e. four for cannabis offences, three for methamphetamine offences and two for alcohol offences)

- The proportion of detainees who had been imprisoned in the past 12 months who had received alcohol and drug treatment increased from 17% in 2010 to 30% in 2012, and then decreased to 24% in 2014

Chapter 15 – Alcohol and other drug harm

Introduction

Alcohol and other drug use is associated with a range of health and social problems, including substance dependency, chronic illness, mental illness, relationship breakdown, suicide, violence, sexual abuse, physical injury, impaired educational achievement, unemployment, work place accidents and low work productivity (Babor et al., 2010b). As a population with high levels of alcohol and other drug use, police detainees are particularly 'at risk' from substance related harm. This harm includes problems which are directly borne by the detainee themselves, such as acute illness, poisoning, overdose, anxiety, depression and psychosis, and wider social harms which are borne by their family, friends, neighbors and work mates, such as parental neglect, family violence, sexual abuse, financial stress, anti-social behavior, poor driving and unsafe work practices.

NZ-ADUM provides a detailed picture of the extent and nature of the substance related harm among police detainees. The 2013 NZ-ADUM found 89% of the detainees who used alcohol, tobacco, legal highs or other drugs had experienced at least one problem from their substance use in the previous 12 months. Thirty-four percent of substance using detainees admitted 'physically hurting someone', and 30% had 'stolen property', while under the influence of alcohol and other drugs. Thirty-eight percent had 'driven too fast' and 28% had 'driven through a stop sign or red light' while under the influence of alcohol and other drugs. Ten percent of the detainees had overdosed on drugs in the previous year.

Extent of alcohol and other drug use

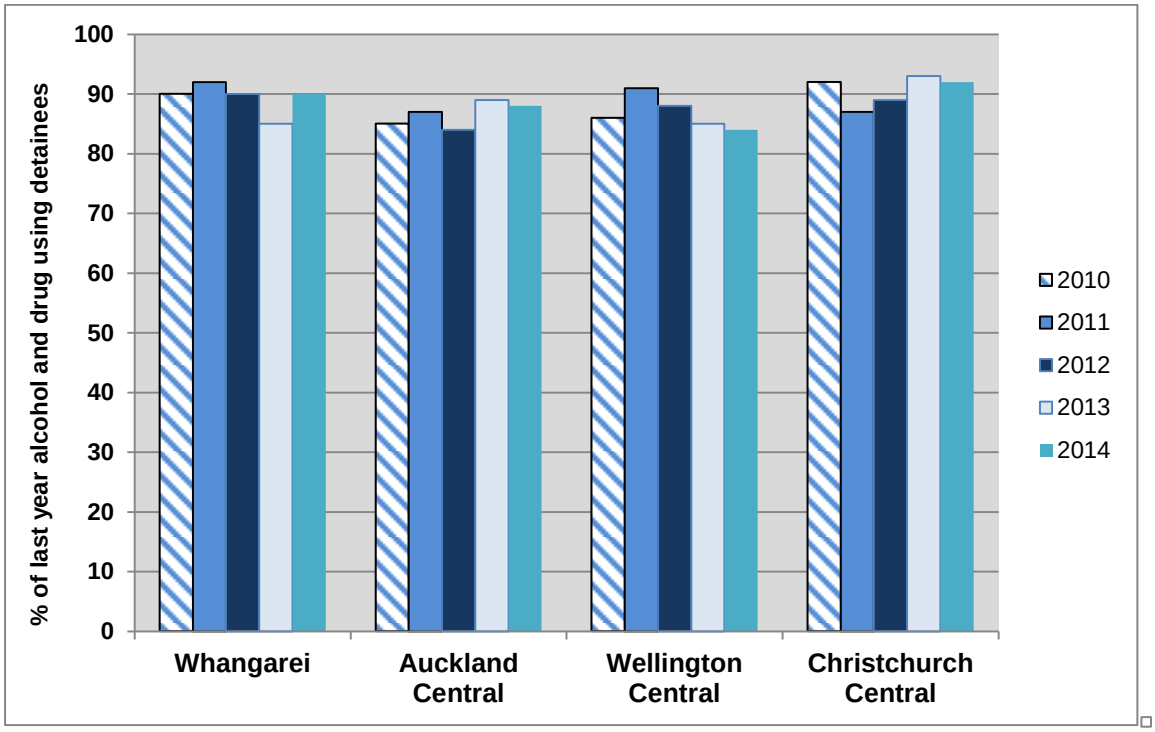
Ninety-eight percent of police detainees had used alcohol, tobacco, legal highs or other drugs in the previous 12 months in 2014. There has been no change in the level of alcohol and other drug use among the detainees over the past four years (i.e. 97%=2010, 98%=2011, 98%=2012, 97%=2013, 98%=2014). In 2014, 87% of the detainees had drunk alcohol, 83% had smoked tobacco, 68% had smoked cannabis, 35% had smoked synthetic

cannabinoids, 30% had used methamphetamine, 20% had used hallucinogens and 16% had used ecstasy in the previous year. Seventy-five percent of the detainees had used an illegal drug in the previous 12 months in 2014. There was no change in the proportion of detainees who had used an illegal drug over the previous four years (i.e. 75%=2010, 79%=2011, 77%=2012, 76%=2013, 75%=2014).

Extent of problems due to alcohol and other drug use

Those detainees who had drunk alcohol or used other drugs in the past 12 months were asked if they had experienced any of a list of 34 substance-related problems in the previous year. Eighty-nine percent had experienced at least one problem related to their substance use in 2014. There was no change in the proportion of detainees who had reported at least one harm due to their substance use from 2010 to 2014 (88%=2010, 88%=2011, 87%=2012, 89%=2013, 89%=2014, p=0.8771) (Figure 15.1).

Figure 15.1: Proportion of police detainees who experienced at least one problem from their alcohol and other drug use in the past 12 months by location (of those who used alcohol and other drugs in the past 12 months), 2010-2014



General problems due to alcohol and other drug use

Fifty-three percent of the alcohol and drug using police detainees reported they 'couldn't remember what happened the night before' due to their substance use in 2014 (Table 15.1). Fifty-five percent had 'upset a family relationship', 43% had 'damaged someone else's property' and 40% had 'reduced work/study performance' as a result of their substance use. Thirty-one percent had physically hurt themselves, 40% had 'ended a personal relationship', 32% 'stole someone's property' (Figure 15.2) and 34% had 'got into debt' as a result of their alcohol and other drug use.

Figure 15.2: Proportion of police detainees who 'stole someone's property' as a result of their alcohol and other drug use (of those who used alcohol and other drugs in the past 12 months), 2010-2014

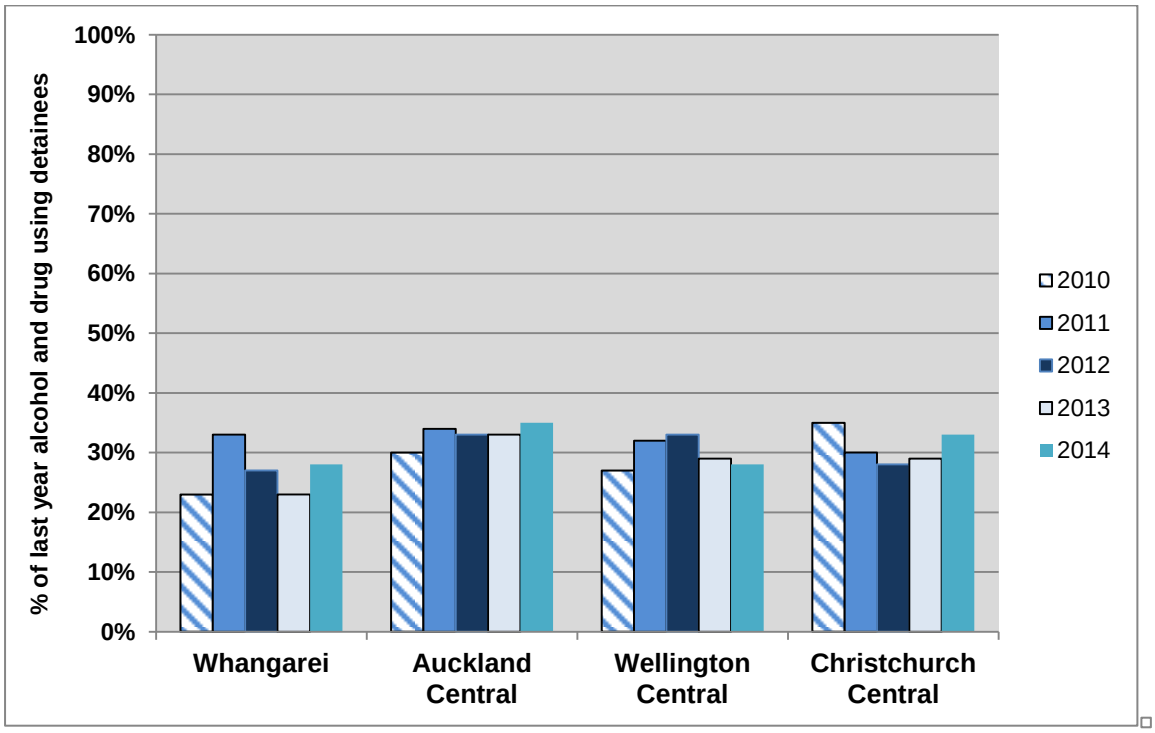


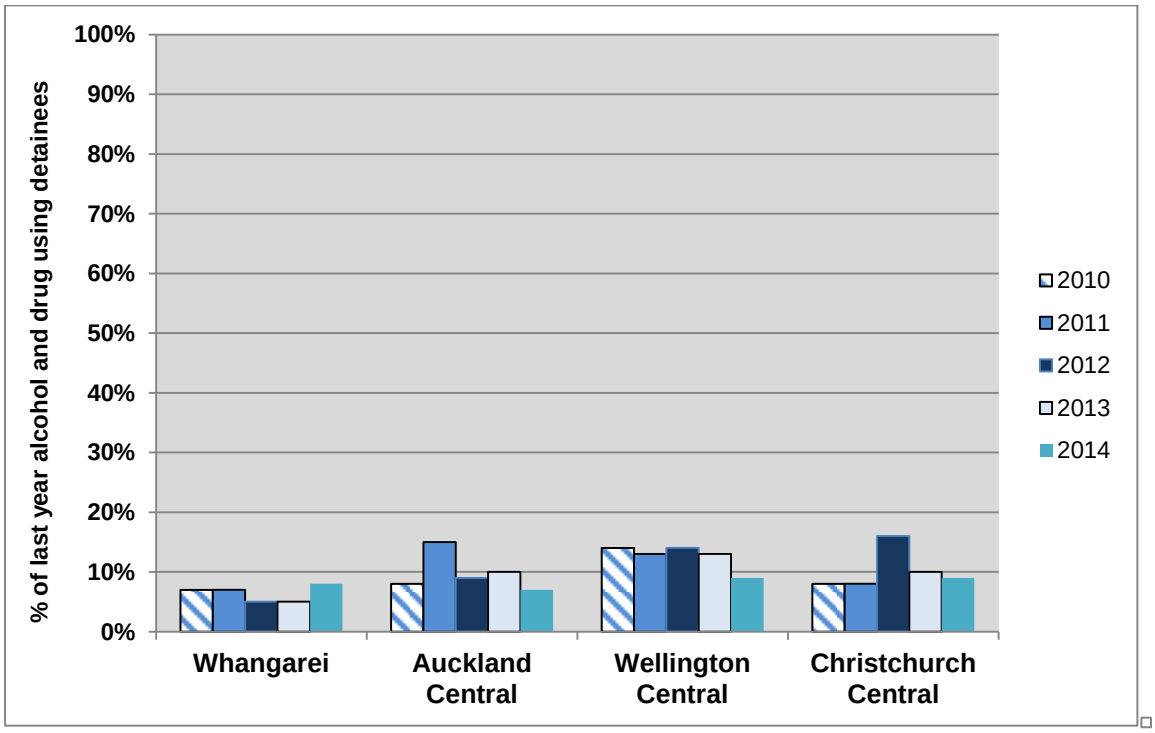
Table 15.1: Proportion of alcohol and other drug using police detainees who experienced problems due to their substance use in the previous 12 months by location, 2010-2014

Harm (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=111)	2011 (n=147)	2012 (n=146)	2013 (n=142)	2014 (n=145)	2010 (n=270)	2011 (n=300)	2012 (n=233)	2013 (n=279)	2014 (n=302)	2010 (n=149)	2011 (n=165)	2012 (n=96)	2013 (n=102)	2014 (n=93)	2010 (n=259)	2011 (n=191)	2012 (n=296)	2013 (n=272)	2014 (n=269)	2010 (n=789)	2011 (n=803)	2012 (n=772)	2013 (n=799)	2014 (n=812)
Upset a family relationship	50	58	54	48	61	52	52	45	46	49	41	51	44	54	53	52	45	55	51	60	50	50	50	50	55
Couldn't remember what happened the night before	58	62	58	48	55	54	56	50	54	48	54	61	65	58	52	63	62	61	56	56	57	60	58	48	53
Damaged someone's property	39	45	38	34	44	38	41	35	42	42	39	45	40	41	43	51	45	44	40	44	43	44	39	40	43
Had reduced work/ study performance	32	39	31	26	32	46	36	29	41	42	38	50	33	42	35	36	37	43	42	45	39	39	35	40	40
Ended a personal relationship	32	38	29	27	31	36	37	28	36	39	28	36	35	36	43	37	30	31	40	42	34	35	31	36	40
Spent some nights sleeping rough (i.e. living on the streets)	35	26	18	25	42	33	25	33	35	37	30	34	28	36	30	36	30	29	31	35	33	28	29	33	36

Got into debt/owing money	38	37	27	26	35	34	39	29	26	32	24	37	25	42	39	34	32	25	32	34	33	36	27	31	34
Stole someone's property	23	33	27	23	28	30	34	33	33	35	27	32	33	29	28	35	30	28	29	33	30	32	31	30	32
Kicked out of where you were living	30	36	24	25	38	32	31	28	28	28	22	30	25	38	27	31	29	27	31	32	29	31	27	30	31
Physically hurt yourself	26	32	21	17	30	26	29	29	32	29	26	35	34	30	28	34	29	39	27	34	29	31	32	28	31
Took sick leave/ did not attend class	30	31	21	19	25	36	29	31	31	30	27	34	25	31	18	29	28	33	30	34	31	30	29	29	28
No money for food or rent	26	18	15	20	28	29	28	24	23	27	25	27	30	27	27	24	25	24	24	29	26	26	24	24	28
Sacked/ lose business/ quit study course	14	14	15	7	11	14	14	12	16	16	15	11	11	12	11	10	13	11	16	16	13	13	12	14	15
Overdosed from drugs	7	7	5	5	8	8	15	9	10	7	14	13	14	13	9	8	8	16	10	9	9	11	12	10	8

Eight percent of the substance using detainees had 'overdosed on drugs' during the previous year (Figure 15.3).

Figure 15.3: Proportion of police detainees who 'overdosed' on drugs (of those who used alcohol and other drugs in the past 12 months), 2010-2014



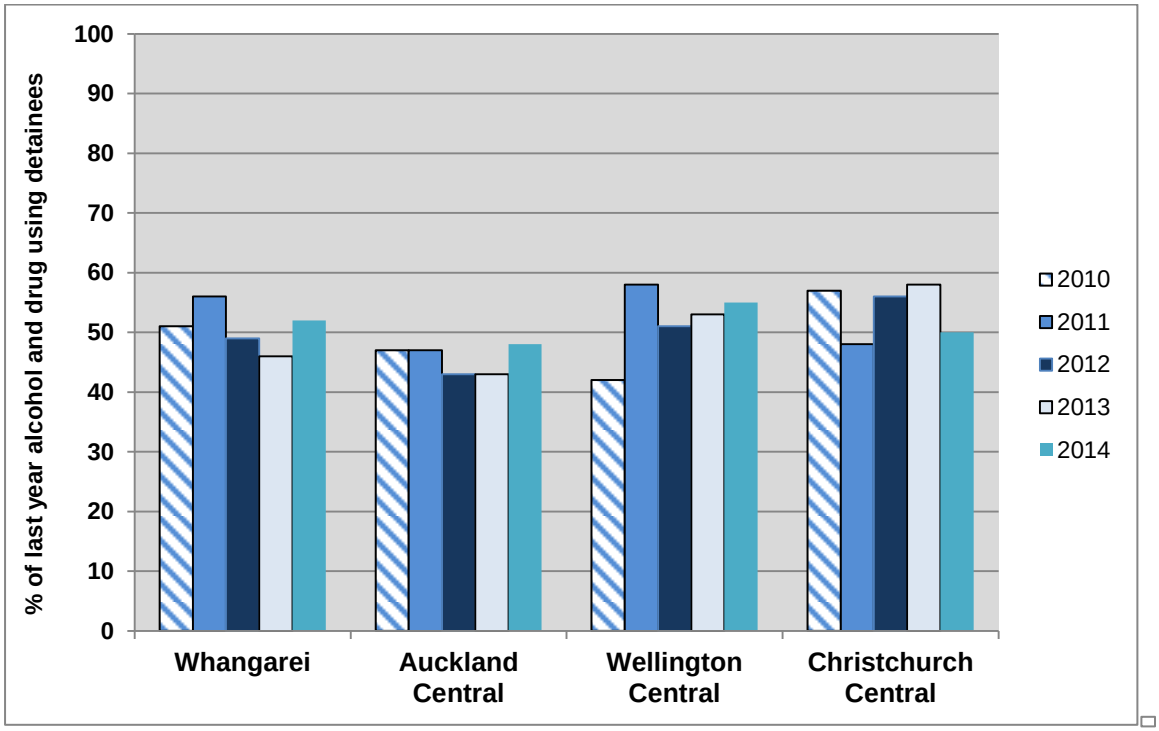
Aggression due to alcohol and other drug use

Sixty percent of the alcohol and other drug using police detainees reported 'losing their temper' due to their substance use during the previous 12 months in 2014 (Table 15.2). Fifty-one percent of the substance using detainees had 'physically or verbally threatened someone', and 41% had been 'physically or verbally threatened' themselves in 2014 (Figure 15.4).

Table 15.2: Proportion of alcohol and other drug using detainees who reported aggression due to their substance use in the past 12 months by location, 2010-2014

Harm (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=110)	2011 (n=147)	2012 (n=144)	2013 (n=142)	2014 (n=145)	2010 (n=267)	2011 (n=299)	2012 (n=233)	2013 (n=278)	2014 (n=302)	2010 (n=149)	2011 (n=163)	2012 (n=96)	2013 (n=103)	2014 (n=93)	2010 (n=259)	2011 (n=190)	2012 (n=295)	2013 (n=272)	2014 (n=268)	2010 (n=785)	2011 (n=801)	2012 (n=766)	2013 (n=800)	2014 (n= 811)
Lost your temper	56	67	56	51	63	56	59	48	54	55	54	63	64	54	59	60	56	61	64	63	57	60	56	57	60
Physically or verbally threatened someone	51	56	49	46	52	47	47	43	43	48	42	58	51	53	55	57	48	56	58	50	50	50	50	50	51
Were physically or verbally threatened	38	37	38	35	44	49	44	41	37	39	40	45	41	46	39	37	39	46	44	43	42	42	42	40	41
Physically hurt someone	31	38	35	37	38	38	38	30	29	33	28	40	40	31	45	40	31	39	40	36	36	36	36	34	37
Were physically assaulted	31	37	31	30	37	36	33	35	30	30	33	34	41	39	52	35	38	38	32	36	34	35	36	32	33

Figure 15.4: Proportion of police detainees who had 'physically or verbally threatened someone' as a result of their alcohol and other drug use by location (of those who used a substance in the past 12 months), 2010-2014



Thirty-seven percent of the detainees had 'physically hurt someone' as a result of their alcohol and other drug use (Figure 15.5), and thirty-three percent had themselves been physically hurt due to someone else's alcohol and other drug use (Figure 15.6).

There was an increase in the proportion of Wellington Central detainees who had 'physically hurt someone' as a result of their alcohol and other drug use (up from 28% in 2010 to 45% in 2014), and this increase was close to being statistically significant (p=0.0582) (Figure 15.5).

Figure 15.5: Proportion of police detainees who 'physically hurt someone' as a result of their alcohol and other drug use by location (of those who used a substance in the past 12 months), 2010-2014

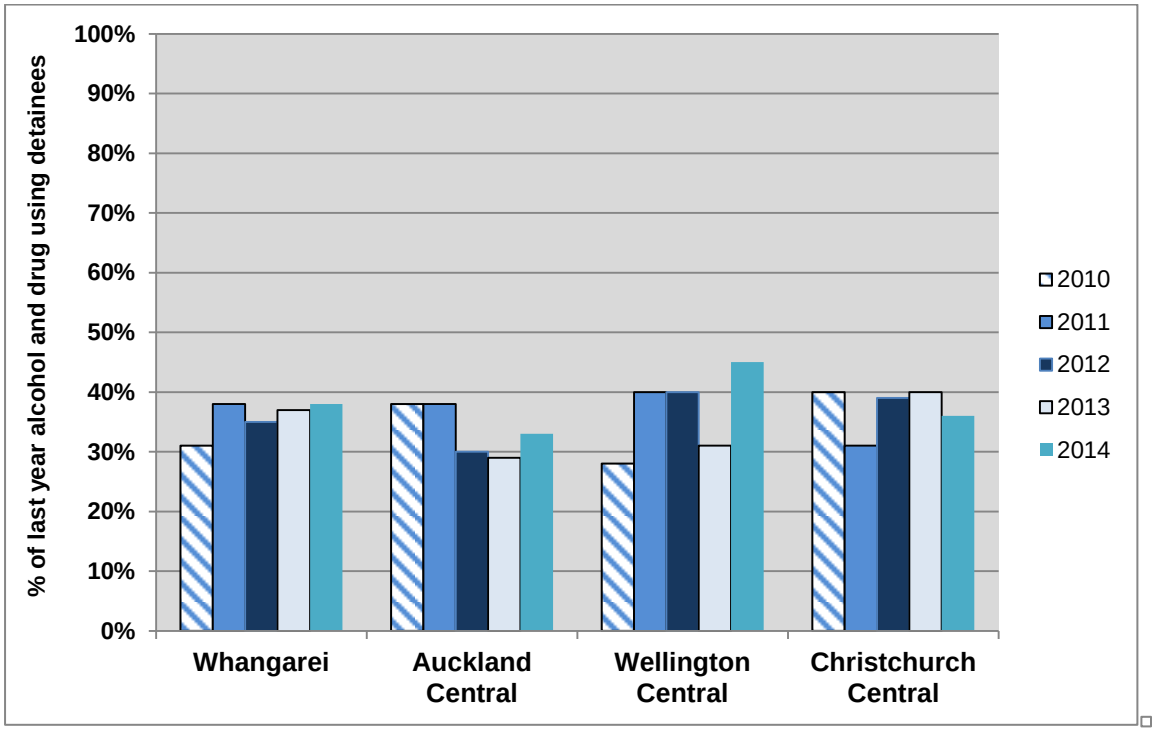
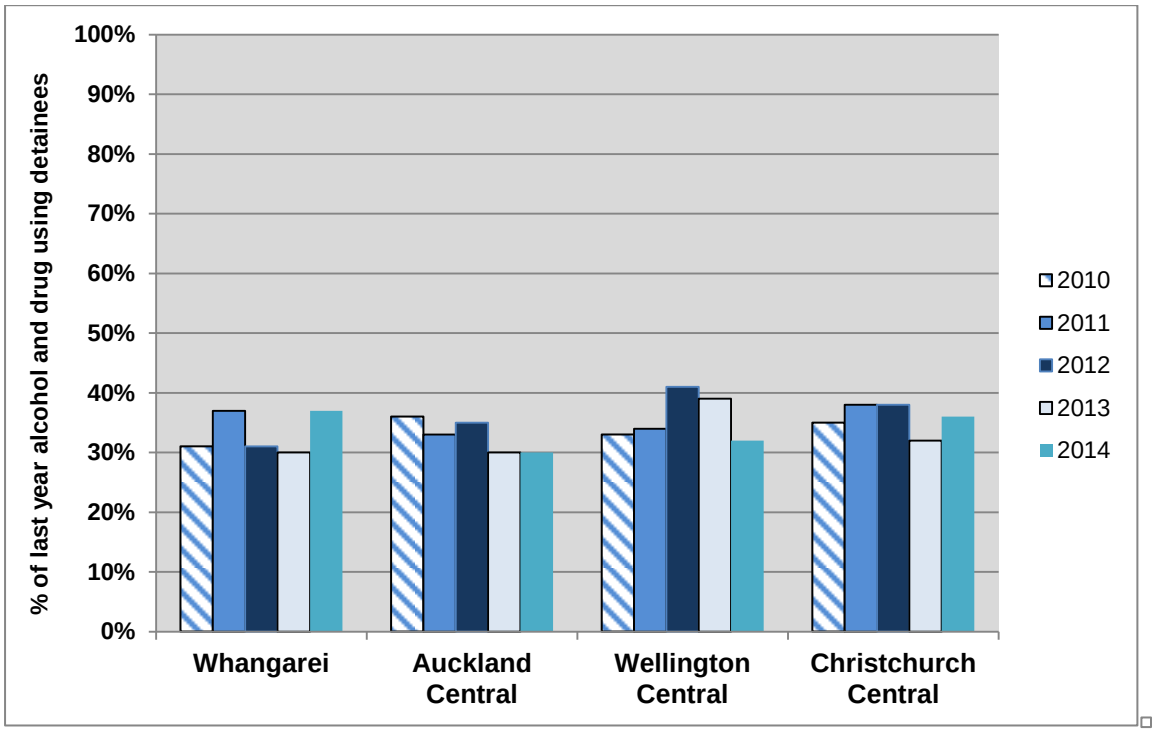


Figure 15.6: Proportion of police detainees who were 'physically assaulted' as a result of their alcohol and drug use by location (of those who used a substance in the past 12 months), 2010-2014



Driving incidents due to alcohol and other drug use

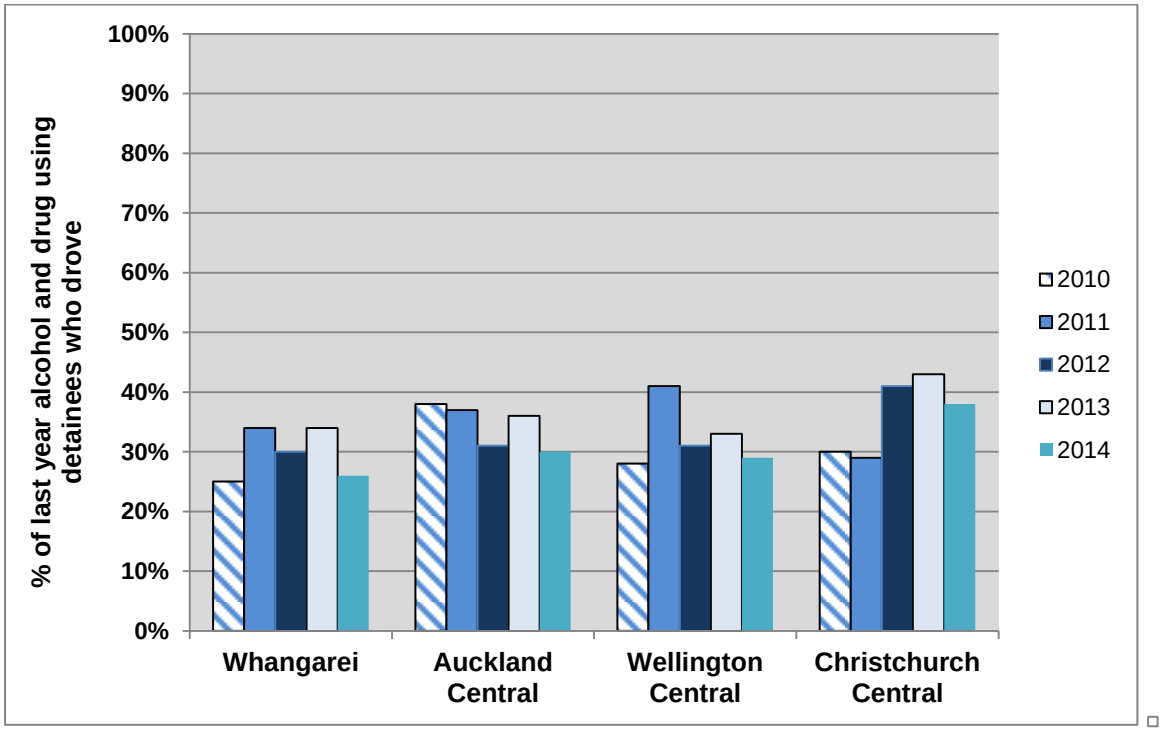
Twenty-seven percent of the detainees said they 'don't drive' and a further 8% said their license was 'suspended' in 2014. Thirty-two percent of the alcohol and other drug using detainees *who drove* reported driving 'too fast' due to their substance use in 2014 (Table 15.3 and Figure 15.7). Twenty-four percent had been charged with a 'driving offence', 24% received a 'traffic ticket', 24% 'lost their temper at another driver', 22% 'drove through a stop sign or red light', and 20% had 'lost concentration while driving' as a result of their alcohol and other drug use. Fourteen percent 'couldn't remember driving home', and 11% had 'had a car crash' due to their alcohol and other drug use.

Table 15.3: Proportion of alcohol and other drug using detainees who reported a driving related incident due to their alcohol and other drug use in the past 12 months by location, 2010-2014

Harm (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=106)	2011 (n=114)	2012 (n=131)	2013 (n=102)	2014 (n=129)	2010 (n=191)	2011 (n=234)	2012 (n=144)	2013 (n=214)	2014 (n=235)	2010 (n=97)	2011 (n=96)	2012 (n=77)	2013 (n=58)	2014 (n=83)	2010 (n=223)	2011 (n=163)	2012 (n=203)	2013 (n=175)	2014 (n=217)	2010 (n=617)	2011 (n=618)	2012 (n=556)	2013 (n=545)	2014 (n=670)
Drove too fast	25	34	30	34	26	38	37	31	36	30	28	41	31	33	29	30	29	41	43	38	31	34	33	38	32
Charged with a driving offence	36	37	24	33	22	35	31	32	31	26	30	33	27	24	19	24	31	34	36	27	30	32	30	32	24
Got a traffic ticket	27	39	20	31	26	32	29	27	26	24	29	37	22	22	18	22	20	26	34	26	27	28	25	28	24
Lost your temper at another driver	13	21	18	21	16	29	31	21	27	20	31	29	25	20	25	22	23	20	29	31	24	26	21	26	24
Drove through a stop sign or red light	22	25	14	22	14	29	35	24	34	26	20	30	18	15	22	16	20	22	29	23	22	27	20	28	22
Lost concentration while driving	16	18	18	22	11	26	21	24	22	22	20	20	27	22	18	17	17	22	23	25	20	19	23	22	20
Nearly hit another car	15	20	9	15	8	22	20	21	20	19	14	19	18	12	18	14	12	13	14	17	17	17	16	16	16

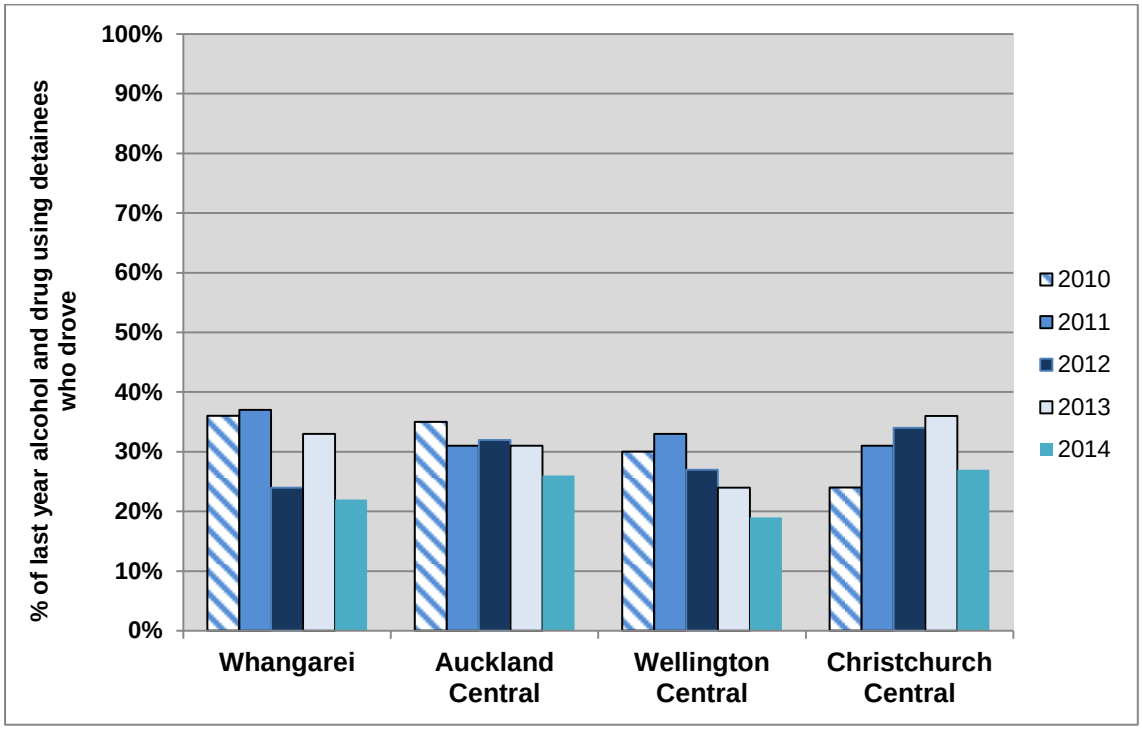
Couldn't remember driving home	22	18	14	14	11	17	18	21	18	14	18	14	19	8	11	15	14	21	19	16	17	16	19	16	14
Had a car crash	14	12	8	14	10	15	16	15	16	10	15	15	13	12	11	13	11	13	18	13	14	13	13	16	11
Nearly hit a pedestrian	3	3	4	2	2	2	6	6	6	6	3	3	3	3	4	3	2	2	3	5	3	4	4	4	4

Figure 15.7: Proportion of police detainees who reported 'driving too fast' as a result of their alcohol and other drug use by location (of those who drove in the previous year), 2010-2014



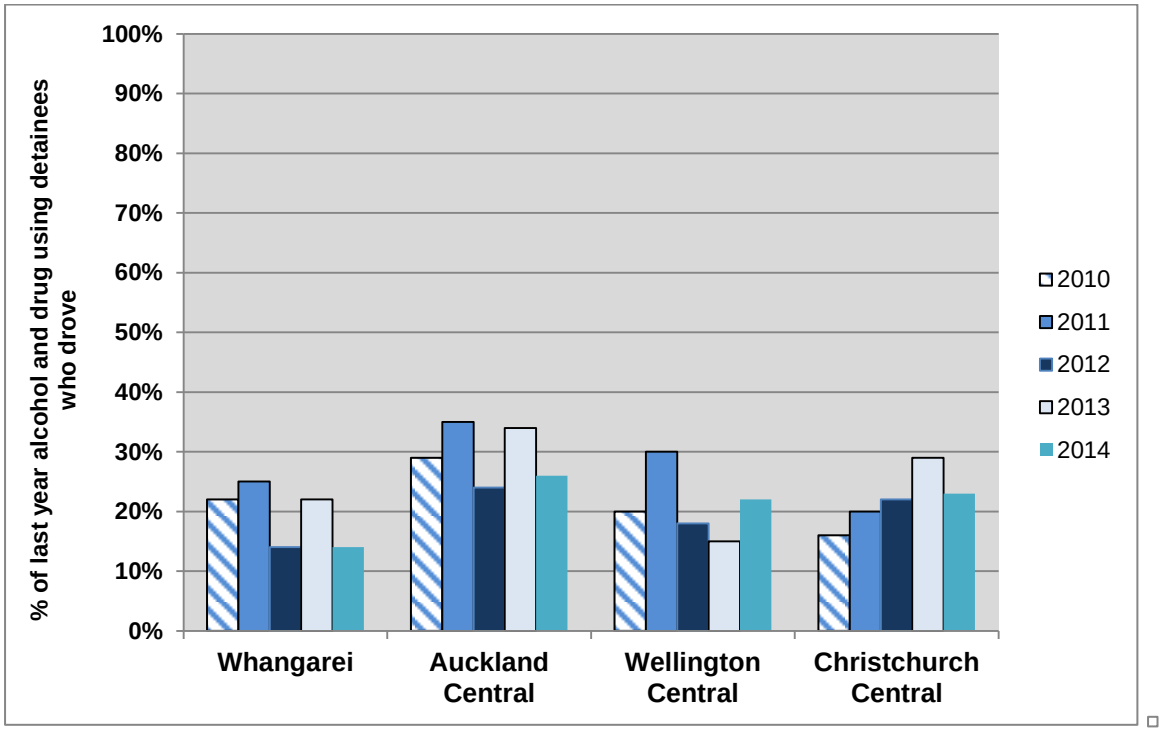
The proportion of detainees who reported being 'charged with a driving offence' as a result of their alcohol and other drug use declined from 32% in 2013 to 24% in 2014 (p=0.0367) (Figure 15.8).

Figure 15.8: Proportion of police detainees who had been 'charged with a driving offence' as a result of their alcohol and other drug use by location (of those who drove in the previous year), 2010-2014



The proportion of detainees in Wellington Central who reported 'getting a traffic ticket' as a result of their alcohol and other drug use declined from 37% in 2011 to 18% in 2014 (p=0.0440). The proportion of detainees in Whangarei who reported 'nearly hitting another car' in the past 12 months as a result of their alcohol and other drug use declined from 20% in 2011 to 8% in 2014 (p=0.0489).

Figure 15.9: Proportion of police detainees who had 'driven through a stop sign or red light' as a result of their alcohol and other drug use by location (of those who drove in the previous year), 2010-2014



Sexual harm incidents due to alcohol and other drug use

Forty-six percent of the detainees had 'unprotected sex' due to their alcohol and other drug use in 2014 (Table 15.4). Thirty-one percent 'had sex and later regretted it', 13% 'had sex and had not wholly consented', and 7% had been 'sexually harassed' in 2014. The proportion of Whangarei detainees who had 'unprotected sex' due to their substance use increased from 29% to 45% in 2014, and this increase was close to being statistically significant (p=0.0536). The proportion of detainees who reported 'having sex and later regretting it' increased in Christchurch Central up from 26% in 2013 to 38% in 2014 (p=0.0190).

Table 15.4: Proportion of alcohol and other drug using detainees who reported sexual harm related to their substance use in the past 12 months by location, 2010-2014

Harm (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=111)	2011 (n=146)	2012 (n=141)	2013 (n=141)	2014 (n=143)	2010 (n=265)	2011 (n=298)	2012 (n=231)	2013 (n=278)	2014 (n=300)	2010 (n=148)	2011 (n=164)	2012 (n=95)	2013 (n=103)	2014 (n=93)	2010 (n=259)	2011 (n=190)	2012 (n=291)	2013 (n=270)	2014 (n=267)	2010 (n=783)	2011 (n=800)	2012 (n=757)	2013 (n=792)	2014 (n=806)
Had unprotected sex	41	48	45	29	45	47	41	46	40	43	46	50	49	45	33	61	55	55	51	57	51	48	50	43	46
Had sex and later regretted it	29	42	27	22	28	33	28	24	31	31	34	29	27	32	22	39	37	35	26	38	34	33	29	28	31
Had sex but felt you hadn't wholly consented	11	12	9	9	10	13	13	12	15	15	15	14	5	14	10	12	13	13	12	15	13	13	10	13	13
Were sexually harassed	2	5	5	2	6	7	7	7	9	9	9	8	8	7	8	6	5	6	4	6	6	6	7	6	7
Were sexually assaulted	1	3	3	2	3	3	4	3	5	3	6	7	5	4	3	3	2	3	2	3	3	4	3	4	3

Main drug types attributed to alcohol and other drug-related problems in the previous 12 months

Those detainees who had experienced problems related to their alcohol and drug use in the previous year were asked about the drug type(s) to which they mainly attributed these problems. Detainees could nominate more than one substance type. The detainees named three drug types as largely responsible for their substance use related problems: alcohol (69%), cannabis (23%) and methamphetamine (20%) (Table 15.5). Fourteen percent of the detainees considered 'synthetic cannabis' to be responsible for their substance use problems (up from only <1% in 2012). In Wellington Central, 21% of detainees named synthetic cannabinoids as the substance responsible for their drug related harm.

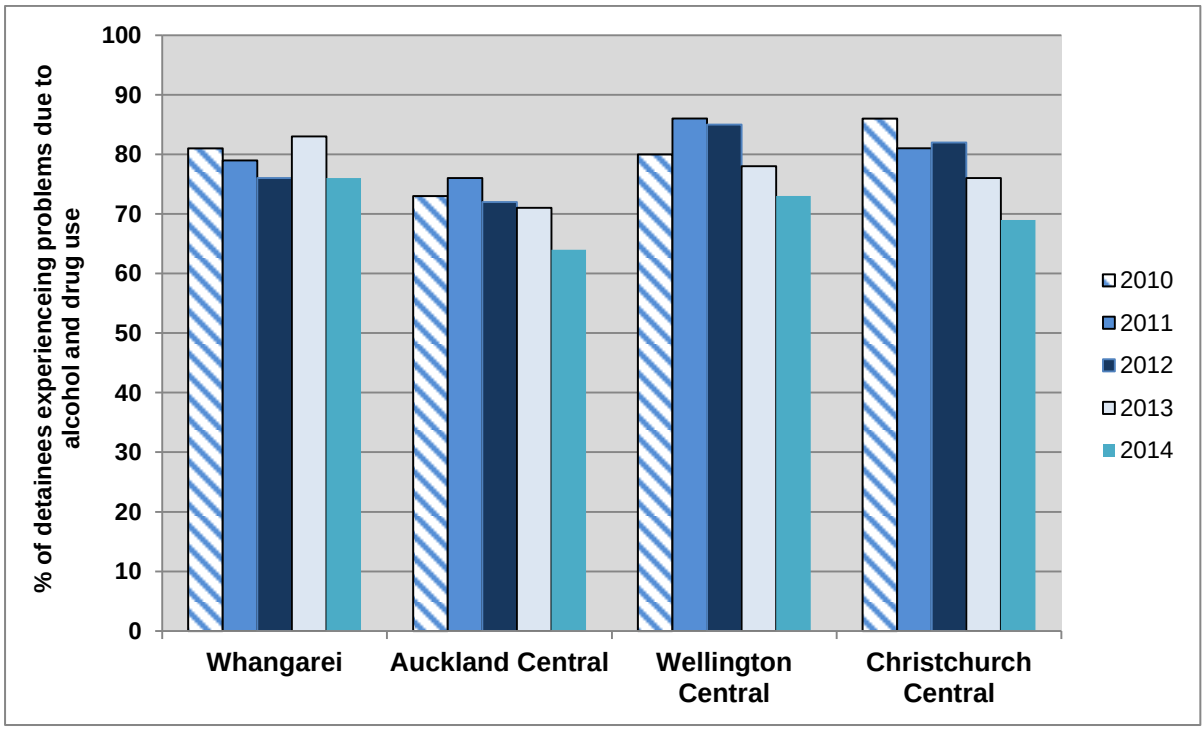
Table 15.5: Drug type(s) which the police detainees nominated as responsible for their substance related problems in the past 12 months by location, 2010-2014

Drug (%)	Whangarei					Auckland Central					Wellington Central					Christchurch Central					All sites				
	2010 (n=105)	2011 (n=134)	2012 (n=135)	2013 (n=146)	2014 (n=145)	2010 (n=229)	2011 (n=248)	2012 (n=209)	2013 (n=279)	2014 (n=303)	2010 (n=130)	2011 (n=148)	2012 (n=88)	2013 (n=103)	2014 (n=93)	2010 (n=241)	2011 (n=166)	2012 (n=268)	2013 (n=273)	2014 (n=270)	2010 (n=705)	2011 (n=696)	2012 (n=700)	2013 (n=801)	2014 (n=813)
Alcohol	81	79	76	83	76	73	76	72	71	64	80	86	85	78	73	86	81	82	76	69	80	80	79	76	69
Cannabis	30	33	34	28	27	33	28	23	23	23	32	28	31	24	24	36	38	29	28	20	33	32	28	25	23
Methamphetamine	12	19	13	14	20	21	28	21	28	24	14	11	10	17	17	8	7	8	10	18	14	17	14	18	20
Synthetic cannabinoids	-	1	0	9	11	-	0	<1	4	12	-	0	0	10	21	-	0	0	12	15	-	<1	<1	8	14
Tobacco	4	5	4	1	7	3	4	5	3	4	2	5	3	0	6	11	9	4	2	4	6	6	4	2	5
LSD	1	0	0	1	0	1	<1	<1	3	0	5	3	0	1	0	4	1	1	1	1	3	1	1	2	<1
Ecstasy	2	4	6	1	1	2	3	3	2	1	5	4	6	2	1	2	1	1	<1	<1	3	3	3	1	1
Benzodiazepines	2	1	1	0	0	2	<1	1	<1	0	1	1	1	0	1	4	1	3	1	<1	2	1	2	<1	<1
Can't specify	2	0	1	0	0	4	0	0	<1	<1	0	2	0	0	0	2	0	1	0	<1	2	<1	<1	<1	<1
Morphine	2	0	0	0	1	2	0	<1	1	0	0	1	1	0	0	5	3	3	3	2	2	1	1	1	1
Magic mushrooms	1	1	2	0	1	1	1	<1	<1	<1	3	2	0	0	0	2	1	2	1	<1	2	1	1	<1	<1
Street BZP	0	0	0	0	-	0	0	<1	0	0	1	0	0	0	0	2	2	1	<1	<1	1	1	1	<1	<1
Heroin	1	0	0	0	0	1	<1	0	1	1	2	1	0	0	0	<1	2	1	<1	0	1	1	<1	<1	,1

'Homebake' Morphine/heroin	0	1	0	0	0	0	<1	0	<1	0	0	1	0	0	0	2	1	1	1	1	1	1	<1	<1	<1
Ice (crystal meth-amphetamine)	3	0	0	0	0	<1	<1	<1	2	1	1	0	0	0	1	<1	1	<1	0	0	1	1	<1	1	<1
Ritalin (methylphenidate)	0	0	0	0	-	0	0	0	0	-	1	0	1	0	0	3	1	2	1	<1	1	<1	1	<1	<1
Amyl nitrate	0	0	0	1	0	<1	0	0	1	0	0	0	0	0	1	1	0	1	0	<1	<1	0	<1	<1	<1
Cocaine	1	2	1	0	0	<1	<1	0	1	1	0	0	0	0	-	0	0	0	0	-	<1	<1	<1	<1	<1
Codeine	0	0	0	0	-	0	<1	<1	<1	<1	0	0	0	0	0	1	0	1	<1	0	<1	<1	1	<1	<1
GHB	0	0	0	0	-	1	0	1	1	<1	0	0	0	0	-	0	0	0	0	-	<1	0	<1	<1	<1
Tramadol	0	0	0	0	-	<1	0	<1	1	<1	0	0	0	0	-	<1	0	2	0	0	<1	0	1	<1	<1
Opium poppies	0	0	0	0	-	0	0	<1	0	0	0	0	0	0	-	<1	0	1	0	<1	<1	0	1	0	<1
Amphetamine	1	1	1	0	0	1	2	0	1	<1	1	2	2	1	0	1	2	<1	<1	0	1	2	1	1	0
Methadone	0	0	0	0	-	1	0	1	1	0	1	1	0	0	0	2	1	1	<1	0	1	1	1	1	0
Antidepressants	1	0	0	0	0	<1	0	0	<1	0	0	0	0	0	-	<1	0	0	<1	0	<1	0	0	<1	0
Zopiclone	0	0	0	0	-	<1	0	<1	0	0	0	0	0	0	-	<1	0	1	0	0	<1	0	<1	0	0
Buprenorphine	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	<1	0	0	0	0	<1	0	0	0	0

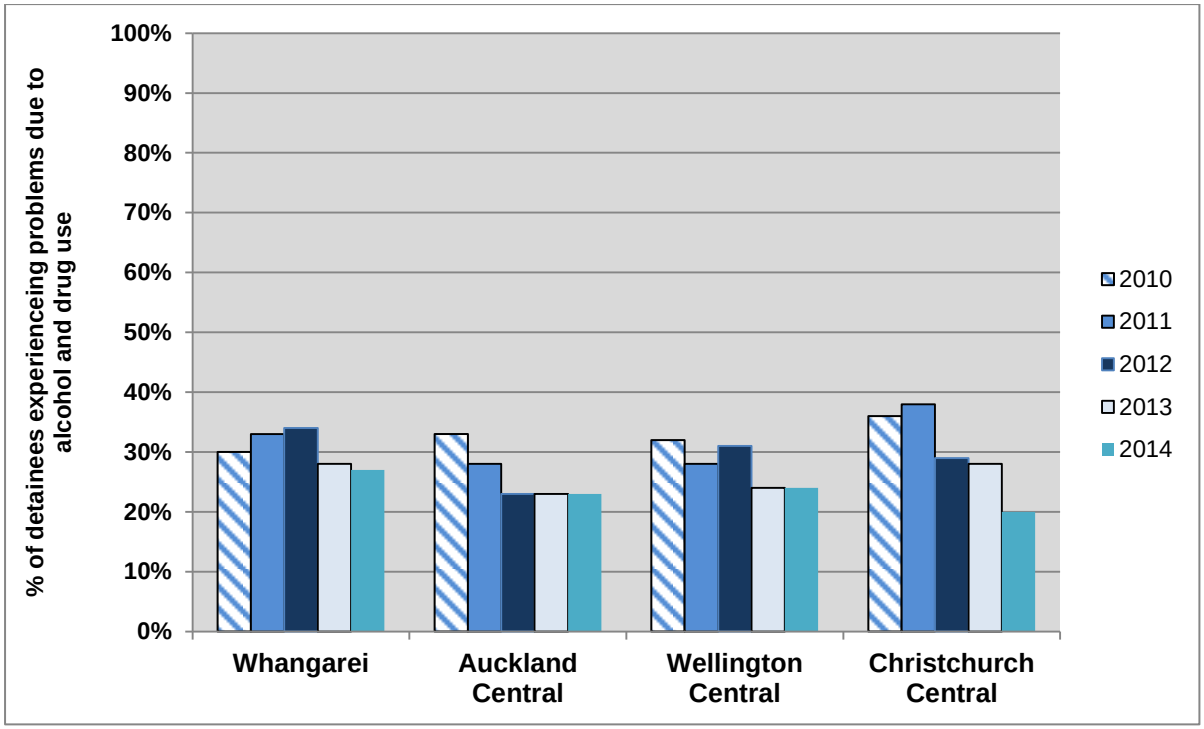
The proportion of detainees who attributed their substance use problems to alcohol declined from 80% in 2010 to 69% in 2014 (p<0.0001), from 80% in 2011 to 69% in 2014 (p<0.0001), and from 79% in 2012 to 69% in 2014 (p=0.0007). The proportion of Auckland Central detainees who attributed their substance related problems to alcohol declined from 76% in 2011 to 64% in 2014 (p=0.0247), and the proportion of Christchurch Central detainees who attributed their problems to alcohol declined from 86% in 2010 to 69% in 2014 (p=0.0002) (Figure 15.10).

Figure 15.10: Proportion of police detainees who attributed their substance use related problems to alcohol by location (of those detainees who experienced an alcohol and drug problem in the past 12 months), 2010-2014



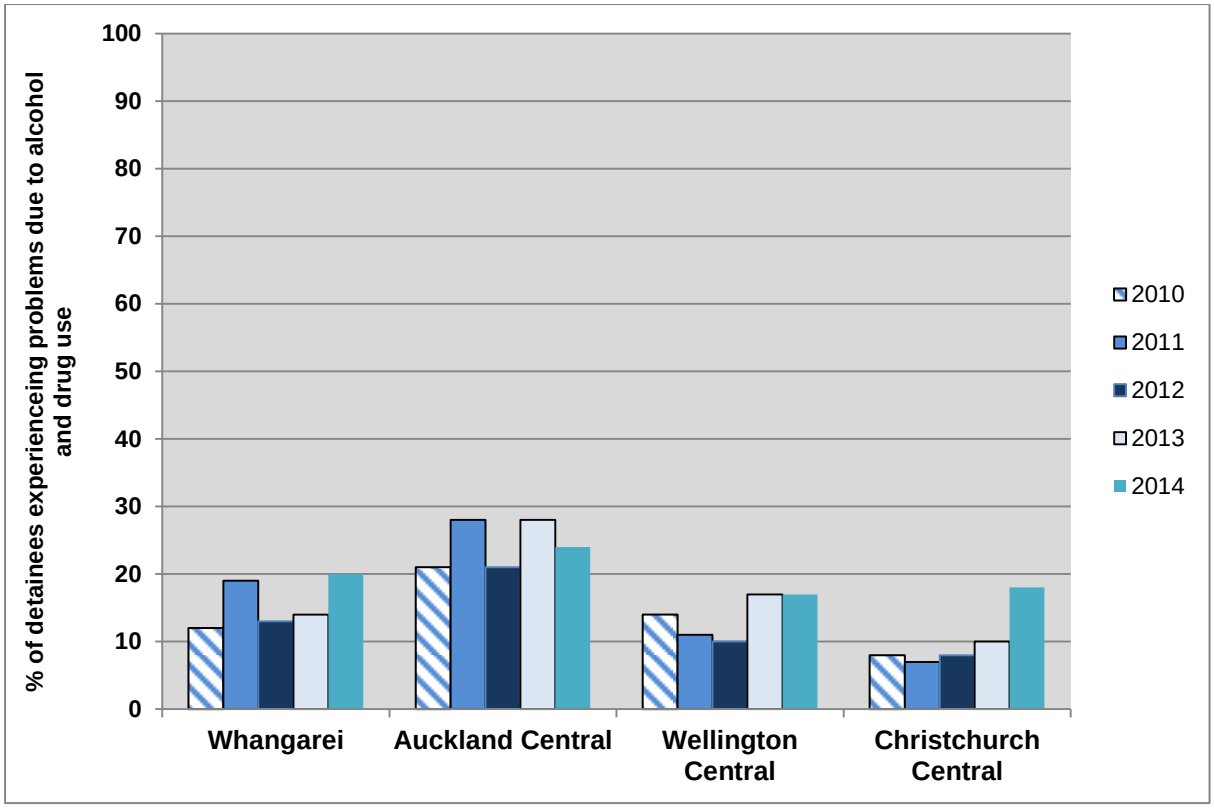
The proportion of detainees who attributed their substance use related problems to cannabis declined from 33% in 2010 to 23% in 2014 (p<0.0001), and from 32% in 2011 to 23% in 2014 (p=0.0007). A lower proportion of Auckland Central detainees attributed their substance use related problems to cannabis (down from 33% in 2010 to 23% in 2014), although this decline was not statistically significant (p=0.1044) (Figure 15.11). The proportion of Christchurch Central detainees who attributed their substance use related problems to cannabis declined from 36% in 2010 to 20% in 2014) (p=0.0004), and from 38% in 2011 to 20% in 2014 (p=0.0004).

Figure 15.11: Proportion of police detainees who attributed their substance use related problems to cannabis by location (of those detainees who had experienced an alcohol and other drug problem in the past 12 months), 2010-2014



The proportion of detainees who attributed their substance use problems to methamphetamine increased from 14% in 2010 to 20% in 2014 (p=0.0163), and from 14% in 2012 to 20% in 2014 (p=0.0120). The proportion of Christchurch Central detainees who attributed their substance use problems to methamphetamine increased from 7% in 2010 to 18% in 2014 (p=0.0097), from 7% in 2011 to 18% in 2014 (p=0.0182), from 8% in 2012 to 18% in 2014 (p=0.0071), and from 10% in 2013 to 18% in 2014 (p=0.0573) (Figure 15.12).

Figure 15.12: Proportion of police detainees who attributed their substance use related problems to methamphetamine by location (of those detainees who experienced an alcohol and other drug problem in the past 12 months), 2010-2014



The proportion of detainees who attributed their substance use related problems to ecstasy declined from 3% in 2012 to 1% in 2014 (p=0.0147). The proportion of detainees who attributed their substance use related problems to tobacco increased from 2% in 2013 to 5% in 2014 (p=0.0241).

Alcohol and Driving

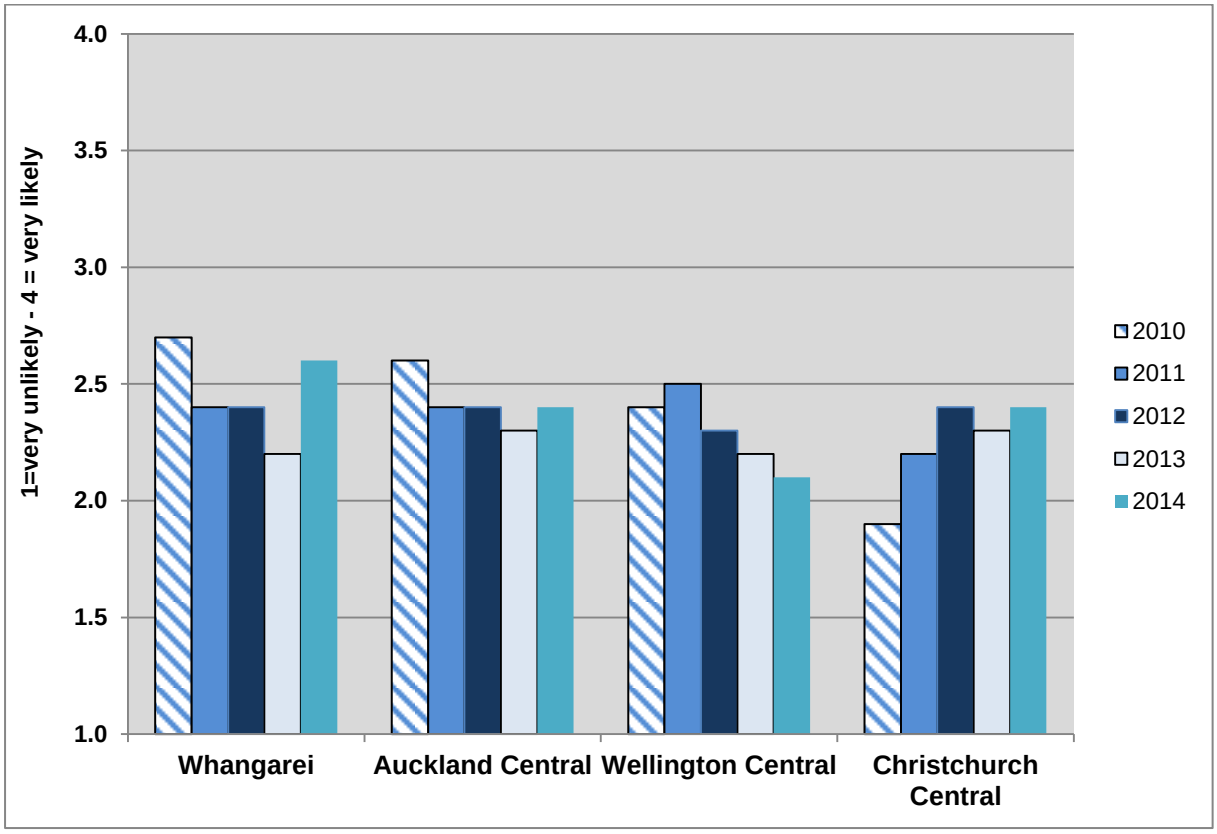
The detainees who had used alcohol and other drugs in the previous 12 months were asked how likely they thought it was that they would be stopped if they drove under the influence of alcohol. In 2014, 27% said they 'did drive' and a further 8% had their 'license suspended'. Fifty-three percent of the detainees who had driven in 2014 thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of alcohol (Table 15.6). Overall, there was no change in the detainees' perceptions of the likelihood of being stopped while driving under the influence of alcohol from 2010 to 2014 (p=0.1668). Detainees from Christchurch Central were more likely to believe they would be stopped

while driving under the influence of alcohol in 2014 compared to 2010 (2.4 vs. 1.9, p=0.0002) (Figure 15.13), but there was no change between 2014 and 2013, 2012 and 2011.

Table 15.6: Police detainees' perceptions of the likelihood of being stopped by police whilst driving under the influence of alcohol by location (of those detainees who used alcohol and other drugs in the past year and who drove), 2010-2014

Likelihood of being stopped by police while under influence of alcohol	Whangarei					Auckland Central					Wellington Central					Christchurch Central					Total				
	2010 (n=29)	2011 (n=112)	2012 (n=116)	2013 (n=107)	2014 (n=96)	2010 (n=153)	2011 (n=205)	2012 (n=149)	2013 (n=194)	2014 (n=166)	2010 (n=110)	2011 (n=102)	2012 (n=69)	2013 (n=54)	2014 (n=63)	2010(n=226)	2011(n=140)	2012(n=227)	2013(n=167)	2014 (n=184)	2010 (n=518)	2011 (n=563	2012 (n=552)	2013 (n=522)	2014 (n =509)
Very likely (4)	28	23	26	21	31	22	18	28	23	24	25	23	17	17	17	16	20	27	21	24	20	20	25	21	24
Likely (3)	28	26	25	20	22	33	30	20	22	21	22	29	25	20	17	16	18	20	23	29	23	25	22	22	23
Unlikely (2)	31	16	18	22	20	25	30	20	22	27	22	22	25	28	27	15	24	20	18	14	20	25	21	22	21
Very unlikely (1)	14	36	31	37	27	20	22	32	34	28	32	26	33	35	38	54	38	33	38	33	37	30	32	35	32
Mean score of likelihood of being stopped (1=Very unlikely – 4=Very likely)	2.7	2.4	2.5	2.2	2.6	2.6	2.4	2.4	2.3	2.4	2.4	2.5	2.3	2.2	2.1	1.9	2.2	2.4	2.3	2.4	2.3	2.4	2.4	2.3	2.4

Figure 15.13: Mean score of likelihood of being stopped while driving under the influence of alcohol by location (of those detainees who used alcohol and other drugs in the past year and who drove), 2010-2014



Drugs and Driving

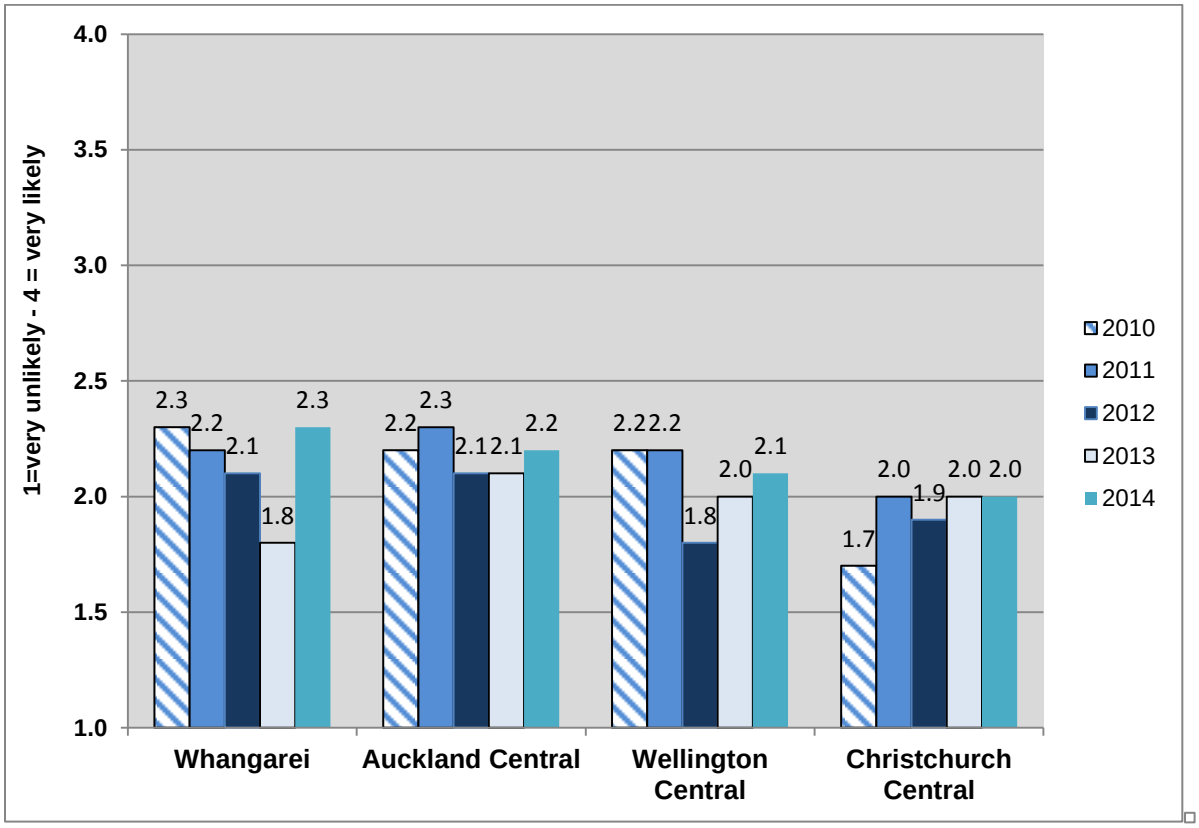
The detainees who had recently used alcohol and other drugs were also asked how likely they thought it was that they would be stopped if they drove under the influence of drugs 'other than alcohol' (e.g. cannabis, methamphetamine, ecstasy or heroin). Again, 27% of the detainees said they 'did not drive' and a further 8% had their 'license suspended' in 2014. Sixty-five percent of the detainees who did drive in 2014 thought it was 'unlikely' or 'very unlikely' they would be stopped by the police while driving under the influence of drugs in 2014 (Table 15.7).

Table 15.7: Police detainees' perceived likelihood of being stopped by the police whilst driving 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), 2010-2014

Likelihood of being stopped by police while under influence of drugs	Whangarei					Auckland Central					Wellington Central					Christchurch Central					Total				
	2010 (n=29)	2011 (n=93)	2012 (n=110)	2013 (n=109)	2014 (n=95)	2010 (n=144)	2011 (n=176)	2012 (n=131)	2013 (n=192)	2014 (n=162)	2010 (n=106)	2011 (n=92)	2012 (n=66)	2013 (n=101)	2014 (n=63)	2010 (n=219)	2011 (n=132)	2012 (n=202)	2013 (n=165)	2014 (n=179)	2010 (n=498)	2011 (n=501)	2012 (n=501)	2013 (n=519)	2014 (n=499)
Very likely (4)	14	18	14	9	22	15	13	16	13	14	20	16	5	15	13	9	11	11	16	12	13	13	12	14	14
Likely (3)	24	25	20	17	17	24	30	16	22	21	19	22	23	17	19	16	23	16	16	22	19	25	18	19	20
Unlikely (2)	45	18	30	20	26	28	31	30	30	33	26	27	26	23	32	17	23	28	18	21	24	26	28	24	27
Very unlikely (1)	17	39	36	53	35	33	27	38	35	31	35	35	47	45	37	58	42	45	49	44	44	36	42	44	38
Mean score of likelihood of being stopped (1=Very unlikely – 4=Very likely)	2.3	2.2	2.1	1.8	2.3	2.2	2.3	2.1	2.1	2.2	2.2	2.2	1.8	2.0	2.1	1.7	2.0	1.9	2.0	2.0	2.0	2.2	2.0	2.0	2.1

Whangarei detainees were more likely to believe they would be stopped by police while driving under the influence of drugs from 2013 to 2014 (up from 1.8 to 2.3, p=0.0338). Christchurch Central detainees were also more likely to believe they would be stopped by police while driving under the influence of drugs from 2010 to 2014 (up from 1.7 to 2.0), and this increase was close to being statistically significant (p=0.0678) (Figure 15.14).

Figure 15.14: 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), 2010-2014



Summary

- Ninety-eight percent of the police detainees had used alcohol, legal highs, tobacco or other drugs in the previous 12 months in 2014, and this had not changed from previous years

- Seventy-five percent of the detainees had used an illegal drug in the previous 12 months in 2014, and this had not changed from previous years

- Eighty-nine percent of the substance using detainees had experienced at least one problem from their alcohol and other drug use in 2014, and this had not changed from previous years

- Forty-three percent of the substance using detainees had 'damaged someone's property' as a result of their alcohol and other drug use in 2014

- Thirty-two percent of the substance using detainees 'stole someone's property' as a result of their alcohol and other drug use in 2014

- Thirty-seven percent of the substance using detainees had 'physically hurt someone' as a result of their alcohol and other drug use in 2014

- Eight percent of the substance using detainees had overdosed on drugs in 2014

- Twenty-two percent of the detainees had 'driven through a stop sign or red light' due to their alcohol and other drug use in 2014

- Fourteen percent of the substance using detainees 'couldn't remember driving home' as a result of their alcohol and other drug use in 2014

- Eleven percent of the detainees had 'had a car crash' as a result of their alcohol and other drug use in 2014

- The proportion of detainees who reported being charged with a driving offence as a result of their alcohol and other drug use declined from 32% in 2011 to 24% in 2014

- The proportion of Whangarei detainees who were charged with a driving offence as a result of their alcohol and other drug use declined from 37% in 2011 to 22% in 2014

- The detainees named three drug types as mainly responsible for their substance use problems in 2014: alcohol (69%), cannabis (23%) and methamphetamine (20%)

- Fourteen percent of the detainees considered 'synthetic cannabis' to be responsible for their substance use problems (up from only <1% in 2012)

- The proportion of detainees who attributed their substance use related problems to alcohol declined from 80% in 2010 to 69% in 2014

- The proportion of detainees who attributed their substance use related problems to cannabis declined from 32% in 2011 to 23% in 2014

- The proportion of detainees who attributed their substance use related problems to methamphetamine increased from 14% in 2010 to 20% in 2014

- The proportion of Christchurch Central detainees who attributed their substance use related problems to methamphetamine increased from 8% in 2012 to 18% in 2014

- The proportion of detainees who attributed their substance use related problems to ecstasy declined from 3% in 2012 to 1% in 2014

- Fifty-three 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 in 2014

- Sixty-five 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 in 2014

- Whangarei detainees believed they were more likely to be stopped by police while driving under the influence of drugs from 2013 to 2014

- Christchurch Central detainees were also more likely to believe they would be stopped by police while driving under the influence of drugs in 2014 compared to 2010

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