

# **Drug Use in New Zealand**

Analysis of the 2003 New Zealand  
Health Behaviours Survey – Drug Use

**Public Health Intelligence  
Occasional Bulletin No. 45**

This report was written by  
Niki Stefanogiannis (Senior Advisor, Public Health Medicine),  
Kylie Mason (Advisor, Statistics/GeoHealth), and  
Li-Chia Yeh (Advisor, Statistics), of  
Public Health Intelligence, Ministry of Health.

Citation: Ministry of Health. 2007. *Drug Use in New Zealand:  
Analysis of the 2003 New Zealand Health Behaviours Survey – Drug Use.*  
Wellington: Ministry of Health.

Published in August 2007 by the  
Ministry of Health  
PO Box 5013, Wellington, New Zealand

ISBN 978-0-478-19162-2 (print)  
ISBN 978-0-478-19163-3 (online)  
HP 4426

This document is available on the Ministry of Health website:  
<http://www.moh.govt.nz/phi>



MANATŪ HAUORA

## Foreword

One of the key aims in the New Zealand Health Strategy is to reduce the harm caused by recreational drug use in the New Zealand population. This encompasses a wide range of harms, including health-related, social and economic harms. We need robust and appropriate evidence for the purposes of monitoring current trends and inequalities, projecting future needs for health services, and evaluating how effective and efficient our current approaches are.

Public Health Intelligence (PHI), the epidemiology group of the Ministry of Health, undertakes the Ministry of Health's statutory responsibility to monitor the health of New Zealanders. The New Zealand Health Monitor (NZHM) is a national population health survey programme, used to obtain evidence around health status and risk behaviours. The NZHM includes surveys on the use of tobacco, alcohol and other drugs used for recreational purposes. The results from these surveys provide valuable information for work done on the *National Drug Policy 2007–2012*, to support policy interventions and service development.

This report summarises key results from the most recent survey carried out about recreational drug use in New Zealand, the 2003 Health Behaviours Survey – Drug Use. The report focuses on the most commonly used drugs in New Zealand: cannabis, amphetamines and ecstasy; however it also presents information on past-year and lifetime use of a wide range of recreational drugs. Presenting results by sex, age and ethnicity allows us to see general trends for the population in drug use for recreational purposes.

Comments about this report are welcome, and should be sent to Public Health Intelligence, Ministry of Health, PO Box 5013, Wellington.

Barry Borman  
Manager (Epidemiologist)  
Public Health Intelligence

## **Acknowledgements**

The 2003 New Zealand Health Behaviours Survey – Drug Use was designed and carried out by the Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki, of Massey University.

The analyses presented in this report were carried out by Public Health Intelligence, the epidemiology group of the Ministry of Health. The authors are grateful to the following people for input on this report: John Wren, Robert Templeton (Public Health Intelligence) and Paul Quigley (Wellington Hospital).

The authors acknowledge the following people for kindly agreeing to peer review this report and providing useful comments and suggestions: Kirstin Lindberg (Public Health Intelligence, Ministry of Health), Kim Williams, Natalie Paki-Paki (Ministry of Health), Sarita Von Afehl (Medsafe, Ministry of Health), Russil Durrant (Victoria University of Wellington), and Simon Adamson (Christchurch School of Medicine and Health Sciences, University of Otago).

We are also very grateful to the participants of the survey who gave their time to take part in the survey.

# Contents

Foreword	iii
Executive Summary	xiii
Chapter 1: Introduction and Methodology	1
Introduction	1
2003 Health Behaviours Survey – Drug Use	1
Methodology	2
Chapter 2: Overview of Drug Use in New Zealand	10
Lifetime drug use	10
Drug use in the last 12 months	13
Needle use	16
Chapter 3: Cannabis Use	17
Lifetime use of cannabis	17
Age of first use of cannabis	19
Cannabis use in the last 12 months	21
Frequency of cannabis use	24
Frequent use of cannabis	26
Binge use of cannabis	26
Type of cannabis used	27
Mode of use of cannabis	29
Location of cannabis use	31
Group size when using cannabis	33
Cannabis use and driving	34
Source of cannabis	35
Purchase of cannabis from tinny houses	37
Perceived price of cannabis compared to a year ago	38
Perceived availability of cannabis compared to a year ago	40
Cannabis and access to other drugs	42
Harms from cannabis use on area of life	42
Self-reported problems from cannabis use	44
Help-seeking for cannabis use	47
Barriers to receiving help for cannabis use	48

<b>Chapter 4: Amphetamine Use</b>	<b>49</b>
Lifetime use of amphetamines	49
Age of first use of amphetamines	51
Amphetamine use in the last 12 months	53
Frequency of amphetamine use	54
Binge use of amphetamines	55
Typical way of taking amphetamine	56
Location of amphetamine use	57
Amphetamine use and driving	59
Perceived price of amphetamines compared to a year ago	61
Perceived availability of amphetamines compared to a year ago	61
Harms from amphetamine use on area of life	62
Help-seeking for amphetamine use	64
<b>Chapter 5: Ecstasy Use</b>	<b>65</b>
Lifetime use of ecstasy	65
Age of first use of ecstasy	67
Ecstasy use in the last 12 months	68
Frequency of ecstasy use	69
Binge use of ecstasy	70
Location of ecstasy use	70
Ecstasy use and driving	72
Perceived price of ecstasy compared to a year ago	73
Perceived availability of ecstasy compared to a year ago	74
Harms from ecstasy use on areas of life	74
<b>Glossary</b>	<b>76</b>
<b>References</b>	<b>77</b>
<b>Appendices</b>	
Appendix A: Drug Classifications	78
Appendix B: Data Tables	79
Appendix C: Definitions of Derived Variables	105

## List of Tables

Table 1:	Sample sizes for 2003 Health Behaviours Survey – Drug Use	3
Table 2:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, percent (crude)	11
Table 3:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	12
Table 4:	Prevalence of drug use in the last 12 months in New Zealand by type of drug, total population aged 13–65 years, percent (crude)	14
Table 5:	Prevalence of drug use in the last 12 months in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	15
Table 6:	Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by age group, percent (crude)	16
Table 7:	Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	16
Table 8:	Prevalence of having ever used cannabis, total population aged 13–65 years, by age group, percent (crude)	17
Table 9:	Prevalence of having ever used cannabis, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	17
Table 10:	Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, percent (crude)	20
Table 11:	Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by age group, percent (crude)	21
Table 12:	Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	22
Table 13:	Frequency of cannabis use in the last 12 months, past-year cannabis users, percent (crude)	24
Table 14:	Frequency of cannabis use in the last 12 months, past-year cannabis users, by age group, percent (crude)	25
Table 15:	Frequency of cannabis use in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	25
Table 16:	Frequent cannabis use (10 or more times per month) in the last 12 months, past-year cannabis users, by age group, percent (crude)	26
Table 17:	Frequent cannabis use (10 or more times per month) in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	26
Table 18:	Binge use of cannabis in the last 12 months, past-year cannabis users, by age group, percent (crude)	26
Table 19:	Binge use of cannabis in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	27
Table 20:	Type of cannabis usually used by past-year cannabis users, percent (crude)	28
Table 21:	Typical mode of administration of cannabis, past-year cannabis users, percent (crude)	30
Table 22:	Location of cannabis use, past-year cannabis users, by age group, percent (crude)	32
Table 23:	Usual group size when using cannabis, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	34
Table 24:	Prevalence of driving while feeling under the influence of cannabis, past-year cannabis users, by age group, percent (crude)	34
Table 25:	Prevalence of driving while feeling under the influence of cannabis, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	34
Table 26:	Source of cannabis, past-year cannabis users, by age group, percent (crude)	35
Table 27:	Purchase of cannabis from tinny house in the last 12 months, past-year cannabis users who had bought cannabis in the last 12 months, by sex and ethnic group, percent (age-standardised)	38

Table 28:	Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, percent (crude)	38
Table 29:	Perceived availability of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by age group, percent (crude)	40
Table 30:	Self-reported harmful effects from cannabis use in the last 12 months, past-year cannabis users, percent (crude)	43
Table 31:	Self-reported harmful effects from cannabis use in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	44
Table 32:	Self-reported problems from cannabis use, past-year cannabis users, percent (crude)	45
Table 33:	Self-reported problems from cannabis use, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	46
Table 34:	Prevalence of having ever received help to reduce level of cannabis use, past-year cannabis users, by sex and ethnic group, percent (age-standardised)	47
Table 35:	Source of help, past-year cannabis users who had ever received help to reduce their level of cannabis use, percent (crude)	47
Table 36:	Barriers to receiving help for cannabis use, past-year cannabis users who had ever wanted help to reduce their level of cannabis use but had not received it, percent (crude)	48
Table 37:	Prevalence of having ever used amphetamines, total population aged 13–65 years, by age group, percent (crude)	49
Table 38:	Prevalence of having ever used amphetamines, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	49
Table 39:	Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, percent (crude)	52
Table 40:	Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by age group, percent (crude)	53
Table 41:	Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	54
Table 42:	Frequency of amphetamine use in the last 12 months, past-year amphetamine users, percent (crude)	55
Table 43:	Binge use of amphetamines in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)	55
Table 44:	Typical way of taking amphetamines, past-year amphetamine users, percent (crude)	56
Table 45:	Typical way of taking amphetamines, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)	57
Table 46:	Location of amphetamine use, past-year amphetamine users, by age group, percent (crude)	58
Table 47:	Prevalence of driving while feeling under the influence of amphetamines, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)	60
Table 48:	Self-reported harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, percent (crude)	63
Table 49:	Self-reported harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)	63
Table 50:	Prevalence of having ever used ecstasy, total population aged 13–65 years, by age group, percent (crude)	65
Table 51:	Prevalence of having ever used ecstasy, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	65
Table 52:	Age of first use of ecstasy, among people aged 13–65 years who have ever used ecstasy, percent (crude)	68
Table 53:	Prevalence of ecstasy use in last 12 months, total population aged 13–65 years, by age group, percent (crude)	68

Table 54:	Prevalence of ecstasy use in the last 12 months, by sex and ethnic group, percent (age-standardised)	68
Table 55:	Frequency of ecstasy use in the last 12 months, past-year ecstasy users, percent (crude)	69
Table 56:	Binge use of ecstasy in the last 12 months, past-year ecstasy users, percent (age-standardised)	70
Table 57:	Location of ecstasy use, past-year ecstasy users, by age group, percent (crude)	71
Table 58:	Self-reported harmful effects from ecstasy use in the last 12 months, past-year ecstasy users, percent (crude)	75
Table A1:	Drug classifications, other names provided for drugs in the survey questionnaire, and mode of administration	78
Table B1:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)	79
Table B2:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	80
Table B3:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)	81
Table B4:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by age group, percent (crude)	83
Table B5:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, males, by age group, percent (crude)	84
Table B6:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, females, by age group, percent (crude)	85
Table B7:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, Māori, by age group, percent (crude)	86
Table B8:	Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, non-Māori, by age group, percent (crude)	87
Table B9:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)	88
Table B10:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	89
Table B11:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)	90
Table B12:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by age group, percent (crude)	91
Table B13:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, males, by age group, percent (crude)	92
Table B14:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, females, by age group, percent (crude)	92
Table B15:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, Māori, by age group, percent (crude)	93
Table B16:	Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, non-Māori, by age group, percent (crude)	93
Table B17:	Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by sex and ethnic group, percent (crude)	94
Table B18:	Indicators of cannabis use in the last 12 months, by sex and ethnic group, percent (age-standardised)	94
Table B19:	Indicators of cannabis use in the last 12 months, by sex and ethnic group, percent (crude)	96
Table B20:	Indicators of cannabis use in the last 12 months, past-year cannabis users, by age group, percent (crude)	98

Table B21: Indicators of cannabis harm and help-seeking, past-year cannabis users, by sex and ethnic group, percent (crude)	99
Table B22: Indicators of cannabis harm and help-seeking, past-year cannabis users, by age group, percent (crude)	100
Table B23: Indicators of amphetamine use by sex and ethnic group, percent (age-standardised)	101
Table B24: Indicators of use of amphetamine use in the last 12 months, by sex and ethnic group, percent (crude)	102
Table B25: Indicators of harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (crude)	103
Table B26: Location of ecstasy use in the last 12 months, past-year ecstasy users, by sex and ethnic group, percent (age-standardised)	103
Table B27: Indicators of ecstasy use in the last 12 months, past-year ecstasy users, by sex and ethnic group, percent (crude)	104
Table C1: Criteria used to define frequency of cannabis use	106

## List of Figures

Figure 1: Prevalence of having ever used cannabis, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	18
Figure 2: Prevalence of having ever used cannabis, total population aged 13–65 years, by age group and sex, percent (crude)	18
Figure 3: Prevalence of having ever used cannabis, total population aged 13–65 years, by age and ethnic group, percent (crude)	19
Figure 4: Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, by sex, percent (age-standardised)	20
Figure 5: Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, by ethnic group, percent (age-standardised)	21
Figure 6: Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	22
Figure 7: Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and age group, percent (crude)	23
Figure 8: Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by ethnic and age group, percent (crude)	24
Figure 9: Type of cannabis usually used by past-year cannabis users, by sex, percent (age-standardised)	28
Figure 10: Type of cannabis usually used by past-year cannabis users, by ethnic group, percent (age-standardised)	29
Figure 11: Typical mode of administration of cannabis, past-year cannabis users, by sex, percent (age-standardised)	30
Figure 12: Typical mode of administration of cannabis, past-year cannabis users, by ethnic group, percent (age-standardised)	31
Figure 13: Location of cannabis use, past-year cannabis users, by sex, percent (age-standardised)	32
Figure 14: Location of cannabis use, past-year cannabis users, by ethnic group, percent (age-standardised)	33
Figure 15: Source of cannabis, past-year cannabis users, by sex, percent (age-standardised)	36
Figure 16: Source of cannabis, past-year cannabis users, by ethnic group, percent (age-standardised)	36
Figure 17: Purchase of cannabis from tinny house in the last 12 months, past-year cannabis users who had bought cannabis in the last 12 months, by age group, percent (crude)	37

Figure 18:	Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by sex, percent (age-standardised)	39
Figure 19:	Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by ethnic group, percent (age-standardised)	39
Figure 20:	Perceived availability of cannabis compared to a year ago, past-year cannabis users who bought cannabis in the last 12 months, by sex, percent (age-standardised)	41
Figure 21:	Perceived availability of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by ethnic group, percent (age-standardised)	41
Figure 22:	Prevalence of having ever used amphetamines, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)	50
Figure 23:	Prevalence of having ever used amphetamines, total population aged 13–65 years, by age group and sex, percent (crude)	50
Figure 24:	Prevalence of having ever used amphetamines, total population aged 13–65 years, by age and ethnic group, percent (crude)	51
Figure 25:	Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, by sex, percent (age-standardised)	52
Figure 26:	Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, by ethnic group, percent (age-standardised)	53
Figure 27:	Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by sex by ethnic group, percent (age-standardised)	54
Figure 28:	Binge use of amphetamines in the last 12 months, past-year amphetamine users, by age group, percent (crude)	56
Figure 29:	Location of amphetamine use, past-year amphetamine users, by sex, percent (age-standardised)	58
Figure 30:	Location of amphetamine use, past-year amphetamine users, by ethnic group, percent (age-standardised)	59
Figure 31:	Prevalence of driving while feeling under the influence of amphetamines, past-year amphetamine users, by age group, percent (crude)	60
Figure 32:	Perceived price of amphetamines compared to a year ago, past-year amphetamine users who had bought amphetamines in the last 12 months, percent (crude)	61
Figure 33:	Perceived availability of amphetamines compared to a year ago, past-year amphetamine users who had bought amphetamines in the last 12 months, percent (crude)	62
Figure 34:	Prevalence of having ever used ecstasy, total population aged 13–65 years, by sex by ethnic group, percent (age-standardised)	66
Figure 35:	Prevalence of having ever used ecstasy, total population aged 13–65 years, by age group and sex, percent (crude)	66
Figure 36:	Prevalence of having ever used ecstasy, total population aged 13–65 years, by age and ethnic group, percent (crude)	67
Figure 37:	Prevalence of ecstasy use in the last 12 months, by sex by ethnic group, percent (age-standardised)	69
Figure 38:	Location of ecstasy use, past-year ecstasy users, by sex, percent (age-standardised)	71
Figure 39:	Location of ecstasy use, past-year ecstasy users, by ethnic group, percent (age-standardised)	72
Figure 40:	Perceived price of ecstasy compared to a year ago, past-year ecstasy users who had bought ecstasy in the last 12 months, percent (crude)	73
Figure 41:	Perceived availability of ecstasy compared to a year ago, past-year ecstasy users who had bought ecstasy in the last 12 months, percent (crude)	74



# Executive Summary

## Background

This report presents the key results of the 2003 New Zealand Health Behaviours Survey – Drug Use (2003 HBS–DU) and describes recreational drug use in the New Zealand population.

The 2003 HBS–DU survey is part of the New Zealand Health Monitor (NZHM) programme, a co-ordinated cycle of population-based health-related surveys. The purpose of the 2003 HBS–DU was to provide information on recreational drug use and drug-related harms in the New Zealand population.

## Methodology

The survey design and data collection for the 2003 HBS–DU was carried out by the Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki, of Massey University. Public Health Intelligence (PHI), the epidemiology group in the Ministry of Health, analysed the survey data and prepared this report.

The target population for the 2003 HBS–DU survey was the New Zealand population aged 13–65 years living in private residential dwellings. The survey was carried out with a computer-assisted telephone interview (CATI) system, with a sample size of 8095 respondents. A stratified sample design was used for the survey, with increased sampling of Māori. The overall weighted response rate for the survey was 68%. The survey interviews were carried out between April and November 2003.

The survey has been weighted to represent the total New Zealand population aged 13–65 years. Differences between males and females, Māori and non-Māori and across age groups are reported. Age-standardised rates have been used in the analysis to compare sex and ethnic groups.

## Key results by drug type

Key results are presented below for cannabis, amphetamines and ecstasy, which are the three most commonly used recreational drugs (excluding alcohol and tobacco) in the last 12 months in New Zealand, as well as for selected other recreational drugs.

### Cannabis

- Cannabis was the most common drug (apart from alcohol and tobacco) that had been used for recreational purposes in New Zealand.
- Over two in five (44.4%; 95% confidence interval: 43.1–45.7) New Zealanders aged 13–65 years had used cannabis during their lifetime.
- Over one in eight (13.7%; 12.8–14.7) New Zealanders aged 13–65 years had used cannabis in the last 12 months.

- Among past-year cannabis users, an estimated 15.8% (13.3–18.3) had used cannabis frequently (10 or more times a month on average).
- Among past-year cannabis users, 13.7% (11.0–16.4) had binged on cannabis in the last 12 months (that is, used cannabis continuously for 24 hours or more).
- An estimated 39.5% (35.1–43.9) of past-year cannabis users had done at least some of their driving while feeling under the influence of cannabis.
- Approximately one in four past-year cannabis users (24.1%; 21.0–27.3) had experienced harmful effects to their energy and vitality in the last 12 months, because of their cannabis use.
- One in seven past-year cannabis users (14.2%; 11.4–17.0) had experienced harmful effects to their health because of their cannabis use, in the last 12 months.
- Overall, 6.1% (4.5–7.7) of past-year cannabis users had ever received help to reduce their use of cannabis.

### **Amphetamines**

- Amphetamines were the second most widely used recreational drug (excluding alcohol and tobacco) in New Zealand, with 6.8% (5.9–7.7) of New Zealanders aged 13–65 years having used amphetamines in their lifetime.
- Amphetamines had been used by 2.5% (2.0–2.9) of New Zealanders aged 13–65 years in the last 12 months.
- Among past-year amphetamine users, over half (56.3%; 47.6–65.0) had used amphetamines only one or two times in the last 12 months.
- Overall, an estimated 28.4% (19.5–37.2) of past-year amphetamine users had binged on amphetamines at least once in the last 12 months (that is, used amphetamines continuously for 24 hours or more).
- Approximately 27.1% (18.7–35.5) of past-year amphetamine users had done at least some of their driving while feeling under the influence of amphetamines.
- The three most harmful effects experienced by past-year amphetamine users because of their amphetamine use were effects on energy and vitality, financial position and health.
- Overall, an estimated 5.3% (1.5–9.1) of past-year amphetamine users had ever received help to reduce their use of amphetamines.

### **Ecstasy**

- Overall, 3.7% (3.1–4.3) of New Zealanders aged 13–65 years had used ecstasy in their lifetime.
- Ecstasy was the third most commonly used recreational drug (excluding alcohol and tobacco) in the last 12 months, with 1.9% (1.4–2.3) of New Zealanders aged 13–65 years having used ecstasy in the last 12 months.
- Almost two in three past-year ecstasy users (60.8%; 48.7–72.9) had used ecstasy one or two times in the last 12 months.

- Overall, an estimated one in four past-year ecstasy users (24.1%; 13.3–34.9) had binged on ecstasy at least once in the last year (that is, used ecstasy continuously for 24 hours or more).
- Overall, an estimated 15.8% (8.2–23.4) of past-year ecstasy users did at least some of their driving while feeling under the influence of ecstasy.
- The most harmful effects experienced by past-year ecstasy users from their ecstasy use were effects on financial position, energy and vitality and health.

### **Other drugs**

Among New Zealanders aged 13–65 years, it was found that:

- 6.5% (5.7–7.2) had used LSD in their lifetime
- 5.7% (5.0–6.4) had used magic mushrooms in their lifetime
- 2.9% (2.4–3.4) had used nitrous oxide in their lifetime
- 1.2% (0.9–1.5) had used LSD in the last 12 months
- 1.1% (0.8–1.4) had used magic mushrooms in the last 12 months
- 1.2% (0.9–1.6) had used nitrous oxide in the last 12 months.

### **Key results by population group**

Analysis showed that past-year drug-taking behaviours differed significantly between population groups, with people younger than 25 years old, males, and Māori being particularly at-risk groups.

#### **Age**

People aged 18–24 years had the highest rates of past-year drug use, in particular:

- one in three (33.6%; 29.4–37.8) had used cannabis in the last 12 months
- 8.7% (6.4–11.0) had used amphetamines in the last 12 months
- 7.2% (5.1–9.3) had used ecstasy in the last 12 months.

Furthermore, among people aged 13–17 years, 1 in 5 (20.4%; 17.0–23.7) had used cannabis in the last 12 months.

#### **Sex**

Males were significantly more likely than females to have used the following drugs in the last 12 months: cannabis, amphetamines, ecstasy, LSD, magic mushrooms, nitrous oxide and kava.

Among past-year cannabis users, males were significantly more likely than females to be frequent cannabis users (10 times or more per month on average), and to have binged on cannabis in the past year (used cannabis continuously for 24 hours or more). Similarly, among past-year cannabis users, males were significantly more likely than females to have driven while feeling under the influence of cannabis, experienced harmful effects because of their cannabis use and to have ever received help to reduce their use of cannabis.

## **Ethnicity**

Māori were significantly more likely than non-Māori to have used cannabis and magic mushrooms in the last 12 months. There were no significant differences in past-year amphetamine or ecstasy use between Māori and non-Māori.

Among past-year cannabis users, Māori were significantly more likely than non-Māori to be frequent cannabis users (10 times or more per month on average). Māori were more likely to have reported experiencing harmful effects from their cannabis use compared to non-Māori, and were also significantly more likely to have ever received help for their cannabis use.

# Chapter 1: Introduction and Methodology

## Introduction

For the purposes of this report, the term *drugs* is used to describe substances with psychoactive effects. Drugs can be divided into the categories of alcohol, tobacco, and other drugs used for recreational purposes.

Drug use can cause harm to individuals, to almost every part of their life, including harms to health, social harms and economic harms. One of the Ministry of Health's key population health objectives in the New Zealand Health Strategy is to minimise the harm caused by alcohol and illicit and other drug use to both individuals and the community (Minister of Health 2000).

Furthermore, the National Drug Policy 2007–2012 aims to reduce the effects of harmful substance use, through measures such as limiting the use of drugs by individuals, reducing harm from existing drug use and controlling or limiting the availability of drugs (Ministerial Committee on Drug Policy 2007).

Publications about tobacco and alcohol use (Ministry of Health 2007a, 2007b) have examined the use of these substances in New Zealand, and are available through the Ministry of Health website ([www.moh.govt.nz](http://www.moh.govt.nz)). This report examines the use of other drugs for recreational purposes in New Zealand.

## 2003 Health Behaviours Survey – Drug Use

This report presents the key results of the 2003 New Zealand Health Behaviours Survey – Drug Use (2003 HBS–DU) and describes patterns of recreational drug use in the New Zealand population.

The 2003 HBS–DU is part of the New Zealand Health Monitor (NZHM) programme, a co-ordinated cycle of population-based health-related surveys. The New Zealand Health Monitor includes the New Zealand Health Survey, and health behaviour surveys on the use of tobacco, alcohol and other drugs.

The objectives of the 2003 HBS–DU survey were to provide information on the types of drugs used in New Zealand, the context of drug use, the procurement of drugs, changes in availability and supply, support for drug enforcement policy, and the help-seeking behaviour of those experiencing problems from their drug use.

Previous national drug use surveys were carried out in New Zealand in 1998 and 2001 (Wilkins et al 2002). The 2003 HBS–DU extended the age range of respondents from 15–45 years to 13–65 years, to provide information about a larger proportion of the New Zealand population.

This report describes recreational drug use (excluding alcohol and tobacco) in New Zealand in 2003, and focuses specifically on the three most commonly used recreational drugs in New Zealand: cannabis, amphetamines and ecstasy. Differences between males and females, Māori and non-Māori and across age groups are reported.

This report is descriptive and as such intends to stimulate hypothesis formulation and further analysis. The report aims to inform work in drug and related fields, as well as meet the needs of a broader audience, such as the New Zealand public.

## **Methodology**

The 2003 HSB–DU was funded by the Ministry of Health as part of the New Zealand Health Monitor.

The data collection and processing of this survey were carried out by the Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki, of Massey University. Public Health Intelligence (PHI), the epidemiology group in the Ministry of Health, analysed the survey data and prepared this report.

The following section describes the survey methodology for the 2003 survey. The details of the survey design, data collection and questionnaire were summarised from SHORE's methodology report (SHORE 2004).

## **Survey design**

The 2003 HSB–DU was carried out with a computer-assisted telephone interview (CATI) system with 8095 respondents, from April to November 2003. The target population for the survey was the New Zealand population aged 13–65 years living in private residential dwellings. The survey population included all New Zealanders aged 13–65 years living in private residential dwellings with a connected landline telephone.

A stratified sample design was used to reflect the New Zealand population on the basis of geographic regions and level of urbanisation. The 34 strata, when combined, covered the whole of New Zealand. Two levels of urbanisation were used for the stratification:

- metropolitan areas and large cities, such as the Auckland urban area, Hamilton, Christchurch and Wellington
- smaller main urban areas, large towns, small towns and rural areas.

Three different sample frames were utilised to obtain both a full coverage of the population and an increased sample of Māori respondents. This allows equal explanatory power for the Māori population; that is, survey estimates have at least the same precision for Māori as for non-Māori. The three sample frames in this survey included:

- a random digit dialling (RDD) sample from the general population
- an RDD Māori screened sample
- a sample from the full electoral roll of people who identified as having Māori ancestry.

## Data collection

Landline telephone numbers were randomly selected within each stratum so that all households with a landline phone had an equal chance of being called. Within each household, one eligible household member was randomly selected by the computer for an interview. Each selected telephone number was tried at least 10 times in an effort to reach those seldom at home.

Respondents were recruited and interviews conducted using the SHORE and Te Ropu Whariki in-house CATI system. Respondents were informed that the study was being conducted on behalf of the Ministry of Health and that interviews would be confidential.

The total sample size for the survey was 8095 respondents, which included 4061 Māori (prioritised count). Table 1 provides the sample sizes from the three different sample frames of the 2003 HBS–DU by ethnicity. An overall weighted response rate of 68% was achieved for the survey.

**Table 1:** Sample sizes for 2003 Health Behaviours Survey – Drug Use

Sample	Māori	Non-Māori	Total
RDD (random digit dialling) general sample	617	4034	4651
RDD Māori sample	762	–	762
Electoral roll published Māori sample	2682	–	2682
Total	4061	4034	8095

Source: SHORE 2004

## Questionnaire

The questionnaire for the 2003 HBS–DU was developed by SHORE, PHI and the National Drug Policy Team from the Ministry of Health. The 2003 questionnaire was based on the questions from the 2001 National Drug Survey (Wilkins et al 2002), with a revised list of drugs to include newly available drugs.

The 2003 HBS–DU questionnaire included sections on the following topics:

- marijuana/cannabis use
- ecstasy use
- amphetamine use
- other drug use
- needle use
- demographics.

Appendix A presents the specific drugs included in the questionnaire, and includes the other names given in the survey for these drugs and information about the modes of administration of these drugs.

The questionnaire also included sections on other topics, including alcohol and tobacco use. However, these questions have not been analysed for this report because the topics have already been covered by New Zealand Health Monitor surveys on tobacco and alcohol use (Ministry of Health 2007a, 2007b).

## **Weighting**

Survey weights allow the sample to be used to produce estimates for the entire population. Each eligible person aged 13–65 years selected into the sample represented a number of other eligible people in the population. Therefore, each eligible person selected had a weight to indicate how many population members were represented by that person. Weighting takes into account the individual probability of selection, but allows one to calibrate the survey weights to independent known population totals.

The final survey weights were calculated by several steps. First, inverse probability weights were calculated for households within each of the three samples, taking into account the differential non-response between the strata.

Next, the three different samples were combined using a yield method, in which each sample was proportionally weighted on the basis of the achieved sample sizes (SHORE 2004). The survey weights were then adjusted for the selection of one respondent per household. A key assumption in this process was that the electoral roll population and the landline population were similar, with respect to the variables in the study.

The final stage involved post-stratification: matching the summed survey weights with 2001 Census population figures for groups based on sex, age and ethnicity.

## **Data reliability**

Two types of error are possible in an estimate based on a sample survey: sampling error and non-sampling error.

Estimates from this survey are subject to sampling error or variability because they are based on information that relates to a sample of persons, rather than a full enumeration (census). That is, the estimates may differ from those that would have been produced if all the information had been obtained for all people in the population. The method used to calculate the sampling errors is outlined below.

Other inaccuracies are referred to as non-sampling errors, and may occur in any enumeration, regardless of whether it is a sample or full enumeration. Possible non-sampling errors include coverage errors, response bias and measurement errors. While these elements cannot be measured, it is useful to be aware of them when interpreting the results of the survey. Significant effort is made to reduce non-sampling error by carefully designing and testing the survey, questionnaire and processes, and ensuring quality control of procedures and data.

In the 2003 HBS–DU, coverage errors may have occurred because of the use of telephone (CATI) interviews, which cannot reach people who do not have a household landline phone, such as people who only have a cellphone but no landline, and those who have had their landline phone disconnected. This gap in coverage may cause bias in the survey results if some population groups who are less likely to have a landline telephone (for example, heavy drug users or transient groups) have different drug use patterns compared to people with household landlines.

Response bias may have occurred if there was differential non-response, that is, if the survey was less likely to be answered by certain people, such as heavy drug users, a certain population group (such as young males), or people who have never used recreational drugs. The interview introduction is an important part of trying to ensure that people take part in the survey, even if they have never used drugs.

Measurement error might also have occurred in this survey. Many of the analyses in this report used self-reported information, which may have some inaccuracies. Measurement errors include recall error (for example, mistakes made when respondents recall how many times in the last 12 months they have used a certain drug), under- and over-reporting (which may be influenced by the respondent's perception of what is socially desirable) and item non-response (if the respondent does not answer certain questions). A fake drug was included in the list of drugs in the survey, to which two people responded that they had tried that drug; these results have not been presented in this report.

### **Sampling errors**

Sampling errors for survey estimates from this survey were calculated using a replicate method, called the delete-a-group jack-knife method (Kott 1998). This method was selected because it produces accurate and consistent variance estimates and is easy to apply.

The idea behind the delete-a-group jack-knife method is to estimate the variances of survey estimates, by first dividing the sample into  $G$  random groups.  $G$  subsamples are produced by deleting one group at a time from the full sample. Each subsample is then reweighted to the population, based on the same weighting estimation methodology as for the full sample.

For this survey, 100 random groups were chosen ( $G=100$ ). These  $G$  groups were formed by sorting the full sample by sample frame and strata. Within each stratum, PSUs (primary sampling units, in this case, households) were then sorted randomly. From this list of the full sample, PSUs were then assigned consecutively to the  $G$  groups. For this method, it was assumed that the component samples were taken from a single population.

The formula for calculating the variance of an estimate,  $y$ , using the delete-a-group jack-knife method is:

$$\text{Variance}(y) = \frac{(G-1)}{G} \times \sum_g (y_g - y)^2$$

where:

$y$  = weighted estimate from the full sample

$y_g$  = weighted estimate, having applied the weights for replicate group  $g$

$G$  = 100 (the number of replicate groups)

$g$  = 1, 2, ...,  $G$ .

The 95% confidence intervals can be calculated from the variance:

$$\text{Sampling error}(y) = 1.96 \times \sqrt{\text{variance}(y)}$$

$$\text{Confidence interval}(y) = y \pm \text{sampling error}(y)$$

### **Ninety-five percent confidence intervals**

Ninety-five percent confidence intervals are used in this report to represent the sampling errors for prevalence estimates. If multiple survey samples were obtained, even at the same time, they would provide results that differed. The 95% confidence interval is the interval that would be expected to contain the true population value 95% of the time, if many samples were taken.

Ninety-five percent confidence intervals are presented in brackets after estimates in the text, and as error bars in graphs.

The confidence interval is influenced by the sample size of the group. When the sample size is small, the confidence interval becomes wider.

The differences between variables are commented on in the text when they were found to be statistically significant at the 5% level. When the confidence intervals of two groups do not overlap, the difference in rates between the groups is statistically significant at the 5% level. However, in some cases, when the confidence intervals of two groups overlap, there may still be a statistically significant difference in rates, which can be formally tested using a two-tailed t-test. In this report, if the confidence intervals overlap but the text reports the difference as being statistically significant, this indicates that the difference has been tested with a t-test.

### **Relative sampling errors**

Relative sampling errors give an indication of the precision of a prevalence estimate. They are defined as the standard error of an estimate, divided by the estimate. Estimates with a relative sampling error of 0.5 or higher have been noted in the text with an asterisk. These estimates are considered to be unreliable and should be interpreted very cautiously.

## **Age standardisation**

Crude rates have been presented in this report for estimates for the total population, and for individual age groups. However, when comparing population subgroups, it is important to note that age is a key determinant of patterns of drug use, and that population groups can have different age structures. Therefore, when making comparisons between males and females, and between different ethnic groups, the different age distributions of the population groups must be taken into account.

Age-standardised weights have been created for this survey, in addition to the New Zealand population survey weights ('crude' weights). These age-standardised weights are standardised to the World Health Organization (WHO) population distribution (Ahmad et al 2000). The weights have been standardised by age group (13–24, 25–34, 35–44, 45–54, 55–65), by Māori/non-Māori by sex.

By using age-standardised weights when comparing sex or ethnic groups, any differences between groups cannot be attributed to differences in the age structure, because this factor has been accounted for.

## **Presentation of results in this report**

This survey provides a cross-sectional picture of the New Zealand population aged 13–65 years, at one point in time. As such, it only describes associations and cannot be used to establish causality.

Analysis in this report is presented for the total New Zealand population aged 13–65 years, and, where possible, by age, sex and ethnicity. When data is presented for the total population or by age group, crude rates are used. Age-standardised rates are used for other results, including comparisons of males and females, and Māori and non-Māori.

When an unweighted individual cell contained a value of less than 10, results were suppressed for reasons of reliability and confidentiality.

Additional results are provided by sex, age group and ethnic group in Appendix B.

## **Time period for the survey**

This survey was carried out between April and November 2003. Results presented in this report which refer to the 'last 12 months' or to the 'past year' refer to the 12-month period prior to the respondent answering the survey.

## **Ethnicity**

In this survey, respondents were asked which ethnic groups they belonged to, with a maximum of three ethnic groups able to be reported. Some comparisons of prevalence rates have been carried out between Māori and non-Māori by using prioritised ethnicity. This method of reporting ethnicity means that if a respondent selected Māori as one of their ethnic groups, they were assigned to the Māori category. All other respondents who reported an ethnicity were categorised as being non-Māori.

## Age groups

The following age groups are included in the analysis:

- 13–17 years
- 18–24 years
- 25–34 years
- 35–44 years
- 45–54 years
- 55–65 years.

## Denominator populations

When interpreting the results in this report, it is important to note the denominator for each prevalence rate. The denominator defines the group of people that the prevalence, proportion, or percent refers to.

Denominators used in the results presented in this report include:

- New Zealanders: New Zealand population aged 13–65 years
- past-year cannabis users: New Zealanders aged 13–65 who had used cannabis/marijuana in the last 12 months
- past-year amphetamine users: New Zealanders aged 13–65 who had used amphetamines in the last 12 months
- past-year ecstasy users: New Zealanders aged 13–65 who had used ecstasy in the last 12 months.

Appendix C provides details on how the derived variables, in particular, past-year drug users, were calculated.

## Liability

Care and diligence has been taken to ensure the information in this document is accurate and up to date. However, we accept no liability for the accuracy of the information, its use or the reliance placed on it.

## How to interpret results – tables

Tells us what the table is about

Prevalence or other rate (eg, proportion of population with the condition or behaviour (prevalence))

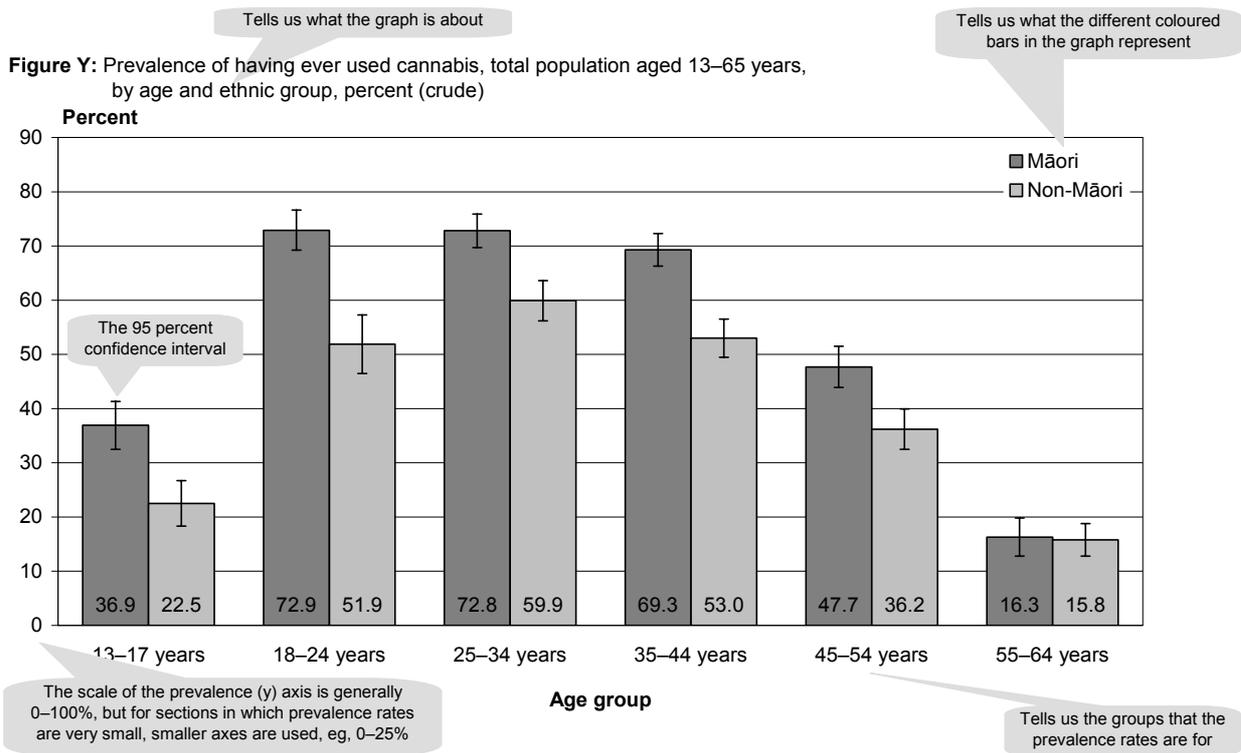
**Table X:** Prevalence of having ever used cannabis, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	<b>Female</b>	<b>Male</b>	<b>Māori</b>	<b>Non-Māori</b>
Cannabis use in lifetime	39.3 (37.6–41.1)	50.2 (48.1–52.2)	55.5 (54.0–56.9)	43.0 (41.5–44.6)

Tells us about the indicator

The 95% confidence interval

## How to interpret results – figures



## Chapter 2: Overview of Drug Use in New Zealand

This section provides an overview of drug use for recreational purposes in New Zealand (excluding alcohol and tobacco).

### Lifetime drug use

Overall, cannabis was the most common drug (apart from alcohol and tobacco) that had been used for recreational purposes in New Zealand. An estimated 44.4% (43.1–45.7) of New Zealanders aged 13–65 years had used cannabis during their lifetime (Table 2). Overall, the prevalence of having ever used cannabis was much higher than for any other type of drug.

Amphetamines were the second most widely used drug, with an estimated 6.8% (5.9–7.7) of New Zealanders aged 13–65 years having used amphetamines in their lifetime. Similarly, LSD had been used by an estimated 6.5% (5.7–7.2) of New Zealanders aged 13–65 years during their lifetime.

The next most commonly used drugs by people in their lifetime included magic mushrooms (5.7%; 5.0–6.4), kava (5.0%; 4.4–5.6) and ecstasy (3.7%; 3.1–4.3).

Using age-standardised rates to compare population groups, males were significantly more likely to have ever used cannabis (50.2%; 48.1–52.2) compared to females (39.3%; 37.6–41.1) (Table 3). Males were also significantly more likely to have ever used amphetamines (9.0%; 7.5–10.6) compared to females (5.3%; 4.4–6.3).

In addition, males were significantly more likely than females to have used the following drugs during their lifetime:

- rush and ice
- LSD, magic mushrooms and other hallucinogens
- tranquillisers
- poppies, morphine and other opiates
- nitrous oxide
- kava
- solvents.

Māori were significantly more likely to have used cannabis (55.5%; 54.0–56.9) than non-Māori (43.0%; 41.5–44.6) in their lifetime (Table 3). Māori were also significantly more likely to have used LSD (8.2%; 7.4–9.1) during their lifetime, compared to non-Māori (6.4%; 5.5–7.3). Furthermore, Māori were significantly more likely to have ever used magic mushrooms (7.9%; 6.9–8.8) than non-Māori (5.6%; 4.8–6.4).

Additionally, Māori were significantly more likely than non-Māori to have used the following drugs at least once during their lifetime:

- tranquilisers
- homebake
- heroin
- solvents.

Non-Māori were significantly more likely to have ever used nitrous oxide (3.3%; 2.7–3.9) compared to Māori (2.3%; 1.8–2.7). Non-Māori were also significantly more likely to have used kava (5.2%; 4.5–5.9) during their lifetime compared to Māori (3.4; 2.9–3.9).

Further results about lifetime drug use are presented by gender, ethnic group and age group in Appendix B.

**Table 2:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, percent (crude)

Type of drug	Drug	Total
Cannabis	Cannabis	44.4 (43.1–45.7)
Stimulants	Amphetamines	6.8 (5.9–7.7)
	Ecstasy	3.7 (3.1–4.3)
	Cocaine	2.5 (2.0–2.9)
	Rush	2.3 (1.8–2.8)
	Ice	1.0 (0.7–1.4)
	Viagra for recreational purposes	0.4 (0.2–0.5)
	Crack	0.2 (0.1–0.3)
Hallucinogens	LSD	6.5 (5.7–7.2)
	Magic mushrooms	5.7 (5.0–6.4)
	Ketamine	0.5 (0.3–0.7)
	Other hallucinogens	1.1 (0.8–1.4)
Sedatives/hypnotics	Tranquillisers	1.7 (1.4–2.0)
Opiates	Poppies	1.4 (1.0–1.7)
	Homebake	0.8 (0.5–1.0)
	Morphine	0.7 (0.5–1.0)
	Heroin	0.5 (0.3–0.6)
	Other opiates	0.5 (0.3–0.7)
Euphoric agents	Nitrous oxide	2.9 (2.4–3.4)
	GHB	0.8 (0.6–1.1)
Others	Kava	5.0 (4.4–5.6)
	Solvents	0.9 (0.7–1.2)
	Steroids	0.1 (0.0–0.2)*

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously.

**Table 3:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

Type of drug	Drug	Female	Male	Māori	Non-Māori
Cannabis	Cannabis	39.3 (37.6–41.1)	50.2 (48.1–52.2)	55.5 (54.0–56.9)	43.0 (41.5–44.6)
Stimulants	Amphetamines	5.3 (4.4–6.3)	9.0 (7.5–10.6)	8.7 (7.8–9.6)	6.9 (5.8–8.0)
	Ecstasy	3.4 (2.5–4.3)	4.8 (3.8–5.8)	3.8 (3.1–4.5)	4.1 (3.3–4.9)
	Cocaine	2.2 (1.6–2.8)	2.7 (2.0–3.4)	2.9 (2.3–3.5)	2.4 (1.8–2.9)
	Rush	1.3 (0.9–1.7)	3.5 (2.6–4.5)	1.9 (1.4–2.4)	2.4 (1.9–3.0)
	Ice	0.6 (0.3–0.9)	1.7 (1.1–2.3)	1.4 (1.0–1.8)	1.1 (0.7–1.5)
	Viagra for recreational purposes	–	0.5 (0.2–0.9)	0.3 (0.1–0.5)	0.3 (0.1–0.5)
	Crack	0.2 (0.0–0.3)	0.2 (0.1–0.3)	0.7 (0.4–1.0)	–
Hallucinogens	LSD	5.2 (4.3–6.1)	8.2 (6.9–9.5)	8.2 (7.4–9.1)	6.4 (5.5–7.3)
	Magic mushrooms	4.0 (3.2–4.8)	7.9 (6.7–9.1)	7.9 (6.9–8.8)	5.6 (4.8–6.4)
	Ketamine	0.6 (0.2–1.0)	0.7 (0.3–1.1)	0.4 (0.2–0.6)	0.7 (0.4–1.0)
	Other hallucinogens	0.5 (0.2–0.7)	1.8 (1.2–2.4)	1.6 (1.2–2.1)	1.0 (0.7–1.4)
Sedatives/hypnotics	Tranquillisers	1.2 (0.8–1.5)	2.2 (1.6–2.8)	2.5 (1.9–3.0)	1.6 (1.2–1.9)
Opiates	Poppies	0.7 (0.4–1.0)	2.1 (1.5–2.6)	1.7 (1.3–2.2)	1.3 (0.9–1.6)
	Homebake	0.6 (0.2–1.0)	1.0 (0.6–1.4)	1.5 (1.1–1.9)	0.7 (0.4–1.0)
	Morphine	0.4 (0.2–0.6)	1.0 (0.6–1.4)	1.2 (0.8–1.6)	0.6 (0.4–0.9)
	Heroin	0.2 (0.1–0.4)	0.6 (0.3–1.0)	0.9 (0.6–1.2)	0.3 (0.2–0.5)
	Other opiates	0.2 (0.0–0.3)	0.9 (0.5–1.4)	0.5 (0.3–0.7)	0.5 (0.3–0.7)
Euphoric agents	Nitrous oxide	1.7 (1.2–2.3)	4.6 (3.8–5.5)	2.3 (1.8–2.7)	3.3 (2.7–3.9)
	GHB	0.6 (0.3–0.9)	1.3 (0.8–1.9)	0.7 (0.4–1.0)	1.0 (0.6–1.4)
Others	Kava	2.8 (2.2–3.4)	7.3 (6.2–8.5)	3.4 (2.9–3.9)	5.2 (4.5–5.9)
	Solvents	0.5 (0.3–0.8)	1.4 (0.9–1.9)	2.5 (1.9–3.0)	0.7 (0.4–1.0)

	Steroids	–	0.2 (0.0–0.3)	0.4 (0.2–0.6)	–
--	----------	---	------------------	------------------	---

Note: A dash (–) indicates that numbers were too low for reliable estimation.

## Drug use in the last 12 months

Cannabis was the most commonly used drug in the last 12 months in New Zealand (excluding alcohol and tobacco). An estimated 13.7% (12.8–14.7) of New Zealanders aged 13–65 years had used cannabis in the last 12 months (Table 4).

The second most commonly used drug in the last 12 months was amphetamines, which had been used by 2.5% (2.0–2.9) of New Zealanders aged 13–65 years. Ecstasy was the third most commonly used drug in the last 12 months (1.9%; 1.4–2.3).

Using age-standardised rates for comparisons, males were significantly more likely to have used cannabis in the last 12 months (18.1%; 16.5–19.7) compared to females (11.9%; 10.5–13.3) (Table 5). Males also had significantly higher rates of past-year amphetamine use (4.0%; 3.1–4.9) compared to females (1.7%; 1.1–2.3).

Males were also significantly more likely than females to have used the following drugs in the last 12 months:

- ecstasy
- LSD
- magic mushrooms
- nitrous oxide
- kava.

Māori were significantly more likely to have used cannabis in the last 12 months (20.8%; 19.6–22.0) compared to non-Māori (14.0%; 12.8–15.3) (Table 5). In the last 12 months, Māori were also significantly more likely to have used magic mushrooms (2.3%; 1.8–2.8) compared to non-Māori (1.1%; 0.7–1.5).

Further results about past-year drug use are presented by gender, ethnic group and age group in Appendix B.

**Table 4:** Prevalence of drug use in the last 12 months in New Zealand by type of drug, total population aged 13–65 years, percent (crude)

Type of drug	Drug	Total
Cannabis	Cannabis	13.7 (12.8–14.7)
Stimulants	Amphetamines	2.5 (2.0–2.9)
	Ecstasy	1.9 (1.4–2.3)
	Cocaine	0.4 (0.2–0.5)
	Rush	0.4 (0.2–0.6)
	Ice	0.5 (0.3–0.7)
	Viagra for recreational purposes	0.2 (0.0–0.4)*
Hallucinogens	LSD	1.2 (0.9–1.5)
	Magic mushrooms	1.1 (0.8–1.4)
	Ketamine	0.2 (0.0–0.3)
	Other hallucinogens	0.2 (0.0–0.3)
Sedatives/hypnotics	Tranquillisers	0.3 (0.1–0.4)
Opiates	Poppies	0.1 (0.0–0.2)*
	Homebake	0.1 (0.0–0.2)*
	Morphine	0.2 (0.1–0.3)
Euphoric agents	Nitrous oxide	1.2 (0.9–1.6)
	GHB	0.3 (0.1–0.4)
Others	Kava	1.4 (1.0–1.7)
	Solvents	0.1 (0.0–0.2)*

Notes: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. Numbers were too low for reliable estimation for the following results: crack, heroin, other opiates and steroids.

**Table 5:** Prevalence of drug use in the last 12 months in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

Type of drug	Drug	Female	Male	Māori	Non-Māori
Cannabis	Cannabis	11.9 (10.5–13.3)	18.1 (16.5–19.7)	20.8 (19.6–22.0)	14.0 (12.8–15.3)
Stimulants	Amphetamines	1.7 (1.1–2.3)	4.0 (3.1–4.9)	3.3 (2.7–3.8)	2.7 (2.1–3.3)
	Ecstasy	1.6 (1.0–2.2)	2.7 (1.9–3.6)	1.7 (1.2–2.2)	2.2 (1.6–2.8)
	Cocaine	0.5 (0.1–0.8)	0.3 (0.1–0.6)	0.5 (0.3–0.7)	0.4 (0.2–0.6)
	Rush	–	0.8 (0.4–1.3)	0.4 (0.2–0.6)	0.4 (0.2–0.7)
	Ice	0.3 (0.1–0.5)	0.9 (0.4–1.4)	0.6 (0.3–0.9)	0.6 (0.3–0.9)
	Viagra for recreational purposes	–	0.3* (0.1–0.6)	0.3 (0.1–0.5)	–
Hallucinogens	LSD	0.8 (0.5–1.2)	1.9 (1.3–2.5)	1.8 (1.4–2.3)	1.3 (0.9–1.7)
	Magic mushrooms	0.7 (0.3–1.1)	1.8 (1.2–2.3)	2.3 (1.8–2.8)	1.1 (0.7–1.5)
Sedatives/ hypnotics	Tranquillisers	0.2* (0.0–0.5)	0.3 (0.1–0.6)	0.3 (0.1–0.5)	0.3 (0.1–0.5)
Opiates	Poppies	–	0.3 (0.1–0.5)	0.3 (0.1–0.5)	–
	Homebake	–	–	0.4 (0.1–0.6)	–
	Morphine	–	0.3 (0.0–0.5)	0.3 (0.1–0.5)	–
Euphoric agents	Nitrous oxide	0.8 (0.4–1.1)	2.3 (1.6–2.9)	1.0 (0.6–1.3)	1.6 (1.1–2.0)
	GHB	–	0.5 (0.2–0.8)	–	0.3 (0.1–0.5)
Others	Kava	0.8 (0.5–1.1)	2.0 (1.3–2.7)	1.0 (0.7–1.2)	1.5 (1.0–1.9)

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: crack, ketamine, other hallucinogens, heroin, other opiates, solvents and steroids.

## Needle use

Overall, among New Zealanders aged between 13 and 65 years, 0.8% (0.6–1.1) had ever used a needle to inject drugs (Table 6).

People aged 35–44 years were significantly more likely to have ever used a needle to inject drugs (1.5%; 0.8–2.3) compared to people aged 25–35 years (0.6%; 0.2–1.1) (Table 6).

**Table 6:** Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)			
		18–24	25–34	35–44	45–54
Ever used a needle to inject drugs	0.8 (0.6–1.1)	1.5 (0.5–2.5)	0.6 (0.2–1.1)	1.5 (0.8–2.3)	0.9 (0.2–1.6)

Note: Numbers were too low for reliable estimation for the results for the age groups 13–17 years and 55–65 years.

Using age-standardised rates to compare groups, males were significantly more likely to have used needles to inject drugs during their lifetime (1.2%; 0.7–1.6) than females (0.5%; 0.2–0.8) (Table 7). Furthermore, Māori were significantly more likely to have ever used a needle to inject drugs (1.3%; 1.0–1.7), compared to non-Māori (0.7%; 0.5–1.0).

**Table 7:** Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Ever used a needle to inject drugs	0.5 (0.2–0.8)	1.2 (0.7–1.6)	1.3 (1.0–1.7)	0.7 (0.5–1.0)

## Chapter 3: Cannabis Use

Cannabis is one of the most commonly used recreational drugs in New Zealand. Cannabis comes in a variety of forms, including marijuana, hashish (resin) and hash oil. The active chemical in cannabis is delta-9 tetrahydrocannabinol (THC); the more THC cannabis has, the stronger it is. Cannabis produces an altered state of consciousness, and its effects can include relaxation, mild euphoria and alterations in perceptions (Ministry of Health 1996).

### Lifetime use of cannabis

Overall, an estimated 44.4% (43.1–45.7) of New Zealanders aged 13–65 years had ever used cannabis (Table 8). People aged 25–34 years were significantly more likely to have used cannabis in their lifetime (61.8%; 58.6–65.0), compared to all other age groups.

**Table 8:** Prevalence of having ever used cannabis, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis use in lifetime	44.4 (43.1–45.7)	25.3 (21.8–28.9)	55.3 (50.7–59.9)	61.8 (58.6–65.0)	54.9 (51.8–58.0)	39.0 (35.6–42.5)	15.8 (13.0–18.6)

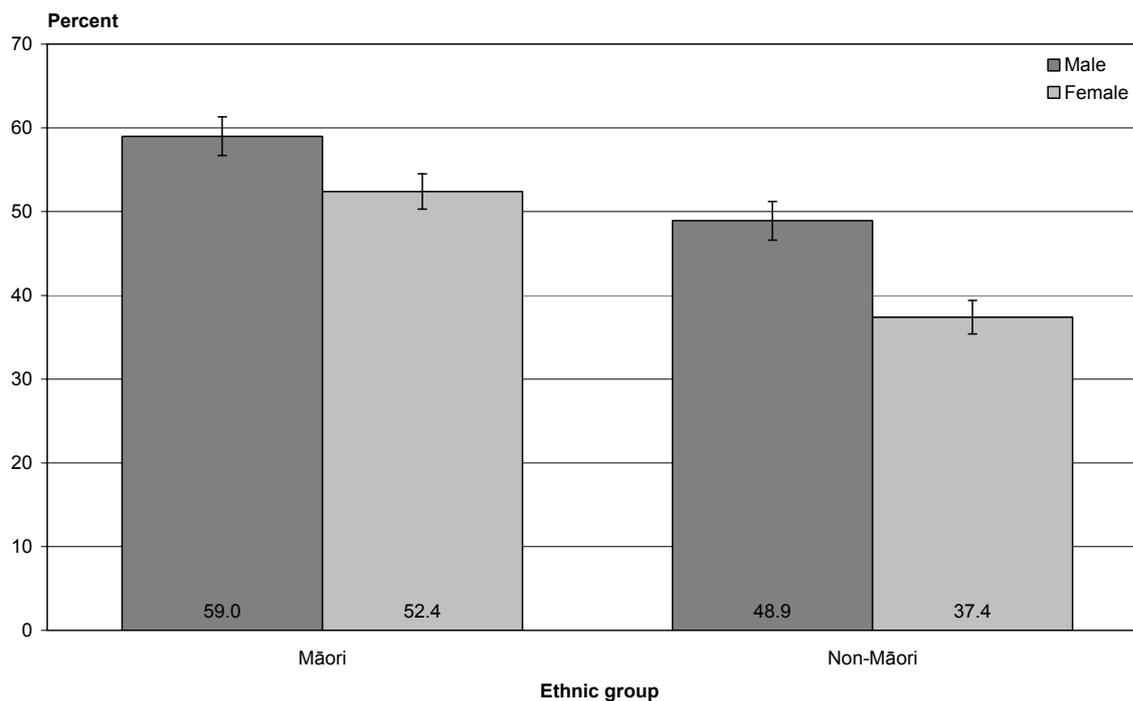
Using age-standardised rates to compare groups, males were significantly more likely to have used cannabis in their lifetime (50.2%; 48.1–52.2) compared to females (39.3%; 37.6–41.1) (Table 9). Māori were significantly more likely to have ever used cannabis (55.5%; 54.0–56.9) compared to non-Māori (43.0%; 41.5–44.6).

**Table 9:** Prevalence of having ever used cannabis, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Cannabis use in lifetime	39.3 (37.6–41.1)	50.2 (48.1–52.2)	55.5 (54.0–56.9)	43.0 (41.5–44.6)

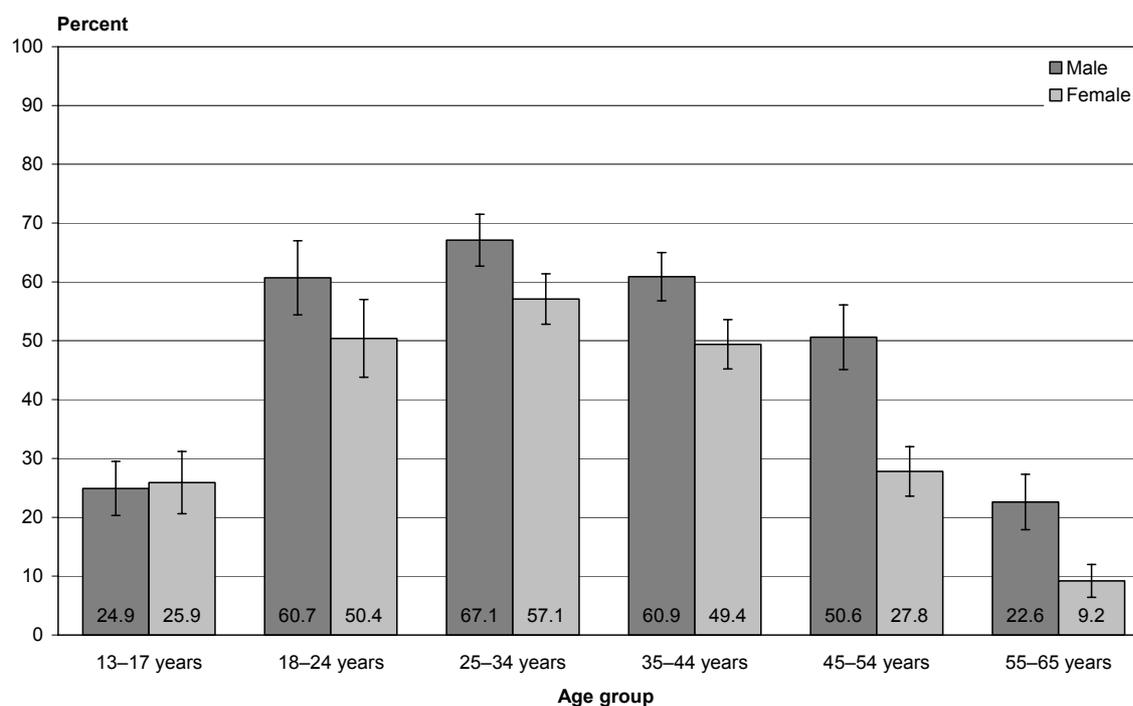
Figure 1 shows that male Māori were significantly more likely to have ever used cannabis (59.0%; 56.7–61.2) compared to male non-Māori (48.9%; 46.6–51.2), female Māori (52.4%; 50.3–54.5) and female non-Māori (37.4%; 35.4–39.4). Among both Māori and non-Māori, males were significantly more likely than females to have ever used cannabis.

**Figure 1:** Prevalence of having ever used cannabis, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)



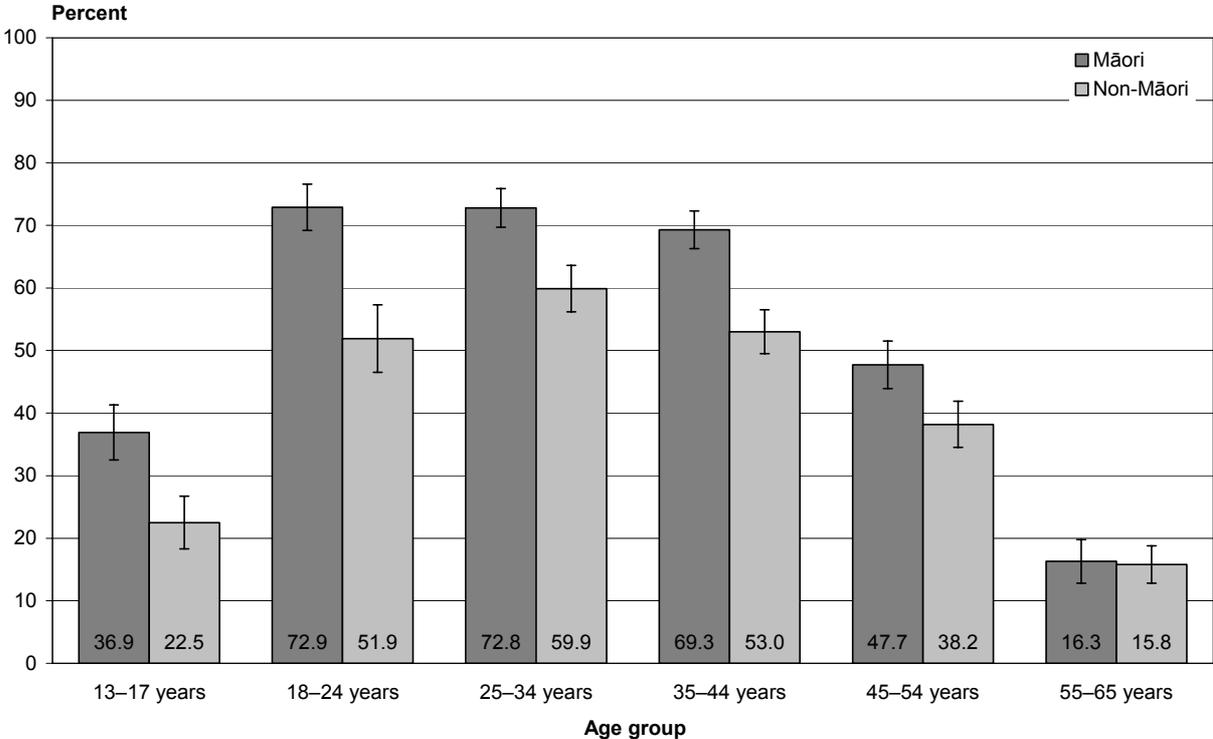
In all age groups, except for 13–17 years, males were significantly more likely to have ever used cannabis compared to females (Figure 2). An estimated 67.1% (62.7–71.6) of males aged 25–34 years had used cannabis during their lifetime.

**Figure 2:** Prevalence of having ever used cannabis, total population aged 13–65 years, by age group and sex, percent (crude)



In all age groups, except for 55–65 years, Māori were significantly more likely to have ever used cannabis compared to non-Māori (Figure 3). Approximately 7 in 10 Māori aged 18–44 years had ever tried cannabis.

**Figure 3:** Prevalence of having ever used cannabis, total population aged 13–65 years, by age and ethnic group, percent (crude)



### Age of first use of cannabis

People who had ever used cannabis ('lifetime cannabis users') were asked at what age they first used the drug.

This section presents results for the ages at which people first used cannabis. These ages of first use are categorised into the following: younger than 15 years, 15–17 years, 18–20 years and 21 years or older.

It should be noted that the proportions of lifetime cannabis users who started using the drug at these ages are affected by the age of the respondents when they answered the questionnaire.

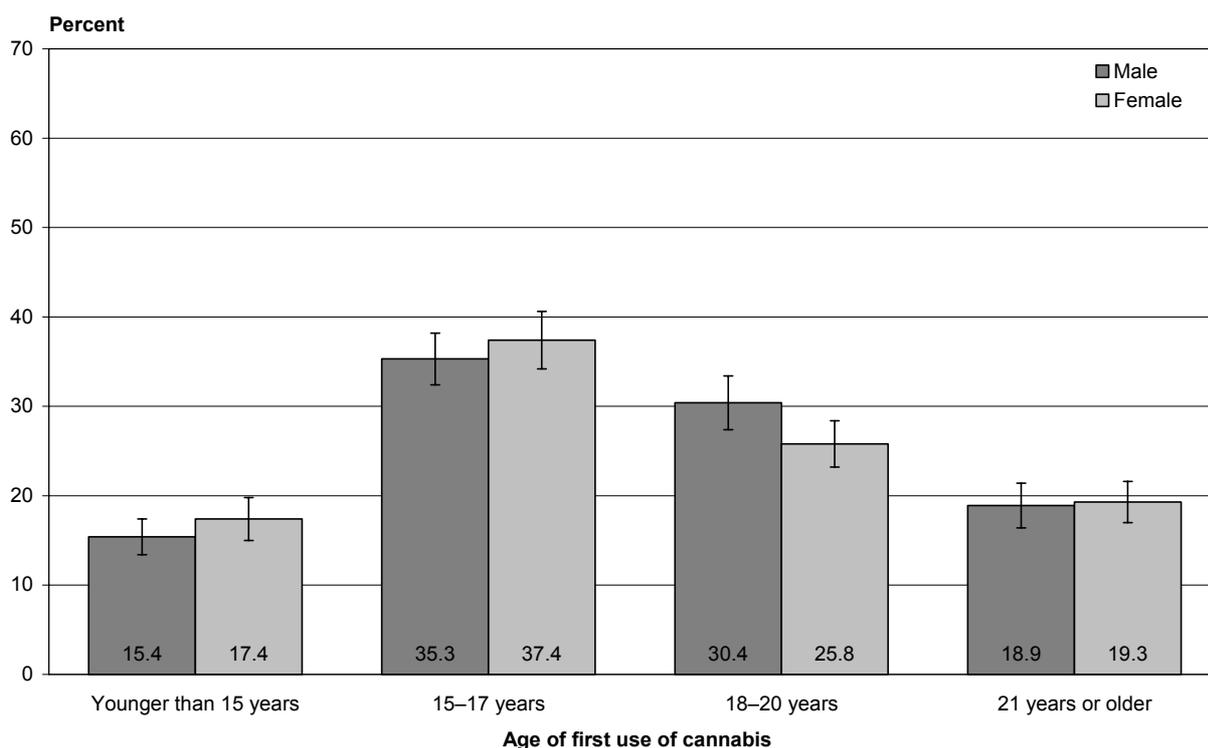
Approximately one in three people (34.8%; 32.7–36.9) who had ever used cannabis had first used the drug when aged 15–17 years (Table 10). An estimated 15.2% (13.9–16.5) of people who had ever used cannabis had first used it when they were younger than 15 years.

**Table 10:** Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, percent (crude)

Age of first use of cannabis	Total
Younger than 15 years	15.2 (13.9–16.5)
15–17 years	34.8 (32.7–36.9)
18–20 years	29.5 (27.3–31.6)
21 years or older	20.6 (18.8–22.3)

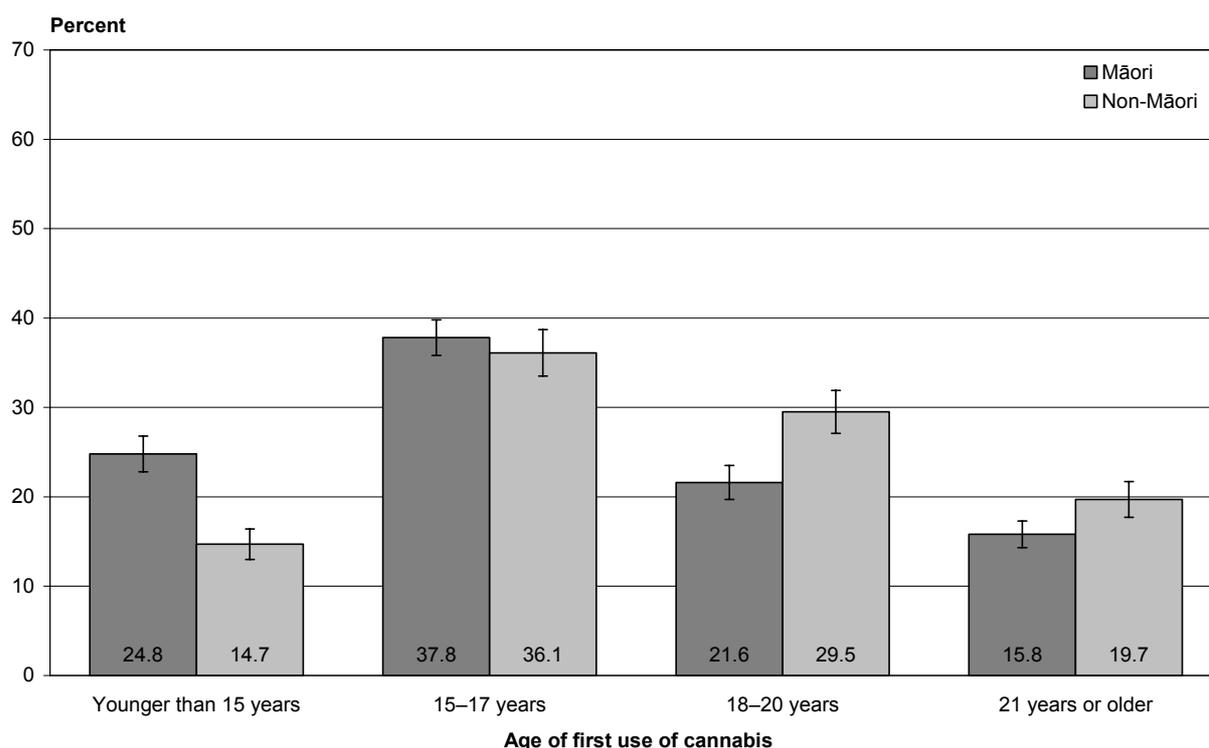
Using age-standardised rates to compare groups of people who had ever used cannabis showed that there were no significant differences for males and females in first using cannabis when younger than 15 years (Figure 4). Males were significantly more likely to have started using cannabis when aged 18–20 years (30.4%; 27.4–33.5), compared to females (25.8%; 23.2–28.4).

**Figure 4:** Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, by sex, percent (age-standardised)



Māori were significantly more likely to have started using cannabis when they were younger than 15 years (24.8%; 22.8–26.7), compared to non-Māori (14.7%; 13.1–16.4) (Figure 5).

**Figure 5:** Age of first use of cannabis, people aged 13–65 years who have ever used cannabis, by ethnic group, percent (age-standardised)



## Cannabis use in the last 12 months

Overall, 13.7% (12.8–14.7) of New Zealanders aged 13–65 years had used cannabis in the last 12 months (Table 11). This report refers to people who had used cannabis in the last 12 months as ‘past-year cannabis users’.

One in three people aged 18–24 years (33.6%; 29.4–37.8) had used cannabis in the last 12 months, which is a significantly higher prevalence of cannabis use than any other age group.

**Table 11:** Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis use in last 12 months	13.7 (12.8–14.7)	20.4 (17.0–23.7)	33.6 (29.4–37.8)	18.4 (16.0–20.9)	10.4 (8.8–12.1)	5.3 (3.8–6.7)	1.5 (0.7–2.4)

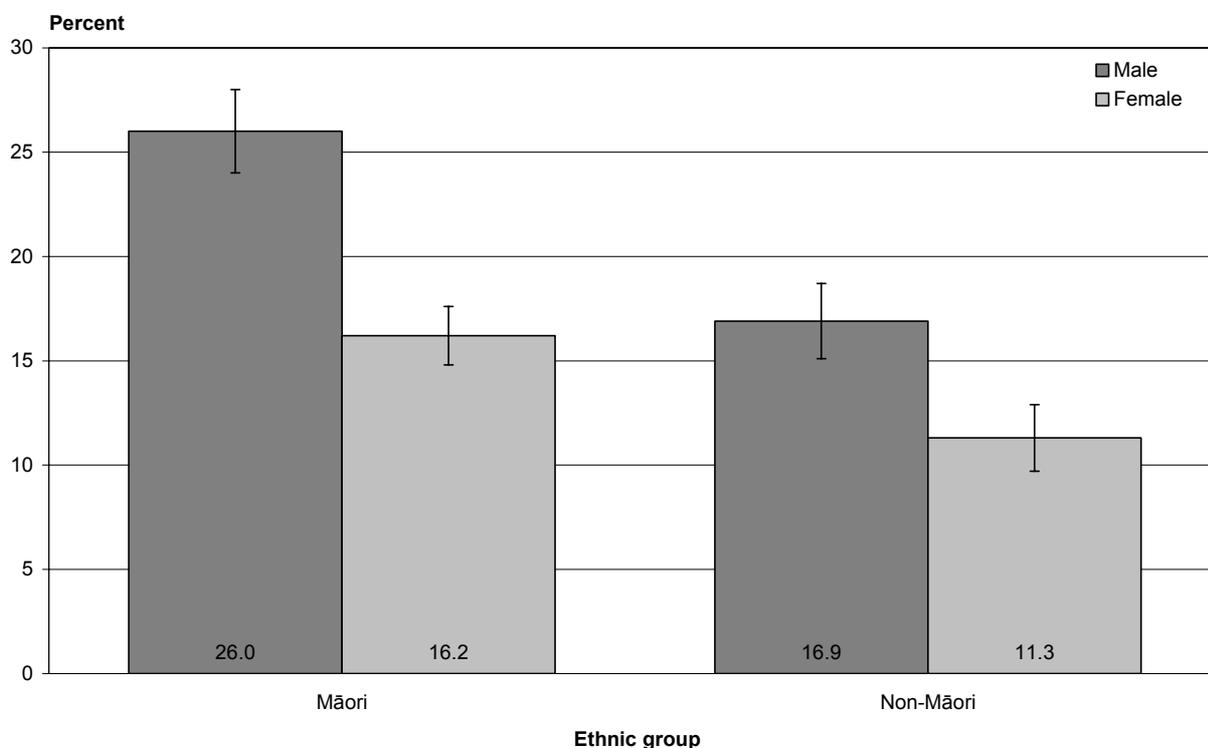
Using age-standardised rates to compare groups, males were significantly more likely to have used cannabis in the last 12 months (18.1%; 16.5–19.7) compared to females (11.9%; 10.5–13.3) (Table 12). Māori were significantly more likely to have used cannabis in the last 12 months (20.8%; 19.6–22.0) compared to non-Māori (14.0%; 12.8–15.3).

**Table 12:** Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Cannabis use in last 12 months	11.9 (10.5–13.3)	18.1 (16.5–19.7)	20.8 (19.6–22.0)	14.0 (12.8–15.3)

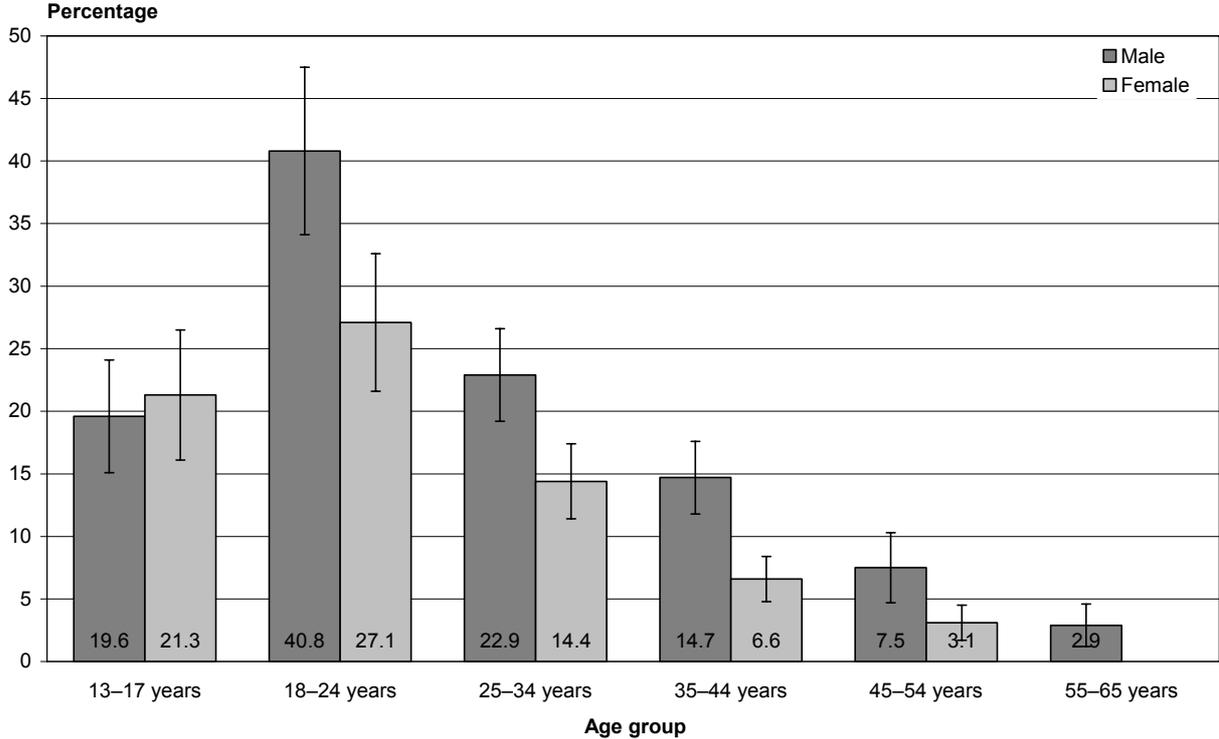
Figure 6 shows that male Māori were significantly more likely to have used cannabis in the last 12 months (26.0%; 24.0–27.9) than male non-Māori (16.9%; 15.1–18.7), female Māori (16.2%; 14.8–17.6) and female non-Māori (11.3%; 9.7–12.9). Among both Māori and non-Māori, males were significantly more likely than females to have used cannabis in the last 12 months.

**Figure 6:** Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)



In the age groups aged from 18 to 54 years, males were significantly more likely to have used cannabis in the last 12 months, compared to females (Figure 7). Males aged 18–24 years had a significantly higher rate of cannabis use in the last 12 months (40.8%; 34.1–47.6), compared to all other age and sex groups.

**Figure 7:** Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by sex and age group, percent (crude)

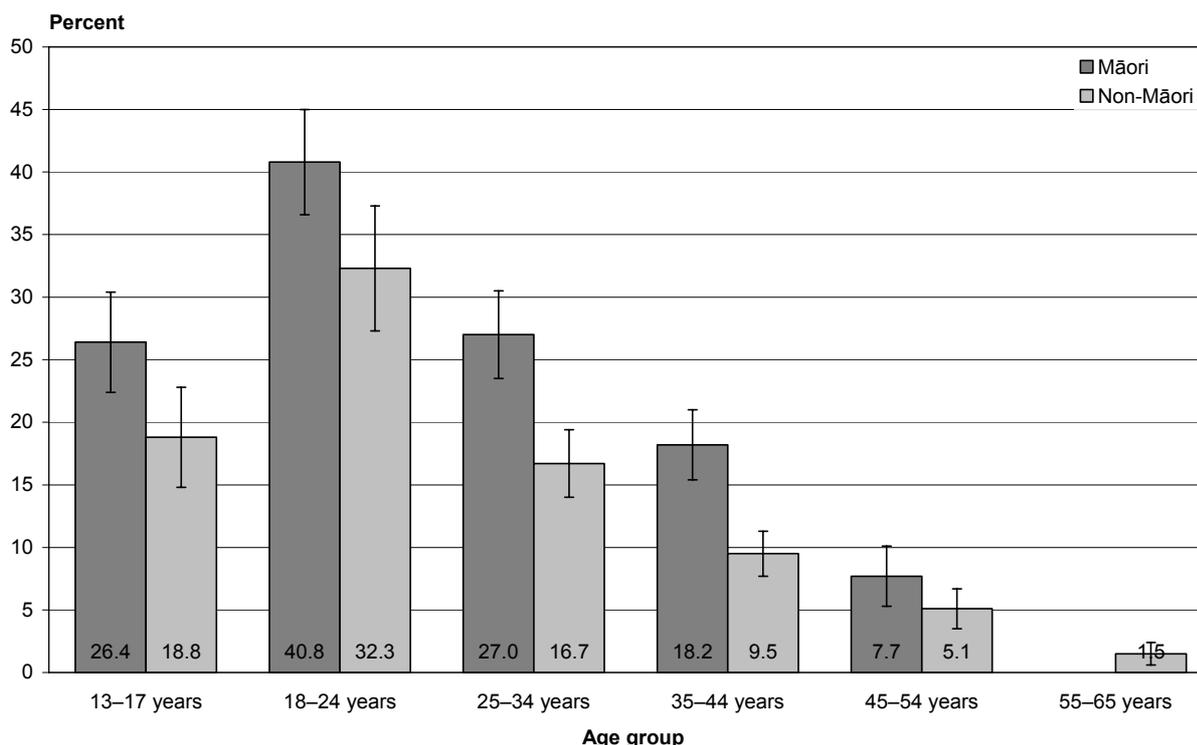


Note: Numbers were too low for reliable estimation for the result for females aged 55–65 years.

Māori were significantly more likely to have used cannabis in the last 12 months compared to non-Māori in all age groups, except among people aged 45 years and older (Figure 8).

In particular, Māori aged 18–24 years were significantly more likely than all other groups to have used cannabis in the last 12 months (40.8%; 36.6–45.0). For youth aged 13–17 years, approximately one in four Māori (26.4%; 22.4–30.4) and one in five non-Māori (18.8%; 14.8–22.8) had used cannabis in the last 12 months.

**Figure 8:** Prevalence of cannabis use in the last 12 months, total population aged 13–65 years, by ethnic and age group, percent (crude)



Note: Numbers were too low for reliable estimation for the result for Māori aged 55–65 years.

## Frequency of cannabis use

Among New Zealanders aged 13–65 years who had used cannabis in the last 12 months (past-year cannabis users), the majority had used cannabis less than once a month on average (59.1%; 55.3–62.9) (Table 13). However, approximately 1 in 13 past-year cannabis users (7.8%; 5.7–9.9) had used cannabis at least seven times a week.

**Table 13:** Frequency of cannabis use in the last 12 months, past-year cannabis users, percent (crude)

Average frequency of cannabis use over last 12 months	Total
7 or more times a week	7.8 (5.7–9.9)
About 2–6 times a week	11.9 (9.3–14.5)
About once a week	7.1 (5.0–9.2)
About 1–3 times a month	14.1 (11.3–16.9)
Less than once a month	59.1 (55.3–62.9)

Among all age groups, the most common frequency of cannabis use was less than once a month. The age group most likely to use cannabis at least seven times a week was people aged 35–44 years (16.6%; 9.5–23.6) (Table 14).

**Table 14:** Frequency of cannabis use in the last 12 months, past-year cannabis users, by age group, percent (crude)

Average frequency of cannabis use	Age group (years)					
	13–17	18–24	25–34	35–44	45–54	55–65
7 or more times a week	–	6.6 (3.6–9.5)	8.2 (4.4–12.1)	16.6 (9.5–23.6)	–	–
About 2–6 times a week	9.2 (3.4–15.0)	13.0 (8.2–17.8)	10.3 (5.5–15.0)	13.4 (7.5–19.3)	18.6 (2.3–34.9)	–
About once a week	–	7.7 (4.3–11.1)	7.4 (3.3–11.6)	7.4 (2.3–12.5)	–	–
About 1–3 times a month	13.2 (6.1–20.2)	16.4 (11.1–21.8)	15.0 (9.2–20.9)	11.5 (5.8–17.1)	11.9 (1.8–22.1)	–
Less than once a month	72.2 (64.2–80.2)	56.3 (48.4–64.2)	59.0 (51.3–66.8)	51.3 (41.6–60.9)	53.3 (36.7–69.9)	84.4 (65.3–100.0)

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Comparing age-standardised rates shows that, among past-year cannabis users, males were significantly more likely to use cannabis at least seven times a week (10.6%; 7.1–14.2) compared to females (2.5%; 0.9–4.0) (Table 15). Males were also significantly more likely to use cannabis two to six times a week (15.2%; 10.9–19.5) compared to females (6.8%; 4.1–9.4). Furthermore, females were significantly more likely to use cannabis less than once a month (72.0%; 66.5–77.5) compared to males (51.2%; 45.5–56.8).

Among past-year cannabis users, Māori were significantly more likely to use cannabis daily (12.4%; 9.9–15.0) compared to non-Māori (6.3%; 3.8–8.7). There were no further significant differences between Māori and non-Māori in the frequency of cannabis use.

**Table 15:** Frequency of cannabis use in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

Average frequency of cannabis use	Female	Male	Māori	Non-Māori
7 or more times a week	2.5 (0.9–4.0)	10.6 (7.1–14.2)	12.4 (9.9–15.0)	6.3 (3.8–8.7)
About 2–6 times a week	6.8 (4.1–9.4)	15.2 (10.9–19.5)	11.1 (8.6–13.6)	11.7 (8.6–14.7)
About once a week	6.9 (3.7–10.2)	6.9 (3.9–9.8)	8.3 (5.9–10.7)	6.7 (4.1–9.2)
About 1–3 times a month	11.8 (7.0–16.7)	16.1 (12.1–20.1)	12.4 (9.8–15.0)	14.8 (11.3–18.3)

Less than once a month	72.0 (66.5–77.5)	51.2 (45.5–56.8)	55.8 (51.2–60.3)	60.6 (56.1–65.0)
------------------------	---------------------	---------------------	---------------------	---------------------

## Frequent use of cannabis

Frequent cannabis use was defined as using cannabis, on average, 10 or more times a month over the last 12 months. Overall, 15.8% (13.3–18.3) of people aged 13–65 years who had used cannabis in the last 12 months had used it frequently (Table 16).

**Table 16:** Frequent cannabis use (10 or more times per month) in the last 12 months, past-year cannabis users, by age group, percent (crude)

	Total	Age group (years)				
		13–17	18–24	25–34	35–44	45–54
Frequent cannabis use (10 or more times per month)	15.8 (13.3–18.3)	9.0 (3.2–14.7)	14.7 (10.2–19.2)	15.6 (10.2–21.0)	24.6 (17.2–32.1)	18.6 (2.2–35.1)

Note: Numbers were too low for reliable estimation for the result for past-year cannabis users aged 55–65 years.

Age-standardised rates show that, among past-year cannabis users, males were significantly more likely to use cannabis 10 or more times per month (21.3%; 17.1–25.5) compared to females (6.3%; 3.9–8.7) (Table 17). Māori were significantly more likely to use cannabis frequently (20.6%; 17.3–23.8) compared to non-Māori (13.8%; 10.8–16.8).

**Table 17:** Frequent cannabis use (10 or more times per month) in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Frequent cannabis use (10 or more times per month)	6.3 (3.9–8.7)	21.3 (17.1–25.5)	20.6 (17.3–23.8)	13.8 (10.8–16.8)

## Binge use of cannabis

Binge use of cannabis was defined as using cannabis continuously for 24 hours or more.

Approximately 13.7% (11.0–16.4) of past-year cannabis users had binged on cannabis at least once in the last 12 months (Table 18). Among past-year cannabis users, people aged 18–24 years were significantly more likely to have binged on cannabis in the last 12 months (16.5%; 11.5–21.4) compared to people aged 35–44 years (7.1%; 2.8–11.4).

**Table 18:** Binge use of cannabis in the last 12 months, past-year cannabis users, by age group, percent (crude)

	Total	Age group (years)			
		13–17	18–24	25–34	35–44
Binge use of cannabis at least once in last 12 months	13.7 (11.0–16.4)	15.6 (8.6–22.6)	16.5 (11.5–21.4)	15.5 (9.1–21.9)	7.1 (2.8–11.4)

Note: Numbers were too low for reliable estimation for the results for the age groups 45–54 and 55–65 years.

Using age-standardised rates to compare past-year cannabis users, males were significantly more likely to have binged on cannabis at least once in the last 12 months (18.5%; 14.3–22.7) compared to females (7.1%; 4.1–10.0) (Table 19). There were no significant differences between Māori and non-Māori past-year cannabis users in the binge use of cannabis.

**Table 19:** Binge use of cannabis in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Binge use of cannabis at least once in the last 12 months	7.1 (4.1–10.0)	18.5 (14.3–22.7)	17.0 (13.9–20.0)	13.3 (10.1–16.6)

## Type of cannabis used

There are three main forms of cannabis – marijuana, hashish (resin) and hash oil – which can be used in several different ways.

Marijuana is the most commonly used and least potent form of cannabis. It is made up of dried leaves and flowers of the *Cannabis sativa* plant, and is most commonly smoked in hand-rolled cigarettes (joints), in a dry pipe or in a water pipe (a bong).

- Leaf (or ‘cabbage’) refers to the dried leaves of the *Cannabis sativa* plant.
- Heads refers to the flowers of the *Cannabis sativa* plant, which are more potent than the leaves.

Skunk is a different variety of cannabis plant which is usually grown indoors. The head of this plant has a higher level of THC (the active chemical in cannabis) than regular cannabis, making it generally more potent.

Hashish (hash) is dried cannabis resin. The concentration of THC in hashish is higher than in cannabis leaf, thereby producing stronger effects. Hash is added to tobacco and smoked, or baked and eaten in foods such as ‘hash cookies’.

Hash oil is a thick, oily liquid that can be extracted from hashish and is the most powerful form of cannabis. It is usually spread on the tip or paper of cigarettes and then smoked.

Respondents who had used cannabis in the last 12 months (past-year cannabis users) were asked what form of cannabis they usually used.

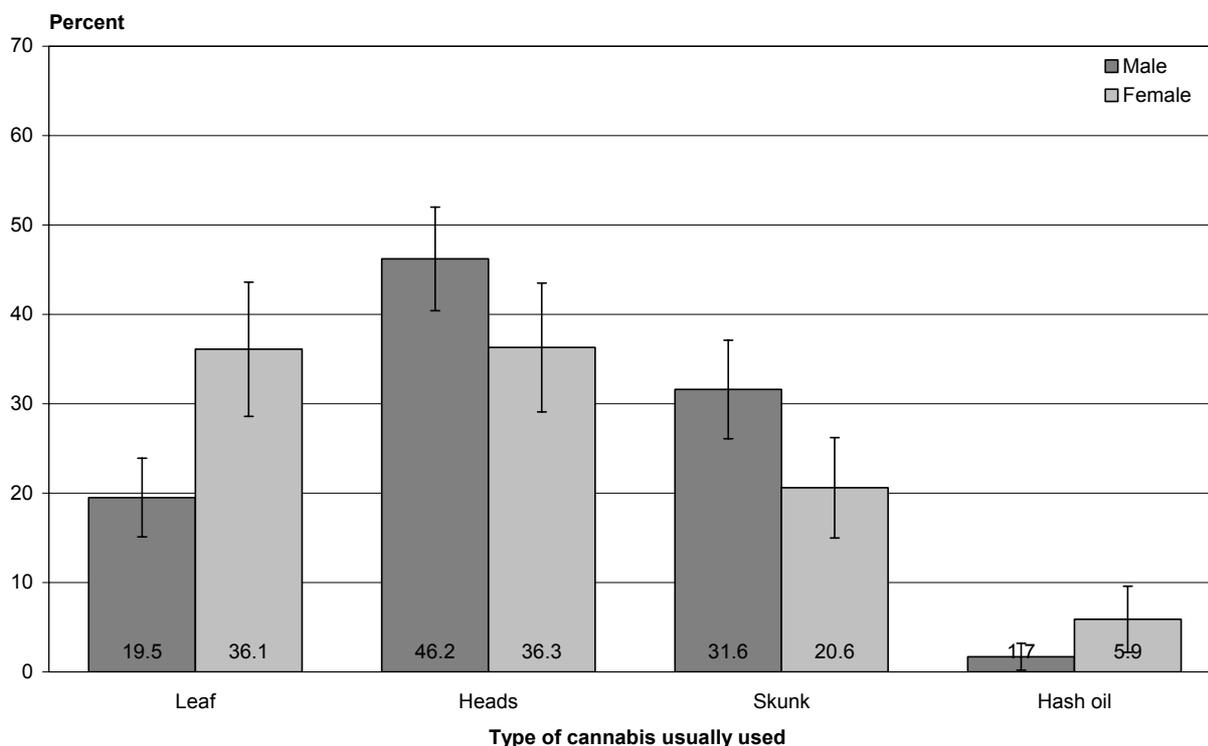
Overall, the most common type of cannabis usually used was heads, by an estimated 43.1% (38.7–47.5) of past-year cannabis users (Table 20). Skunk (27.6%; 23.6–31.6) and leaf (25.2%; 21.6–28.8) were also commonly used types of cannabis.

**Table 20:** Type of cannabis usually used by past-year cannabis users, percent (crude)

Type of cannabis usually used	Total
Leaf	25.2 (21.6–28.8)
Heads	43.1 (38.7–47.5)
Skunk	27.6 (23.6–31.6)
Hash oil	3.2 (1.7–4.6)
Hashish	1.0 (0.1–1.8)

Using age-standardised rates to compare groups, female past-year cannabis users were significantly more likely to usually use leaf (36.1%; 28.6–43.5) than male past-year cannabis users (19.5%; 15.1–23.9) (Figure 9). Among past-year cannabis users, males were significantly more likely to use skunk (31.6%; 26.1–37.1) than females (20.6%; 15.0–26.2).

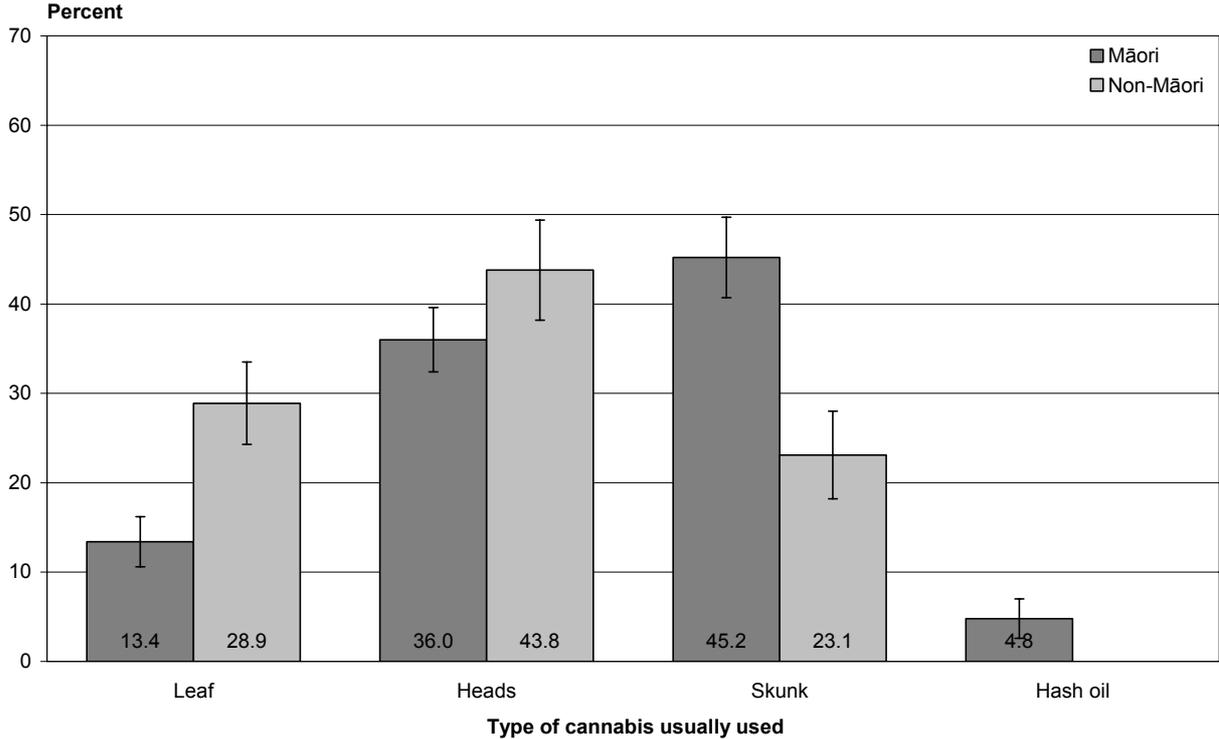
**Figure 9:** Type of cannabis usually used by past-year cannabis users, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the result for hashish.

Figure 10 shows that, among past-year cannabis users, non-Māori were significantly more likely to usually use marijuana leaf (28.9%; 24.3–33.5) or heads (43.8%; 38.2–49.5) than Māori (leaf: 13.4%; 10.6–16.3; heads: 36.0%; 32.4–39.6). By comparison, Māori past-year cannabis users were significantly more likely to have typically used skunk (45.2%; 40.7–49.7), compared to non-Māori past-year cannabis users (23.1%; 18.2–28.1).

**Figure 10:** Type of cannabis usually used by past-year cannabis users, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for non-Māori using hash oil, and all results for hashish.

**Mode of use of cannabis**

Past-year cannabis users were asked how they typically used cannabis. Respondents selected one of the following options: smoking it as joints, smoking it from a bong or pipe, smoking it with tobacco, and eating it.

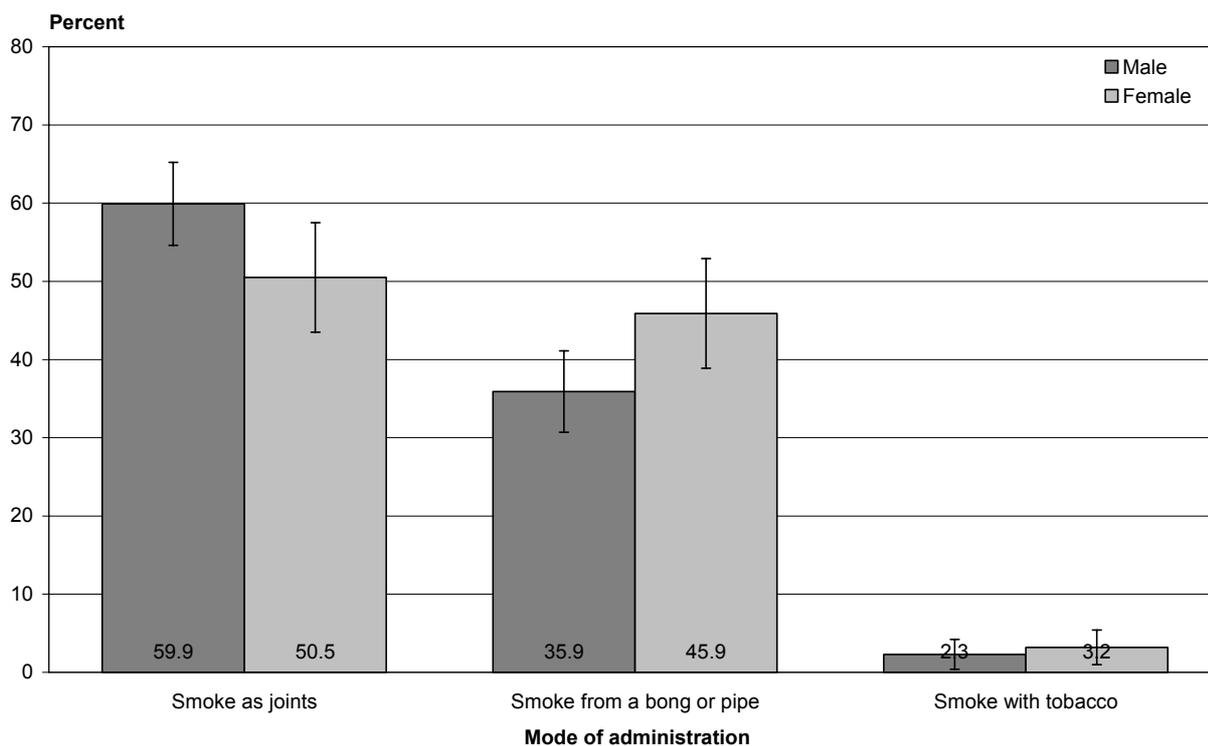
Overall, the most common modes of cannabis use were smoking it as a joint (57.1%; 53.2–61.0) and smoking it using a bong or pipe (39.1%; 35.2–42.9) (Table 21). A small proportion of past-year cannabis users typically smoked cannabis with tobacco (2.6%; 1.2–4.0) or ate it (1.3%; 0.4–2.1).

**Table 21:** Typical mode of administration of cannabis, past-year cannabis users, percent (crude)

Mode of administration	Total
Smoke as joints	57.1 (53.2–61.0)
Smoke from a bong or pipe	39.1 (35.2–42.9)
Smoke it with tobacco	2.6 (1.2–4.0)
Eat it	1.3 (0.4–2.1)

Using age-standardised rates to compare groups of past-year cannabis users, males were significantly more likely to typically use cannabis by smoking it as a joint (59.9%; 54.6–65.2) compared to females (50.5%; 43.5–57.5) (Figure 11). Furthermore, females were significantly more likely to typically use cannabis by smoking it from a bong or pipe (45.9%; 38.9–53.0) compared to males (35.9%; 30.7–41.1).

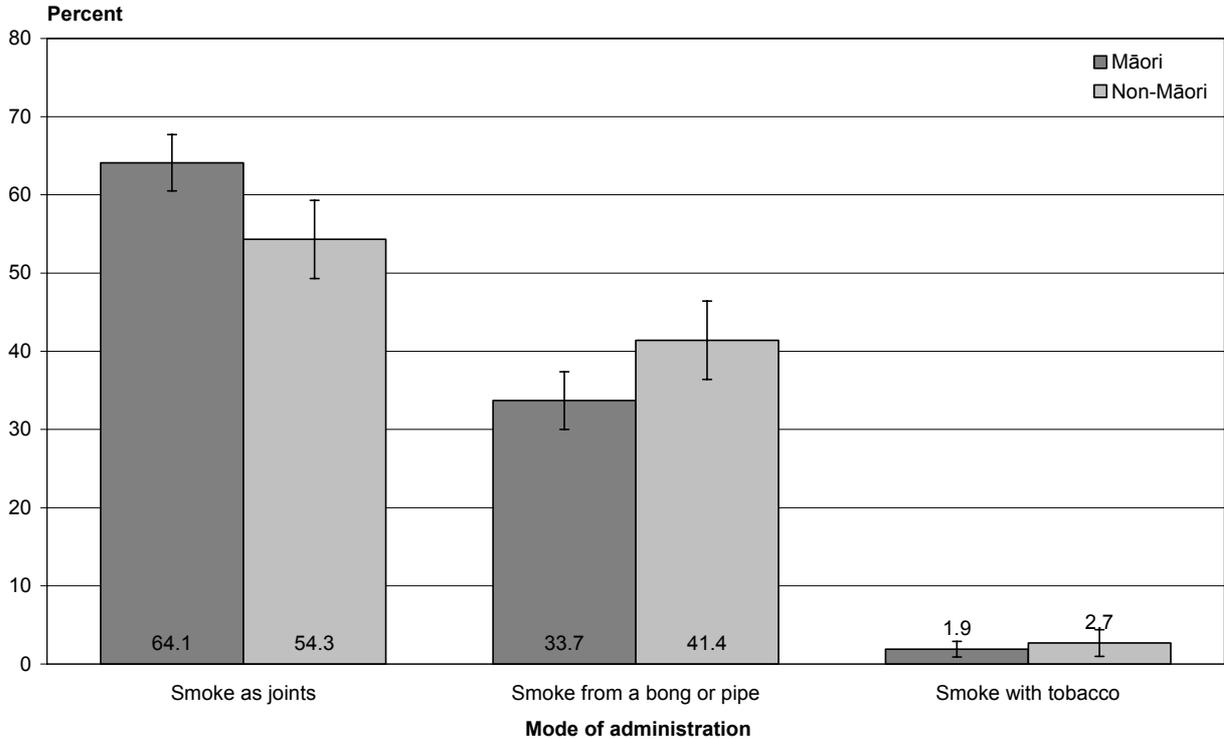
**Figure 11:** Typical mode of administration of cannabis, past-year cannabis users, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for eating cannabis.

Among past-year cannabis users, Māori were significantly more likely to smoke cannabis using a joint (64.1%; 60.4–67.7) compared to non-Māori (54.3%; 49.3–59.3) (Figure 12). In contrast, non-Māori were significantly more likely to use a bong or pipe when using cannabis (41.4%; 36.4–46.4) than Māori (33.7%; 30.0–37.4).

**Figure 12:** Typical mode of administration of cannabis, past-year cannabis users, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for eating cannabis.

### Location of cannabis use

Past-year cannabis users were asked how much of their cannabis use took place in private homes, in public places and at work. Public places referred to locations such as music concerts, pubs, bars, dance clubs, on the street, and at the beach or park. Respondents selected their answer from the following options: none, hardly any, some, most, or all of their cannabis use. This section reports on any use of cannabis in these specific locations, which includes hardly any, some, most, and all of cannabis use at each location.

Overall, an estimated 84.7% (81.9–87.6) of past-year cannabis users used cannabis in private homes (Table 22). Approximately half of past-year cannabis users (47.5%; 43.3–51.6) used cannabis in public places, and a small proportion used it at work (5.8%; 4.2–7.4).

The youngest age group (13–17 years) was significantly more likely to use cannabis in public places or at workplaces, compared to all other age groups.

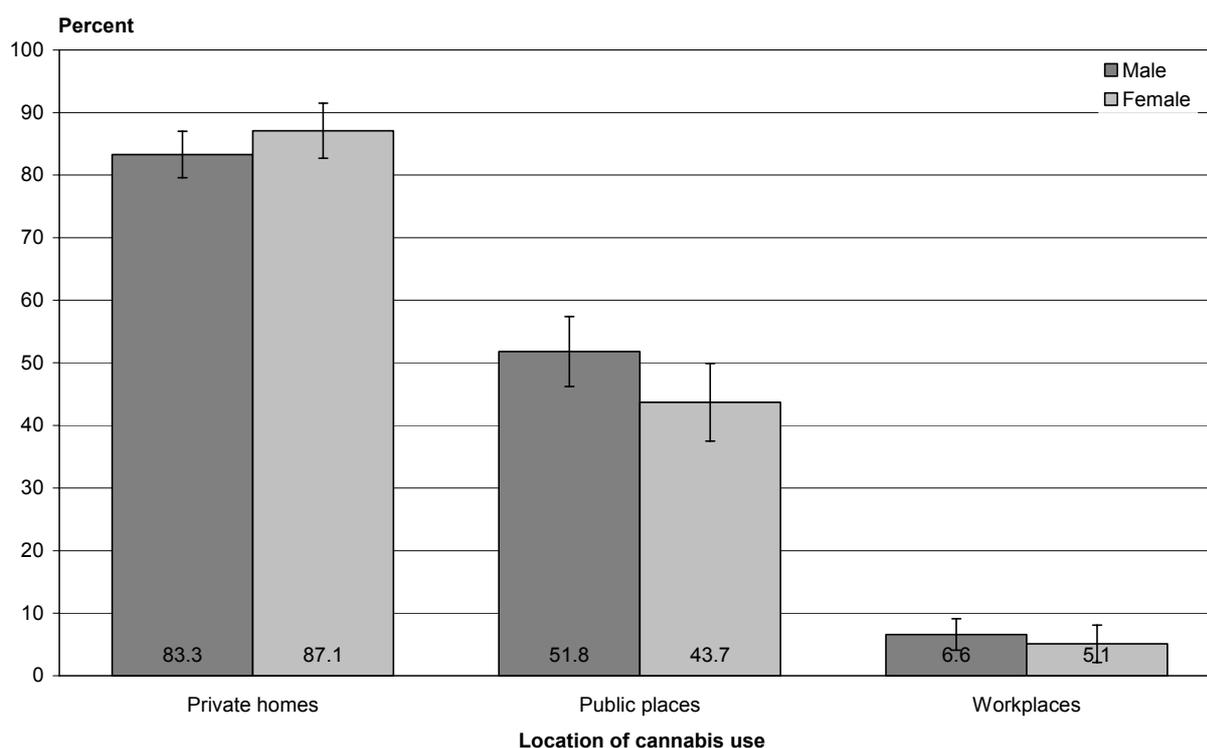
**Table 22:** Location of cannabis use, past-year cannabis users, by age group, percent (crude)

Location	Total	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Private homes	84.7 (81.9–87.6)	72.0 (63.1–81.0)	85.1 (79.8–90.4)	87.6 (83.0–92.3)	90.9 (86.5–95.3)	86.1 (74.7–97.6)	89.9 (69.1–100.0)
Public places	47.5 (43.3–51.6)	72.1 (62.6–81.5)	54.0 (46.6–61.3)	40.1 (31.9–48.4)	37.4 (28.2–46.7)	24.1 (10.1–38.1)	–
Workplaces	5.8 (4.2–7.4)	13.3 (6.0–20.6)	4.4 (1.8–7.0)	5.2 (2.4–8.0)	4.6 (1.8–7.5)	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. The results presented refer to any cannabis use, which includes hardly any, some, most and all cannabis use.

Comparing groups with age-standardised rates shows there were no significant differences between male and female past-year cannabis users in the location of cannabis use (Figure 13).

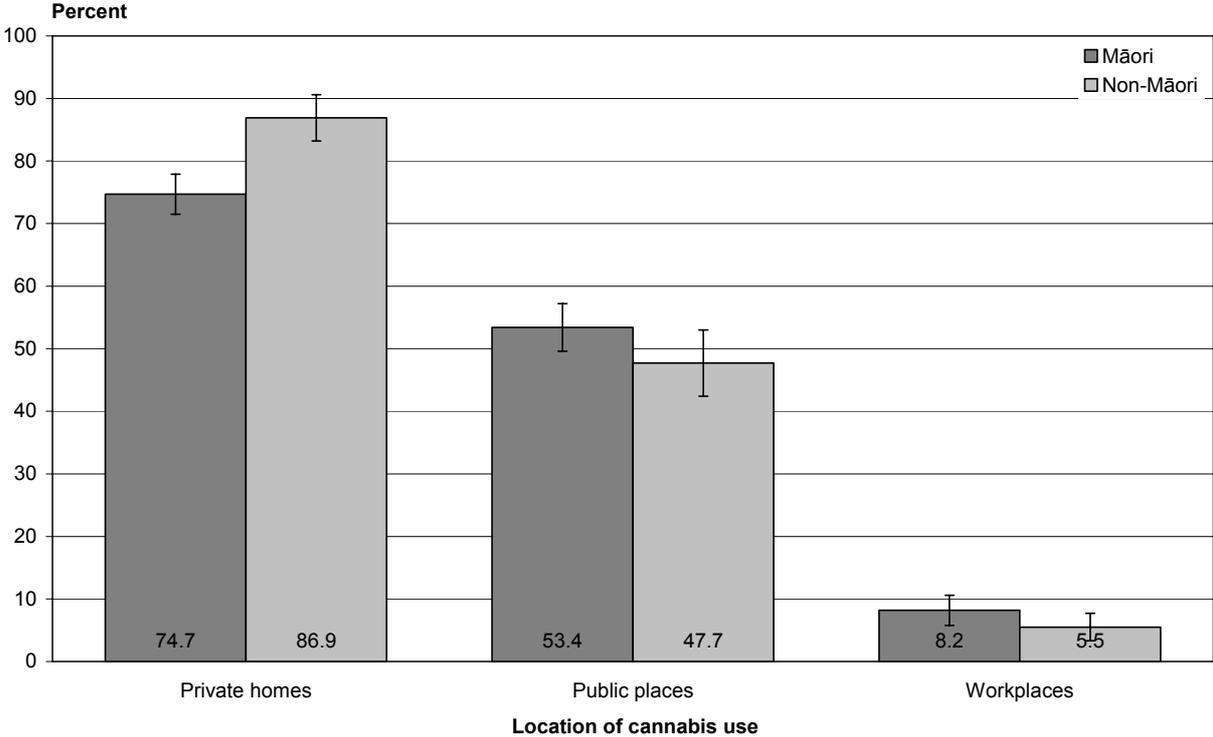
**Figure 13:** Location of cannabis use, past-year cannabis users, by sex, percent (age-standardised)



Note: The results presented refer to any cannabis use, which includes hardly any, some, most and all cannabis use.

Among past-year cannabis users, non-Māori were significantly more likely to use cannabis in private homes (86.9%; 83.2–90.6) compared to Māori (74.7%; 71.5–77.9) (Figure 14).

**Figure 14:** Location of cannabis use, past-year cannabis users, by ethnic group, percent (age-standardised)



Note: The results presented refer to any cannabis use, which includes hardly any, some, most and all cannabis use.

**Group size when using cannabis**

Past-year cannabis users were asked how many people they usually shared cannabis with, or if they usually used cannabis alone.

Overall, the majority of past-year cannabis users used cannabis in groups of two people or more (93.8%; 92.2–95.5), with only a small proportion using cannabis alone (6.2%; 4.5–7.8).

Age-standardised rates showed that, among past-year cannabis users, males were significantly more likely to usually use cannabis alone (7.7%; 5.1–10.4) than females (3.2%; 1.6–4.8) (Table 23).

Among past-year cannabis users, Māori (11.3%; 9.0–13.6) were significantly more likely to use cannabis alone compared to non-Māori (4.5%; 2.4–6.5).

**Table 23:** Usual group size when using cannabis, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

Usual group size when using cannabis	Female	Male	Māori	Non-Māori
Groups of two or more people	96.8 (95.2–98.4)	92.3 (89.6–94.9)	88.7 (86.4–91.0)	95.5 (93.5–97.6)
Alone	3.2 (1.6–4.8)	7.7 (5.1–10.4)	11.3 (9.0–13.6)	4.5 (2.4–6.5)

## Cannabis use and driving

Past-year cannabis users were asked how much of their driving they did while feeling under the influence of cannabis. Respondents selected their answer from the following options: none, hardly any, some, most, or all of their driving. The following results are for past-year cannabis users who reported doing any driving while feeling under the influence of cannabis, which included hardly any, some, most, or all of their driving.

Overall, an estimated 39.5% (35.1–43.9) of past-year cannabis users reported driving while feeling under the influence of cannabis (Table 24). There were no significant differences by age group in driving while feeling under the influence of cannabis.

**Table 24:** Prevalence of driving while feeling under the influence of cannabis, past-year cannabis users, by age group, percent (crude)

	Total	Age group (years)				
		13–17	18–24	25–34	35–44	45–54
Driving while feeling under the influence of cannabis	39.5 (35.1–43.9)	33.5 (21.1–45.8)	42.2 (34.9–49.5)	38.5 (30.0–47.1)	44.1 (34.9–53.2)	37.8 (21.9–53.7)

Note: Numbers were too low for reliable estimation for the results for the age group 55–65 years. The results presented refer to any driving done while feeling under the influence of cannabis, which includes hardly any, some, most and all driving.

Using age-standardised rates to compare past-year cannabis users, males were significantly more likely to report driving while feeling under the influence of cannabis (46.8%; 40.5–53.0) than females (27.2%; 21.2–33.3) (Table 25). There was no significant difference between Māori and non-Māori past-year cannabis users in driving while feeling under the influence of cannabis.

**Table 25:** Prevalence of driving while feeling under the influence of cannabis, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Driving while feeling under the influence of cannabis	27.2 (21.2–33.3)	46.8 (40.5–53.0)	44.2 (39.8–48.6)	38.1 (32.7–43.6)

Note: The results presented refer to any driving done while feeling under the influence of cannabis, which includes hardly any, some, most and all driving.

## Source of cannabis

Past-year cannabis users were asked how much of the cannabis they used was free, bought, or grown by themselves. Respondents selected their answer from the following options for each source of cannabis: none, hardly any, some, most, or all of the cannabis they used. The following results are for people who reported receiving any cannabis from each source, which includes hardly any, some, most and all of the cannabis they used.

Overall, an estimated 92.3% (89.8–94.9) of past-year cannabis users received cannabis for free (Table 26). Approximately half of past-year cannabis users bought cannabis (46.4%; 42.2–50.5) and approximately 11.0% (8.0–14.0) of past-year cannabis users grew cannabis for their own use.

Among the age groups, there was evidence to suggest a decreasing trend for buying cannabis with age, from the youngest age group (13–17 years) to the 45–54 year old group (Table 26).

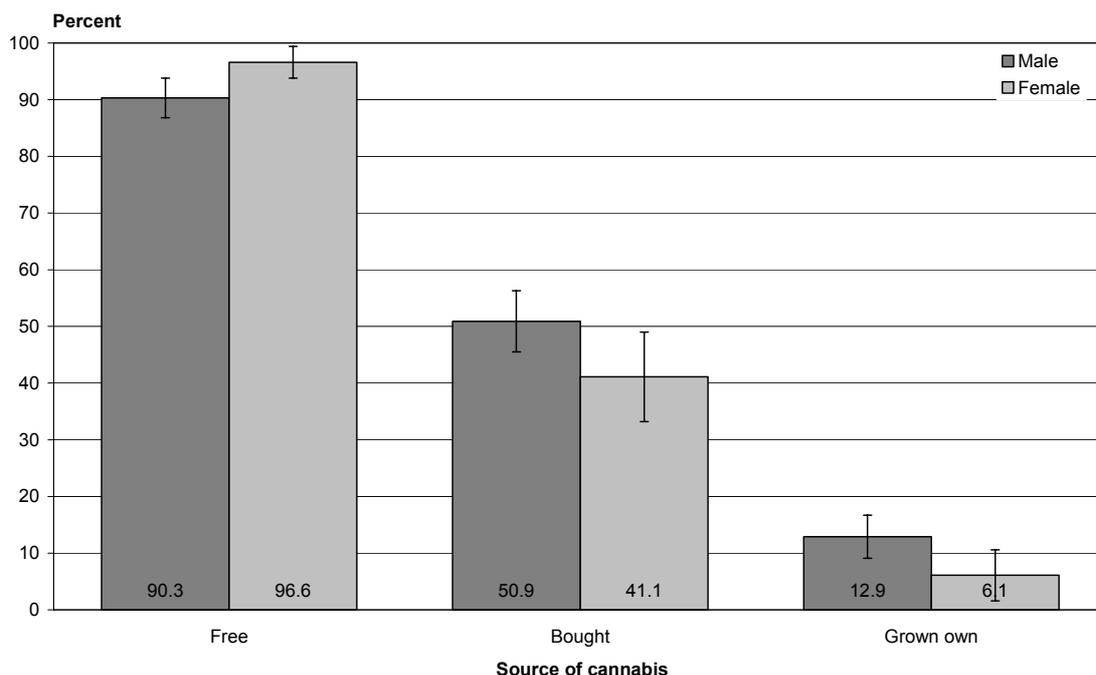
**Table 26:** Source of cannabis, past-year cannabis users, by age group, percent (crude)

Source of cannabis	Total	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Given free	92.3 (89.8–94.9)	92.5 (86.4–98.6)	93.4 (89.2–97.6)	94.5 (90.7–98.4)	92.4 (87.8–97.1)	80.9 (59.1–100.0)	–
Bought	46.4 (42.2–50.5)	59.9 (48.5–71.3)	49.5 (40.7–58.3)	45.4 (36.4–54.4)	40.6 (30.5–50.6)	30.6 (13.2–48.0)	–
Grown own	11.0 (8.0–14.0)	–	9.3 (3.7–14.9)	8.0 (3.8–12.3)	19.4 (11.8–27.0)	–	–

Note: A dash (–) indicates that the numbers were too low for reliable estimation. The results presented refer to the source of any of the cannabis used, which includes hardly any, some, most and all of the cannabis used.

Using age-standardised rates to compare past-year cannabis users, females were significantly more likely to be given cannabis for free (96.6%; 93.8–99.3) compared to males (90.3%; 86.8–93.8) (Figure 15). Furthermore, males were significantly more likely to buy cannabis (50.9%; 45.5–56.3) compared to females (41.1%; 33.2–49.0). Males were also significantly more likely to grow their own cannabis (12.9%; 9.1–16.7) compared to females (6.1%; 1.6–10.6).

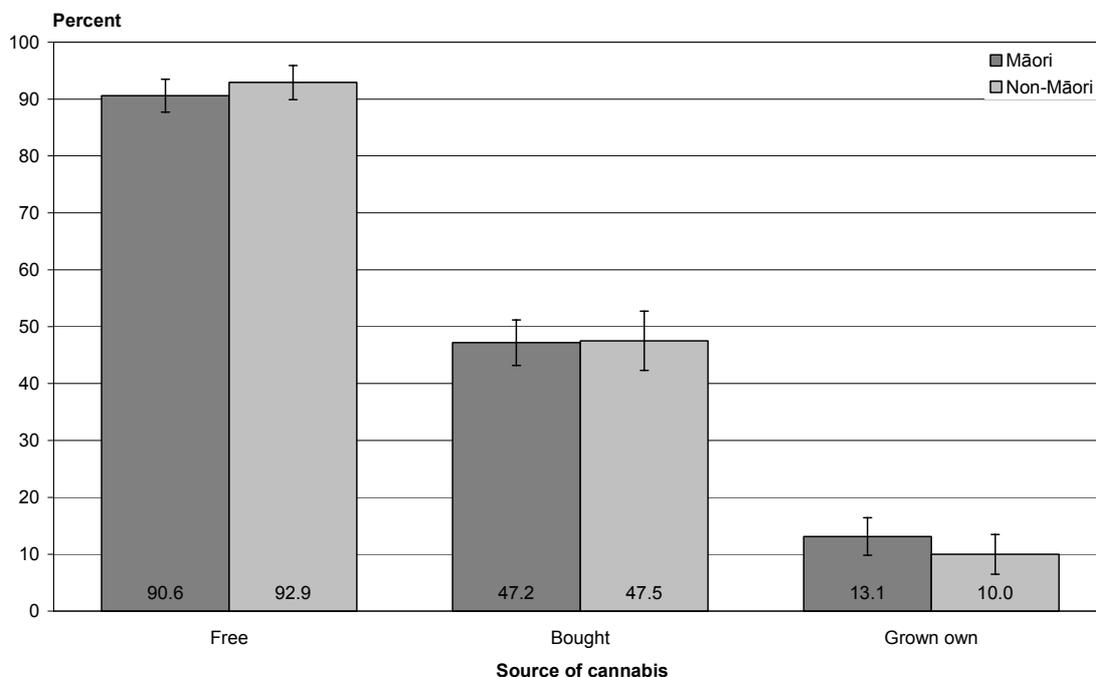
**Figure 15:** Source of cannabis, past-year cannabis users, by sex, percent (age-standardised)



Note: The results presented refer to the source of any of the cannabis used, which includes hardly any, some, most and all of the cannabis used.

There were no significant differences between Māori and non-Māori past-year cannabis users in the source of cannabis (Figure 16).

**Figure 16:** Source of cannabis, past-year cannabis users, by ethnic group, percent (age-standardised)



Note: These results refer to the source of any of the cannabis used, which includes hardly any, some, most and all of the cannabis used.

## Purchase of cannabis from tinny houses

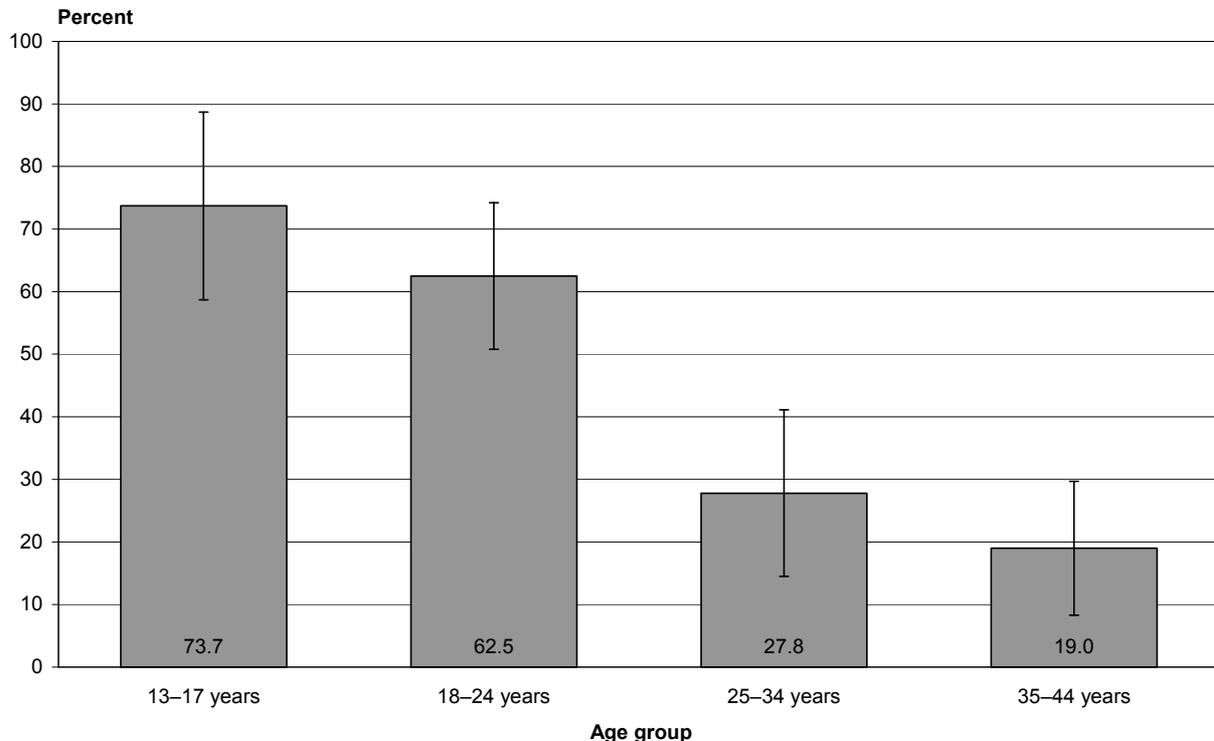
'Tinny houses' (or 'bullet houses') are residential properties converted for the 'supermarket' sale of cannabis and other illicit drugs to anyone who attends the premises with cash.

Past-year cannabis users who reported buying cannabis in the last 12 months were asked how much of the cannabis they had bought in the last 12 months was from a tinny or bullet house. Respondents selected their answer from the following options: none, hardly any, some, most, or all of the cannabis they had bought. The results presented below are for any of the cannabis purchased, that is, hardly any, some, most, or all of the cannabis they purchased.

Approximately half of past-year cannabis users who had bought cannabis in the last 12 months had purchased some of this cannabis from a tinny house or bullet house (47.3%; 40.5–54.0).

Figure 17 shows that, among past-year cannabis users who had purchased cannabis in the last 12 months, almost three in four (73.7%; 58.8–88.7) of those aged 13–17 years had purchased some of this cannabis from a tinny house, compared to one-fifth of those aged 35–44 years (19.0%; 8.2–29.7).

**Figure 17:** Purchase of cannabis from tinny house in the last 12 months, past-year cannabis users who had bought cannabis in the last 12 months, by age group, percent (crude)



Note: Numbers were too low for reliable estimation for the results for the age groups 45–54 and 55–65 years.

Age-standardised rates showed that, among past-year cannabis users who had purchased cannabis in the last 12 months, Māori were significantly more likely to have purchased cannabis from a tinny house (59.7%; 53.8–65.5) than non-Māori (45.9%; 37.3–54.4) (Table 27).

**Table 27:** Purchase of cannabis from tinny house in the last 12 months, past-year cannabis users who had bought cannabis in the last 12 months, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Purchase of cannabis from tinny houses	53.7 (41.3–66.0)	46.1 (37.9–54.3)	59.7 (53.8–65.5)	45.9 (37.3–54.4)

Among past-year cannabis users who had purchased cannabis in the last year, there was no significant difference between males (46.1%; 37.9–54.3) and females (53.7%; 41.3–66.0) in the proportions purchasing cannabis from a tinny house.

### Perceived price of cannabis compared to a year ago

Past-year cannabis users who had bought cannabis in the last year were asked if the price they would expect to pay for cannabis was higher, lower, or the same compared to a year ago.

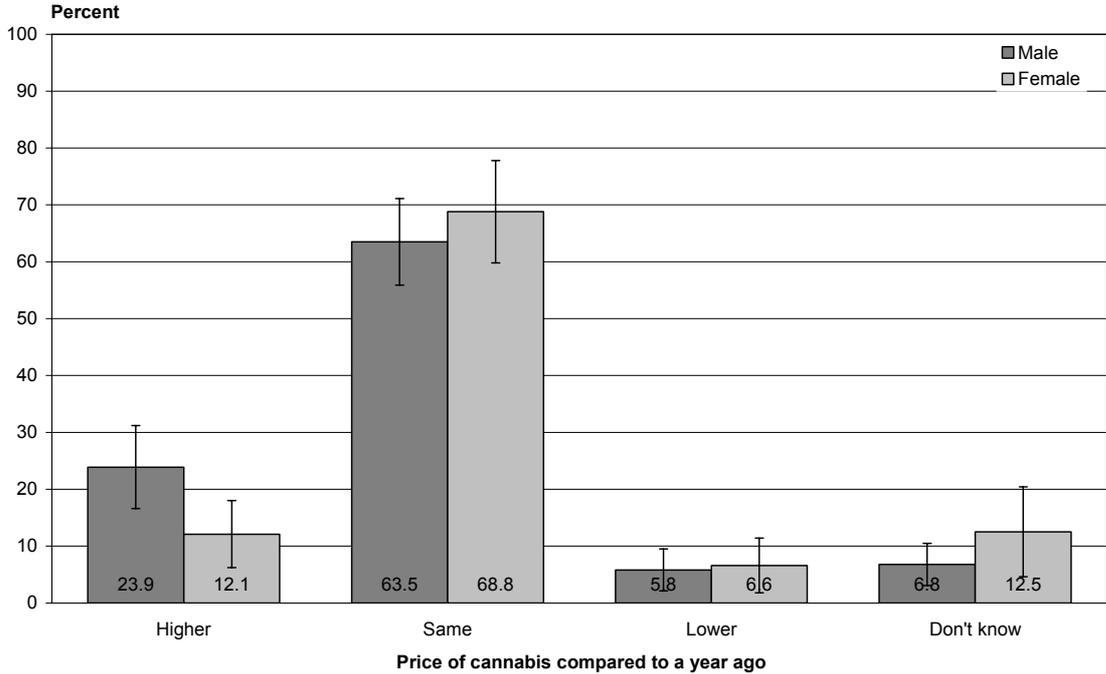
Overall, approximately two-thirds (65.1%; 59.7–70.5) of past-year cannabis users who had bought cannabis in the last 12 months thought the price of cannabis was the same compared to a year ago, and one in five (19.8%; 15.1–24.5) thought the price was higher (Table 28). A small proportion of past-year cannabis users thought that the price of cannabis was lower compared to a year ago (6.0%; 3.3–8.7).

**Table 28:** Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, percent (crude)

Price of cannabis compared to a year ago	Total
Higher	19.8 (15.1–24.5)
Same	65.1 (59.7–70.5)
Lower	6.0 (3.3–8.7)
Don't know	9.1 (5.3–12.9)

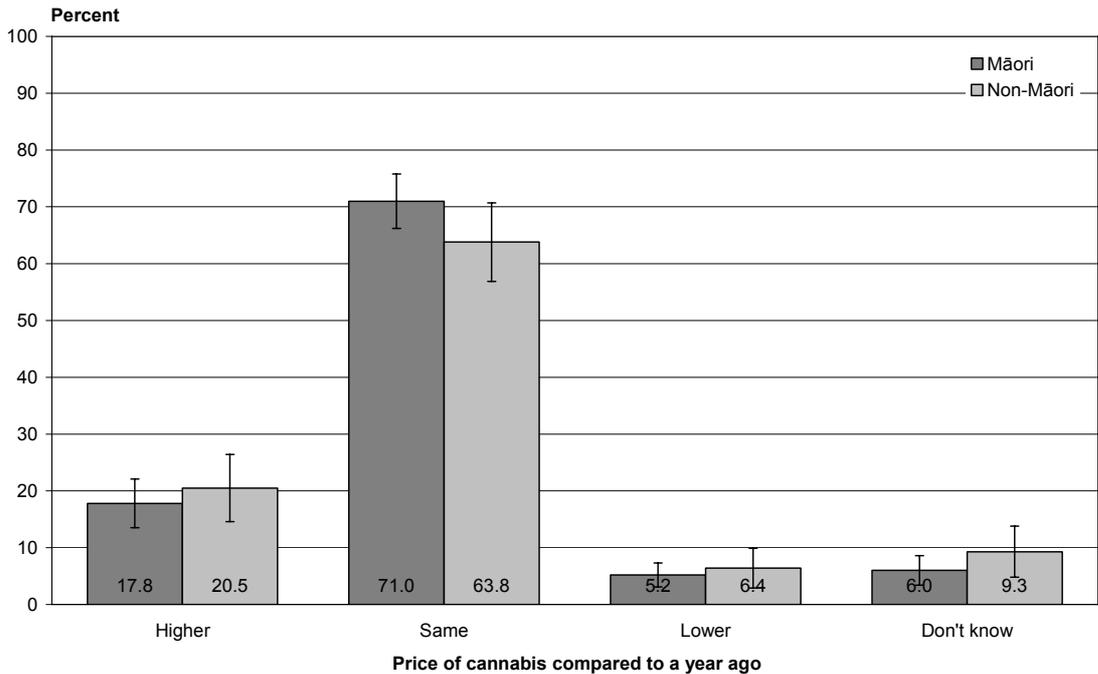
Using age-standardised rates to compare past-year cannabis users who had bought cannabis in the last year, males were significantly more likely to report that the price of cannabis was higher compared to a year ago (23.9%; 16.6–31.2) than females (12.1%; 6.1–18.0) (Figure 18).

**Figure 18:** Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by sex, percent (age-standardised)



There were no differences in perceptions of changes in the price of cannabis between Māori and non-Māori past-year cannabis users who had purchased cannabis in the last 12 months (Figure 19).

**Figure 19:** Perceived price of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by ethnic group, percent (age-standardised)



## Perceived availability of cannabis compared to a year ago

Past-year cannabis users who had bought cannabis in the last year were asked if getting cannabis was easier, harder, or the same compared to a year ago.

Overall, approximately half of this group of past-year cannabis users (48.9%; 43.0–54.9) thought there had been no change in the availability of cannabis, one in four (26.1%; 21.1–31.1) thought it was easier to get cannabis, and one in five (19.7%; 14.8–24.6) thought it was harder to get cannabis compared to a year ago (Table 29).

There was no difference between the age groups in the proportions of those who thought that getting cannabis was harder. Past-year cannabis users aged 18–54 years were significantly more likely to say that there was no change in the availability of cannabis compared to those aged 13–17 years. Past-year cannabis users aged 13–17 years were significantly more likely to say that it was easier to get cannabis compared to year ago (52.9%; 39.9–65.8) than all other age groups.

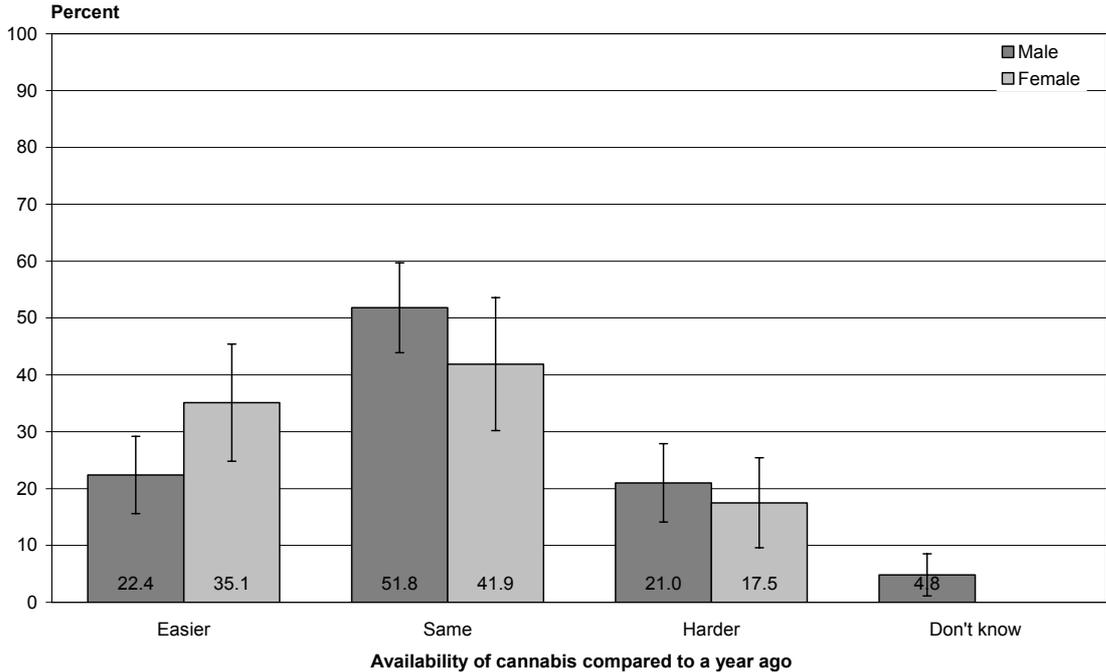
**Table 29:** Perceived availability of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by age group, percent (crude)

Availability	Total	Age group (years)				
		13–17	18–24	25–34	35–44	45–54
Easier	26.1 (21.1–31.1)	52.9 (39.9–65.8)	24.0 (14.7–33.3)	17.1 (6.9–27.2)	14.8 (5.7–23.8)	–
Same	48.9 (43.0–54.9)	22.1 (9.7–34.4)	49.7 (38.1–61.3)	61.0 (49.6–72.3)	65.3 (52.2–78.3)	34.6 (7.6–61.6)
Harder	19.7 (14.8–24.6)	21.8 (11.0–32.6)	20.7 (12.0–29.4)	19.2 (9.1–29.4)	13.4 (4.0–22.8)	–
Don't know	5.2 (2.5–8.0)	–	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were too low for reliable estimation for all results for the age group 55–65 years.

Using age-standardised rates to compare groups of past-year cannabis users who had purchased cannabis in the last year, females were significantly more likely to find it easier to get cannabis compared to a year ago (35.1%; 24.8–45.4) than males (22.4%; 15.7–29.2) (Figure 20).

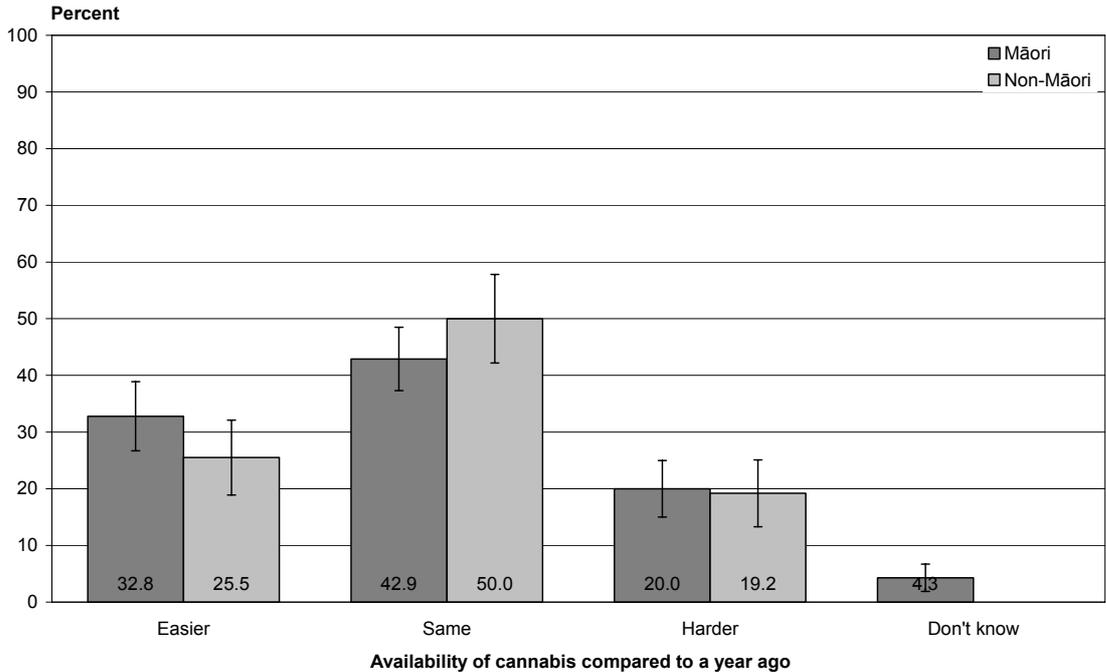
**Figure 20:** Perceived availability of cannabis compared to a year ago, past-year cannabis users who bought cannabis in the last 12 months, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the response 'don't know' for females.

There were no significant differences between Māori and non-Māori in the perception of the change in availability of cannabis (Figure 21).

**Figure 21:** Perceived availability of cannabis compared to a year ago, past-year cannabis users who had bought cannabis in the last 12 months, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the response 'don't know' for non-Māori.

## **Cannabis and access to other drugs**

Past-year cannabis users who had purchased cannabis in the last 12 months were asked whether they knew, or had heard, that their cannabis dealer sold other drugs. If this was the case, they were then asked if the cannabis dealer had ever encouraged them to buy other drugs. Those who were encouraged to buy other drugs were then asked whether this encouragement had resulted in them purchasing other drug types.

Overall, 23.4% (18.1–28.7) of past-year cannabis users who had purchased cannabis in the last 12 months had purchased from a dealer who they knew, or had heard, sold other drugs. Of those whose dealer sold other drugs, 30.5% (18.0–42.9) had been encouraged to buy other drugs. Of those people who had been encouraged to buy other drugs, approximately two in five (39.8%; 12.1–67.5) went on to buy other drugs.

## **Harms from cannabis use on area of life**

Past-year cannabis users were asked whether their use of cannabis had resulted in any harmful effect on eight areas of their lives in the last 12 months (Table 30).

Approximately one in four past-year cannabis users (24.1%; 21.0–27.3) reported experiencing harmful effects to their energy and vitality in the last 12 months, which they attributed to their use of cannabis.

Furthermore, one in seven past-year cannabis users (14.2%; 11.4–17.0) reported experiencing harmful effects to their health in the last 12 months because of their cannabis use.

Other self-reported harmful effects from cannabis use in the last 12 months included effects on financial position (10.5%; 8.3–12.7) and outlook on life (10.1%; 7.8–12.5).

An estimated 7.1% (5.4–8.8) of past-year cannabis users reported experiencing harmful effects on their home life because of their cannabis use. A small proportion of past-year cannabis users felt that their cannabis use had harmed their children's health or wellbeing (3.2%; 1.7–4.6).

**Table 30:** Self-reported harmful effects from cannabis use in the last 12 months, past-year cannabis users, percent (crude)

Area of harmful effect	Total
Energy and vitality	24.1 (21.0–27.3)
Health	14.2 (11.4–17.0)
Financial position	10.5 (8.3–12.7)
Outlook on life	10.1 (7.8–12.5)
Friendships and social life	8.3 (6.1–10.4)
Home life	7.1 (5.4–8.8)
Work or work opportunities	6.4 (4.5–8.4)
Children’s health/wellbeing	3.2 (1.7–4.6)

Using age-standardised rates to compare groups of past-year cannabis users, males were more likely than females to report harmful effects on areas of their life because of their use of cannabis (Table 31). Specifically, males were significantly more likely than females to report harmful effects on their energy and vitality, financial position, home life and work or work opportunities.

Compared to non-Māori past-year cannabis users, Māori past-year cannabis users were significantly more likely to report harmful effects from cannabis on many areas of life, including energy and vitality, health, financial position, outlook on life, friendships and social life, home life and work or work opportunities. This represented all areas of life except children’s health and wellbeing.

**Table 31:** Self-reported harmful effects from cannabis use in the last 12 months, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

Area of harmful effect	Female	Male	Māori	Non-Māori
Energy and vitality	19.3 (14.0–24.6)	27.0 (22.5–31.5)	29.5 (25.7–33.4)	22.5 (18.7–26.3)
Health	10.8 (7.0–14.6)	16.3 (12.3–20.3)	20.8 (17.4–24.2)	12.6 (9.0–16.3)
Financial position	6.9 (3.5–10.3)	13.0 (9.6–16.3)	15.1 (12.1–18.1)	9.4 (6.7–12.0)
Outlook on life	9.6 (5.4–13.8)	10.5 (7.5–13.5)	14.8 (11.8–17.9)	8.8 (5.9–11.7)
Friendships and social life	7.6 (3.9–11.3)	8.7 (5.9–11.5)	11.9 (9.1–14.6)	7.5 (4.9–10.2)
Home life	4.7 (2.4–7.0)	8.4 (5.9–10.9)	11.6 (9.3–13.9)	6.0 (4.0–8.0)
Work or work opportunities	4.0 (1.8–6.3)	7.9 (5.0–10.8)	11.0 (8.2–13.7)	5.1 (2.8–7.5)
Children's health/wellbeing	2.3 (1.0–3.6)	3.3 (1.0–5.7)	6.2 (4.0–8.5)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

## Self-reported problems from cannabis use

Past-year cannabis users were asked what specific problems, if any, they had experienced because of their use of cannabis.

An estimated one in eight past-year cannabis users (12.5%; 10.0–15.0) reported experiencing a health-related problem because of their cannabis use. This included coughs or chest complaints, memory loss, blackouts and other physical health-related problems (Table 32).

An estimated 1 in 12 past-year cannabis users (8.1%; 5.8–10.4) reported experiencing a loss of motivation or energy because of their cannabis use. Other commonly reported problems included memory loss (7.0%; 5.3–8.7), other problems relating to physical health (4.9%; 3.4–6.3) and having feelings of paranoia (4.1%; 2.6–5.5).

**Table 32:** Self-reported problems from cannabis use, past-year cannabis users, percent (crude)

Self-reported problem	Total
Overall health problems (includes coughs or chest complaints; memory loss; blackouts; other physical health-related problems)	12.5 (10.0–15.0)
Loss of motivation/energy	8.1 (5.8–10.4)
Memory loss	7.0 (5.3–8.7)
Other physical health-related problems	4.9 (3.4–6.3)
Feelings of paranoia	4.1 (2.6–5.5)
Relationship problems	3.9 (2.5–5.2)
In trouble with the law	3.1 (1.7–4.6)
Coughs or chest complaints	2.9 (1.0–4.7)
Problems with parents	2.3 (1.3–3.3)
Financial	2.3 (1.0–3.6)
Job problems	1.0 (0.2–1.7)
Wasting time	0.7 (0.2–1.1)

Note: Numbers were too low for reliable estimation for the individual self-reported problems of needing counselling or clinical treatment, having blackouts, needing more to get the same effect and having suicidal thoughts.

Using age-standardised rates to compare groups of past-year cannabis users, Māori were significantly more likely (16.4%; 13.4–19.4) than non-Māori (11.5%; 8.3–14.6) to report experiencing a health-related problem because of their cannabis use (includes coughs and chest complaints, memory loss, blackouts and other physical health-related problems) (Table 33). In particular, among past-year cannabis users, Māori were significantly more likely to experience 'other physical health-related problems' (8.1%; 5.9–10.2) than non-Māori (3.9%; 2.0–5.7).

**Table 33:** Self-reported problems from cannabis use, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

Self-reported problem	Female	Male	Māori	Non-Māori
Overall health problems (includes coughs or chest complaints; memory loss; blackouts; other physical health-related problems)	9.9 (6.6–13.2)	13.8 (10.0–17.6)	16.4 (13.4–19.4)	11.5 (8.3–14.6)
Loss of motivation/energy	8.1 (4.4–11.8)	7.8 (4.7–10.9)	5.5 (3.6–7.3)	8.1 (5.4–10.8)
Memory loss	6.4 (3.6–9.1)	7.5 (4.7–10.3)	7.8 (5.7–9.9)	6.9 (4.8–9.0)
Other physical health-related problems	4.2 (2.3–6.2)	4.8 (2.5–7.1)	8.1 (5.9–10.2)	3.9 (2.0–5.7)
Feelings of paranoia	3.7 (1.6–5.8)	4.1 (1.9–6.2)	3.9 (2.3–5.4)	4.0 (2.2–5.7)
Relationship problems	2.2 (0.8–3.7)	4.7 (2.6–6.9)	5.2 (3.6–6.7)	3.0 (1.4–4.6)
In trouble with the law	–	4.3 (2.1–6.4)	3.5 (2.1–4.9)	2.9 (1.2–4.7)
Coughs or chest complaints	–	4.3 (1.3–7.4)	2.2 (1.0–3.5)	2.9 (0.7–5.2)
Problems with parents	2.3 (0.4–4.2)	2.4 (0.9–3.9)	3.1 (1.9–4.3)	–
Financial	–	2.7 (1.0–4.5)	2.0 (0.9–3.1)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were too low for reliable estimation for the self-reported problems of job problems, wasting time, needing counselling or clinical treatment, having blackouts, needing more to get the same effect and having suicidal thoughts.

There were no significant differences between male and female past-year cannabis users, in the self-reported problems because of their cannabis use.

## Help-seeking for cannabis use

Past-year cannabis users were asked whether they had ever received help to reduce their level of cannabis use.

Overall, 6.1% (4.5–7.7) of past-year cannabis users had ever received help to reduce their use of cannabis.

Comparing groups with age-standardised rates, male past-year cannabis users were significantly more likely to have received help (7.7%; 5.2–10.2) compared to female past-year cannabis users (3.4%; 1.4–5.5) (Table 34). Likewise, among past-year cannabis users, Māori were significantly more likely to have received help (12.3%; 9.8–14.7) compared to non-Māori (4.7%; 2.8–6.6).

**Table 34:** Prevalence of having ever received help to reduce level of cannabis use, past-year cannabis users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Ever received help to reduce level of cannabis use	3.4 (1.4–5.5)	7.7 (5.2–10.2)	12.3 (9.8–14.7)	4.7 (2.8–6.6)

Past-year cannabis users who had received help to reduce their level of cannabis use were asked where they had gone to receive help (Table 35). Overall, the most common source of help came from a drug and alcohol counsellor (30.0%; 17.1–43.0). Friends (16.9%; 5.4–28.4) and family (11.9%; 3.0–20.8) were also common sources of help.

**Table 35:** Source of help, past-year cannabis users who had ever received help to reduce their level of cannabis use, percent (crude)

Source of help	Total
Drug and alcohol counsellor	30.0 (17.1–43.0)
Friends	16.9 (5.4–28.4)
Family	11.9 (3.0–20.8)
Detoxification programme	10.7 (1.3–20.2)

Note: Numbers were too low for reliable estimation for the following sources of help: general practitioners or family doctors, psychiatrists or psychologists, mental health services, Narcotics Anonymous, natural therapists or alternative therapy, health centres or medical centres and accident and emergency departments.

## Barriers to receiving help for cannabis use

Past-year cannabis users were asked if they had ever wanted help to reduce their level of cannabis use but had not received it. Overall, 3.5% (2.4–4.6) of past-year cannabis users had wanted help but not received it during their lifetime.

Past-year cannabis users who had ever wanted help but not received it were then asked what barriers, if any, they had come across in trying to get help. The most common reasons for not receiving help were: not knowing where to go, having no time or being too busy and fear of the police (Table 36).

**Table 36:** Barriers to receiving help for cannabis use, past-year cannabis users who had ever wanted help to reduce their level of cannabis use but had not received it, percent (crude)

Barrier	Total
Did not know where to go	31.2 (14.2–48.3)
Had no time or was too busy	27.4 (9.5–45.3)
Fear of the law or police	13.3 (3.9–22.7)

Note: Numbers were too low for reliable estimation for the following barriers to receiving help: fear of losing friends; services too expensive; transport problems; social pressure to keep using; fear of what might happen once contact made with the service; no local services available; services not being ongoing; and services not being appropriate for the respondent's type of drug use.

## Chapter 4: Amphetamine Use

Amphetamines are the second most commonly used recreational drug in New Zealand (excluding alcohol and tobacco). Amphetamines are commonly known as speed in New Zealand, and include methamphetamine, also known as 'P'. They belong to a group of drugs called 'psychostimulants' that stimulate the central nervous system, reducing tiredness and increasing endurance. Amphetamines can be swallowed, smoked, injected, or 'snorted' or 'sniffed' through the nose.

### Lifetime use of amphetamines

Overall, an estimated 6.8% (5.9–7.7) of New Zealanders aged 13–65 years had ever used amphetamines (Table 37).

People aged 18–34 years were significantly more likely than all other age groups to have used amphetamines during their lifetime (Table 37).

**Table 37:** Prevalence of having ever used amphetamines, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)				
		13–17	18–24	25–34	35–44	45–54
Amphetamine use in lifetime	6.8 (5.9–7.7)	2.4 (1.2–3.6)	13.8 (10.7–16.9)	12.0 (9.7–14.4)	7.2 (5.7–8.7)	3.5 (2.3–4.7)

Note: Numbers were too low for reliable estimation for the age group 55–65 years.

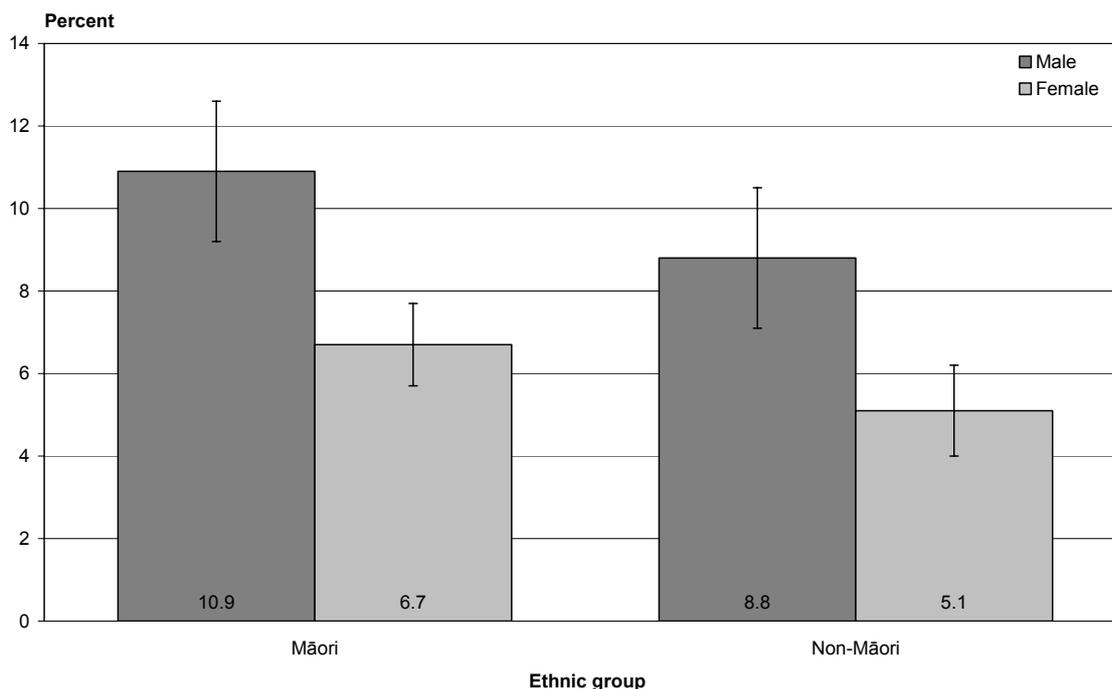
Using age-standardised rates to compare groups, males were significantly more likely to have used amphetamines in their lifetime (9.0%; 7.5–10.6) compared to females (5.3%; 4.4–6.3) (Table 38). Māori were significantly more likely to have ever used amphetamines (8.7%; 7.8–9.6) compared to non-Māori (6.9%; 5.8–8.0).

**Table 38:** Prevalence of having ever used amphetamines, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Amphetamine use in lifetime	5.3 (4.4–6.3)	9.0 (7.5–10.6)	8.7 (7.8–9.6)	6.9 (5.8–8.0)

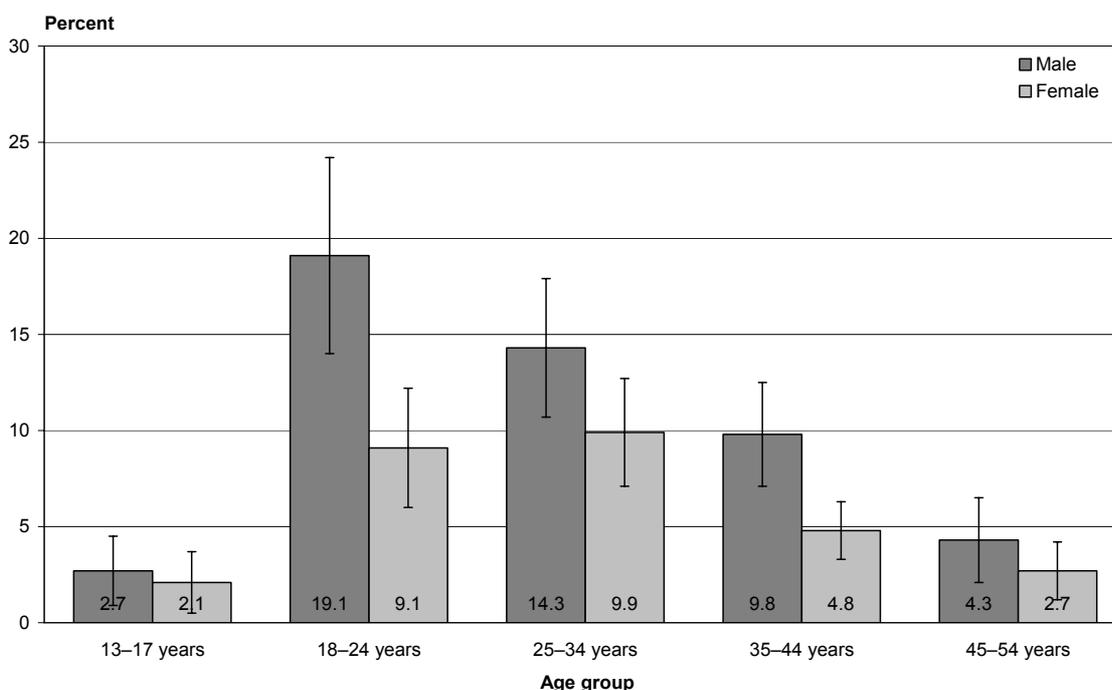
Figure 22 shows that, among both Māori and non-Māori, males were significantly more likely than females to have ever used amphetamines.

**Figure 22:** Prevalence of having ever used amphetamines, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)



Among people aged 18–24 and 35–44, males were significantly more likely to have ever tried amphetamines compared to females (Figure 23). Almost one in five males aged 18–24 years (19.1%; 14.0–24.1) had used amphetamines during their lifetime.

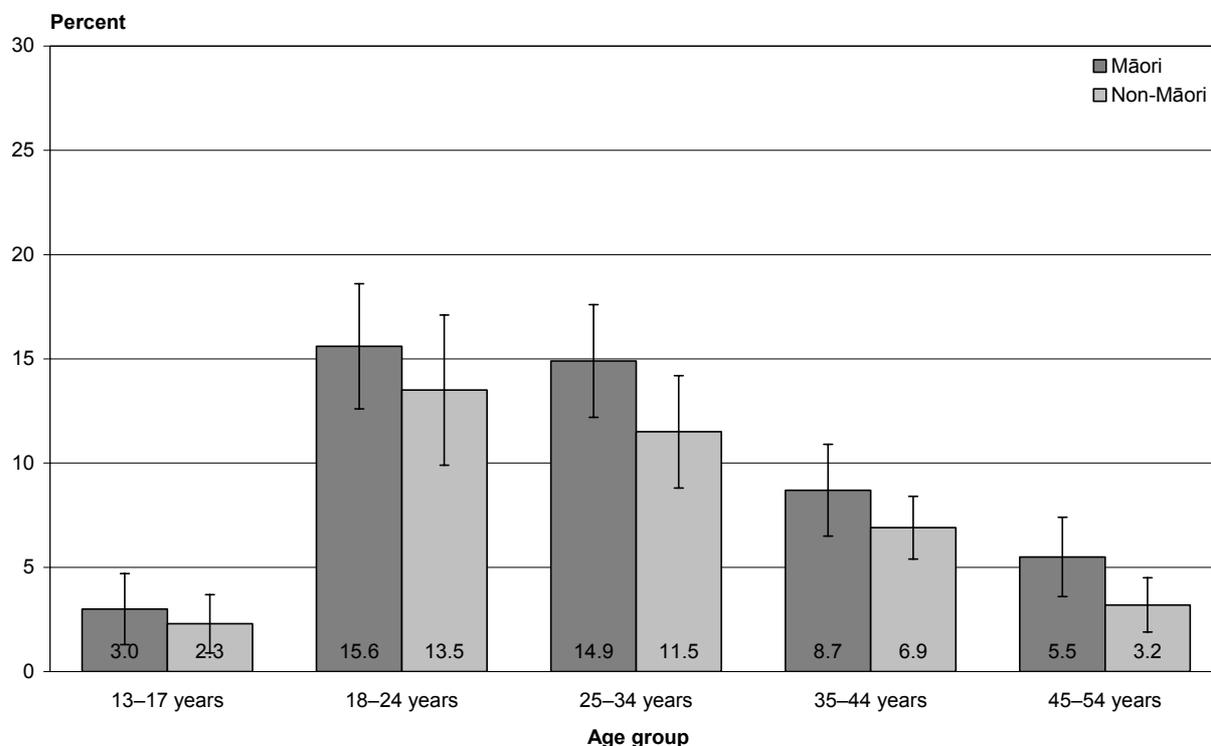
**Figure 23:** Prevalence of having ever used amphetamines, total population aged 13–65 years, by age group and sex, percent (crude)



Note: Numbers were too low for reliable estimation for the age group 55–65 years.

There were no significant differences between Māori and non-Māori in any age group in the prevalence of having ever tried amphetamines (Figure 24).

**Figure 24:** Prevalence of having ever used amphetamines, total population aged 13–65 years, by age and ethnic group, percent (crude)



Note: Numbers were too low for reliable estimation for the age group 55–65 years.

## Age of first use of amphetamines

People who had ever used amphetamines ('lifetime amphetamine users') were asked at what age they first used the drug.

This section presents results for the ages at which people first used amphetamines. These ages of first use are categorised into the following: younger than 15 years, 15–17 years, 18–20 years and 21 years or older.

It should be noted that, in this analysis, the proportions of lifetime amphetamine users who started using amphetamines at these ages are affected by the age of the respondents when they answered the questionnaire.

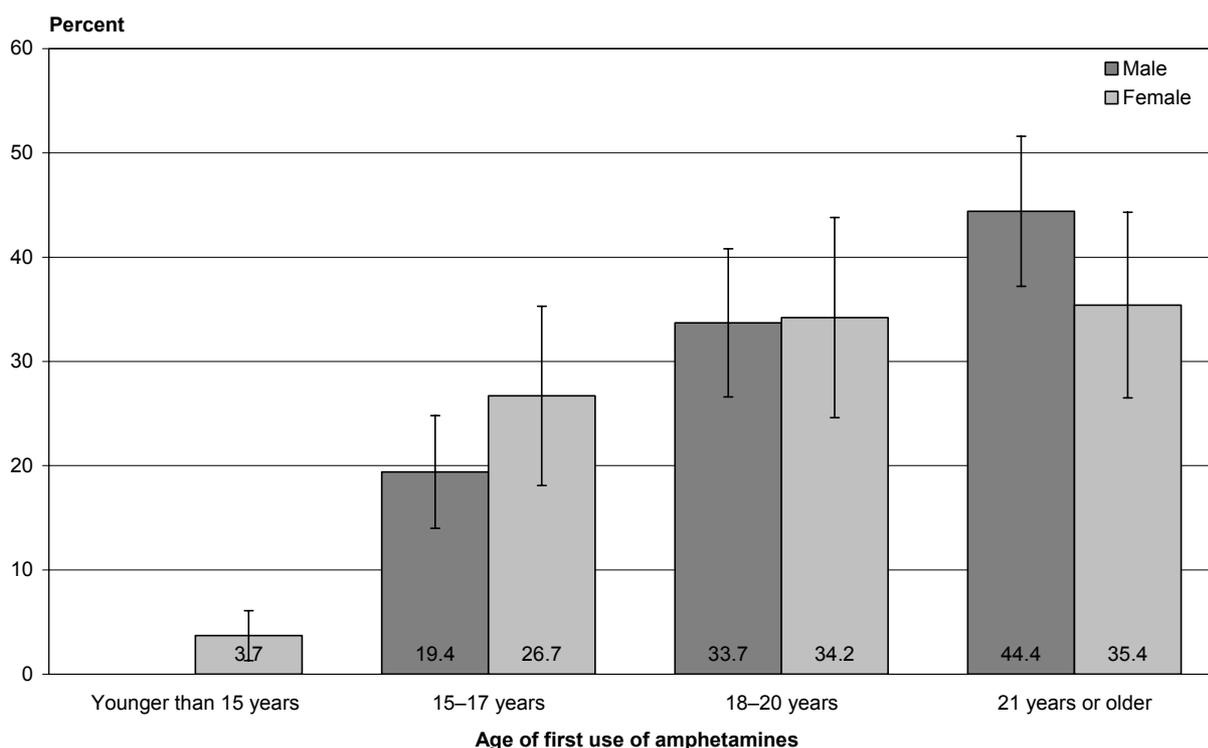
Approximately one in three people who had ever used amphetamines (33.2%; 28.3–38.1) had started using amphetamines when they were aged from 18 to 20 years (Table 39). An estimated two in five people (42.6%; 37.0–48.2) who had used amphetamines during their lifetime had first used the drug when they were 21 years or older.

**Table 39:** Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, percent (crude)

Age of first use of amphetamines	Total
Younger than 15 years	3.0 (1.2–4.8)
15–17 years	21.2 (17.5–24.9)
18–20 years	33.2 (28.3–38.1)
21 years or older	42.6 (37.0–48.2)

Using age-standardised rates to compare groups, there were no significant differences between males and females for the age of first use of amphetamines (Figure 25).

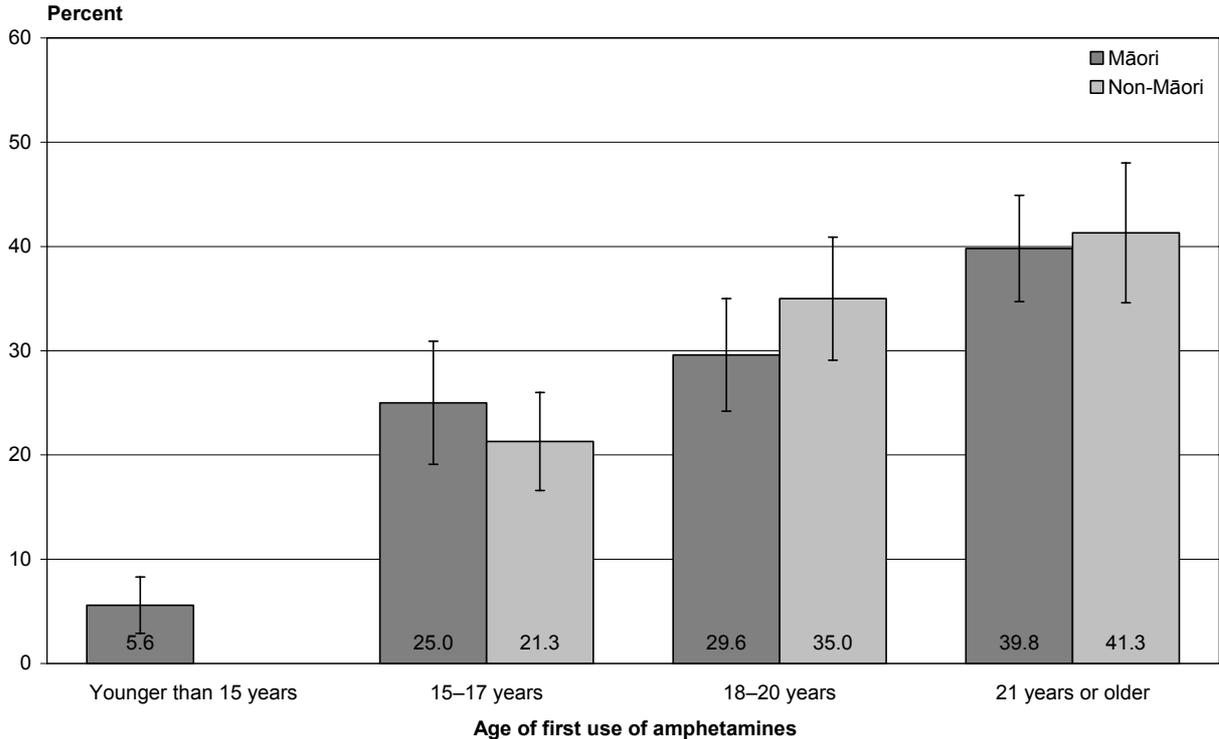
**Figure 25:** Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for males who first started using amphetamines when younger than 15 years.

Comparing ethnic groups with age-standardised rates, there were no significant differences between Māori and non-Māori for the age of first use of amphetamines (Figure 26).

**Figure 26:** Age of first use of amphetamines, people aged 13–65 years who have ever used amphetamines, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for non-Māori who first started using amphetamines when younger than 15 years.

**Amphetamine use in the last 12 months**

Overall, an estimated 2.5% (2.0–2.9) of New Zealanders aged 13–65 years had used amphetamines in the last 12 months (Table 40). This report refers to these people who had used amphetamines in the last 12 months as ‘past-year amphetamine users’.

Approximately 1 in 12 people aged 18–24 years (8.7%; 6.4–11.0) had used amphetamines in the last 12 months, which was significantly more than all other age groups (Table 40).

**Table 40:** Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)			
		13–17	18–24	25–34	35–44
Amphetamine use in last 12 months	2.5 (2.0–2.9)	1.8 (0.7–2.9)	8.7 (6.4–11.0)	4.4 (2.9–6.0)	1.2 (0.6–1.7)

Note: Numbers were too low for reliable estimation for the age groups 45–54 years and 55–65 years.

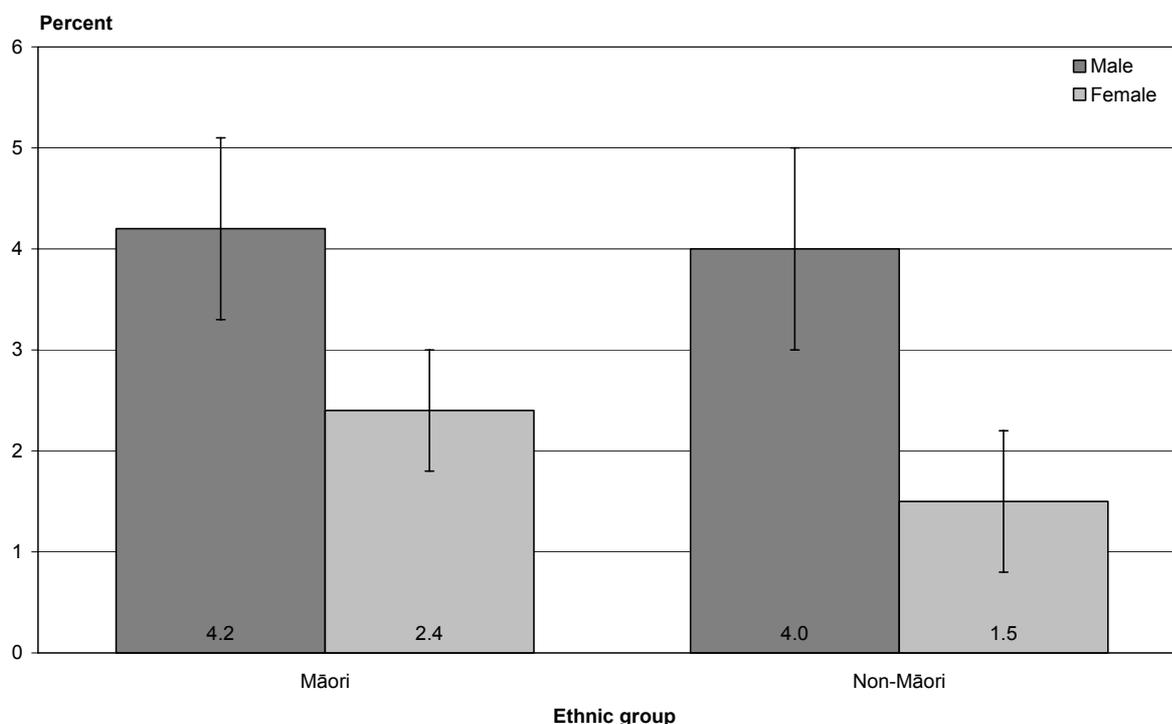
Comparing groups with age-standardised rates, males were significantly more likely to have used amphetamines in the last 12 months (4.0%; 3.1–4.9) compared to females (1.7%; 1.1–2.3) (Table 41). There was no significant difference between Māori and non-Māori in the use of amphetamines in the last 12 months.

**Table 41:** Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Amphetamine use in last 12 months	1.7 (1.1–2.3)	4.0 (3.1–4.9)	3.3 (2.7–3.8)	2.7 (2.1–3.4)

Figure 27 shows that, among both Māori and non-Māori, males were significantly more likely to have used amphetamines in the last 12 months than females.

**Figure 27:** Prevalence of amphetamine use in last 12 months, total population aged 13–65 years, by sex by ethnic group, percent (age-standardised)



## Frequency of amphetamine use

Among past-year amphetamine users, over half (56.3%; 47.6–65.0) had used amphetamines only one or two times in the last 12 months (Table 42).

An estimated 6.3% (2.2–10.4) of past-year amphetamine users had used amphetamines 20 or more times in the last 12 months, which represents approximately two or more times a month. A further 7.4% (2.2–12.6) of past-year amphetamine users had used amphetamines between 10 and 19 times in the last 12 months.

**Table 42:** Frequency of amphetamine use in the last 12 months, past-year amphetamine users, percent (crude)

Number of times used amphetamines in the last 12 months	Total
20 or more times	6.3 (2.2–10.4)
10–19 times	7.4 (2.2–12.6)
6–9 times	7.6 (2.9–12.4)
3–5 times	22.4 (15.2–29.5)
1–2 times	56.3 (47.6–65.0)

### Binge use of amphetamines

Binge use of amphetamines was defined as using amphetamines continuously for 24 hours or more.

Overall, an estimated 28.4% (19.5–37.2) of past-year amphetamine users had binged on amphetamines at least once in the last 12 months.

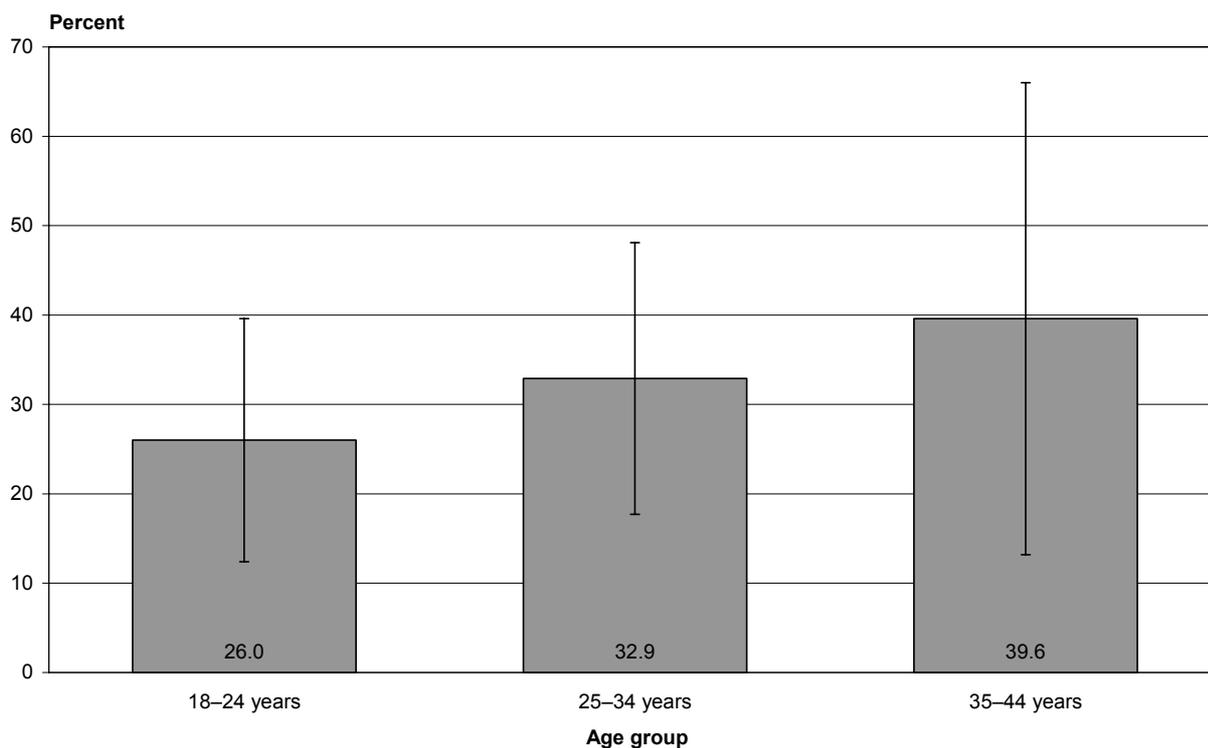
Comparing groups of past-year amphetamine users with age-standardised rates, there were no significant differences between males and females, or between Māori and non-Māori, in the binge use of amphetamines (Table 43).

**Table 43:** Binge use of amphetamines in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Binge use of amphetamines at least once in the last 12 months	22.2 (7.1–37.2)	29.7 (18.1–41.3)	35.7 (26.0–45.5)	26.2 (15.1–37.3)

There were no significant differences between age groups in the binge use of amphetamines (Figure 28).

**Figure 28:** Binge use of amphetamines in the last 12 months, past-year amphetamine users, by age group, percent (crude)



Note: Numbers were too low for reliable estimation for the age groups 13–17 years, 45–54 years and 55–65 years.

### Typical way of taking amphetamine

Past-year amphetamine users were asked how they mostly took amphetamines.

Among past-year amphetamine users, the most common ways of taking amphetamines were snorting powder (34.2%; 25.2–43.3) and swallowing the drug in a pill form (30.7%; 21.5–39.8) (Table 44).

**Table 44:** Typical way of taking amphetamines, past-year amphetamine users, percent (crude)

Typical way of taking amphetamines	Total
Snort it in powder form	34.2 (25.2–43.3)
Swallow it in pill form	30.7 (21.5–39.8)
Smoke it	26.1 (18.6–33.6)
Swallow it in powder form	6.9 (1.4–12.4)

Note: Numbers were too low for reliable estimation for the result for injecting amphetamines.

Using age-standardised rates to compare groups of past-year amphetamine users, Māori were significantly more likely to smoke amphetamines (39.3%; 30.0–48.6) than non-Māori (24.5%; 14.7–34.2) (Table 45).

**Table 45:** Typical way of taking amphetamines, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)

Typical way of taking amphetamines	Female	Male	Māori	Non-Māori
Snort it in powder form	29.6 (10.2–49.1)	36.0 (24.7–47.3)	34.7 (25.4–43.9)	33.5 (22.4–44.5)
Swallow it in pill form	28.1 (9.9–46.3)	32.4 (20.5–44.4)	21.2 (13.7–28.7)	33.0 (21.8–44.2)
Smoke it	28.1 (9.3–46.9)	25.7 (16.6–34.9)	39.3 (30.0–48.6)	24.5 (14.7–34.2)

Note: Numbers were too low for reliable estimation for the result for injecting amphetamines and swallowing amphetamines in powder form.

## Location of amphetamine use

Past-year amphetamine users were asked how much of their amphetamine use took place in private homes, public places and at work. Public places referred to locations such as music concerts, pubs, bars, dance clubs, on the street, and at the beach or park. Respondents selected their answer from the following options: none, hardly any, some, most, or all of their amphetamine use. This section reports on any use of amphetamines in these specific locations, which includes hardly any, some, most and all of amphetamine use at each location.

Overall, 73.5% (65.2–81.9) of past-year amphetamine users used amphetamines in private homes (Table 46). Almost two in three past-year amphetamine users (59.9%; 49.6–70.3) used amphetamines in public places. A small proportion of past-year amphetamine users (6.7%; 2.0–11.3) used amphetamines in workplaces.

Past-year amphetamine users aged 35–44 years were significantly more likely to use amphetamines in private homes (89.9%; 72.4–100.0) than in public places (50.3%; 22.5–78.0) (Table 46).

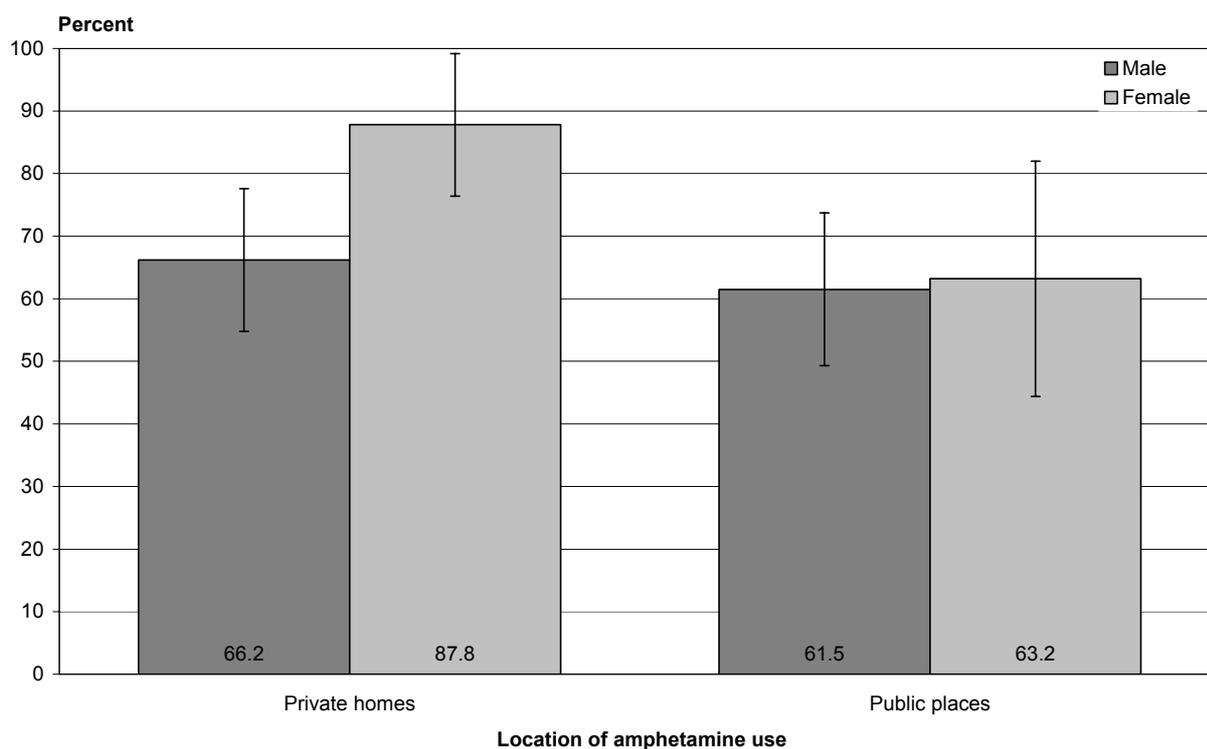
**Table 46:** Location of amphetamine use, past-year amphetamine users, by age group, percent (crude)

Location	Total	Age group (years)			
		13–17	18–24	25–34	35–44
Private homes	73.5 (65.2–81.9)	86.2 (60.3–100.0)	66.9 (52.8–81.0)	75.6 (58.9–92.3)	89.9 (72.4–100.0)
Public places	59.9 (49.6–70.3)	–	72.4 (59.5–85.4)	52.7 (33.5–71.9)	50.3 (22.5–78.0)
Workplaces	6.7 (2.0–11.3)	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were too low for reliable estimation for the age groups 45–54 years and 55–65 years. The results presented refer to any amphetamine use, which includes hardly any, some, most and all amphetamine use.

Using age-standardised rates to compare past-year amphetamine users, females were significantly more likely to use amphetamines in private homes (87.8%; 76.4–99.2) compared to males (66.2%; 54.8–77.6) (Figure 29).

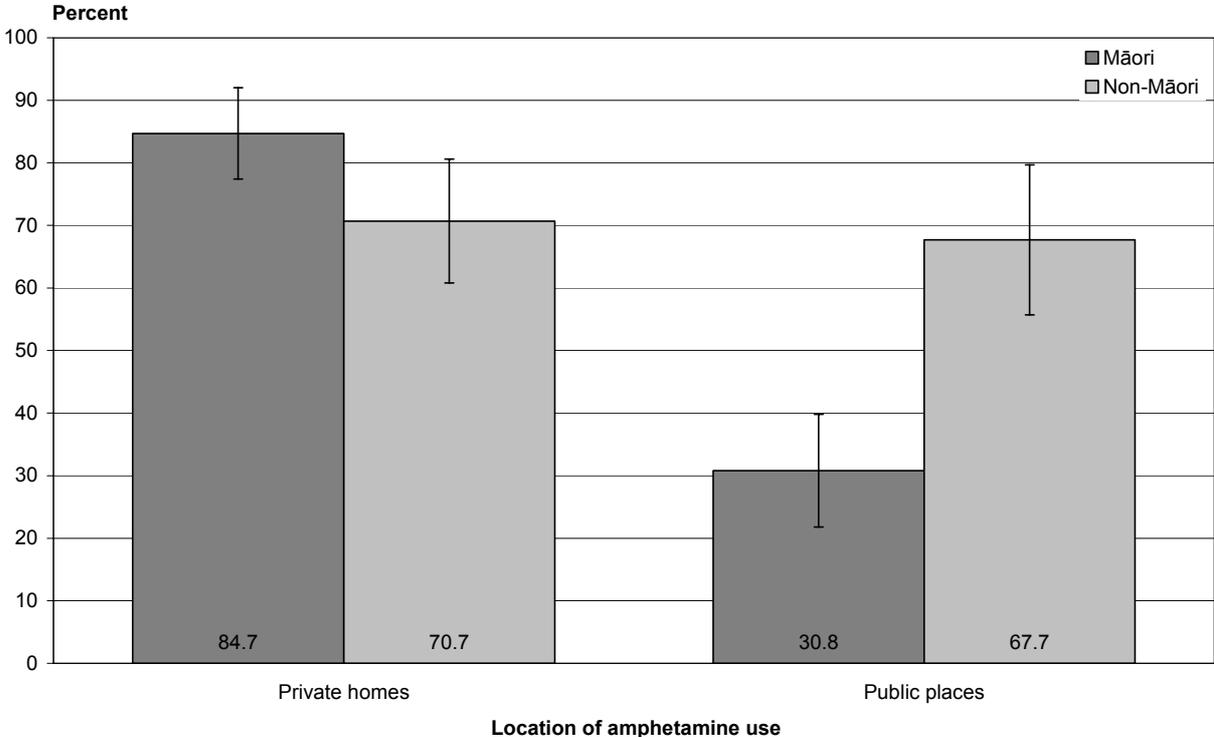
**Figure 29:** Location of amphetamine use, past-year amphetamine users, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for using amphetamines at work. The results presented refer to any amphetamine use, which includes hardly any, some, most and all amphetamine use.

Among past-year amphetamine users, non-Māori were significantly more likely to use amphetamines in public places (67.7%; 55.7–79.7) than Māori (30.8%; 21.9–39.8) (Figure 30).

**Figure 30:** Location of amphetamine use, past-year amphetamine users, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for using amphetamines at work. The results presented refer to any amphetamine use, which includes hardly any, some, most and all amphetamine use.

### Amphetamine use and driving

Past-year amphetamine users were asked how much of their driving they did while feeling under the influence of amphetamines. Respondents selected their answer from the following options: none, hardly any, some, most, or all of their driving. The following results are for past-year amphetamine users who reported doing any driving while feeling under the influence of amphetamines, which included hardly any, some, most, or all of their driving.

Overall, an estimated 27.1% (18.7–35.5) of past-year amphetamine users reported driving while feeling under the influence of amphetamines.

Using age-standardised rates to compare groups of past-year amphetamine users, there were no significant differences between males and females, or between Māori and non-Māori, with regard to driving while feeling under the influence of amphetamines (Table 47).

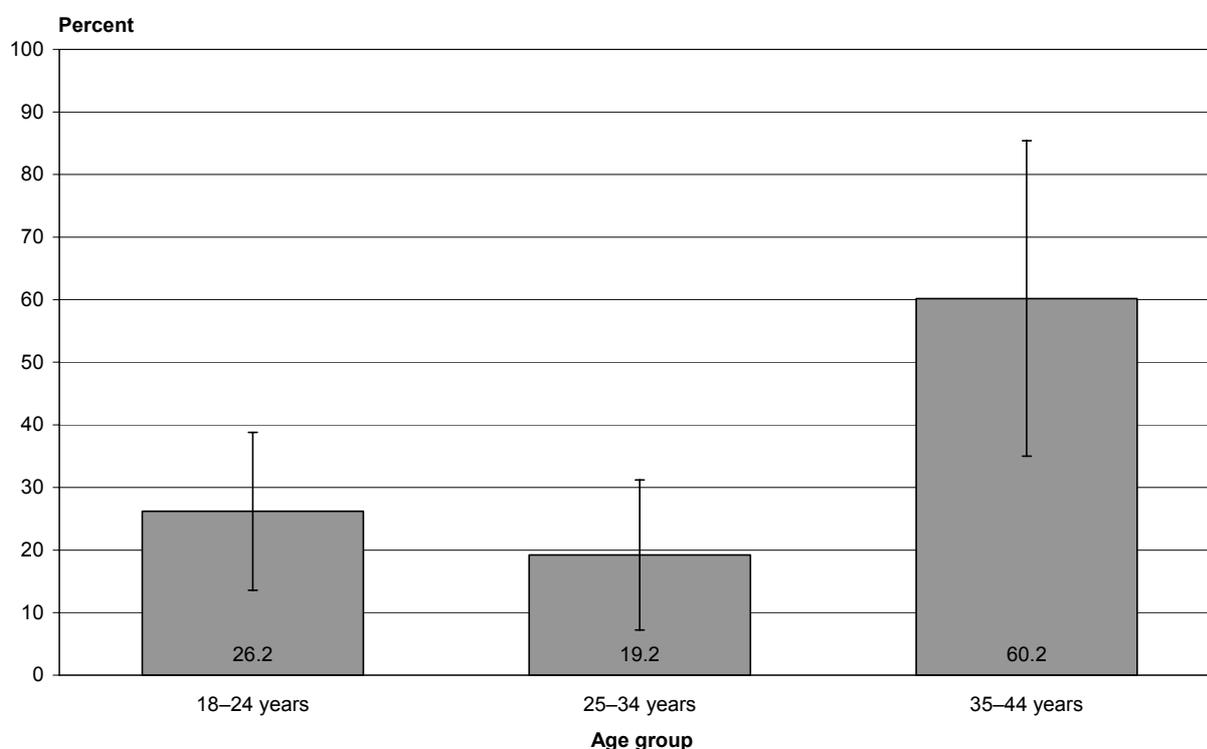
**Table 47:** Prevalence of driving while feeling under the influence of amphetamines, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Driving while feeling under the influence of amphetamine	16.8 (2.6–31.0)	30.2 (19.0–41.5)	37.5 (27.1–47.8)	24.7 (14.7–34.7)

Note: The results presented refer to any driving done while feeling under the influence of amphetamines, which includes hardly any, some, most and all driving.

Over half of past-year amphetamine users aged 35–44 years (60.2%; 35.0–85.4) reported driving while feeling under the influence of amphetamines – a significantly higher proportion than other age groups (Figure 31).

**Figure 31:** Prevalence of driving while feeling under the influence of amphetamines, past-year amphetamine users, by age group, percent (crude)



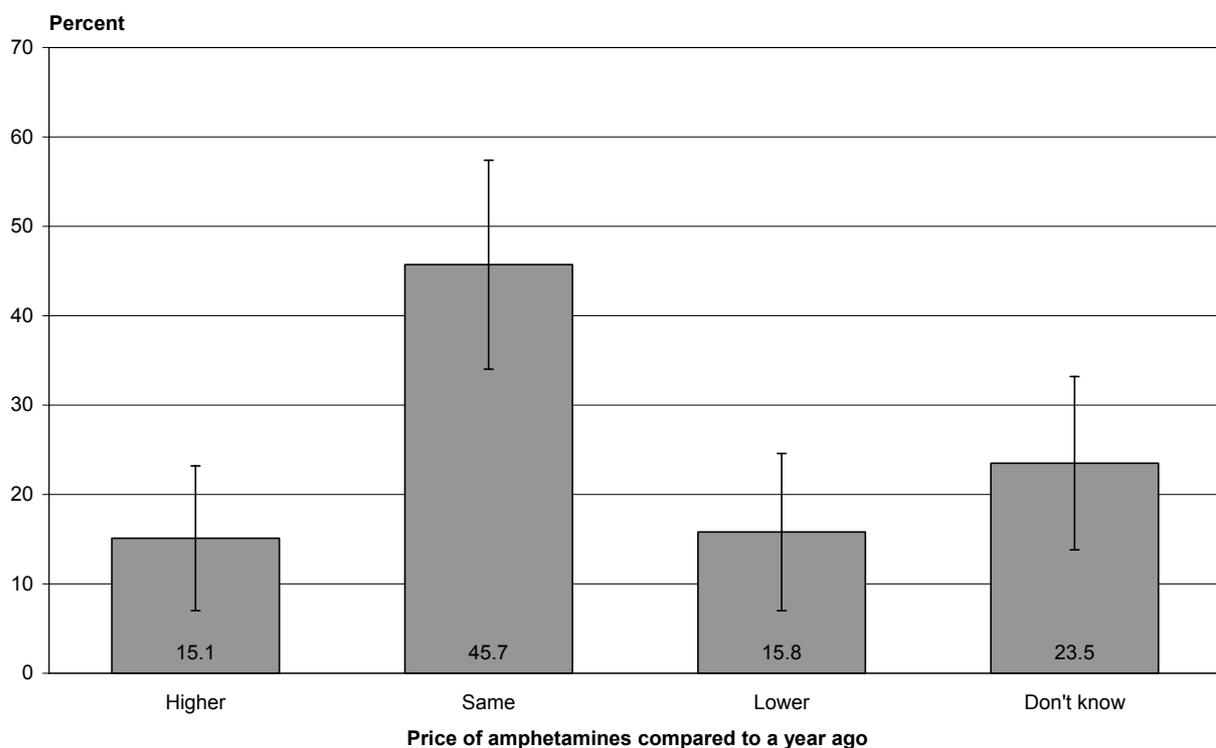
Note: Numbers were too low for reliable estimation for the age groups 13–17 years, 45–54 years and 55–65 years. The results presented refer to any driving done while feeling under the influence of amphetamines, which includes hardly any, some, most and all driving.

## Perceived price of amphetamines compared to a year ago

Past-year amphetamine users who had bought amphetamines in the last year were asked if the price they would expect to pay for amphetamines was higher, lower, or the same compared to a year ago.

Approximately half of past-year amphetamine users (45.7%; 34.0–57.3) thought that the price was the same as it had been the previous year (Figure 32). Similar proportions thought that the price was higher (15.1%; 7.0–23.2) and lower (15.8%; 6.9–24.6) than the previous year.

**Figure 32:** Perceived price of amphetamines compared to a year ago, past-year amphetamine users who had bought amphetamines in the last 12 months, percent (crude)

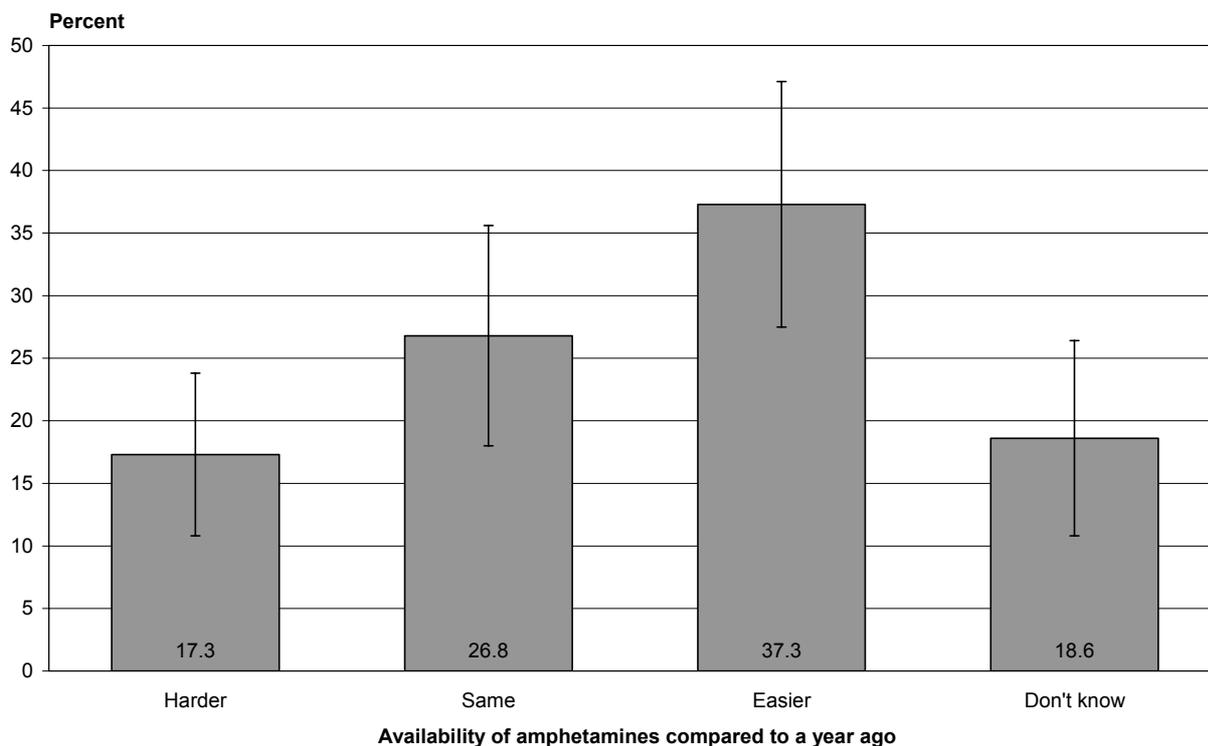


## Perceived availability of amphetamines compared to a year ago

Past-year amphetamine users who had bought amphetamines in the last year were asked if getting amphetamines was easier, harder, or the same compared to a year ago.

Overall, more than one in three past-year amphetamine users (37.3%; 27.4–47.1) thought it was easier to get amphetamines compared to a year ago (Figure 33). An estimated 17.3% (10.8–23.9) of past-year amphetamine users thought it was harder to get amphetamines, and 26.8% (18.1–35.6) thought there was no difference in how difficult it was to get amphetamines compared to a year ago.

**Figure 33:** Perceived availability of amphetamines compared to a year ago, past-year amphetamine users who had bought amphetamines in the last 12 months, percent (crude)



## Harms from amphetamine use on area of life

Past-year amphetamine users were asked whether their use of amphetamines had resulted in any harmful effects on areas of their life in the last 12 months (Table 48).

The three most common harmful effects experienced by past-year amphetamine users because of their amphetamine use were to energy and vitality, financial position and health. An estimated one in seven (15.8%; 9.2–22.4) past-year amphetamine users reported harmful effects on their energy and vitality because of their amphetamine use in the last year.

**Table 48:** Self-reported harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, percent (crude)

Area of harmful effect	Total
Energy and vitality	15.8 (9.2–22.4)
Financial position	13.7 (7.8–19.7)
Health	11.5 (5.9–17.2)
Outlook on life	9.9 (4.0–15.8)
Friendships and social life	9.2 (3.3–15.0)
Home life	6.9 (2.0–11.8)

Note: Numbers were too low for reliable estimation for the self-reported harmful effects of work and work opportunities, and children’s health and wellbeing.

Comparing groups of past-year amphetamine users with age-standardised rates, there were no significant differences between males and females, or between Māori and non-Māori for self-reported harmful effects from amphetamine use (Table 49).

**Table 49:** Self-reported harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (age-standardised)

Area of harmful effect	Female	Male	Māori	Non-Māori
Energy and vitality	9.9 (2.9–16.9)	17.7 (8.6–26.9)	24.1 (15.6–32.6)	13.3 (5.5–21.1)
Financial position	11.3 (1.6–21.0)	14.6 (6.7–22.5)	20.7 (12.8–28.6)	11.8 (4.7–18.9)
Health	–	12.4 (4.8–20.1)	15.8 (8.6–22.9)	–
Outlook on life	5.8 (1.1–10.5)	11.1 (2.6–19.6)	19.4 (11.8–26.9)	–
Friendships and social life	–	10.6 (2.5–18.8)	13.6 (6.7–20.6)	–
Home life	–	6.5 (1.1–11.8)	11.9 (5.1–18.7)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were too low for reliable estimation for the self-reported harmful effects of work and work opportunities, and children’s health or wellbeing.

## **Help-seeking for amphetamine use**

Past-year amphetamine users were asked whether they had ever received help to reduce their level of amphetamine use.

Overall, an estimated 5.3% (1.5–9.1) of past-year amphetamine users had ever received help to reduce their use of amphetamines. Further analysis surrounding help-seeking for amphetamine use was unable to be done because numbers were too low for reliable estimation.

## Chapter 5: Ecstasy Use

Ecstasy was the third most commonly used recreational drug in New Zealand (excluding alcohol and tobacco) in the last 12 months. Ecstasy is the street term for a wide range of drugs that are similar in structure to methylenedioxymethamphetamine (MDMA), and are also similar in structure and effect to both amphetamines and hallucinogens. Ecstasy comes in the form of tablets that can be swallowed whole or crushed and snorted.

### Lifetime use of ecstasy

Overall, 3.7% (3.1–4.3) of New Zealanders aged 13–65 years had used ecstasy in their lifetime (Table 50).

Over 1 in 10 people aged 18–24 years (11.3%; 8.7–13.9) had ever used ecstasy, which was significantly higher than any other age group (Table 50).

**Table 50:** Prevalence of having ever used ecstasy, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)			
		13–17	18–24	25–34	35–44
Ecstasy use in lifetime	3.7 (3.1–4.3)	1.5 (0.6–2.4)	11.3 (8.7–13.9)	6.7 (5.0–8.5)	2.7 (1.9–3.6)

Note: Numbers were too low for reliable estimation for the results for age groups 45–54 years and 55–65 years.

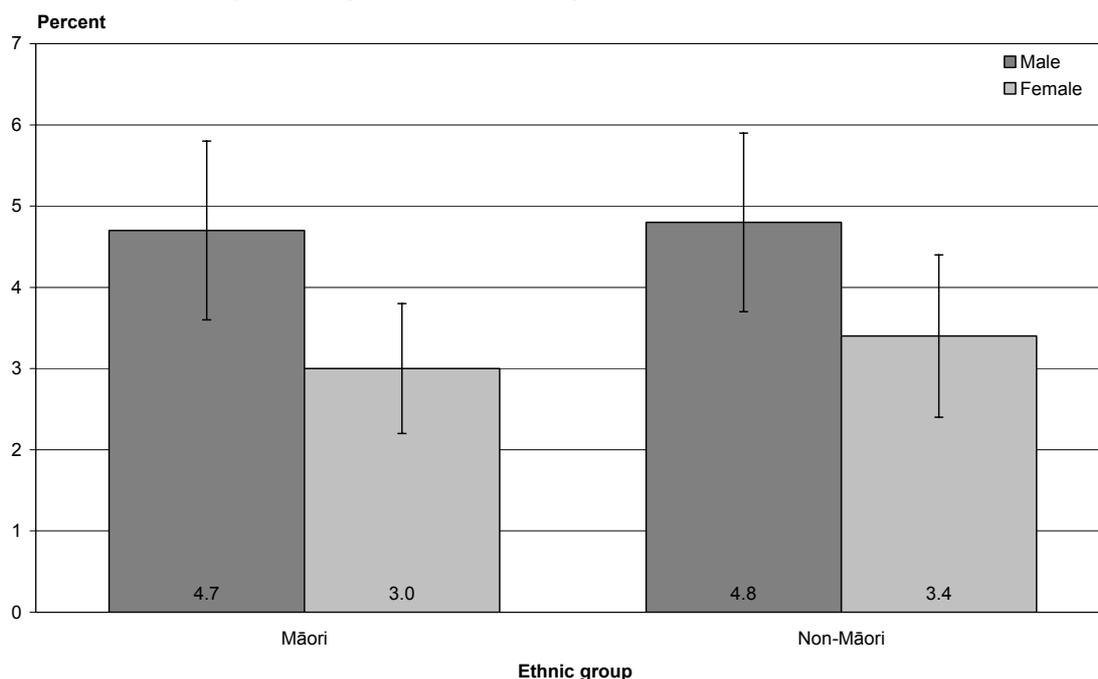
Using age-standardised rates to compare groups, males were significantly more likely to have ever used ecstasy (4.8%; 3.8–5.8) compared to females (3.4%; 2.5–4.3) (Table 51). There was no significant difference between Māori (3.8%; 3.1–4.5) and non-Māori (4.1%; 3.3–4.9) in ever having used ecstasy.

**Table 51:** Prevalence of having ever used ecstasy, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Ecstasy use in lifetime	3.4 (2.5–4.3)	4.8 (3.8–5.8)	3.8 (3.1–4.5)	4.1 (3.3–4.9)

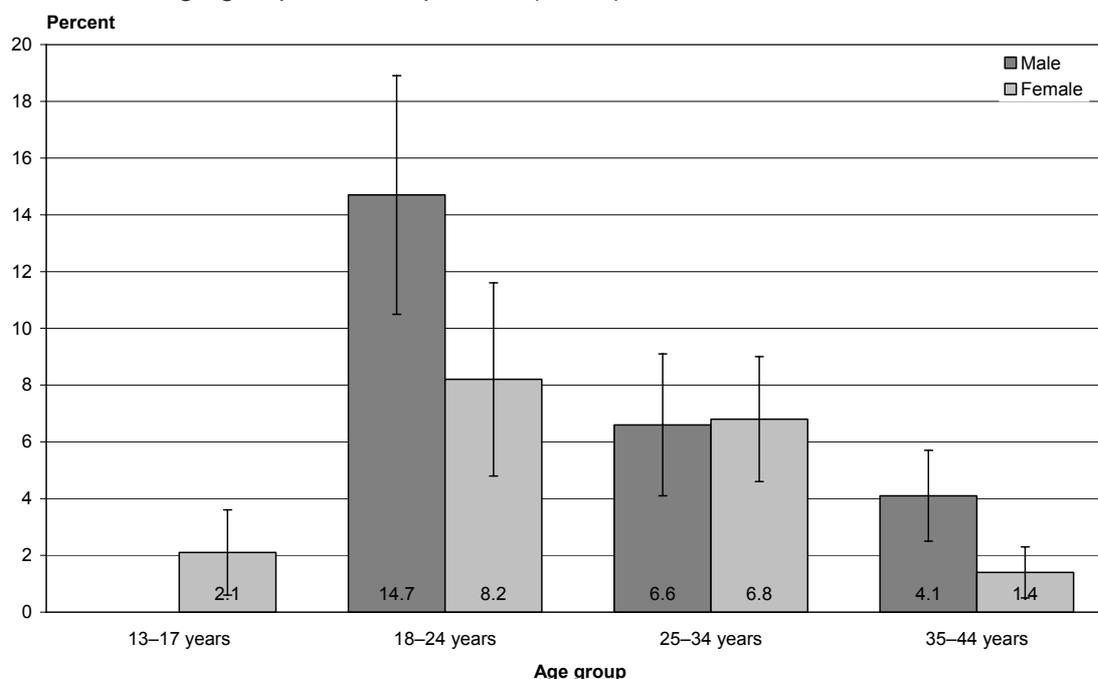
Figure 34 shows that, among Māori, males were significantly more likely to have ever used ecstasy (4.7%; 3.7–5.8) compared to females (3.0%; 2.1–3.8). There were no significant differences between male Māori and male non-Māori, or between female Māori and female non-Māori in having ever used ecstasy.

**Figure 34:** Prevalence of having ever used ecstasy, total population aged 13–65 years, by sex by ethnic group, percent (age-standardised)



Among the age groups 18–24 years and 35–44 years, males were significantly more likely to have ever used ecstasy than females (Figure 35). Males aged 18–24 years were significantly more likely than all other people to have ever used ecstasy (14.7%; 10.5–18.9).

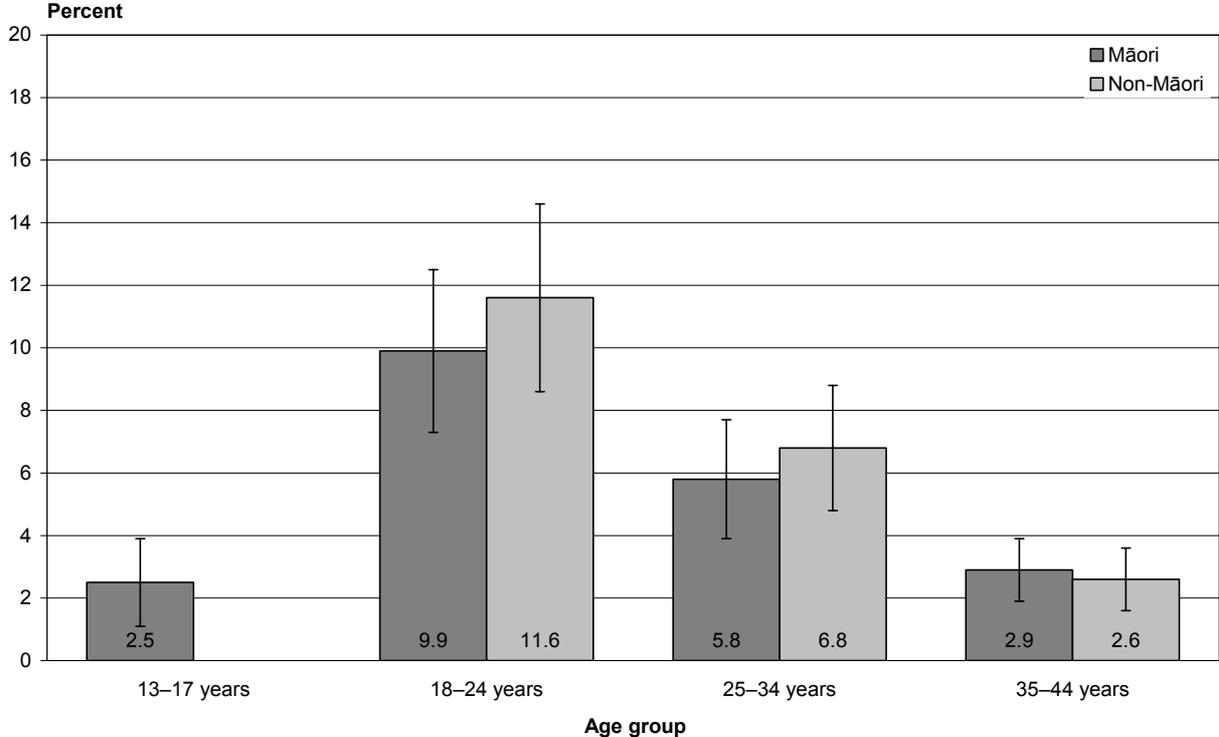
**Figure 35:** Prevalence of having ever used ecstasy, total population aged 13–65 years, by age group and sex, percent (crude)



Note: Numbers were too low for reliable estimation for the results for males aged 13–17 years, and for people aged 45–54 years and 55–65 years.

Among all age groups, there were no significant differences between Māori and non-Māori in ever having used ecstasy (Figure 36).

**Figure 36:** Prevalence of having ever used ecstasy, total population aged 13–65 years, by age and ethnic group, percent (crude)



Note: Numbers were too low for reliable estimation for the results for non-Māori aged 13–17 years, and for people aged 45–54 years and 55–65 years.

### Age of first use of ecstasy

People who had ever used ecstasy (‘lifetime ecstasy users’) were asked at what age they first used the drug.

This section presents results for the ages at which people first used ecstasy. These ages of first use are categorised into the following: aged younger than 18 years, 18–20 years and 21 years or older.

It should be noted that the proportions of lifetime ecstasy users who started using the drug at these ages are affected by the age of the respondents when they answered the questionnaire.

Overall, more than half of people who had ever used ecstasy (56.6%; 49.7–63.6) had first used the drug when aged 21 years or older (Table 52).

**Table 52:** Age of first use of ecstasy, among people aged 13–65 years who have ever used ecstasy, percent (crude)

Age of first use of ecstasy	Total
Younger than 18 years	13.9 (9.0–18.9)
18–20 years	29.5 (23.2–35.7)
21 years or older	56.6 (49.7–63.6)

### Ecstasy use in the last 12 months

Overall, 1.9% (1.4–2.3) of New Zealanders aged 13–65 years had used ecstasy in the last 12 months (Table 53). This report refers to those people who had used ecstasy in the last 12 months as ‘past-year ecstasy users’.

People aged 18–24 years were significantly more likely than all other age groups to have used ecstasy in the last 12 months, with 1 in 14 people aged 18–24 years (7.2%; 5.1–9.3) having used ecstasy in the last 12 months (Table 53).

**Table 53:** Prevalence of ecstasy use in last 12 months, total population aged 13–65 years, by age group, percent (crude)

	Total	Age group (years)			
		13–17	18–24	25–34	35–44
Ecstasy use in last 12 months	1.9 (1.4–2.3)	1.3 (0.4–2.1)	7.2 (5.1–9.3)	2.6 (1.4–3.9)	1.0 (0.4–1.6)

Note: Numbers were too low for reliable estimation for the results for age groups 45–54 years and 55–65 years.

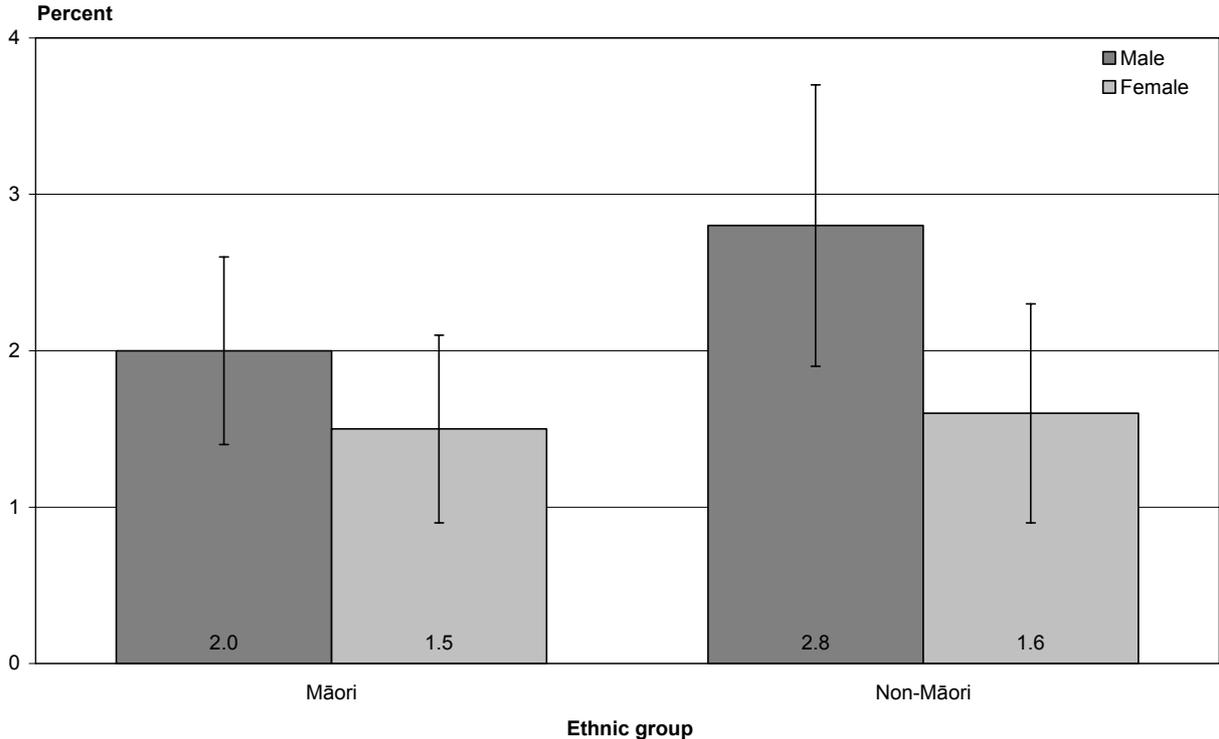
Using age-standardised rates to compare groups, males were significantly more likely to have used ecstasy in the last 12 months (2.7%; 1.9–3.6) compared to females (1.6%; 1.0–2.2) (Table 54). There were no significant differences between Māori and non-Māori in the use of ecstasy in the last 12 months.

**Table 54:** Prevalence of ecstasy use in the last 12 months, by sex and ethnic group, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Ecstasy use in last 12 months	1.6 (1.0–2.2)	2.7 (1.9–3.6)	1.7 (1.2–2.2)	2.2 (1.6–2.8)

Among non-Māori, males were significantly more likely to have used ecstasy in the last 12 months (2.8%; 1.9–3.8) compared to females (1.6%; 0.9–2.3) (Figure 37).

**Figure 37:** Prevalence of ecstasy use in the last 12 months, by sex by ethnic group, percent (age-standardised)



**Frequency of ecstasy use**

Almost two in three past-year ecstasy users (60.8%; 48.7–72.9) had used ecstasy one or two times in the last 12 months.

Among New Zealanders aged 13–65 years who used ecstasy in the last 12 months, an estimated one in eight past-year ecstasy users (12.4%; 6.1–18.8) had used ecstasy 10 or more times in the last 12 months, which is approximately once a month on average (Table 55).

**Table 55:** Frequency of ecstasy use in the last 12 months, past-year ecstasy users, percent (crude)

Frequency of ecstasy use in the last 12 months	Total
10 or more times	12.4 (6.1–18.8)
6–9 times	8.2 (2.1–14.3)
3–5 times	18.5 (10.0–27.1)
1–2 times	60.8 (48.7–72.9)

## Binge use of ecstasy

Binge use of ecstasy was defined as using ecstasy continuously for 24 hours or more over the last 12 months.

Overall, an estimated one in four past-year ecstasy users (24.1%; 13.3–34.9) had binged on ecstasy at least once in the last 12 months.

Among past-year ecstasy users, approximately 23.6% (8.6–38.6) of those aged 18–24 years, and 31.5% (7.5–55.4) of those aged 25–34 years, had binged on ecstasy at least once in the last year. Numbers were too low for reliable estimation in other age groups.

Using age-standardised rates to compare groups of past-year ecstasy users, there were no significant differences in the binge use of ecstasy between males and females, or between Māori and non-Māori (Table 56).

**Table 56:** Binge use of ecstasy in the last 12 months, past-year ecstasy users, percent (age-standardised)

	Female	Male	Māori	Non-Māori
Binge use of ecstasy	21.1 (4.1–38.0)	25.5 (11.4–39.6)	32.5 (20.5–44.6)	22.9 (10.3–35.4)

## Location of ecstasy use

Past-year ecstasy users were asked how much of their ecstasy use took place in private homes, public places and at work. Public places referred to locations such as music concerts, pubs, bars, dance clubs, on the street, and at the beach or park.

Respondents selected their answer from the following options: none, hardly any, some, most, or all of their ecstasy use. This section reports on any use of ecstasy in these specific locations, which includes hardly any, some, most and all of ecstasy use at each location.

Approximately 70.9% (61.0–80.8) of past-year ecstasy users used ecstasy in public places (Table 57). Furthermore, 62.4% (50.9–73.9) of past-year ecstasy users used ecstasy in private homes. Numbers were too low for reliable estimation for ecstasy use at work.

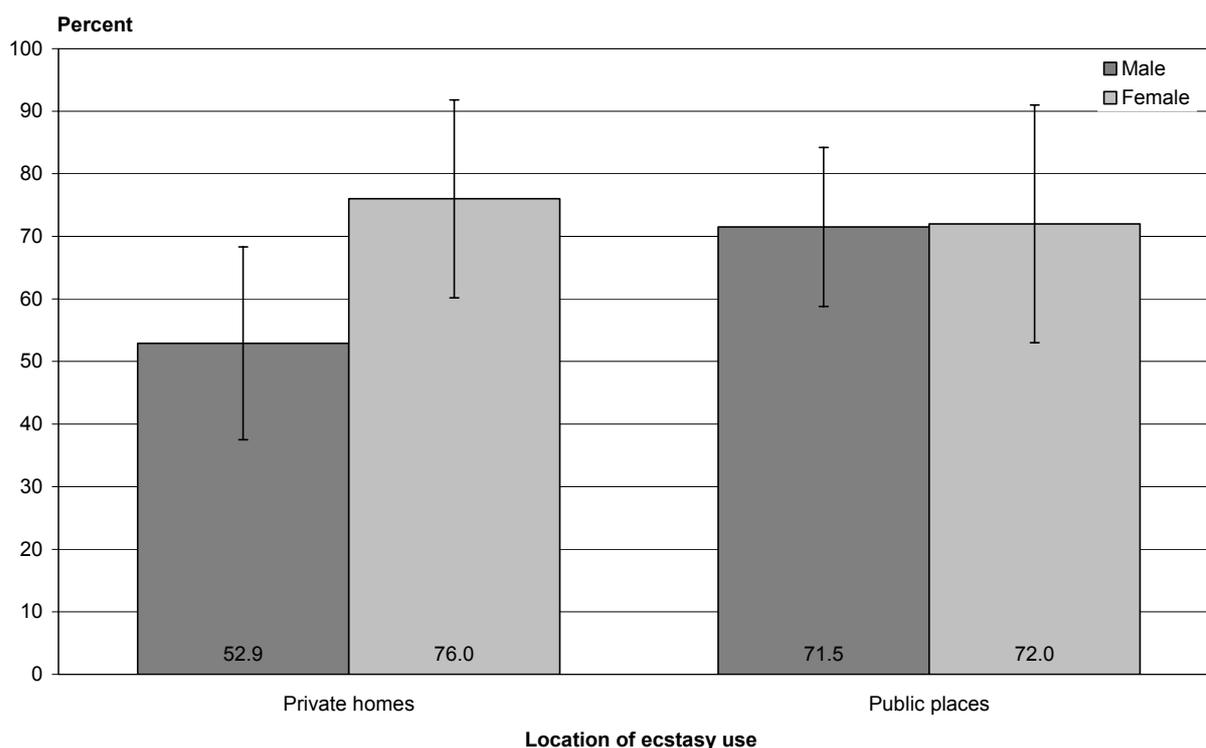
**Table 57:** Location of ecstasy use, past-year ecstasy users, by age group, percent (crude)

Location	Total	Age group (years)		
		18–24	25–34	35–44
Private homes	62.4 (50.9–73.9)	47.3 (29.7–65.0)	76.8 (52.2–100.0)	–
Public places	70.9 (61.0–80.8)	71.0 (55.0–87.0)	86.4 (73.2–99.6)	71.6 (36.9–100.0)

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were too low for reliable estimation for the results for age groups 13–17 years, 45–54 years and 55–65 years for the locations of private homes and public places, and all results for the location of workplaces. The results presented refer to any ecstasy use, which includes hardly any, some, most and all ecstasy use.

Using age-standardised rates to compare past-year ecstasy users, females were significantly more likely to use ecstasy in private homes (76.0%; 60.1–91.8) compared to males (52.9%; 37.6–68.3) (Figure 38).

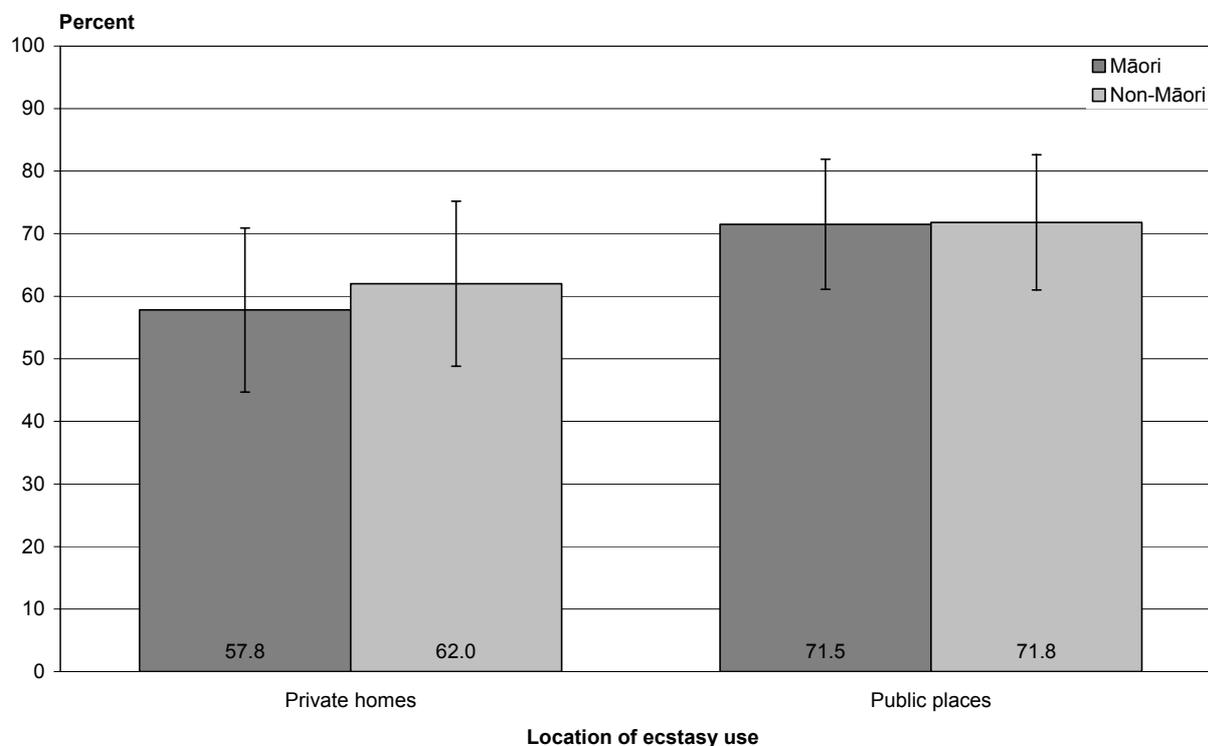
**Figure 38:** Location of ecstasy use, past-year ecstasy users, by sex, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for people using ecstasy in workplaces. The results presented refer to any ecstasy use, which includes hardly any, some, most and all ecstasy use.

There were no significant differences between Māori and non-Māori in the location of ecstasy use (Figure 39).

**Figure 39:** Location of ecstasy use, past-year ecstasy users, by ethnic group, percent (age-standardised)



Note: Numbers were too low for reliable estimation for the results for people using ecstasy in workplaces. The results presented refer to any ecstasy use, which includes hardly any, some, most and all ecstasy use.

### Ecstasy use and driving

Past-year ecstasy users were asked how much of their driving they did while feeling under the influence of ecstasy. Respondents selected their answer from the following options: none, hardly any, some, most, or all of their driving. The following results are for past-year ecstasy users who reported doing any driving while feeling under the influence of ecstasy, which included hardly any, some, most, or all of their driving.

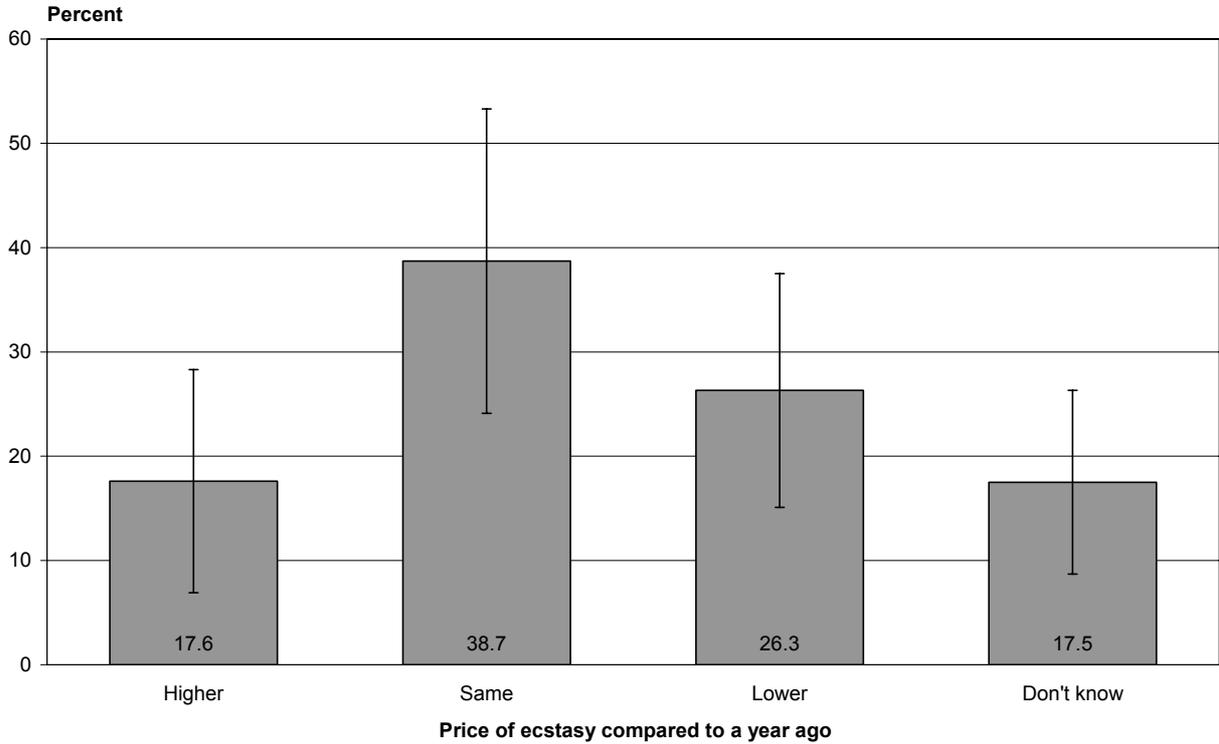
Overall, an estimated 15.8% (8.2–23.4) of past-year ecstasy users reported driving while feeling under the influence of ecstasy.

### Perceived price of ecstasy compared to a year ago

Past-year ecstasy users who had bought ecstasy in the last year were asked if the price they would expect to pay for ecstasy was higher, lower, or the same compared to a year ago.

Overall, 26.3% (15.1–37.4) of past-year ecstasy users thought the price of ecstasy was lower than it had been the previous year, while 38.7% (24.0–53.3) thought it was the same price (Figure 40). A further 17.6% (6.8–28.3) of past-year ecstasy users thought the price of ecstasy was higher compared to a year ago.

**Figure 40:** Perceived price of ecstasy compared to a year ago, past-year ecstasy users who had bought ecstasy in the last 12 months, percent (crude)

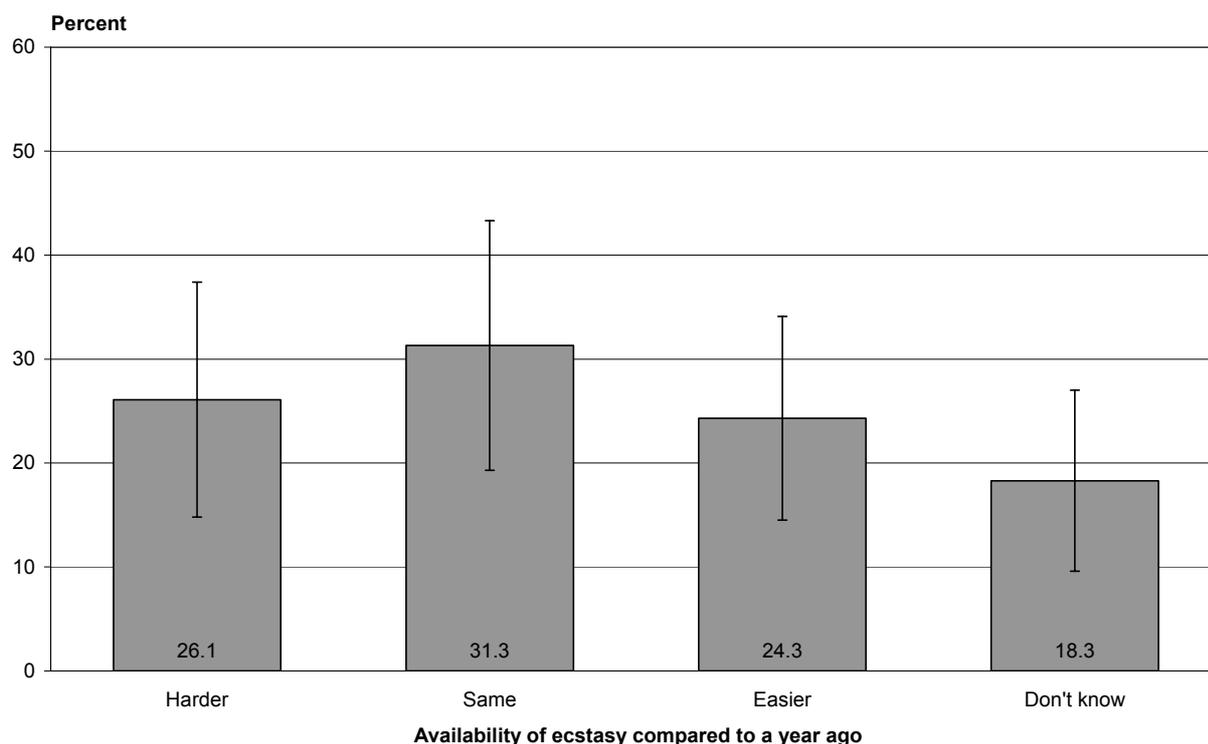


## Perceived availability of ecstasy compared to a year ago

Past-year ecstasy users who had bought ecstasy in the last year were asked if getting ecstasy was easier, harder, or the same compared to a year ago.

Overall, past-year ecstasy users were evenly distributed in their perceptions on the availability of ecstasy, with similar proportions reporting ecstasy as being easier (24.3%; 14.5–34.0), harder (26.1%; 14.8–37.5), or the same (31.3%; 19.3–43.4) to obtain compared to a year ago (Figure 41).

**Figure 41:** Perceived availability of ecstasy compared to a year ago, past-year ecstasy users who had bought ecstasy in the last 12 months, percent (crude)



## Harms from ecstasy use on areas of life

Past-year ecstasy users were asked whether their use of ecstasy had any harmful effects on areas of their life in the last 12 months.

Overall, 15.3% (7.1–23.5) of past-year ecstasy users reported experiencing harmful effects on their financial position because of their ecstasy use (Table 58). Approximately 14.1% (6.3–21.8) of past-year ecstasy users felt that their ecstasy use had had a harmful effect on their energy and vitality. An estimated 1 in 13 past-year ecstasy users (7.6%; 2.6–12.6) had felt a harmful effect on their health because of their ecstasy use in the last 12 months.

**Table 58:** Self-reported harmful effects from ecstasy use in the last 12 months, past-year ecstasy users, percent (crude)

<b>Area of harmful effect</b>	<b>Total</b>
Financial position	15.3 (7.1–23.5)
Energy and vitality	14.1 (6.3–21.8)
Health	7.6 (2.6–12.6)

Note: Numbers were too low for reliable estimation for the harmful effects of friendships and social life, outlook on life, home life, work or work opportunities and children's health or wellbeing.

Results have not been presented on help seeking for ecstasy use, because of low numbers.

# Glossary

<b>Amphetamines</b>	Includes amphetamines, and methamphetamines such as 'P'.
<b>Binge use</b>	For the purposes of this survey, this is defined as using a drug continuously for 24 hours or more. It should be noted that this measure does not take into account the amount of drug used over this time period.
<b>Euphoric agents</b>	Includes the drugs nitrous oxide and GHB.
<b>Frequent use of drugs</b>	Using a drug 10 or more times a month on average over the last 12 months.
<b>GHB</b>	Gamma-hydroxybutyrate; a euphoric agent.
<b>Hallucinogens</b>	Drugs that can cause profound cognitive and perceptual distortions. Includes the drugs LSD, magic mushrooms, ketamine and other hallucinogens.
<b>In the last 12 months</b>	This refers to the 12 months prior to the respondent answering the survey. The survey interviews were carried out between April and November 2003.
<b>Ketamine</b>	A prescription anaesthetic medicine. It can be classified as either a hallucinogen (low dose) or sedative/hypnotic (high dose). For the purposes of this report, it has been defined as low dose (hallucinogen).
<b>LSD</b>	d-lysergic acid diethylamide; a hallucinogenic drug.
<b>Opiates</b>	Substances derived from the opium poppy or synthetic analogues. Includes the drugs morphine, heroin and homebake.
<b>Past-year amphetamine users</b>	People aged 13–65 years who had used amphetamines in the last 12 months.
<b>Past-year cannabis users</b>	People aged 13–65 years who had used cannabis in the last 12 months.
<b>Past-year ecstasy users</b>	People aged 13–65 years who had used ecstasy in the last 12 months.
<b>Recreational drugs</b>	Drugs used for recreational, non-medical purposes.
<b>Sedatives/hypnotics</b>	Includes drugs referred to in the questionnaire as tranquillisers, for example, downers, valium, blues, and serepans. This is likely to include drugs such as benzodiazepines and barbiturates.
<b>Stimulants</b>	Includes the drugs amphetamines, methamphetamine, ecstasy, cocaine, rush, ice and crack.
<b>THC</b>	Delta-9 tetrahydrocannabinol; the active ingredient in cannabis.
<b>Tinny house</b>	A place where cannabis and other drugs are sold in high volumes.

## References

- Ahmad OB, Boschi-Pinto C, Lopez AD, et al. 2000. *Age-standardization of rates: A new WHO standard*. Geneva: World Health Organization.
- Kott P. 1998. *Using the Delete-A-Group Jackknife Variance Estimator in NASS Surveys*. Washington DC: USDA.
- Minister of Health. 2000. *New Zealand Health Strategy*. Wellington: Ministry of Health.
- Ministry of Health. 1996. *Cannabis: The Public Health Issues 1995–1996*. Wellington: Public Health Group, Ministry of Health.
- Ministry of Health. 2007a. *New Zealand Tobacco Use Survey 2006*. Wellington: Ministry of Health.
- Ministry of Health. 2007b. *Alcohol Use in New Zealand: Analysis of the 2004 New Zealand Health Behaviours Survey – Alcohol Use*. Wellington: Ministry of Health.
- Ministerial Committee on Drug Policy. 2007. *National Drug Policy 2007–2012*. Wellington: Ministry of Health.
- SHORE. 2004. *Health Behaviours Survey – Drugs Use 2003: Methodology Report*. Auckland: Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki, Massey University.
- Wilkins C, Casswell S, Bhatta K, Pledger M. 2002. *Drug Use in New Zealand: National Surveys Comparison 1998 and 2001*. Auckland: Alcohol and Public Health Research Unit, University of Auckland.

## Appendix A: Drug Classifications

Table A1 presents the list of drugs that were included in the 2003 Health Behaviours Survey – Drug Use. This table also includes the other names that were listed for each drug in the survey, and information on the possible modes of administration for each drug.

Drugs have been classified according to the following drug types:

- cannabis
- stimulants
- hallucinogens
- sedatives/hypnotics
- opiates
- euphoric agents
- others.

**Table A1:** Drug classifications, other names provided for drugs in the survey questionnaire, and mode of administration

Drug type	Drug	Other names for drug provided in the survey questionnaire	Mode of administration
Cannabis	Cannabis	Marijuana	Ingested, inhaled
Stimulants	Amphetamines	Uppers, speed, methamphetamine, P, pure	Injected, ingested, inhaled
	Ecstasy	'E', MDMA	
	Cocaine	Coke, snow, blow	
	Rush	Amyl nitrate, butyl nitrate	
	Ice	Crystal meth	
	Viagra for recreational purposes		
	Crack	Freebase	Injected, inhaled
Hallucinogens	LSD	Acid, tabs	Ingested
	Mushrooms	Magic mushrooms, gold tops	Ingested
	Other hallucinogens	Psychedelics, PCP, datura	Ingested, inhaled
	Ketamine*	Special K	Ingested, inhaled
Sedatives/hypnotics	Tranquillisers	Downers, valium, blues, serepans	Injected, ingested
Opiates	Poppies	Opium	Injected, ingested, inhaled
	Homebake	Bake	
	Morphine	Misties	
	Other opiates	Methadone, pethidine	
	Heroin	Smack, skag, junk	
Euphoric agents	Nitrous oxide	Laughing gas	Inhaled
	GHB	GBH, Liquid Ecstasy, Fantasy, One4b	Injected, ingested, inhaled
Others	Kava		Injected, ingested, inhaled
	Solvents	Glue, petrol, spray paint	Injected, ingested, inhaled
	Steroids for non-medical purposes	Juice, roids	Injected, ingested, inhaled

Note: \*The drug ketamine can be classified as either a hallucinogen (low dose) or sedative/hypnotic (high dose). For the purposes of this report, ketamine has been treated as low dose.

## Appendix B: Data Tables

The following tables summarise the prevalence of selected outcomes from this report.

### Lifetime use of drugs

Table B1 summarises the prevalence of having ever used drugs, by drug type, sex and ethnic group. These are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B1:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)

Type of drug	Drug	Female	Male	Māori	Non-Māori
Cannabis	Cannabis	38.9 (37.2–40.6)	50.2 (48.1–52.2)	57.8 (56.3–59.3)	42.5 (41.0–44.0)
Stimulants	Amphetamines	5.2 (4.3–6.0)	8.5 (7.1–10.0)	9.2 (8.3–10.1)	6.4 (5.4–7.4)
	Ecstasy	3.0 (2.3–3.7)	4.4 (3.5–5.3)	4.2 (3.4–4.9)	3.6 (2.9–4.3)
	Cocaine	2.1 (1.6–2.6)	2.8 (2.1–3.6)	3.1 (2.4–3.7)	2.3 (1.8–2.9)
	Rush	1.4 (0.9–1.8)	3.3 (2.5–4.2)	2.0 (1.5–2.5)	2.4 (1.8–2.9)
	Ice	0.5 (0.3–0.8)	1.6 (1.1–2.1)	1.5 (1.1–2.0)	0.9 (0.6–1.3)
	Viagra for recreational purposes	–	0.6 (0.2–1.0)	0.3 (0.1–0.6)	0.4 (0.1–0.6)
	Crack	0.2 (0.0–0.3)	0.2 (0.1–0.3)	0.7 (0.4–1.0)	–
Hallucinogens	LSD	5.0 (4.2–5.8)	8.0 (6.7–9.3)	8.6 (7.8–9.5)	6.1 (5.3–6.9)
	Magic mushrooms	3.9 (3.2–4.7)	7.6 (6.5–8.7)	8.5 (7.5–9.5)	5.3 (4.5–6.1)
	Ketamine	0.5 (0.2–0.8)	0.6 (0.3–0.9)	0.4 (0.2–0.6)	0.6 (0.3–0.8)
	Other hallucinogens	0.5 (0.2–0.7)	1.8 (1.1–2.4)	1.7 (1.2–2.2)	1.0 (0.6–1.4)
Sedatives/hypnotics	Tranquillisers	1.2 (0.9–1.6)	2.2 (1.6–2.7)	2.5 (2.0–3.0)	1.5 (1.2–1.9)
Opiates	Poppies	0.7 (0.4–1.0)	2.0 (1.5–2.6)	1.7 (1.3–2.2)	1.3 (0.9–1.6)
	Homebake	0.6 (0.2–0.9)	0.9 (0.6–1.3)	1.6 (1.2–2.1)	0.6 (0.3–0.9)
	Morphine	0.5 (0.2–0.7)	1.1 (0.6–1.5)	1.3 (0.9–1.7)	0.6 (0.4–0.9)
	Heroin	0.2* (0.1–0.4)	0.7 (0.3–1.1)	1.0 (0.6–1.3)	0.4 (0.2–0.6)
	Other opiates	0.2 (0.0–0.3)	0.9 (0.5–1.3)	0.5 (0.3–0.8)	0.5 (0.3–0.7)

Type of drug	Drug	Female	Male	Māori	Non-Māori
Euphoric agents	Nitrous oxide	1.6 (1.1–2.0)	4.3 (3.5–5.0)	2.4 (1.9–2.9)	2.9 (2.4–3.5)
	GHB	0.5 (0.3–0.8)	1.2 (0.7–1.6)	0.8 (0.5–1.1)	0.9 (0.5–1.2)
Others	Kava	2.8 (2.2–3.4)	7.3 (6.2–8.5)	3.5 (3.0–4.1)	5.2 (4.6–5.9)
	Solvents	0.5 (0.3–0.8)	1.3 (0.8–1.8)	2.6 (2.1–3.2)	0.6 (0.4–0.9)
	Steroids	–	0.2 (0.0–0.3)	0.4 (0.2–0.6)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously.

Table B2 summarises the prevalence of having ever used drugs, by drug type, sex and ethnic group (female Māori, female non-Māori, male Māori, male non-Māori). These are presented as age-standardised estimates. Note that age-standardised estimates have no meaning by themselves; they are meaningful only when compared with other age-standardised estimates. Therefore, only use these age-standardised estimates to compare one population group with another.

**Table B2:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Cannabis	Cannabis	52.4 (50.3–54.5)	37.4 (35.4–39.4)	59.0 (56.7–61.2)	48.9 (46.6–51.2)
Stimulants	Amphetamines	6.7 (5.7–7.7)	5.1 (4.0–6.2)	10.9 (9.1–12.6)	8.8 (7.1–10.5)
	Ecstasy	3.0 (2.1–3.8)	3.4 (2.5–4.4)	4.7 (3.7–5.8)	4.8 (3.7–5.9)
	Cocaine	2.0 (1.5–2.6)	2.2 (1.5–2.9)	3.9 (2.8–4.9)	2.5 (1.8–3.3)
	Rush	1.1 (0.6–1.6)	1.4 (0.9–1.8)	2.8 (1.9–3.7)	3.6 (2.5–4.6)
	Ice	1.0 (0.5–1.4)	–	2.0 (1.2–2.7)	1.6 (1.0–2.3)
	Viagra for recreational purposes	–	–	0.6 (0.2–1.0)	0.5 (0.2–0.9)
	Crack	–	–	1.0 (0.5–1.5)	–
	Hallucinogens	LSD	6.5 (5.4–7.6)	5.0 (4.0–6.0)	10.2 (8.8–11.7)
Magic mushrooms		5.6 (4.5–6.8)	3.7 (2.8–4.7)	10.4 (8.7–12.1)	7.5 (6.2–8.9)
Ketamine		–	0.6 (0.2–1.1)	0.5 (0.2–0.9)	0.7 (0.3–1.1)
Other hallucinogens		0.6 (0.2–1.0)	0.5 (0.2–0.7)	2.8 (1.9–3.7)	1.7 (1.0–2.4)
Sedatives/hypnotics	Tranquillisers	1.9 (1.3–2.4)	1.0 (0.6–1.5)	3.1 (2.2–4.0)	2.1 (1.4–2.7)

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Opiates	Poppies	1.0 (0.6–1.4)	0.6 (0.3–0.9)	2.6 (1.7–3.4)	2.0 (1.3–2.6)
	Homebake	1.1 (0.6–1.6)	–	2.0 (1.3–2.7)	0.8 (0.3–1.2)
	Morphine	0.9 (0.5–1.3)	–	1.5 (0.9–2.2)	0.9 (0.5–1.4)
	Heroin	0.7 (0.4–1.1)	–	1.2 (0.6–1.7)	0.5 (0.2–0.9)
	Other opiates	–	–	0.8 (0.4–1.3)	0.9 (0.5–1.3)
Euphoric agents	Nitrous oxide	1.3 (0.8–1.7)	1.8 (1.2–2.4)	3.4 (2.5–4.3)	4.8 (3.8–5.8)
	GHB	–	0.7 (0.3–1.0)	1.1 (0.6–1.6)	1.3 (0.7–2.0)
Others	Kava	1.8 (1.3–2.4)	2.9 (2.2–3.6)	5.3 (4.3–6.2)	7.6 (6.3–9.0)
	Solvents	1.7 (1.2–2.3)	–	3.3 (2.3–4.2)	1.1 (0.5–1.6)
	Steroids	–	–	0.6 (0.2–0.9)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B3 summarises the prevalence of having ever used drugs, by drug type, sex and ethnic group (female Māori, female non-Māori, male Māori, male non-Māori). These are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B3:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Cannabis	Cannabis	55.3 (53.1–57.4)	36.6 (34.6–38.5)	60.7 (58.4–63.1)	48.6 (46.3–50.9)
Stimulants	Amphetamines	7.3 (6.2–8.3)	4.8 (3.8–5.8)	11.4 (9.6–13.2)	8.1 (6.5–9.7)
	Ecstasy	3.2 (2.3–4.2)	3.0 (2.1–3.8)	5.2 (4.0–6.4)	4.3 (3.3–5.3)
	Cocaine	2.2 (1.6–2.8)	2.0 (1.4–2.7)	4.1 (3.0–5.1)	2.6 (1.9–3.4)
	Rush	1.2 (0.6–1.7)	1.4 (0.9–1.9)	2.9 (2.0–3.8)	3.3 (2.4–4.3)
	Ice	1.1 (0.6–1.5)	–	2.1 (1.3–2.9)	1.5 (0.9–2.1)
	Viagra for recreational purposes	–	–	0.6 (0.2–1.0)	0.6 (0.2–1.0)
	Crack	–	–	1.1 (0.5–1.6)	–

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Hallucinogens	LSD	6.9 (5.7–8.1)	4.7 (3.7–5.6)	10.6 (9.1–12.1)	7.6 (6.2–9.0)
	Magic mushrooms	6.2 (4.9–7.4)	3.6 (2.7–4.4)	11.0 (9.3–12.8)	7.1 (5.9–8.4)
	Ketamine	–	0.5 (0.2–0.8)	0.6 (0.2–1.0)	0.6 (0.3–0.9)
	Other hallucinogens	0.6 (0.2–1.1)	0.4 (0.2–0.7)	2.9 (2.0–3.8)	1.6 (0.9–2.3)
Sedatives/ hypnotics	Tranquillisers	2.0 (1.3–2.6)	1.1 (0.7–1.6)	3.2 (2.3–4.0)	2.0 (1.4–2.6)
Opiates	Poppies	1.0 (0.6–1.4)	0.6 (0.3–0.9)	2.6 (1.7–3.5)	1.9 (1.3–2.6)
	Homebake	1.2 (0.6–1.7)	–	2.1 (1.4–2.9)	0.7 (0.3–1.1)
	Morphine	1.0 (0.6–1.5)	–	1.6 (0.9–2.3)	0.9 (0.5–1.4)
	Heroin	0.8 (0.4–1.1)	–	1.2 (0.6–1.7)	0.6 (0.2–1.0)
	Other opiates	–	–	0.9 (0.4–1.3)	0.9 (0.5–1.3)
Euphoric agents	Nitrous oxide	1.4 (0.9–1.9)	1.6 (1.1–2.1)	3.6 (2.7–4.6)	4.3 (3.5–5.2)
	GHB	–	0.5 (0.2–0.8)	1.2 (0.6–1.7)	1.2 (0.6–1.7)
Others	Kava	1.9 (1.3–2.5)	2.9 (2.2–3.6)	5.4 (4.4–6.4)	7.6 (6.3–8.9)
	Solvents	1.9 (1.3–2.5)	–	3.5 (2.5–4.5)	0.9 (0.4–1.4)
	Steroids	–	–	0.6 (0.2–1.0)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B4 summarises the prevalence of having ever used drugs, by drug type and age group.

**Table B4:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	25.3 (21.8–28.9)	55.3 (50.7–59.9)	61.8 (58.6–65.0)	54.9 (51.8–58.0)	39.0 (35.6–42.5)	15.8 (13.0–18.6)
Stimulants	Amphetamines	2.4 (1.2–3.6)	13.8 (10.7–16.9)	12.0 (9.7–14.4)	7.2 (5.7–8.7)	3.5 (2.3–4.7)	–
	Ecstasy	1.5 (0.6–2.4)	11.3 (8.7–13.9)	6.7 (5.0–8.5)	2.7 (1.9–3.6)	–	–
	Cocaine	0.8 (0.1–1.5)	2.5 (1.2–3.9)	4.0 (2.6–5.3)	4.1 (3.1–5.1)	1.5 (0.5–2.4)	–
	Rush	–	3.3 (1.8–4.7)	4.1 (2.5–5.6)	3.4 (2.4–4.4)	1.1 (0.3–1.8)	–
	Ice	–	3.1 (1.7–4.5)	1.7 (0.9–2.4)	1.1 (0.5–1.6)	–	–
	Viagra for recreational purposes	–	–	–	0.7 (0.2–1.2)	–	–
	Crack	–	–	–	0.3* (0.1–0.6)	–	–
Hallucinogens	LSD	1.9 (0.7–3.2)	11.1 (8.7–13.4)	11.1 (9.0–13.1)	7.0 (5.7–8.4)	5.0 (3.2–6.8)	–
	Magic mushrooms	3.0 (1.6–4.4)	10.2 (8.0–12.4)	9.4 (7.6–11.2)	7.4 (6.0–8.9)	2.5 (1.2–3.8)	–
	Ketamine	–	2.7 (1.3–4.1)	0.8 (0.2–1.4)	–	–	–
	Other hallucinogens	–	1.0 (0.3–1.7)	1.8 (0.9–2.6)	1.5 (0.9–2.2)	1.0 (0.1–1.8)	–
Sedatives/hypnotics	Tranquillisers	–	2.8 (1.5–4.1)	1.8 (1.0–2.6)	2.8 (2.0–3.6)	1.6 (0.8–2.3)	–
Opiates	Poppies	–	2.2 (1.1–3.3)	1.5 (0.8–2.2)	1.9 (1.2–2.6)	1.5 (0.6–2.4)	–
	Homebake	–	1.7 (0.8–2.7)	1.2 (0.3–2.1)	0.9 (0.4–1.4)	–	–
	Morphine	–	1.2 (0.4–2.0)	0.7 (0.3–1.2)	1.3 (0.7–2.0)	–	–
	Heroin	–	–	0.4 (0.1–0.6)	1.0 (0.4–1.5)	0.6* (0.0–1.3)	–
	Other opiates	–	–	–	0.8 (0.3–1.2)	–	–
Euphoric agents	Nitrous oxide	1.9 (0.9–3.0)	8.1 (6.0–10.2)	4.1 (2.8–5.4)	2.5 (1.6–3.5)	1.0 (0.4–1.7)	–
	GHB	–	3.0 (1.7–4.4)	1.5 (0.7–2.3)	0.5 (0.2–0.9)	–	–
Other	Kava	1.6 (0.5–2.7)	4.9 (3.3–6.6)	7.6 (5.9–9.2)	5.9 (4.6–7.3)	4.8 (3.1–6.5)	3.1 (1.9–4.3)
	Solvents	1.3 (0.3–2.3)	1.5 (0.7–2.4)	1.4 (0.8–2.0)	1.2 (0.6–1.9)	–	–

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for steroids.

Table B5 (males) and Table B6 (females) summarise the prevalence of having ever used drugs, by drug type and age group.

**Table B5:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, males, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	24.9 (20.3–29.4)	60.7 (54.4–67.0)	67.1 (62.7–71.6)	60.9 (56.8–65.0)	50.6 (45.2–56.1)	22.6 (17.8–27.3)
Stimulants	Amphetamines	2.7 (0.9–4.5)	19.1 (14.0–24.1)	14.3 (10.8–17.9)	9.8 (7.1–12.5)	4.3 (2.1–6.5)	–
	Ecstasy	–	14.7 (10.5–18.9)	6.6 (4.1–9.1)	4.1 (2.5–5.7)	–	–
	Cocaine	–	1.6 (0.5–2.6)	4.0 (2.2–5.8)	5.8 (4.0–7.7)	2.4 (0.5–4.2)	–
	Rush	–	5.7 (2.7–8.6)	6.3 (3.6–9.1)	4.0 (2.3–5.7)	1.7 (0.4–3.0)	–
	Ice	–	3.9 (1.7–6.0)	2.4 (1.2–3.6)	2.2 (1.0–3.4)	–	–
Hallucinogens	LSD	–	13.3 (9.1–17.5)	12.4 (9.2–15.7)	10.0 (7.7–12.3)	7.4 (4.2–10.5)	–
	Magic mushrooms	2.7 (0.9–4.5)	14.8 (10.9–18.7)	12.5 (9.5–15.5)	10.3 (7.8–12.8)	3.3 (1.2–5.3)	–
	Ketamine	–	3.0 (1.0–5.1)	–	–	–	–
	Other hallucinogens	–	1.6 (0.4–2.9)	3.1 (1.4–4.9)	2.2 (1.0–3.4)	1.9 (0.2–3.6)	–
Sedatives/hypnotics	Tranquillisers	–	5.0 (2.4–7.6)	2.3 (0.9–3.8)	3.8 (2.4–5.3)	1.3 (0.2–2.3)	–
Opiates	Poppies	–	3.6 (1.6–5.6)	2.5 (1.1–3.8)	2.5 (1.4–3.7)	2.7 (0.8–4.5)	–
	Homebake	–	2.5 (0.8–4.2)	0.8 (0.2–1.4)	1.4 (0.5–2.3)	–	–
	Morphine	–	–	–	1.8 (0.7–2.9)	–	–
	Heroin	–	–	–	1.6 (0.5–2.6)	1.2* (0.0–2.5)	–
	Other opiates	–	–	–	1.1 (0.3–1.8)	–	–
Euphoric agents	Nitrous oxide	2.9 (1.0–4.8)	11.7 (8.1–15.2)	6.0 (3.6–8.4)	4.4 (2.5–6.3)	1.8 (0.5–3.1)	–
	GHB	–	3.8 (1.6–6.0)	2.2 (0.7–3.7)	–	–	–
Other	Kava	2.8 (0.7–4.9)	8.1 (4.9–11.3)	10.0 (7.2–12.8)	9.1 (6.6–11.5)	7.2 (4.2–10.2)	4.4 (2.2–6.6)
	Solvents	1.9 (0.1–3.6)	2.5 (0.8–4.3)	2.1 (0.9–3.4)	1.5 (0.6–2.4)	–	–

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for Viagra for recreational purposes, crack and steroids.

**Table B6:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, females, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	25.9 (20.6–31.2)	50.4 (43.8–57.0)	57.1 (52.8–61.4)	49.4 (45.2–53.6)	27.8 (23.5–32.0)	9.2 (6.4–12.0)
Stimulants	Amphetamines	2.1 (0.5–3.6)	9.1 (6.0–12.2)	9.9 (7.1–12.7)	4.8 (3.3–6.3)	2.7 (1.3–4.2)	–
	Ecstasy	2.1 (0.5–3.6)	8.2 (4.9–11.6)	6.8 (4.6–9.0)	1.4 (0.6–2.3)	–	–
	Cocaine	–	3.4 (1.3–5.5)	4.0 (2.2–5.7)	2.6 (1.5–3.7)	–	–
	Rush	–	1.1 (0.1–2.0)	2.0 (0.9–3.1)	2.9 (1.6–4.2)	–	–
	Ice	–	2.4 (0.7–4.0)	1.0 (0.3–1.8)	–	–	–
Hallucinogens	LSD	–	9.1 (6.1–12.1)	9.9 (7.4–12.3)	4.3 (2.8–5.7)	2.7 (1.2–4.2)	–
	Magic mushrooms	3.3 (0.9–5.8)	6.0 (3.3–8.7)	6.6 (4.6–8.7)	4.8 (3.1–6.5)	1.8 (0.6–3.1)	–
Sedatives/hypnotics	Tranquillisers	–	–	1.3 (0.5–2.1)	1.9 (0.9–2.9)	1.8 (0.7–3.0)	–
Opiates	Poppies	–	–	–	1.4 (0.5–2.3)	–	–
	Homebake	–	1.1 (0.1–2.0)	1.6* (0.1–3.2)	–	–	–
	Morphine	–	–	–	0.9 (0.2–1.5)	–	–
Euphoric agents	Nitrous oxide	–	4.9 (2.4–7.5)	2.3 (0.9–3.8)	0.8 (0.2–1.4)	–	–
	GHB	–	2.3 (0.6–4.1)	–	–	–	–
Other	Kava	–	2.1 (0.6–3.6)	5.4 (3.4–7.4)	3.1 (1.7–4.5)	2.4 (1.0–3.8)	–
	Solvents	–	–	0.7 (0.3–1.2)	0.9* (0.0–1.9)	–	–

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for Viagra for recreational purposes, crack, ketamine, other hallucinogens, heroin, other opiates and steroids.

Table B7 (Māori) and Table B8 (non-Māori) summarise the prevalence of having ever used drugs, by drug type and age group.

**Table B7:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, Māori, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	36.9 (32.4–41.3)	72.9 (69.2–76.6)	72.8 (69.7–75.9)	69.3 (66.3–72.3)	47.7 (43.8–51.5)	16.3 (12.9–19.8)
Stimulants	Amphetamines	3.0 (1.3–4.7)	15.6 (12.6–18.7)	14.9 (12.2–17.6)	8.7 (6.5–10.8)	5.5 (3.6–7.4)	–
	Ecstasy	2.5 (1.1–3.9)	9.9 (7.3–12.6)	5.8 (3.9–7.7)	2.9 (1.8–3.9)	–	–
	Cocaine	1.5 (0.5–2.5)	4.0 (2.4–5.6)	3.9 (2.1–5.7)	4.5 (2.9–6.1)	1.9 (0.8–3.0)	–
	Rush	–	3.1 (1.4–4.8)	2.2 (1.1–3.4)	3.0 (1.8–4.1)	–	–
	Ice	–	2.7 (1.2–4.2)	2.9 (1.6–4.2)	1.6 (0.7–2.4)	–	–
Hallucinogens	LSD	–	13.9 (11.2–16.7)	13.6 (11.0–16.1)	9.5 (7.4–11.7)	6.3 (4.4–8.3)	–
	Magic mushrooms	5.0 (3.3–6.7)	15.3 (12.1–18.5)	12.7 (10.2–15.3)	7.6 (5.8–9.4)	3.2 (1.8–4.7)	–
	Other hallucinogens	–	2.2 (0.7–3.6)	2.5 (1.2–3.8)	2.2 (1.2–3.2)	–	–
Sedatives/hypnotics	Tranquillisers	–	1.7 (0.5–2.9)	4.0 (2.6–5.4)	4.4 (3.0–5.8)	2.4 (1.0–3.7)	–
Opiates	Poppies	–	2.2 (0.8–3.7)	2.2 (1.1–3.4)	2.5 (1.5–3.5)	1.8 (0.8–2.8)	–
	Homebake	–	3.0 (1.3–4.7)	2.9 (1.5–4.3)	1.5 (0.8–2.2)	–	–
	Morphine	–	2.5 (1.1–4.0)	–	2.2 (1.0–3.3)	–	–
	Heroin	–	–	1.4 (0.5–2.3)	1.3 (0.5–2.1)	1.4 (0.6–2.2)	–
Euphoric agents	Nitrous oxide	1.7 (0.7–2.6)	5.4 (3.4–7.5)	2.9 (1.6–4.3)	1.8 (1.0–2.7)	–	–
	GHB	–	2.2 (1.0–3.5)	–	–	–	–
Other	Kava	–	3.5 (2.0–5.0)	5.5 (4.0–7.1)	4.6 (3.3–5.9)	2.8 (1.5–4.1)	–
	Solvents	1.8 (0.5–3.2)	2.6 (1.2–4.0)	4.1 (2.6–5.6)	4.2 (2.8–5.5)	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for Viagra for recreational purposes, crack, ketamine, other opiates and steroids.

**Table B8:** Prevalence of lifetime drug use in New Zealand by type of drug, total population aged 13–65 years, non-Māori, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	22.5 (18.3–26.7)	51.9 (46.6–57.3)	59.9 (56.2–63.5)	53.0 (49.5–56.5)	38.2 (34.5–41.9)	15.8 (12.8–18.8)
Stimulants	Amphetamines	2.3 (0.9–3.7)	13.5 (9.9–17.1)	11.5 (8.8–14.2)	6.9 (5.4–8.5)	3.2 (1.9–4.6)	–
	Ecstasy	–	11.6 (8.5–14.6)	6.8 (4.8–8.8)	2.6 (1.6–3.6)	–	–
	Cocaine	–	2.3 (0.8–3.7)	3.9 (2.3–5.5)	4.0 (2.9–5.1)	–	–
	Rush	–	3.3 (1.5–5.1)	4.2 (2.4–6.0)	3.5 (2.4–4.6)	–	–
	Ice	–	3.1 (1.5–4.8)	1.4 (0.5–2.3)	–	–	–
Hallucinogens	LSD	–	10.6 (7.8–13.3)	10.5 (8.1–12.8)	6.6 (5.1–8.1)	4.9 (3.0–6.8)	–
	Magic mushrooms	–	9.2 (6.6–11.9)	8.8 (6.7–10.9)	7.3 (5.7–8.9)	2.5 (1.1–3.9)	–
	Ketamine	–	3.0 (1.3–4.7)	–	–	–	–
	Other hallucinogens	–	–	1.6 (0.6–2.6)	1.4 (0.7–2.2)	–	–
Sedatives/hypnotics	Tranquillisers	–	3.0 (1.5–4.6)	1.4 (0.5–2.4)	2.5 (1.6–3.4)	1.4 (0.6–2.2)	–
Opiates	Poppies	–	2.2 (0.9–3.5)	1.3 (0.6–2.1)	1.8 (1.0–2.5)	–	–
	Morphine	–	–	–	1.1 (0.4–1.8)	–	–
Euphoric agents	Nitrous oxide	–	8.7 (6.1–11.2)	4.3 (2.8–5.8)	2.5 (1.5–3.6)	–	–
	GHB	–	3.2 (1.6–4.8)	1.6 (0.7–2.5)	–	–	–
Other	Kava	–	5.2 (3.3–7.2)	7.9 (6.0–9.9)	6.1 (4.6–7.6)	4.9 (3.0–6.7)	3.3 (2.0–4.6)

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for Viagra for recreational purposes, crack, homebake, heroin, other opiates, solvents and steroids.

## Drug use in last 12 months

Table B9 summarises the prevalence of drug use in the last 12 months, by sex and ethnic group. These are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B9:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)

Type of drug	Drug	Female	Male	Māori	Non-Māori
Cannabis	Cannabis	10.7 (9.5–11.9)	16.9 (15.5–18.4)	22.6 (21.3–23.8)	12.4 (11.4–13.5)
Stimulants	Amphetamines	1.5 (1.0–2.0)	3.5 (2.7–4.2)	3.6 (3.0–4.1)	2.3 (1.8–2.8)
	Ecstasy	1.3 (0.9–1.8)	2.5 (1.7–3.2)	1.9 (1.4–2.5)	1.9 (1.4–2.4)
	Cocaine	0.4 (0.1–0.6)	0.3 (0.1–0.5)	0.6 (0.3–0.8)	0.3 (0.1–0.5)
	Rush	–	0.7 (0.3–1.1)	0.4 (0.2–0.6)	0.4 (0.2–0.6)
	Ice	0.2 (0.1–0.4)	0.8 (0.4–1.2)	0.6 (0.3–0.9)	0.5 (0.2–0.7)
	Viagra for recreational purposes	–	0.4 (0.0–0.7)	0.3 (0.1–0.5)	–
Hallucinogens	LSD	0.7 (0.4–1.0)	1.7 (1.2–2.2)	2.1 (1.6–2.6)	1.1 (0.8–1.4)
	Magic mushrooms	0.6 (0.3–1.0)	1.6 (1.1–2.0)	2.6 (2.0–3.2)	0.9 (0.6–1.2)
Sedatives/ hypnotics	Tranquillisers	0.3 (0.0–0.5)	0.3 (0.1–0.5)	0.4 (0.1–0.6)	0.3 (0.1–0.4)
Opiates	Poppies	–	0.2* (0.1–0.4)	0.3 (0.1–0.5)	–
	Homebake	–	–	0.4 (0.2–0.6)	–
	Morphine	–	0.2* (0.0–0.4)	0.4 (0.2–0.6)	–
Euphoric agents	Nitrous oxide	0.6 (0.3–0.9)	1.9 (1.4–2.5)	1.1 (0.7–1.4)	1.3 (0.9–1.6)
	GHB	–	0.4 (0.2–0.7)	–	0.3 (0.1–0.4)
Others	Kava	0.8 (0.4–1.1)	2.0 (1.3–2.7)	1.0 (0.7–1.3)	1.4 (1.0–1.9)

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: rush, crack, ketamine, other hallucinogens, heroin, other opiates, solvents and steroids.

Table B10 summarises the prevalence of drug use in the last 12 months, by sex and ethnic group (female Māori, female non-Māori, male Māori, male non-Māori). These are presented as age-standardised estimates. Note that age-standardised estimates have no meaning by themselves; they are meaningful only when compared with other age-standardised estimates. Therefore, only use these age-standardised estimates to compare one population group with another.

**Table B10:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (age-standardised)

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Cannabis	Cannabis	16.2 (14.8–17.6)	11.3 (9.7–12.9)	26.0 (24.0–27.9)	16.9 (15.1–18.7)
Stimulants	Amphetamines	2.4 (1.8–3.1)	1.5 (0.9–2.2)	4.2 (3.3–5.1)	3.9 (2.9–4.9)
	Ecstasy	1.5 (0.9–2.1)	1.6 (0.9–2.3)	2.0 (1.4–2.6)	2.8 (1.9–3.8)
	Cocaine	0.5 (0.2–0.8)	–	0.6 (0.3–0.9)	–
	Rush	–	–	0.5 (0.2–0.8)	0.9 (0.3–1.4)
	Ice	–	–	0.8 (0.3–1.3)	0.9 (0.4–1.5)
Hallucinogens	LSD	1.5 (0.9–2.0)	0.8 (0.4–1.2)	2.3 (1.5–3.0)	1.8 (1.1–2.5)
	Magic mushrooms	1.7 (1.1–2.3)	–	3.0 (2.1–3.9)	1.6 (1.0–2.2)
Euphoric agents	Nitrous oxide	0.4 (0.1–0.6)	0.8 (0.3–1.3)	1.6 (1.0–2.2)	2.4 (1.6–3.1)
Others	Kava	0.4 (0.1–0.6)	0.9 (0.5–1.3)	1.6 (1.1–2.2)	2.1 (1.2–2.9)

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

Table B11 summarises the prevalence of drug use in the last 12 months, by sex and ethnic group (female Māori, female non-Māori, male Māori, male non-Māori). These are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B11:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by sex and ethnic group, percent (crude)

Type of drug	Drug	Female		Male	
		Māori	Non-Māori	Māori	Non-Māori
Cannabis	Cannabis	17.7 (16.2–19.2)	9.7 (8.3–11.0)	28.1 (26.0–30.2)	15.3 (13.7–16.9)
Stimulants	Amphetamines	2.7 (2.0–3.4)	1.3 (0.7–1.8)	4.5 (3.5–5.6)	3.3 (2.5–4.2)
	Ecstasy	1.7 (1.0–2.4)	1.3 (0.8–1.8)	2.2 (1.5–3.0)	2.5 (1.7–3.3)
	Cocaine	0.5 (0.2–0.8)	–	0.6 (0.3–1.0)	–
	Rush	–	–	0.5 (0.2–0.9)	0.7 (0.3–1.2)
	Ice	–	–	0.8 (0.3–1.4)	0.8 (0.3–1.2)
Hallucinogens	LSD	1.6 (1.0–2.2)	0.6 (0.3–0.9)	2.6 (1.7–3.4)	1.6 (1.0–2.2)
	Magic mushrooms	1.9 (1.2–2.6)	–	3.3 (2.3–4.4)	1.3 (0.8–1.8)
Euphoric agents	Nitrous oxide	0.4 (0.2–0.7)	0.6 (0.3–1.0)	1.8 (1.1–2.5)	1.9 (1.3–2.6)
Others	Kava	0.4 (0.1–0.6)	0.8 (0.5–1.2)	1.7 (1.1–2.4)	2.0 (1.2–2.9)

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

Table B12 summarises the prevalence of drug use in the last 12 months, by age group.

**Table B12:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	20.4 (17.0–23.7)	33.6 (29.4–37.8)	18.4 (16.0–20.9)	10.4 (8.8–12.1)	5.3 (3.8–6.7)	1.5 (0.7–2.4)
Stimulants	Amphetamines	1.8 (0.7–2.9)	8.7 (6.4–11.0)	4.4 (2.9–6.0)	1.1 (0.5–1.6)	–	–
	Ecstasy	1.3 (0.4–2.1)	7.2 (5.1–9.3)	2.6 (1.4–3.9)	1.0 (0.4–1.6)	–	–
	Cocaine	–	0.9 (0.2–1.7)	–	–	–	–
	Rush	–	0.9 (0.2–1.7)	–	–	–	–
	Ice	–	1.5 (0.6–2.5)	1.2 (0.5–1.9)	–	–	–
Hallucinogens	LSD	1.4 (0.4–2.5)	4.4 (2.9–5.9)	1.7 (0.9–2.5)	0.7 (0.2–1.2)	–	–
	Magic mushrooms	2.3 (1.0–3.6)	4.6 (3.0–6.1)	0.8 (0.4–1.3)	–	–	–
Opiates	Homebake	–	0.5* (0.0–1.0)	–	–	–	–
	Morphine	–	0.7 (0.1–1.3)	–	–	–	–
Euphoric agents	Nitrous oxide	1.8 (0.7–2.9)	5.9 (4.1–7.8)	1.1 (0.4–1.8)	–	–	–
	GHB	–	1.3 (0.4–2.3)	–	–	–	–
Other	Kava	–	2.2 (1.1–3.4)	1.9 (0.9–2.8)	1.5 (0.7–2.3)	–	–

Note: An asterisk (\*) indicates that the relative sampling error (RSE) is 0.5 or greater; these results should be interpreted very cautiously. A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the results for Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, heroin, other opiates, solvents and steroids.

Table B13 (males) and Table B14 (females) summarise the prevalence of drug use in the last 12 months, by age group.

**Table B13:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, males, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	19.6 (15.1–24.0)	40.8 (34.1–47.6)	22.9 (19.2–26.5)	14.7 (11.8–17.5)	7.5 (4.7–10.2)	2.9 (1.2–4.7)
Stimulants	Amphetamines	–	12.7 (8.7–16.7)	6.0 (3.6–8.5)	1.8 (0.8–2.9)	–	–
	Ecstasy	–	9.2 (5.6–12.7)	3.3 (1.3–5.2)	1.9 (0.7–3.0)	–	–
	Ice	–	2.5 (0.7–4.3)	1.6 (0.6–2.7)	–	–	–
Hallucinogens	LSD	–	6.1 (3.4–8.7)	2.3 (1.1–3.6)	1.3 (0.3–2.4)	–	–
	Magic mushrooms	2.4 (0.7–4.2)	6.7 (3.9–9.6)	1.3 (0.5–2.2)	–	–	–
Euphoric agents	Nitrous oxide	2.8 (0.9–4.7)	8.8 (5.7–11.9)	1.9 (0.5–3.4)	–	–	–
Other	Kava	–	3.4 (1.2–5.5)	2.0 (0.3–3.7)	2.2 (0.7–3.7)	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: cocaine, rush, Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

**Table B14:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, females, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	21.3 (16.1–26.5)	27.1 (21.6–32.5)	14.4 (11.4–17.5)	6.6 (4.7–8.4)	3.1 (1.7–4.6)	–
Stimulants	Amphetamines	–	5.0 (2.5–7.6)	3.0 (1.4–4.7)	–	–	–
	Ecstasy	1.8 (0.3–3.3)	5.4 (2.8–8.0)	2.1 (0.7–3.4)	–	–	–
Hallucinogens	LSD	–	2.9 (1.2–4.7)	1.1 (0.3–1.9)	–	–	–
	Magic mushrooms	2.2 (0.2–4.2)	2.6 (0.7–4.5)	–	–	–	–
Euphoric agents	Nitrous oxide	–	3.3 (1.1–5.5)	–	–	–	–
Other	Kava	–	–	1.7 (0.6–2.8)	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: cocaine, rush, ice, Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

Table B15 (Māori) and Table B16 (non-Māori) summarise the prevalence of drug use in the last 12 months, by age group.

**Table B15:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, Māori, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	26.4 (22.4–30.4)	40.8 (36.6–45.0)	27.0 (23.5–30.6)	18.2 (15.4–21.1)	7.7 (5.2–10.1)	–
Stimulants	Amphetamines	–	8.9 (6.3–11.4)	5.5 (3.8–7.1)	2.4 (1.2–3.6)	–	–
	Ecstasy	–	6.0 (3.9–8.1)	1.9 (0.6–3.2)	1.1 (0.4–1.8)	–	–
	Cocaine	–	1.6 (0.5–2.6)	–	–	–	–
	Ice	–	1.5 (0.4–2.7)	–	–	–	–
Hallucinogens	LSD	–	7.0 (4.6–9.4)	2.5 (1.3–3.7)	–	–	–
	Magic mushrooms	3.9 (2.4–5.4)	7.3 (4.9–9.6)	2.5 (1.2–3.8)	–	–	–
Euphoric agents	Nitrous oxide	–	3.9 (2.2–5.5)	–	–	–	–
Other	Kava	–	1.9 (0.8–3.0)	1.4 (0.6–2.3)	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: rush, Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquillisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

**Table B16:** Prevalence of drug use in New Zealand in last 12 months by type of drug, total population aged 13–65 years, non-Māori, by age group, percent (crude)

Type of drug	Drug	Age group (years)					
		13–17	18–24	25–34	35–44	45–54	55–65
Cannabis	Cannabis	18.8 (14.8–22.8)	32.3 (27.3–37.3)	16.7 (14.0–19.5)	9.5 (7.6–11.3)	5.1 (3.5–6.7)	1.5 (0.6–2.5)
Stimulants	Amphetamines	–	8.6 (5.9–11.4)	4.2 (2.5–6.0)	–	–	–
	Ecstasy	–	7.4 (4.9–9.9)	2.8 (1.3–4.3)	–	–	–
Hallucinogens	LSD	–	3.9 (2.2–5.6)	1.6 (0.7–2.5)	–	–	–
	Magic mushrooms	–	4.0 (2.2–5.9)	–	–	–	–
Euphoric agents	Nitrous oxide	–	6.3 (4.1–8.5)	–	–	–	–
Other	Kava	–	2.3 (0.9–3.7)	1.9 (0.8–3.1)	1.6 (0.7–2.5)	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. Numbers were also too low for reliable estimation for the following results: cocaine, rush, ice, Viagra for recreational purposes, crack, ketamine, other hallucinogens, tranquilisers, poppies, homebake, morphine, heroin, other opiates, GHB, solvents and steroids.

## Needle use during lifetime

Table B17 summarises the prevalence estimates of having ever used a needle to inject drugs for non-medical purposes, by sex and ethnic group, presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B17:** Prevalence of having ever used a needle to inject drugs, total population aged 13–65 years, by sex and ethnic group, percent (crude)

	Female	Male	Māori	Non-Māori
Ever used a needle to inject drugs	0.5 (0.2–0.8)	1.2 (0.7–1.6)	1.4 (1.0–1.8)	0.8 (0.5–1.0)

## Cannabis

Table B18 summarises information about cannabis use in the last 12 months, by sex and ethnic group. These rates are presented as age-standardised estimates. Note that age-standardised estimates have no meaning by themselves; they are meaningful only when compared with other age-standardised estimates. Therefore, only use these age-standardised estimates to compare one population group with another.

**Table B18:** Indicators of cannabis use in the last 12 months, by sex and ethnic group, percent (age-standardised)

Indicator	Female	Male	Māori	Non-Māori
<b>Age of first use (among people who have ever used cannabis)</b>				
Younger than 15 years	17.4 (15.1–19.8)	15.4 (13.4–17.4)	24.8 (22.8–26.7)	14.7 (13.1–16.4)
15–17 years	37.4 (34.3–40.6)	35.3 (32.4–38.2)	37.8 (35.9–39.8)	36.1 (33.4–38.7)
18–20 years	25.8 (23.2–28.4)	30.4 (27.4–33.5)	21.6 (19.7–23.6)	29.5 (27.1–31.9)
21 years or older	19.3 (17.0–21.6)	18.9 (16.4–21.4)	15.8 (14.3–17.3)	19.7 (17.7–21.7)
<b>Type of cannabis usually used (past-year cannabis users)</b>				
Leaf	36.1 (28.6–43.5)	19.5 (15.1–23.9)	13.4 (10.6–16.3)	28.9 (24.3–33.5)
Heads	36.3 (29.2–43.5)	46.2 (40.4–52.0)	36.0 (32.4–39.6)	43.8 (38.2–49.5)
Skunk	20.6 (15.0–26.2)	31.6 (26.1–37.1)	45.2 (40.7–49.7)	23.1 (18.2–28.1)
Hash oil	5.9 (2.3–9.6)	1.7 (0.2–3.1)	4.8 (2.6–7.0)	–
Hashish	–	–	–	–

Indicator	Female	Male	Māori	Non-Māori
<b>Mode of use of cannabis (past-year cannabis users)</b>				
Smoke as joints	50.5 (43.5–57.5)	59.9 (54.6–65.2)	64.1 (60.4–67.7)	54.3 (49.3–59.3)
Smoke from a pipe or bong	45.9 (38.9–53.0)	35.9 (30.7–41.1)	33.7 (30.0–37.4)	41.4 (36.4–46.4)
Smoke it with tobacco	3.2 (0.9–5.4)	2.3 (0.4–4.1)	1.9 (0.9–2.9)	2.7 (1.0–4.3)
Eat it	–	–	–	–
<b>Source of cannabis (past-year cannabis users)</b>				
Given free	96.6 (93.8–99.3)	90.3 (86.8–93.8)	90.6 (87.7–93.4)	92.9 (89.9–95.9)
Bought	41.1 (33.2–49.0)	50.9 (45.5–56.3)	47.2 (43.2–51.2)	47.5 (42.3–52.7)
Grown own	6.1 (1.6–10.6)	12.9 (9.1–16.7)	13.1 (9.8–16.4)	10.0 (6.4–13.5)
<b>Location of cannabis use (past-year cannabis users)</b>				
Private homes	87.1 (82.7–91.6)	83.3 (79.6–86.9)	74.7 (71.5–77.9)	86.9 (83.2–90.6)
Public places	43.7 (37.5–49.9)	51.8 (46.2–57.4)	53.4 (49.5–57.2)	47.7 (42.5–53.0)
Workplaces	5.1 (2.1–8.1)	6.6 (4.1–9.1)	8.2 (5.8–10.5)	5.5 (3.4–7.7)
<b>Perceived price of cannabis compared to a year ago (past-year cannabis users who had bought cannabis in the last year)</b>				
Higher	12.1 (6.1–18.0)	23.9 (16.6–31.2)	17.8 (13.5–22.1)	20.5 (14.6–26.5)
Same	68.8 (59.9–77.8)	63.5 (56.0–71.1)	71.0 (66.2–75.9)	63.8 (56.9–70.7)
Lower	6.6 (1.8–11.5)	5.8 (2.2–9.5)	5.2 (3.0–7.3)	6.4 (2.8–9.9)
Don't know	12.5 (4.6–20.4)	6.8 (3.0–10.5)	6.0 (3.4–8.6)	9.3 (4.8–13.9)
<b>Perceived availability of cannabis compared to a year ago (past-year cannabis users who had bought cannabis in the last year)</b>				
Harder	17.5 (9.7–25.4)	21.0 (14.0–27.9)	20.0 (15.0–25.0)	19.2 (13.3–25.1)
Same	41.9 (30.1–53.6)	51.8 (43.9–59.7)	42.9 (37.3–48.5)	50.0 (42.2–57.8)
Easier	35.1 (24.8–45.4)	22.4 (15.7–29.2)	32.8 (26.7–38.9)	25.5 (19.0–32.1)
Don't know	–	4.8 (1.2–8.5)	4.3 (1.9–6.7)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B19 summarises information about cannabis use in the last 12 months, by sex and ethnic group. These rates are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B19:** Indicators of cannabis use in the last 12 months, by sex and ethnic group, percent (crude)

Indicator	Female	Male	Māori	Non-Māori
<b>Age of first use (people who had ever used cannabis)</b>				
Younger than 15 years	16.2 (14.1–18.3)	14.3 (12.5–16.1)	26.1 (24.1–28.1)	13.0 (11.5–14.4)
15–17 years	35.8 (32.9–38.8)	33.9 (31.2–36.7)	39.1 (37.1–41.1)	34.0 (31.6–36.5)
18–20 years	27.0 (24.4–29.7)	31.5 (28.4–34.6)	21.0 (19.1–22.9)	31.1 (28.5–33.6)
21 years or older	21.0 (18.6–23.4)	20.2 (17.6–22.8)	13.8 (12.5–15.2)	21.9 (19.8–24.0)
<b>Average frequency of cannabis use (past-year cannabis users)</b>				
7 or more times a week	3.0 (1.1–4.9)	11.0 (7.6–14.5)	12.4 (9.9–15.0)	6.7 (4.2–9.3)
About 2–6 times a week	7.2 (4.6–9.9)	15.1 (10.9–19.3)	11.0 (8.6–13.4)	12.0 (8.9–15.1)
About once a week	7.1 (4.2–10.0)	7.1 (4.1–10.1)	8.3 (5.9–10.6)	6.9 (4.3–9.5)
About 1–3 times a month	11.7 (7.1–16.3)	15.7 (11.9–19.4)	12.7 (10.0–15.3)	14.5 (11.1–18.0)
Less than once a month	70.9 (65.7–76.1)	51.1 (45.6–56.7)	55.7 (51.1–60.3)	59.9 (55.4–64.4)
<b>Frequent cannabis use (≥ 10 times per month) (past-year cannabis users)</b>	7.3 (4.6–9.9)	21.6 (17.5–25.7)	20.4 (17.2–23.5)	14.5 (11.5–17.5)
<b>Binge use of cannabis (24 hours of continuous cannabis use at least once in last 12 months) (past-year cannabis users)</b>	7.6 (4.7–10.4)	17.7 (13.8–21.7)	17.3 (14.2–20.5)	12.9 (9.7–16.1)
<b>Type of cannabis usually used (past-year cannabis users)</b>				
Leaf	34.9 (28.1–41.8)	19.4 (15.2–23.6)	13.3 (10.6–16.1)	28.8 (24.3–33.3)
Heads	36.8 (30.2–43.4)	46.8 (41.2–52.4)	34.9 (31.4–38.5)	45.3 (39.7–50.9)
Skunk	21.4 (16.3–26.6)	31.3 (26.0–36.5)	46.3 (41.8–50.8)	22.1 (17.3–26.9)
Hash oil	5.8 (2.4–9.2)	1.6 (0.3–2.9)	4.8 (2.6–7.0)	–
Hashish	–	–	–	–

Indicator	Female	Male	Māori	Non-Māori
<b>Mode of use of cannabis (past-year cannabis users)</b>				
Smoke as joints	51.7 (45.2–58.1)	60.6 (55.7–65.6)	63.5 (59.8–67.2)	55.4 (50.8–60.1)
Smoke from a pipe or bong	44.6 (38.0–51.1)	35.5 (30.6–40.3)	34.2 (30.5–37.9)	40.4 (35.7–45.1)
Smoke it with tobacco	3.3 (1.0–5.5)	2.2 (0.4–3.9)	2.0 (1.0–3.0)	2.6 (1.0–4.3)
Eat it	–	–	–	–
<b>Location of cannabis use (past-year cannabis users)</b>				
Private homes	86.9 (82.8–91.0)	83.3 (79.9–86.8)	74.5 (71.3–77.7)	87.3 (83.8–90.9)
Public places	42.6 (36.9–48.4)	50.6 (45.2–55.9)	54.4 (50.5–58.3)	45.8 (40.6–51.0)
Workplaces	4.7 (2.1–7.3)	6.5 (4.3–8.8)	8.1 (5.7–10.5)	5.2 (3.3–7.2)
<b>Group size when using cannabis (past-year cannabis users)</b>				
Groups of two or more people	96.2 (94.3–98.1)	92.3 (89.8–94.8)	89.1 (86.9–91.3)	95.3 (93.3–97.4)
Alone	3.8 (1.9–5.7)	7.7 (5.2–10.2)	10.9 (8.7–13.1)	4.7 (2.6–6.7)
<b>Driving while feeling under the influence of cannabis (past-year cannabis users)</b>				
	27.5 (21.9–33.0)	46.7 (40.7–52.6)	44.2 (39.9–48.6)	38.2 (32.8–43.5)
<b>Source of cannabis (past-year cannabis users)</b>				
Given free	96.3 (93.7–98.9)	90.1 (86.5–93.7)	90.8 (88.0–93.6)	92.6 (89.5–95.7)
Bought	40.4 (33.2–47.5)	49.7 (44.5–54.9)	47.4 (43.4–51.3)	46.3 (41.2–51.4)
Grown own	6.2 (2.2–10.2)	13.7 (9.8–17.6)	12.9 (9.6–16.2)	10.7 (7.1–14.3)
<b>Purchase of cannabis from a tinny house (past-year cannabis users)</b>				
	52.9 (42.0–63.9)	44.6 (36.8–52.4)	60.9 (55.2–66.7)	43.2 (34.9–51.4)
<b>Perceived price of cannabis compared to a year ago (past-year cannabis users who had bought cannabis in the last year)</b>				
Higher	12.9 (7.2–18.6)	23.2 (16.4–30.0)	17.9 (13.7–22.2)	20.4 (14.6–26.3)
Same	68.5 (60.2–76.9)	63.4 (56.1–70.7)	70.7 (65.9–75.5)	63.3 (56.4–70.2)
Lower	6.1 (1.9–10.3)	6.0 (2.5–9.4)	5.4 (3.2–7.6)	6.2 (2.8–9.6)
Don't know	12.5 (5.4–19.6)	7.4 (3.3–11.6)	5.9 (3.3–8.6)	10.1 (5.3–14.8)

Indicator	Female	Male	Māori	Non-Māori
<b>Perceived availability of cannabis compared to a year ago (past-year cannabis users who had bought cannabis in the last year)</b>				
Harder	18.1 (10.8–25.4)	20.5 (14.1–26.9)	20.0 (15.0–25.0)	19.1 (13.3–24.9)
Same	42.7 (32.1–53.3)	52.0 (44.7–59.4)	42.3 (36.8–47.8)	51.1 (43.7–58.6)
Easier	33.5 (24.4–42.5)	22.5 (16.1–28.9)	33.3 (27.2–39.5)	24.3 (18.0–30.5)
Don't know	–	5.0 (1.3–8.7)	4.4 (1.9–6.8)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B20 summarises information about cannabis use in the last 12 months, by age group.

**Table B20:** Indicators of cannabis use in the last 12 months, past-year cannabis users, by age group, percent (crude)

Indicator	Age group (years)					
	13–17	18–24	25–34	35–44	45–54	55–65
<b>Type of cannabis usually used</b>						
Leaf	22.7 (14.2–31.3)	24.2 (17.2–31.3)	28.3 (20.6–36.0)	25.4 (16.0–34.8)	19.4 (2.4–36.4)	–
Heads	29.7 (19.6–39.7)	33.8 (26.3–41.3)	48.0 (39.4–56.6)	56.9 (47.9–65.9)	67.4 (48.0–86.9)	–
Skunk	42.8 (32.9–52.7)	36.5 (29.3–43.7)	19.0 (13.3–24.7)	16.3 (9.8–22.7)	–	–
Hash oil	–	4.0 (0.9–7.1)	–	–	–	–
Hashish	–	–	–	–	–	–
<b>Mode of use of cannabis</b>						
Smoke as joints	45.0 (35.0–54.9)	56.7 (49.0–64.3)	56.8 (49.6–64.0)	59.9 (51.0–68.9)	83.8 (72.9–94.7)	60.3 (26.3–94.4)
Smoke from a bong or pipe	51.0 (42.2–59.8)	40.6 (32.6–48.6)	36.2 (28.9–43.4)	38.8 (29.8–47.9)	13.5 (3.5–23.6)	–
Smoke it with tobacco	–	–	5.8 (1.5–10.1)	–	–	–
Eat it	–	–	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B21 summarises information about cannabis harm and help-seeking, by sex and ethnic group. These rates are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B21:** Indicators of cannabis harm and help-seeking, past-year cannabis users, by sex and ethnic group, percent (crude)

Indicator	Female	Male	Māori	Non-Māori
<b>Self-reported harmful effects from cannabis use in the last 12 months</b>				
Energy and vitality	20.4 (15.4–25.5)	26.5 (22.3–30.8)	30.2 (26.3–34.0)	22.3 (18.7–26.0)
Health	11.7 (8.0–15.3)	15.8 (12.2–19.4)	21.2 (17.8–24.5)	12.3 (8.9–15.8)
Financial position	7.1 (3.9–10.3)	12.7 (9.5–15.8)	15.3 (12.3–18.3)	9.0 (6.5–11.5)
Outlook on life	9.7 (5.8–13.7)	10.4 (7.6–13.2)	15.1 (12.0–18.2)	8.5 (5.8–11.3)
Friendships and social life	7.5 (4.2–10.8)	8.7 (6.0–11.4)	12.2 (9.4–15.1)	7.3 (4.8–9.8)
Home life	5.1 (3.0–7.2)	8.4 (6.0–10.8)	11.8 (9.5–14.1)	5.9 (4.0–7.8)
Work or work opportunities	4.4 (2.2–6.6)	7.8 (5.1–10.4)	11.0 (8.2–13.7)	5.0 (2.7–7.3)
Children's health or wellbeing	2.8 (1.2–4.4)	3.4 (1.1–5.7)	6.3 (4.1–8.6)	–
<b>Self-reported problems from cannabis use</b>				
Overall health problems*	10.6 (7.3–14.0)	13.8 (10.1–17.4)	16.5 (13.5–19.4)	11.6 (8.5–14.7)
Loss of motivation/energy	8.4 (4.8–12.0)	7.9 (4.8–11.1)	5.5 (3.7–7.4)	8.5 (5.6–11.3)
Memory loss	6.8 (4.1–9.6)	7.1 (4.5–9.6)	7.9 (5.8–10.0)	6.8 (4.8–8.9)
Other physical health-related problems	4.8 (2.7–6.9)	4.9 (2.7–7.1)	8.1 (6.0–10.3)	4.1 (2.2–5.9)
Feelings of paranoia	3.9 (1.9–5.9)	4.2 (2.1–6.3)	3.9 (2.3–5.5)	4.1 (2.3–5.9)
Relationship problems	2.6 (0.9–4.2)	4.7 (2.7–6.7)	5.1 (3.6–6.7)	3.2 (1.6–4.7)
In trouble with the law	–	4.4 (2.2–6.5)	3.4 (2.0–4.8)	3.1 (1.4–4.8)
Coughs or chest complaints	–	4.4 (1.3–7.5)	2.1 (0.9–3.3)	3.1 (0.7–5.5)
Problems with parents	2.2 (0.5–3.9)	2.3 (0.9–3.7)	3.2 (2.0–4.4)	–
Financial	–	2.7 (1.0–4.3)	2.0 (0.9–3.1)	–
<b>Ever received help to reduce level of cannabis use</b>	3.7 (1.9–5.5)	7.7 (5.2–10.1)	12.5 (10.0–15.0)	4.5 (2.7–6.3)

Note: A dash (–) indicates that numbers were too low for reliable estimation. \* Includes coughs or chest complaints, memory, loss, blackouts, other physical health-related problems. Numbers were too low for reliable estimation for the self-reported problems of job problems, wasting time, needing counselling or clinical treatment, having blackouts, needing more to get the same effect and having suicidal thoughts.

Table B22 summarises information about cannabis harm and help-seeking, by age group.

**Table B22:** Indicators of cannabis harm and help-seeking, past-year cannabis users, by age group, percent (crude)

Indicator	Age group (years)				
	13–17	18–24	25–34	35–44	45–54
<b>Self-reported harmful effects from the use of cannabis in the last 12 months</b>					
Energy and vitality	28.7 (18.4–38.9)	26.2 (20.1–32.2)	21.8 (14.8–28.7)	26.6 (19.1–34.1)	13.3 (2.6–24.0)
Health	18.1 (8.5–27.7)	16.1 (11.4–20.7)	13.3 (8.4–18.3)	12.2 (6.7–17.8)	–
Financial position	18.5 (10.3–26.8)	10.1 (6.7–13.6)	9.4 (4.8–13.9)	9.1 (4.3–13.9)	–
Outlook on life	8.5 (3.3–13.7)	14.5 (9.9–19.0)	8.6 (4.0–13.2)	9.8 (5.0–14.6)	–
Friendships and social life	10.9 (5.1–16.7)	11.9 (7.2–16.7)	3.9 (1.5–6.3)	6.9 (2.9–10.9)	–
Home life	11.0 (5.5–16.4)	8.5 (4.9–12.1)	3.5 (1.5–5.6)	8.9 (4.0–13.7)	–
Work or work opportunities	6.8 (2.5–11.1)	7.6 (4.1–11.1)	6.3 (2.3–10.3)	6.9 (2.9–10.9)	–
Children's health or wellbeing	–	–	4.3 (0.6–8.1)	3.9 (0.4–7.4)	–
<b>Self-reported problems from cannabis use</b>					
Overall health problems*	13.2 (6.4–20.0)	13.3 (8.8–17.8)	11.4 (7.5–15.2)	13.2 (7.2–19.3)	–
Loss of motivation/energy	3.9 (0.5–7.4)	8.2 (4.4–11.9)	8.2 (3.6–12.9)	12.1 (6.1–18.2)	–
Memory loss	9.8 (3.4–16.1)	7.1 (4.0–10.2)	6.8 (3.4–10.2)	6.1 (2.1–10.0)	–
Other physical health-related problems	6.3 (1.1–11.4)	4.0 (2.1–5.9)	4.1 (1.9–6.3)	7.8 (2.8–12.8)	–
Feelings of paranoia	–	2.7 (0.8–4.5)	4.6 (1.1–8.2)	5.8 (2.0–9.5)	–
Relationship problems	2.2 (0.4–4.0)	2.9 (0.2–5.7)	5.5 (2.3–8.7)	5.3 (1.3–9.4)	–
In trouble with the law	–	–	3.0 (0.6–5.4)	6.0 (1.6–10.3)	–
Problems with parents	6.2 (1.9–10.5)	2.6 (0.5–4.7)	–	–	–
<b>Ever received help to reduce level of cannabis use</b>	11.2 (5.3–17.1)	5.5 (3.1–7.9)	5.9 (3.0–8.8)	5.7 (1.9–9.5)	–

Note: A dash (–) indicates that numbers were too low for reliable estimation. \*Includes coughs or chest complaints, memory, loss, blackouts, other physical health-related problems. Numbers were too low for reliable estimation for the results for past-year cannabis users aged 55–65 years, and for all age-groups for the following self-reported problems: coughs or chest complaints, financial problems, job problems, wasting time, needing counselling or clinical treatment, having blackouts, needing more to get the same effect and having suicidal thoughts.

## Amphetamines

Table B23 summarises information about amphetamine use, by sex and ethnic group. These rates are presented as age-standardised estimates. Note that age-standardised estimates have no meaning by themselves; they are meaningful only when compared with other age-standardised estimates. Therefore, only use these age-standardised estimates to compare one population group with another.

**Table B23:** Indicators of amphetamine use, by sex and ethnic group, percent (age-standardised)

Indicator	Female	Male	Māori	Non-Māori
<b>Age of first use (people who have ever used amphetamines)</b>				
Younger than 15 years	3.7 (1.3–6.1)	–	5.6 (2.9–8.3)	–
15–17 years	26.7 (18.1–35.3)	19.4 (14.1–24.8)	25.0 (19.1–30.9)	21.3 (16.6–26.0)
18–20 years	34.2 (24.6–43.8)	33.7 (26.6–40.9)	29.6 (24.2–35.0)	35.0 (29.0–40.9)
21 years or older	35.4 (26.5–44.4)	44.4 (37.2–51.7)	39.8 (34.8–44.9)	41.3 (34.6–48.0)
<b>Location of use (past-year amphetamine users)</b>				
Private homes	87.8 (76.4–99.2)	66.2 (54.8–77.6)	84.7 (77.4–92.1)	70.7 (60.7–80.6)
Public places	63.2 (44.4–82.0)	61.5 (49.3–73.7)	30.8 (21.9–39.8)	67.7 (55.7–79.7)
Workplaces	–	6.6 (0.7–12.5)	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B24 summarises information about amphetamine use, by sex and ethnic group. These rates are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B24:** Indicators of amphetamine use, by sex and ethnic group, percent (crude)

Indicator	Female	Male	Māori	Non-Māori
<b>Age of first use (people who had ever used amphetamines)</b>				
Younger than 15 years	4.2 (1.5–6.8)	–	5.9 (3.0–8.8)	–
15–17 years	25.2 (17.3–33.0)	18.7 (13.8–23.5)	25.7 (19.7–31.7)	19.8 (15.5–24.2)
18–20 years	33.7 (24.7–42.7)	32.9 (25.8–39.9)	29.6 (24.1–35.1)	34.2 (28.4–40.1)
21 years or older	37.0 (28.4–45.5)	46.2 (39.1–53.3)	38.7 (33.7–43.8)	43.5 (36.7–50.3)
<b>Binge use of amphetamines (24 hours of continuous amphetamine use at least once in last 12 months) (past-year amphetamine users)</b>	23.2 (9.1–37.2)	30.6 (19.4–41.8)	36.1 (26.6–45.7)	26.9 (15.9–37.8)
<b>Typical mode of use (past-year amphetamine users)</b>				
Snort it in powder form	30.3 (11.9–48.6)	36.0 (25.2–46.9)	34.1 (25.0–43.1)	33.8 (22.8–44.8)
Swallow it in pill form	28.0 (10.8–45.1)	31.9 (20.3–43.4)	21.9 (14.3–29.5)	32.8 (21.6–44.0)
Smoke it	26.3 (9.8–42.9)	26.0 (17.4–34.6)	39.2 (30.0–48.5)	23.4 (14.2–32.7)
Swallow it in powder form	–	–	–	–
<b>Location (past-year amphetamine users)</b>				
Private homes	87.9 (77.8–98.0)	67.2 (56.1–78.2)	84.2 (76.7–91.7)	71.1 (61.3–80.9)
Public places	59.3 (40.8–77.7)	60.2 (48.3–72.1)	31.5 (22.6–40.4)	66.6 (54.4–78.8)
Workplaces	–	6.8 (1.0–12.6)	–	–
<b>Driving while feeling under the influence of amphetamines (past-year amphetamine users)</b>	16.9 (4.0–29.8)	31.5 (20.3–42.8)	37.4 (27.1–47.6)	25.4 (15.2–35.6)

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B25 summarises information about harmful effects from amphetamine use experienced in the last 12 months by past-year amphetamine users, by sex and ethnic group. These rates are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B25:** Indicators of harmful effects from amphetamine use in the last 12 months, past-year amphetamine users, by sex and ethnic group, percent (crude)

Indicator	Female	Male	Māori	Non-Māori
<b>Self-reported harmful effects from the use of amphetamines in the last 12 months</b>				
Energy and vitality	11.6 (4.1–19.0)	17.7 (8.8–26.6)	23.8 (15.5–32.0)	13.5 (5.6–21.4)
Health	–	12.5 (5.2–19.7)	15.5 (8.5–22.5)	–
Financial position	11.7 (2.7–20.8)	14.7 (7.2–22.1)	20.6 (12.8–28.4)	11.6 (4.7–18.5)
Outlook on life	7.5 (1.4–13.6)	11.0 (2.8–19.2)	18.9 (11.6–26.2)	–
Friendships and social life	–	10.7 (2.8–18.6)	13.7 (7.0–20.4)	–
Home life	–	6.6 (1.4–11.7)	11.2 (4.7–17.6)	–
Work or work opportunities	–	–	–	–
Children's health or wellbeing	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

## Ecstasy

Table B26 presents information about the location of ecstasy use in the last 12 months, by sex and ethnic group. These rates are presented as age-standardised estimates. Note that age-standardised estimates have no meaning by themselves; they are meaningful only when compared with other age-standardised estimates. Therefore, only use these age-standardised estimates to compare one population group with another.

**Table B26:** Location of ecstasy use in the last 12 months, past-year ecstasy users, by sex and ethnic group, percent (age-standardised)

Location of ecstasy use	Female	Male	Māori	Non-Māori
Private homes	76.0 (60.1–91.8)	52.9 (37.6–68.3)	57.8 (44.7–71.0)	62.0 (48.8–75.2)
Public places	72.0 (53.0–91.0)	71.5 (58.9–84.2)	71.5 (61.1–82.0)	71.8 (61.0–82.5)
Workplaces	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

Table B27 summarises information about ecstasy use, by sex and ethnic group. These rates are presented as crude estimates. Use these crude estimates if you want to know the actual burden experienced by the population of interest, but do not use them to compare one population group with another.

**Table B27:** Indicators of ecstasy use in the last 12 months, past-year ecstasy users, by sex and ethnic group, percent (crude)

Indicator	Female	Male	Māori	Non-Māori
<b>Binge use of ecstasy (24 hours of continuous ecstasy use at least once in last 12 months)</b>	21.4 (5.1–37.6)	25.6 (11.9–39.4)	32.6 (20.6–44.7)	22.9 (10.4–35.4)
<b>Location of ecstasy use</b>				
Private homes	75.4 (60.4–90.4)	55.1 (39.9–70.4)	58.4 (45.3–71.4)	63.0 (49.7–76.2)
Public places	72.8 (55.4–90.2)	69.9 (56.2–83.5)	71.1 (60.5–81.7)	70.9 (59.6–82.2)
Workplaces	–	–	–	–

Note: A dash (–) indicates that numbers were too low for reliable estimation.

# Appendix C: Definitions of Derived Variables

## Defining past-year drug users

This report has presented the prevalence of drug use in the last 12 months for a variety of different drugs. Because of some item non-response, several variables were used to define whether respondents had used specific drugs (marijuana, ecstasy and amphetamine) in the past year. These variables related specifically to the respondents' use of the drug in the past year.

All of the following respondents were defined as being past-year users of the specific drugs marijuana, ecstasy and amphetamine:

- respondents who reported they had used the drug at least once in the past year
- respondents who reported they had binged on the drug at least once in the past year
- respondents who reported they were using the drug less, the same, or more compared to a year ago
- respondents who answered the questions about the harmful effects they had felt from their use of that specific drug in the past year (by responding 'yes' or 'no' to these questions).

## Defining lifetime drug users

Several variables were also used to define whether respondents had ever used the drugs of marijuana, ecstasy and amphetamine.

The following respondents were classified as having ever used the drug:

- respondents who were past-year users of the drug
- respondents who reported that they had used the drug before
- respondents who reported an age when they had first used the drug.

Item non-response (refusal or responding 'don't know'), for the question of whether the respondent had ever tried the drug, was treated in the following way:

- if the respondent was classified as having ever used the drug according to the above criteria, they were included in the analysis
- if the respondent was not classified as having ever used the drug according to the above criteria:
  - for marijuana use, respondents who refused to answer the question about whether they had ever used marijuana, or replied 'don't know' to this question, were excluded from the analysis
  - for ecstasy and amphetamine use, respondents who refused to answer the question about which drugs they had ever used, or who responded 'don't know' to this question, were excluded from the analysis.

## Frequency of cannabis use

Table C1 provides the criteria used to calculate the frequency of cannabis use.

**Table C1:** Criteria used to define frequency of cannabis use

Frequency of cannabis use presented in report	Number of times of use in the last 12 months
7 or more times a week	350+
About 2–6 times a week	70–349
About once a week	40–69
About 1–3 times a month	10–39
Less than once a month	1–9

## Frequent use of cannabis

Frequent users of cannabis were defined as people who used cannabis on average at least 10 times a month. For the purposes of this analysis, this was defined as respondents who reported that they had used, or binged on, cannabis at least 120 times or more in the past year.