

# **Alcohol Use in New Zealand**

Key Results of the 2007/08 New  
Zealand Alcohol and Drug Use Survey

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MANATŪ HAUORA

## Foreword

This publication, *Alcohol Use in New Zealand*, is the first release of results from the 2007/08 New Zealand Alcohol and Drug Use Survey. It describes the key findings from the survey about alcohol use in New Zealand. A report presenting findings about other recreational drug use will be published in late 2009.

The New Zealand Alcohol and Drug Use Survey provides valuable information about the use of alcohol and other drugs by the New Zealand population. The survey tells us about New Zealanders' use of alcohol and other drugs, including the frequency of use, help-seeking behaviours, and the harms people experience from both their own use and from other people's use.

Alcohol and drug use cause a lot of harm in New Zealand, including to family and friends, at work, and to finances, as well as causing injuries, disease and death. It is important that the development of appropriate policy and services to address this harm is underpinned by an understanding of New Zealanders' drinking patterns.

This publication will be of interest to government agencies, crown organisations, non-government agencies, the Alcohol Advisory Council of New Zealand, researchers in the alcohol and related fields, educators, industry and the general public.

I would like to acknowledge and thank the many people who freely gave their time to take part in the 2007/08 New Zealand Alcohol and Drug Use Survey. This report would not have been possible without them.

I invite any feedback on the content, relevance and direction of this publication. Please direct any comments to Health and Disability Intelligence, Ministry of Health, PO Box 5013, Wellington.

Dr Mark Jacobs  
Director of Public Health  
Ministry of Health

## Authors

This report was written by Kylie Mason, Aloka Bhattacharya, Niki Stefanogiannis, Anthea Hewitt and Miranda Devlin, of Health and Disability Intelligence, Health and Disability Systems Strategy Directorate, Ministry of Health.

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# Executive Summary

## Introduction

Alcohol is the most commonly used recreational drug in New Zealand. While most New Zealanders enjoy alcohol moderately and socially, alcohol misuse results in increased mortality and morbidity, as well as considerable harm to society. The *National Drug Policy 2007–2012* (Ministerial Committee on Drug Policy 2007) aims to reduce the effects of harmful substance use (including alcohol, tobacco and recreational drugs) through measures including limiting the use of drugs by individuals, reducing harm from existing drug use, and controlling or limiting the availability of drugs. Regular monitoring of alcohol and drug use in the population is essential to observe trends over time and for developing appropriate policy and services to minimise harm (Ministerial Committee on Drug Policy 2007).

The 2007/08 New Zealand Alcohol and Drug Use Survey measured alcohol and drug use behaviours among over 6500 New Zealanders aged 16–64 years. The survey included questions about past-year use, frequency of use, harms related to the use of alcohol and drugs, help seeking for alcohol and/or drug use, and harms experienced due to other people's alcohol and/or drug use. The survey was carried out from August 2007 to April 2008 and had a weighted response rate of 60%.

This report presents the key findings from this survey about alcohol use in the New Zealand adult population. A publication reporting the findings about other recreational drug use by New Zealand adults will be released in late 2009.

## Key findings for adults

All results refer to the New Zealand population aged 16–64 years.

### Patterns of alcohol use

- Eight in ten (85.2%) adults had had an alcoholic drink in the past year.
- A small proportion of past-year drinkers (6.8%) drank alcohol every day, with European/Other people more likely to have consumed alcohol daily.
- The median age of having a first alcoholic drink was 16 years, among people who had ever tried alcohol. One in three (31.9%) people who had ever tried alcohol had their first drink when aged 14 years or younger.

### Moderating drinking behaviours

- Four in five past-year drinkers (78.9%) reported limiting the number of drinks consumed in an evening always or most of the time.
- Other moderating drinking behaviours used by past-year drinkers, always or most of the time, included making a point of consuming food with alcohol (70.1% of past-year drinkers), refusing an alcoholic drink offered because of not really wanting it (58.9%) and counting the number of drinks consumed when drinking (53.8%). Women were more likely than men to use moderating drinking behaviours.

## **Risky drinking behaviours**

- Three in five (61.6%) past-year drinkers had consumed a large amount of alcohol<sup>1</sup> on at least one occasion in the past year, with men more likely than women to have done so.
- One in eight (12.6%) past-year drinkers had consumed a large amount of alcohol on one drinking occasion at least weekly in the past year. The prevalence was highest among male past-year drinkers aged 18–24 years, with one in three (33.8%) having consumed a large amount of alcohol at least weekly.
- One in ten (13.9%) people who had ever consumed a large amount of alcohol on a drinking occasion had done so when aged 14 years or younger.
- One in five (19.8%) past-year drinkers reported having driven while feeling under the influence of alcohol in the past year, while 11.2% reported having worked while feeling under the influence of alcohol in the past year.
- One in eight (12.2%) past-year drinkers had used cannabis while drinking alcohol, at least once in the past year, and 10.6% of past-year drinkers had used pain-killers, sedatives or anti-depressants at the same time as drinking alcohol, at least once in the past year.

## **Help-seeking behaviours**

- In the past year, 1.3% of adults had received help to reduce their level of alcohol. About 1.2% of adults had wanted help to reduce their level of alcohol use in the past year but had not received it.
- About 3.6% of adults aged 16–64 years reported that they had ever received help to reduce their level of alcohol use at some point during their lifetime.
- Among people who had ever received help to reduce their level of alcohol use, the most common places for receiving help were from drug and alcohol counsellors (48.1%), friends or family members (29.9%), general practitioners (21.1%) and detox programmes (19.3%).
- One in forty adults (2.4%) reported that they had wanted help to reduce their level of alcohol use but had not received it, at some point in their life.
- Among people who had ever wanted help but not received it, the most common reasons for not getting help were fear (31.2%), not knowing where to go (28.4%) and social pressure (23.2%). Other reasons included not being able to get an appointment at the right time or soon enough (9.0%), cost (8.2%), not being able to spare the time (7.4%), having no transport to get there (6.3%) and having no local services available (4.8%).

<sup>1</sup> A large amount of alcohol is defined in this report as drinking more than six (for men) or four (for women) standard drinks on one drinking occasion.

## Harmful effects due to alcohol use

- The most common harmful effects experienced by adults in the past year *due to their own alcohol use* were:
  - harmful effects on friendships or social life (6.9% of adults aged 16–64 years)
  - having days off work or school (5.6%)
  - harmful effects on home life (5.4%)
  - harmful effects on financial position (5.4%)
  - having injuries (4.7%).
- The most common harmful effects experienced by adults in the past year *due to someone else's alcohol use* were harmful effects on friendships or social life (16.0% of adults aged 16–64 years), on home life (8.5%) and on financial position (3.6%).
- One in twenty-five (4.1%) adults reported having been assaulted (physically and/or sexually) as a result of actual force or violence by someone who was under the influence of alcohol or drugs, in the past year.
- A small proportion of adults (1.2%) reported having been involved in a motor vehicle accident due to someone else's alcohol use in the past year.

## Alcohol and pregnancy

- About one in four (28.7%) women who had been pregnant in the past three years reported that they had consumed alcohol while pregnant. European/Other women were significantly more likely to have consumed alcohol while pregnant than the overall rate, while Pacific and Asian women were significantly less likely.
- Seven in ten (68.0%) women who had been pregnant in the past three years had been advised not to drink alcohol when pregnant. Pacific and Asian women were significantly less likely to have been advised not to drink when pregnant compared with the overall rate.

## Time trends

- There were no significant changes in the prevalence of drinking alcohol in the past year among the total population aged 16–64 years in the 11-year period from 1996/97 to 2007/08, adjusted for age. There were also no significant changes by gender in past-year alcohol use for 16–17-year-olds from 1996/97 to 2007/08. However, for Māori and Pacific men and women there had been significant increases in past-year alcohol consumption since 1996/97.
- Further analyses of the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys were carried out to examine trends over time in the prevalence of hazardous drinking, as measured by the Alcohol Use Disorders Identification Test (AUDIT). There had been no significant changes in the prevalence of hazardous drinking among past-year drinkers aged 16–64 years from 1996/97 to 2006/07 in the total population, in men or women, or for Māori or Pacific peoples (when adjusting for age), or in the age groups 16–17 years or 18–24 years.



## Key findings for specific population groups

The following results refer to the key population groups of youth, Māori and Pacific peoples, who are identified in the National Drug Policy as being at greater risk of experiencing harms from the use of alcohol and other drugs. Results are also presented for people living in neighbourhoods of high deprivation, who also appeared to be at greater risk. These results should be interpreted within the context of the broader determinants of health, which include the social and physical environment, socioeconomic status, inequalities in the distribution of and access to material resources such as health care, and other determinants of health (such as education, employment and housing).

### Youth aged 16–17 years

- Eight in ten (79.6%) people aged 16–17 years had consumed alcohol in the past year. There was no significant change in the prevalence of past-year drinking from 1996/97 to 2007/08 in this age group.
- Among past-year drinkers, those aged 16–17 years generally consumed alcohol less frequently than those aged 18–64 years. One in three (35.8%) past-year drinkers aged 16–17 years had consumed alcohol at least weekly in the past year.
- Three in five (59.0%) past-year drinkers aged 16–17 years had consumed ready-to-drink beverages (RTDs) in the past year, which was a much higher prevalence than for past-year drinkers aged 18–64 years (20.5%).
- One in eight (12.6%) past-year drinkers aged 16–17 years had consumed a large amount of alcohol at least weekly in the past year, which was the same prevalence as for past-year drinkers aged 18–64 years. The prevalence was similar for males and females aged 16–17 years.
- For females, the prevalence of having been drunk when aged 14 years or younger was highest in the 16–17 years age group, with 31.6% of females aged 16–17 years having been drunk when they were 14 years or younger.
- Past-year drinkers aged 16–17 years were significantly more likely to use the moderating drinking behaviour of only drinking low-alcohol drinks (31.0%) ‘always’ or ‘most of the time’ than past-year drinkers aged 18–64 years (10.6%). However, among past-year drinkers, 16–17-year-olds were less likely than 18–64-year-olds to have used several of the other moderating drinking behaviours.
- The prevalence of having ever received help to reduce the level of alcohol use was low (0.8%) among people aged 16–17 years. Two percent of people aged 16–17 years had ever wanted help to reduce their level of alcohol use at some point in their life but not received it.
- Overall, people aged 16–17 years experienced higher rates of harmful effects in the past year due to *their own* alcohol use than people aged 18–64 years. People aged 16–17 years had a high prevalence of having had injuries (15.0%) and having experienced harmful effects on their financial position (10.5%), friendships or social life (10.1%), and work, study or employment (9.2%) in the past year, due to their own alcohol use.

- One in four people aged 16–17 years had experienced harmful effects on their friendships or social life in the past year due to *someone else's* drinking (23.0%). The prevalence of having experienced assault (physical and/or sexual) in the last year due to someone else's use of alcohol or drugs was relatively high among males aged 16–17 years (9.9%).

## **Māori**

- From 1996/97 to 2007/08 there was a significant increase in the prevalence of past-year alcohol consumption for both Māori men and Māori women, adjusted for age. In 2007/08 there was no significant difference between Māori and non-Māori in the prevalence of past-year drinking.
- Māori past-year drinkers generally consumed alcohol less frequently than non-Māori past-year drinkers.
- However, among past-year drinkers, Māori consumed a large amount of alcohol on a drinking occasion more frequently than non-Māori. One in four Māori past-year drinkers had consumed a large amount of alcohol at least weekly in the past year (23.9%).
- Among people who had ever consumed alcohol, the majority of Māori had started drinking alcohol when they were aged 15–17 years or 18–20 years, similar to non-Māori. However, Māori were significantly more likely than non-Māori to have started drinking alcohol when they were 14 years or younger. Māori were also more likely than non-Māori to have first consumed a large amount of alcohol when aged 14 years or younger.
- Overall, 2.4% of Māori aged 16–64 years had received help to reduce their level of alcohol use in the past year, and a further 2.4% had wanted help to reduce their alcohol use in the last year but had not received it.
- Māori, and particularly Māori women, were significantly more likely to have experienced harmful effects (eg, on their friendships or social life, home life and/or financial position) from their own alcohol use in the last year compared with non-Māori.
- Māori women were significantly more likely than non-Māori women to have experienced harmful effects in the past year due to someone else's alcohol use. In particular, Māori women were almost four times more likely to have experienced assault (physical and/or sexual) in the past 12 months due to someone else's use of alcohol or drugs than non-Māori women, adjusted for age.

## **Pacific peoples**

- Pacific peoples were much less likely to have consumed alcohol in the past year than other people, with 61.2% of Pacific peoples having consumed alcohol in the past year.
- Pacific men were significantly more likely to have consumed alcohol in the past year than Pacific women.
- The prevalence of past-year alcohol consumption increased significantly from 1996/97 to 2007/08 for both Pacific men and Pacific women.

- Pacific peoples generally were less likely to have first started drinking when aged 14 years or younger than non-Pacific peoples.
- Among past-year drinkers, Pacific men were significantly more likely than non-Pacific men to have consumed a large amount of alcohol on a drinking occasion in the past year. There was no significant difference between Pacific and non-Pacific women.
- Overall, 4.2% of Pacific peoples aged 16–64 years had received help to reduce their level of alcohol use in the past year. A further 3.6% had wanted help in the past year to reduce their level of alcohol use but not received it. Among past-year drinkers, Pacific men were over four times more likely to have received help or to have wanted help but not received it in the past year than non-Pacific men, when adjusted for age.
- Among past-year drinkers, Pacific men were significantly more likely than non-Pacific men to have experienced harmful effects on their friendships or social life, or on their home life in the past year, due to their own alcohol use.

### **People living in more socioeconomically deprived neighbourhoods**

Compared with people living in the least deprived neighbourhoods, people living in more deprived neighbourhoods, after adjusting for age, were:

- less likely to have consumed alcohol in the past year
- less likely to use moderating drinking behaviours ‘always’ or ‘most of the time’ (among past-year drinkers)
- more likely to have consumed a large amount of alcohol at least weekly in the past year (among past-year drinkers)
- more likely to have received help to reduce their level of alcohol use in the last year
- more likely to have wanted help in the past year to reduce their level of alcohol use but not received it
- generally more likely to have experienced harmful effects in the last year due to their own alcohol use
- more likely to have experienced harmful effects on their home life in the past year due to someone else’s alcohol use
- more likely to have experienced assault (physical and/or sexual) in the past 12 months due to someone else’s use of alcohol or drugs.

### **Conclusions**

This report has shown that alcohol continues to affect the lives of many people in New Zealand. The survey results show that some population groups – in particular, younger people, Māori, Pacific men and people living in more deprived neighbourhoods – are more likely to have higher than recommended consumption levels, to engage in risky drinking behaviours and to experience disproportionate amounts of harm due to alcohol use. Given that the effects of alcohol use and risky drinking include health problems (including injuries), social harms and financial harms, it will continue to be important to address alcohol-related harm in New Zealand, and in particular to address the existing disparities.



# Part A: Introduction

## Chapter 1: Introduction and methods

Alcohol is the most commonly used recreational drug in New Zealand. While most New Zealanders enjoy alcohol moderately and socially, alcohol misuse results in increased mortality and morbidity, as well as considerable harm to society. The *National Drug Policy 2007–2012* (Ministerial Committee on Drug Policy 2007) aims to reduce the effects of harmful substance use (including alcohol, tobacco and recreational drugs) through measures including limiting the use of drugs by individuals, reducing harm from existing drug use, and controlling or limiting the availability of drugs. Regular monitoring of alcohol and other drug use is essential to observe trends over time and for developing appropriate policy and services to minimise harm (Ministerial Committee on Drug Policy 2007).

This report presents the key descriptive results about alcohol use from the 2007/08 New Zealand Alcohol and Drug Use Survey. The report includes analyses of past-year use, frequency of use, harms related to the use of alcohol, help-seeking for alcohol use, and harms experienced due to other people's alcohol use. Descriptive results are also presented separately for the key population groups of youth, Māori and Pacific peoples, as identified in the National Drug Policy. The overall key findings of this report are summarised and discussed in the final chapter. Another publication will report the findings on other recreational drug use among the New Zealand adult population.

This report will be of interest to government agencies such as the Ministry of Health, Ministry of Justice and Department of Labour; Crown organisations such as the Law Commission and ACC; non-government agencies such as the Alcohol Advisory Council of New Zealand (ALAC); and researchers in the alcohol and related fields, educators, industry and the general public.

### Overview of the survey

The 2007/08 New Zealand Alcohol and Drug Use Survey (NZADUS) was carried out from August 2007 to April 2008, collecting information on 6784 New Zealanders aged 16–64 years. The survey included 1825 Māori and 817 Pacific respondents.

The 2007/08 NZADUS measured self-reported alcohol and drug use behaviours among the usually resident New Zealand population living in private dwellings. The survey included questions about past-year use, frequency of use, harms related to the use of alcohol and drugs, help-seeking for alcohol and/or drug use, and harms experienced due to other people's alcohol and/or drug use.

A final weighted response rate of 60% was achieved for the survey, with similar rates of participation across ethnic groups. This response rate is lower than the standard normally aimed at for New Zealand Health Monitor surveys of 70%. However, given the subject of the questionnaire, the response rate was considered a reasonable outcome.

All results have been weighted in order to be representative of New Zealand's estimated resident population living in permanent private dwellings.

This chapter covers the following topics:

- Why do a survey?
- What questions were asked?
- How were survey participants selected?
- Who agreed to take part?
- How well does the survey represent the total population?
- What has been analysed and reported?
- What is the quality of these results?
- Key points for interpreting these results.

## **Why do a survey?**

The 2007/08 NZADUS is a key component of the New Zealand Health Monitor, an integrated programme of household surveys and cohort studies, which is managed by Health and Disability Intelligence (HDI, formerly Public Health Intelligence) and monitors the health of the New Zealand population (Ministry of Health 2005). The 2007/08 NZADUS is valuable because it collected information on New Zealanders' alcohol and drug use behaviours that is not available through other means, such as analyses of health system records. For most of the topics in this report the NZADUS is the best current source of information at a population level.

HDI developed the objectives and content of the 2007/08 NZADUS, in consultation with stakeholders and an external technical group. The data collection was carried out by a specialist survey company, CBG Research Ltd, which undertook the interviewing and prepared the data sets. HDI led the analysis and dissemination of the data.

The key objectives of the survey were to provide information on the:

- prevalence of the use of alcohol, illicit and other drugs for recreational purposes in the resident New Zealand population aged 16–64 years
- quantity and frequency of alcohol use, by type
- frequency of risky drinking
- frequency of illicit and other drug use for recreational purposes, by type of drug
- types of harm to self from own alcohol and drug use
- types of harm to self from others' alcohol and drug use
- risk-taking and help-seeking behaviour for alcohol and illicit drug use
- unmet need for related services
- differences between population groups categorised by age (16–17, 18–24, 25–34, 35–44, 45–54, 55–64 years), gender, ethnicity (Māori, non-Māori) and socioeconomic position.

## What questions were asked?

The 2007/08 NZADUS collected information on the broad topics of alcohol use, drug use and sociodemographics (see Table 1 for a summary). Where possible, questions were sourced from previous surveys. The full questionnaire for the 2007/08 NZADUS is available online ([www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09](http://www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09)).

**Table 1:** Summary of the content of the 2007/08 New Zealand Alcohol and Drug Use Survey

Module	Topics
Alcohol use	Past-year alcohol use (including frequency of use in past year, types of alcohol consumed, age of first use), amount consumed on typical drinking occasion, risky drinking, risk-taking behaviour, harms and health problems due to alcohol use, moderating drinking behaviours when drinking, receiving help for alcohol use, unmet need for help
BZP use	Past-year BZP party pill use (including frequency of use in past year, age of first use), typical occasion, risk-taking behaviour, harms and health problems due to BZP use, receiving help for BZP use, unmet need for help
Cannabis use	Cannabis use (including frequency of use in past year, age of first use), risk-taking behaviour, harms and health problems, receiving help for cannabis use, unmet need for help
Amphetamine use	Amphetamine use (including frequency of use in past year, age of first use), risk-taking behaviour, harms and health problems, receiving help for cannabis use, unmet need for help
Other drug use	Use of other drugs (eg, frequency of use in past year, age of first use), risk-taking behaviour, harms and health problems, receiving help for drug use, unmet need for help
Needle use	Use of needles (ever and in last 12 months)
Harm caused by other people's alcohol and drug use	Harmful effects due to someone else's alcohol use (on friendships or social life, home life, financial position), been involved in motor vehicle accident or other accident that involved someone else's drinking, assaulted by someone while they were under the influence of alcohol and/or drugs
Alcohol and drug use while pregnant or breastfeeding	Use of alcohol or other drugs while pregnant or breastfeeding
Sociodemographic and related questions	Sex, age, ethnic groups, education, income, income support, employment, tobacco use

Note: BZP = benzylpiperazine

## How were survey participants selected?

### Overview of the sample design

Like other surveys in the New Zealand Health Monitor, the 2007/08 NZADUS used a multi-stage, stratified, probability proportional to size (PPS) sample design, with increased sampling of some ethnic groups, primarily through a 'screened' sample. This sample design was developed by the Centre for Statistical and Survey Methodology, University of Wollongong, New South Wales, Australia.

Small geographic areas (meshblocks) were randomly chosen throughout New Zealand, with larger areas having a slightly increased chance of selection. Both the core and screened samples were drawn from the same selection of meshblocks. The core sample was drawn by selecting an average of 10 households from each meshblock, using a systematic selection and interviewing one adult aged 16–64 years randomly selected from the household. The screened sample was drawn by selecting 10 further households using a systematic random selection from each meshblock and conducting a screening interview with one adult randomly selected from the household. If the selected adult belonged to the target population group (eg, of Māori or Pacific ethnicity), then the full interview was conducted. There was no substitution of households or participants if the selected household or participant refused, was not contactable or was unavailable.

The sample design ensured that:

- robust national estimates for key indicators of alcohol and recreational drug use could be produced
- all population groups of interest, in particular, Māori and Pacific peoples, were included in sufficient numbers to enable estimates that are accurate for all groups and allow enough depth of analyses for all groups
- interviewer travel costs were reduced because the sample was geographically clustered or ‘clumped’.

It should be noted that Pacific peoples were necessarily treated as one group, rather than as separate nations, due to sample size issues.

A full methodology report for the 2007/08 NZADUS will be made available online ([www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09](http://www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09)).

## **Data collection**

Interviews for the 2007/08 NZADUS were conducted from August 2007 to April 2008, with no surveys being carried out over the Christmas – New Year period, or on Easter Friday or Easter Sunday. The interview team consisted of approximately 98 CBG Health Research Limited interviewers.

Participation in the 2007/08 NZADUS was voluntary, relying on the goodwill of participants, and consent was obtained without coercion. Due to a low response rate a trial was carried out during the final two months of the survey whereby a small number of respondents were offered a small incentive to complete the survey questionnaire in order to increase participation in the survey. All people selected for the survey were given a letter of invitation from the Ministry of Health and an information brochure. If they agreed to take part, they were asked to sign a consent form.

Interviews were conducted in respondents’ homes. The survey was administered in three parts. The first part of the survey was carried out using a face-to-face computer-assisted personal interview (CAPI), with the interviewer asking questions on alcohol and BZP party pill use. Interviewers typed responses directly into a laptop computer, and show cards with predetermined response categories were used to assist the participant



where appropriate. The second part of the interview involved questions on sensitive topics related to personal patterns of alcohol and drug use, and this was completed by participants on the laptop computer (using audio computer-assisted self-interview, or A-CASI). The third and final part of the questionnaire was conducted by the interviewer using the CAPI method, and covered standard demographic questions, as well as re-contact details in case of follow-up surveys.

### **Ethical approval**

The New Zealand Health and Disability Multi-Region Ethics Committee granted approval for the 2007/08 NZADUS (MEC/07/03/034), confirming that the study met the following ethical principles:

- validity of research
- minimisation of harm
- privacy and confidentiality
- informed consent
- cultural and social responsibility.

The Ethics Committee approved the wording of all public materials from the survey, including the invitation letter, information brochures, consent form, pre-testing version of the questionnaire and thank you cards. The Ethics Committee also later approved the use of a small incentive to encourage non-responders to participate in the survey in order to increase the sample size and improve the response rate.

### **Who agreed to take part?**

A total sample size of 6784 interviews was achieved, with a weighted response rate of 60%. This included 1825 Māori respondents and 817 Pacific respondents.

### **How well does the survey represent the total population?**

Survey 'weights' were used in all of the results presented in this report so that estimates of population totals, averages and proportions can be said to be representative of the total resident population of New Zealand. Survey weights can be thought of as the number of population members represented by each survey participant. Using weights in analyses ensures that no population group is under- or over-represented in estimates from the survey. The process used to calculate the survey weights is described in more detail below.

### **Weighting**

A method called 'calibrated weighting' (Deville and Sarndal 1992) was used for calculating a survey weight for every respondent in the 2007/08 NZADUS. This results in:

- the survey weights being close to the inverse of the probability of selection of each participant
- the aggregated weights matching the known population counts for a range of sub-populations (eg, age-by-gender categories).

Calibrated survey weights were calculated using population counts from the 2006 Census, broken down by age, gender and ethnic group, and adjusted to 2008 population estimates. These variables were included in the calibration weighting because they are related to many health conditions and non-response, and are the output classifications for the survey. By using these variables in the calibration, the weighting corrects for the discrepancy if the sample differed from the population according to any of these categories. For example, if young men are under-represented in the sample relative to the census counts (as can often be the case due to non-response), the survey weights for young male participants are increased so that this group is correctly represented in estimates.

## **What has been analysed and reported?**

This report presents the key descriptive results on alcohol use from the 2007/08 NZADUS. These include data on key alcohol-related topics, particularly those that align with the Ministry of Health's priority monitoring and policy areas, as stated in the *New Zealand Health Strategy* (Minister of Health 2000) and the *National Drug Policy 2007–2012* (Ministerial Committee on Drug Policy 2007).

Data in this report have been presented for the total adult population aged 16–64 years, by gender and age group. Analyses by ethnic group, neighbourhood deprivation (NZDep2006) and over time have also been reported where possible. Specific chapters on the key population groups identified in the National Drug Policy (youth, Māori and Pacific peoples) have also been included in this report in Part F.

Important information about the analyses presented in this report is discussed below.

### **Gender analyses**

Data in this report have been presented by gender. Where statements regarding differences between genders are made, the data have been age-standardised to account for the different age structures of the male and female populations.

### **Ethnic group analyses**

Ethnicity is self-defined, and in the survey questionnaire respondents were able to report affiliation with up to nine different groups, using the Statistics New Zealand standard ethnicity question and Level 4 response categories.

In this report, descriptive results have been presented by *total response ethnic group*. This involves each person being allocated to all of the following four main ethnic groups they have identified with: European/Other, Māori, Pacific and Asian. These ethnic groups are the most appropriate for representing valid multiple ethnic group data in the restricted space of this report (Callister et al 2007). In analyses presented in this report, the 'Other' ethnic group (comprising mainly Middle Eastern, Latin American and African ethnicities) has been combined with 'European' due to small numbers in this group.

Using total response ethnicity can result in overlapping groups, where one person is included in several ethnic groups. For this reason, rate ratios are presented that compare each ethnic group with the total New Zealand adult population by gender (ie, the reference group). The reference group does not represent 'the best health outcome group', but provides an indication of the current level in New Zealand for comparison. Readers should note that ethnic groups should not be compared with each other (eg, comparing Māori and Pacific data) using these analyses. An example of how to interpret a rate ratio graph has been provided at the end of this chapter.

This report also presents the unadjusted prevalence rates for total response ethnic groups for most indicators, both to show the burden on different population groups and to present population counts of the number of people affected.

Specific chapters are also presented for Māori and Pacific peoples, who are the key population groups identified in the National Drug Policy. In these chapters, results have been presented for the ethnic group compared with the rest of the population. For example, Māori are compared with non-Māori and Pacific peoples are compared with non-Pacific peoples. For these analyses total response ethnic groups have again been used; that is, everyone who identified with being of Pacific ethnicity has been included as Pacific, and everyone else has been included as non-Pacific.

### **Socioeconomic deprivation analyses**

Analyses in this report have been presented by neighbourhood socioeconomic deprivation, as measured by the NZDep2006 Index of Deprivation (NZDep2006) quintiles. NZDep2006 is an area-based index of deprivation that measures the level of socioeconomic deprivation for each neighbourhood (meshblock) according to a combination of the following 2006 Census variables: household income, means-tested benefit status, access to car, household crowding, home ownership, unemployment, qualifications, sole-parent families and access to a telephone (Salmond et al 2007).

The predecessors of NZDep2006 (NZDep91, NZDep96 and NZDep2001) have been validated. This means that the index accurately describes levels of deprivation in small areas and is highly correlated with key health outcomes and behaviours, such as mortality and smoking (Crampton et al 2004).

All analyses using NZDep2006 in this report have been adjusted for the differing age distributions within NZDep2006 quintile populations and are presented as age-standardised rates (as described below).

### **Age-standardised rates**

Unadjusted rates have been presented in this report for estimates of the prevalence in the total population and by age group. However, age is an important determinant of health, so populations with different age structures (such as men and women, due to women having a longer life expectancy) will have different rates due to these age differences.

The statistical method of standardising for age has been used to adjust for the effects of any differences in the age distributions within population groups for some analyses. For this report, age standardisation was performed by the direct method using the World Health Organization (WHO) world population age distribution (Ahmad et al 2000). This allows for time trend comparisons and comparisons across different population groups.

### **Population estimates**

Population estimates have been given for some analyses. These numbers reflect the estimated number of people affected by the outcome in the total population aged 16–64 years. However, readers should be aware that the survey only covered the usually resident population living in permanent private dwellings, and so did not include people living in institutions (such as prisons, hospitals, IHC and rest homes, and boarding schools), the homeless, short-term visitors and tourists. Given that these people are not included in the analyses, the estimated populations presented in this report may be an underestimate of the total number of people in New Zealand experiencing alcohol-related harm.

### **Time trend analyses**

This survey is the first national survey of alcohol and drug use carried out by face-to-face interviews in the New Zealand adult population. Previous national Health Behaviours Surveys on alcohol and drug use were carried out on the population aged 12–65 years by the Centre for Social and Health Outcomes Research and Evaluation (SHORE) and Te Ropu Whariki (Massey University). These surveys, which included a 2003 survey on drug use and a 2004 survey on alcohol use, were computer-assisted telephone interviews (CATI).

There are a number of differences between the Health Behaviours Surveys and the Alcohol and Drug Use Survey which limit comparability between these surveys. Firstly, the change in survey collection mode from the telephone interviews of the Health Behaviour Surveys to the face-to-face interviews of the 2007/08 NZADUS has meant any changes seen in prevalence estimates may be due to the different mode of collection rather than to an underlying change in prevalence. As a result, interpretation of time trend analyses is difficult, and it is therefore not possible to make robust comparisons over time.

Furthermore, there were changes made to the questionnaire and the wording of some of the questions of the Health Behaviours Surveys for the NZADUS, in consultation with internal and external stakeholders. This change in questions means that reliable comparisons cannot necessarily be made between the surveys. It should also be noted that the age range of respondents has changed from 12–65 years in the Health Behaviours Surveys to 16–64 years in the NZADUS.

For this reason, only a small number of time trend analyses have been presented in this publication. These comparisons use data from the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys, which used similar survey methodologies to the 2007/08 NZADUS. Time trends analyses presented in this report include the prevalence of past-year alcohol consumption from 1996/97 to 2007/08, and the prevalence of hazardous drinking patterns among past-year drinkers from 1996/97 to 2006/07 (included in Appendix 2). Further information about these analyses of previous New Zealand Health Surveys is provided below.

It is intended that future surveys will examine alcohol and drug use using a methodology consistent with the NZADUS in order to give reliable estimates.

### **Analyses of New Zealand Health Survey data**

Previous New Zealand Health Surveys in 1996/97, 2002/03 and 2006/07 collected data on the adult population aged 15 years and over, including alcohol use and hazardous drinking. Data from these New Zealand Health Surveys and the 2007/08 NZADUS have been used in the time trend analyses in this report for prevalence of past-year alcohol consumption.

Results on hazardous drinking (using the Alcohol Use Disorders Identification Test, or AUDIT) from the New Zealand Health Surveys have also been presented in Appendix 2. Although the AUDIT was not included in the 2007/08 NZADUS, these AUDIT results have been included to provide further recent information about hazardous alcohol consumption and to complement the results presented in the body of this report.

To ensure as much comparability as possible, all earlier data sets have been reanalysed (including limiting the data sets to 16–64-year-olds and reweighting the data sets), and only identical questions or measurements have been analysed and presented. Although care was taken to ensure that only questions with the same wording were used to assess changes in indicators, caution is required when comparing the results as other factors (such as question order) can influence responses to an unknown extent.

Furthermore, comparisons between the 1996/97, 2002/03 and 2006/07 New Zealand Health Survey results for AUDIT must be interpreted with caution because the administration of the standard AUDIT forms was different between surveys. In 1996/97 the AUDIT instrument was self-administered, whereas in 2002/03 and 2006/07 it was interviewer-administered. Although this instrument is suitable for self-administration or administration by a trained interviewer in person or by telephone (Babor et al 2001) it is not known what effect this change might have had on the responses in the different surveys.

Direct comparisons with other data that are not included in the time trend analyses in this report need to be treated with caution due to differences in the methods used in the collection and analysis of data.

## **Small numbers**

Small numbers can affect both the reliability and the confidentiality of results. Problems with reliability generally arise when the denominator (the number of people in the sample for a population group) is small, and consequently random variation is high, resulting in estimates that may change substantially if the survey were repeated. Problems with confidentiality can occur when it becomes possible to identify an individual, usually someone in a sub-group of the population within a small geographical area.

In order to ensure the survey data presented are reliable and that the confidentiality of the participants is protected, data have only been presented when the sample size in the denominator of a rate is at least 30. In most cases this has meant presenting the data in a sufficiently aggregated form and, in a small number of cases, has meant suppressing results for some cells in a table presented. Care has been taken to ensure that no participant can be identified in the results.

## **What is the quality of these results?**

As a signatory to the Protocols of Official Statistics, HDI has used best-practice survey techniques throughout the 2007/08 NZADUS. Many steps have been taken to ensure that data collected are as high quality and robust as possible, including the establishment of advisory groups to advise on questionnaire content. External peer review of the sample design and this report has contributed to maintaining the high quality of the survey.

However, readers should be aware that errors can come about due to sampling errors (selection of only some people in a population) and for other reasons (non-sampling errors). The quantifying of sampling errors and the prevention of non-sampling errors is discussed below.

## **Sampling error**

Sampling error results from selecting a small number of people (a sample) in the population to represent the entire population, and is influenced by the complex design of the survey (resulting in some people having a higher chance of selection than others). That is, the estimates in this survey may differ from those estimates that would have been produced if all the information had been obtained for all the people in the population. Sample errors for survey estimates from this survey were calculated using a replicate method, called the delete-a-group jackknife method (Kott 1998).

## **95% confidence intervals**

### **For prevalence estimates**

Ninety-five percent confidence intervals have been used in this report to quantify the sample errors for 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. It should be noted that the confidence interval is influenced

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

Ninety-five percent confidence intervals have been presented in brackets after estimates in the text and as error bars in graphs. 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 (indicated by a p-value < 0.05), this indicates that the difference has been tested with a t-test and is statistically significant at the 5% level of significance.

The Korn and Graubard (1998) method was used to calculate 95% confidence intervals when only a small number of respondents (fewer than 30) answered 'yes' to a question, or when the original 95% confidence interval included values outside the range 0–100%.

#### For rate ratios

In rate ratio graphs, the 95% confidence intervals are presented as lines on the graph. If the line includes 1, then there is no statistically significant difference. If the 95% confidence interval does not include 1, then the rate ratio is statistically significantly different from the reference group.

#### Statistical significance

It should be noted that in this report the term 'significant' (or 'significance') refers to statistical significance.

#### Non-sampling errors

Non-sampling errors 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. Although these elements cannot be measured, it is useful to be aware of them when interpreting the results of the survey.

Considerable effort is made to reduce non-sampling error by carefully designing and testing the survey, questionnaire and processes, and by ensuring quality control of procedures and data.

In the 2007/08 NZADUS coverage errors may have occurred; for example, because a small proportion of the population could not be covered by the survey (including people living in meshblocks with fewer than nine occupied dwellings, and people not living in the North Island, South Island or Waiheke Island). 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 a certain population group (eg, young males) or people who

were not often home. The interview introduction was an important part of trying to ensure that people take part in the survey.

Measurement error might also have occurred in this survey. Many of the analyses in this report used self-reported information, which may have had some inaccuracies. Measurement errors include recall error (eg, mistakes made when respondents recall how often they have done something over the last 12 months), 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).

The methodology report contains more information on questionnaire development, interviewer training and operational processes, and will be made available online ([www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09](http://www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09)).

### **Response rates**

The main measure used to assess the overall quality of a survey is the final weighted response rate. The response rate is a measure of how many people who were invited to take part in the survey actually participated. A high response rate means that we can be more confident that the survey results are representative of the New Zealand population.

The overall weighted response rate for the 2007/08 NZADUS was 60%. The online methodology report contains a detailed explanation of the response rate calculations.

### **Key points for interpreting results**

The 2007/08 NZADUS is a sample survey at one point in time, and can be used to examine associations between alcohol and drug use and sociodemographic characteristics. However, readers of this report need to be aware that associations do not necessarily imply causality. For example, if the survey finds that a particular behaviour is more common in people living in more socioeconomically deprived areas, an association has been identified. This does not mean the behaviour is *caused* by living in a deprived area.

The survey only included the usually resident population living in private dwellings; that is, about 94% of the population. People living in institutions (hospitals, IHC and rest homes, prisons, boarding schools), the homeless, short-term visitors and tourists were not included. Furthermore, many of the survey results are based on the assumption that participants can accurately recall previous events, and that they are providing correct information.

Comparisons with other data sources (such as the Census, health system administrative and other survey data) that are not presented in this report should be approached with caution, as there are many problems with making comparisons.



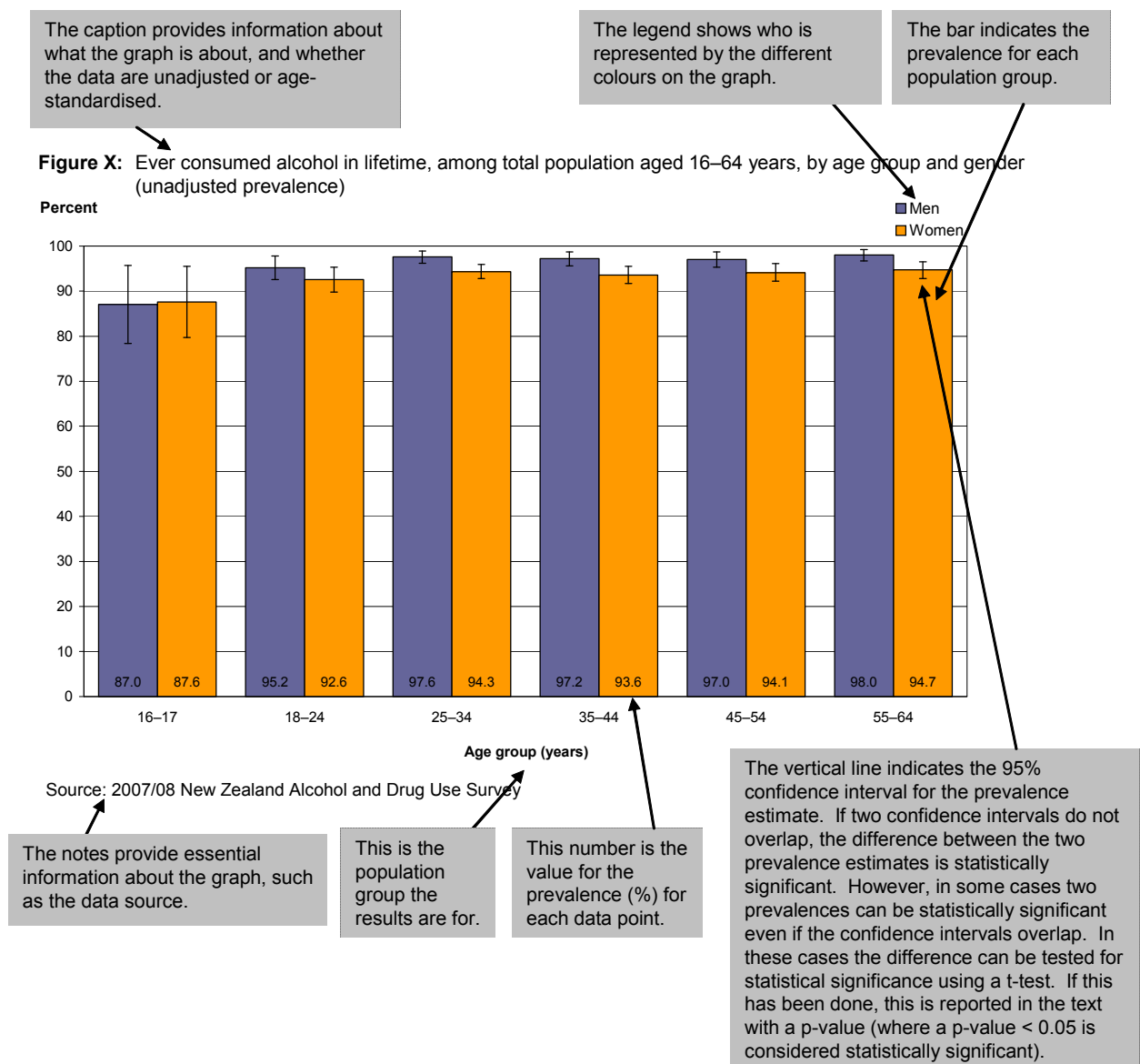
Care and diligence have been taken to ensure the information in this report is accurate. The Ministry of Health accepts no liability for the accuracy of the information nor its use or the reliance placed on it. If you suspect an error in any of the data contained in this report, please contact the authors.

Data for all analyses presented in this report are available in data tables online in Excel format, on the publication webpage ([www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09](http://www.moh.govt.nz/moh.nsf/indexmh/alcohol-use-in-nz-oct09)).

## How to interpret graphs in this report

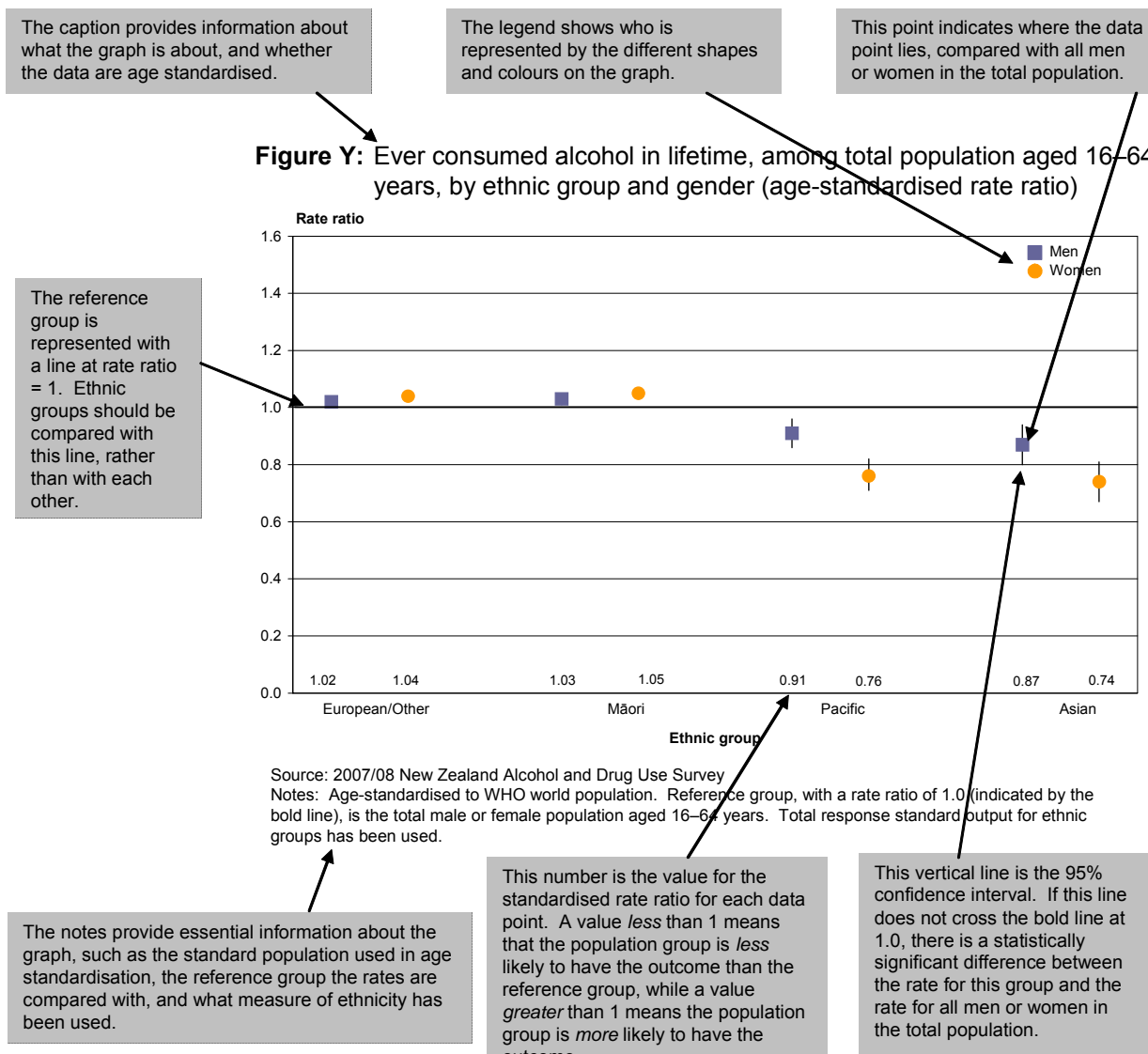
### Bar graphs

The following diagram shows how to interpret the bar graphs presented in this report.



## Rate ratio graphs

The following diagram shows how to interpret the rate ratio graphs presented in this report.



# Part B: Patterns of Alcohol Use

This part examines patterns of alcohol use. In particular, it covers the following topics:

- Chapter 2: Alcohol use
- Chapter 3: Frequency of drinking alcohol.

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report.

## Chapter 2: Alcohol use

Alcohol is the most commonly used recreational drug in New Zealand, with the majority of New Zealanders consuming alcohol at least occasionally. Early initiation into alcohol use is a risk factor for alcohol-related harm for young people (Cagney and Palmer 2007), and for heavy drinking and alcohol dependence in adulthood (Pitkanen et al 2005). The Australian guidelines recommend that it is important that children under the age of 15 years do not drink alcohol, and that for young people aged 15–17 years the safest option is to delay starting drinking as long as possible (National Health and Medical Research Council 2009).

In New Zealand there is no legal drinking age, but the minimum legal purchase age for alcohol is 18 years. This means that it is illegal for people under the age of 18 years to purchase alcohol, although minors are allowed to be supplied with alcohol in certain circumstances.

This chapter investigates the prevalence of past-year and lifetime consumption of alcohol and the age of first starting drinking. Information is provided about the context of this drinking, including the types of alcohol consumed in the last year and the locations at which people consume alcohol.

### What were the survey questions?

In the 2007/08 NZADUS, participants were asked whether they had had an alcoholic drink in the last 12 months. If they had not had an alcoholic drink in the past year, they were asked whether, in their entire life, they had had at least one alcoholic drink, not counting small tastes or sips.

Participants who had ever had an alcoholic drink in their life were asked how old they were the first time they had an alcoholic drink (not counting small tastes or sips). It should be noted that this analysis relies on accurate recall of survey respondents.

Participants who had had an alcoholic drink in the past year were asked which of the following types of alcoholic drinks they had had in the last 12 months: beer, low alcohol beer or home brew beer; wine; spirits, liqueurs or mixed cocktails; sherry, port or vermouth; cider; ready-to-drink drinks (RTDs) such as alcoholic sodas or premixed drinks that come mainly in bottles or cans; or any other types of alcoholic drink. Multiple responses were allowed.

Past-year drinkers were also asked, during the previous 12 months, whether they had consumed alcohol at any of the following places: at their home; at someone else's home; at pubs or hotels; at nightclubs or bars; at restaurants or cafes; at sports clubs or events; at workplaces, groups or meetings; at theatres or movies; at schools, university or polytechnics; in private motor vehicles; on a marae; at outdoor public places such as beaches, streets or parks; at special events like festivals, music events or dance parties; other (please specify). Multiple locations could be selected.

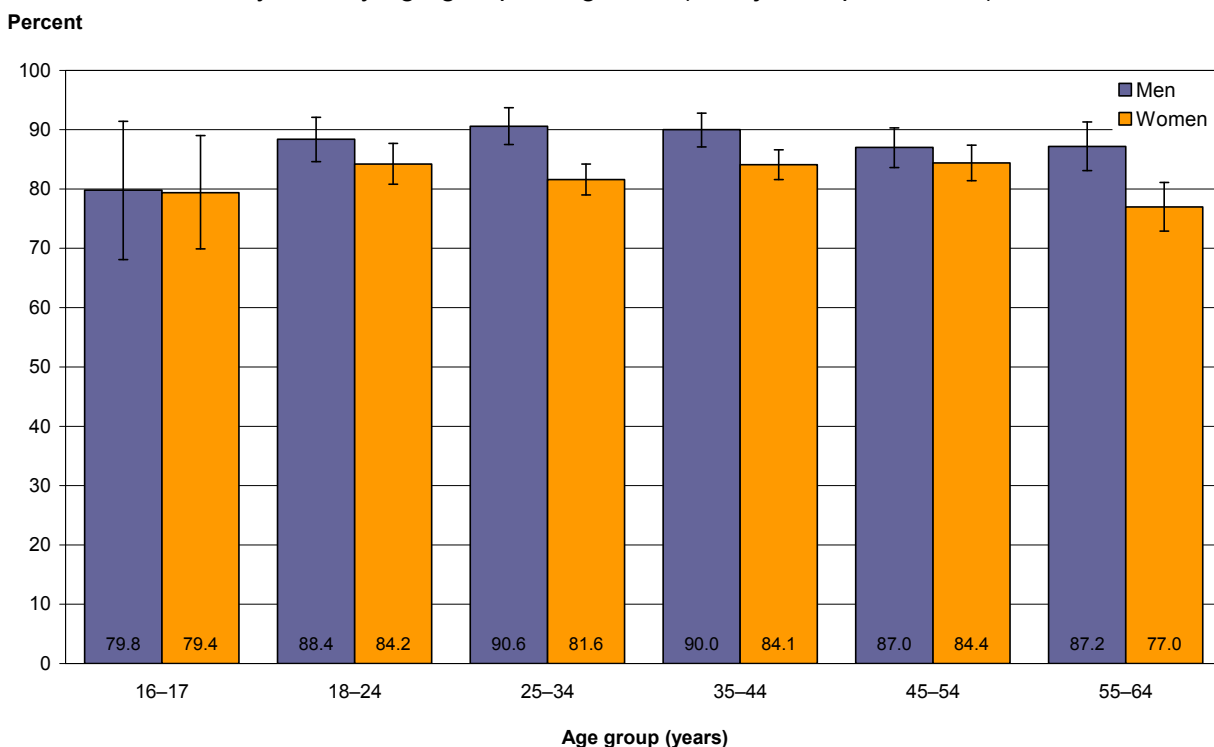
## Prevalence of drinking alcohol in last 12 months

More than eight in ten adults aged 16–64 years had had a drink containing alcohol in the past year (85.2%, 83.9–86.4). Past-year alcohol use was significantly<sup>2</sup> higher in men (88.4%, 86.6–90.1) than in women (82.7%, 81.1–84.3), adjusted for age.

### By age group

About eight in ten people aged 16–17 years had consumed alcohol in the previous 12 months, with no difference between males (79.8%, 68.1–91.4) and females (79.4%, 69.9–89.0) in this age group (Figure 1). In the age groups 25–34, 35–44 and 55–64 years, women were significantly less likely than men to have had an alcohol drink in the past 12 months.

**Figure 1:** Prevalence of drinking alcohol in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

<sup>2</sup> In this report, the term 'significant' (or 'significance') refers to statistical significance.

## By ethnic group

Table 2 gives an indication of the prevalence of having consumed alcohol in the past year by adults in New Zealand's main ethnic population groups.

**Table 2:** Prevalence of drinking alcohol in the last 12 months, among total population aged 16–64 years, by ethnic group (unadjusted prevalence and estimated number of adults)

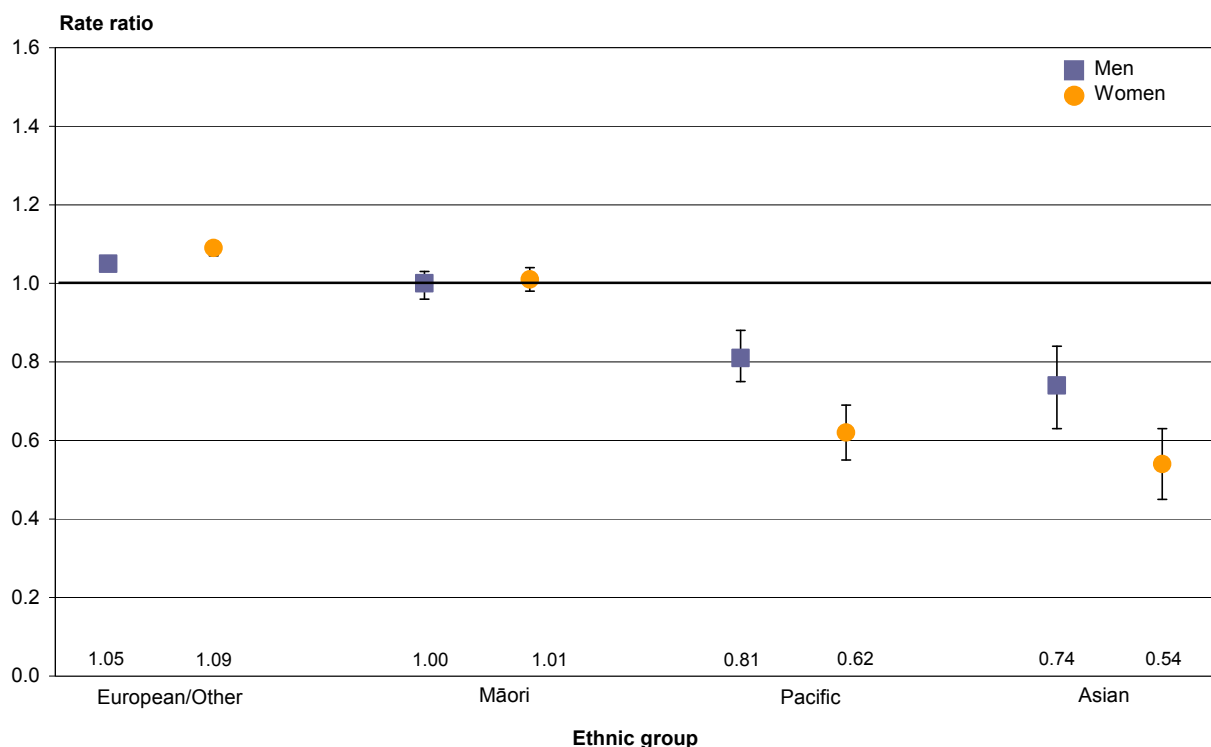
Ethnic group	Prevalence (%) (95% CI)	Estimated number of adults
European/Other	90.3 (89.0–91.7)	1,878,600
Māori	85.0 (83.2–86.9)	278,500
Pacific	61.2 (57.0–65.3)	94,500
Asian	54.8 (48.2–61.5)	121,600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Adjusted for age, Pacific and Asian men and women were significantly less likely to have consumed alcohol in the past year compared with men and women in the total population (Figure 2).

**Figure 2:** Prevalence of drinking alcohol in the last 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



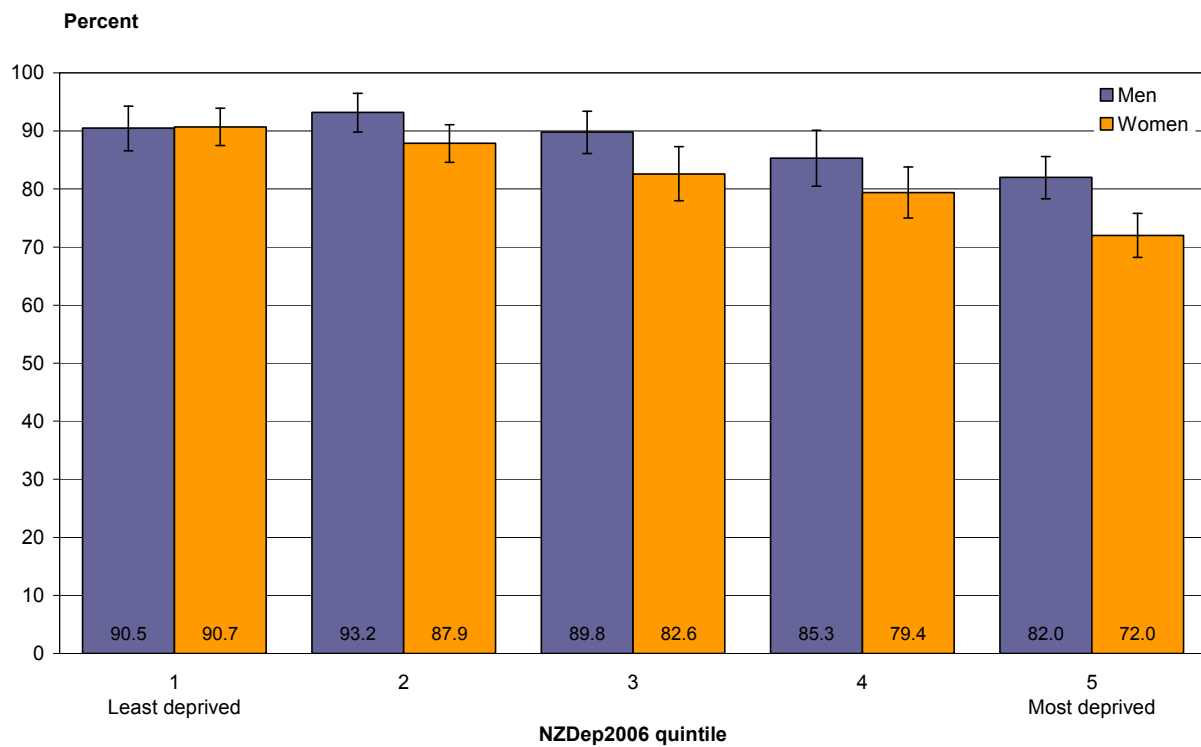
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

People living in neighbourhoods of low deprivation (NZDep2006 quintile 1) were significantly more likely to have consumed alcohol in the previous year than people living in neighbourhoods of high deprivation (NZDep2006 quintile 5), adjusted for age (Figure 3). This pattern was evident in both men and women.

**Figure 3:** Prevalence of drinking alcohol in the last 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)

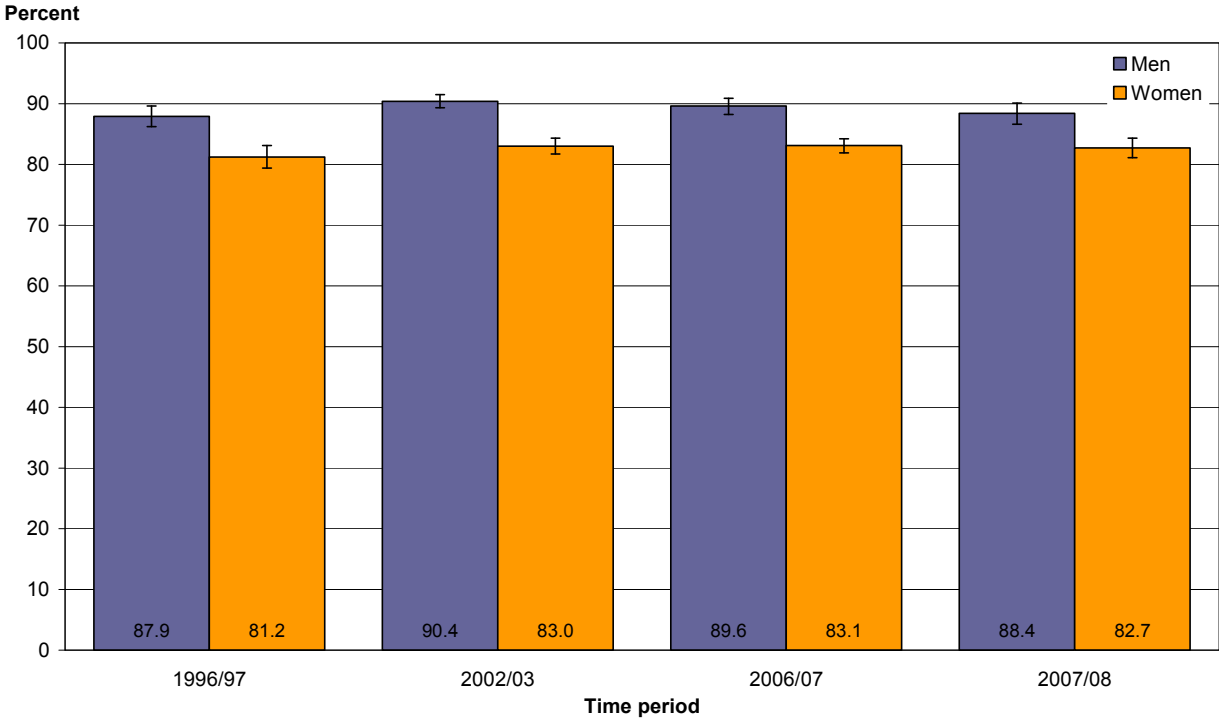


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Changes over time in the prevalence of drinking alcohol in the past 12 months

There have not been any significant changes in past-year alcohol use among the total population aged 16–64 years by gender since 1996/97, adjusted for age (Figure 4).

**Figure 4:** Prevalence of drinking alcohol in the last 12 months, among total population aged 16–64 years, by gender, 1996/97, 2002/03, 2006/07 and 2007/08 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys; 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Data from these surveys have been reanalysed to allow for comparability.

Analyses showed that there had been no significant changes in past-year drinking for 16–17-year-olds from 1996/97 to 2007/08, although Māori and Pacific men and women were significantly more likely to have consumed alcohol in the past year in 2007/08 than in 1996/97, adjusted for age. The full results can be found in the youth, Māori and Pacific chapters in Part F.

## **Type of alcoholic drink consumed in the last 12 months**

Among past-year drinkers aged 16–64 years, the types of alcohol most commonly consumed at least once in the last 12 months were wine (62.3%, 60.4–64.1) and beer (60.6%, 59.2–62.0). The other types of alcohol consumed by past-year drinkers in the past year were:

- spirits/liqueurs/mixed cocktails (46.5%, 44.8–48.2)
- ready-to-drink drinks (RTDs or ‘alcopops’) (22.2%, 20.6–23.7)
- sherry/port/vermouth (6.7%, 5.6–7.9)
- cider (5.4%, 4.5–6.3).

## **Location of drinking in the last 12 months**

Among past-year drinkers aged 16–64 years, the most frequently reported places where they had consumed alcohol in the past 12 months were at their own home (87.5%, 86.3–88.6) and at someone else’s home (70.8%, 69.1–72.5). Other places where past-year drinkers had consumed alcohol in the last year were at:

- pubs, hotels, restaurants or cafés (64.7%, 62.9–66.6)
- nightclubs or bars (27.6%, 26.0–29.3)
- groups, workplaces or meetings (25.4%, 23.6–27.2)
- sports clubs or events (19.4%, 17.8–21.0)
- special events (17.9%, 16.3–19.5)
- outdoor public places (14.7%, 13.3–16.1).

A smaller proportion of past-year drinkers had consumed alcohol in theatres, schools or universities, private motor vehicles or on marae.

## **Prevalence of alcohol consumption in lifetime**

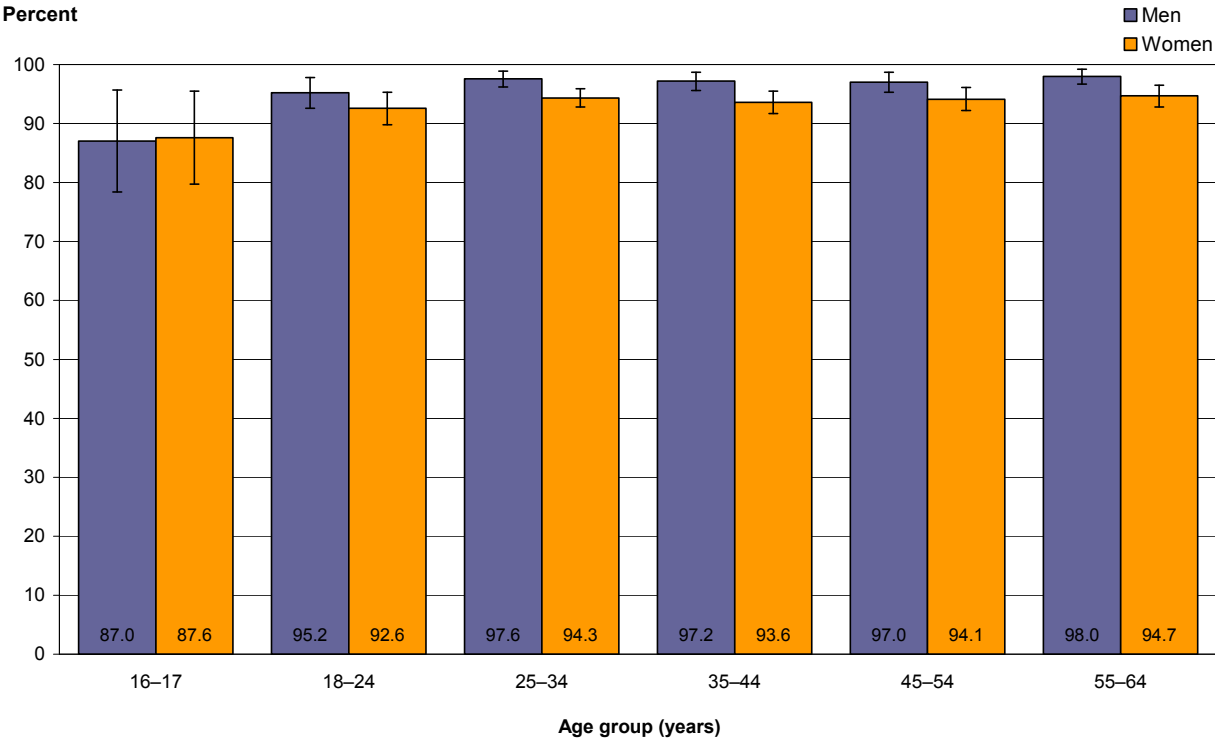
Almost all adults (95.0%, 94.2–95.8) reported having had a drink containing alcohol at some point during their lifetime. Men (96.2%, 95.1–97.3) were significantly more likely than women (93.4%, 92.2–94.5) to have had a drink containing alcohol during their lifetime, when standardised for age.

### **By age group**

For all age groups over 25 years, for men and women, the prevalence of having ever consumed alcohol was similar (Figure 5). For both males and females, those aged 16–17 years had the lowest prevalence of having ever consumed alcohol, although almost nine in ten people in this age group had had a drink containing alcohol at some point during their lifetime.



**Figure 5:** Ever consumed alcohol in lifetime, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**By ethnic group**

Table 3 gives an indication of lifetime alcohol use by adults in New Zealand’s main ethnic population groups.

**Table 3:** Ever consumed alcohol in lifetime, among total population aged 16–64 years, by ethnic group (unadjusted prevalence and estimated number of adults)

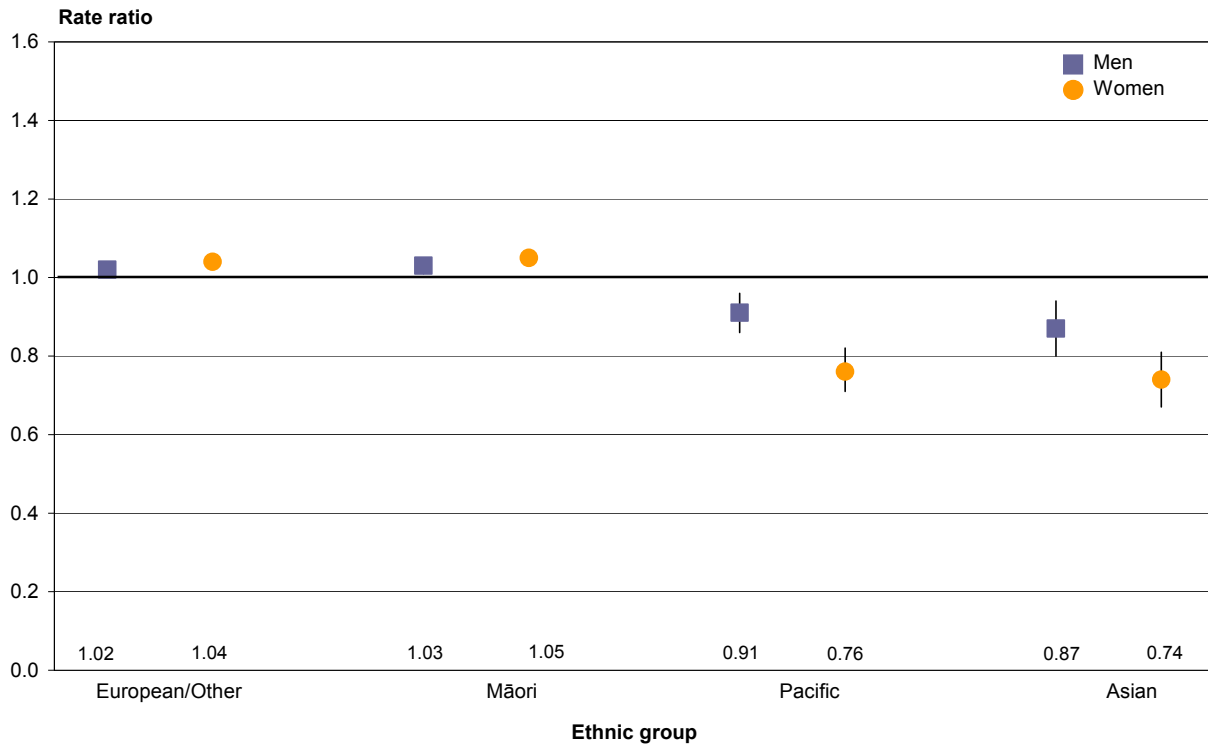
Ethnic group	Prevalence (%) for total adults (95% CI)	Estimated number of adults
European/Other	97.9 (97.3–98.6)	2,036,400
Māori	98.1 (97.3–99.0)	321,300
Pacific	79.1 (75.6–82.6)	122,200
Asian	76.3 (70.9–81.7)	169,200

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Pacific and Asian men and women were significantly less likely to have ever consumed alcohol in their lifetime compared with men and women in the total population (Figure 6).

**Figure 6:** Ever consumed alcohol in lifetime, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



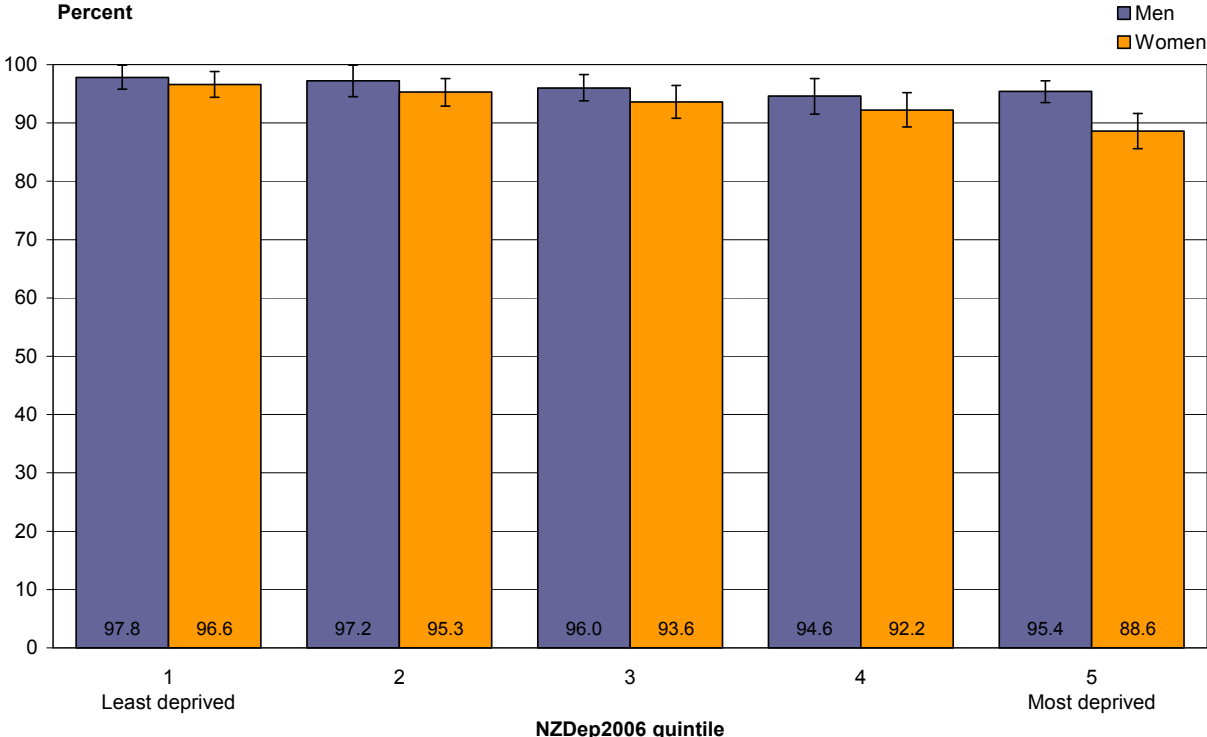
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

Women living in the least deprived areas of NZDep2006 quintile 1 were significantly more likely to report having consumed alcohol in their lifetime than women living in the most deprived areas of quintile 5, adjusted for age (Figure 7). There was no pattern by neighbourhood deprivation for men.

**Figure 7:** Ever consumed alcohol in lifetime, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Age of first drinking alcohol**

For this analysis it should be noted that there may be some recall error when analysing the age when people first started drinking alcohol, as older people may not remember exactly when they first started drinking.

For people aged 16–64 years who had ever had an alcoholic drink, the median age at which they first tried alcohol was 16 years. Overall, one in three people who had ever had an alcoholic drink first tried alcohol when aged 14 years or younger (31.9%, 30.3–33.4) (Table 4). A further 45.3% (43.5–47.1) were aged 15–17 years old when they first tried alcohol.

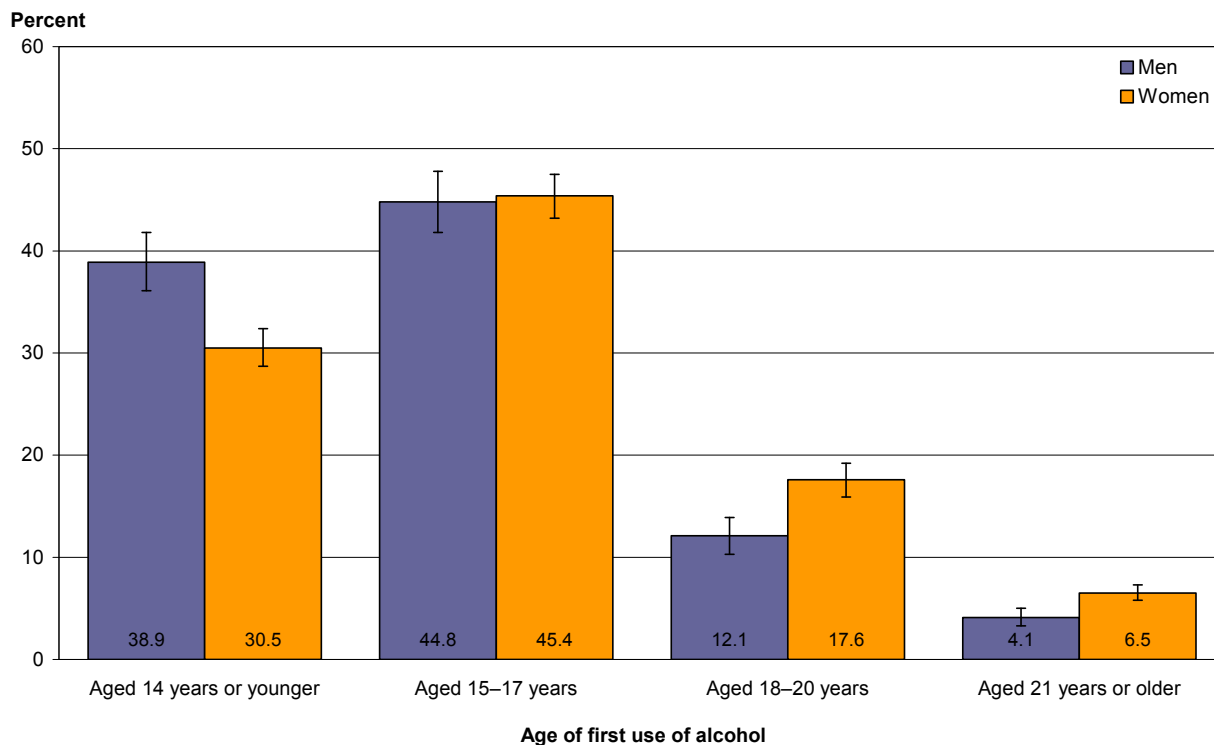
**Table 4:** Age of first drinking alcohol, among people aged 16–64 years who had ever tried alcohol (unadjusted prevalence)

Age of first use of alcohol	Prevalence for people who have ever consumed alcohol (%) (95% CI)
14 years or younger	31.9 (30.3–33.4)
15–17 years	45.3 (43.5–47.1)
18–20 years	16.4 (15.1–17.7)
21 years or older	6.4 (5.7–7.1)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Men were significantly more likely than women to have first had an alcoholic drink when aged 14 years or younger, when adjusted for age (Figure 8).

**Figure 8:** Age of first use of alcohol, among people aged 16–64 years who had ever tried alcohol, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Drank alcohol when aged 14 years or younger

For this analysis it should be noted that there may be some recall error when analysing the age when people first started drinking alcohol, as older people may not remember exactly when they first started drinking.

Overall, three in ten people aged 16–64 years in the total population had consumed alcohol when they were 14 years or younger (30.3%, 28.8–31.8).

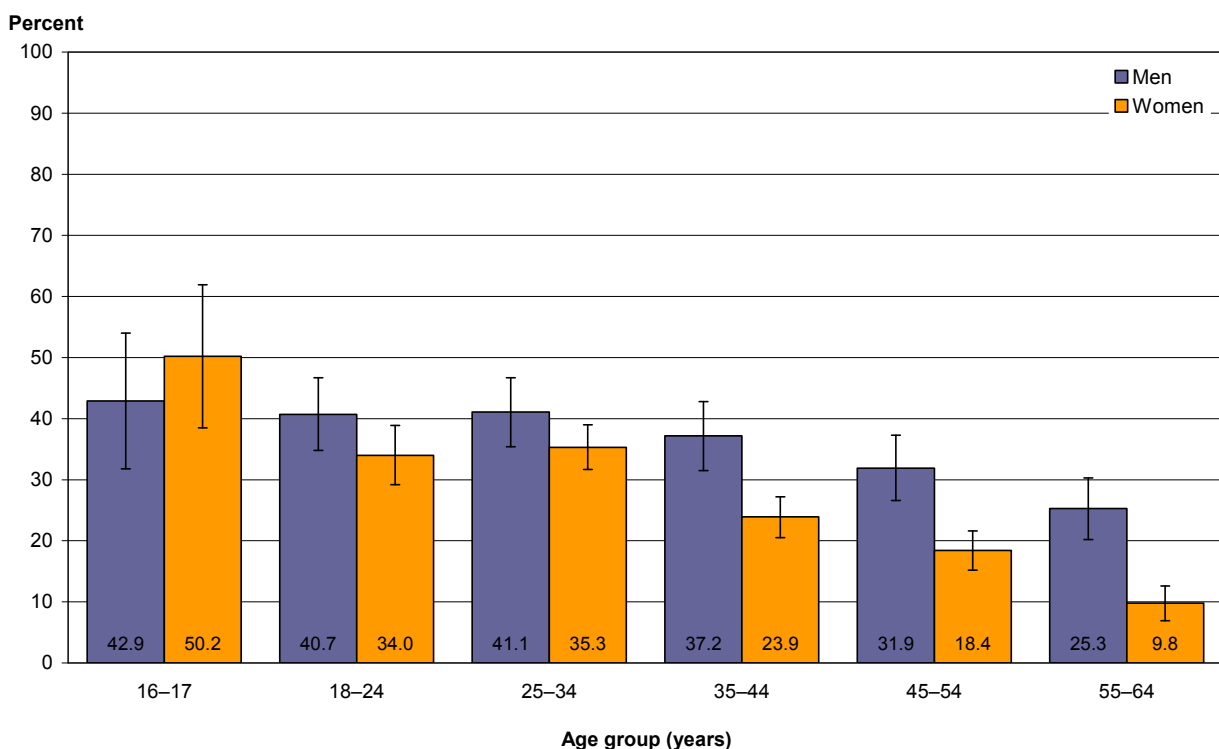
Adjusted for age, men were significantly more likely to have first consumed alcohol when they were 14 years or younger (37.4%, 34.7–40.2) than women (28.5%, 26.7–30.3).

## By age group

For men, the prevalence of having first consumed alcohol when aged 14 years or younger was stable (at about 40%) for men aged 16–44 years, and was lower for men aged 45–64 years (Figure 9). However, for females, there was a much higher prevalence of drinking alcohol when aged 14 years or younger among the 16–17-year-old females, with the prevalence decreasing with increasing age.

In the age groups 18–64 years, men were significantly more likely than women to have consumed alcohol when aged 14 years or younger, but there was no statistically significant difference between males and females aged 16–17 years.

**Figure 9:** Consumed alcohol when aged 14 years or younger, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

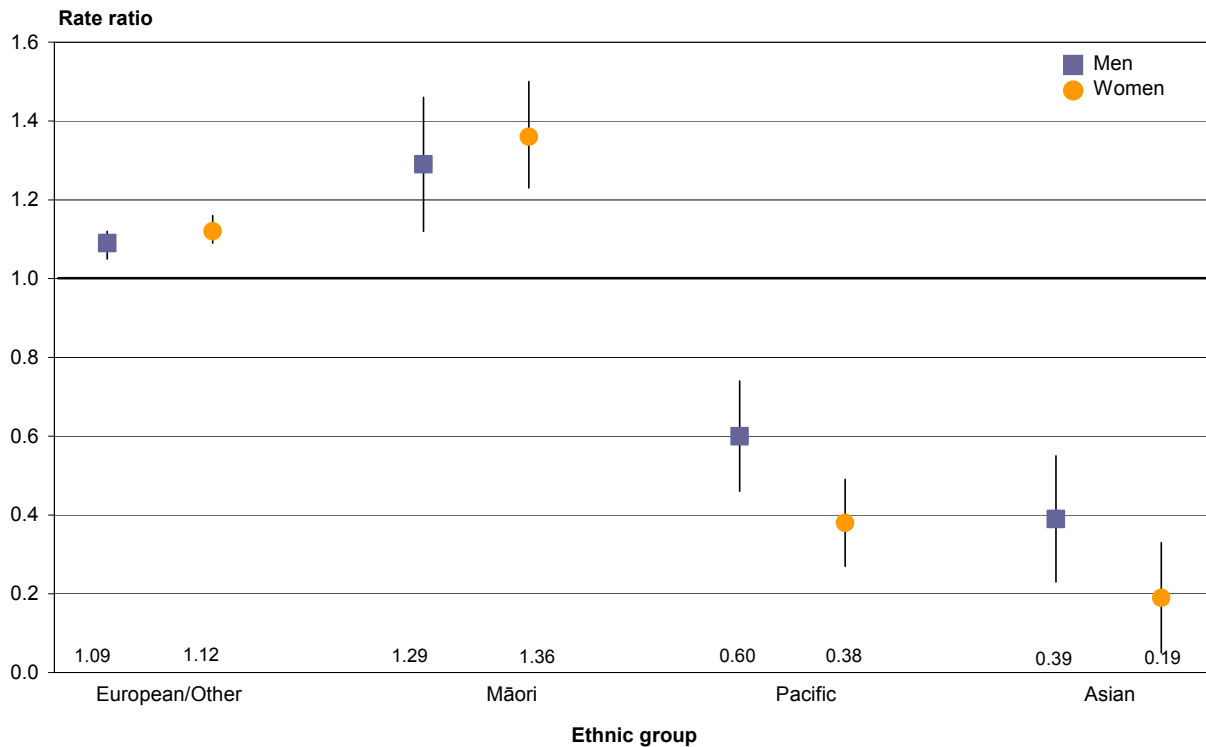


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Overall, European/Other and Māori men and women were significantly more likely to have started drinking when aged 14 years or younger compared with men and women in the total population, adjusted for age (Figure 10). Pacific and Asian men and women were significantly less likely to have first consumed alcohol when they were 14 years or younger.

**Figure 10:** Consumed alcohol when aged 14 years or younger, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



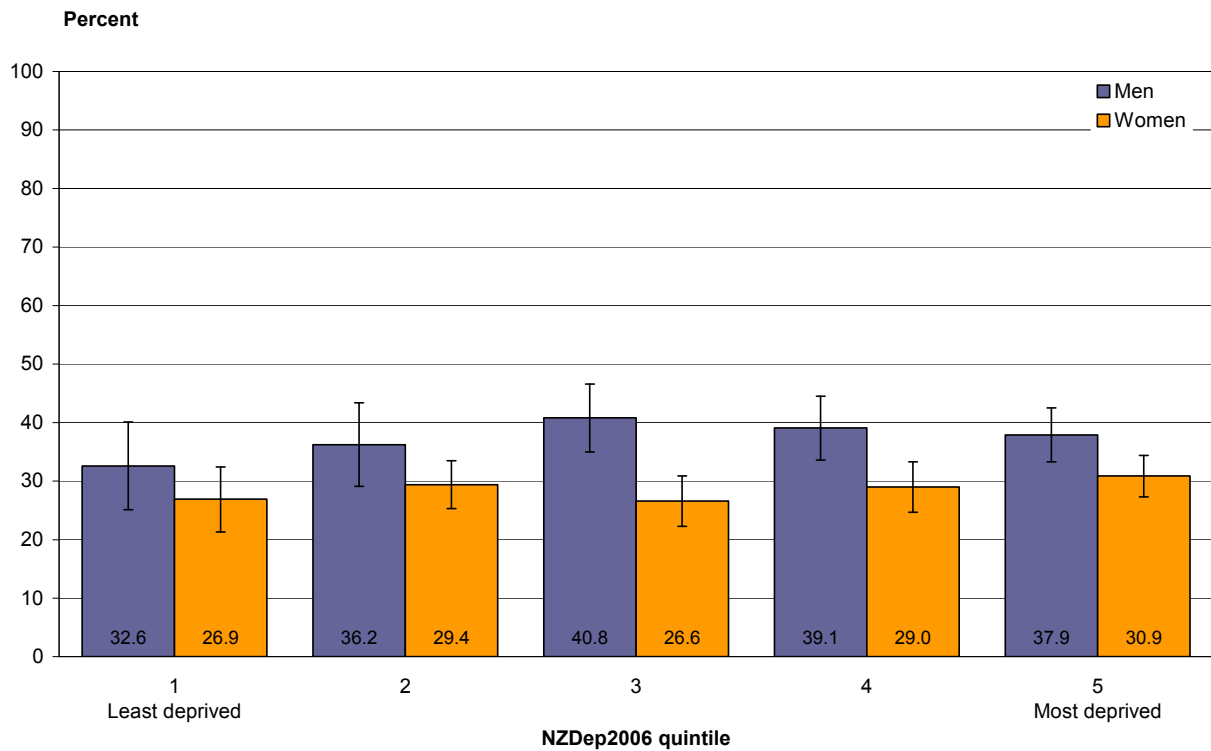
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

For both men and women there was no statistically significant difference in the prevalence of having consumed alcohol when aged 14 years or younger between people living in most deprived areas (NZDep2006 quintile 5) and in the least deprived areas (NZDep2006 quintile 1), adjusted for age (Figure 11).

**Figure 11:** Consumed alcohol when aged 14 years or younger, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 3: Frequency of Drinking Alcohol

An increased frequency of drinking increases the lifetime risk of hospitalisation or death from alcohol-related injuries. For example, research suggests that when drinking occasions are frequent (nearly every day), the lifetime risk of hospitalisation for alcohol-related injury for both men and women is approximately 1 in 10, even if the number of drinks consumed on each occasion is two or less (National Health and Medical Research Council 2009). The Alcohol Advisory Council of New Zealand (ALAC) recommends that every week people have two or more days when they do not drink any alcohol.

### What were the survey questions?

In the 2007/08 NZADUS, participants who had had an alcoholic drink in the past year were asked how often they had had an alcoholic drink of any kind in the last 12 months.

For this question, participants selected a response off a showcard, which had the following options: daily, about five to six times a week, about three to four times a week, twice a week, once a week, two to three times a month, once a month, once every six weeks in the last 12 months, three to six times in the last 12 months, one or two times in the last 12 months.

### Frequency of drinking alcohol in last 12 months

Two in five past-year drinkers (39.0%, 37.3–40.8) had consumed alcohol less than once a week in the past year (Table 5). Almost 7% of past-year drinkers had consumed alcohol daily (6.8%, 6.0–7.6), representing 5.8% (5.1–6.5) of the total population aged 16–64 years.

**Table 5:** Frequency of drinking alcohol in the last 12 months, among past-year drinkers and total population aged 16–64 years (unadjusted prevalence)

Frequency of drinking alcohol	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total adults (95% CI)	Estimated number of adults
Daily	6.8 (6.0–7.6)	5.8 (5.1–6.5)	152,900
3–6 times a week	22.0 (20.3–23.6)	18.7 (17.3–20.2)	494,300
1–2 times a week	32.2 (30.5–33.9)	27.4 (25.9–28.9)	723,500
1–3 times a month	20.7 (19.2–22.2)	17.6 (16.2–19.0)	464,800
Less than once a month	18.3 (16.9–19.8)	15.6 (14.4–16.8)	412,400
Not in the last 12 months	–	14.9 (13.6–16.1)	392,700

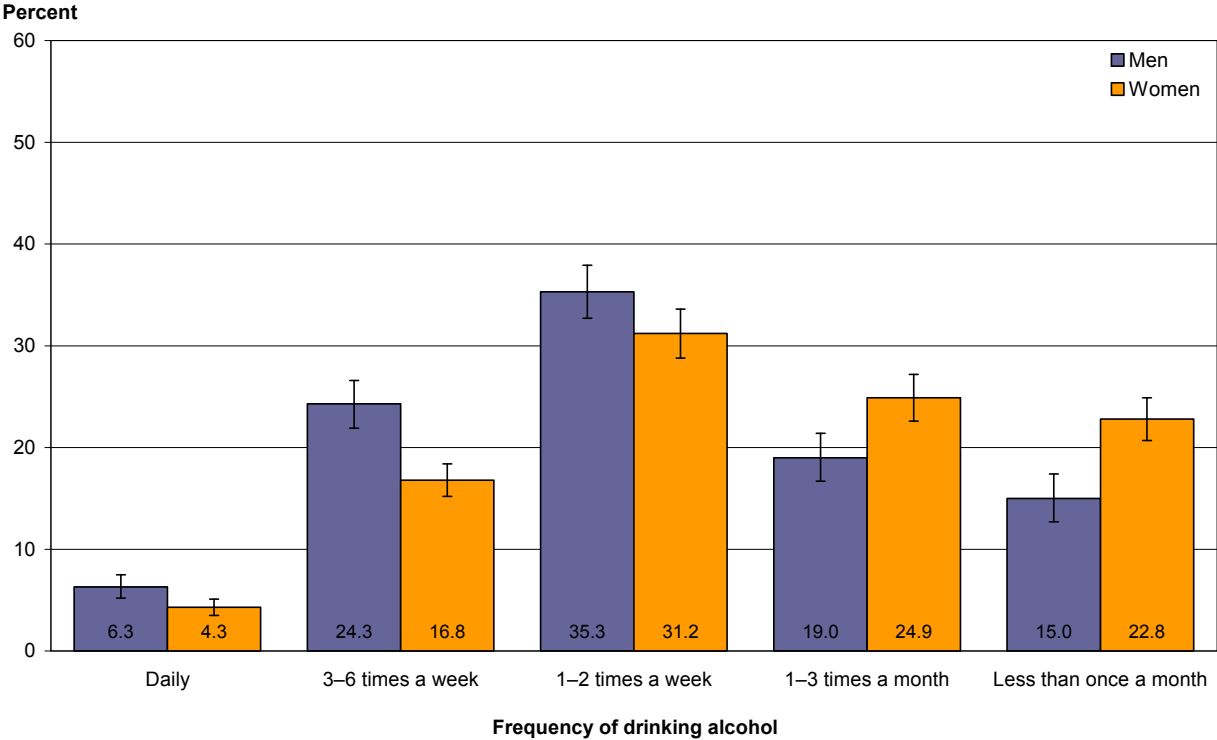
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, 61.0% (59.2–62.7) had consumed alcohol at least weekly over the past year.



Among past-year drinkers, men were significantly more likely than women to have consumed alcohol daily, three to six times a week or one to two times a week, adjusting for age (Figure 12). Women were significantly more likely to have consumed alcohol less than once a week than men.

**Figure 12:** Frequency of drinking alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Drinking alcohol daily in last 12 months

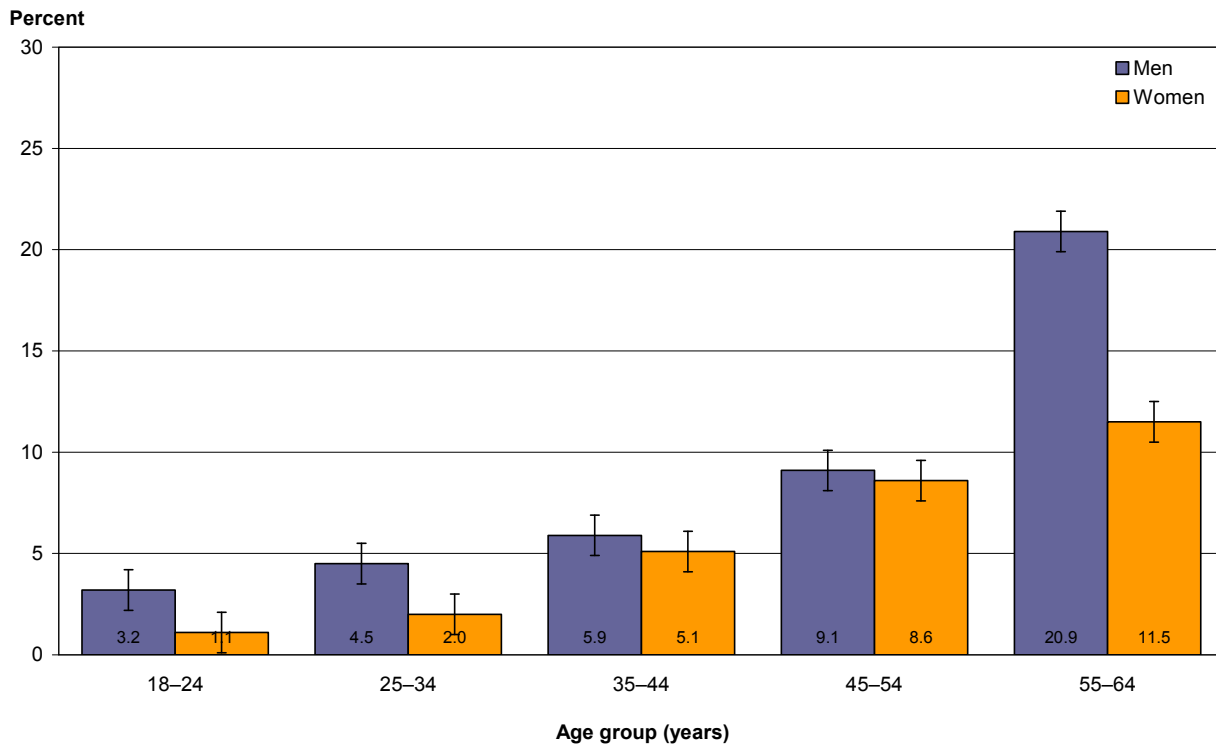
Almost 7% of past-year drinkers (6.8%, 6.0–7.6) had consumed alcohol daily in the last 12 months. This is 5.8% (5.1–6.5) of the total adult population, equating to 152,900 adults who consumed alcohol daily in the last 12 months.

Among past-year drinkers, men (6.3%, 5.2–7.5) were significantly more likely than women (4.3%, 3.6–5.1) to drink alcohol daily when standardised for age.

## By age group

The prevalence of drinking alcohol daily increased as age increased in both male and female past-year drinkers (Figure 13). Among past-year drinkers, men aged 55–64 years had the highest prevalence of drinking alcohol daily (20.9%, 15.6–26.2).

**Figure 13:** Prevalence of drinking alcohol daily in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Numbers were too low for reliable estimation for past-year drinkers aged 16–17 years.

An additional figure showing the prevalence of drinking alcohol daily in the past year, among the total population aged 16–64 years, by age group and gender, is available in Appendix 1 (Figure A1).

## By ethnic group

Table 6 gives an indication of the prevalence of daily alcohol consumption by adults in New Zealand's main ethnic population groups.

**Table 6:** Prevalence of drinking alcohol daily in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

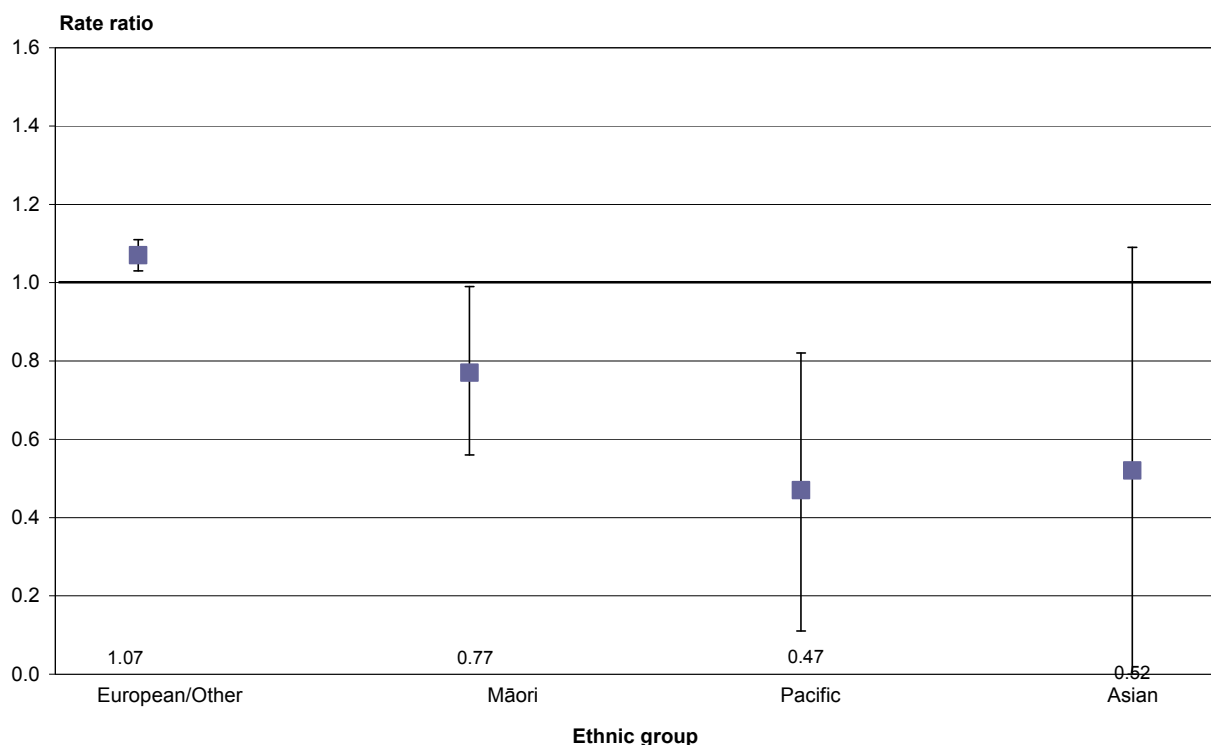
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total adults (95% CI)	Estimated number of adults
European/Other	7.6 (6.7–8.4)	6.8 (6.0–7.6)	141,900
Māori	4.2 (3.2–5.3)	3.6 (2.7–4.5)	11,800
Pacific	2.0 (0.9–4.0)	1.2 (0.5–2.5)	1900
Asian	2.4 (0.5–6.7)	1.3 (0.3–3.7)	2900

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, European/Other people were significantly more likely to drink alcohol daily compared with the total population, adjusted for age (Figure 14). Māori and Pacific past-year drinkers were significantly less likely to report drinking alcohol daily compared with all past-year drinkers in the total population. There were no significant differences for Asian past-year drinkers.

**Figure 14:** Prevalence of drinking alcohol daily in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (age-standardised rate ratio)



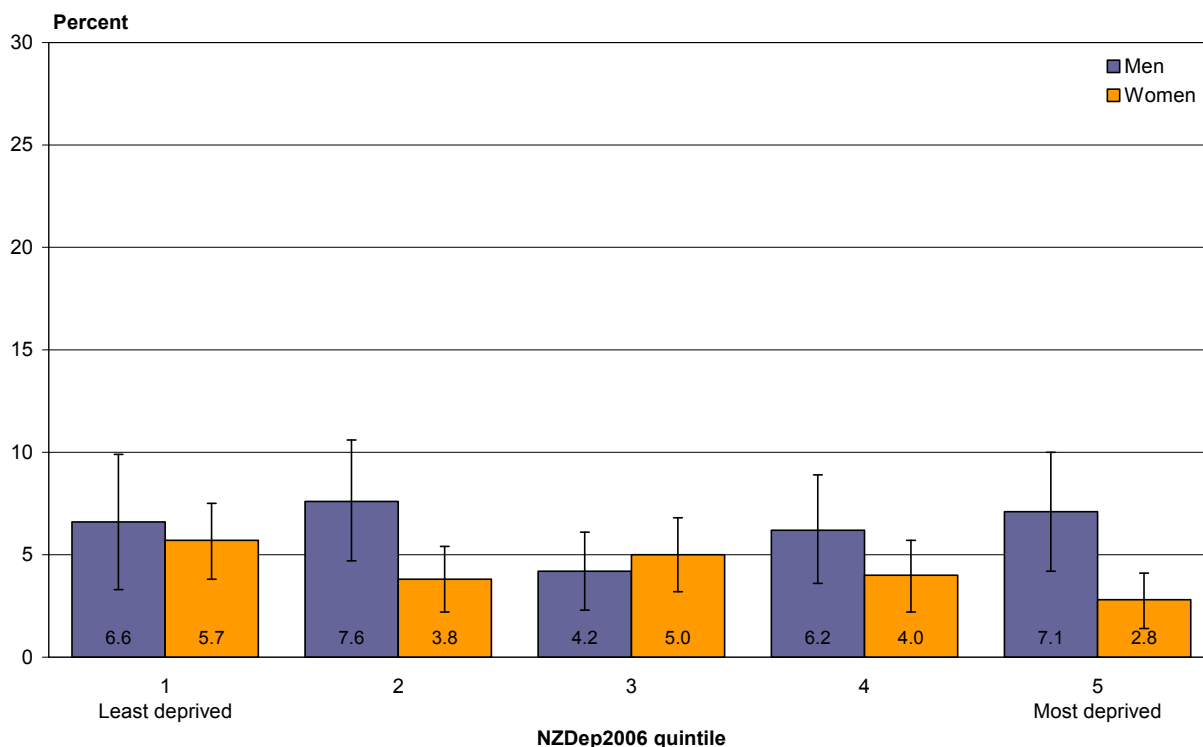
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Among past-year drinkers, women living in the least deprived neighbourhoods (NZDep2006 quintile 1) were significantly more likely to drink alcohol daily than women living in the most deprived neighbourhoods (quintile 5) (Figure 15). There were no significant differences in the prevalence of drinking alcohol daily by neighbourhood deprivation for men.

**Figure 15:** Prevalence of drinking alcohol daily in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

# Part C: Drinking Behaviours

This part examines moderating and risky drinking behaviours. In particular, it covers the following topics:

- Chapter 4: Drinking a large amount of alcohol
- Chapter 5: Drinking enough alcohol to feel drunk
- Chapter 6: Risky behaviours while under the influence of alcohol
- Chapter 7: Use of moderating drinking behaviours.

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report. Also, analyses of hazardous drinking from the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys have been included in Appendix 1. Results are presented for the population aged 16–64 years, by gender, age group, ethnic group and neighbourhood deprivation. Time trend analyses are also presented for the key population groups.

## Chapter 4: Drinking a large amount of alcohol

The risk of alcohol-related injury increases with the amount of alcohol consumed on a drinking occasion. Evidence suggests that drinking four drinks on one drinking occasion more than doubles the relative risk of an injury in the six-hour time period after drinking, for both men and women (National Health and Medical Research Council 2009).

ALAC recommends that, on any one drinking occasion, men should drink no more than six standard drinks and women should drink no more than four standard drinks (Alcohol Advisory Council of New Zealand 2008). This is supported by current World Health Organization (WHO) recommendations, through the Alcohol Use Disorders Identification Test (AUDIT). Drinking above this amount increases the risk of alcohol-related harm. However, due to variability between individuals, it should be remembered that there is no specific safe amount of alcohol for everyone, all of the time (Alcohol Advisory Council of New Zealand 2008).

Note that in this report the term ‘drinking a large amount of alcohol’ is defined as drinking more than six (for men) or four (for women) standard drinks on one drinking occasion.

### **What were the survey questions?**

In the 2007/08 NZADUS participants who had had an alcoholic drink in the past year were asked whether they had ever had more than six (for males) or four (for females) drinks on one occasion. Participants were told that one drink meant one standard drink, which is 10 grams of pure alcohol. One drink is one can or stubbie of beer, half a large bottle of beer, one small glass of wine or one double nip of spirits.

Participants who had ever had more than six/four drinks were asked how old they were the first time they had more than six/four drinks on one occasion. Participants who had had more than six/four drinks in the past year were asked how often in the last 12 months they had had more than six/four drinks on one occasion.

Participants who had consumed a large amount of alcohol in the past year were asked, in the last 12 months, on those occasions when they drank more than six/four drinks, where they drank alcohol. Participants could select multiple options from the following list: at their home; at someone else's home; at pubs or hotels; at nightclubs or bars; at restaurants or cafes; at sports clubs or events; at workplaces, groups or meetings; at theatres or movies; at schools, university or polytechnics; in private motor vehicles; on a marae; at outdoor public places such as beaches, streets or parks; at special events like festivals, music events or dance parties; other (please specify).

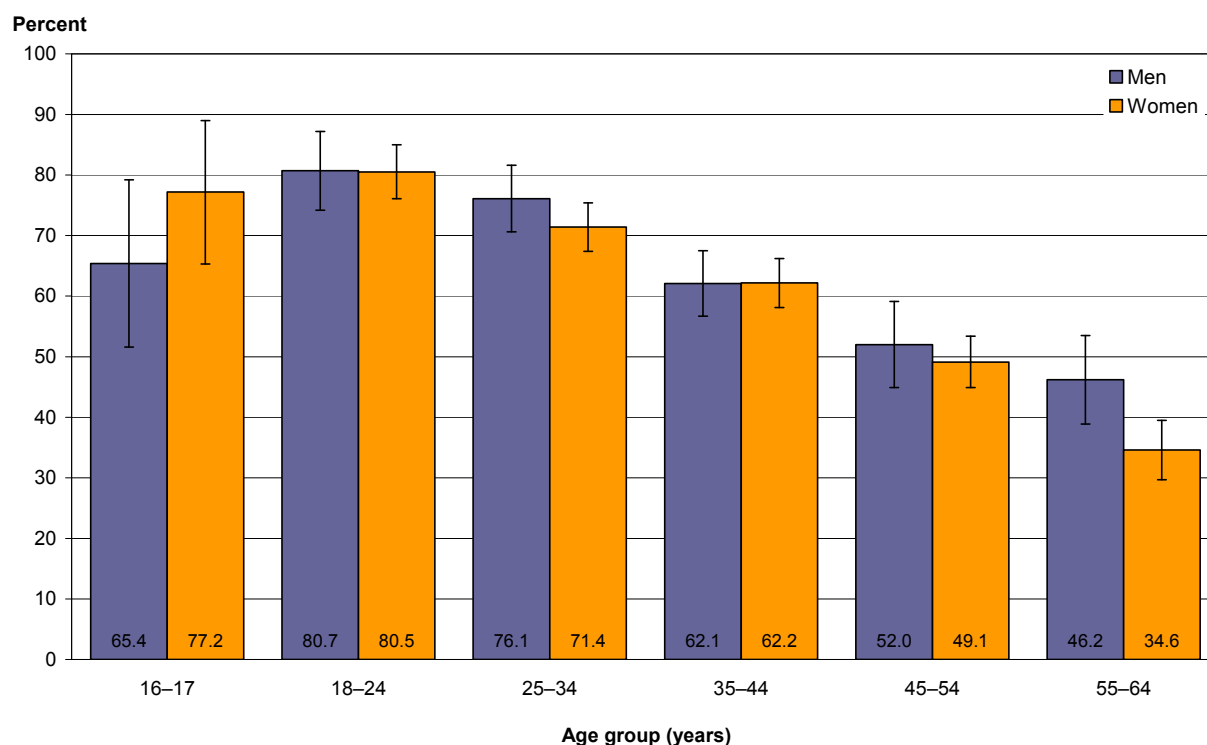
### **Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months**

Three in five past-year drinkers had consumed a large amount of alcohol on at least one drinking occasion in the last 12 months (61.6%, 59.8–63.5). This equates to 1,384,500 adults aged 16–64 years. There was no difference between men (66.7%, 63.9–69.5) and women (64.9%, 62.8–66.9) in the prevalence of having consumed a large amount of alcohol on at least one drinking occasion in the last 12 months among past-year drinkers, adjusted for age.

#### **By age group**

In both male and female past-year drinkers the prevalence of having consumed a large amount of alcohol on at least one drinking occasion in the past year was highest for people aged 18–24 years (Figure 16). Overall, eight in ten past-year drinkers aged 18–24 years had consumed a large amount of alcohol at least once in the past year. The prevalence of consuming a large amount of alcohol decreased with increasing age for both men and women over the age of 25 years.

**Figure 16:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure showing the prevalence of having consumed a large amount of alcohol on at least one occasion in the past year, among the total population aged 16–64 years, by age group and gender, is available in Appendix 1 (Figure A2).

### By ethnic group

Table 7 gives an indication of the prevalence of having consumed a large amount of alcohol on at least one drinking occasion in the past year, among adults in New Zealand’s main ethnic population groups.

**Table 7:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

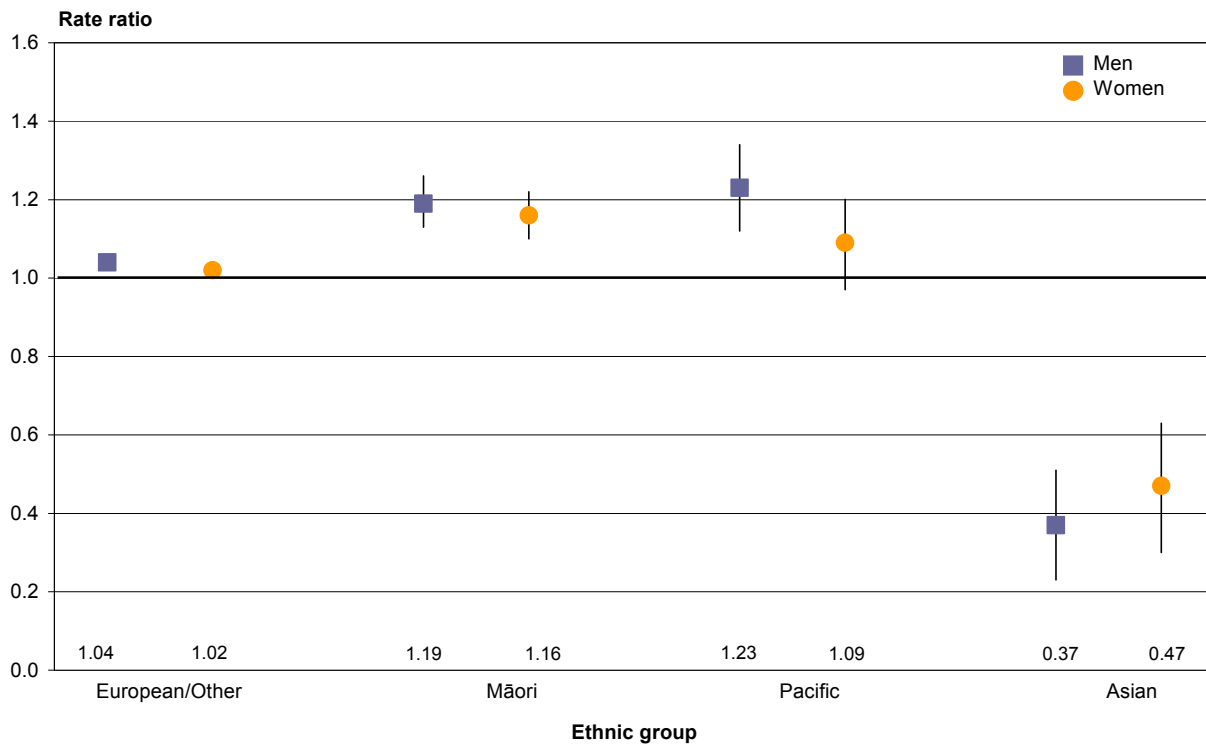
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total adults (95% CI)	Estimated number of adults
European/Other	62.0 (60.0–64.0)	55.9 (54.0–57.9)	1,163,400
Māori	76.6 (73.8–79.4)	65.1 (62.4–67.7)	213,000
Pacific	76.5 (71.5–81.6)	46.5 (42.1–50.9)	71,900
Asian	28.6 (21.4–35.9)	15.7 (11.5–19.9)	34,800

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, Māori men and women and Pacific men were significantly more likely to have consumed a large amount of alcohol on a drinking occasion in the last 12 months compared with men and women in the total population, adjusted for age (Figure 17). For past-year drinkers, Asian men and women were significantly less likely to have had a large amount of alcohol in the previous year compared to men and women in the total population.

**Figure 17:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

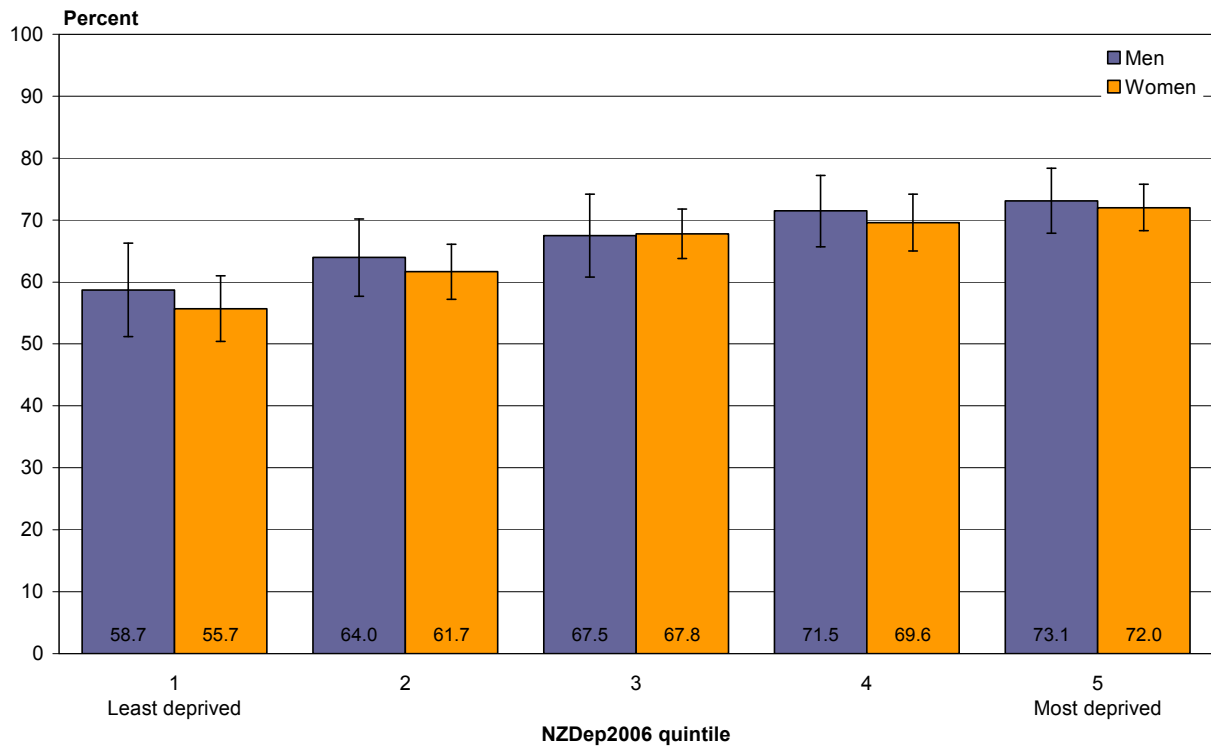
Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.



### By neighbourhood deprivation

In both men and women the age-adjusted prevalence of having consumed a large amount of alcohol on a drinking occasion in the previous year was higher in NZDep2006 quintile 5 (most deprived) areas than in quintile 1 (least deprived) areas (Figure 18).

**Figure 18:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Frequency of consuming a large amount of alcohol on a drinking occasion in the last 12 months

Overall, one in three past-year drinkers aged 16–64 years (38.4%, 36.5–40.2) had not consumed a large amount of alcohol in the past year, while a further one in three had consumed a large amount of alcohol on a drinking occasion less than once a month (36.0%, 34.3–37.7) (Table 8).

One in ten past-year drinkers (9.4%, 8.4–10.4) had consumed a large amount of alcohol on a drinking occasion one to two times a week in the past year. An additional 3.2% (2.7–3.8) of past-year drinkers had consumed a large amount of alcohol three or more times a week in the past year.

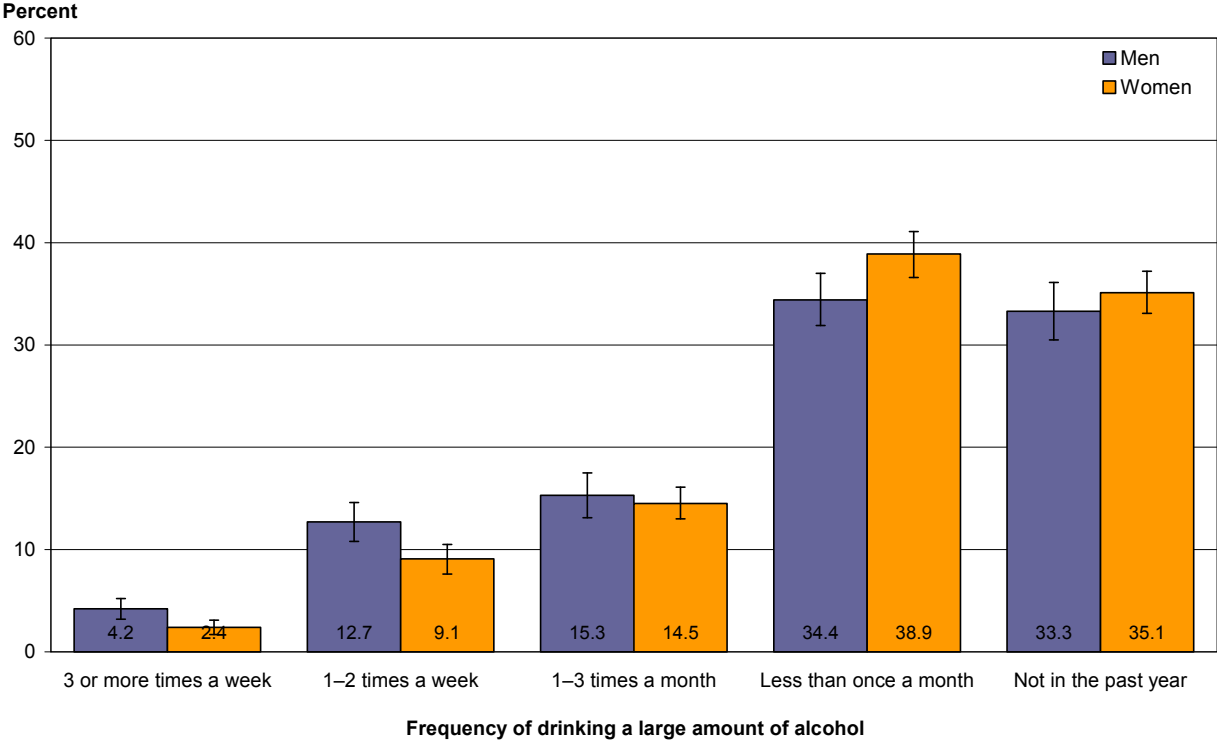
**Table 8:** Frequency of drinking a large amount of alcohol in the last 12 months, among past-year drinkers aged 16–64 years (unadjusted prevalence)

Frequency of drinking alcohol	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)
3 or more times a week	3.2 (2.7–3.8)	2.8 (2.3–3.2)
1–2 times a week	9.4 (8.4–10.4)	8.0 (7.1–8.9)
1–3 times a month	13.0 (11.8–14.2)	11.0 (10.0–12.1)
Less than once a month	36.0 (34.3–37.7)	30.6 (29.1–32.1)
Did not consume a large amount of alcohol in last 12 months	38.4 (36.5–40.2)	47.6 (45.8–49.4)
At least weekly	12.6 (11.5–13.8)	10.7 (9.7–11.8)
At least monthly	25.6 (24.0–27.2)	21.8 (20.3–23.2)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, men were significantly more likely than women to have consumed a large amount of alcohol on a drinking occasion three or more times a week or one to two times a week, adjusted for age (Figure 19).

**Figure 19:** Frequency of drinking a large amount of alcohol on a drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Consumed a large amount of alcohol on a drinking occasion at least weekly in the last 12 months**

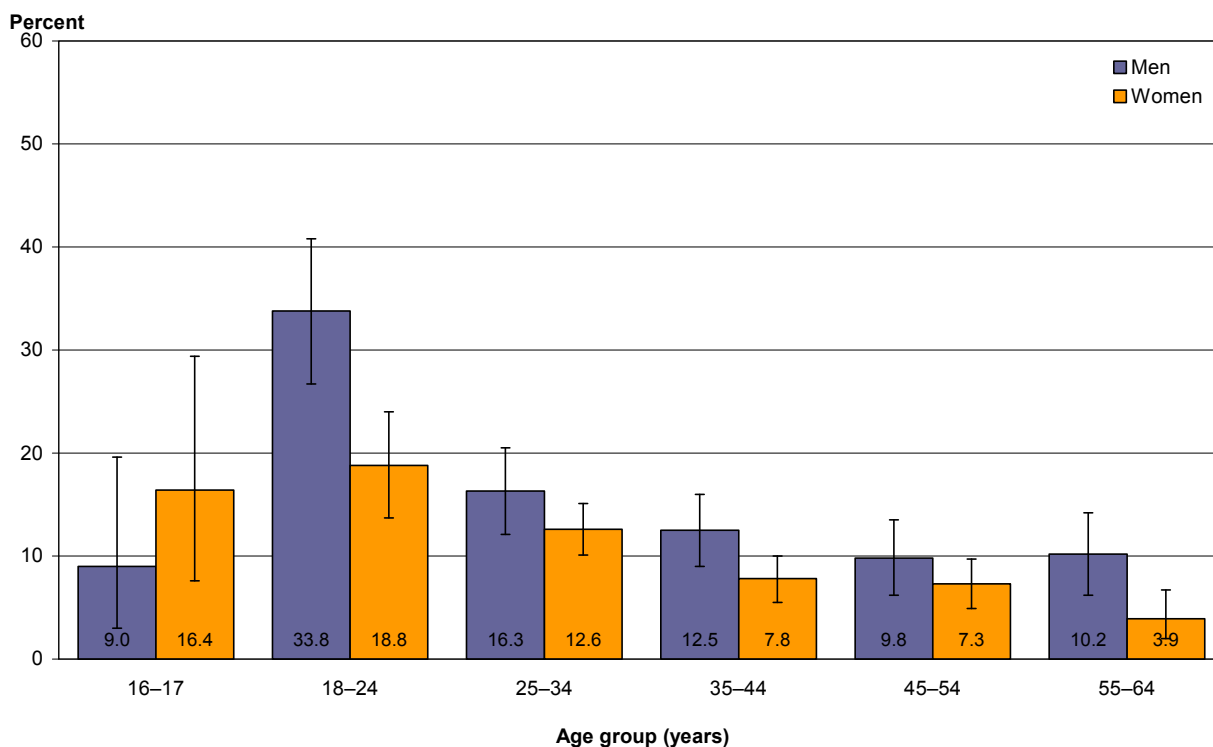
One in eight past-year drinkers consumed a large amount of alcohol on a drinking occasion at least weekly in the past 12 months (12.6%, 11.5–13.8). This is 10.7% (9.7–11.8) of the total population aged 16–64 years, and equates to 283,900 adults who consumed a large amount of alcohol at least once a week in the last year.

Among past-year drinkers, men (16.9%, 14.9–19.0) were significantly more likely than women (11.4%, 9.8–13.1) to have consumed a large amount of alcohol at least weekly in the past 12 months, adjusted for age.

## By age group

Among past-year drinkers, the prevalence of consuming a large amount of alcohol at least weekly was highest for 18–24-year-olds, and decreased with age after that (Figure 20). Among past-year drinkers aged 18–24 years, one in three men (33.8%, 26.7–40.8) and one in five women (18.8%, 13.7–24.0) consumed a large amount of alcohol at least weekly.

**Figure 20:** Consumed a large amount of alcohol on a drinking occasion at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure showing the prevalence of having consumed a large amount of alcohol on a drinking occasion at least weekly in the past year, among the total population aged 16–64 years, by age group and gender, is available in Appendix 1 (Figure A3).

## By ethnic group

Table 9 gives an indication of the prevalence of consuming a large amount of alcohol on a drinking occasion at least weekly among adults in New Zealand's main ethnic population groups.

**Table 9:** Consumed a large amount of alcohol on a drinking occasion at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

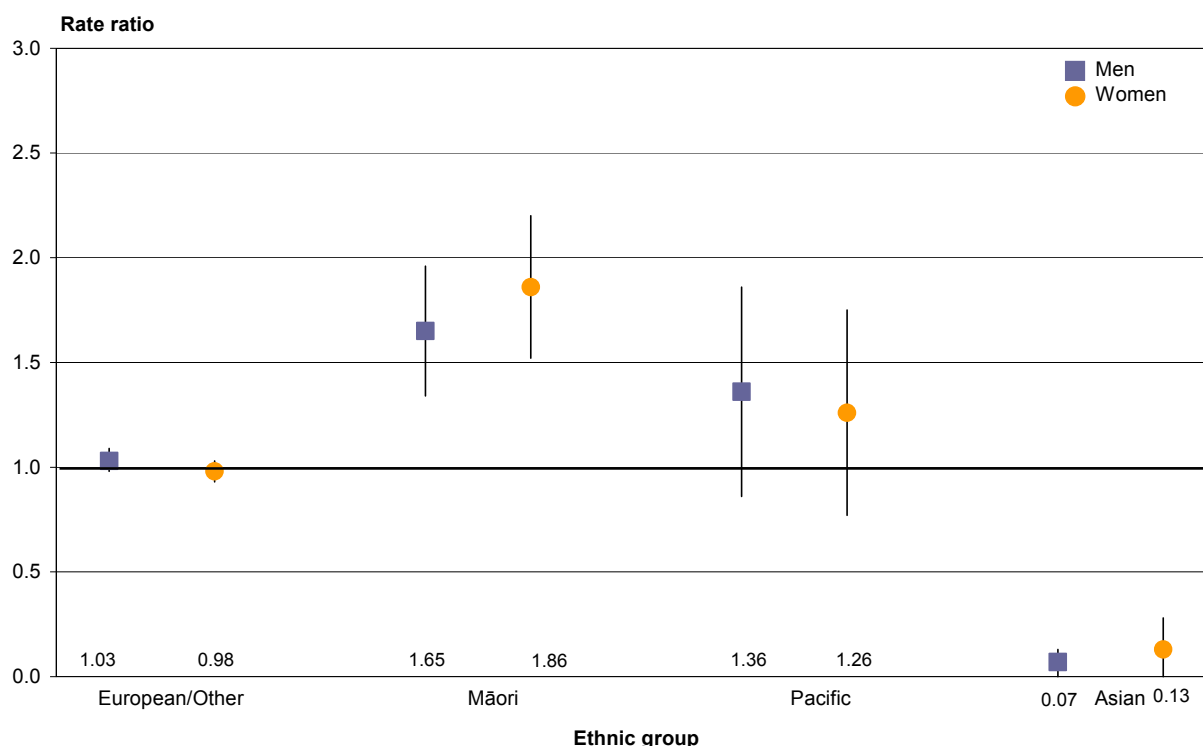
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)	Estimated number of adults
European/Other	12.2 (10.9–13.4)	11.0 (9.8–12.2)	228,400
Māori	23.9 (20.9–27.0)	20.3 (17.6–23.0)	66,500
Pacific	19.1 (14.3–24.0)	11.6 (8.7–14.5)	17,900
Asian	1.4 (0.6–2.8)	0.8 (0.3–1.5)	1700

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori men and women were over 1.5 times more likely to have consumed a large amount of alcohol weekly in the previous year compared with men and women in the total population (Figure 21). Asian men and women were much less likely to have consumed a large amount of alcohol weekly. There were no significant differences for Pacific men and women.

**Figure 21:** Consumed a large amount of alcohol on a drinking occasion at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



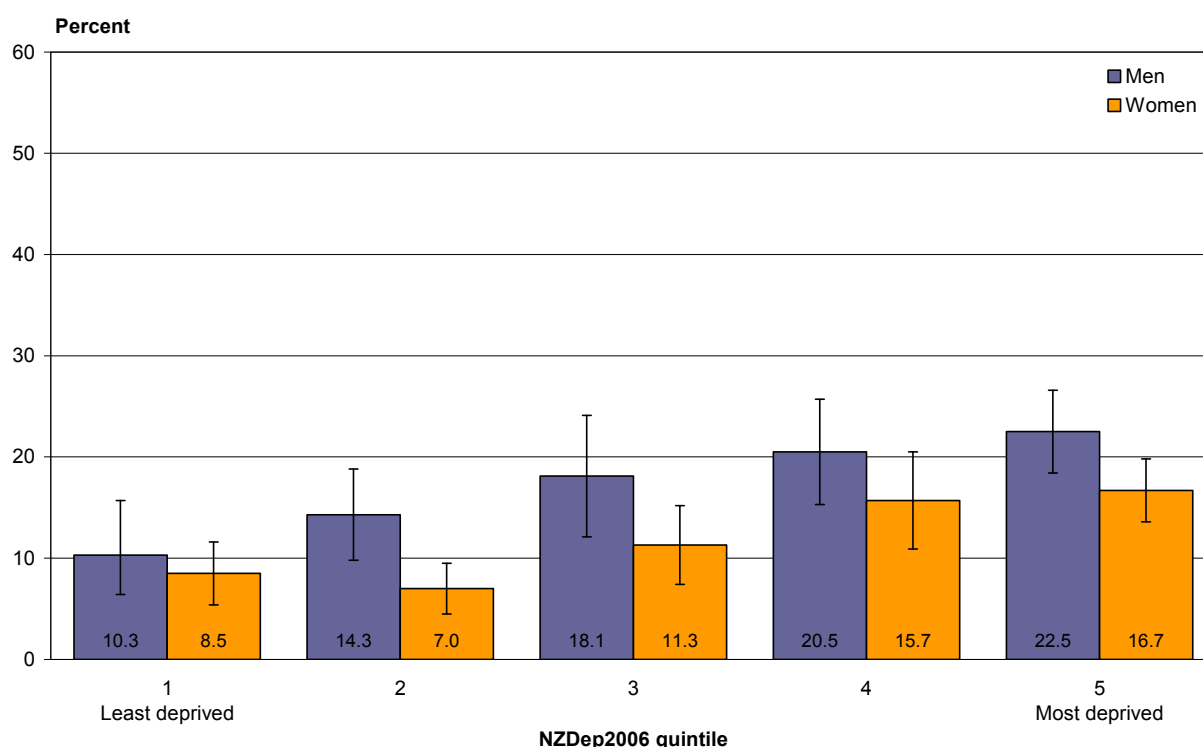
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both men and women, the prevalence of consuming a large amount of alcohol on a drinking occasion at least weekly was twice as high in NZDep2006 quintile 5 (most deprived) as in quintile 1 (least deprived) areas, when adjusted for age (Figure 22).

**Figure 22:** Consumed a large amount of alcohol on a drinking occasion at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Location of drinking large amounts of alcohol in the last 12 months

Among past-year drinkers aged 16–64 years, the most common places to have consumed a large amount of alcohol at least once in the past year were at their own home (42.1%, 40.2–44.0) and at someone else's home (35.7%, 34.0–37.4). Other places that past-year drinkers had consumed a large amount of alcohol were at:

- pubs, hotels, restaurants or cafés (18.8%, 17.2–20.4)
- nightclubs or bars (12.0%, 10.7–13.3)
- special events (5.9%, 5.1–6.8)
- sports clubs or events (4.1%, 3.4–4.9)
- groups, workplaces or meetings (3.6%, 2.9–4.3)
- outdoor public places (2.4%, 1.8–2.9).

## Ever consumed a large amount of alcohol on one drinking occasion

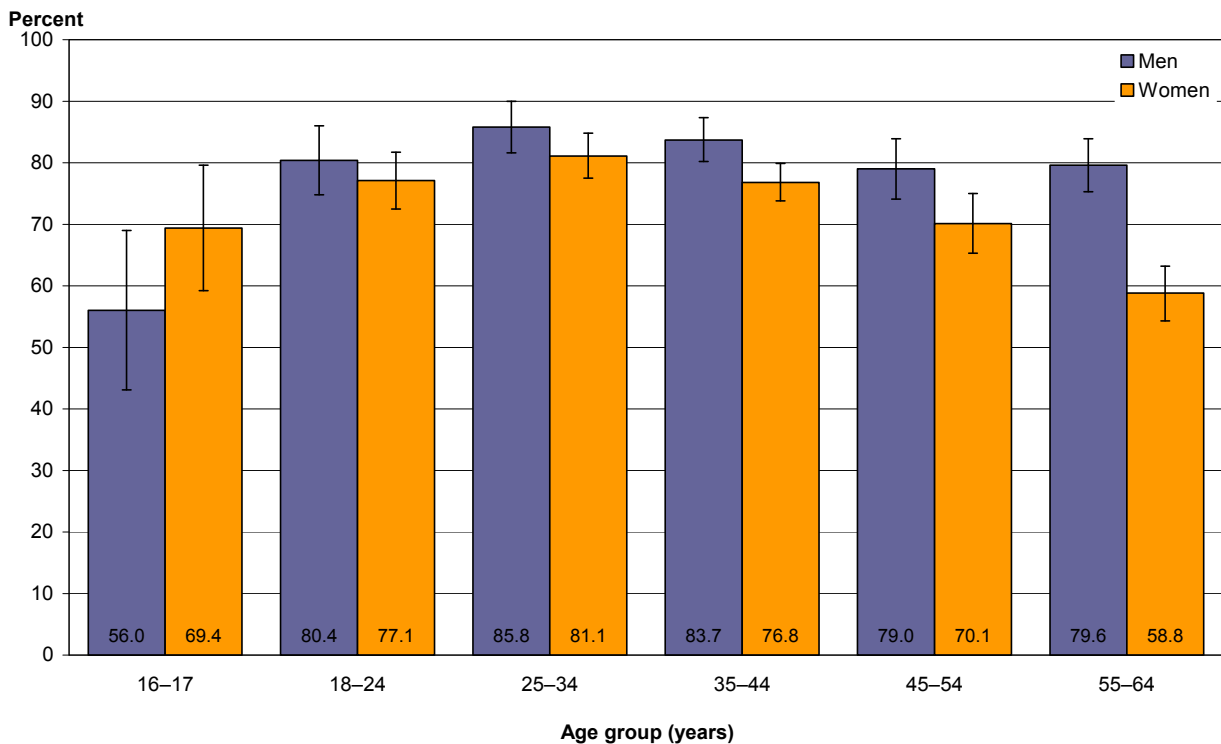
Almost eight in ten people aged 16–64 years in the total population had consumed a large amount of alcohol on one occasion during their lifetime (76.7%, 75.1–78.2). This equates to 2,024,000 adults aged 16–64 years.

When adjusted for age, men (80.5%, 78.1–82.9) were significantly more likely than women (74.9%, 72.8–77.1) to have ever consumed a large amount of alcohol.

### By age group

In men aged 18 years or over, the prevalence of having ever consumed a large amount of alcohol was relatively stable across age groups (Figure 23). The proportion of women who had ever consumed a large amount of alcohol was highest in the age group 25–34 years, and decreased with increasing age.

**Figure 23:** Ever consumed a large amount of alcohol on one drinking occasion, among total population aged 16–64 years (unadjusted prevalence)

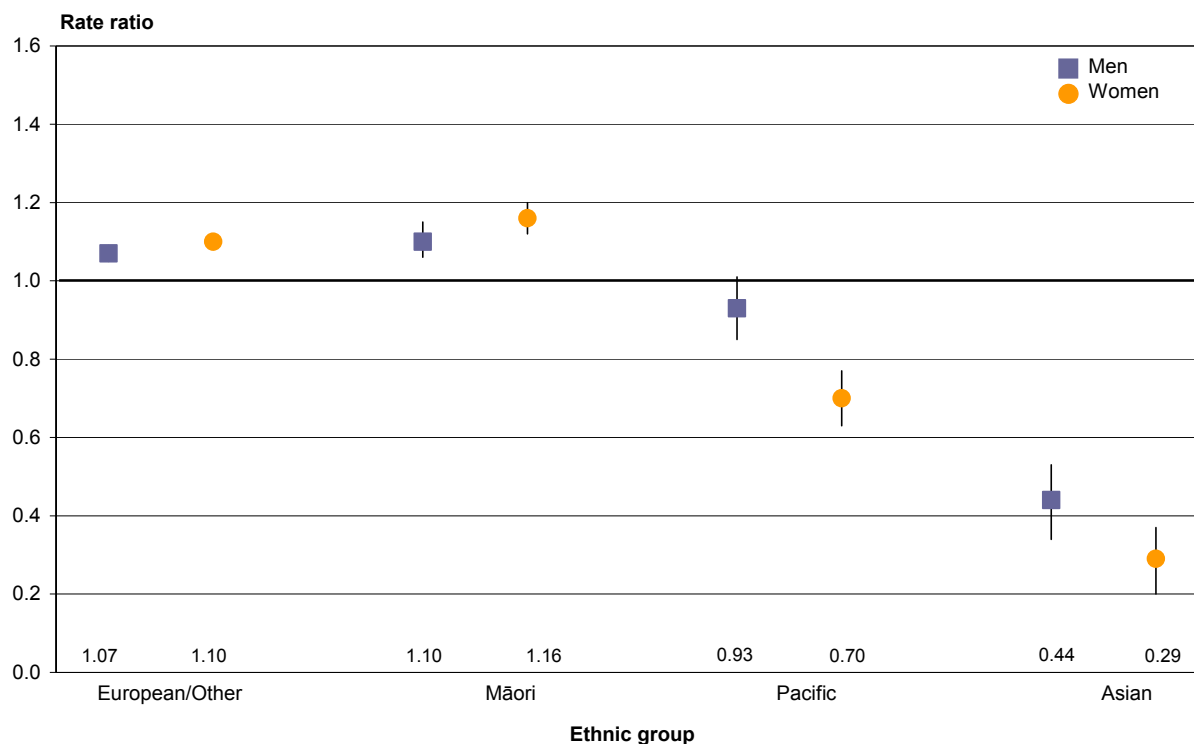


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

After adjusting for age, Māori and European/Other men and women were significantly more likely to have ever consumed a large amount of alcohol in their lifetime compared with men and women in the total population (Figure 24). Asian men and women and Pacific women were significantly less likely to have ever consumed a large amount of alcohol in their lifetime than men and women in the total population.

**Figure 24:** Ever consumed a large amount of alcohol on one drinking occasion, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both men and women there was no significant difference in the prevalence of having ever consumed a large amount of alcohol between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived).

## Age of first having consumed a large amount of alcohol

For this analysis it should be noted that there may be some recall error when analysing the age when people first consumed a large amount of alcohol, as older people may not remember exactly when they first started drinking.



The median age of first having consumed a large amount of alcohol was 17 years of age among people who had ever consumed a large amount of alcohol in their lifetime. Overall, over half of all people who had consumed a large amount of alcohol in their lifetime had done so when younger than 18 years of age (Table 10). One in seven people (13.9%, 12.7–15.1) who had ever had a large amount of alcohol had done so when they were aged 14 years or younger.

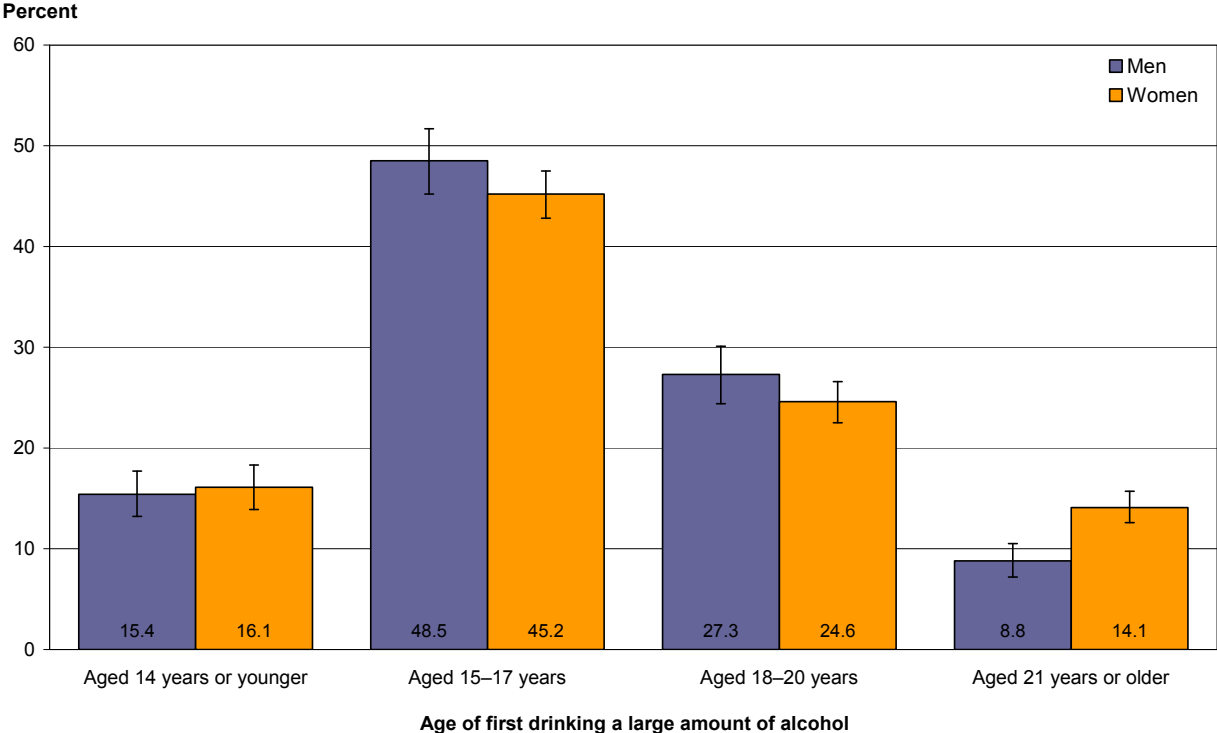
**Table 10:** Age of first having consumed a large amount of alcohol on one drinking occasion, among people aged 16–64 years who had ever consumed a large amount of alcohol (unadjusted prevalence)

Age of first having consumed a large amount of alcohol	Prevalence (%) (95% CI)
14 years or younger	13.9 (12.7–15.1)
15–17 years	44.3 (42.4–46.2)
18–20 years	27.9 (26.0–29.8)
21 years or older	14.0 (12.7–15.2)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Women were more likely than men to have first consumed a large amount of alcohol when aged 21 years or older, adjusted for age (Figure 25). There were no other significant differences between men and women in having consumed a large amount of alcohol when aged 14 years or younger, aged 15–17 years or aged 18–20 years.

**Figure 25:** Age of first having consumed a large amount of alcohol on one drinking occasion, among people aged 16–64 years who had ever consumed a large amount of alcohol, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report.

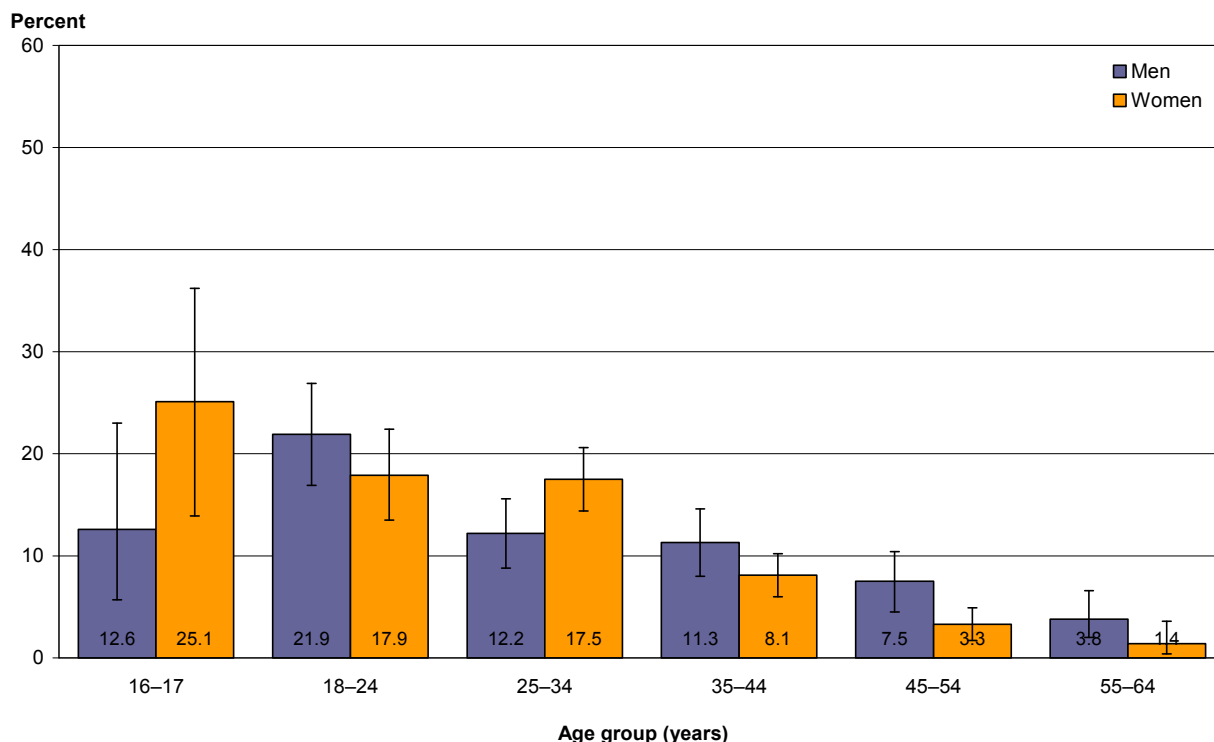
## Consumed a large amount of alcohol when aged 14 years or younger

Overall, one in ten people aged 16–64 years had consumed a large amount of alcohol when they were 14 years or younger (10.6%, 9.6–11.5). There was no significant difference between men (12.6%, 10.7–12.3) and women (12.3%, 10.6–13.9) in the prevalence of having consumed a large amount of alcohol when aged 14 years or younger, adjusted for age ( $p$ -value > 0.05).

### By age group

For males, the prevalence of having consumed a large amount of alcohol when aged 14 years or younger was highest among men aged 18–24 years, and decreased with increasing age after that age group (Figure 26). However, for females, there was a higher prevalence of drinking a large amount of alcohol when aged 14 years or younger among the 16–17-year-old females, with one in four females aged 16–17 years having consumed a large amount of alcohol when aged 14 years or younger.

**Figure 26:** Consumed a large amount alcohol on one drinking occasion when aged 14 years or younger, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

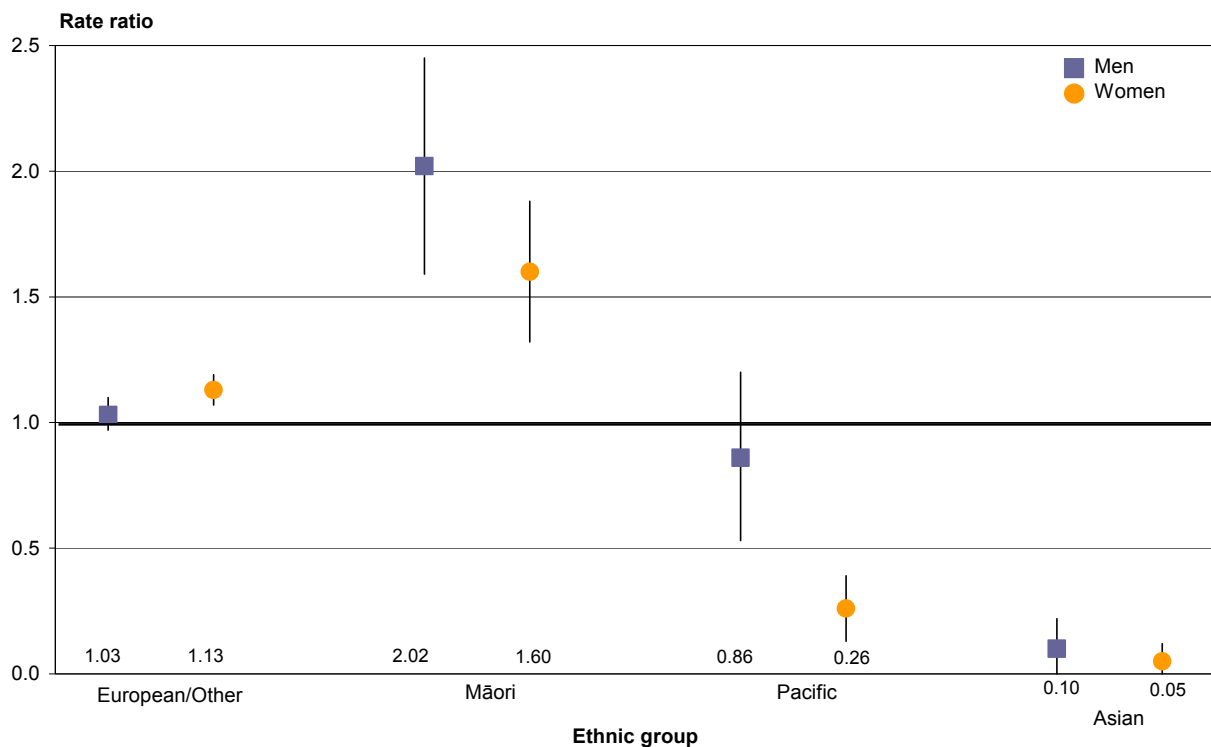


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Māori men were twice as likely to have consumed a large amount of alcohol when aged 14 years or younger than men in the total population, adjusted for age (Figure 27). European/Other women and Māori women were significantly more likely to have consumed a large amount of alcohol when they were 14 years or younger, while Pacific women and Asian men and women were significantly less likely to have done so, compared with men and women in the total population.

**Figure 27:** Consumed a large amount alcohol on one drinking occasion when aged 14 years or younger, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



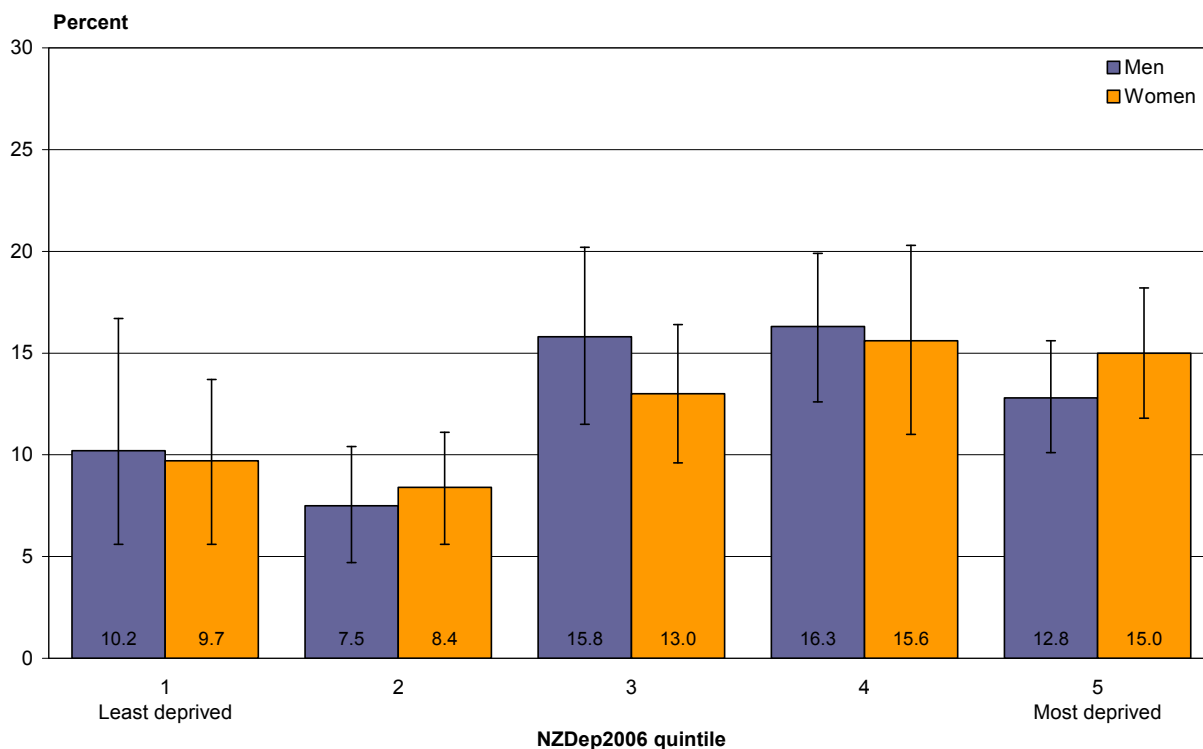
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Women living in the most deprived areas (NZDep2006 quintile 5) were significantly more likely to have consumed a large amount of alcohol when they were aged 14 years or younger than women living in the least deprived areas (NZDep2006 quintile 1), adjusted for age (p-value < 0.05) (Figure 28). There was no significant difference between NZDep2006 quintiles 1 and 5 for men.

**Figure 28:** Consumed a large amount alcohol on one drinking occasion when aged 14 years or younger, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 5: Drinking Enough Alcohol to Feel Drunk

Drinking enough alcohol to feel drunk or intoxicated may mean that an individual feels light-headed, their thoughts may slow down, and they may slur their speech or be unsteady on their feet. Intoxication is one of the three main mechanisms for harm from alcohol use, along with dependence and toxicity (World Health Organization 2007). Intoxication can increase risk-taking behaviour, and can also increase the risk of injury and other alcohol-related harms

### What were the survey questions?

In the 2007/08 NZADUS participants who had had an alcoholic drink in the past year were asked, during the last 12 months about how often did they drink enough to feel intoxicated or drunk; that is, when they felt light-headed, their thoughts were slowed down, their speech was slurred, they felt unsteady on their feet, or they had blurred vision. If they had not felt drunk in the past year, participants were asked if they had ever been drunk. All participants who had ever felt drunk were asked how old they were the first time they got drunk.

### Drinking enough to feel drunk in the last 12 months

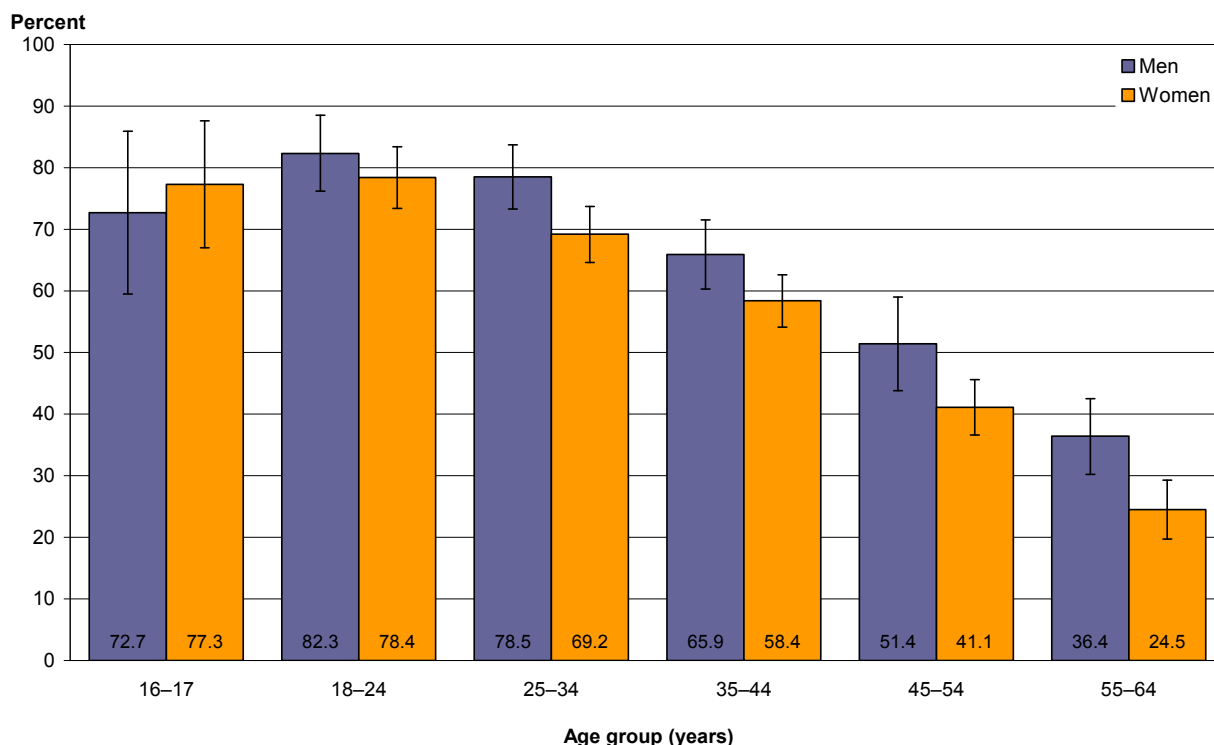
Six in ten past-year drinkers had consumed enough alcohol to feel drunk at least once in the past 12 months (59.2%, 57.4–61.0). This is half of the total adult population aged 16–64 years (50.4%, 48.6–52.1), equating to 1,330,000 people who drank enough to feel drunk at least once in the last 12 months.

Among past-year drinkers, men (68.1%, 65.3–70.9) were more likely than women (60.8%, 58.5–63.1) to have consumed enough alcohol to feel drunk in the last 12 months, adjusted for age.

### By age group

For past-year drinkers aged 18 years or over, the prevalence of drinking enough alcohol to feel drunk in the past year was highest for men and women aged 18–24 years, and decreased with increasing age (Figure 29). Although men were significantly more likely to have consumed enough alcohol to feel drunk in the past year than women in the age groups 25 years and over ( $p$ -values < 0.05), there was no significant difference by gender in the 16–17 and 18–24 years age groups.

**Figure 29:** Drank enough alcohol to feel drunk at least once in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure showing the prevalence of drinking enough alcohol to feel drunk in the past year, among the total population aged 16–64 years, by age group and gender, is available in Appendix 1 (Figure A4).

### By ethnic group

Table 11 gives an indication of the prevalence of drinking enough to feel drunk in the past year in New Zealand’s main ethnic population groups.

**Table 11:** Prevalence of drinking enough to feel drunk at least once in the last 12 months, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

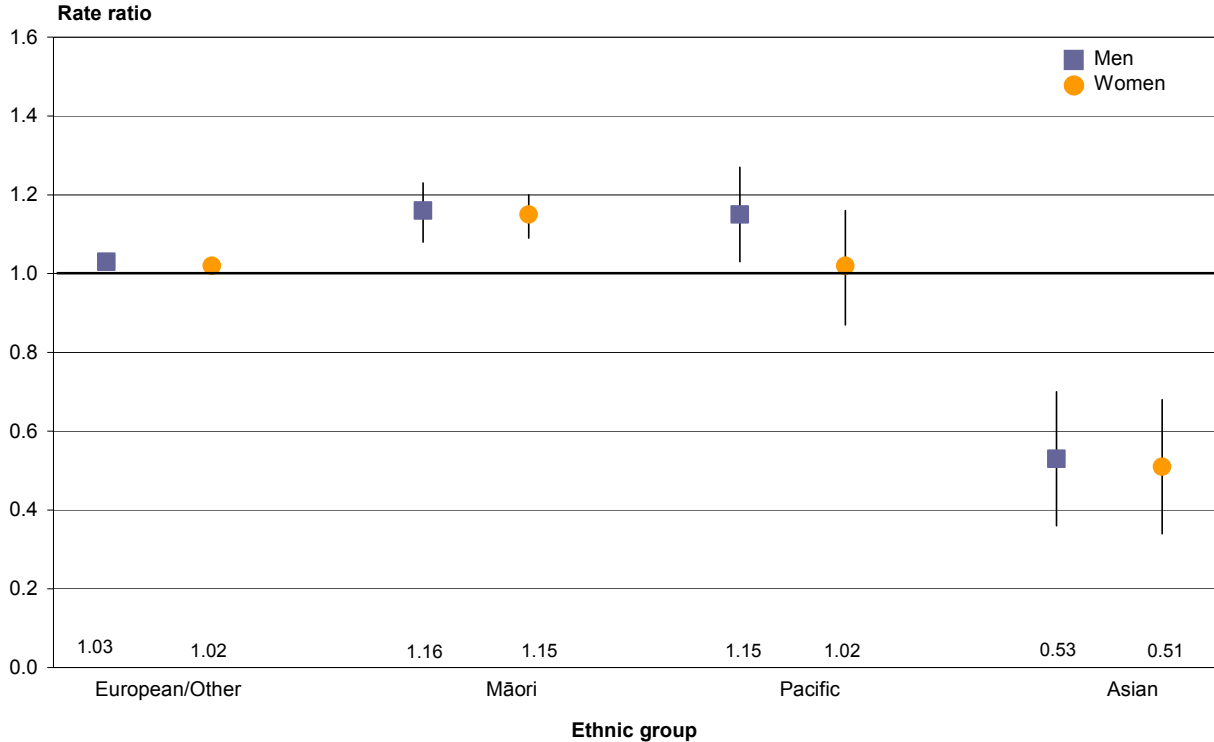
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total adults (95% CI)	Estimated number of adults
European/Other	59.2 (57.3–61.0)	53.4 (51.5–55.3)	1,110,300
Māori	72.9 (70.3–75.5)	61.9 (59.2–64.5)	202,600
Pacific	70.9 (65.3–76.4)	43.0 (38.6–47.5)	66,500
Asian	34.6 (26.5–42.7)	18.9 (14.3–23.5)	42,000

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, Māori men and women and Pacific men were significantly more likely to have consumed enough alcohol to feel drunk in the past 12 months compared with men and women in the total population, adjusted for age (Figure 30). Asian men and women were significantly less likely to have done so compared with men and women in the total population.

**Figure 30:** Drank enough alcohol to feel drunk at least once in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

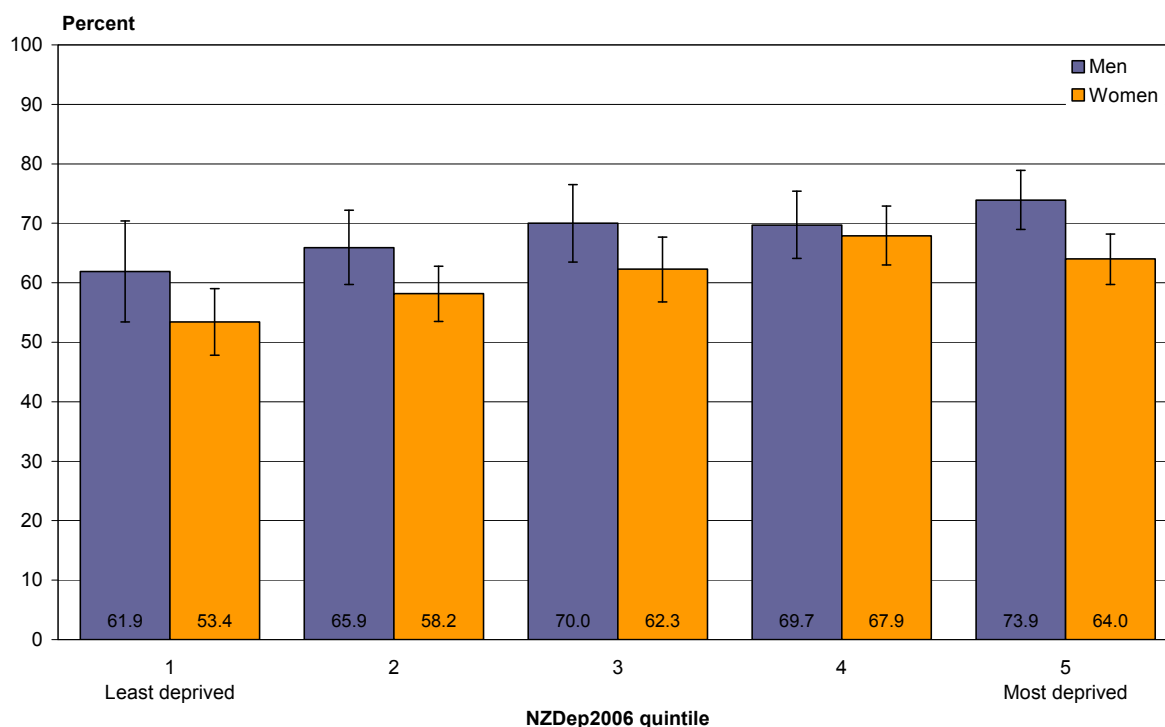


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both men and women, past-year drinkers living in areas of high neighbourhood deprivation (NZDep2006 quintile 5) were significantly more likely to have consumed enough alcohol to feel drunk in the past year than past-year drinkers living in areas of low neighbourhood deprivation (NZDep2006 quintile 1) ( $p$ -values  $< 0.05$ ) (Figure 31).

**Figure 31:** Drank enough alcohol to feel drunk at least once in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Frequency of drinking enough alcohol to feel drunk in the last 12 months

Two in five past-year drinkers (37.4%, 35.7–39.1) drank enough alcohol to feel drunk less than once a month on average (Table 12). An additional 8.4% (7.5–9.3) consumed enough alcohol to feel drunk one to two times a week, and 1.6% (1.1–2.0) consumed enough alcohol to feel drunk three or more times a week.

Two in five past-year drinkers (40.8%, 39.0–42.6) had not consumed enough alcohol to feel drunk in the past year.



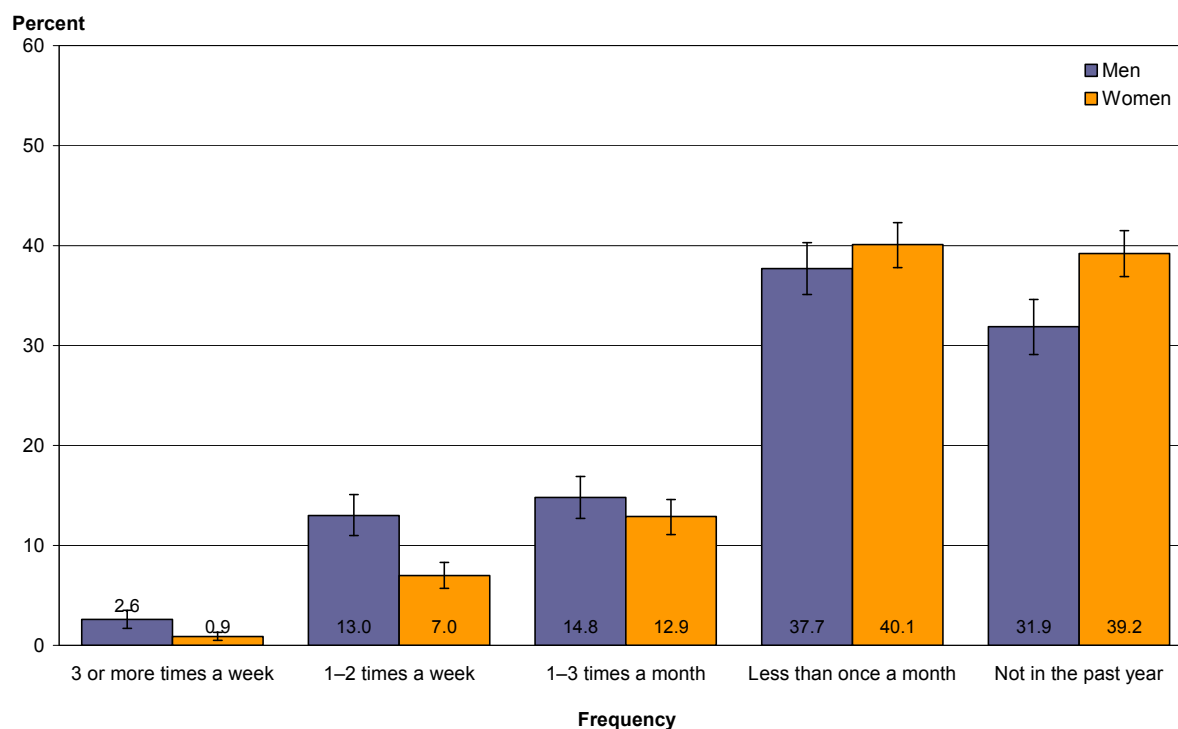
**Table 12:** Frequency of drinking enough alcohol to feel drunk in the last 12 months, among past-year drinkers aged 16–64 years (unadjusted prevalence)

Frequency of drinking enough alcohol to feel drunk in the past year	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)
3 or more times a week	1.6 (1.1–2.0)	1.3 (0.9–1.7)
1–2 times a week	8.4 (7.5–9.3)	7.2 (6.4–7.9)
1–3 times a month	11.8 (10.7–13.0)	10.1 (9.1–11.0)
In the last 12 months, but less than once a month	37.4 (35.7–39.1)	31.8 (30.3–33.3)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, men were more likely to drink enough alcohol to feel drunk one to two times a week, or three or more times a week in the past year, compared with women, adjusted for age (Figure 32).

**Figure 32:** Frequency of drinking enough alcohol to feel drunk in the past 12 months, among past-year drinkers aged 16–64 years, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report.

## Drinking enough to feel drunk at least weekly in the last 12 months

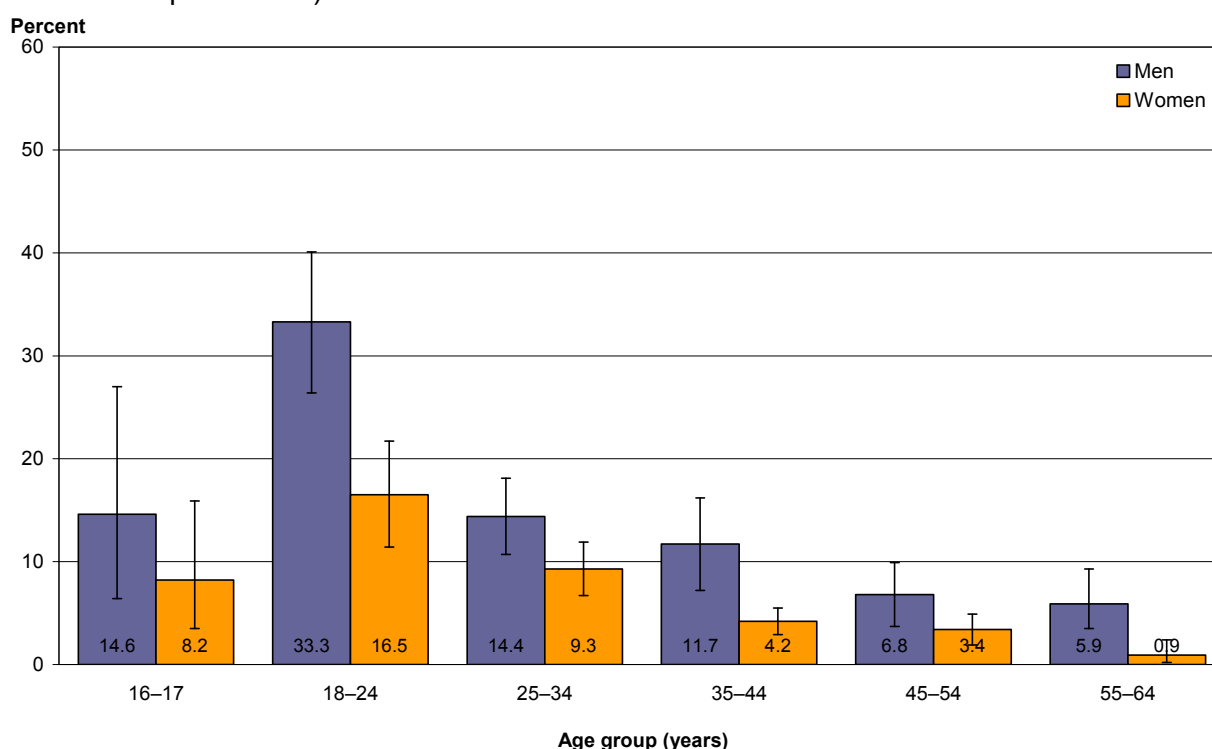
One in ten past-year drinkers consumed enough alcohol to feel drunk at least weekly in the past 12 months (10.0%, 9.1–10.9). This equates to 224,600 adults who drank enough to feel drunk at least once a week in the last year.

Among past-year drinkers, men (15.6%, 13.5–17.7) were twice as likely as women (7.9%, 6.5–9.3) to have drunk enough alcohol to feel drunk at least weekly in the last 12 months, when standardised for age.

### By age group

Among past-year drinkers, the prevalence of drinking enough alcohol to feel drunk on a weekly basis was highest in the 18–24 years age group, and decreased with increasing age for both men and women (Figure 33). Among past-year drinkers, one in three men aged 18–24 years (33.3%, 26.4–40.1) drank enough alcohol to feel drunk at least weekly.

**Figure 33:** Drank enough alcohol to feel drunk at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure showing the prevalence of drinking enough alcohol to feel drunk at least weekly in the past year, among the total population aged 16–64 years, by age group and gender, is available in Appendix 1 (Figure A5).

### By ethnic group

Table 13 gives an indication of the prevalence of drinking enough alcohol to feel drunk at least weekly in New Zealand's main ethnic population groups.

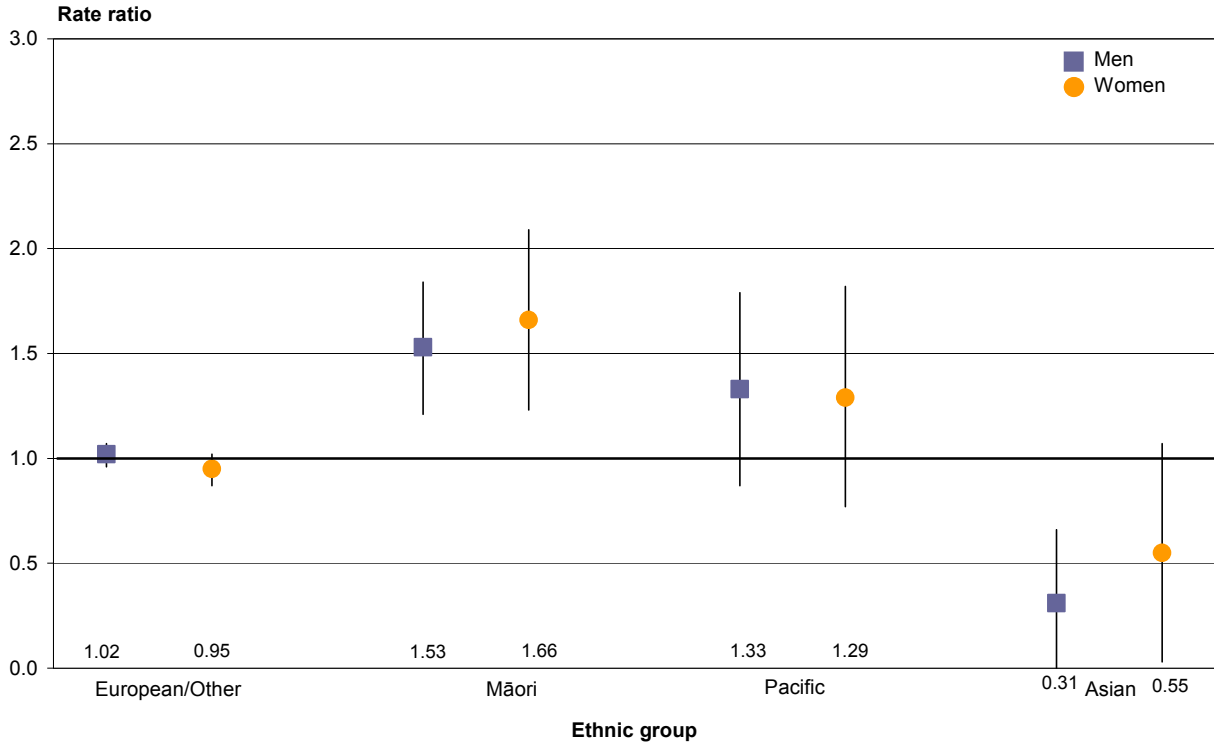
**Table 13:** Drank enough alcohol to feel drunk at least weekly in the last 12 months, among past-year drinkers and total population aged 16–64 years, by ethnic group (unadjusted prevalence)

Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)	Estimated number of adults
European/Other	9.2 (8.2–10.2)	8.3 (7.4–9.3)	173,300
Māori	17.9 (15.1–20.6)	15.2 (12.9–17.5)	49,700
Pacific	16.0 (12.1–19.8)	9.7 (7.4–12.0)	15,000
Asian	4.7 (1.9–9.6)	2.6 (1.1–5.2)	5700

Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori men and women were about 1.5 times more likely to have consumed enough alcohol to feel drunk at least weekly in the past year compared with men and women in the total population (Figure 34). Asian men were significantly less likely to have consumed enough alcohol to feel drunk at least weekly in the past year, compared to men in the total population. There were no significant differences for Pacific men and women or for Asian women.

**Figure 34:** Drank enough alcohol to feel drunk at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

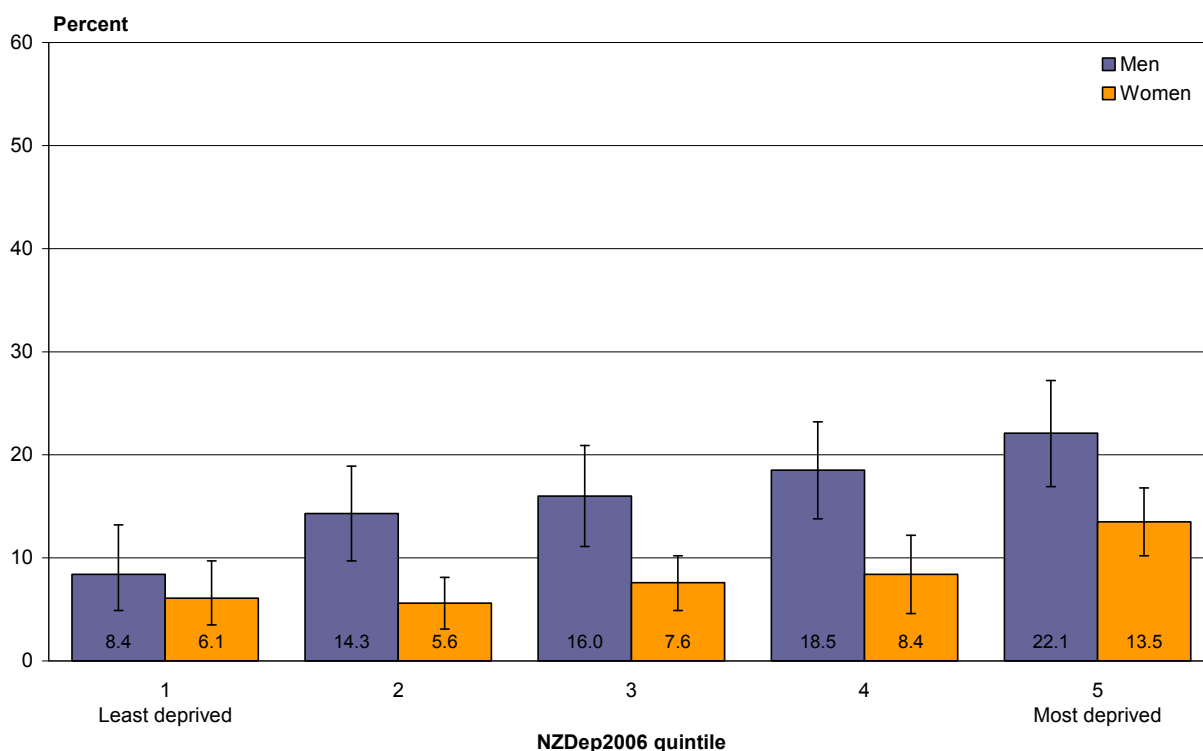


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

Men and women living in areas of high neighbourhood deprivation (NZDep2006 quintile 5) were over twice as likely to have consumed enough alcohol to feel drunk at least weekly in the past year compared with men and women living in areas of low neighbourhood deprivation (NZDep2006 quintile 1), when adjusted for age (Figure 35).

**Figure 35:** Drank enough alcohol to feel drunk at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Ever consumed enough alcohol to feel drunk

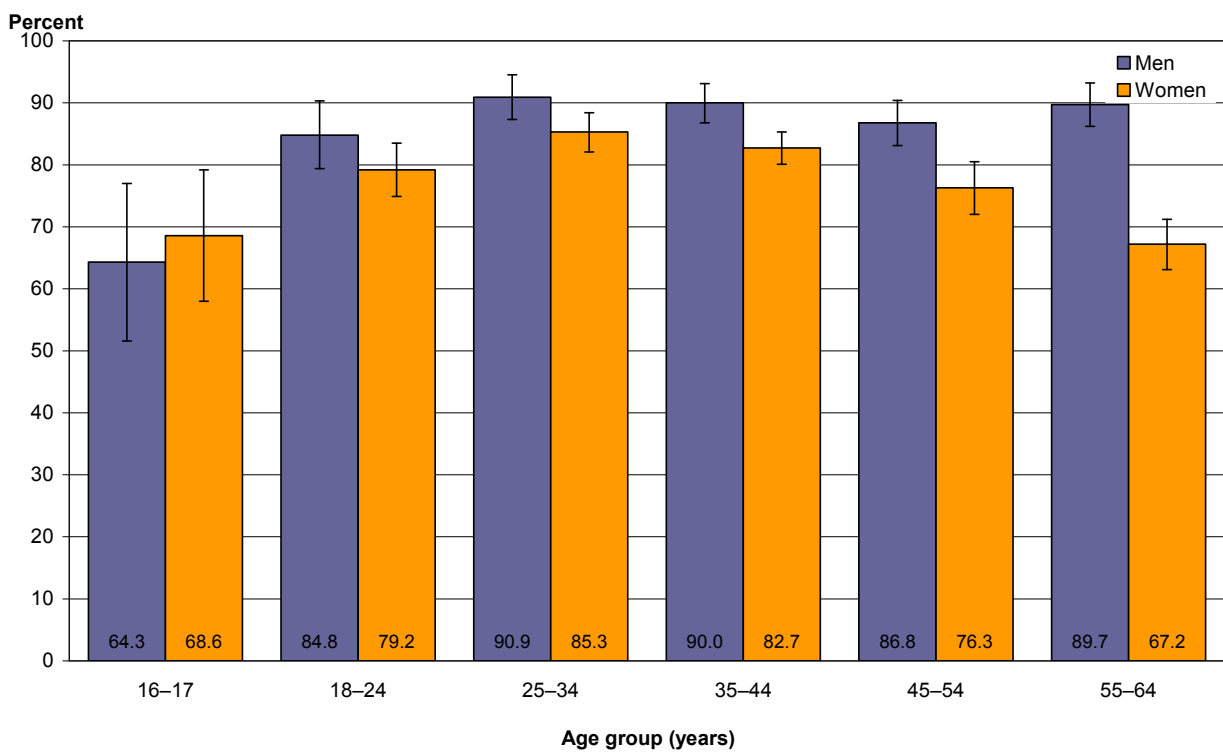
Overall, eight in ten people aged 16–64 years had ever consumed enough alcohol to feel drunk (82.6%, 81.2–84.0). Men (86.8%, 84.6–89.0) were significantly more likely than women (79.4%, 77.3–81.4) to have ever consumed enough alcohol to feel drunk, when standardised for age.

### By age group

About nine in ten men aged 25 years and over had consumed enough alcohol to feel drunk at some point during their lifetime (Figure 36). In all age groups aged 25 years and older, men were significantly more likely than women to have ever consumed enough alcohol to feel drunk.

There was a lower prevalence in the 16–17 years age group for having ever consumed enough alcohol to feel drunk, although two in three people in this age group had consumed enough alcohol to feel drunk at least once in their lifetime.

**Figure 36:** Ever consumed enough alcohol to feel drunk, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

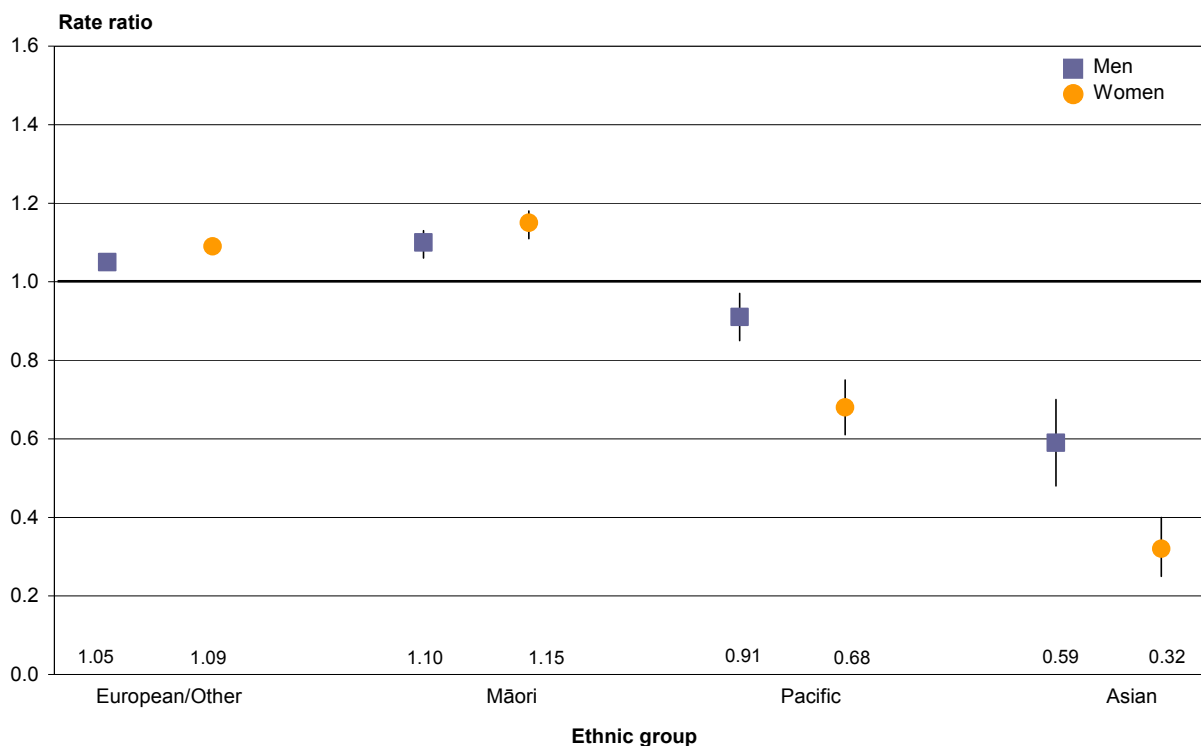


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

European/Other and Māori men and women were significantly more likely to have ever consumed enough alcohol to feel drunk compared with men and women in the total population (Figure 37). Pacific and Asian men and women were significantly less likely to have ever consumed enough alcohol to feel drunk compared with men and women in the total population.

**Figure 37:** Ever consumed enough alcohol to feel drunk, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



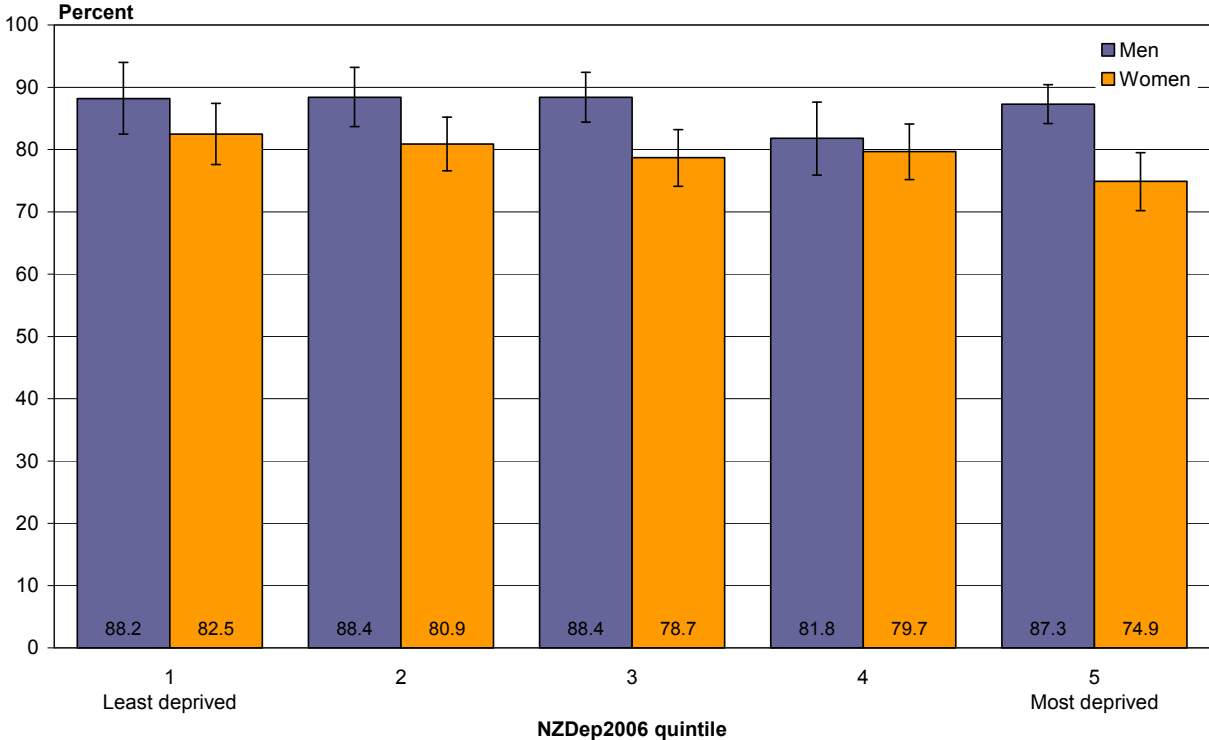
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Women living in the least deprived neighbourhoods (NZDep2006 quintile 1) were significantly more likely to have ever consumed enough alcohol to feel drunk than women living in the most deprived areas (quintile 5) (Figure 38). There were no significant differences for men in the prevalence of having ever consumed enough alcohol to feel drunk, by neighbourhood deprivation.

**Figure 38:** Ever consumed enough alcohol to feel drunk, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Age of first drinking enough to feel drunk**

For this analysis it should be noted that there may be some recall error when analysing the age when people first drank enough alcohol to feel drunk, as older people may not remember exactly when they first felt drunk.

For adults aged 16–64 years who had ever consumed enough alcohol to feel drunk, the median age at which they first did this was 16 years. Overall, the most common age at which people first consumed enough alcohol to feel drunk was 15–17 years (Table 14). About two in three people who had ever been drunk were first drunk when younger than 18.

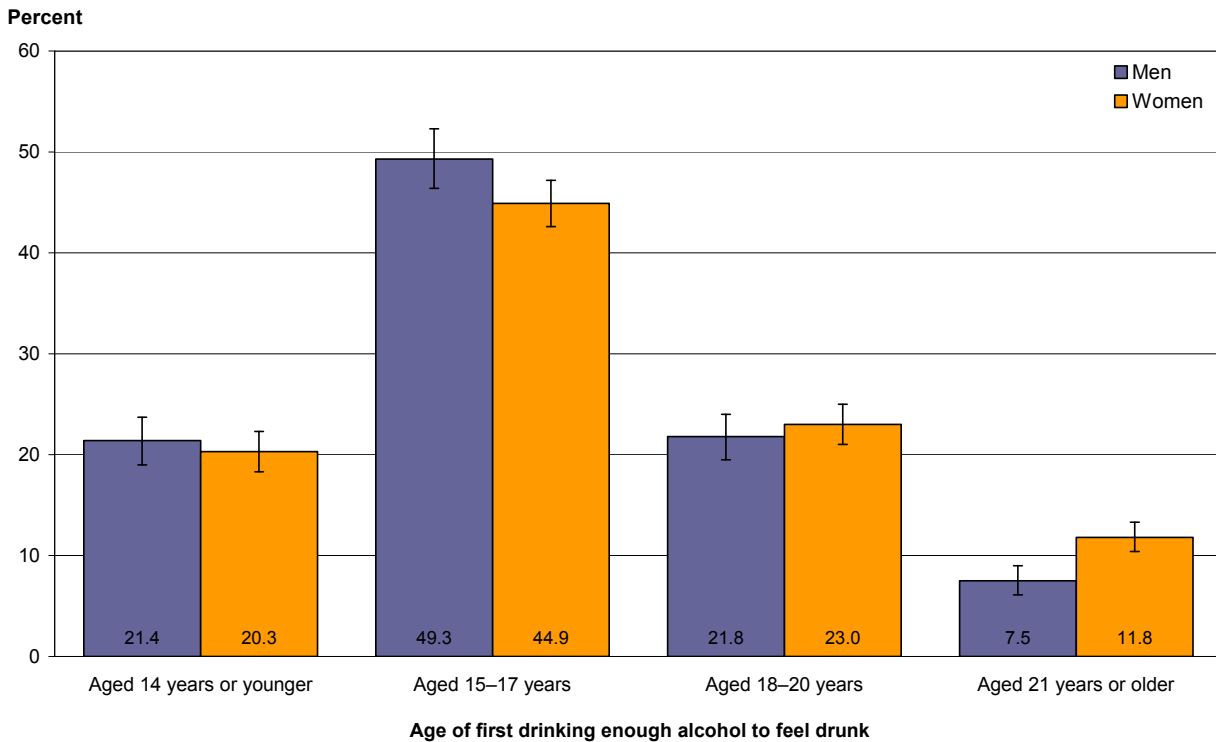
**Table 14:** Age of first having consumed enough alcohol to feel drunk, among people aged 16–64 years who had ever consumed enough alcohol to feel drunk (unadjusted prevalence)

Age of first having consumed enough alcohol to feel drunk	Prevalence (%) (95% CI)
14 years or younger	18.1 (16.8–19.4)
15–17 years	45.4 (43.8–47.0)
18–20 years	24.4 (22.9–25.9)
21 years or older	12.1 (10.9–13.3)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among people who had ever consumed enough alcohol to feel drunk, men were generally more likely to have first consumed enough alcohol to feel drunk at a younger age than women. Men were significantly more likely to have first consumed enough alcohol to feel drunk at the age of 15–17 years than women, adjusted for age (Figure 39). Women were significantly more likely than men to have been aged 21 years or over when they first consumed enough alcohol to feel drunk.

**Figure 39:** Age of first drinking enough alcohol to feel drunk, among people aged 16–64 years who had ever consumed enough alcohol to feel drunk, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey



## Consumed enough alcohol to feel drunk when aged 14 years or younger

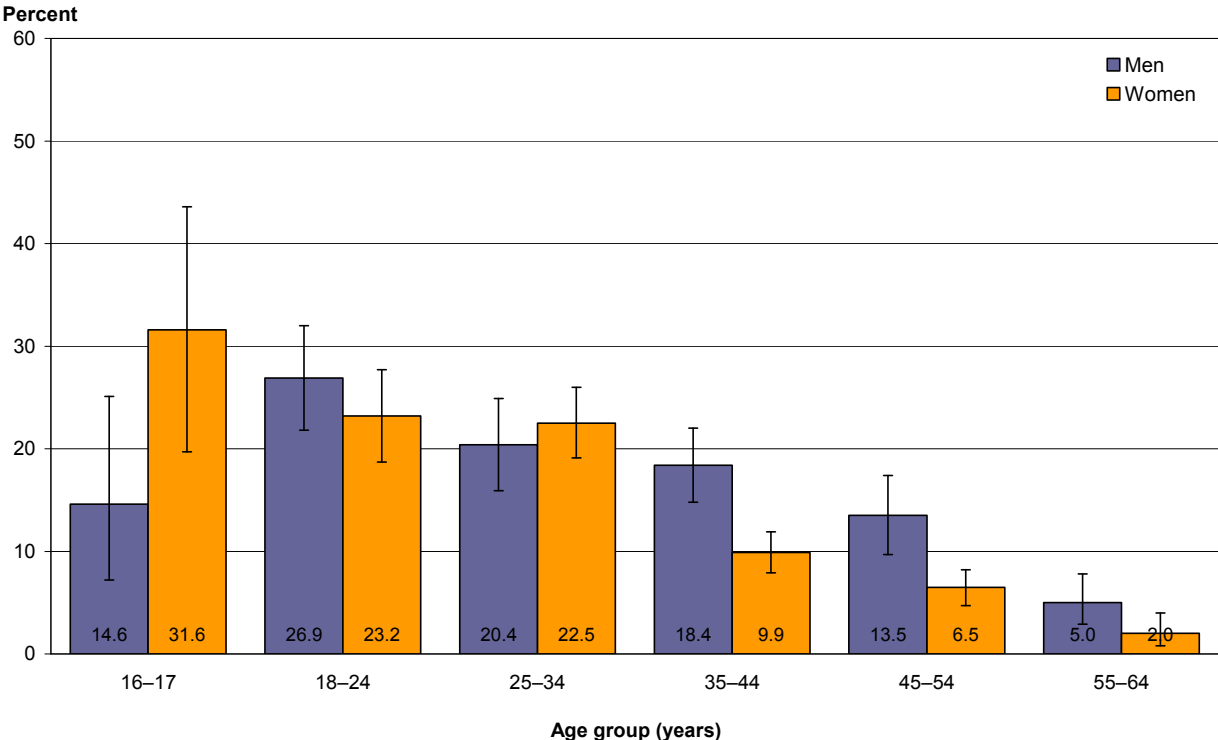
Overall, one in seven people aged 16–64 years had consumed enough alcohol to feel drunk at the age of 14 years or younger (14.9%, 13.8–16.0).

### By age group

For men, the prevalence of having been drunk at the age of 14 years or younger was highest among men aged 18–24 years (Figure 40). However, for women, the prevalence was highest among female aged 16–17 years, with about one in three females aged 16–17 years having first got drunk when they were aged 14 years or younger.

In the age groups 35–64 years, men were significantly more likely than women to have first consumed enough alcohol to feel drunk when they were aged 14 years or younger (p-values < 0.05). However, among people aged 16–17 years, the prevalence for first having been drunk when aged 14 years or younger was significantly higher for females than for males (p-value < 0.05). There was no significant difference between males and females aged 18–34 years.

**Figure 40:** Consumed enough alcohol to feel drunk when aged 14 years or younger, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

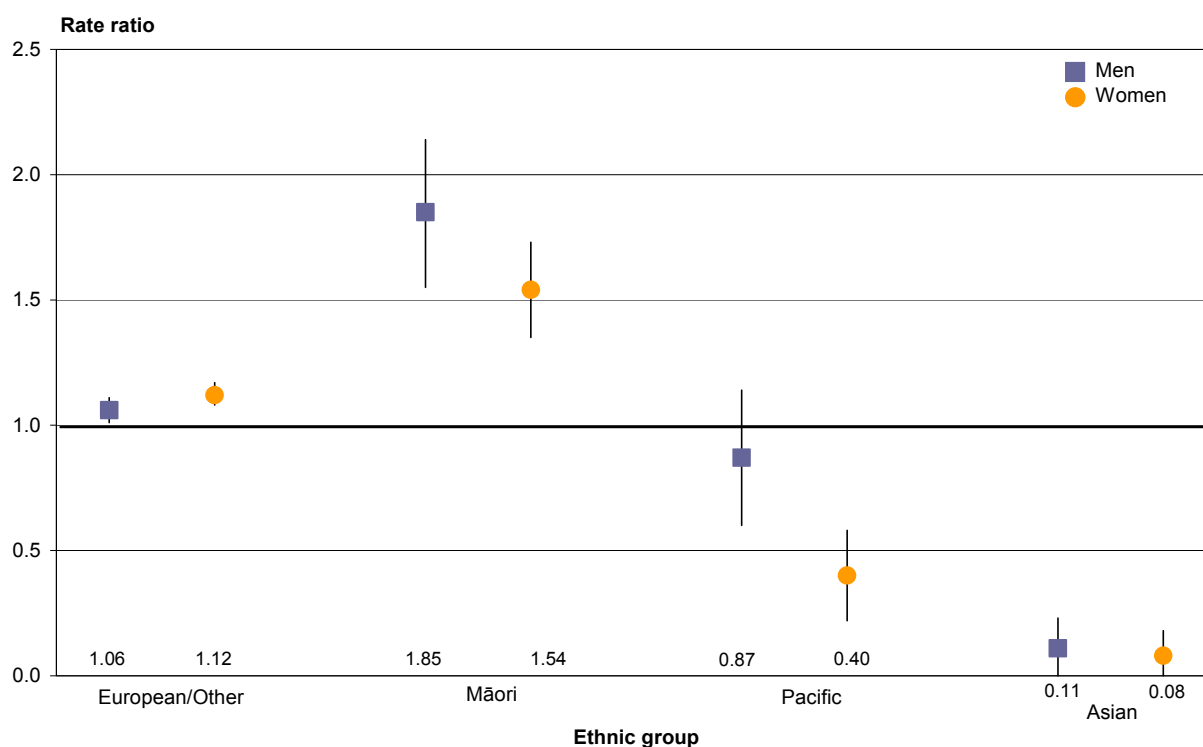


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Overall, European/Other and Māori men and women were significantly more likely to have first got drunk at the age of 14 years or younger compared with men and women in the total population, adjusted for age (Figure 41). Asian men, and Pacific and Asian women, were significantly less likely to have first consumed enough alcohol to feel drunk when they were 14 years or younger compared with men and women in the total population. There was no significant difference for Pacific men.

**Figure 41:** Consumed enough alcohol to feel drunk when aged 14 years or younger, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



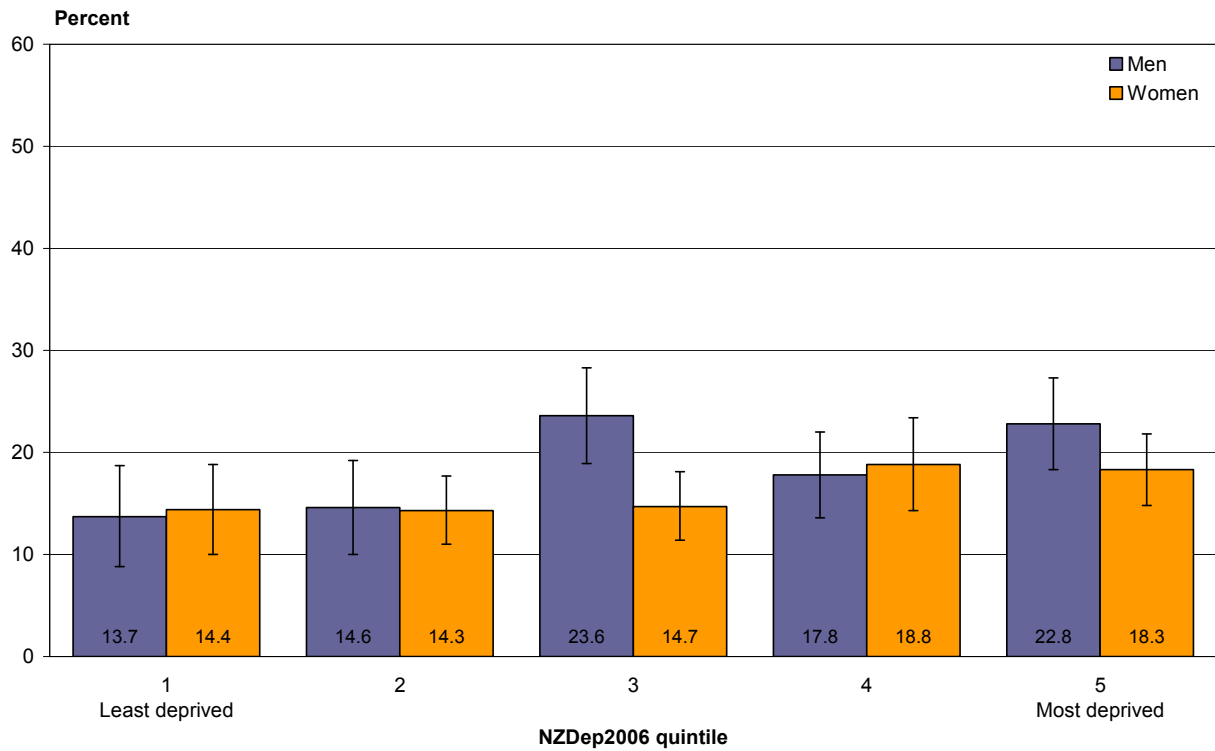
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

For both men and women there was no statistically significant difference in the prevalence of having consumed alcohol when aged 14 years or younger between people living in the most deprived areas (NZDep2006 quintile 5) and in the least deprived areas (NZDep2006 quintile 1), adjusted for age (Figure 42).

**Figure 42:** Consumed enough alcohol to feel drunk when aged 14 years or younger, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 6: Risky Behaviours While Under the Influence of Alcohol

Alcohol affects the central nervous system. As a result, alcohol use slows reactions, dulls judgement and impairs people's abilities. Driving and operating machinery and working while feeling under the influence of alcohol can result in major harm and, in some cases, death, to the drinker and to other people.

Using other drugs with alcohol is also risky, as alcohol can interact with other drugs, causing different effects and, in some cases, posing additional health risks. Some of the health effects of mixing alcohol and other drugs include:

- alcohol and cannabis: decreased alertness, increased effect on motor and intellectual skills
- alcohol and opiates (eg, heroin, morphine): increased effect on the central nervous system
- alcohol and stimulant drugs (eg, amphetamine, cocaine): reduced psychomotor skills
- alcohol and painkillers (eg, paracetamol, aspirin): increased gastrointestinal blood loss, can cause drowsiness
- alcohol and anti-depressants: increased sedative effect
- alcohol and pain relievers: can increase the effect of alcohol, and can cause liver damage or gastric bleeding (Health Department of Western Australia 1999; National Institute on Alcohol Abuse and Alcoholism 1995).

This section examines the prevalence of a number of risky behaviours while under the influence of alcohol. The analysis of using alcohol with other drugs has been presented according to broad drug categories due to small numbers.

### What were the survey questions?

In the 2007/08 NZADUS participants who had had an alcoholic drink in the past year were asked, in the last 12 months, how often they had driven a car or another motor vehicle such as a motorcycle or boat when they felt under the influence of alcohol, how often they had operated machinery when they felt under the influence of alcohol, and how often they had worked when they felt under the influence of alcohol.

Participants who had had an alcoholic drink in the past year were also asked whether, in the last 12 months, they had used any of the following together with alcohol, on at least one occasion: tobacco, BZP party pills, anti-depressants, pain killers, sedatives (including sleeping pills), cannabis, ecstasy, amphetamine/methamphetamine, heroin, cocaine/crack, or any other drugs.

It should be noted that BZP party pills became a class C1 controlled drug under the Misuse of Drugs Act on 1 April 2008.

## Summary of risky behaviours

Table 15 presents a summary of risky behaviours reported by people while they were feeling under the influence of alcohol in the last 12 months.

**Table 15:** Reported risky behaviours while feeling under the influence of alcohol in the past year, among past-year drinkers and total population aged 16–64 years (unadjusted prevalence)

Risky behaviour while feeling under the influence of alcohol in the past year	Prevalence (%) in the last 12 months (95% CI)		Estimated number of adults
	For past-year drinkers	For total adults	
Driving	19.8 (18.5–21.1)	16.8 (15.7–18.0)	444,100
Working	11.2 (9.9–12.5)	9.5 (8.4–10.7)	251,900
Operating machinery	3.1 (2.5–3.7)	2.6 (2.1–3.1)	68,900

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Driving while feeling under the influence of alcohol

The following results are reported for all past-year drinkers and do not take into account whether people had driven a motor vehicle in the past year.

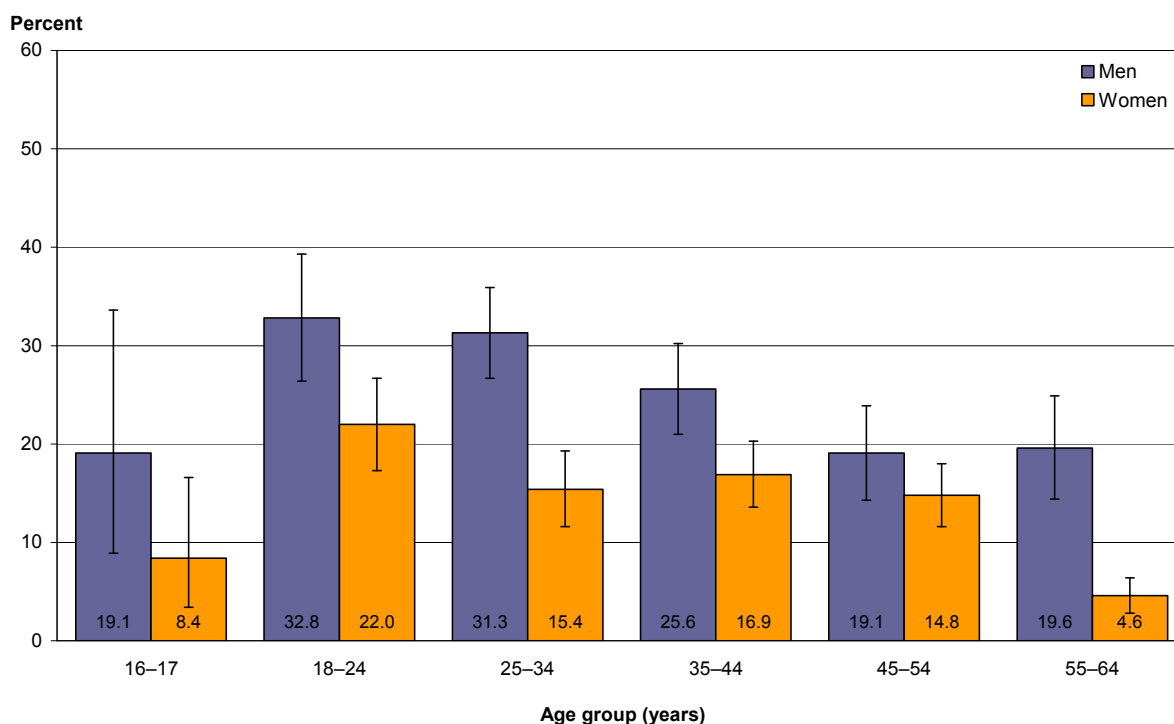
One in five past-year drinkers reported having driven a car or another motor vehicle (such as a motorcycle or boat) while feeling under the influence of alcohol in the past 12 months (19.8%, 18.5–21.1). This represents one in six people (16.8%, 15.7–18.0) in the total adult population aged 16–64 years, equating to 444,100 adults who reported having driven under the influence of alcohol at least once in the past 12 months.

Among past-year drinkers, men were significantly more likely to report having driven under the influence of alcohol in the last 12 months (26.5%, 24.1–28.9) compared with women (15.8%, 14.0–17.6), adjusted for age.

### By age group

Among past-year drinkers, the prevalence of reporting having driven in the past year while feeling under the influence of alcohol was highest among men aged 18–24 years, and decreased with increasing age. Among past-year drinkers, one in three men aged 18–34 years reported having driven while feeling under the influence of alcohol in the previous year (Figure 43). In most age groups women were significantly less likely to have driven under the influence of alcohol than men.

**Figure 43:** Reporting having driven while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure is available in Appendix 1 presenting the prevalence of reporting having driven while feeling under the influence of alcohol in the past year, among the total population aged 16–64 years, by age group and gender.

### By ethnic group

Table 16 gives an indication of the prevalence of reporting having driven while feeling under the influence of alcohol at least once in the past year, among people aged 16–64 years in New Zealand’s main ethnic population groups.

**Table 16:** Reporting having driven while feeling under the influence of alcohol in the last 12 months, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

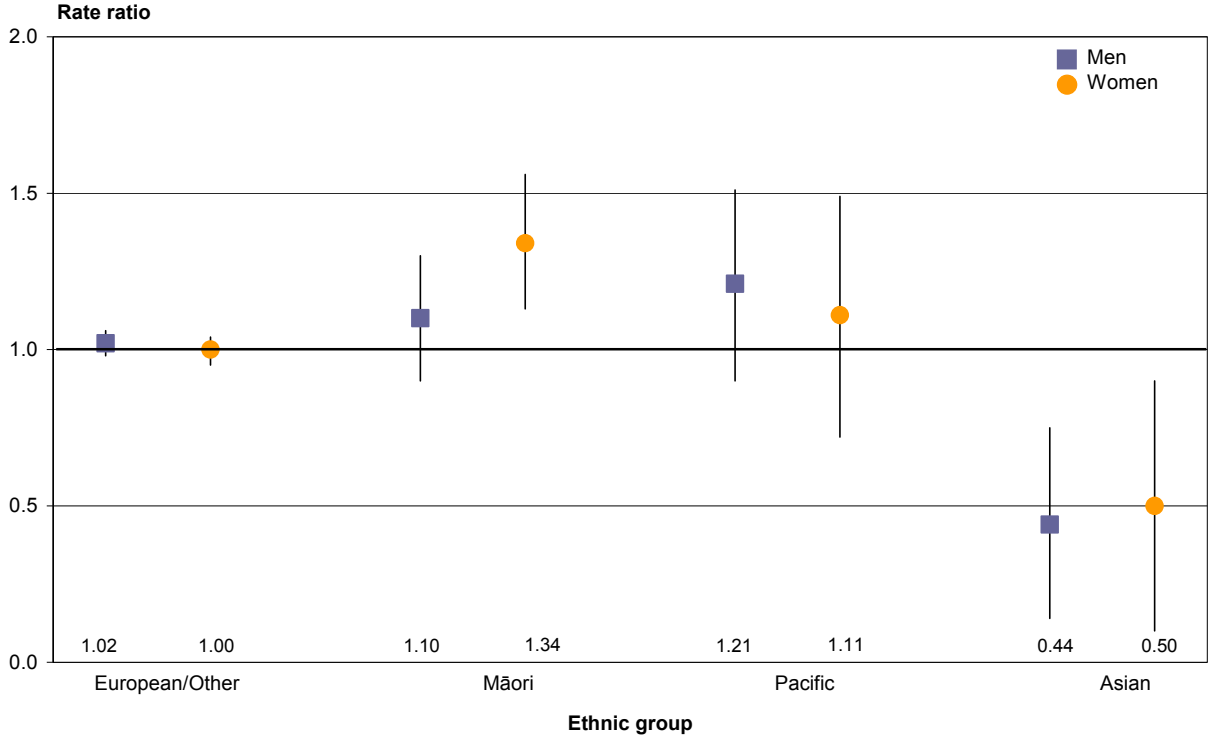
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)	Estimated number of adults
European/Other	19.6 (18.2–21.1)	17.7 (16.4–19.0)	367,800
Māori	24.5 (21.4–27.5)	20.8 (18.1–23.4)	68,000
Pacific	24.9 (19.6–30.2)	15.1 (11.8–18.5)	23,400
Asian	10.8 (6.1–17.5)	5.9 (3.3–9.6)	13,000

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, Māori women were significantly more likely to report having driven while feeling under the influence of alcohol in the previous year compared with women in the total population, adjusted for age (Figure 44). Asian men and women were less likely to report having driven while feeling under the influence of alcohol compared with men and women in the total population.

**Figure 44:** Reporting having driven while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



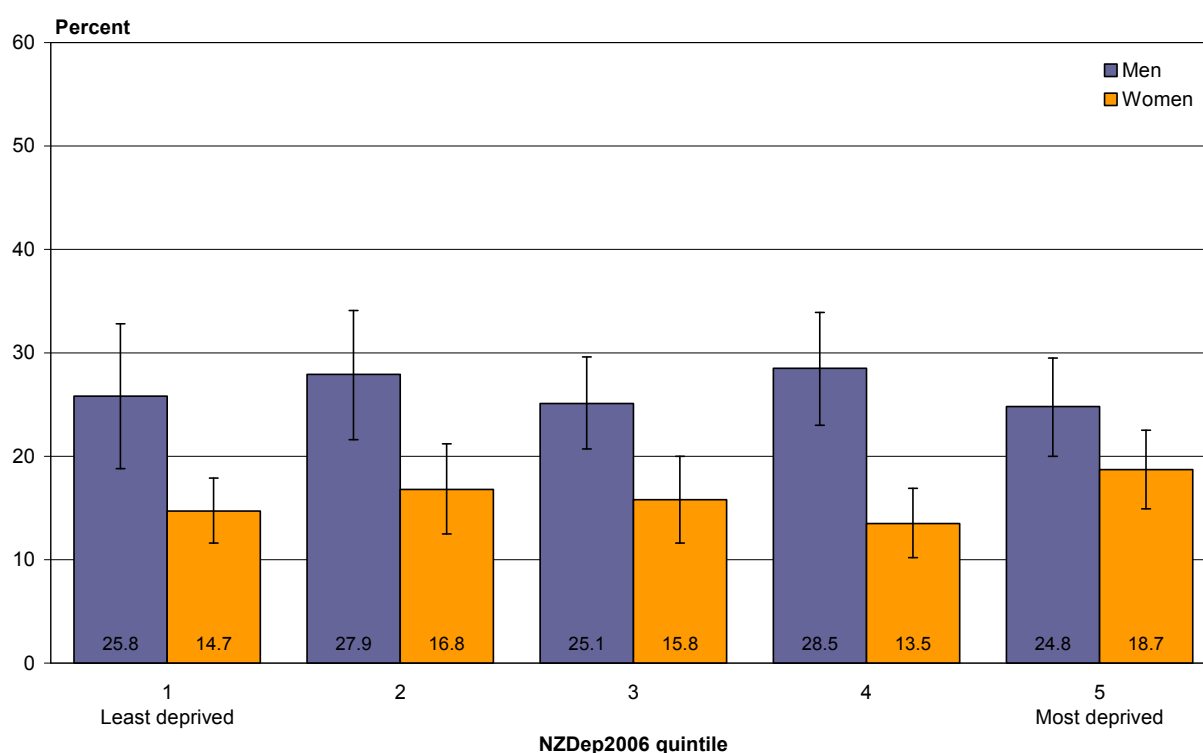
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both male and female past-year drinkers there was no significant difference in the prevalence of reporting driving while feeling under the influence of alcohol in the previous year by neighbourhood deprivation (NZDep2006 quintiles), adjusted for age (Figure 45). However, in all quintiles men were significantly more likely than women to report having driven while feeling under the influence of alcohol in the past year (p-values < 0.05).

**Figure 45:** Reporting having driven while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Working while feeling under the influence of alcohol

The results are reported for all past-year drinkers and do not take into account whether people had worked in the past year.

One in nine past-year drinkers reported having worked while feeling under the influence of alcohol in the past 12 months (11.2%, 9.9–12.5). This represents one in ten adults aged 16–64 years in the population (9.5%, 8.4–10.7), and equates to 251,900 people who had worked while feeling under the influence of alcohol at least once in the last 12 months.

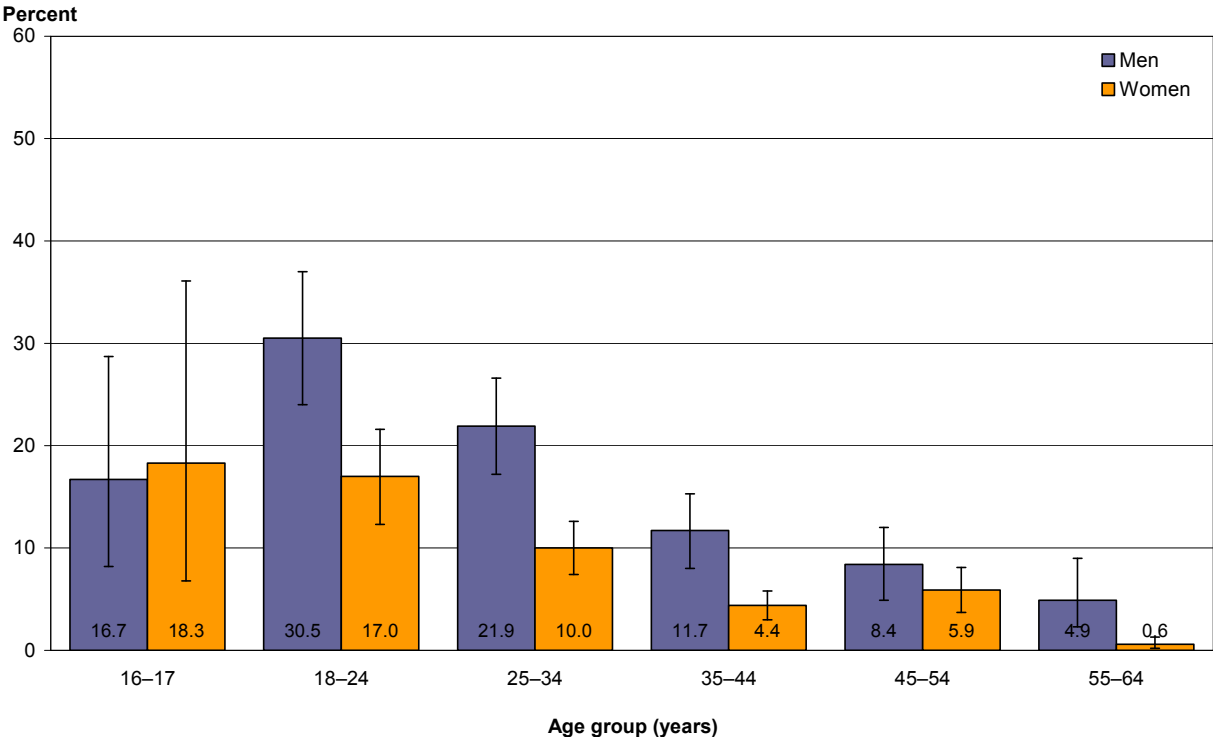


Among past-year drinkers, men (17.3%, 15.1–19.5) were significantly more likely than women (9.2%, 7.7–10.8) to report having worked while feeling under the influence of alcohol in the last 12 months, adjusted for age.

**By age group**

Among past-year drinkers, men aged 18–24 years had the highest prevalence of reporting having worked while feeling under the influence of alcohol in the past year (Figure 46). Men were significantly more likely to have worked while feeling under the influence of alcohol than women in all age groups except 16–17 years and 45–54 years.

**Figure 46:** Reporting having worked while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure is available in Appendix 1 presenting the prevalence of reporting having worked while feeling under the influence of alcohol in the past year among the total population aged 16–64 years, by age group and gender.

## By ethnic group

Table 17 gives an indication of the prevalence of reporting having worked while feeling under the influence of alcohol at least once in the past year, among people aged 16–64 years in New Zealand’s main ethnic population groups.

**Table 17:** Reporting having worked while feeling under the influence of alcohol in the last 12 months, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

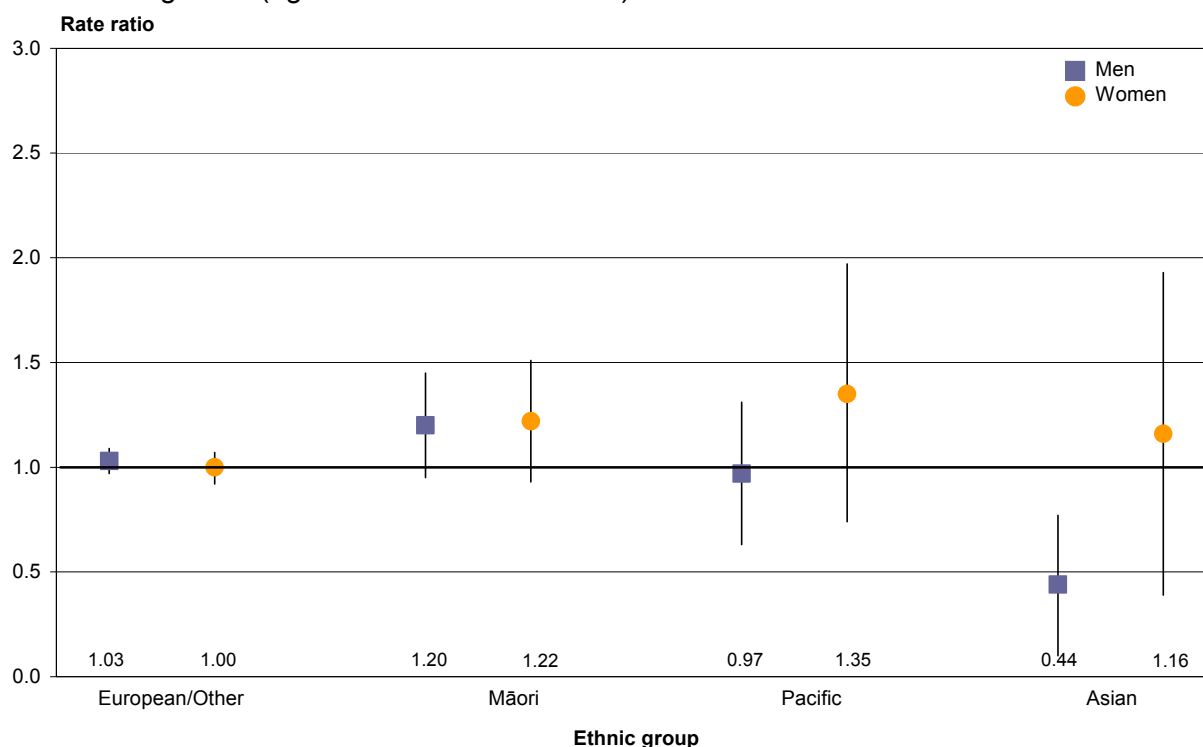
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)	Estimated number of adults
European/Other	10.8 (9.5–12.2)	9.8 (8.6–11.0)	203,400
Māori	15.4 (12.7–18.0)	13.0 (10.8–15.3)	42,600
Pacific	15.4 (10.9–19.9)	9.3 (6.5–12.1)	14,400
Asian	9.8 (4.8–17.2)	5.3 (2.5–9.7)	11,800

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, Asian men were significantly less likely to report having worked while feeling under the influence of alcohol in the past year than men in the total population, adjusting for age (Figure 47). There were no other significant differences in the prevalence of reporting working under the influence of alcohol by ethnic group.

**Figure 47:** Reporting having worked while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



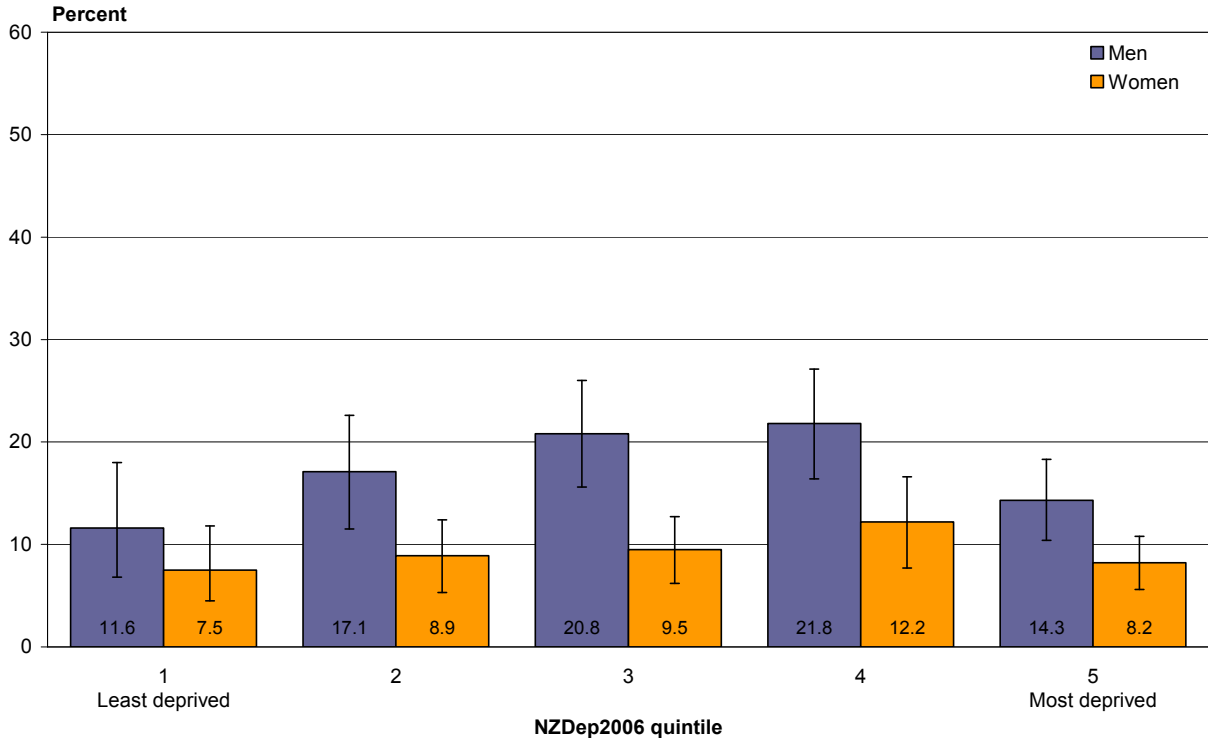
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

**By neighbourhood deprivation**

There were no significant differences in the prevalence of having worked while feeling under the influence of alcohol in the past 12 months among past-year drinkers, between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived), for both men and women (Figure 48). However, in men, there was an increase in the age-adjusted prevalence of having worked while feeling under the influence of alcohol from NZDep2006 quintile 1 to quintile 4.

**Figure 48:** Reporting having worked while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Operating machinery while feeling under the influence of alcohol**

The results are reported for all past-year drinkers, and do not take into account whether people had operated machinery in the past year.

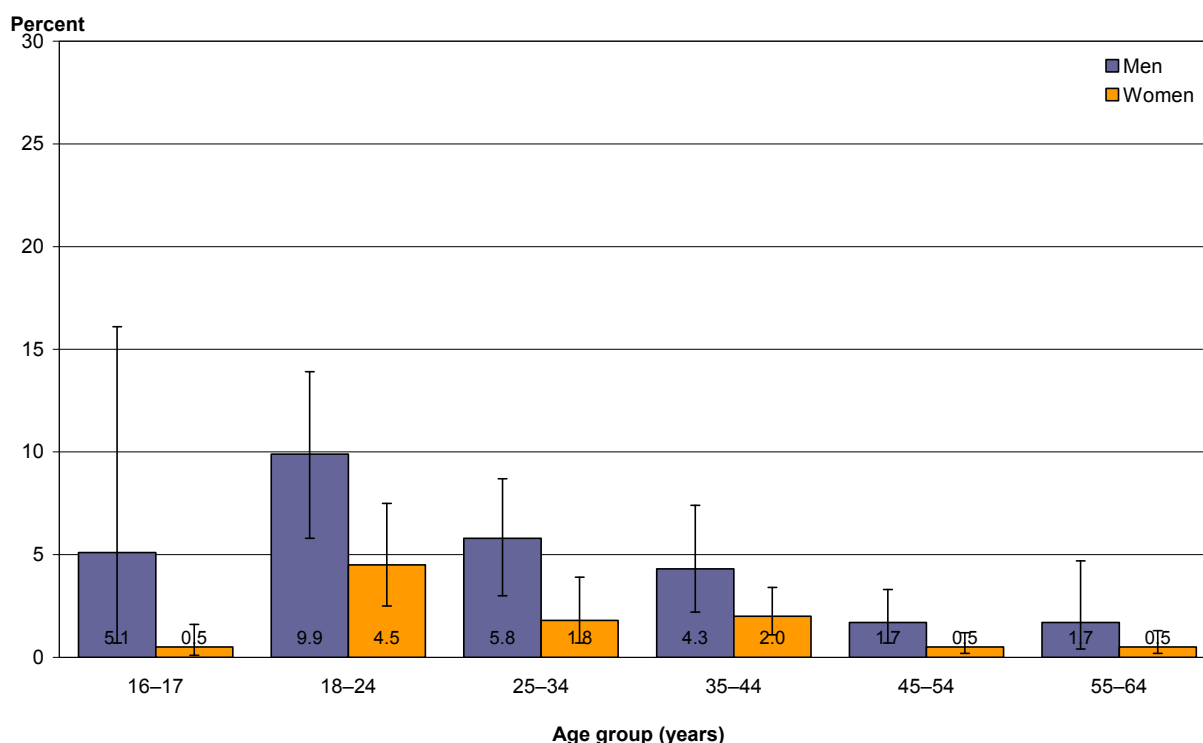
About 3% of past-year drinkers reported having operated machinery while feeling under the influence of alcohol in the past 12 months (3.1%, 2.5–3.7). This represents 2.6% (2.1–3.1) of the total adult population aged 16–64 years, equating to 68,900 people who had operated machinery while feeling under the influence of alcohol at least once in the last 12 months.

Among past-year drinkers, men (5.2%, 3.9–6.5) were over twice as likely as women (2.0%, 1.4–2.6) to have operated machinery under the influence of alcohol in the last 12 months, adjusted for age.

### By age group

Among past-year drinkers, the prevalence of operating machinery while feeling under the influence of alcohol in the previous year was highest among 18–24-year-olds for both men and women, and decreased with increasing age (Figure 49). In the age groups 18–24 years and 25–34 years, men were significantly more likely than women to have operated machinery while feeling under the influence of alcohol (p-values < 0.05).

**Figure 49:** Reporting having operated machinery while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

An additional figure is available in Appendix 1 presenting the prevalence of reporting having operated machinery while feeling under the influence of alcohol in the past year, among the total population aged 16–64 years, by age group and gender.

### By ethnic group

Table 18 gives an indication of the prevalence of reporting having operated machinery while feeling under the influence of alcohol at least once in the past year, among people aged 16–64 years in New Zealand’s main ethnic population groups.

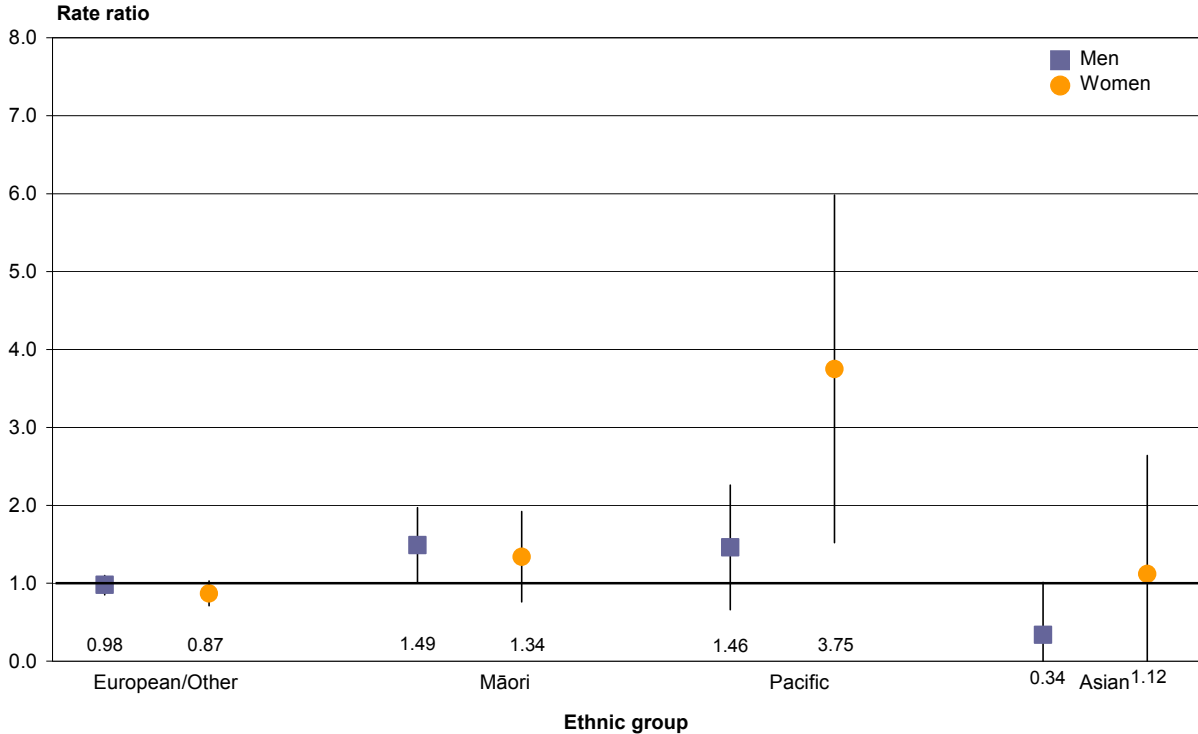
**Table 18:** Reporting having operated machinery while feeling under the influence of alcohol in the last 12 months, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population aged 16–64 years (95% CI)	Estimated number of adults
European/Other	2.7 (2.1–3.3)	2.4 (1.9–3.0)	50,600
Māori	5.0 (3.7–6.3)	4.3 (3.2–5.4)	14,000
Pacific	7.7 (4.3–11.1)	4.7 (2.6–6.7)	7,200
Asian	2.1 (0.3–6.8)	1.2 (0.2–3.8)	2,600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Note: Total response standard output for ethnic groups has been used.

Adjusted for age, Pacific women were significantly more likely to have operated machinery while under the influence of alcohol in the previous year compared with women in the total population (Figure 50). However, this result should be interpreted with caution due to the large confidence interval.

**Figure 50:** Reporting having operated machinery while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

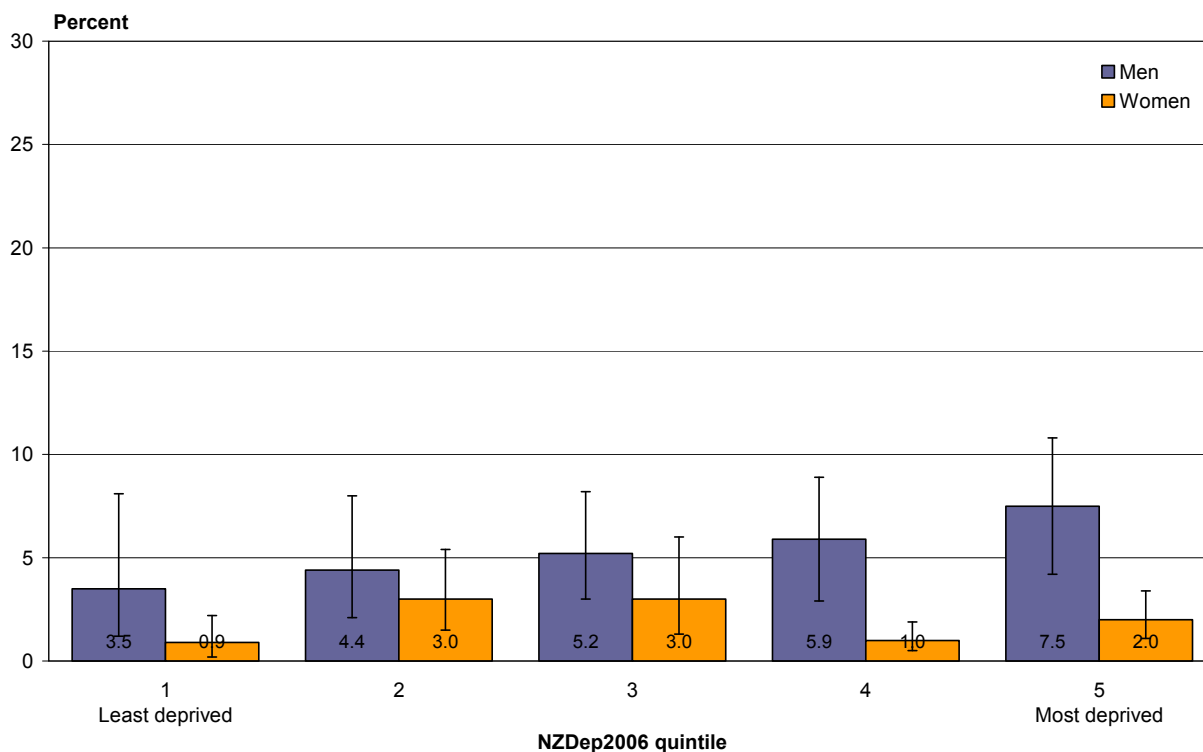


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

There were no significant differences in the prevalence of having operated machinery while feeling under the influence of alcohol in the past year by neighbourhood deprivation, for both men and women, when adjusted for age (Figure 51). However, in quintiles 4 and 5, men were significantly more likely than women to have operated machinery in the past year while feeling under the influence of alcohol.

**Figure 51:** Reporting having operated machinery while feeling under the influence of alcohol in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Using alcohol with other drugs

Table 19 presents the prevalence of using alcohol with other drugs at the same time in the last 12 months, among past-year drinkers. The results are reported for all past-year drinkers and do not take into account whether people had used other drugs in the past year.

Overall, the most common combination was using alcohol and tobacco together, with three in ten past-year drinkers having used tobacco while drinking alcohol at least once in the past year (30.2%, 28.6–31.8). One in eight past-year drinkers had used cannabis while drinking alcohol at least once in the past 12 months (12.2%, 11.0–13.4).

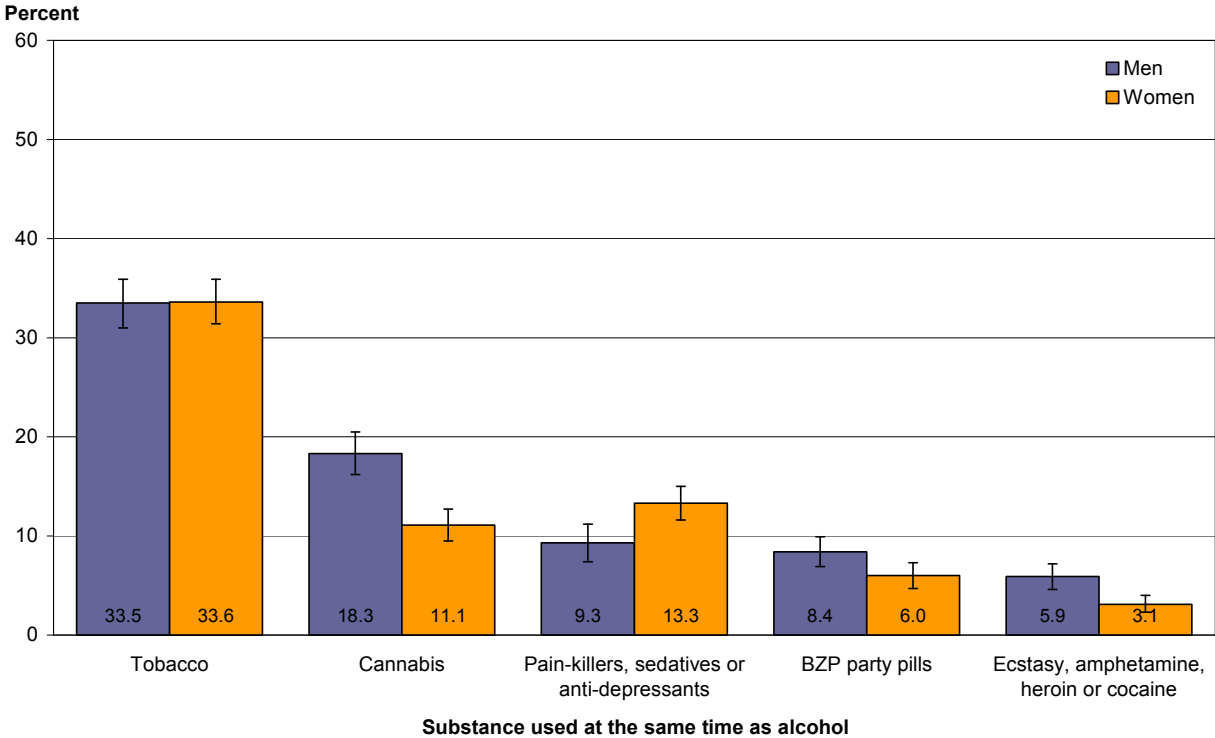
**Table 19:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among past-year drinkers aged 16–64 years (unadjusted prevalence)

Combinations of drugs used on at least one occasion in the last 12 months	Prevalence (%) in past-year drinkers (95% CI)	Estimated number of people
Alcohol and tobacco	30.2 (28.6–31.8)	678,400
Alcohol and cannabis	12.2 (11.0–13.4)	274,400
Alcohol and pain killers, sedatives or anti-depressants	10.6 (9.4–11.9)	238,600
Alcohol and BZP party pills	5.5 (4.7–6.3)	123,800
Alcohol and ecstasy, amphetamine, heroin or cocaine	3.5 (2.9–4.1)	79,000

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, men were significantly more likely than women to have used alcohol with BZP party pills, with cannabis, and with ecstasy, amphetamine, heroin or cocaine, in the past 12 months (Figure 52). Women were more likely to have used alcohol with pain-killers, sedatives or anti-depressants than men in the past year. For past-year drinkers there was no significant difference between men and women in the prevalence of having used alcohol and tobacco at the same time in the past year.

**Figure 52:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among past-year drinkers aged 16–64 years, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### **By age group**

Past-year drinkers in the age group 18–24 years had the highest prevalence of using alcohol with tobacco (47.1%, 42.5–51.8), cannabis (26.3%, 22.3–30.4), BZP party pills (16.6%, 12.9–20.3), pain-killers/sedatives/anti-depressants (15.4%, 11.8–18.9), and ecstasy/amphetamine/heroin/cocaine (10.1%, 7.5–12.7). Generally, the age groups 25–34 years and 16–17 years also had relatively high prevalences of using alcohol in combination with these drugs, with the prevalence decreasing with increasing age above the age of 35 years.

### **By ethnic group**

Adjusted for age, European/Other men and women were significantly more likely to have used alcohol in combination with BZP party pills in the past year, compared with men and women in the total population. Also, in the past year European/Other men were significantly more likely to have used alcohol with cannabis, and to have used alcohol with ecstasy/amphetamine/heroin/cocaine, compared with men in the total population.

Adjusted for age, Māori men and women were significantly more likely to have used alcohol and tobacco, and alcohol and cannabis, at the same time in the past year, compared with men and women in the total population. Pacific men and women were significantly more likely to have used alcohol and tobacco at the same time in the past year, but, along with Asian men and women, were generally less likely to have used alcohol together with the other drugs in the past year than the national rate.

### **By neighbourhood deprivation**

Among past-year drinkers there was a significantly higher prevalence of using alcohol and tobacco at the same time among men and women living in the most deprived neighbourhoods (NZDep2006 quintile 5) than for men and women living in the least deprived neighbourhoods (quintile 1), adjusted for age. Among male past-year drinkers, there was also a significantly higher prevalence of using alcohol and cannabis together in the past year in NZDep2006 quintile 5 than in quintile 1, although this was not significant for female past-year drinkers. There were no other significant differences in the prevalence of using alcohol with drugs in the past year between people living in the most deprived areas (quintile 5) and the least deprived areas (quintile 1).



## Chapter 7: Use of Moderating Drinking Behaviours

Moderating drinking behaviours can be used to control the amount of alcohol consumed and/or the effect that alcohol has on the person while they are drinking. Moderating drinking behaviours include limiting the number of drinks consumed in an evening and eating food while drinking.

### What were the survey questions?

In the 2007/08 NZADUS participants who had had an alcoholic drink in the past year were asked the following questions about their drinking behaviours:

- When you have an alcoholic drink, how often do you count the number of drinks you have?
- When you have an alcoholic drink, how often do you deliberately alternate between alcoholic and non-alcoholic drinks?
- When you have an alcoholic drink, how often do you make a point of eating while consuming alcohol?
- When you have an alcoholic drink, how often do you quench your thirst by having a non-alcoholic drink before having alcohol?
- When you have an alcoholic drink, how often do you only drink low-alcoholic drinks?
- When you have an alcoholic drink, how often do you limit the number of drinks you have in an evening (eg, when driving)?
- How often do you refuse an alcoholic drink you are offered because you really don't want it?

Participants selected their answers from the following options: always, most of the time, sometimes, rarely, never. It should be noted that no other questions were asked about these moderating drinking behaviours, due to time constraints for the survey.

This chapter examines the use of moderating drinking behaviours 'always' or 'most of the time'. Results are presented for all drinking behaviours by gender, and then, for the two most common moderating drinking behaviours, by gender, age group, ethnic group and neighbourhood deprivation.

### Overall use of moderating drinking behaviours

Table 20 presents the prevalence of using selected moderating drinking behaviours 'always' or 'most of the time' when drinking, among past-year drinkers.

Overall, the most commonly used moderating drinking behaviour was to limit the number of drinks consumed in a night. Other common behaviours were making a point of consuming food with alcohol, refusing an alcoholic drink offered because of not really wanting it, and counting the number of drinks consumed when drinking.

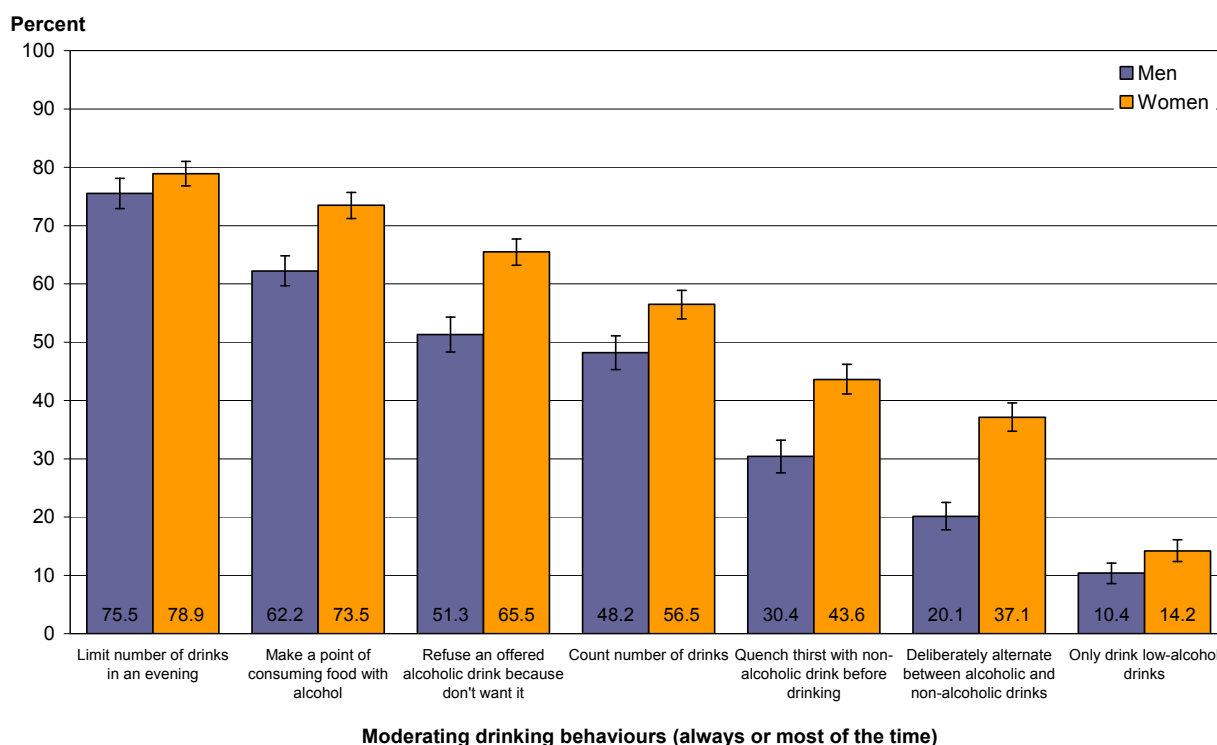
**Table 20:** Prevalence of using moderating drinking behaviours ‘always’ or ‘most of the time’, among past-year drinkers aged 16–64 years (unadjusted prevalence)

Moderating drinking behaviour ‘always’ or ‘most of the time’	Prevalence (%) for past-year drinkers (95% CI)
Limiting the number of drinks consumed in a night	78.9 (77.1–80.6)
Making a point of consuming food with alcohol	70.1 (68.5–71.7)
Refusing an alcoholic drink offered because of not really wanting it	58.9 (57.1–60.8)
Counting the number of drinks consumed when drinking	53.8 (51.9–55.7)
Quenching thirst with a non-alcoholic drink before drinking	37.3 (35.5–39.2)
Deliberately alternating between alcoholic drinks and non-alcoholic drinks	29.8 (28.0–31.6)
Drinking only low-alcohol drinks	11.5 (10.3–12.6)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Women were significantly more likely than men to use the listed moderating drinking behaviours ‘always’ or ‘most of the time’ (p-values all < 0.05), adjusted for age (Figure 53).

**Figure 53:** Prevalence of using moderating drinking behaviours ‘always’ or ‘most of the time’, among past-year drinkers aged 16–64 years, by gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Limiting the number of drinks consumed in an evening

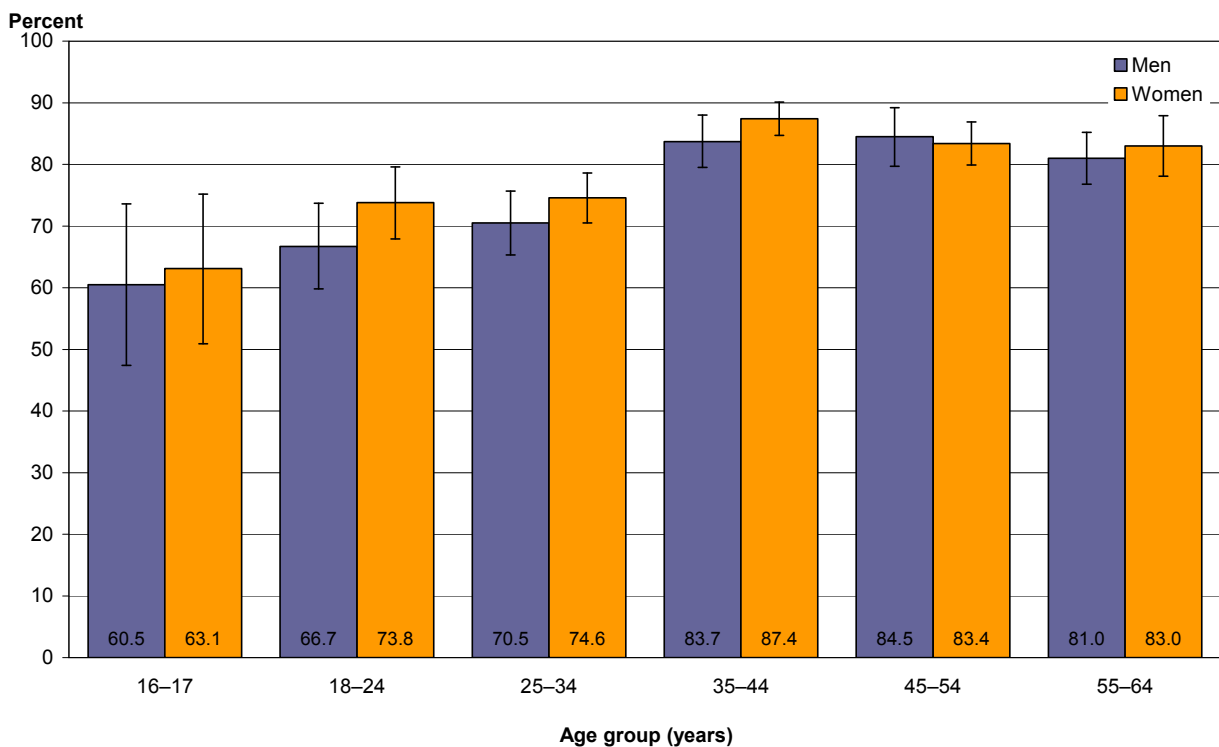
The most commonly reported moderating drinking behaviour was limiting the number of drinks consumed in an evening. Among past-year drinkers almost eight in ten (78.9%, 77.1–80.6) limited the number of drinks consumed in an evening always or most of the time.

Among past-year drinkers, women were significantly more likely to limit the number of drinks consumed in an evening (78.9%, 76.8–81.0) compared with men (75.5%, 72.9–78.1) (p-value < 0.05), when adjusted for age.

### By age group

The prevalence of limiting the number of drinks in an evening was lower in the age groups 16–34 years for both men and women, and increased with increasing age (Figure 54).

**Figure 54:** Prevalence of limiting the number of drinks consumed in an evening ‘always’ or ‘most of the time’, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)

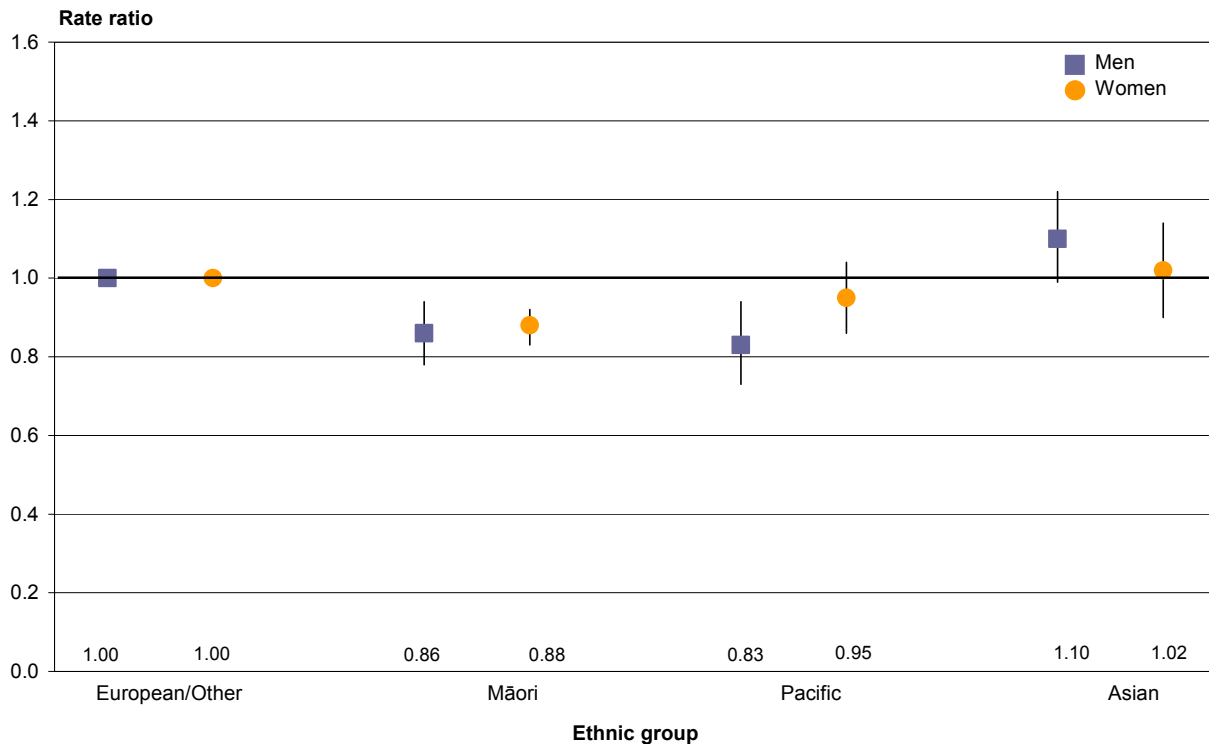


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Adjusted for age, Māori and Pacific men and Māori women were significantly less likely to limit the number of drinks in an evening compared with men and women in the total population (Figure 55).

**Figure 55:** Prevalence of limiting the number of drinks consumed in an evening 'always' or 'most of the time', among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



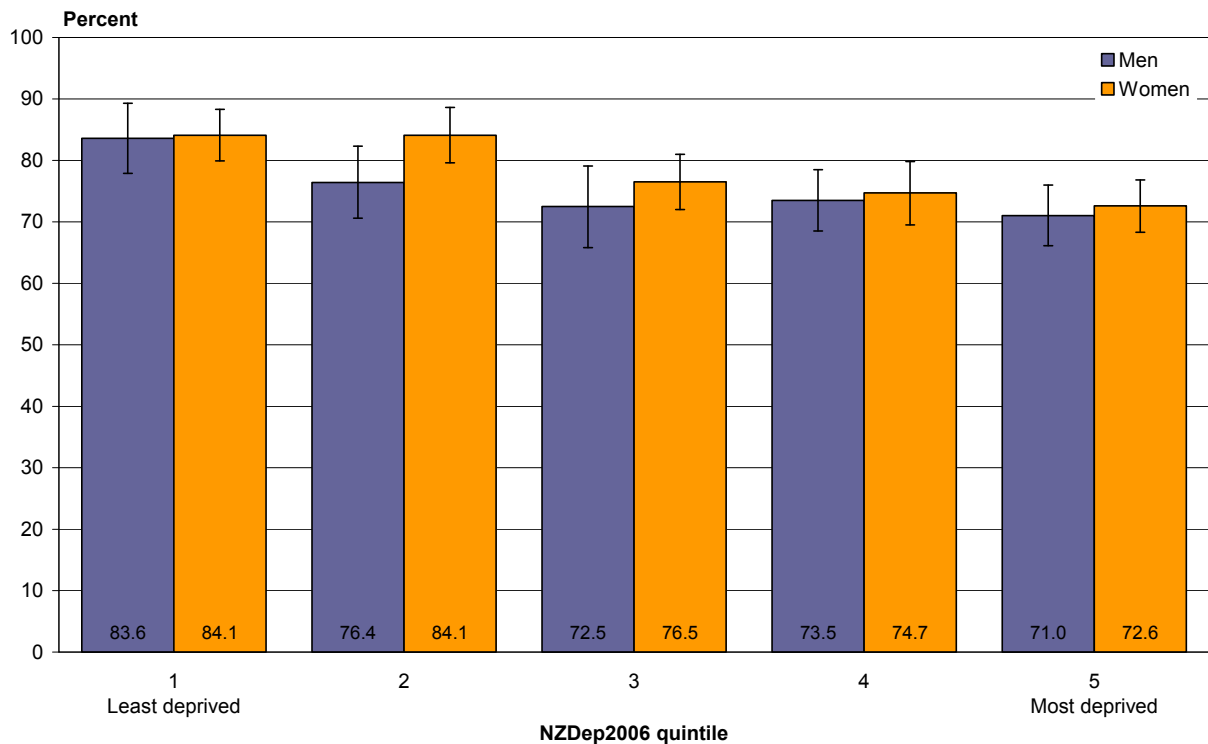
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

People living in neighbourhoods of low deprivation (NZDep2006 quintile 1) were significantly more likely to limit the number of drinks consumed in an evening always or most of the time than people living in neighbourhoods of high deprivation (quintile 5), for both men and women (Figure 56).

**Figure 56:** Prevalence of limiting the number of drinks consumed in an evening ‘always’ or ‘most of the time’, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

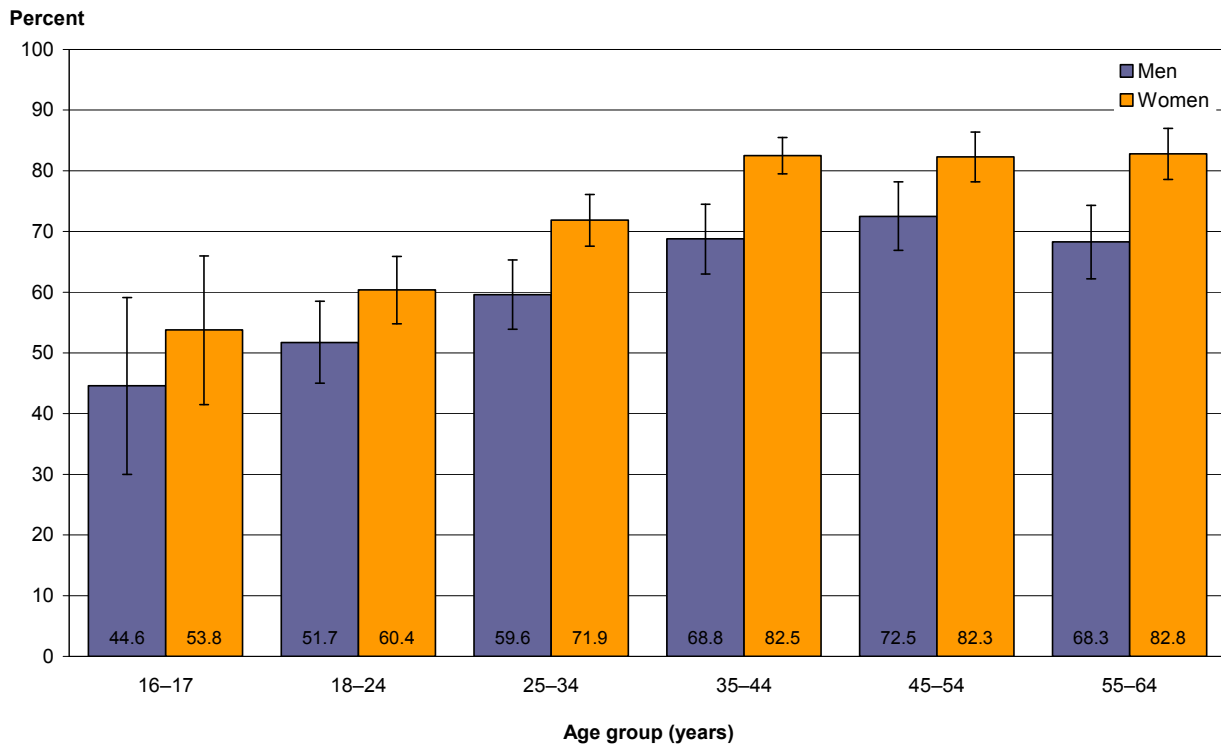
## Making a point of consuming food with alcohol

The second most commonly reported moderating drinking behaviour was making a point of consuming food with alcohol. Seven in ten past-year drinkers (70.1%, 68.5–71.7) reported making a point of consuming food with alcohol always or most of the time. Women (73.5%, 71.2–75.7) were significantly more likely to make a point of consuming food with alcohol than men (62.2%, 59.7–64.8), adjusted for age.

## By age group

The prevalence of making a point of consuming food with alcohol was lowest among people aged 16–17 years, and increased with increasing age for both men and women (Figure 57).

**Figure 57:** Prevalence of making a point of consuming food when drinking alcohol 'always' or 'most of the time', among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)

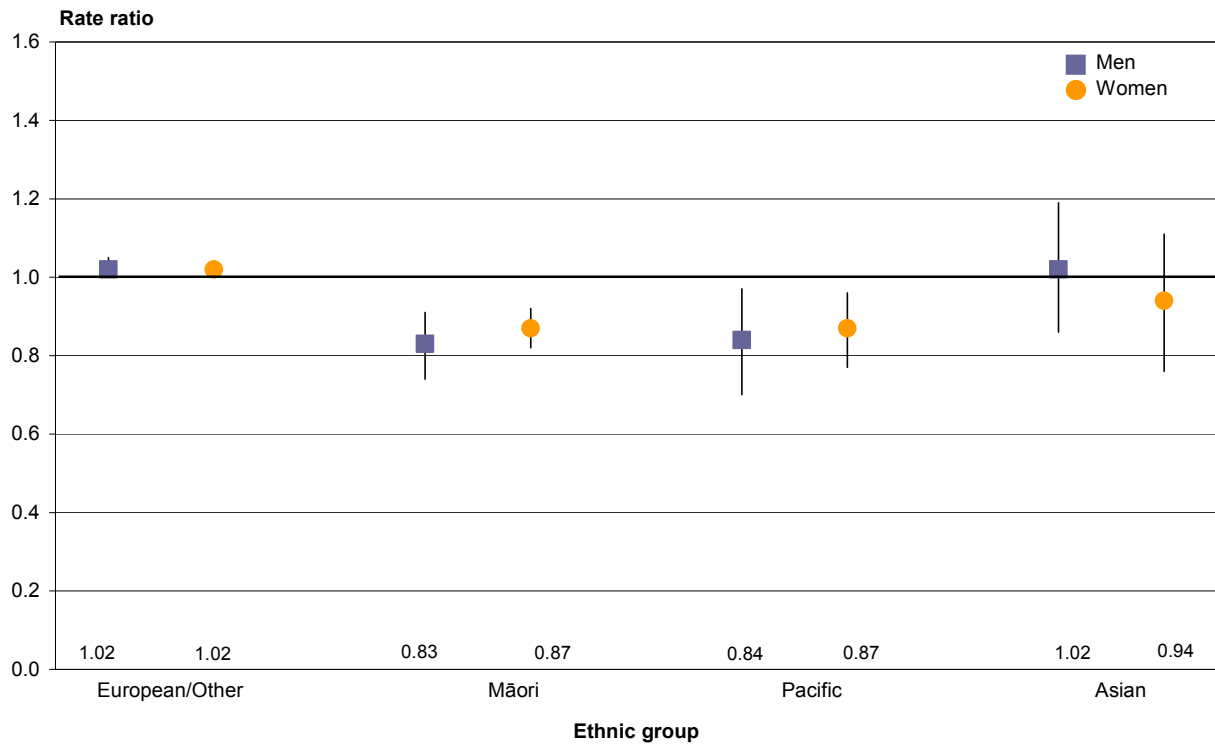


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Māori and Pacific men and women were significantly less likely to make a point of consuming food with alcohol always or most of the time, compared with men and women in the total population (Figure 58).

**Figure 58:** Prevalence of making a point of consuming food when drinking alcohol ‘always’ or ‘most of the time’, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



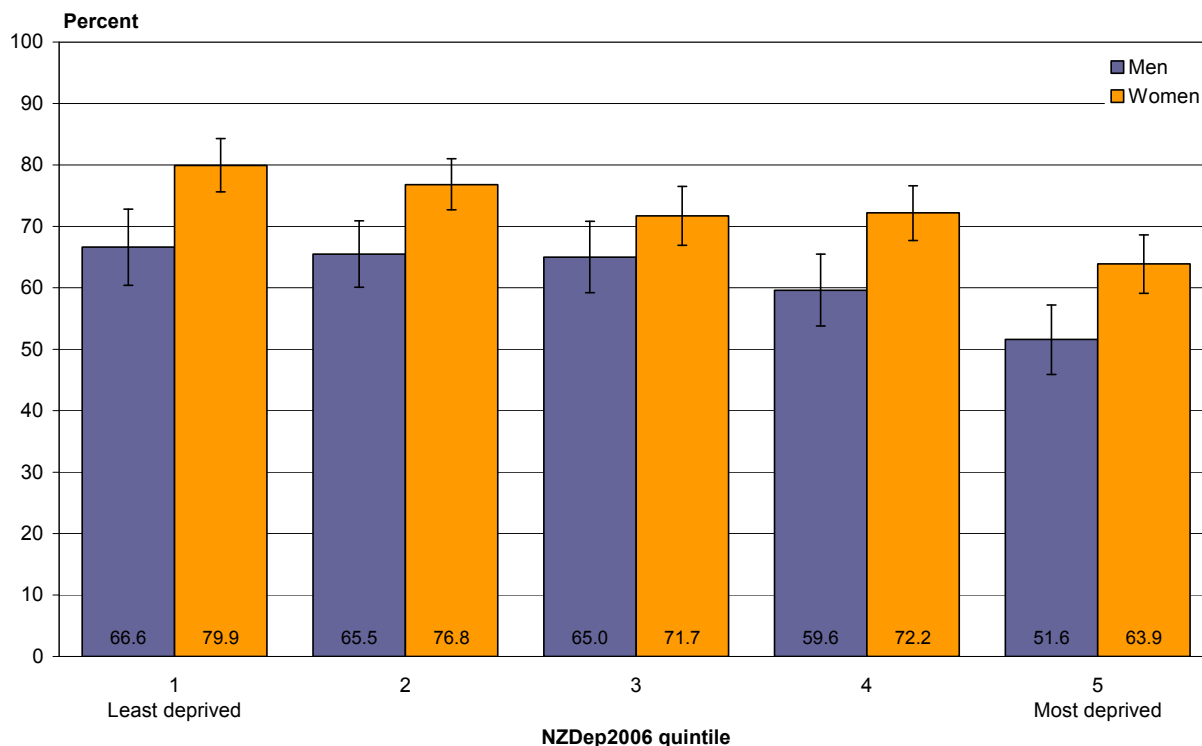
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

People living in areas of low deprivation (NZDep2006 quintile 1) were significantly more likely to make a point of consuming food with alcohol always or most of the time than people living in areas of high deprivation (quintile 5), for both men and women (Figure 59).

**Figure 59:** Prevalence of making a point of consuming food when drinking alcohol 'always' or 'most of the time', among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey



## Part D: Help-seeking Behaviours

This part examines help seeking to reduce the level of alcohol use. In particular, it covers the following topics:

- Chapter 8: Help seeking for alcohol use in past year
- Chapter 9: Help seeking for alcohol use in lifetime.

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report.

### Chapter 8: Help Seeking for Alcohol Use in Past Year

Sometimes people may want help to reduce their level of alcohol use, and there are a variety of types of alcohol treatment available to reduce levels of alcohol use. These include specialised treatment programmes, brief interventions (such as at GPs), and other groups such as support groups. Some people may also seek help and support from friends and family members.

This chapter examines the prevalence of seeking help to reduce the level of alcohol use in the past year, among past-year drinkers. The survey does not allow results to be presented about the places where help was received in the past year, or reasons for not receiving help in the past year. However, the next chapter presents these results for lifetime help-seeking behaviour.

#### What were the survey questions?

In the 2007/08 NZADUS participants who had ever had an alcoholic drink in their lifetime were asked whether they had ever received help to reduce their level of alcohol use. If they had, they were asked whether this was in the last 12 months. Participants who had ever received help to reduce their level of alcohol use were asked where they had gone to receive help, from the following list: GP or family doctor, drug and alcohol counsellor, detoxification programme, Narcotics Anonymous or other support group, psychiatrist or psychologist, mental health service, Māori or Pacific health service, emergency department at a public hospital, natural or alternative therapist, family member, friend, or other.

Participants who had ever had an alcoholic drink in their lifetime were also asked whether they had ever wanted help to reduce their level of alcohol use but did not get it. Participants who answered *yes* to this question were asked whether this was in the last 12 months, and what their reasons were for not getting help.

Participants who had ever had an alcoholic drink in their lifetime were asked whether a relative or friend, or a doctor or other health worker, had been concerned about the participant's drinking or suggested that they cut down. Participants selected from the following answers: *yes*, but not in the last year; *yes*, during the last year; *no*.

It should be noted that many people in prisons receive alcohol and/or drug counselling as part of a criminal sentence, and the results in this chapter may reflect these trends for people who have been in prison and who were no longer in prison at the time of the survey.

## Summary of help-seeking behaviours in last 12 months

Table 21 presents a summary of help-seeking behaviours to reduce the level of alcohol use in the last 12 months.

**Table 21:** Summary of help-seeking behaviours in the last 12 months, among population aged 16–64 years (unadjusted prevalence)

Help-seeking behaviour	Prevalence in last 12 months (%) (95% CI)		Estimated number of adults
	For past-year drinkers	For total population aged 16–64 years	
Received help to reduce level of alcohol use in last 12 months	1.5 (1.1–1.9)	1.3 (1.0–1.7)	35,500
Wanted help to reduce level of alcohol use but did not receive it in last 12 months	1.3 (1.0–1.7)	1.2 (0.9–1.5)	31,600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Received help to reduce level of alcohol use in the last 12 months

Less than 2% (1.3%, 1.0–1.7) of adults aged 16–64 years had received help to reduce their level of alcohol use in the last 12 months. This represents 1.5% (1.1–1.9) of past-year drinkers. It equates to 35,500 people who had received help to reduce their level of alcohol use in the last 12 months.

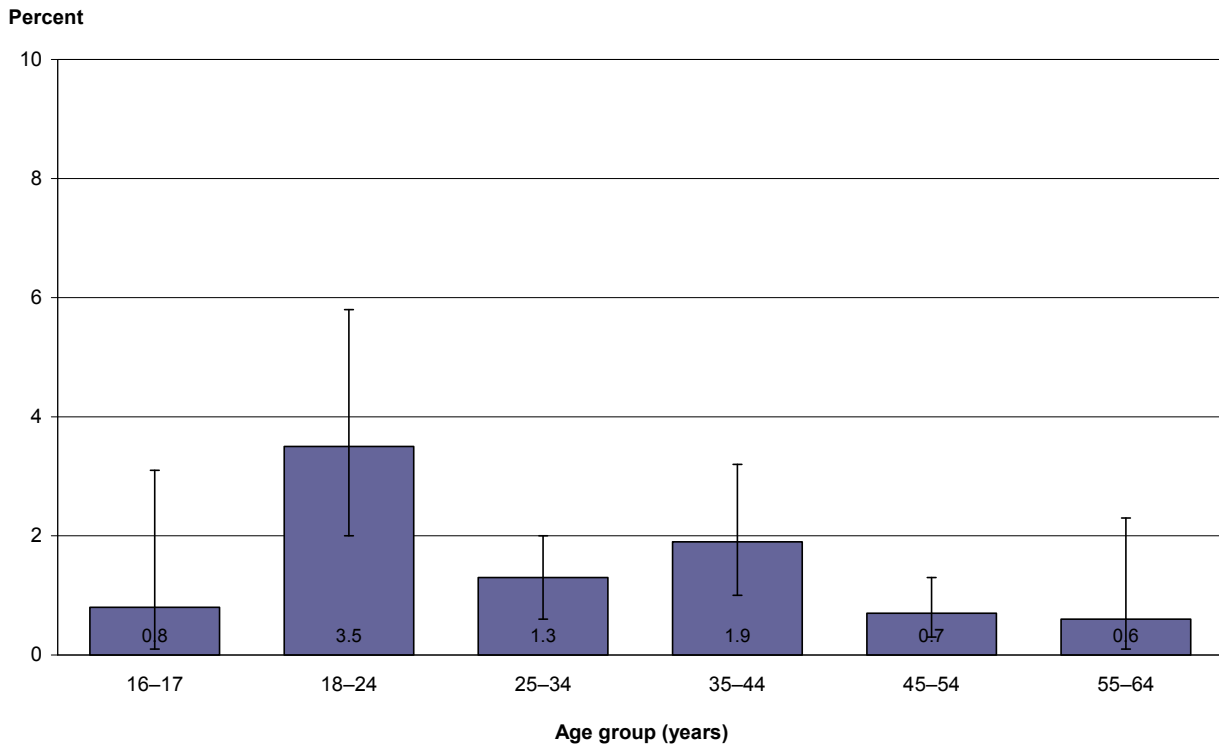
Among past-year drinkers, men (2.3%, 1.5–3.1) were significantly more likely than women (1.1%, 0.6–1.7) to have received help to reduce their alcohol use in the last 12 months, adjusted for age ( $p$ -value < 0.05).

The following results by age group, ethnic group and neighbourhood deprivation are not presented by gender, due to small numbers.

## By age group

The prevalence of having received help in the past year to reduce the level of alcohol use was highest in the 18–24 years age group (Figure 60).

**Figure 60:** Received help to reduce level of alcohol use in the last 12 months, among past-year drinkers aged 16–64 years, by age group (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Table 22 gives an indication of the prevalence of having received help to reduce the level of alcohol use in the past year by adults in New Zealand's main ethnic population groups.

**Table 22:** Received help to reduce level of alcohol use in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

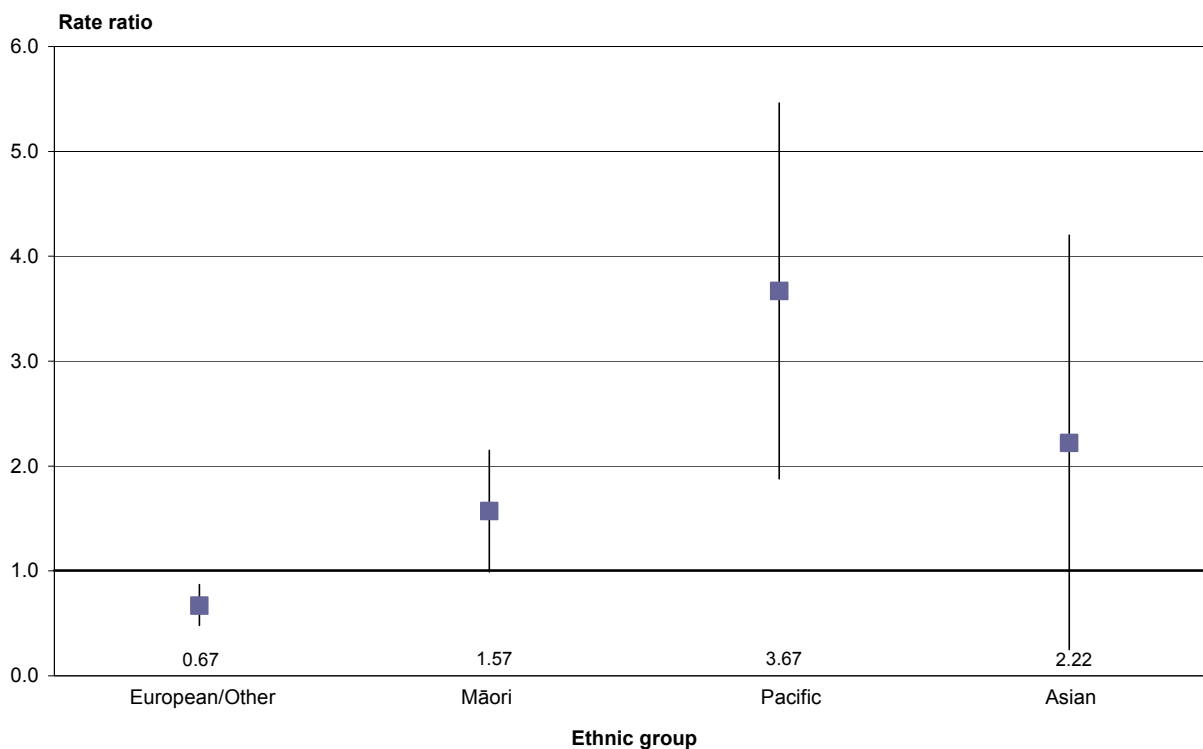
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	1.0 (0.6–1.4)	0.9 (0.6–1.3)	19,300
Māori	2.6 (1.8–3.5)	2.4 (1.6–3.1)	7,700
Pacific	6.3 (3.6–10.0)	4.2 (2.4–6.1)	6,500
Asian	3.8 (1.1–9.2)	2.3 (0.7–5.4)	5,100

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Adjusted for age, Māori and Pacific past-year drinkers were significantly more likely to have received help in the past year to reduce their level of alcohol use compared with past-year drinkers in the total population (Figure 61). However, the result for Pacific past-year drinkers has a large confidence interval and should be interpreted with caution.

**Figure 61:** Received help to reduce level of alcohol use in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (age-standardised rate ratio)



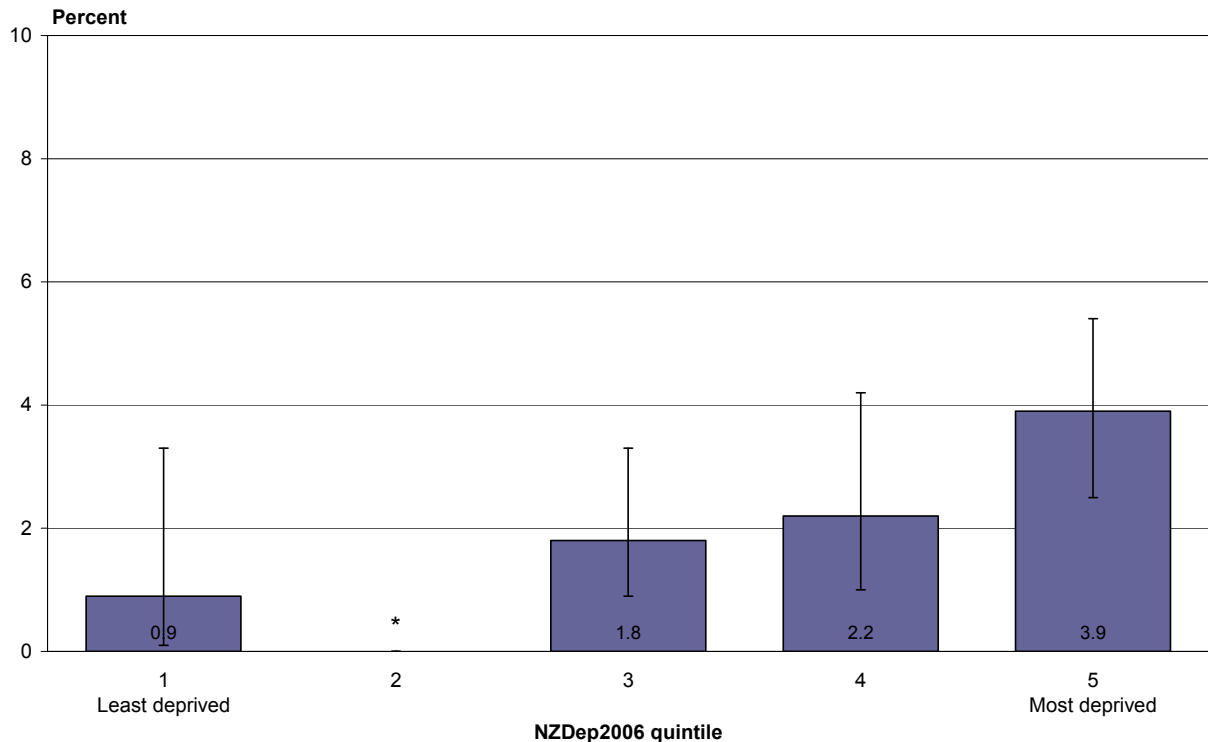
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

The prevalence of having received help in the past year to reduce the level of alcohol use increased with increasing neighbourhood deprivation, adjusted for age (Figure 62).

**Figure 62:** Received help to reduce level of alcohol use in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for reliable estimation for people living in NZDep2006 quintile 2.

### Wanted help to reduce level of alcohol use in the last 12 months but had not received it

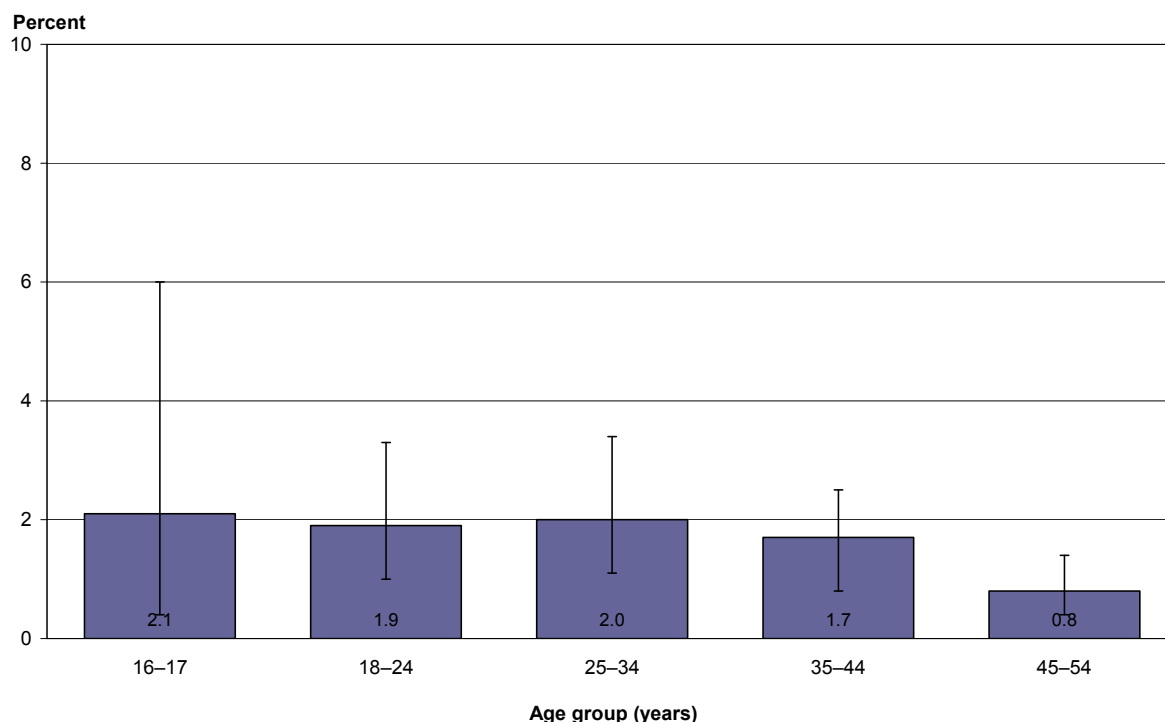
Overall, 1.2% (0.9–1.5) of adults aged 16–64 years had wanted help to reduce their level of alcohol use in the last 12 months but had not received it. This represented 1.3% (1.0–1.7) of past-year drinkers, and equates to 31,600 people who had wanted help in the last 12 months to reduce their level of alcohol use but had not received it.

Among past-year drinkers, men (2.0%, 1.3–2.7) were significantly more likely to have wanted help to reduce their level of alcohol use in the past year than women (1.1%, 0.6–1.7), adjusted for age (p-value < 0.05).

## By age group

The proportion of past-year drinkers who had wanted help in the last 12 months to reduce their level of alcohol use but had not received it was relatively stable in people aged 16–44 years (Figure 63).

**Figure 63:** Wanted help to reduce level of alcohol use in the last 12 months but had not received it, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Numbers were too low for reliable estimation for people aged 55–64 years.

## By ethnic group

Table 23 gives an indication of the prevalence of having wanted help in the past year to reduce the level of alcohol use but not having received it, among adults in New Zealand's main ethnic population groups.

**Table 23:** Wanted help to reduce level of alcohol use in the last 12 months but had not received it, among past-year drinkers and total population aged 16–64 years, by ethnic group (unadjusted prevalence)

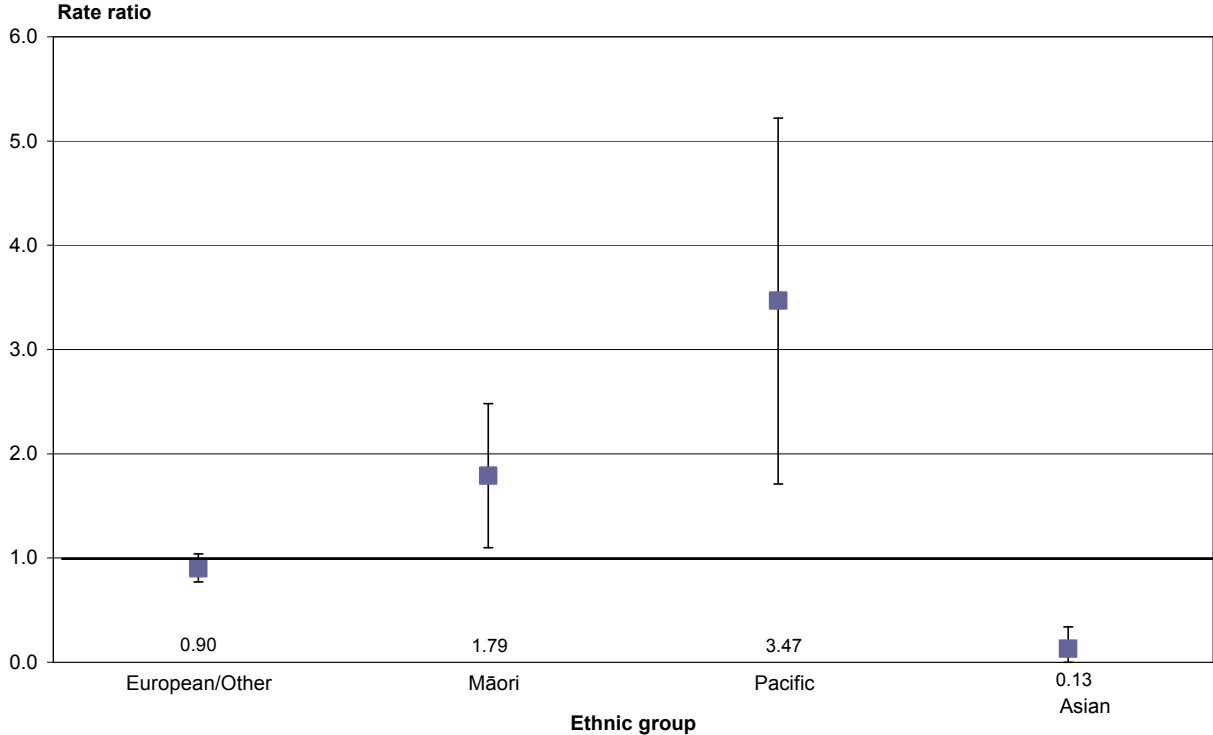
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	1.1 (0.7–1.5)	1.0 (0.7–1.4)	21,400
Māori	2.7 (1.8–3.6)	2.4 (1.6–3.3)	8,000
Pacific	5.4 (3.2–8.5)	3.6 (2.3–5.5)	5,600
Asian	0.2 (0.0–1.0)	0.3 (0.0–1.2)	700

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Pacific past-year drinkers were about 3.5 times more likely than past-year drinkers in the total population to have wanted help to reduce their level of alcohol use in the past year but not received it, compared with all past-year drinkers (Figure 64). Māori were also significantly more likely to have had unmet need for help in the last 12 months.

**Figure 64:** Wanted help to reduce level of alcohol use in the past 12 months but had not received it, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

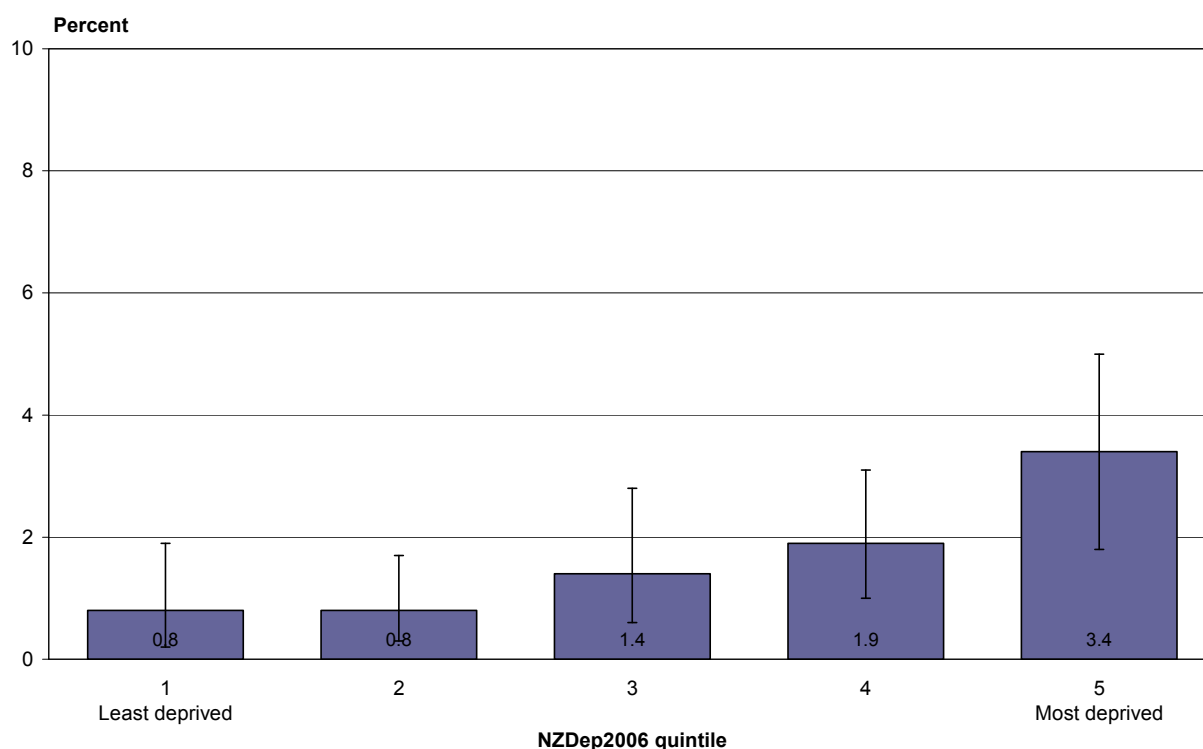


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total population aged 16–64 years who had ever consumed alcohol. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

The prevalence of having wanted help in the past year to reduce alcohol use but not receiving it was significantly higher for people living in NZDep2006 quintile 5 areas (most deprived) than in quintile 1 areas (least deprived), adjusted for age (Figure 65).

**Figure 65:** Wanted help to reduce level of alcohol use in the last 12 months but had not received it, among past-year drinkers aged 16–64 years, by NZDep2006 quintile (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Had someone show concern or suggest cutting down alcohol consumption in past 12 months

Six percent (6.3%, 5.5–7.2) of past-year drinkers reported that, in the past year, a relative or friend, or a doctor or other health worker, had been concerned about the respondent's drinking or suggested they cut down. This equates to 142,400 adults aged 16–64 years who had had someone show concern or suggest cutting down their alcohol consumption in the past 12 months.

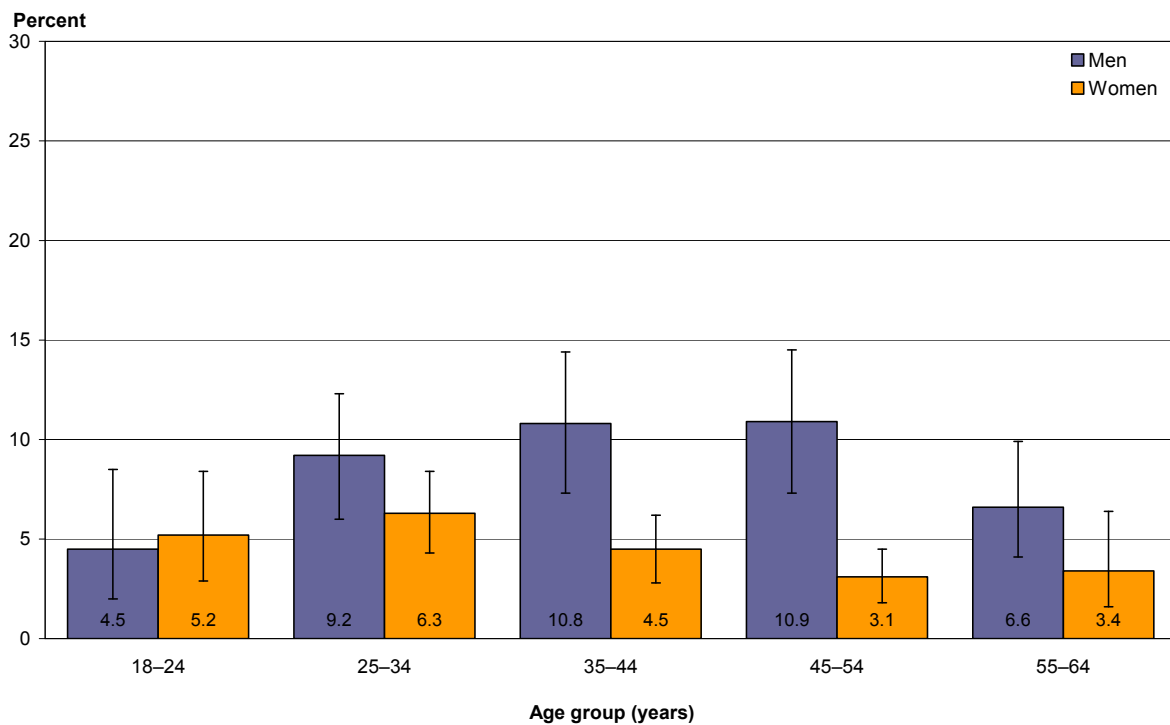
Among past-year drinkers aged 16–64 years, men (8.2%, 6.7–9.7) were significantly more likely than women (4.5%, 3.6–5.4) to have had someone show concern or suggest cutting down their alcohol consumption in the past year, adjusted for age.



## By age group

About one in ten male past-year drinkers aged 35–54 years had had someone show concern or suggest cutting down alcohol consumption in the past year (Figure 66). Among women, the prevalence was highest in the 25–34 years age group.

**Figure 66:** Had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down alcohol consumption in the past 12 months, among past-year drinkers aged 18–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Numbers were too low for reliable estimation for past-year drinkers aged 16–17 years.

## By ethnic group

Table 24 gives an indication of the prevalence of having had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down alcohol consumption in the past year among adults in New Zealand’s main ethnic population groups.

**Table 24:** Had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down alcohol consumption in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

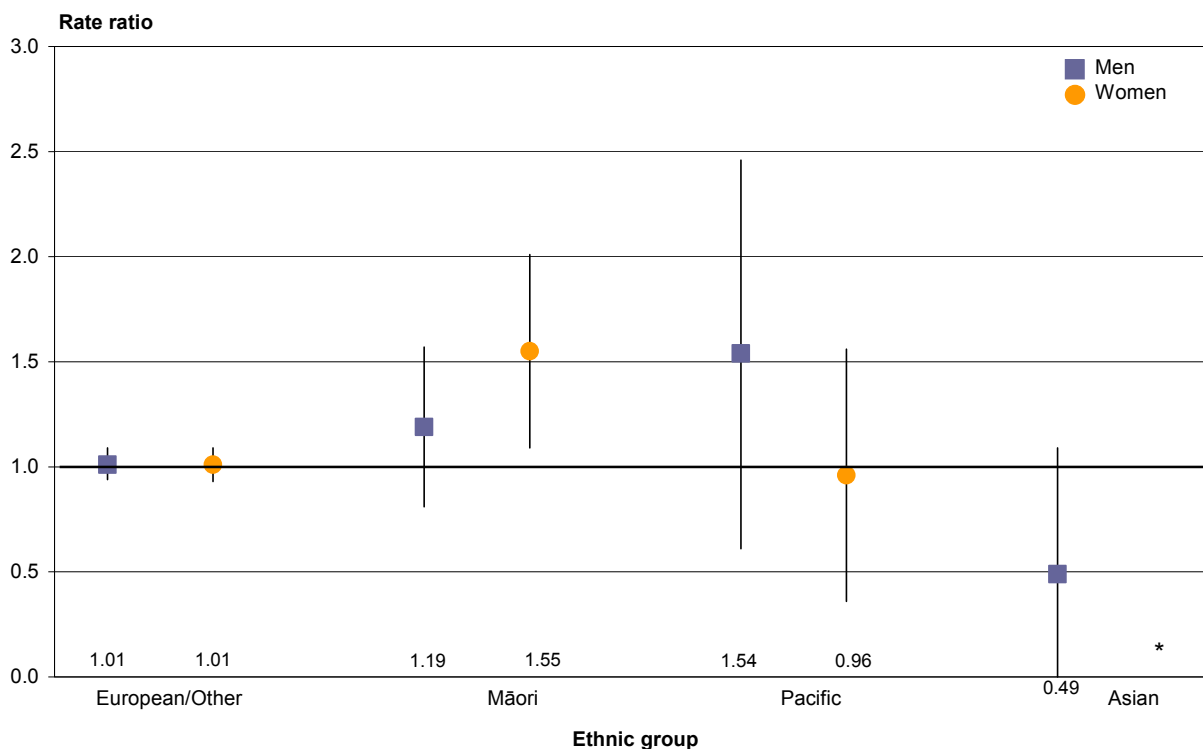
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Estimated number of adults
European/Other	6.3 (5.3–7.3)	118,400
Māori	8.2 (6.4–10.1)	23,000
Pacific	8.9 (4.7–13.1)	8,400
Asian	2.1 (0.4–6.5)	2,600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Adjusted for age, Māori women were significantly more likely to have had someone show concern or suggest cutting down their alcohol consumption in the past year compared with women in the total population (Figure 67).

**Figure 67:** Had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down alcohol consumption in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

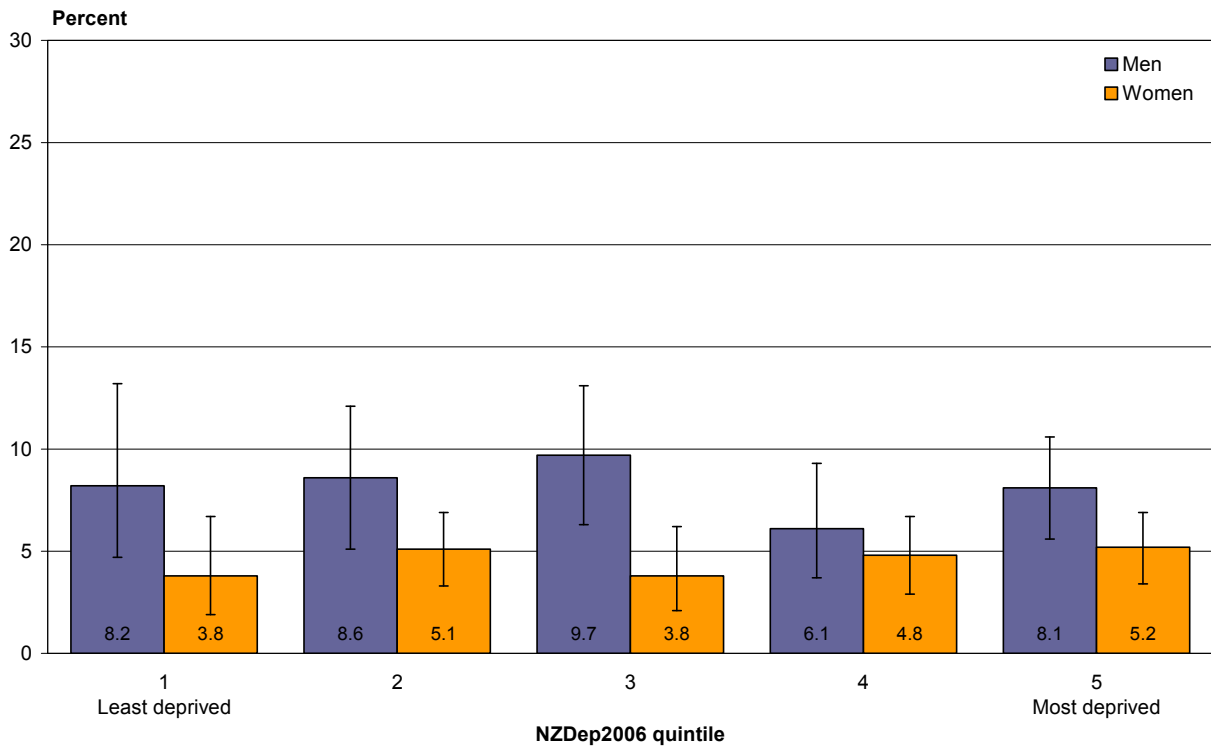
\* Numbers were too low for reliable estimation for Asian women.

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

In both men and women there were no significant differences in the prevalence of having had someone show concern or suggest cutting down alcohol consumption in the past year by neighbourhood deprivation, adjusted for age (Figure 68).

**Figure 68:** Had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down alcohol consumption in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 9: Help Seeking for Alcohol Use in Lifetime

This chapter examines the prevalence of ever seeking help to reduce the level of alcohol use among people who have ever consumed alcohol ('ever-drinkers'). This chapter provides details about where people received help and the reasons for having not received help. These analyses were not possible to present for past-year help seeking in the previous chapter.

It should be noted that this section includes all help-seeking behaviours in people's lifetime. This means that some people may be referring to things that happened many years ago and that there may have been some recall error.

### Summary of help-seeking behaviours in lifetime

Table 25 presents a summary of help-seeking behaviour to reduce the level of alcohol use for the population aged 16–64 years during their lifetime.

**Table 25:** Summary of help-seeking behaviours in lifetime, among the population aged 16–64 years (unadjusted prevalence)

Help-seeking behaviour	Prevalence in lifetime (%) (95% CI)		Estimated number of adults
	For ever drinkers	For total population aged 16–64 years	
Ever received help to reduce level of alcohol use	3.8 (3.2–4.4)	3.6 (3.1–4.1)	95,000
Ever wanted help to reduce level of alcohol use but did not receive it	2.5 (2.1–3.0)	2.4 (2.0–2.9)	63,600
Ever had a relative or friend, or a doctor or other health worker, show concern or suggest cutting down drinking	12.4 (11.3–13.4)	11.7 (10.7–12.7)	309,600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Ever received help to reduce level of alcohol use

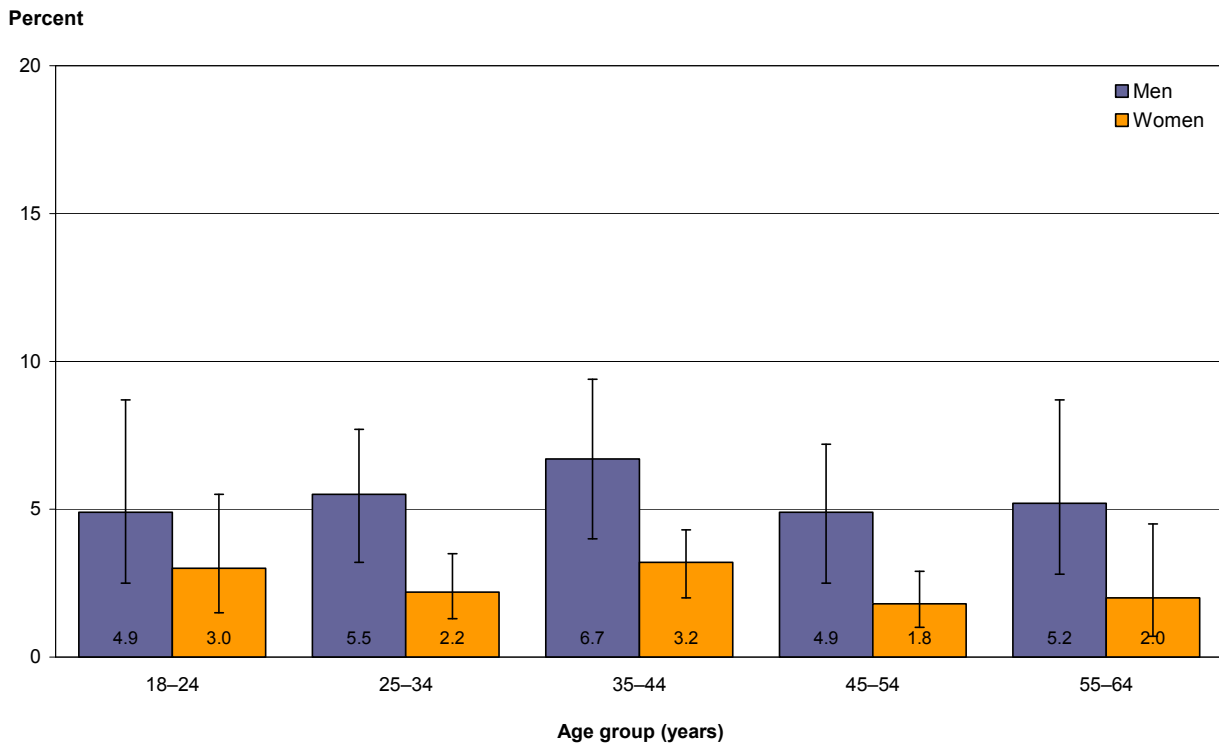
Among people who had ever consumed alcohol, 3.8% (3.2–4.4) had ever received help to reduce their level of alcohol use in their lifetime. This equates to 3.6% (3.1–4.1) of adults in the total population aged 16–64 years, or 95,000 people, who had ever received help to reduce their level of alcohol use.

Among people who had ever tried alcohol, men (5.2%, 4.2–6.2) were more than twice as likely as women (2.4%, 1.8–3.1) to have ever received help to reduce their level of alcohol use, adjusted for age.

## By age group

In both men and women who had ever consumed alcohol, the prevalence of having ever received help to reduce the level of alcohol use was relatively stable in the age groups 18–24 years and older (Figure 69).

**Figure 69:** Ever received help to reduce level of alcohol use, among ever-drinkers aged 18–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Numbers were too low for reliable estimation for people aged 16–17 years.

## By ethnic group

Table 26 gives an indication of the prevalence of having ever received help to reduce the level of alcohol use among adults in New Zealand's main ethnic population groups.

**Table 26:** Ever received help to reduce level of alcohol use, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

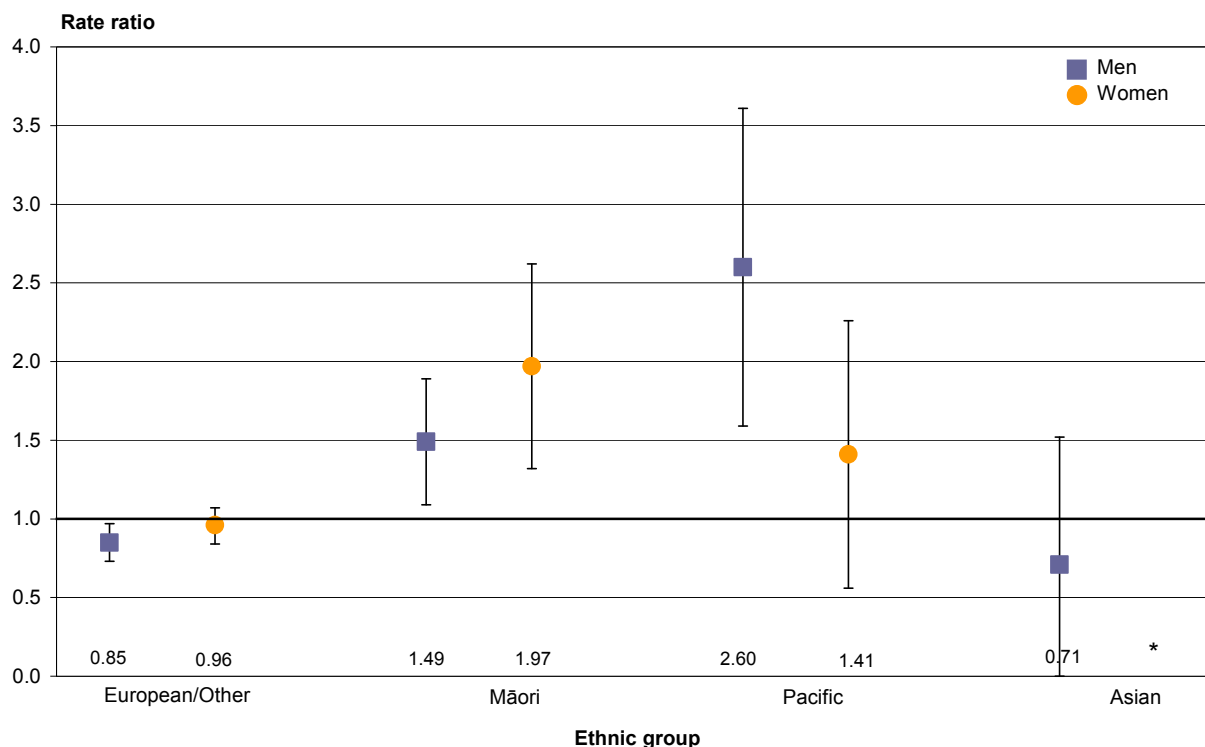
Ethnic group	Prevalence (%) for ever drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	3.4 (2.7–4.0)	3.3 (2.7–3.9)	68,600
Māori	6.2 (4.9–7.5)	6.1 (4.8–7.3)	19,900
Pacific	8.7 (5.8–11.5)	6.8 (4.6–9.1)	10,600
Asian	2.0 (0.4–5.9)	1.5 (0.3–4.5)	3300

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among ever drinkers, Māori men and women and Pacific men were significantly more likely to have ever received help to reduce their level of alcohol use, compared with men and women in the total population, after adjusting for age (Figure 70).

**Figure 70:** Ever received help to reduce level of alcohol use, among ever drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

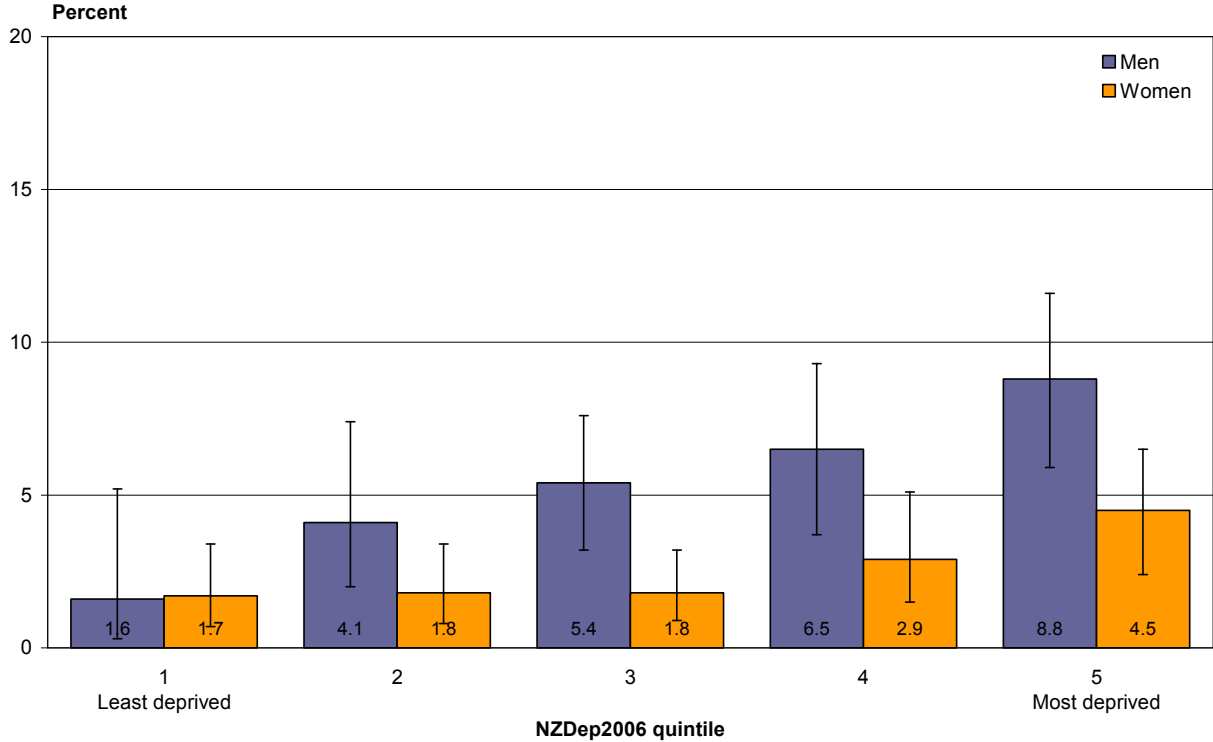
\* Numbers were too low for reliable estimation for Asian women.

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

Among both male and female ever drinkers the prevalence of having ever received help to reduce the level of alcohol use increased with increasing neighbourhood deprivation, when adjusted for age (Figure 71). Men living in the most deprived areas (NZDep2006 quintile 5) were over five times more likely to have ever received help than men living in the least deprived areas (quintile 1).

**Figure 71:** Ever received help to reduce level of alcohol use, among ever drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Where received help to reduce their level of alcohol use**

Among people who had ever received help to reduce their level of alcohol use:

- one in two received help from a drug and alcohol counsellor (48.1%, 40.5–55.7)
- one in three received help from a friend or family member (29.9%, 21.3–38.5)
- one in five received help from a GP (21.1%, 14.2–27.9)
- one in five received help from a detox programme (19.3%, 12.8–25.7)
- one in eight received help from a psychiatrist or mental health service (12.7%, 8.1–17.2)
- about 2% received help from a Māori or Pacific health service (2.3%, 1.1–4.3)
- a small proportion received help from an emergency department of a public hospital (0.7%, 0.2–2.1).

Other places where people reported receiving help, but which had a low prevalence, included natural or alternative therapists.

## Ever wanted help to reduce level of alcohol use but had not got it

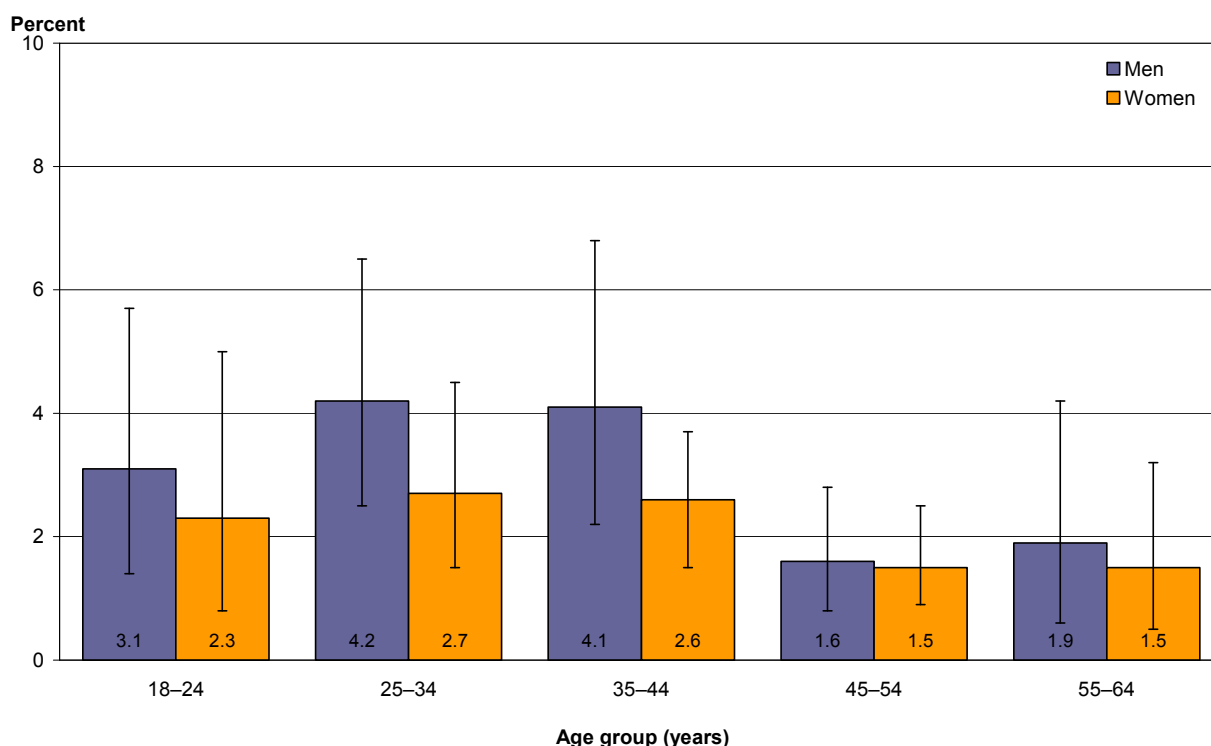
Overall, 2.5% (2.1–3.0) of adults who had ever consumed alcohol had ever wanted help to reduce their level of alcohol use but not received it. This represented 2.4% (2.0–2.9) of the total population aged 16–64 years, and equates to 63,600 people who had ever wanted help to reduce their level of alcohol use but not got it.

Among people who had ever consumed alcohol, there was no significant difference between men (3.1%, 2.2–4.0) and women (2.3%, 1.7–2.9) in the prevalence of having ever wanted help to reduce their level of alcohol use but not receiving it, adjusted for age.

### By age group

Among people who had ever consumed alcohol, the prevalence of having ever wanted help to reduce the level of alcohol use but not received it was highest for men aged 25–34 and 35–44 years (Figure 72). In women, the prevalence was relatively stable across the age groups.

**Figure 72:** Ever wanted help to reduce level of alcohol use but not received it in lifetime, among ever drinkers aged 18–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Numbers were too low for reliable estimation for ever drinkers aged 16–17 years.



## By ethnic group

Table 27 gives an indication of the prevalence of having ever wanted help to reduce the level of alcohol use but not received it, for people who had ever consumed alcohol in New Zealand's main ethnic population groups.

**Table 27:** Ever wanted help to reduce level of alcohol use but not received it in lifetime, among ever drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

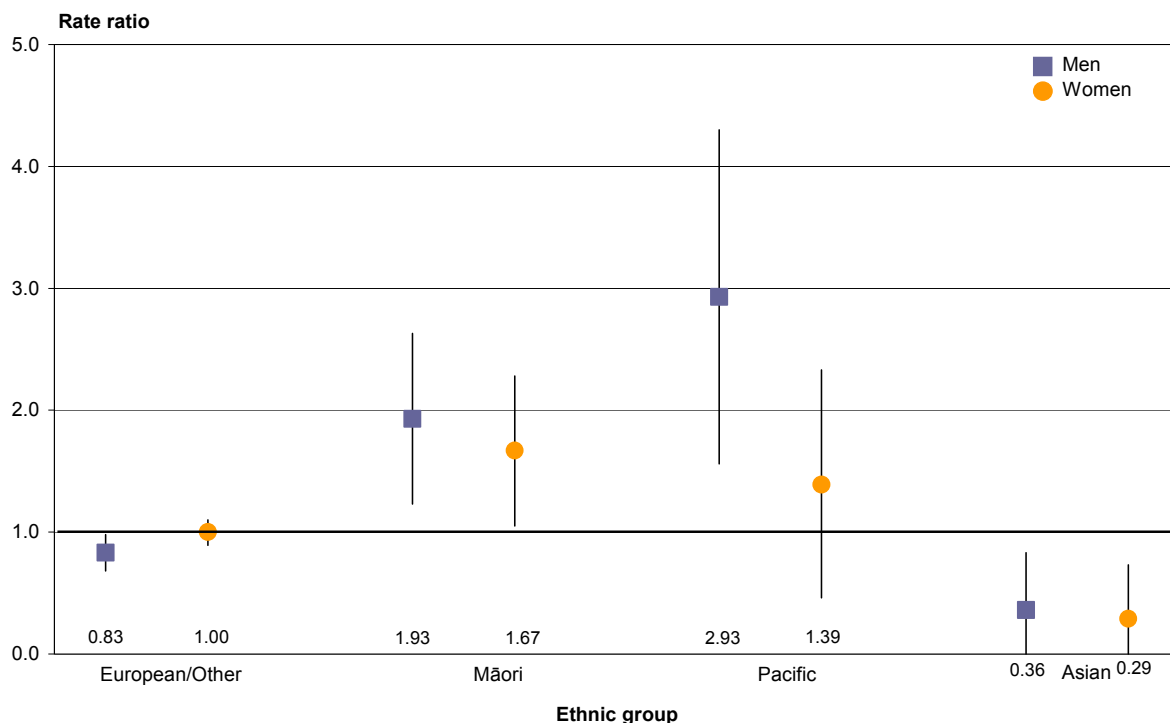
Ethnic group	Prevalence (%) for ever drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	2.2 (1.7–2.7)	2.2 (1.6–2.7)	44,900
Māori	4.8 (3.6–5.9)	4.7 (3.5–5.8)	15,300
Pacific	6.4 (4.0–8.8)	5.0 (3.2–6.8)	7,800
Asian	0.8 (0.3–2.0)	0.6 (0.2–1.5)	1,400

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Pacific men were almost three times more likely to have ever wanted help to reduce their level of alcohol use but not received it compared with men in the total population (Figure 73). Māori men and women were also significantly more likely to have ever had unmet need compared with men and women in the total population.

**Figure 73:** Ever wanted help to reduce level of alcohol use but not received it in lifetime, among ever drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



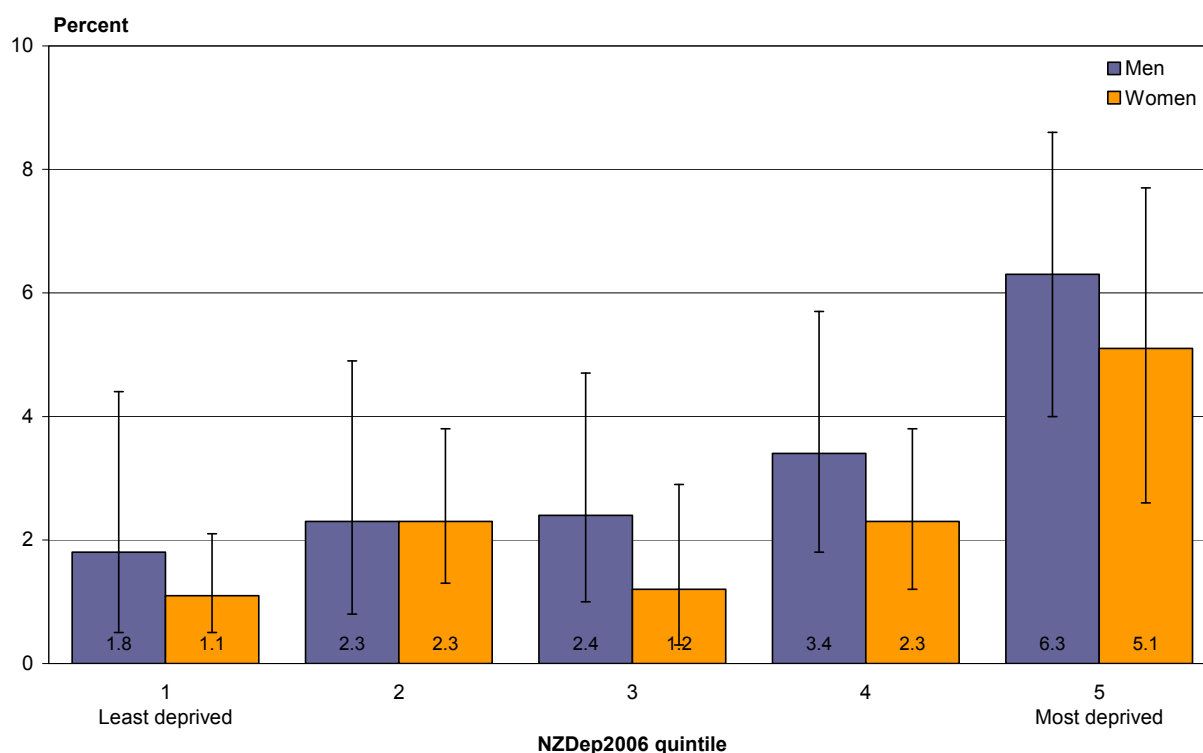
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had ever consumed alcohol. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both male and female ever drinkers, the prevalence of having ever wanted help to reduce the level of alcohol use but not received it was at least three times higher in the most deprived areas (NZDep2006 quintile 5) than in the least deprived areas (NZDep2006 quintile 1), adjusted for age ( $p$ -values < 0.05) (Figure 74).

**Figure 74:** Ever wanted help to reduce level of alcohol use but not received it in lifetime, among ever drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Reasons for not getting help to reduce level of alcohol use

Among people who had ever wanted help to reduce their level of alcohol use but not received it, the most common reasons for not getting help were due to:

- fear (31.2%, 22.6–39.8)
- not knowing where to go (28.4%, 19.6–37.3)
- social pressure (23.2%, 15.2–31.1)
- not being able to get an appointment at the right time or soon enough (9.0%, 3.4–18.5)
- service not being appropriate for type of use (8.8%, 4.0–16.4)
- cost (8.2%, 2.6–18.6)
- not being able to spare the time (7.4%, 3.3–13.9)
- having no transport to get there (6.3%, 3.2–11.1)
- not being able to get in touch with the doctor or service (5.8%, 1.9–13.1)

- there being no local service available (4.8%, 1.7–10.3)
- lack of childcare (1.7%, 0.3–5.0).

## Ever had someone show concern or suggest cutting down alcohol consumption

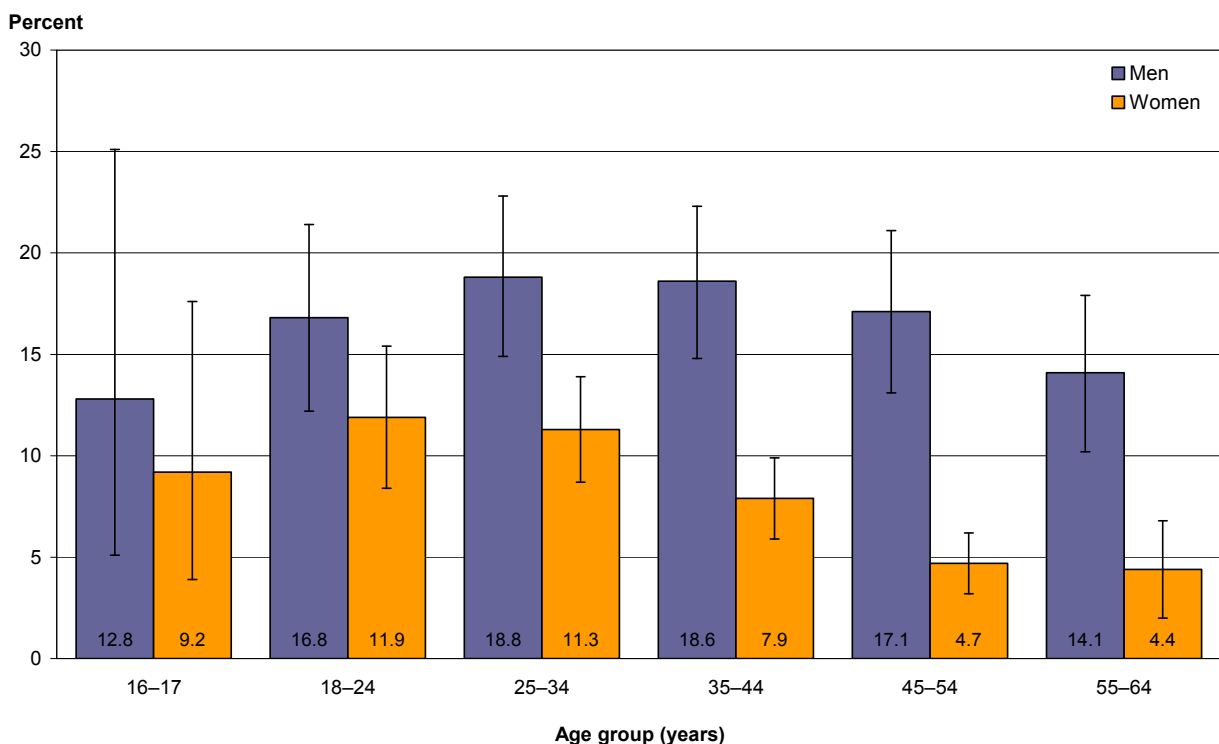
One in eight (12.4%, 11.3–13.4) adults who had ever consumed alcohol reported that a relative, friend, doctor or other health worker had ever been concerned about their drinking or ever suggested they cut down. This represented 11.7% (10.7–12.7) of the total population aged 16–64 years, and equates to 309,600 people who had ever had someone show concern or suggest cutting down alcohol consumption.

Among ever drinkers, men (17.3%, 15.4–19.2) were significantly more likely than women (8.8%, 7.7–9.8) to have ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption, adjusted for age.

### By age group

Among ever drinkers, men were significantly more likely than women to have ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption in all age groups, from 25–34 years and older (Figure 75).

**Figure 75:** Ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption, among ever drinkers aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Table 28 gives an indication of the prevalence of having ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption among adults in New Zealand's main ethnic population groups.

**Table 28:** Ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption, among population aged 16–64 years, by ethnic group (unadjusted prevalence)

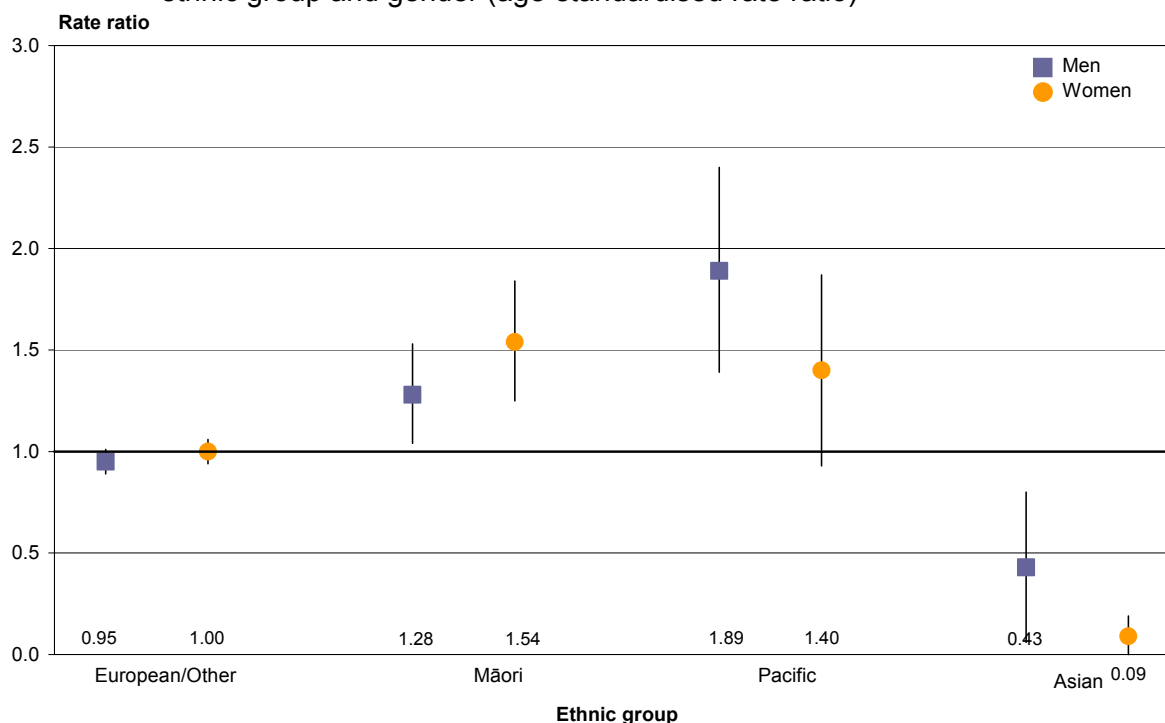
Ethnic group	Prevalence (%) for ever drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	11.7 (10.5–13.0)	11.5 (10.2–12.7)	238,500
Māori	17.3 (14.8–19.9)	17.0 (14.5–19.5)	55,600
Pacific	23.3 (18.5–28.0)	18.4 (14.7–22.0)	28,400
Asian	4.1 (1.7–8.1)	3.1 (1.3–6.2)	6,900

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

Among ever drinkers, Māori men and women and Pacific men were significantly more likely to have ever had someone show concern or suggest they cut down their alcohol consumption compared with men and women in the total population, adjusted for age (Figure 76).

**Figure 76:** Ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption, among ever drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



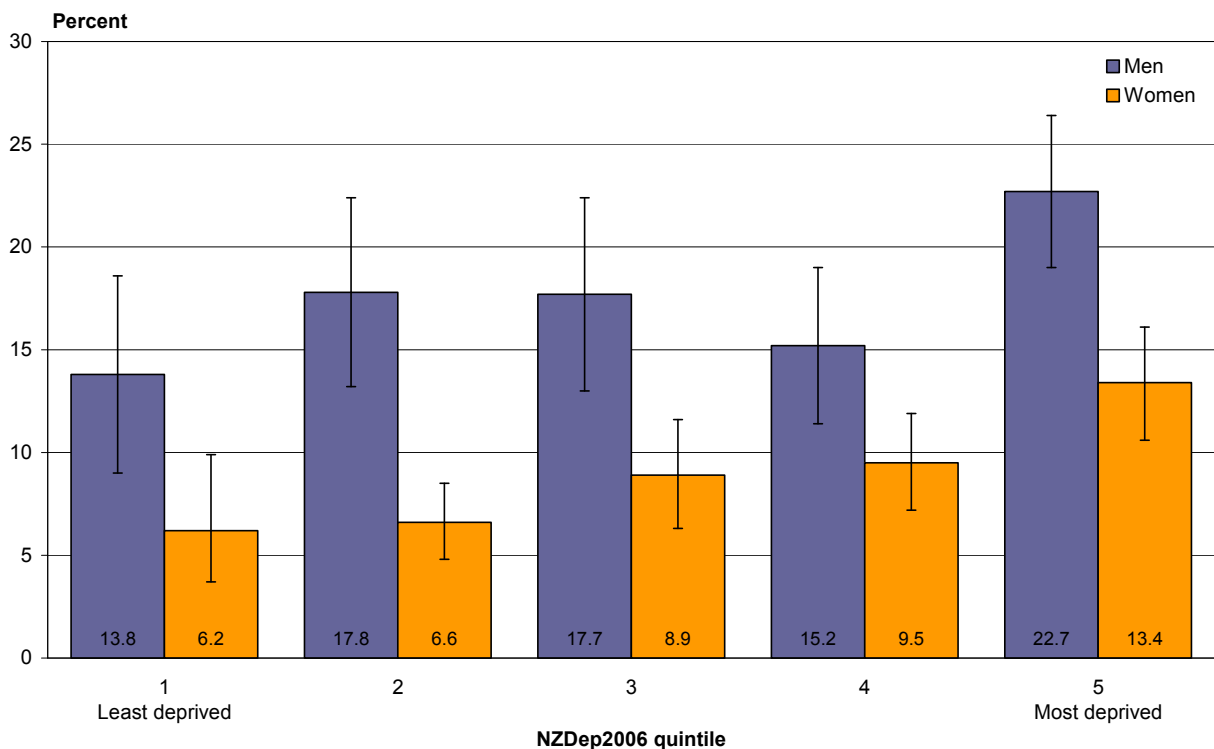
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

Among ever drinkers, the prevalence of having ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption was significantly higher in NZDep2006 quintile 5 (most deprived areas) than in quintile 1 (least deprived areas) in both men and women, adjusted for age (Figure 77). In every quintile, men were significantly more likely than women to have had someone show concern or suggest they cut down their alcohol consumption.

**Figure 77:** Ever had a relative, friend, doctor or other health worker show concern or suggest cutting down alcohol consumption, among ever drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

# Part E: Harmful Effects from Alcohol Use

This part examines harmful effects associated with alcohol use. In particular, it covers the following topics:

- Chapter 10: Harmful effects experienced due to own alcohol use
- Chapter 11: Harmful effects experienced due to someone else's alcohol use.

Further analyses for the key population groups of youth, Māori and Pacific peoples are presented in Part F of this report.

## Chapter 10: Harmful effects experienced due to own alcohol use

Three key ways that alcohol use can cause harm to the drinker include through intoxication, alcohol dependence and acute toxicity (World Health Organization 2007).

Intoxication is the main cause of alcohol-related harm in the population because it can lead to risk-taking behaviour, accidents and injuries, violence, and acute alcohol poisoning (World Health Organization 2007). Several studies have found that alcohol contributes to injury and mortality in New Zealand. One study estimated that 3.9% of deaths in New Zealand in 2000 were attributable to alcohol consumption, and that 51% of these alcohol-related deaths were due to injury (Conner et al 2005). Furthermore, a recent study found that injuries from harmful alcohol use cost an estimated \$1.592 billion in 2005/06 in New Zealand (BERL 2009). A New Zealand study of a random sample of people presenting to an Auckland hospital emergency department in December 2000 found that 35% of people with injuries had consumed alcohol prior to the injury (Humphrey et al 2003). Police have also estimated that at least 31% of all recorded offences and one-third of violent offences in New Zealand in 2007/08 were committed where the offender had consumed alcohol prior to committing the offence (Stevenson 2009).

Alcohol dependence is associated with withdrawal symptoms on removal of alcohol (World Health Organization 2007). Alcohol also has toxic effects, and can exacerbate existing health problems. For example, brain development can be affected by alcohol, particularly in young people and in developing foetuses in pregnant women (Stevenson 2009). Alcohol consumption is also associated with some chronic diseases, including cirrhosis of the liver, and breast cancer in women (National Health and Medical Research Council 2009). Furthermore, alcohol can cause social harms, such as family and interpersonal problems, work problems, violence and crimes (World Health Organization 2007).

This chapter examines the harmful effects experienced by people due to their own alcohol use. These effects were not defined in the questionnaire, and may include minor effects as well as major effects.

### What were the survey questions?

In the 2007/08 NZADUS participants who had ever had an alcoholic drink in their lifetime were asked about the experiences they had had as a result of drinking alcohol. These participants were asked whether there had ever been a time when they felt their alcohol use had a harmful effect on their friendships or social life; their home life; their work, studies or employment opportunities; their financial position; or whether they had ever had legal problems, difficulty learning things or injuries because of their alcohol use. Participants selected from the following responses: yes, during the last 12 months; yes, but not in the last 12 months; no. Participants who had consumed alcohol in the past year were asked, in the last 12 months, how many days, if any, they were away from work or school because of their drinking.

### Summary of harmful effects experienced due to own alcohol use

Table 29 presents a summary of harmful effects experienced by people due to their own alcohol use, in the last 12 months and during their lifetime.

**Table 29:** Harmful effects experienced due to own alcohol use, among total population aged 16–64 years (unadjusted prevalence)

Harmful effect	Prevalence (%) in the last 12 months (95% CI)		Prevalence (%) in lifetime (95% CI)
	For past-year drinkers	For total adults	For total adults
Harmful effects on friendships or social life	7.8 (6.8–8.8)	6.9 (6.0–7.7)	19.7 (18.4–21.0)
Harmful effects on home life	6.2 (5.4–7.0)	5.4 (4.7–6.2)	14.2 (13.1–15.3)
Harmful effects on financial position	6.2 (5.4–7.0)	5.4 (4.7–6.1)	11.7 (10.7–12.7)
Had injuries	5.5 (4.6–6.3)	4.7 (4.0–5.4)	16.1 (14.9–17.3)
Harmful effects on work, study or employment	3.6 (2.9–4.4)	3.2 (2.5–3.9)	9.4 (8.5–10.3)
Had legal problems	1.8 (1.3–2.2)	1.6 (1.2–1.9)	7.5 (6.7–8.4)
Had difficulty learning things	1.0 (0.6–1.3)	0.9 (0.6–1.1)	3.9 (3.3–4.6)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: The lifetime prevalence of having had days off work or school due to own alcohol use has not been presented, as this question was not asked in the 2007/08 New Zealand Alcohol and Drug Use Survey.

Also, 6.6% (5.7–7.5) of past-year drinkers had had days off work or school in the past year due to their alcohol use, representing 5.6% (4.8–6.4) of all adults aged 16–64 years.

## Any harmful effect experienced due to own alcohol use

Overall, one in eight adults (12.2%, 11.0–13.3) in the total population aged 16–64 years had experienced at least one of the following harmful effects in the past year due to their own alcohol use:

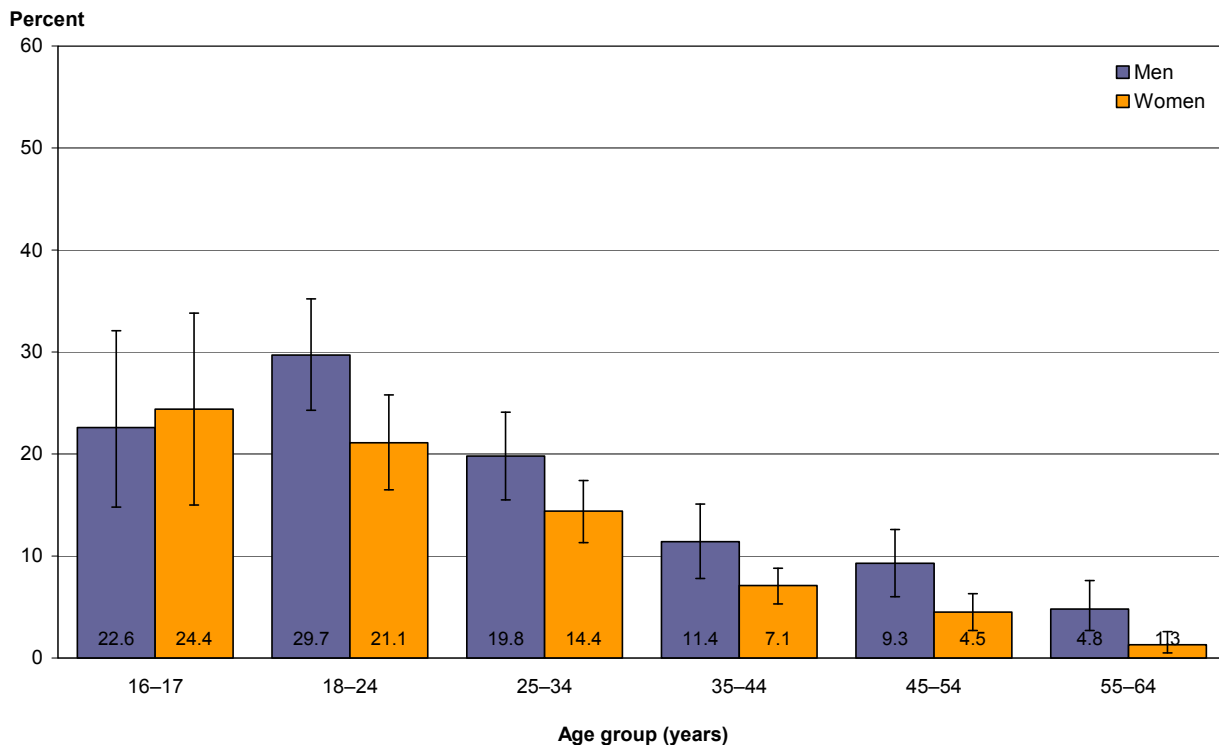
- harmful effect on friendships/social life
- harmful effect on home life
- harmful effect on work/study/employment opportunities
- harmful effect on financial position
- had legal problems
- had difficulty learning things.

Men (17.1%, 15.1–19.1) were significantly more likely than women (12.0%, 10.4–13.6) to have experienced any of the above harmful effects due to their own alcohol use in the past year, adjusted for age.

### By age group

Overall, people in the younger age groups (16–24 years) experienced a higher level of harmful effects in the last year from their alcohol use than people in the older age groups (Figure 78). In all age groups except 16–17 years, men were significantly more likely than women to have experienced a harmful effect in the past year.

**Figure 78:** Experienced any of the following harmful effects due to own alcohol use in the past 12 months: on friendships or social life, home life, work/study/employment opportunities, financial position, legal problems, difficulty learning things, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



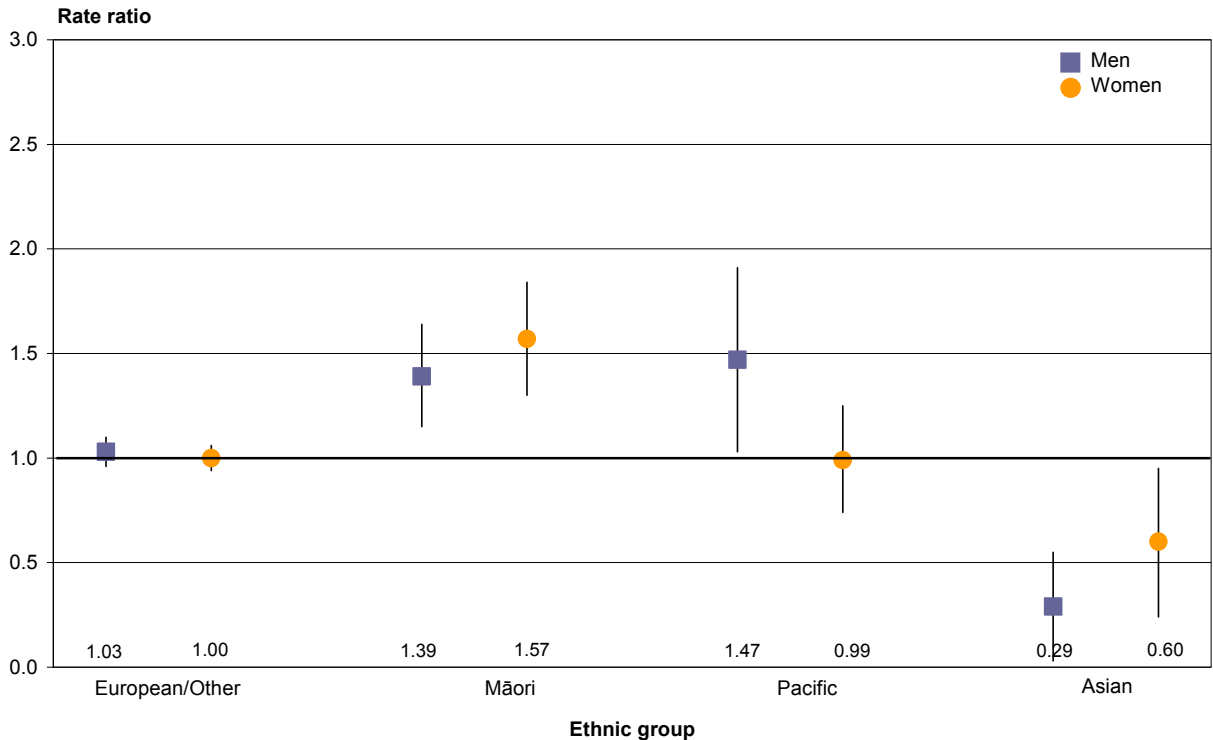
Source: 2007/08 New Zealand Alcohol and Drug Use Survey



**By ethnic group**

Māori men and women and Pacific men were significantly more likely to have experienced harmful effects in the past year due to their alcohol use compared with men and women in the total population (Figure 79). Asian men and women were significantly less likely to have experienced harmful effects, while there was no significant difference for European/Other men or women, or for Pacific women.

**Figure 79:** Experienced any of the following harmful effects due to own alcohol use in the past 12 months: on friendships or social life, home life, work/study/employment opportunities, financial position, legal problems, difficulty learning things, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

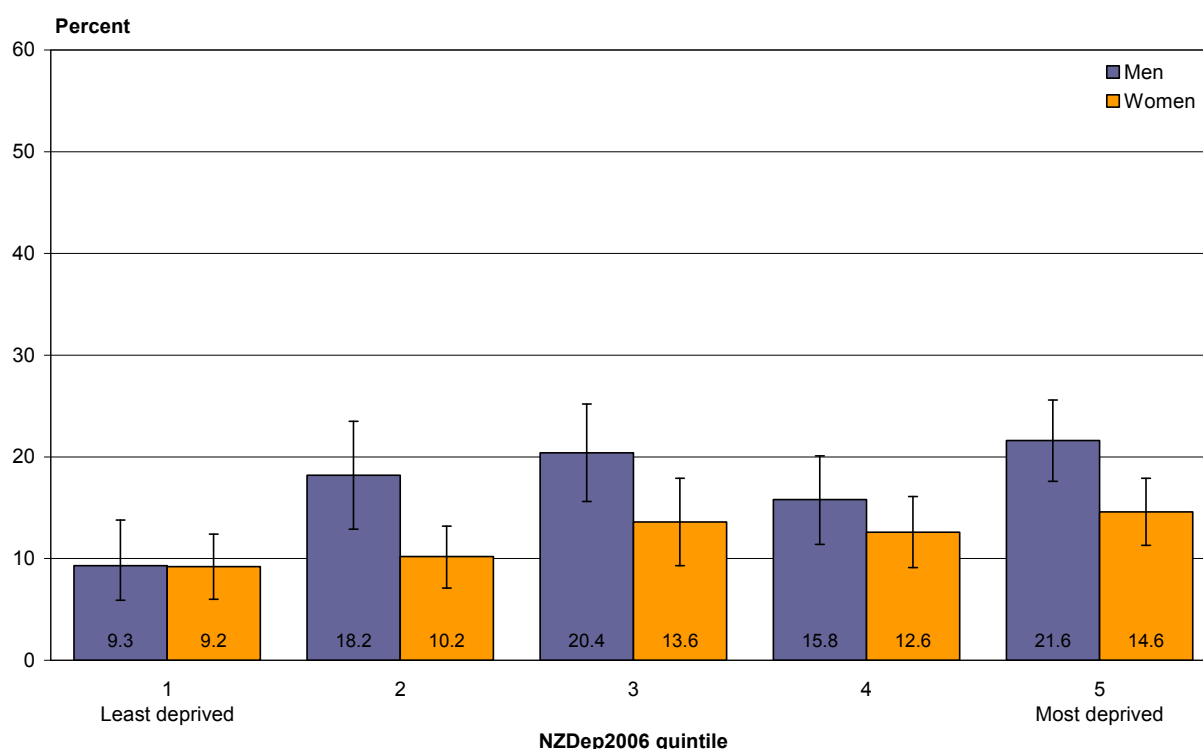


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

For both men and women, people living in more deprived areas (NZDep2006 quintile 5) were significantly more likely to have experienced harmful effects in the last 12 months due to their own alcohol use than people living in less deprived areas (quintile 1) (p-values < 0.05) (Figure 80).

**Figure 80:** Experienced any of the following harmful effects due to own alcohol use in the past 12 months: on friendships or social life, home life, work/study/employment opportunities, financial position, legal problems, difficulty learning things, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

The harmful effects experienced by people due to their own alcohol use are discussed separately in more detail below.

## Harmful effects on friendships or social life in the past 12 months

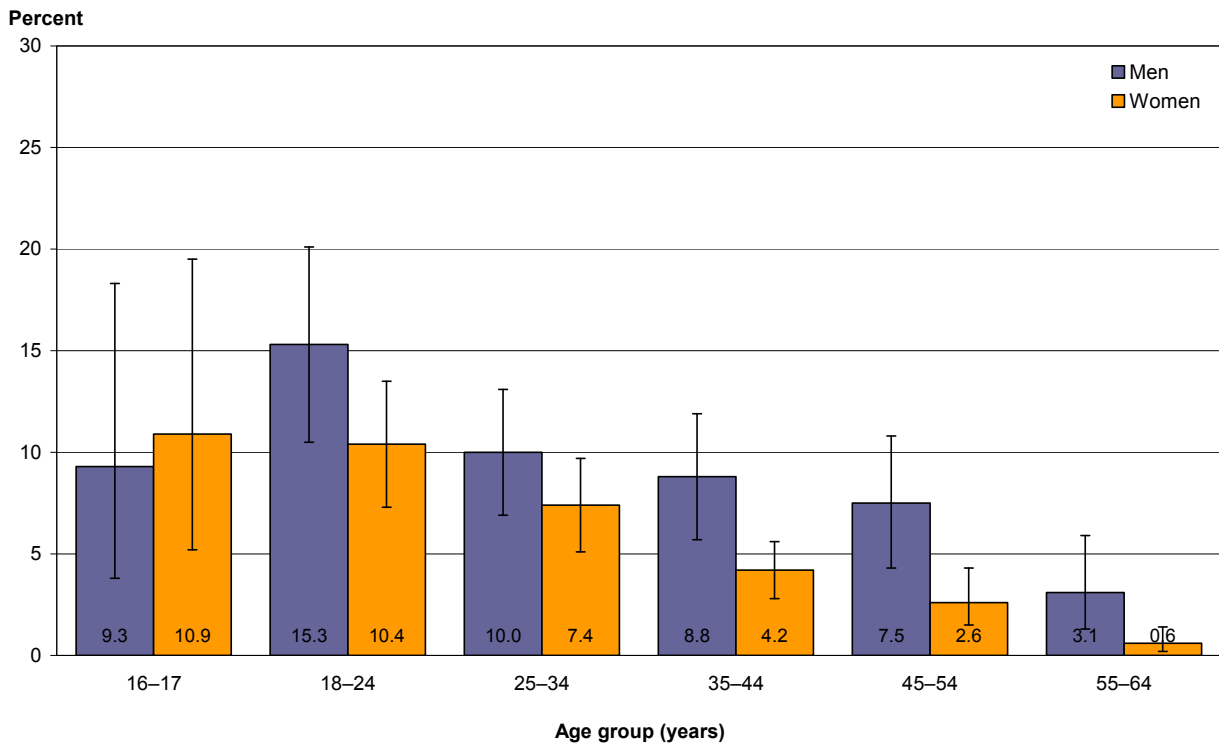
Almost 7% of adults had experienced harmful effects on their friendships or social life in the past year due to their alcohol use (6.9%, 6.0–7.7). This represents 7.8% (6.8–8.8) of past-year drinkers, and equates to 181,100 people who had experienced harmful effects on friendships or social life in the last 12 months due to their alcohol use.

Among the total population aged 16–64 years, men (9.8%, 8.1–11.5) were significantly more likely than women (6.1%, 5.0–7.3) to have experienced harmful effects on their friendships or social life in the past 12 months due to their own alcohol use, adjusted for age.

## By age group

In men, the prevalence of having experienced harmful effects on friendships or social life in the last year due to their own alcohol use was highest among 18–24-year-olds (Figure 81). The prevalence decreased with increasing age for both men and women.

**Figure 81:** Experienced harmful effects on friendships or social life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

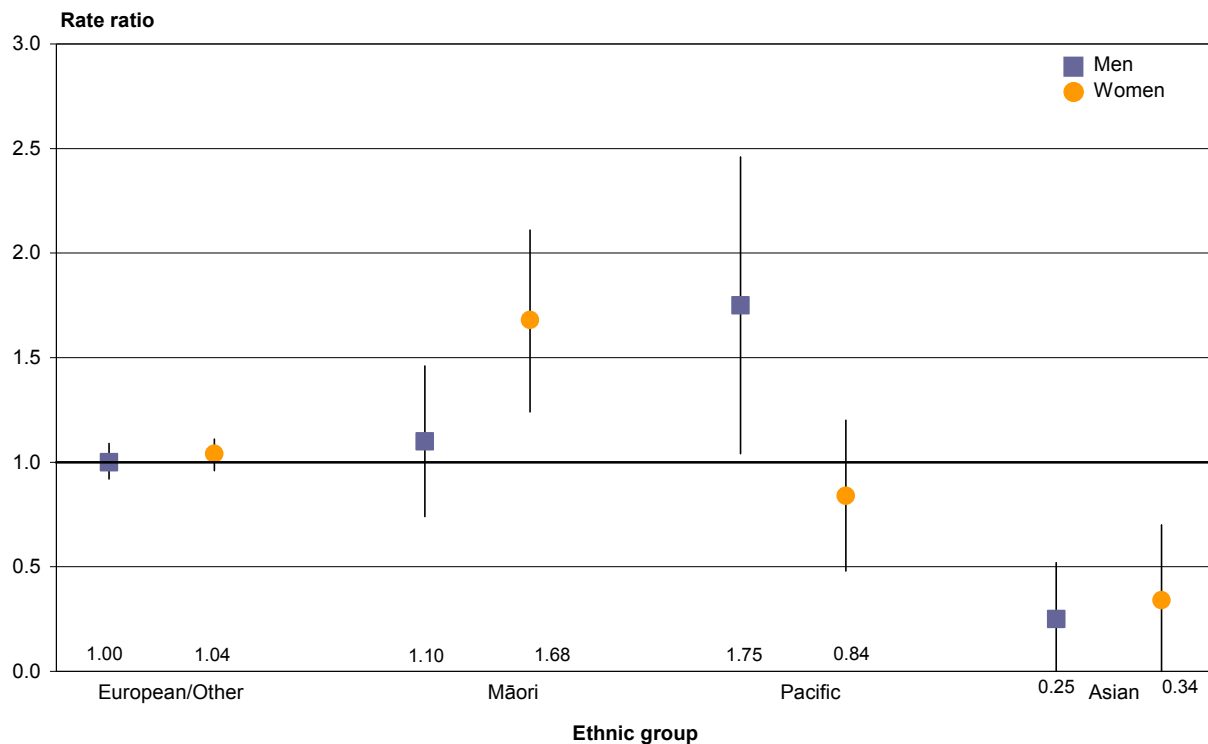


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

After adjusting for age, Māori women and Pacific men were significantly more likely to have experienced harmful effects on their friendships and social life in the last year due to their alcohol use, compared with men and women in the total population (Figure 82).

**Figure 82:** Experienced harmful effects on friendships or social life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



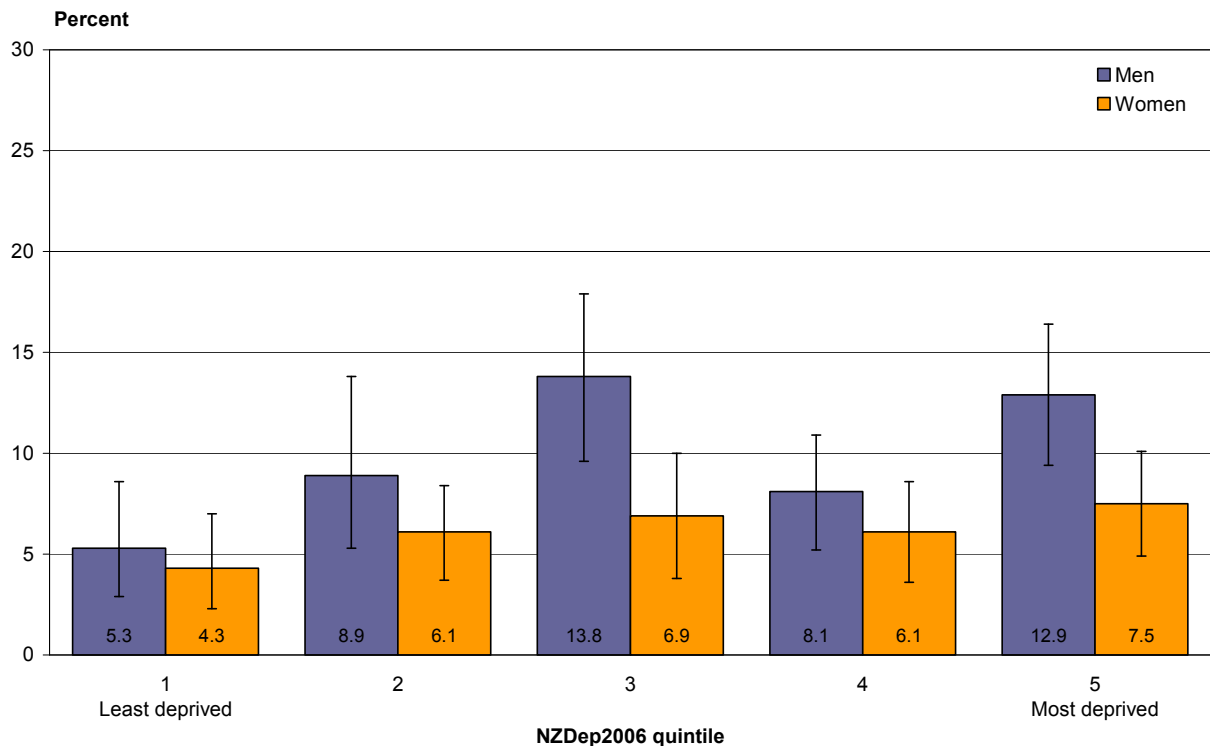
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Men living in NZDep2006 quintile 5 (most deprived) were significantly more likely to have experienced harmful effects on friendships or social life in the past year due to own alcohol use than men living in NZDep2006 quintile 1 (least deprived), adjusted for age. There were no significant differences in women by neighbourhood deprivation (Figure 83).

**Figure 83:** Experienced harmful effects on friendships or social life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Harmful effects on home life in the past 12 months

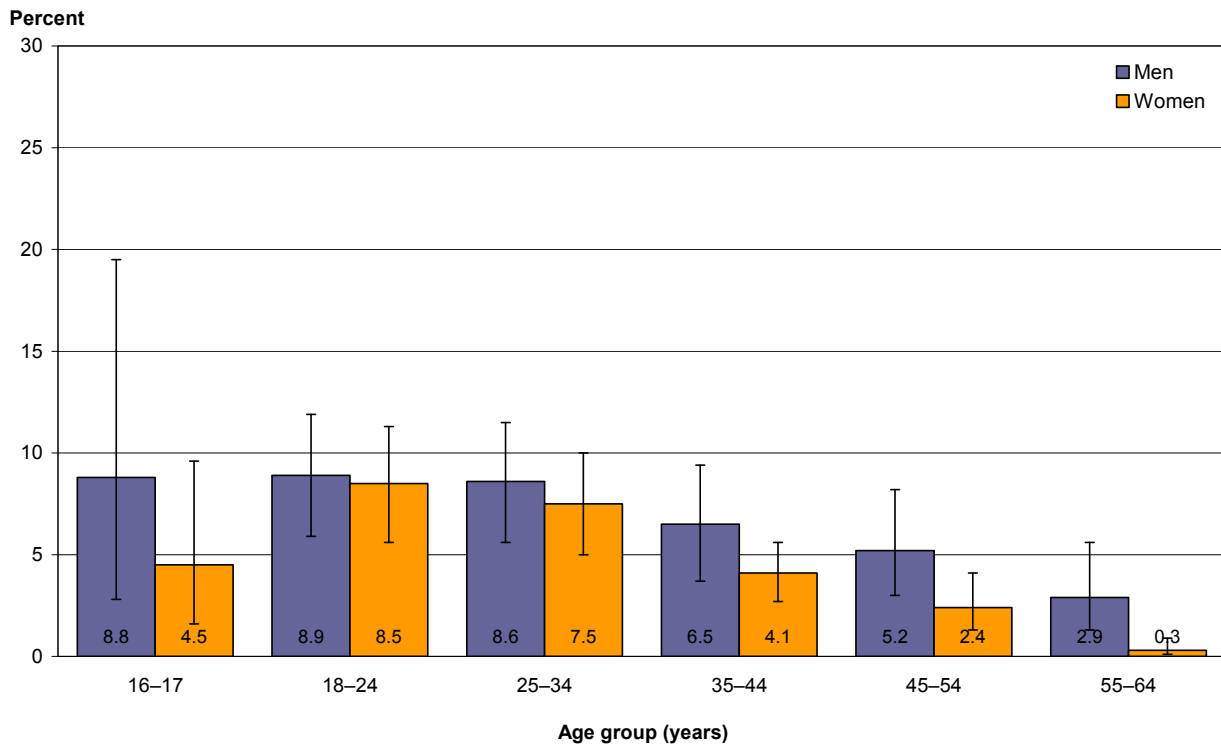
Overall, 5.4% (4.7–6.2) of adults aged 16–64 years had experienced harmful effects on their home life in the last 12 months due to their own alcohol use, representing 6.2% (5.4–7.0) of past-year drinkers. This equates to 143,300 people who had experienced harmful effects on their home life in the past 12 months due to their alcohol use.

Men (7.2%, 5.9–8.5) were significantly more likely to have experienced harmful effects on their home life in the past 12 months due to their own alcohol use than women (5.3%, 4.3–6.2), adjusted for age ( $p$ -value < 0.05).

## By age group

For both men and women, the younger age groups (16–34 years) generally experienced higher levels of harmful effects on their home life in the past year due to their alcohol use than people in the older age groups (Figure 84).

**Figure 84:** Experienced harmful effects on home life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

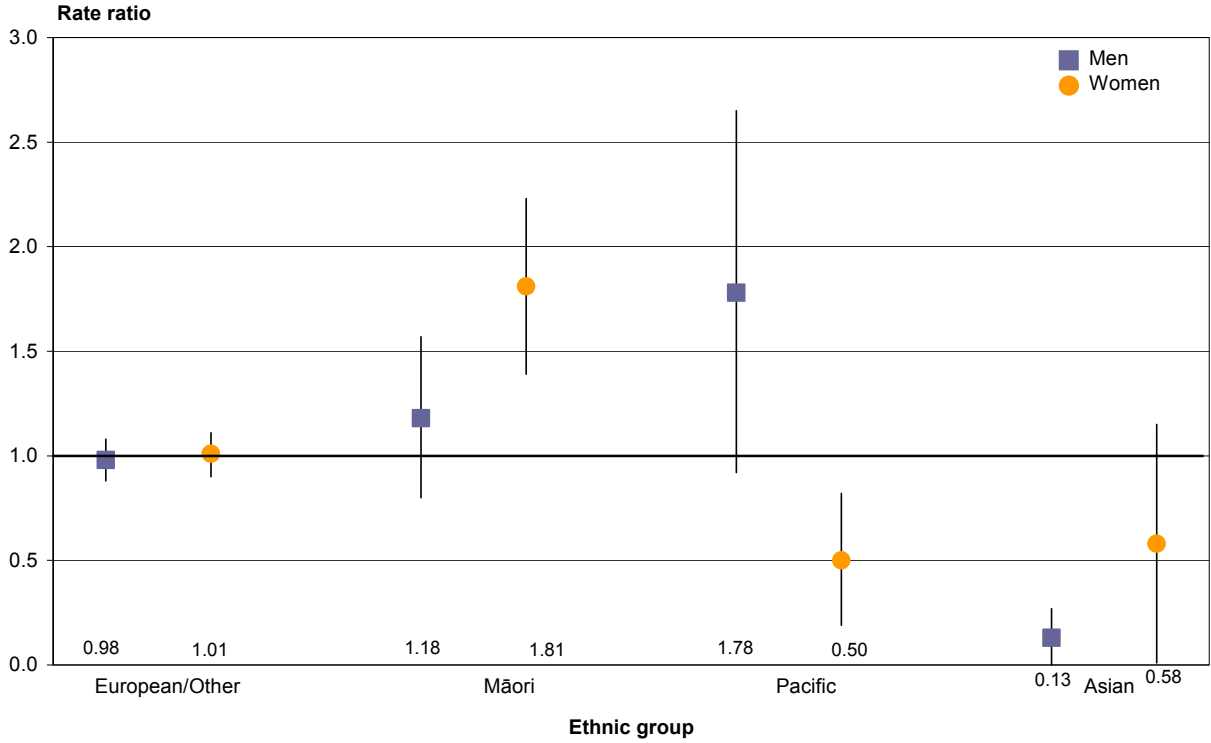


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**By ethnic group**

After adjusting for age, Māori women were 80% more likely to have experienced harmful effects on their home life in the past year due to their alcohol use compared with women in the total population (Figure 85). Asian men and Pacific women were significantly less likely to have experienced this harmful effect in the past year due to their own alcohol use compared with men and women in the total population.

**Figure 85:** Experienced harmful effects on home life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)

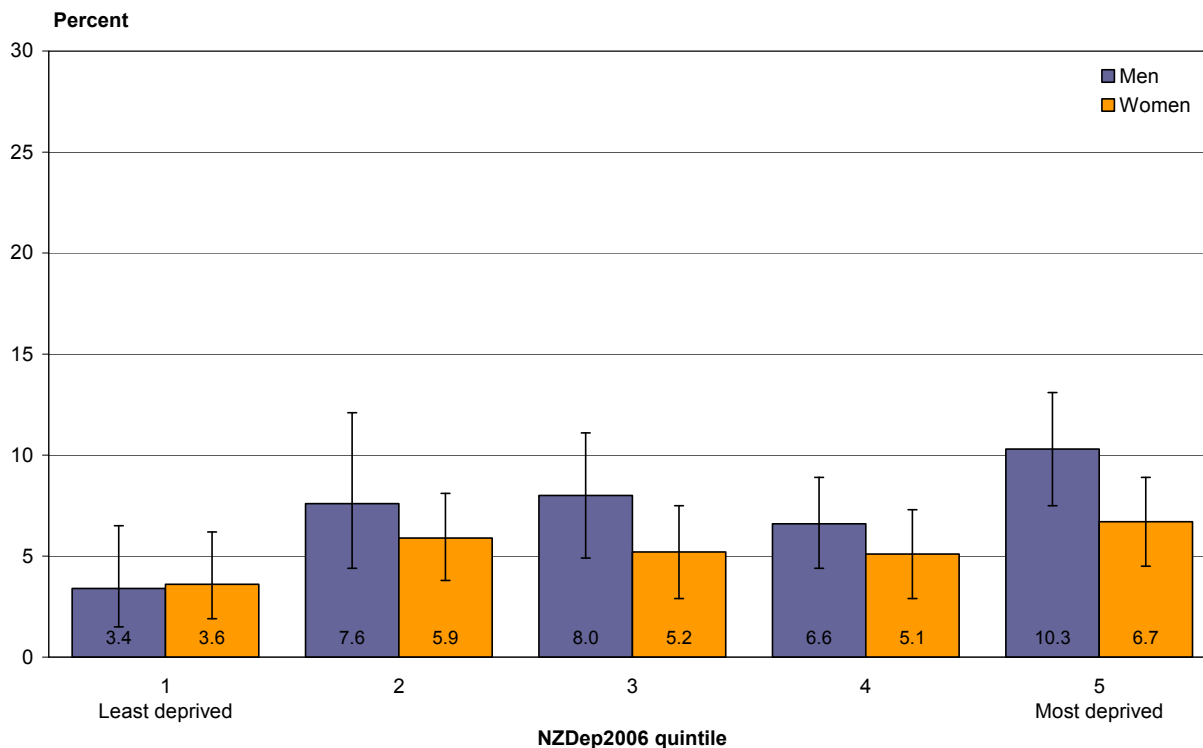


Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In men the prevalence of having experienced harmful effects on home life in the past year due to own alcohol use was significantly higher in the most deprived areas (quintile 5) compared with the least deprived areas (quintile 1), adjusted for age. There were no significant differences in women by neighbourhood deprivation (Figure 86).

**Figure 86:** Experienced harmful effects on home life due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey



## Had days off work or school due to alcohol use in last 12 months

The results in this section are reported for the total population aged 16–64 years and do not take into account whether people usually worked or attended school in the past year.

In total, 5.6% (4.8–6.4) of adults reported that they had had days off work or school in the past 12 months due to their alcohol use. This equates to 147,500 people aged 16–64 years who had had days off work or school in the past year due to their alcohol use. The majority of these people had had one or two days off work or school (Table 30).

**Table 30:** Had days off work or school due to alcohol use in the past 12 months, among total population aged 16–64 years (unadjusted prevalence)

Days off work or school due to alcohol use in the last 12 months	Prevalence (%) in the last 12 months (95% CI)		Estimated number of adults aged 16–64 years
	For past-year drinkers	For total adults	
Any days	6.6 (5.7–7.5)	5.6 (4.8–6.4)	147,500
1 day	2.6 (2.0–3.2)	2.2 (1.7–2.8)	58,600
2 days	1.5 (1.1–1.8)	1.2 (0.9–1.6)	32,600
3–5 days	1.5 (1.1–1.9)	1.3 (1.0–1.6)	34,400
6 or more days	1.0 (0.6–1.3)	0.8 (0.5–1.1)	21,900

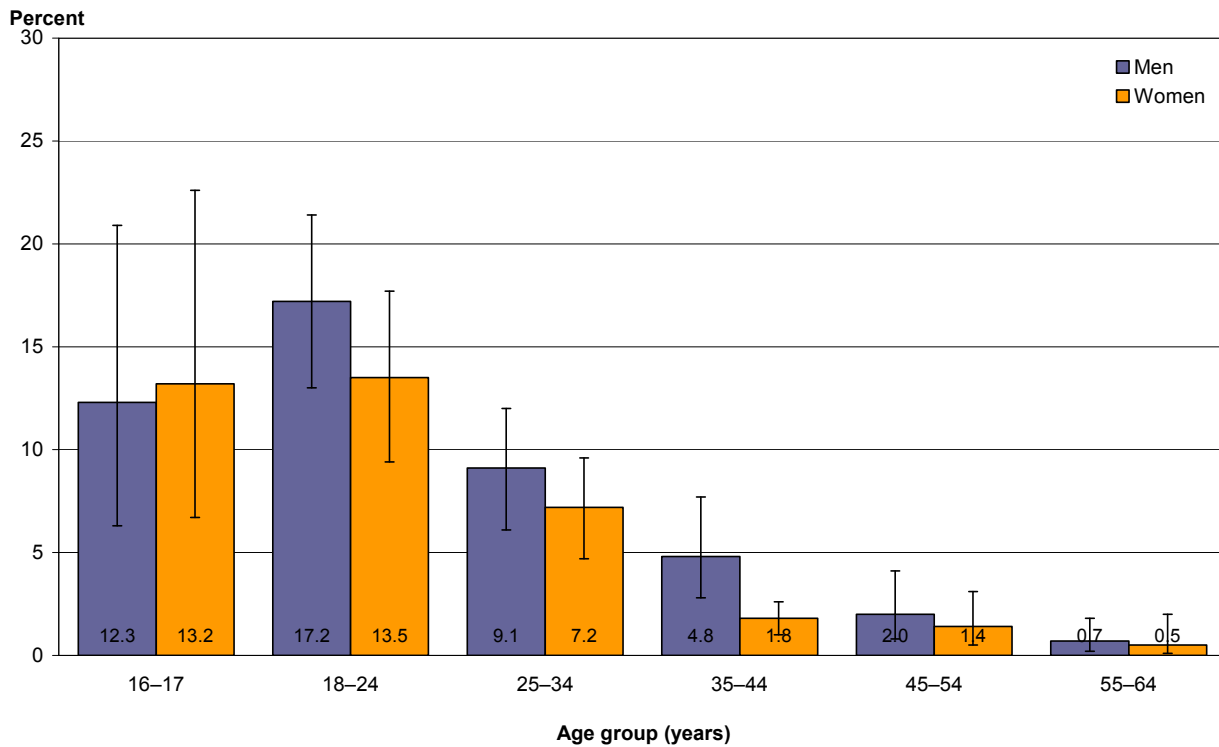
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among people aged 16–64 years, men were significantly more likely to have had days off work or school in the past year due to their own drinking (8.0%, 6.7–9.4) than women (6.1%, 4.9–7.3), adjusted for age (p-value < 0.05).

## By age group

The prevalence of having had days off work or school in the past year due to own alcohol use was highest among men aged 18–24 years, and decreased with increasing age (Figure 87).

**Figure 87:** Had days off work or school due to own alcohol use in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

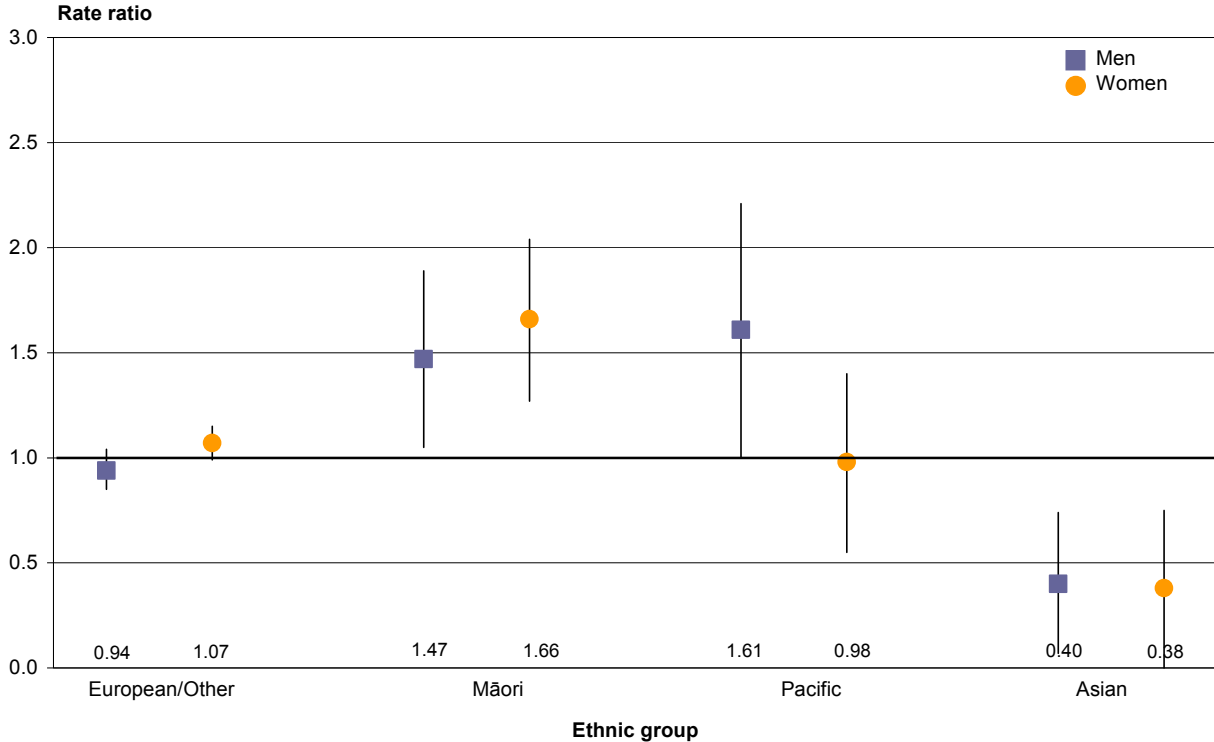


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**By ethnic group**

After adjusting for age, Māori men and women and Pacific men were significantly more likely to have had days off work or school in the past year due to their alcohol use compared with men and women in the total population (Figure 88).

**Figure 88:** Had days off work or school due to own alcohol use in the last 12 months, among total population, by ethnic group and gender (age-standardised rate ratio)



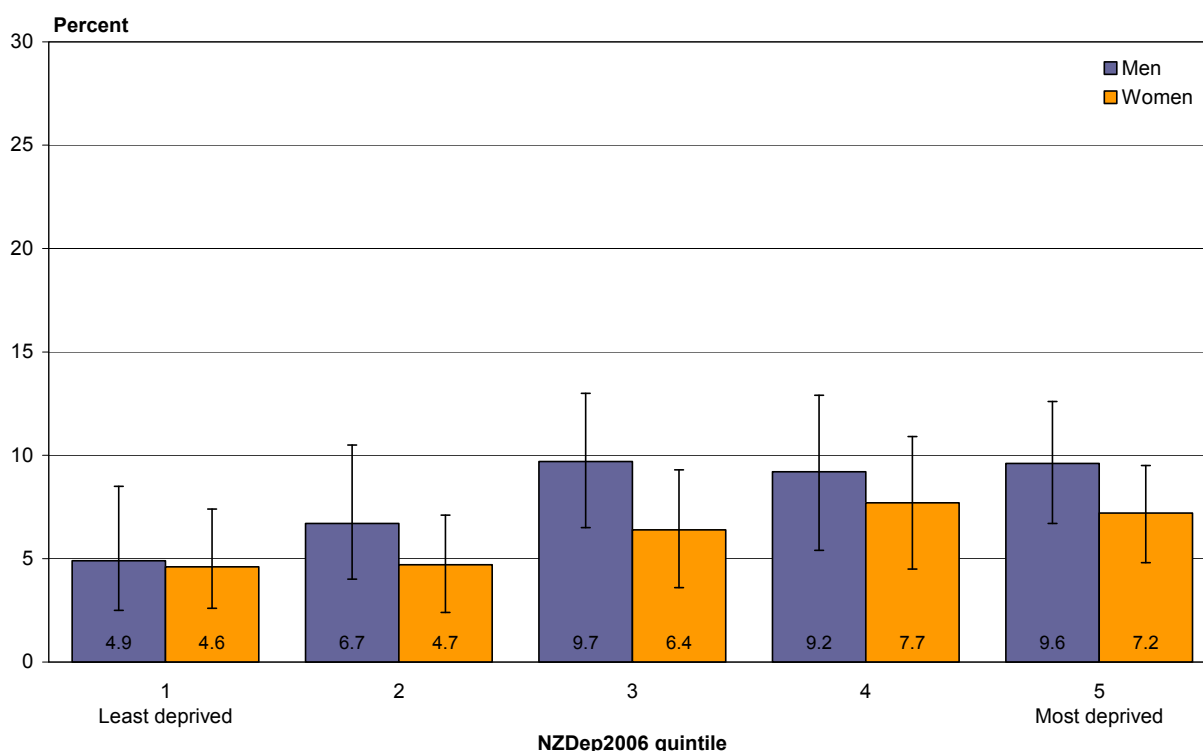
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Men living in more deprived areas (NZDep2006 quintile 5) were significantly more likely to have had days off work or school due to own alcohol use in the past year compared with men living in the least deprived areas (quintile 1), adjusted for age (Figure 89). There were no significant differences by NZDep2006 quintile for women in the prevalence of having had days off work or school due to own alcohol use in the past year.

**Figure 89:** Had days off work or school due to own alcohol use in the last 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Harmful effects on financial position in the past 12 months

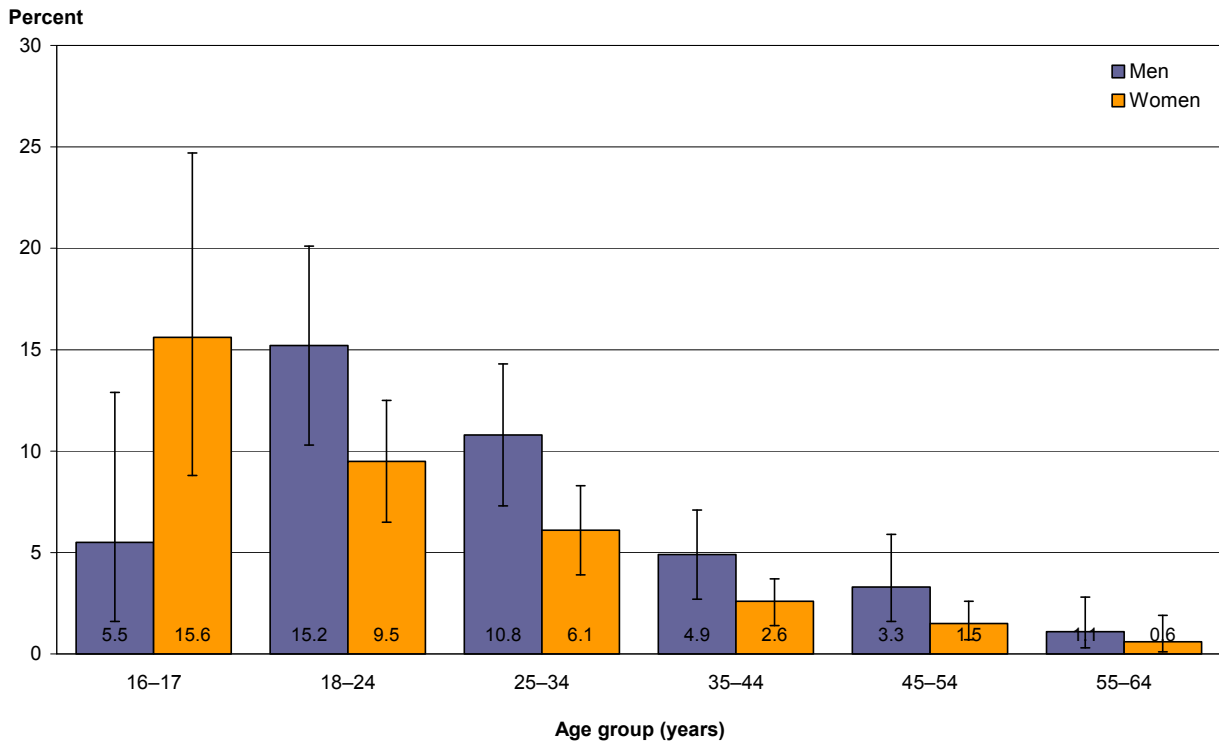
Over 5% of adults had experienced harmful effects on their financial position in the last year due to their own alcohol use (5.4%, 4.7–6.1). This represents 6.2% (5.4–7.0) of past-year drinkers, and equates to 141,800 people who had experienced harmful effects on their financial position in the past year.

Men (7.9%, 6.5–9.3) were significantly more likely than women (5.4%, 4.4–6.3) to have experienced harmful effects on their financial position in the past year due to their own alcohol use, adjusted for age.

## By age group

The prevalence of people having experienced harmful effects on their financial position due to their own alcohol use was highest among women aged 16–17 years and men aged 18–24 years and decreased with increasing age (Figure 90). It should be noted that the large confidence intervals for the younger age groups suggest that the results should be interpreted with caution.

**Figure 90:** Experienced harmful effects on financial position due to own alcohol use in the past 12 months, among the total population aged 16–64 years, by age group and gender (unadjusted prevalence)

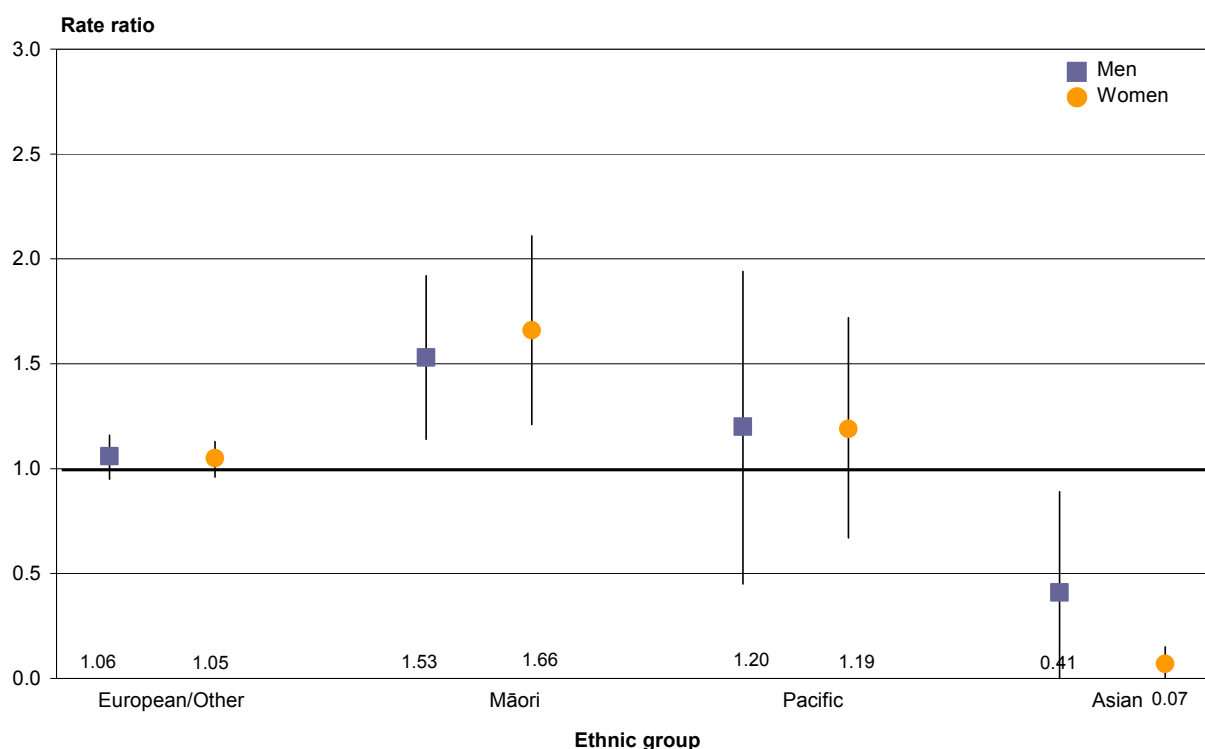


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Adjusted for age, Māori men and women were significantly more likely to have experienced harmful effects on their financial position in the past year due to their own alcohol use, compared with men and women in the total population (Figure 91).

**Figure 91:** Experienced harmful effects on financial position due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



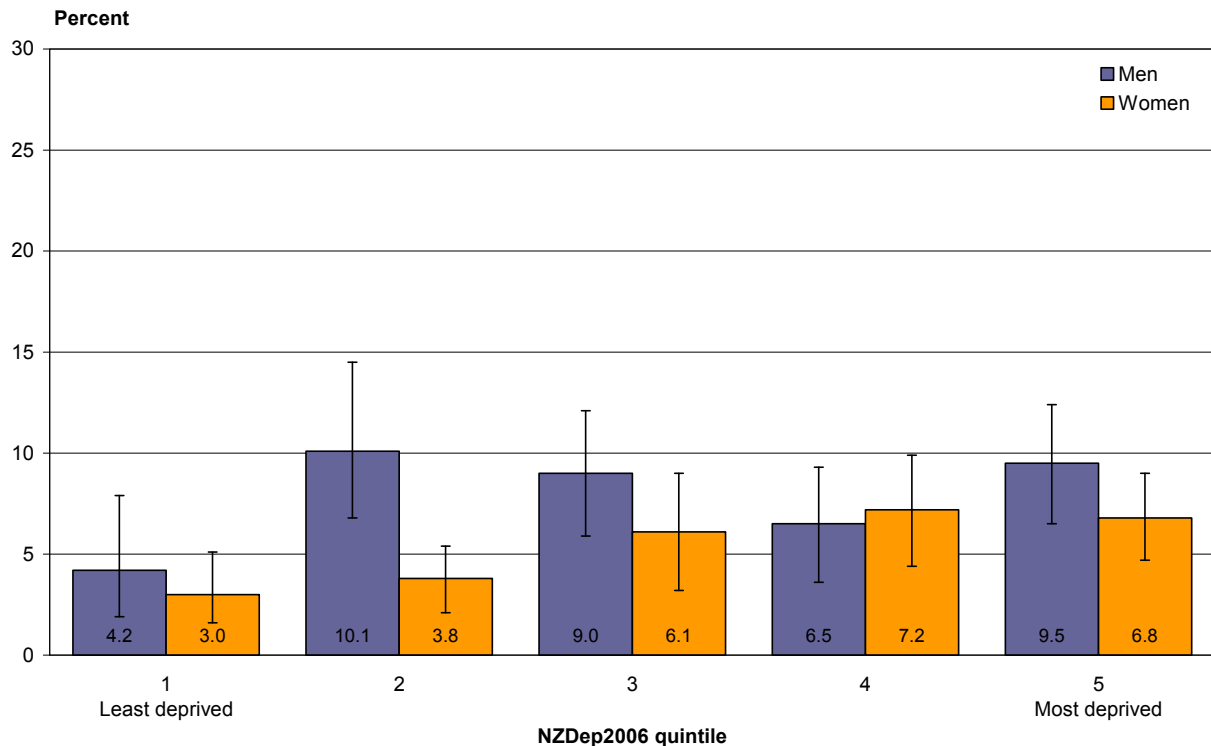
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both men and women the prevalence of having experienced harmful effects on financial position due to own alcohol use was significantly higher in NZDep2006 quintile 5 (most deprived) than in quintile 1 (least deprived), when adjusted for age ( $p$ -values  $< 0.05$ ) (Figure 92).

**Figure 92:** Experienced harmful effects on financial position due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Had injuries due to alcohol use in the past 12 months

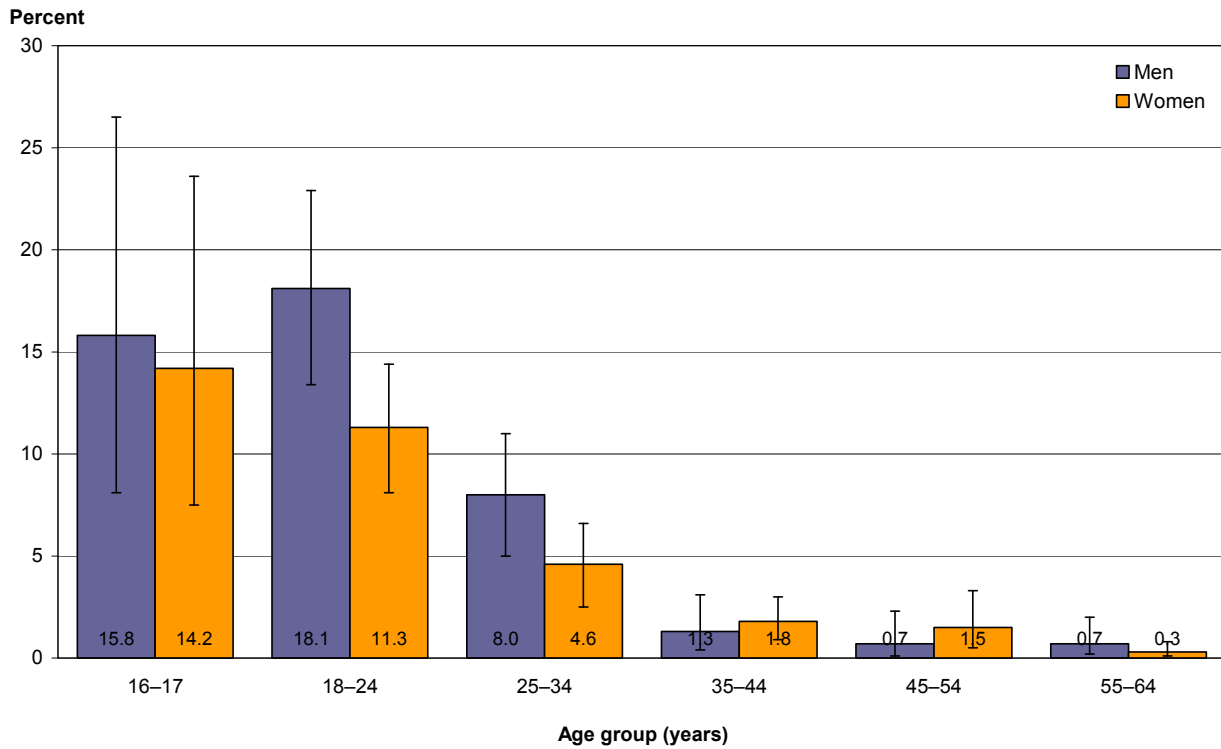
Overall, 4.7% (4.0–5.4) of adults aged 16–64 years had experienced an injury in the past year due to their alcohol use. This represents 5.5% (4.6–6.3) of past-year drinkers, and equates to 124,300 people who had had injuries in the last year due to their alcohol use.

Men (7.2%, 5.8–8.6) were significantly more likely to have experienced an injury in the past year due to their own alcohol use than women (5.1%, 3.9–6.2), adjusted for age ( $p$ -value  $< 0.05$ ).

## By age group

In both men and women, the prevalence of having had injuries due to their own alcohol use in the last year was highest among 16–24-year-olds (Figure 93).

**Figure 93:** Had injuries due to own alcohol use in the past 12 months, among the total population aged 16–64 years, by age group and gender (unadjusted prevalence)



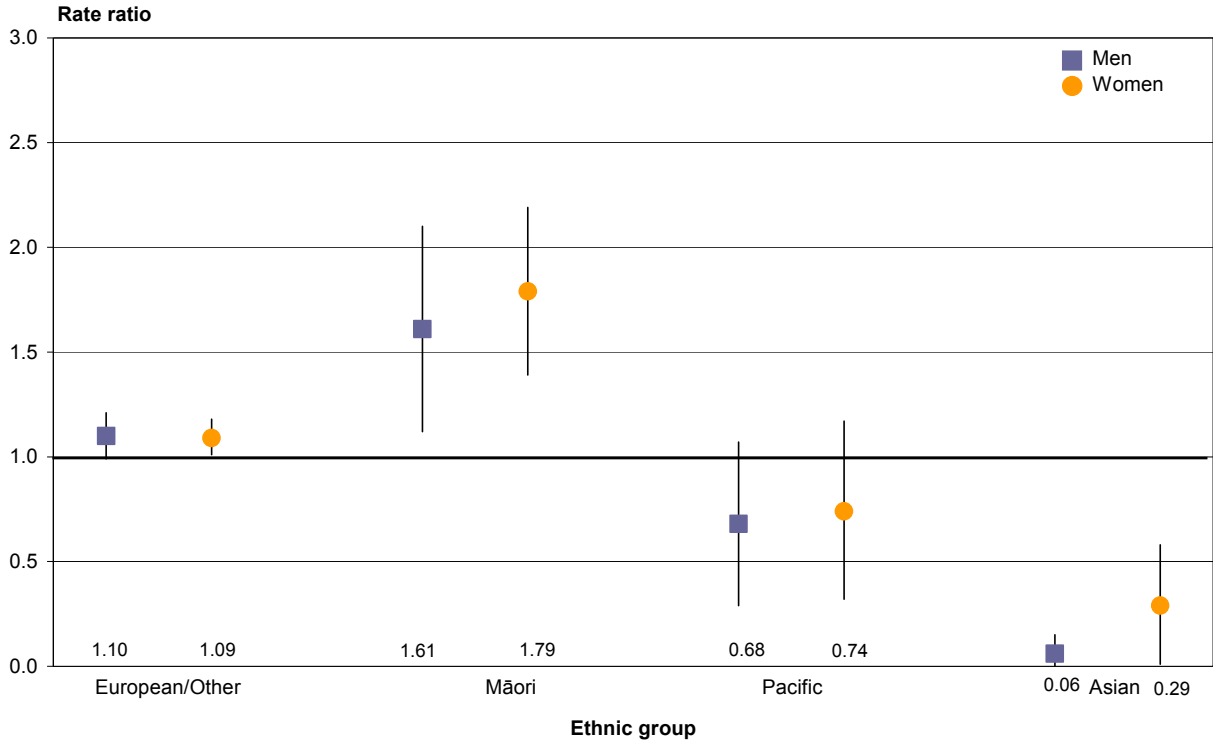
Source: 2007/08 New Zealand Alcohol and Drug Use Survey



**By ethnic group**

After adjusting for age, Māori men and women were significantly more likely to have had injuries due to their alcohol use in the last 12 months compared with men and women in the total population (Figure 94). Asian men and women were much less likely to have had injuries due to their alcohol use in the past year, while there were no significant differences for Pacific men and women compared with men and women in the total population.

**Figure 94:** Had injuries due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



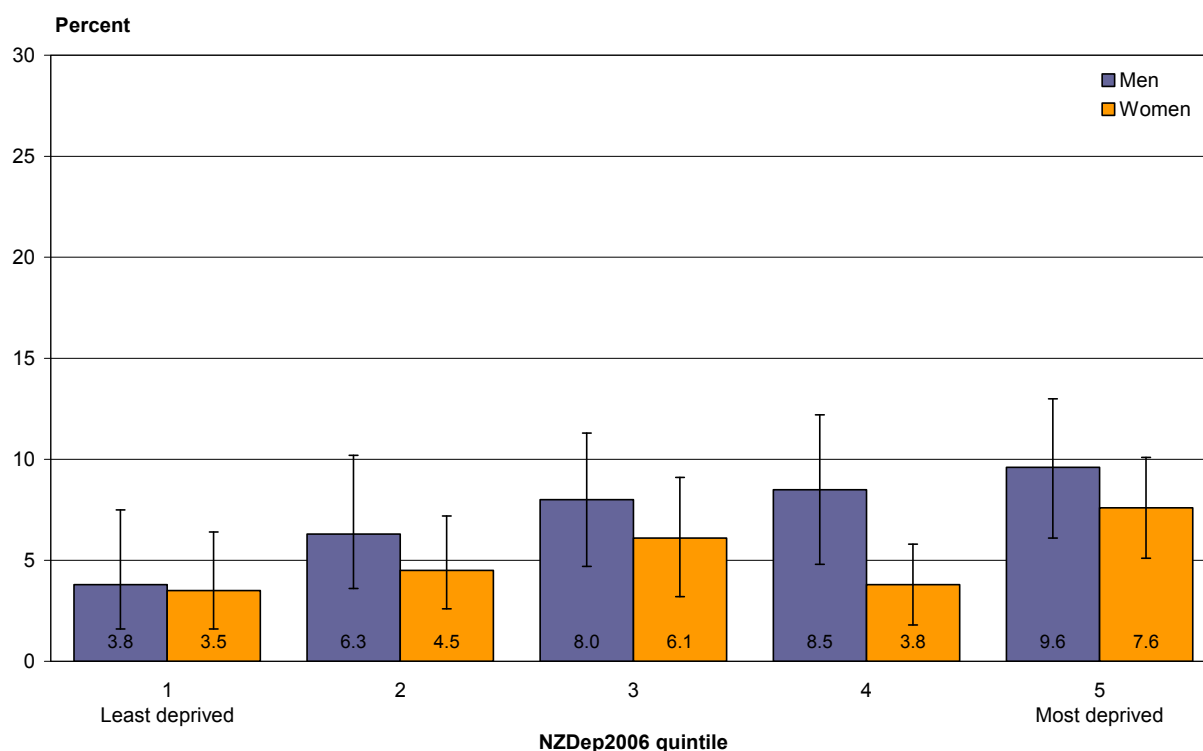
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

The prevalence of having had injuries in the last 12 months due to own alcohol use was significantly higher in NZDep2006 quintile 5 (most deprived) than in quintile 1 (least deprived) in both men and women, when adjusted for age (Figure 95).

**Figure 95:** Had injuries due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Harmful effects on work, study or employment in the past 12 months

The results in this section are reported for the total population aged 16–64 years and do not take into account of whether people usually worked or attended school in the past year.

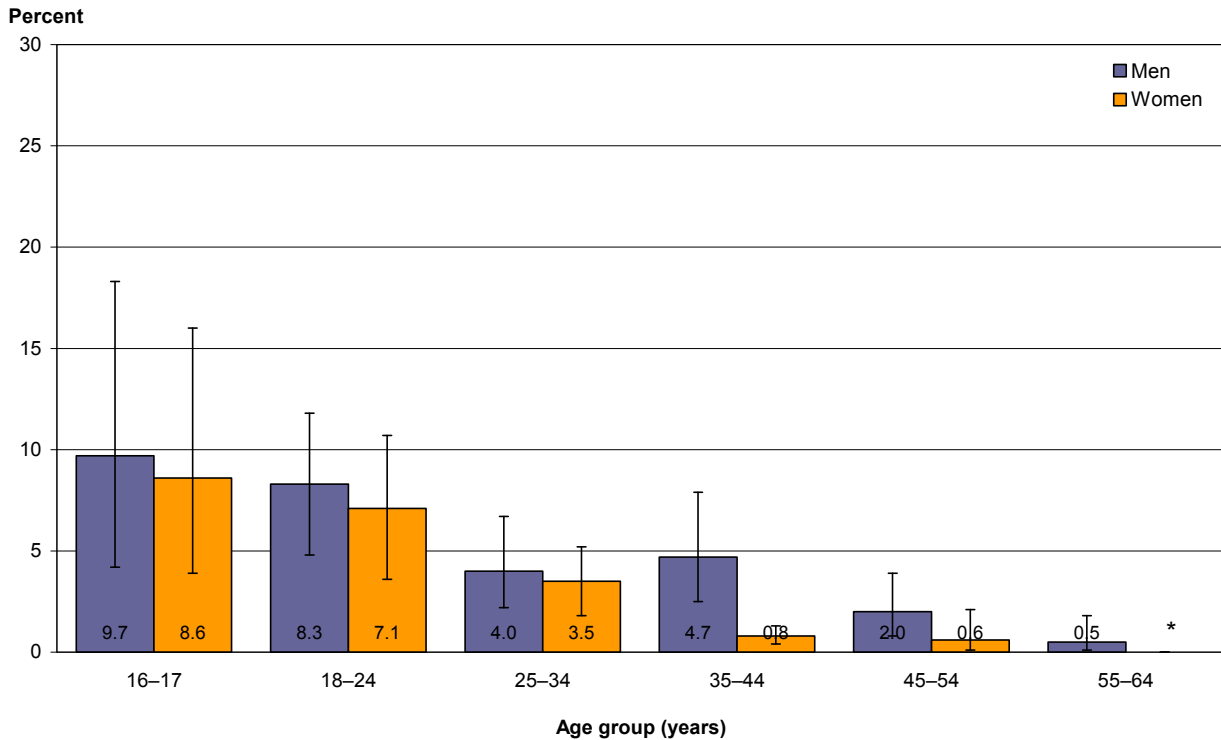
Over 3% of adults (3.2%, 2.5–3.9) had experienced harmful effects on their work, study or employment in the last 12 months due to their own alcohol use. This represented 3.6% (2.9–4.4) of past-year drinkers, and equates to 84,400 people in the total population who had experienced harmful effects on their work, study or employment in the last year due to their alcohol use.

Men (4.8%, 3.5–6.0) were significantly more likely to have experienced harmful effects on their work, study or employment in the past year due to their own alcohol use than women (3.2%, 2.2–4.2), adjusted for age ( $p$ -value < 0.05).

## By age group

Among men and women, the prevalence of having experienced harmful effects on work, study or employment was highest in the younger age groups (16–24 years), and decreased with increasing age (Figure 96). However, the large confidence intervals for the younger age groups suggest that the results should be interpreted with caution.

**Figure 96:** Experienced harmful effects on work, study or employment due to own alcohol use in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



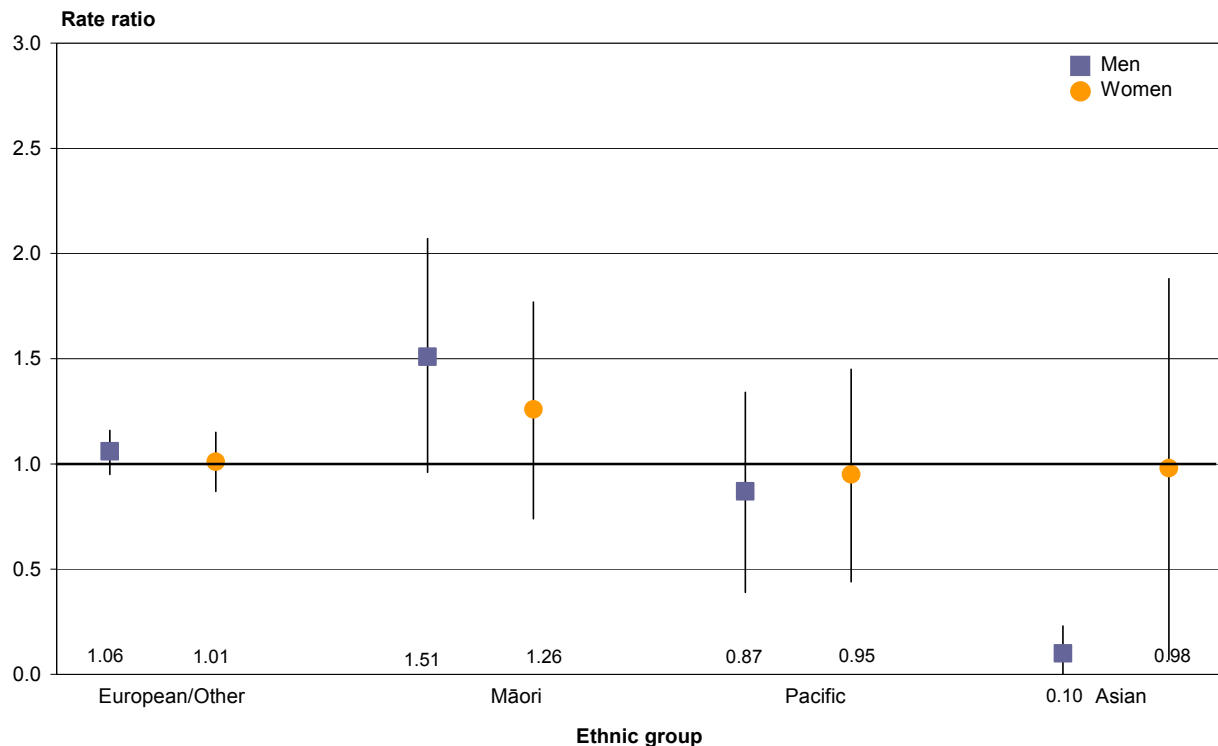
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for reliable estimation for women aged 55–64 years.

## By ethnic group

Adjusted for age, Asian men were significantly less likely to have experienced harmful effects on their work, study or employment in the last year due to their own alcohol use than men in the total population (Figure 97). There were no other significant differences.

**Figure 97:** Experienced harmful effects on work, study or employment due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



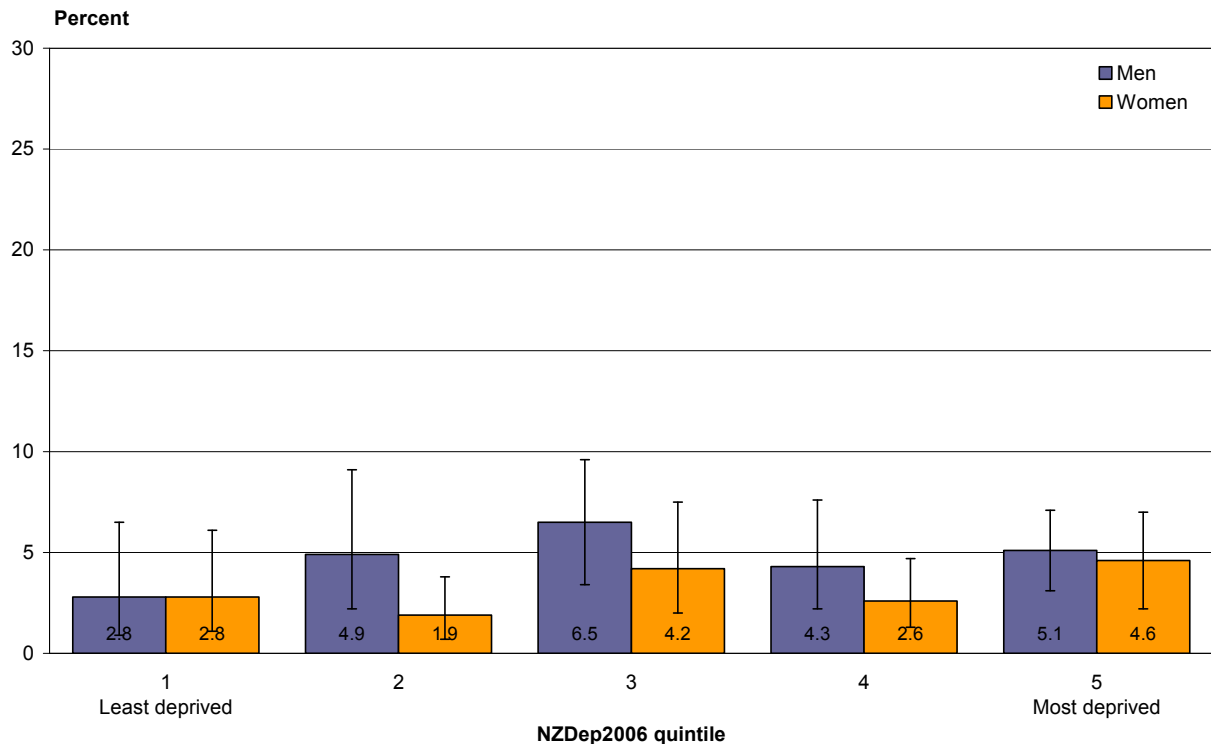
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

There were no significant differences by neighbourhood deprivation in the prevalence of having experienced harmful effects on work, study or employment due to own alcohol use in the past year, after adjusting for age (Figure 98).

**Figure 98:** Experienced harmful effects on work, study or employment due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Had legal problems due to alcohol use in the past 12 months

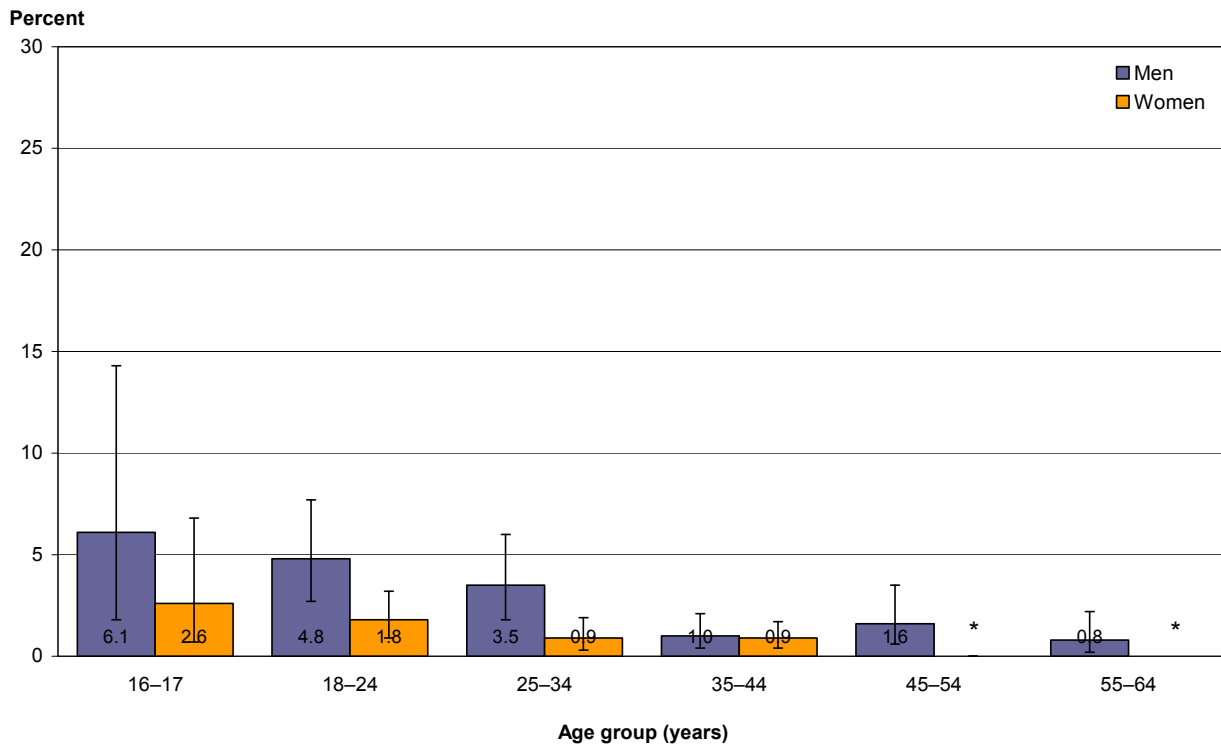
Overall, 1.6% (1.2–1.9) of adults aged 16–64 years had experienced legal problems due to their own alcohol use in the past 12 months, representing 1.8% (1.3–2.2) of past-year drinkers. This equates to 41,400 people who had experienced legal problems in the past year due to their alcohol use.

Men (2.8%, 2.0–3.7) were significantly more likely than women (1.0%, 0.6–1.4) to have had legal problems in the past 12 months due to their own alcohol use, adjusted for age.

## By age group

For men, the prevalence of having had legal problems in the past year due to own alcohol use was highest in men aged 16–34 years, and decreased with increasing age (Figure 99). There were lower prevalences for women, although there was a similar trend of decreasing prevalence with increasing age.

**Figure 99:** Experienced legal problems due to own alcohol use in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



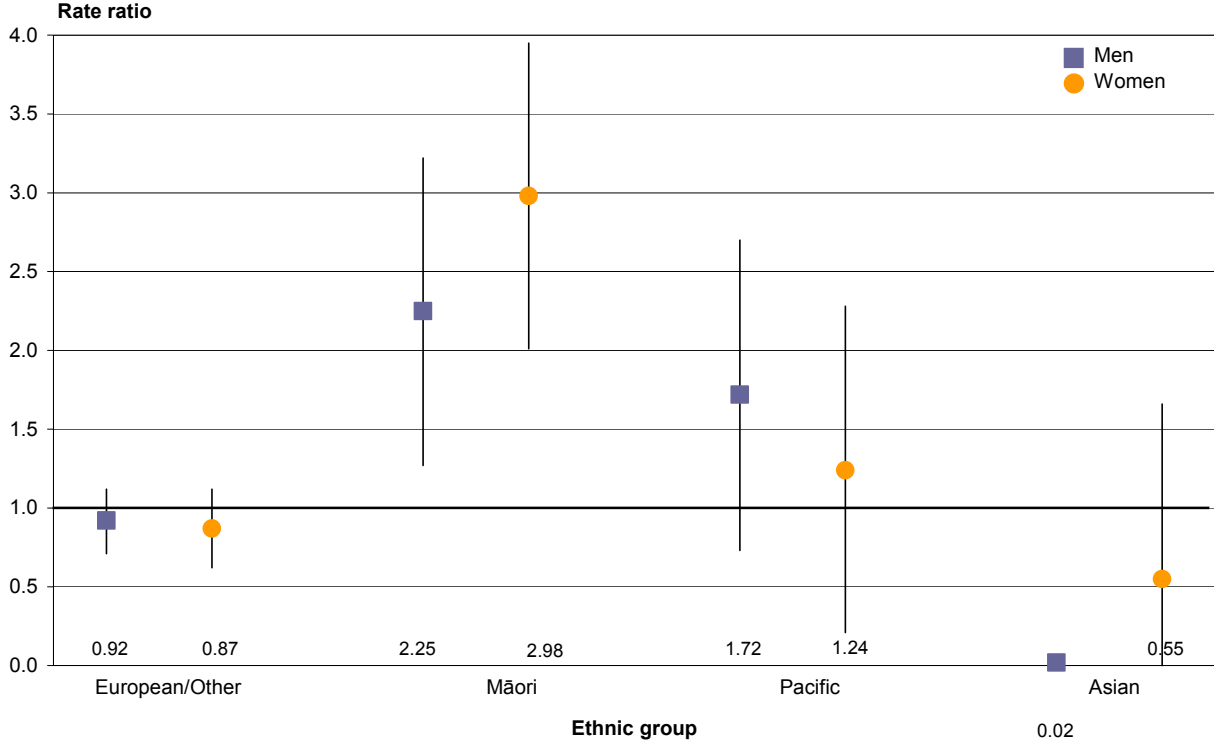
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for reliable estimation for women aged 45–64 years.

**By ethnic group**

After adjusting for age, Māori men were over twice as likely, and Māori women three times as likely, to have experienced legal problems in the last year due to their own alcohol use compared with men and women in the total population (Figure 100).

**Figure 100:** Experienced legal problems due to own alcohol use in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



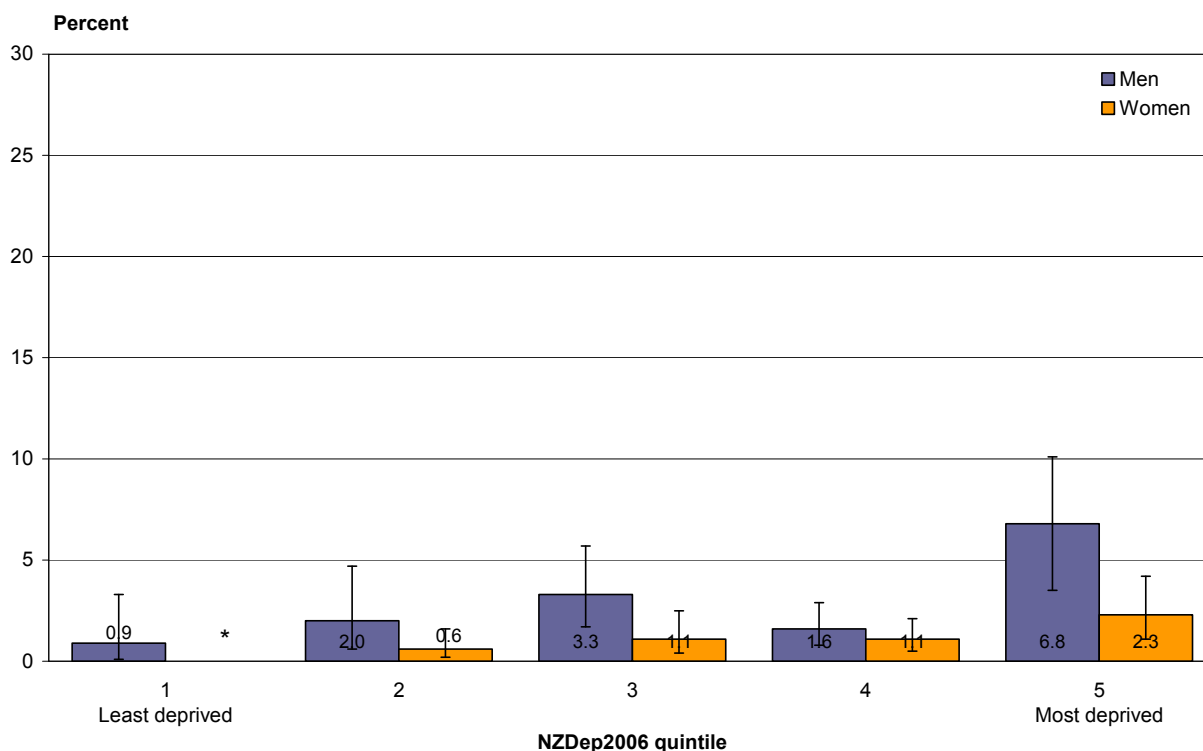
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

The prevalence of having had legal problems in the past year due to own alcohol use was significantly higher for men living in the most deprived areas (NZDep2006 quintile 5) than men living in the least deprived areas (quintile 1), adjusted for age (Figure 101).

**Figure 101:** Experienced legal problems due to own alcohol use in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for a reliable estimation for women living in NZDep2006 quintile 1.

## Had difficulty learning things due to alcohol use in the past 12 months

About 1% of all adults aged 16–64 years had experienced difficulty learning things in the past 12 months due to their own alcohol use (0.9%, 0.6–1.1). This represented 1.0% (0.6–1.3) of past-year drinkers, and equates to 22,500 adults.

There was no significant difference in the prevalence of experiencing difficulty in learning things in the past year due to own alcohol use between men (1.1%, 0.6–1.5) and women (1.0%, 0.5–1.6).

Due to low numbers, results for this indicator have not been presented in this report by age group, ethnic group or neighbourhood deprivation.



## Chapter 11: Harmful Effects Experienced Due to Someone Else's Alcohol Use

Alcohol-related harm can affect not only the drinkers but also those people around them. Alcohol can cause a wide range of harms to a person's life, including social harms (eg, harms to friendships) and economic harms (eg, financial problems).

This chapter examines the prevalence of having experienced harm due to someone else's alcohol use in the past year.

### **What were the survey questions?**

In the 2007/08 NZADUS all participants were asked questions about the effect on their lives of other people drinking alcohol. Participants were asked whether there was ever a time they felt someone else's alcohol use had had a harmful effect on their friendships or social life, their home life, or their financial position. They were also asked whether they had ever been involved in a motor vehicle accident that involved someone else's drinking (they may have been the driver or passenger). Participants selected from the following responses: yes, during the last 12 months; yes, but not in the last 12 months; no.

Participants were also asked whether, in the last 12 months, anyone had assaulted, or threatened to assault, them either physically or sexually while they (the assailant) were under the influence of alcohol and/or drugs. If the respondent reported yes, they were asked to select from the following list all the different types of physical or sexual assault that applied: actual force or violence, threat of force or violence, deliberately damaged something belonging to them, threat to damage something belonging to them, forced them to have sexual intercourse, attempted to force them to have sexual intercourse, touched them sexually in a way that they didn't like. In this report, analyses are presented for the participants who reported experiencing actual force or violence and/or being forced to have sexual intercourse.

It should be noted that no further information was provided to respondents as examples of harm, and that no information was collected on the number of times the harm had been experienced in the past year.

## Summary of harmful effects experienced due to someone else's alcohol use

Table 31 presents a summary of the prevalence of experiencing harmful effects due to someone else's alcohol use. This excludes physical and sexual assaults, which are covered in the next section. Overall, the most common harmful effect experienced was on friendships or social life, with two in five adults having ever experienced this harmful effect in their lifetime (40.4%, 38.6–42.3), and one in seven adults having experienced this harm in the last 12 months (16.0%, 14.7–17.2).

**Table 31:** Harmful effects experienced due to someone else's alcohol use, among total population aged 16–64 years (unadjusted prevalence)

Harmful effect	Prevalence (%) for total population aged 16–64 years (95% CI)	
	In the last 12 months	In lifetime
Harmful effects on friendships or social life	16.0 (14.7–17.2)	40.4 (38.6–42.3)
Harmful effects on home life	8.5 (7.6–9.4)	25.4 (24.0–26.8)
Harmful effects on financial position	3.6 (3.0–4.2)	10.2 (9.3–11.1)
Involved in motor vehicle accident	1.2 (0.9–1.5)	11.9 (10.9–12.8)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

In addition, 4.1% (3.4–4.7) of adults reported having been assaulted (physically and/or sexually) as a result of actual force or violence by someone who was under the influence of alcohol or drugs, in the past year.

### Any harmful effect experienced due to someone else's alcohol use

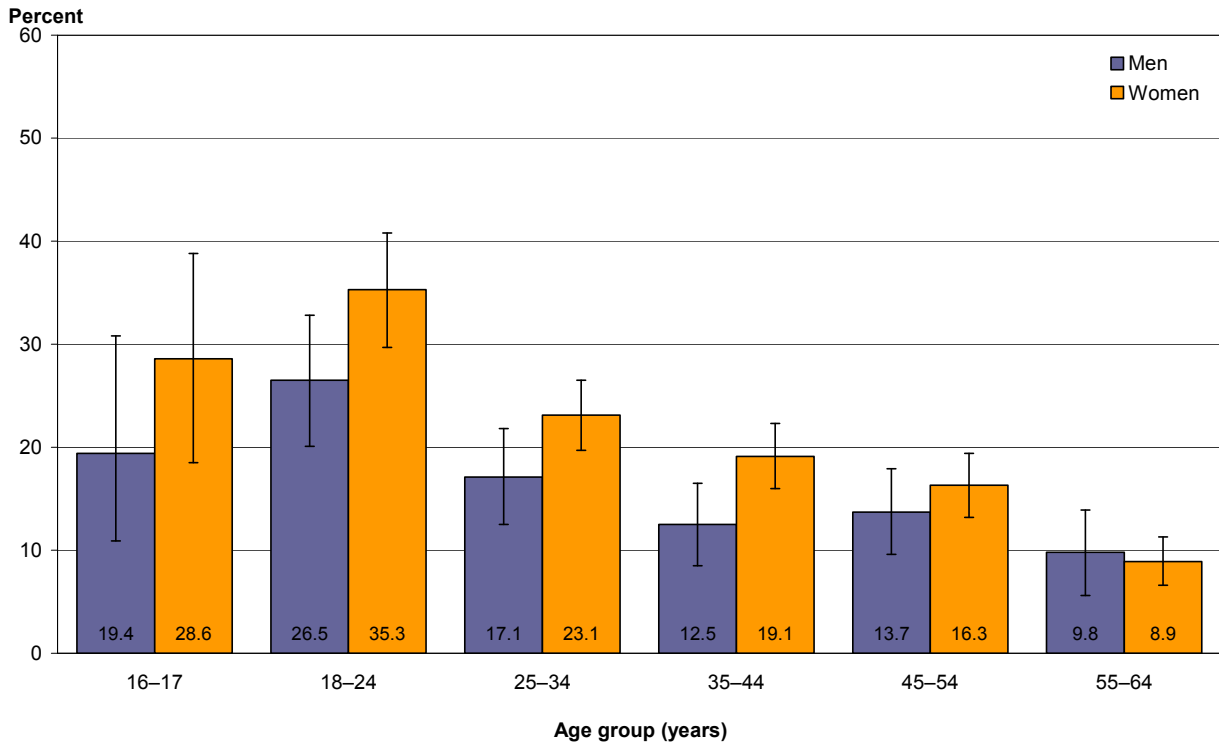
Overall, one in six adults aged 16–64 years (18.1%, 16.7–19.4) had experienced harmful effects on their friendships or social life, home life or financial position in the past year due to someone else's alcohol use. This equates to 477,400 people aged 16–64 years who experienced harmful effects in the past year.

Females (22.8%, 20.9–24.6) were significantly more likely than males (17.0%, 14.7–19.3) to have experienced harmful effects in the last 12 months due to someone else's alcohol use, adjusted for age.

## By age group

For both men and women, people in the younger age groups (particularly people aged 18–24 years, but also those aged 16–17 or 25–34 years) were more likely to have experienced harmful effects due to someone else’s alcohol use in the past year (Figure 102).

**Figure 102:** Experienced harmful effects on friendships or social life, home life or financial position due to someone else’s drinking in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

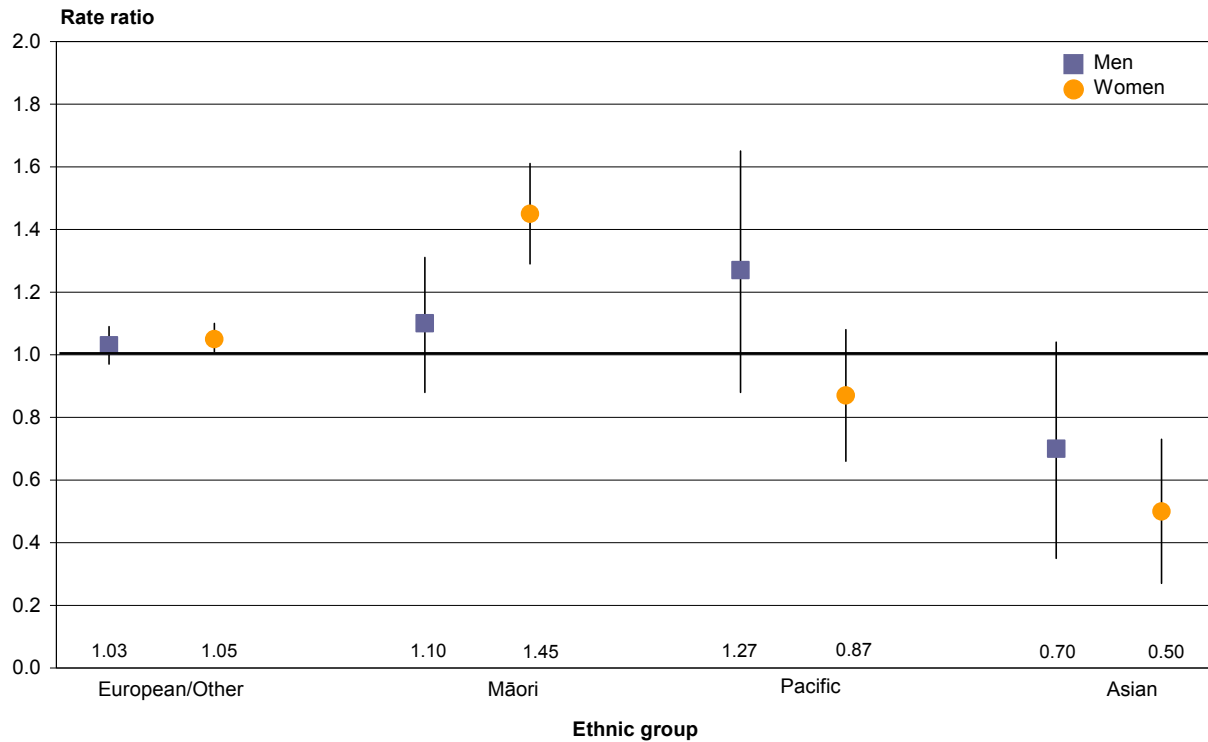


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Māori women were almost 50% more likely than women in the total population to have experienced harmful effects on their friendships or social life, home life or financial position in the last year due to someone else's drinking, adjusted for age (Figure 103).

**Figure 103:** Experienced harmful effects on friendships or social life, home life or financial position due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



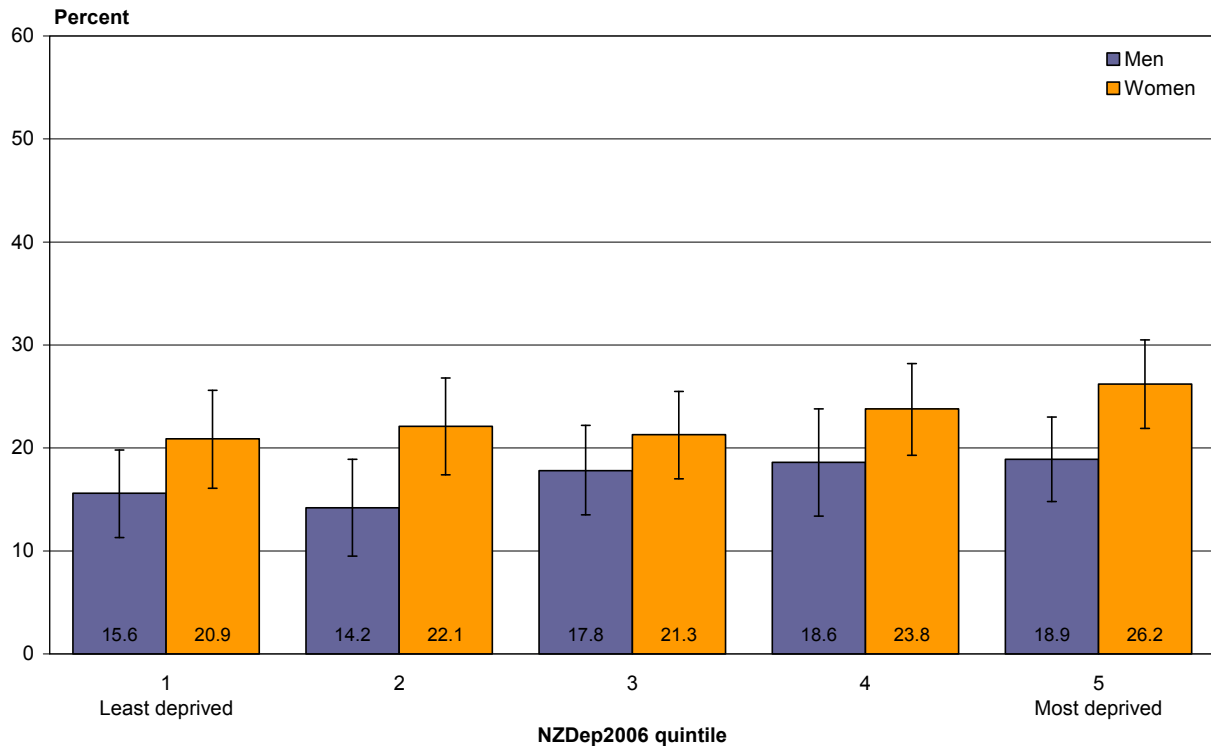
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

For both men and women there were no significant differences by neighbourhood deprivation in the prevalence of having experienced harmful effects in the past year due to someone else's alcohol use (p-values > 0.05) (Figure 104).

**Figure 104:** Experienced harmful effects on friendships or social life, home life or financial position due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

These harmful effects are discussed in more detail in the sections below.

## Harmful effects on friendships or social life in past 12 months

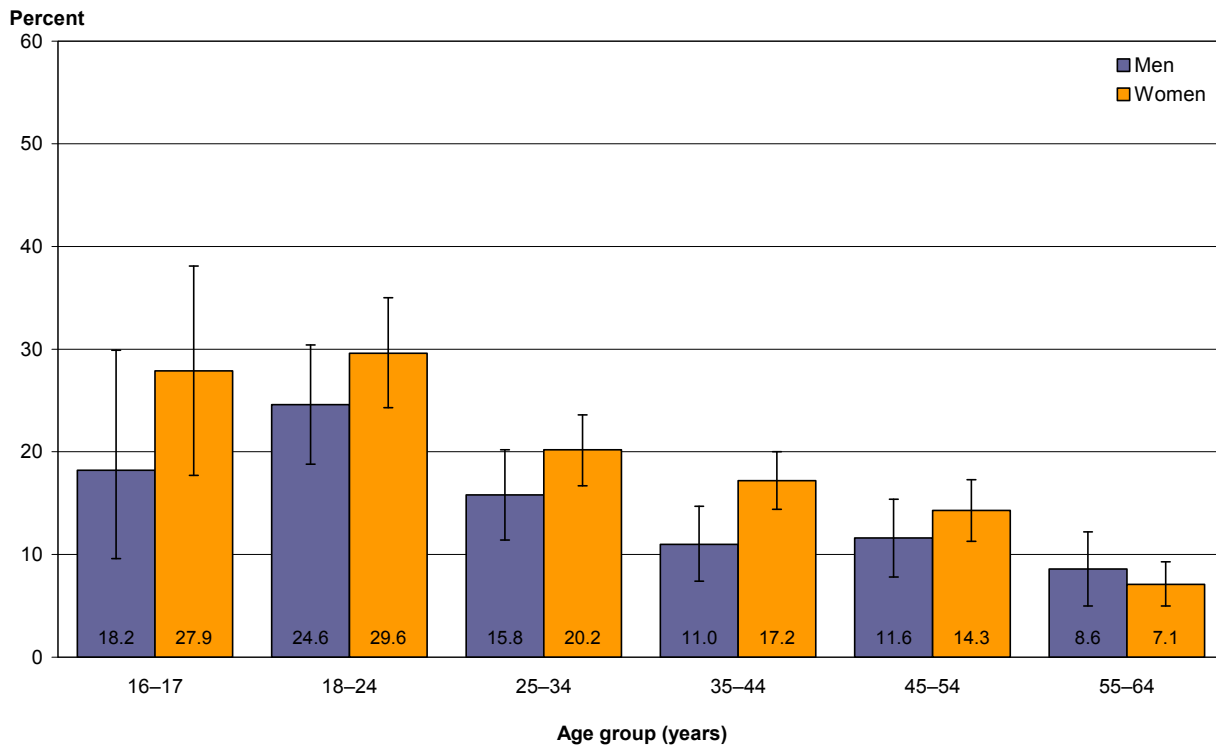
One in seven adults had experienced harmful effects on their friendships or social life in the last year due to someone else's alcohol use (16.0%, 14.7–17.2). This equates to 421,400 people who had experienced this harmful effect in the past 12 months.

Women (19.9%, 18.1–21.6) were more likely than men (15.4%, 13.2–17.5) to have experienced harmful effects on their friendships or social life due to someone else's alcohol use in the last year, adjusted for age.

## By age group

For men and women, the prevalence of having experienced harmful effects on friendships or social life in the past 12 months due to someone else's drinking was higher in the younger age groups (16–24 years) and decreased with increasing age (Figure 105).

**Figure 105:** Experienced harmful effects on friendships or social life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

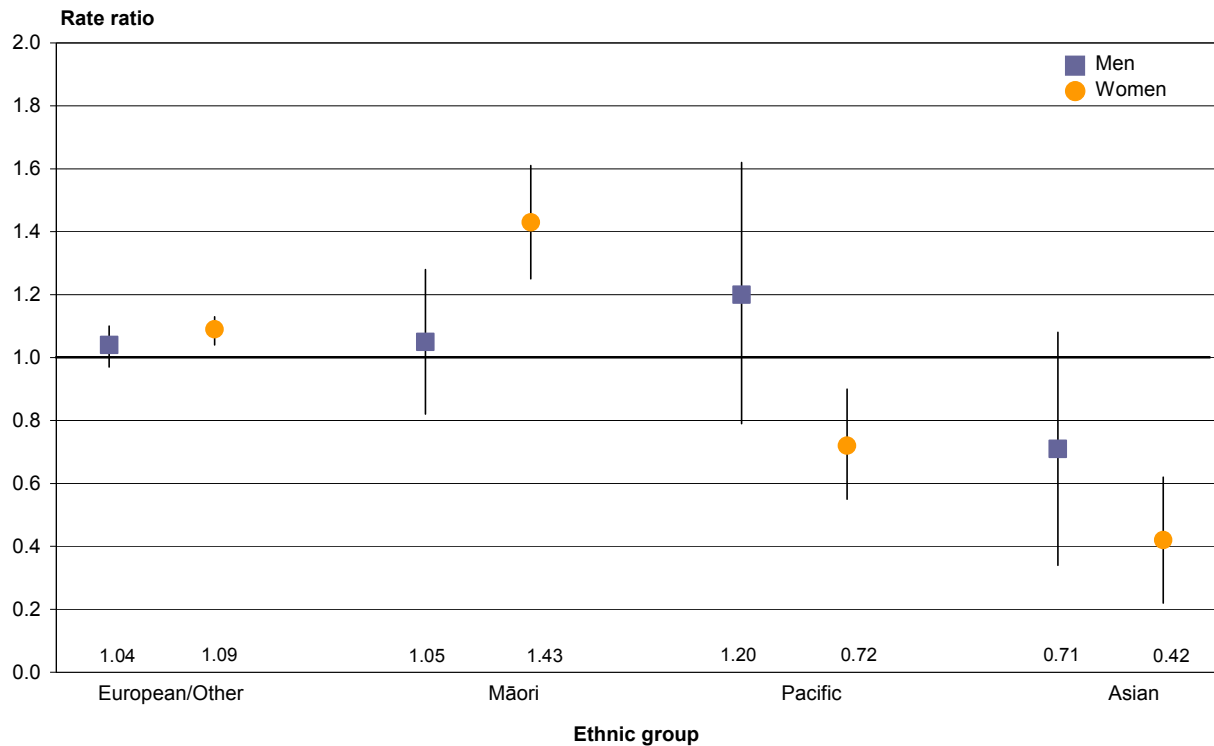


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

Adjusted for age, Māori women were significantly more likely to have experienced harmful effects on their friendships or social life in the past year due to someone else's alcohol use compared with women in the total population (Figure 106). Pacific and Asian women were less likely to have experienced this harmful effect in their lifetime.

**Figure 106:** Experienced harmful effects on friendships or social life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



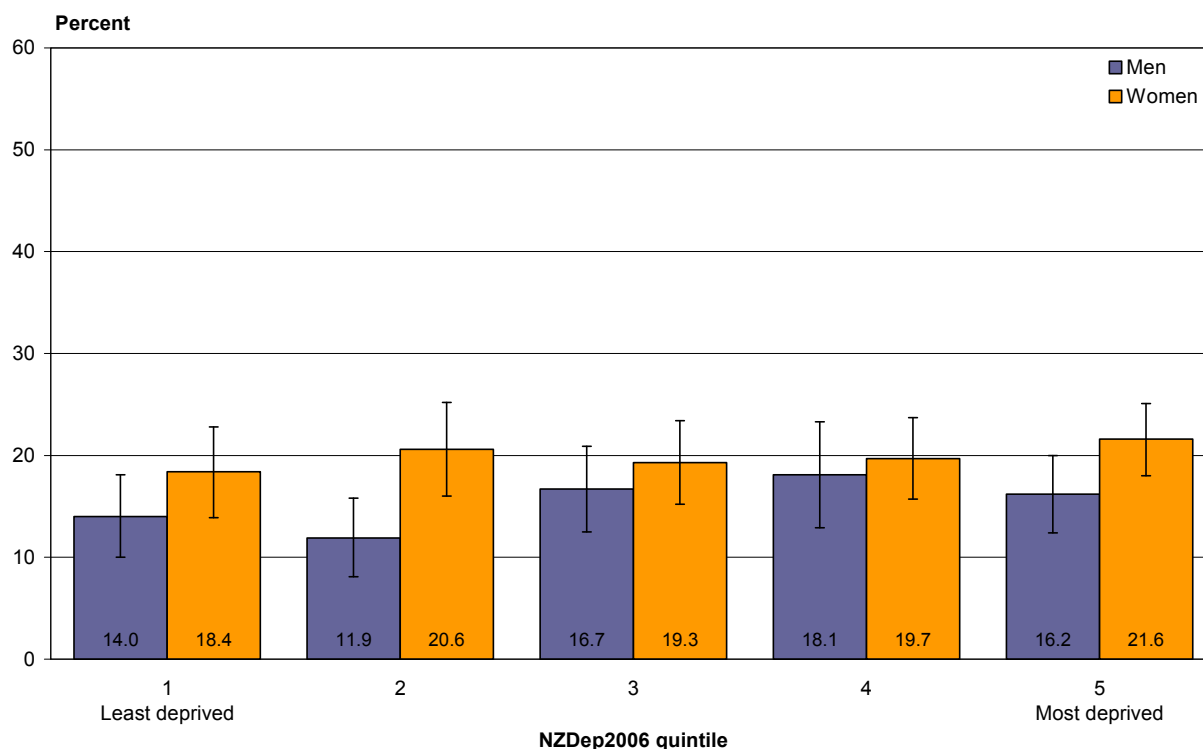
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

In both men and women there were no significant differences by neighbourhood deprivation in the prevalence of having experienced harmful effects on friendships or social life in the past year due to someone else's alcohol use, adjusted for age (Figure 107).

**Figure 107:** Experienced harmful effects on friendships or social life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Harmful effects on home life in past 12 months

Over 8% of adults had experienced harmful effects on their home life in the past year due to someone else's alcohol use (8.5%, 7.6–9.4). This equates to 225,100 people in the population who had experienced this harmful effect in the last 12 months.

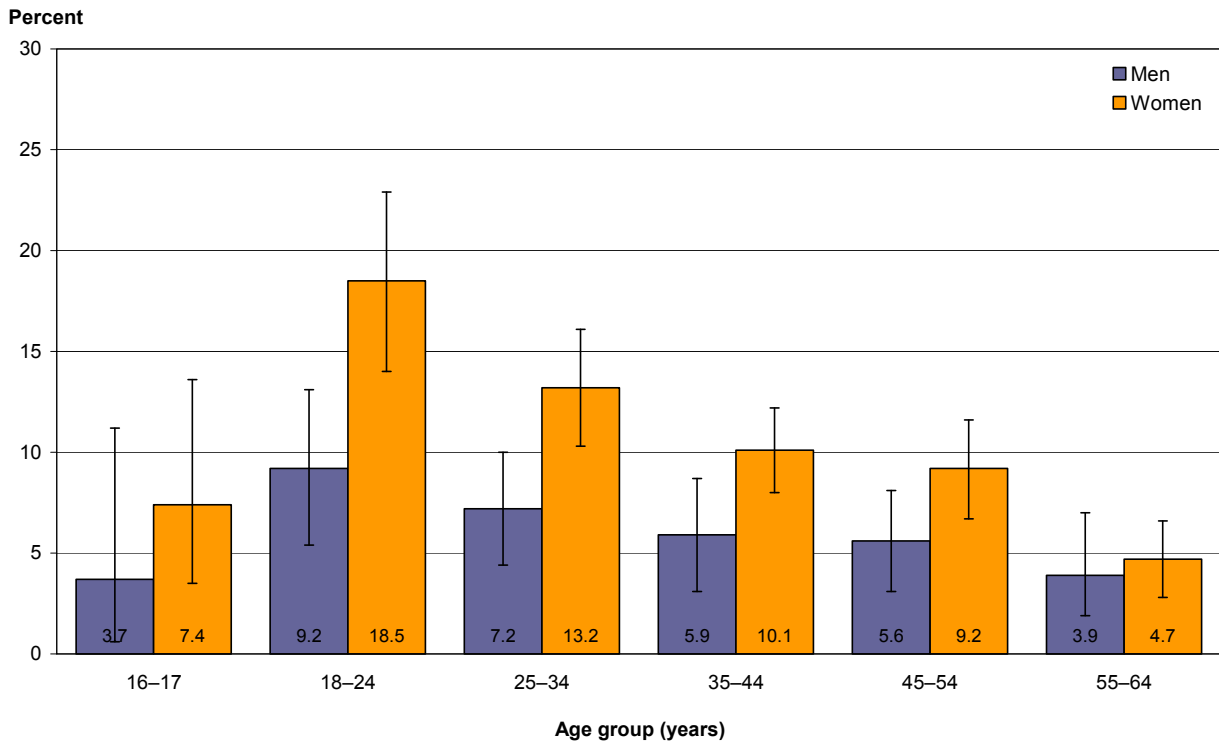
Adjusted for age, women (11.8%, 10.4–13.3) were more likely than men to have experienced harmful effects on their home life due to someone else's alcohol use in the past year (6.6%, 5.2–7.9), adjusted for age.



## By age group

The prevalence of having experienced harmful effects on home life due to someone else's drinking in the past year was highest among women aged 18–24 years (Figure 108). The prevalence decreased with increasing age. For the age groups 18–54 years, women were significantly more likely than men to have experienced harmful effects on their home life due to someone else's drinking.

**Figure 108:** Experienced harmful effects on home life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

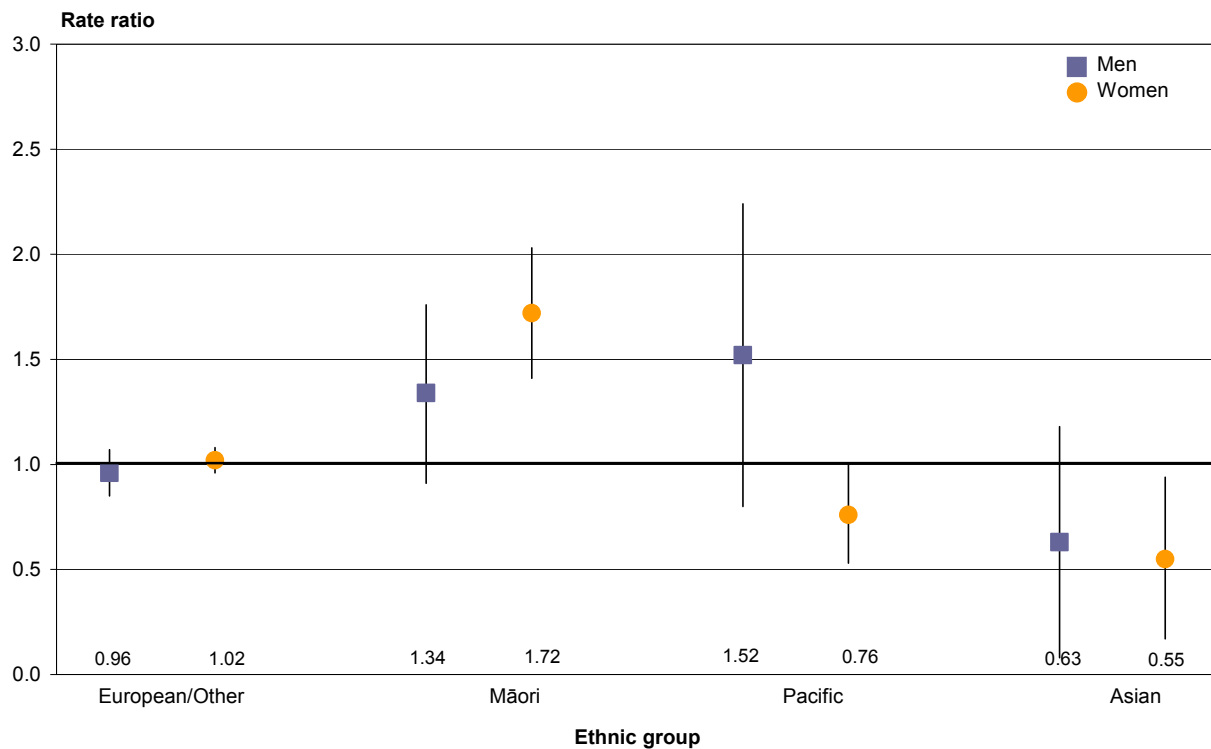


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

After adjusting for age, Māori women were more likely to have experienced harmful effects on their home life in the last 12 months due to someone else's drinking compared with women in the total population (Figure 109).

**Figure 109:** Experienced harmful effects on home life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



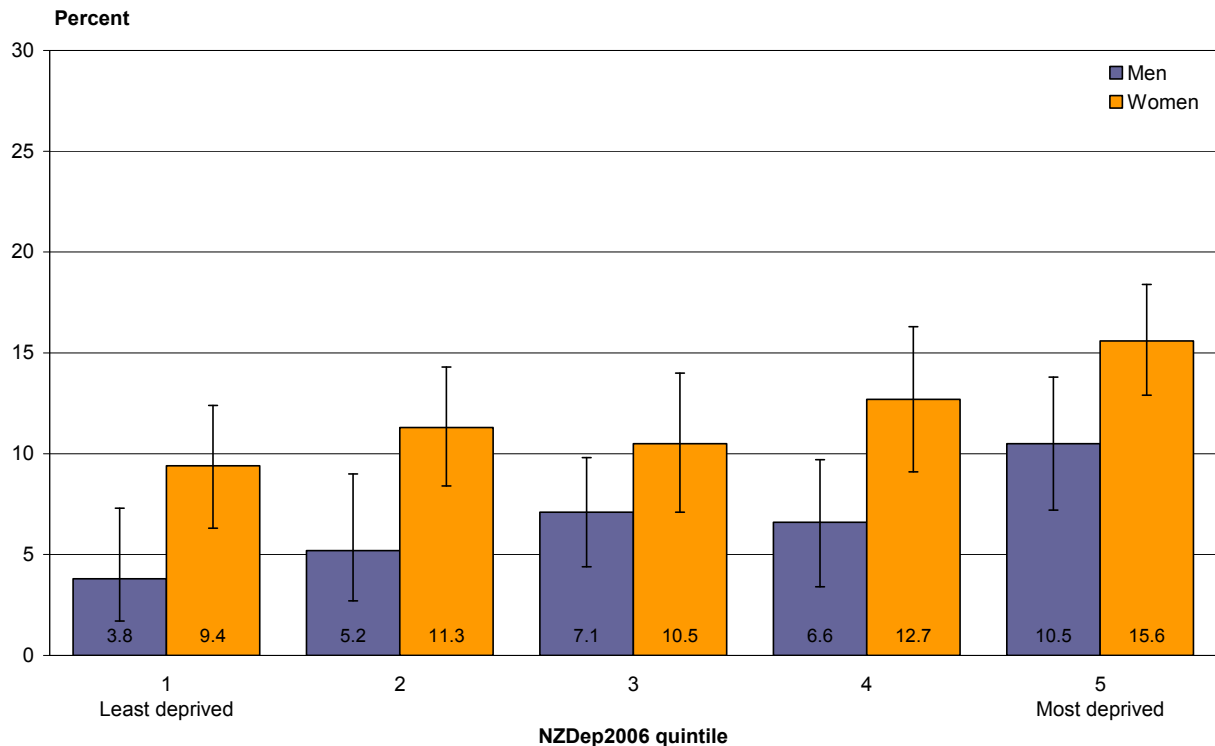
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

The prevalence of having experienced harmful effects on home life in the past year due to someone else's drinking was significantly higher in the most deprived areas (NZDep2006 quintile 5) than in the least deprived areas (quintile 1) for both men and women, adjusted for age (Figure 110).

**Figure 110:** Experienced harmful effects on home life due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Harmful effects on financial position in past 12 months

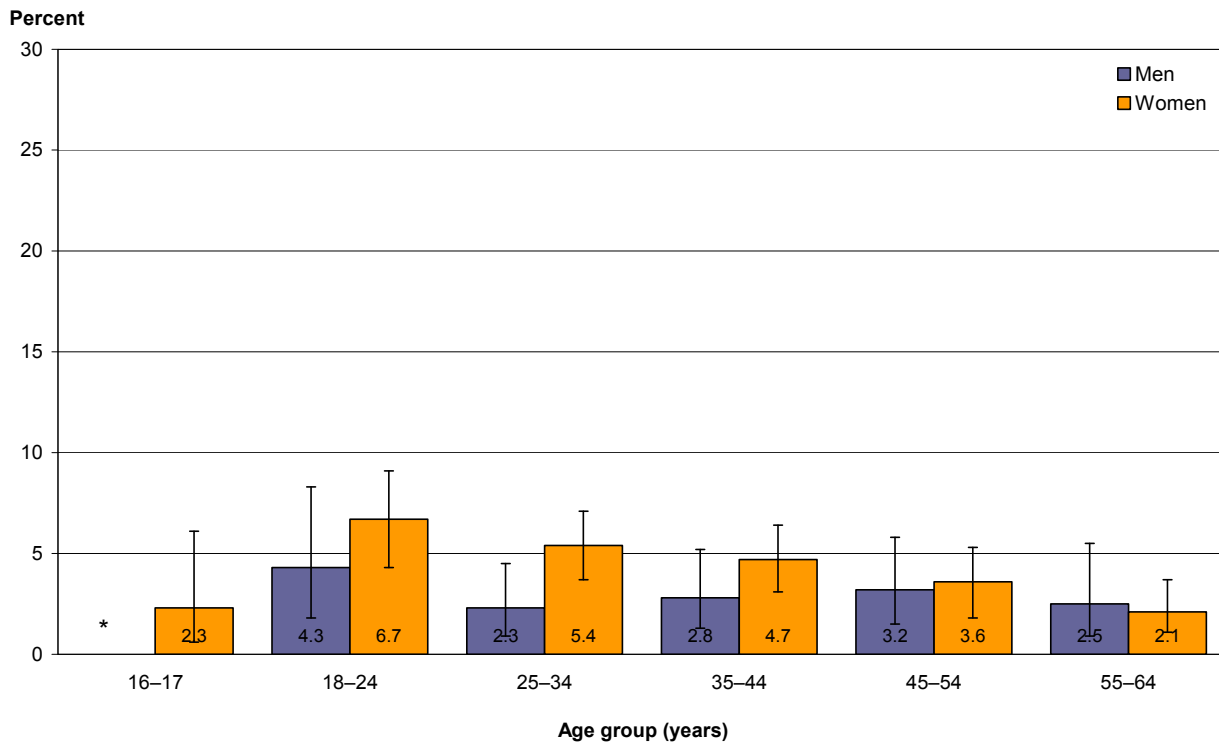
Over 3% of adults aged 16–64 years (3.6%, 3.0–4.2) had experienced harmful effects on their financial position due to someone else's alcohol use in the last 12 months. This equates to 95,500 people who had experienced this harmful effect in the last year.

When adjusted for age, women (4.7%, 3.9–5.6) were significantly more likely to have experienced harmful effects on their financial position in the past year due to someone else's alcohol use than men (2.8%, 1.9–3.7).

## By age group

The prevalence of having experienced harmful effects on their financial position in the past year due to someone else's drinking was highest in women aged 18–24 years, and decreased with increasing age (Figure 111).

**Figure 111:** Experienced harmful effects on financial position due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



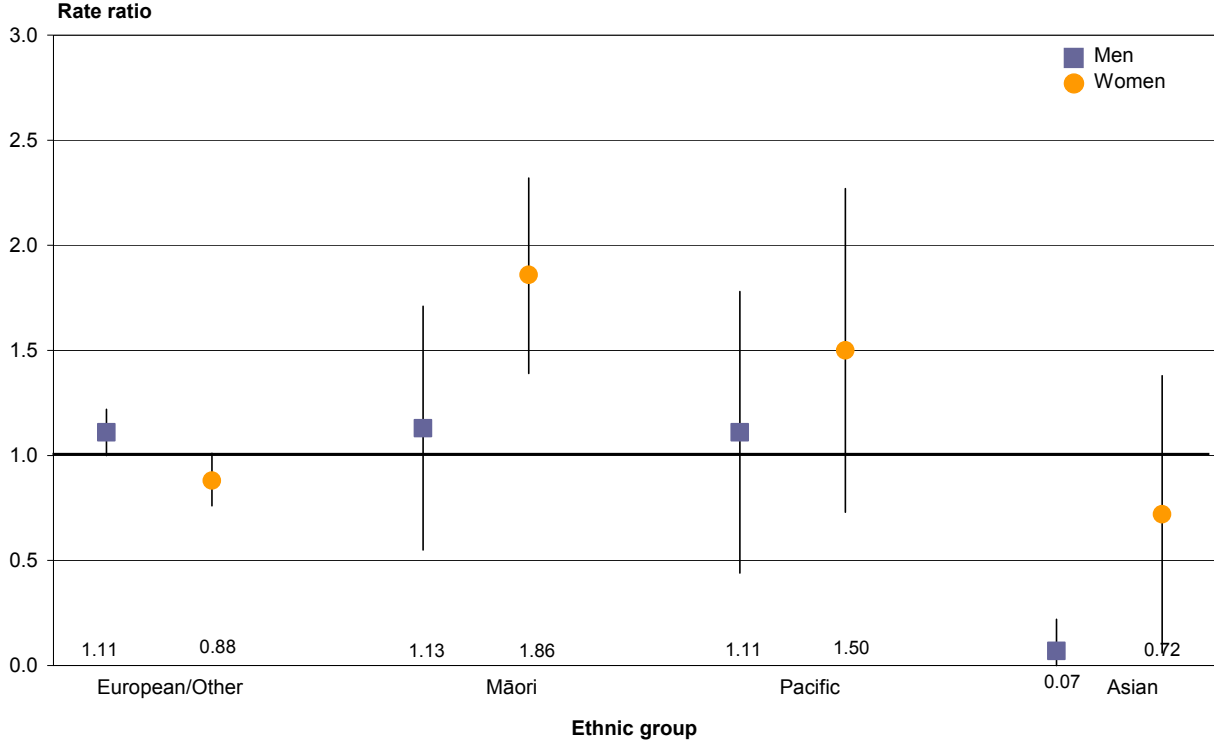
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for reliable estimation for males aged 16–17 years.

**By ethnic group**

After adjusting for age, Māori women were significantly more likely to have experienced financial problems in the last year due to someone else’s drinking compared with women in the total population (Figure 112).

**Figure 112:** Experienced harmful effects on financial position due to someone else’s drinking in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



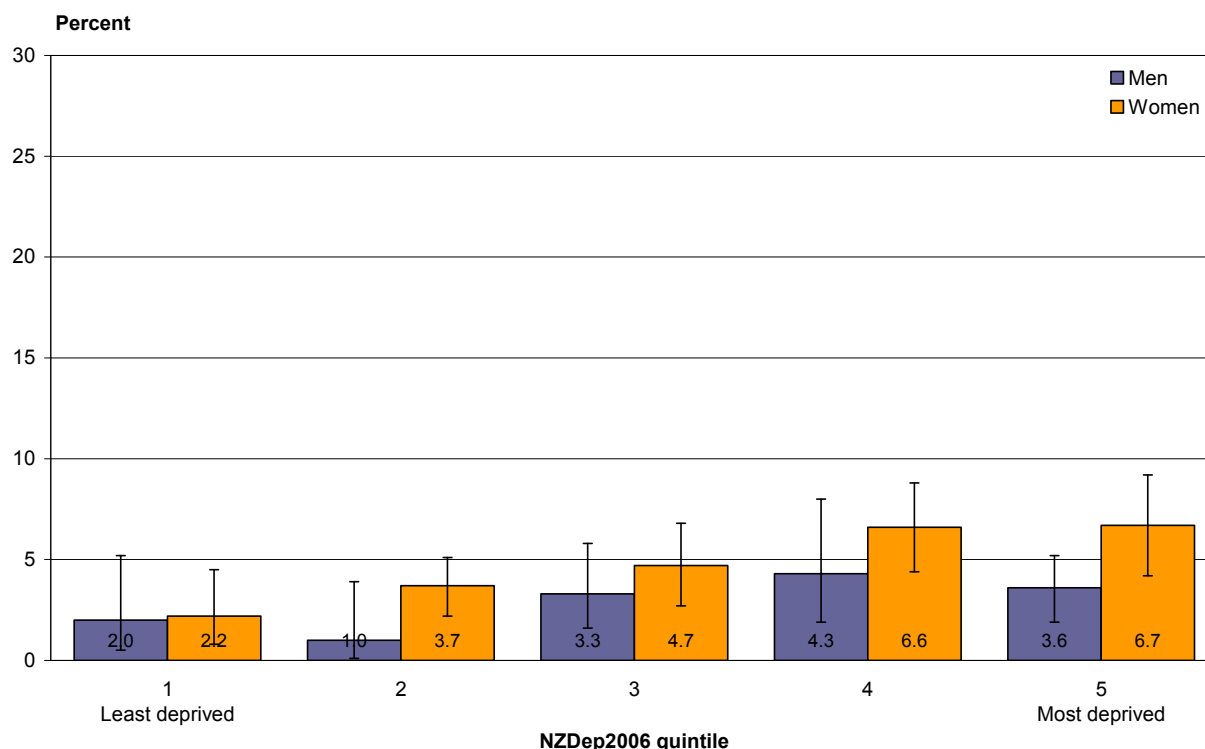
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

Women living in NZDep2006 quintile 5 (most deprived) areas were significantly more likely to have experienced harmful effects on their financial position in the past 12 months due to someone else's alcohol use than women living in NZDep2006 quintile 1 (least deprived) areas, adjusted for age (Figure 113).

**Figure 113:** Experienced harmful effects on financial position due to someone else's drinking in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Assaulted due to someone else's alcohol and/or drug use in past 12 months

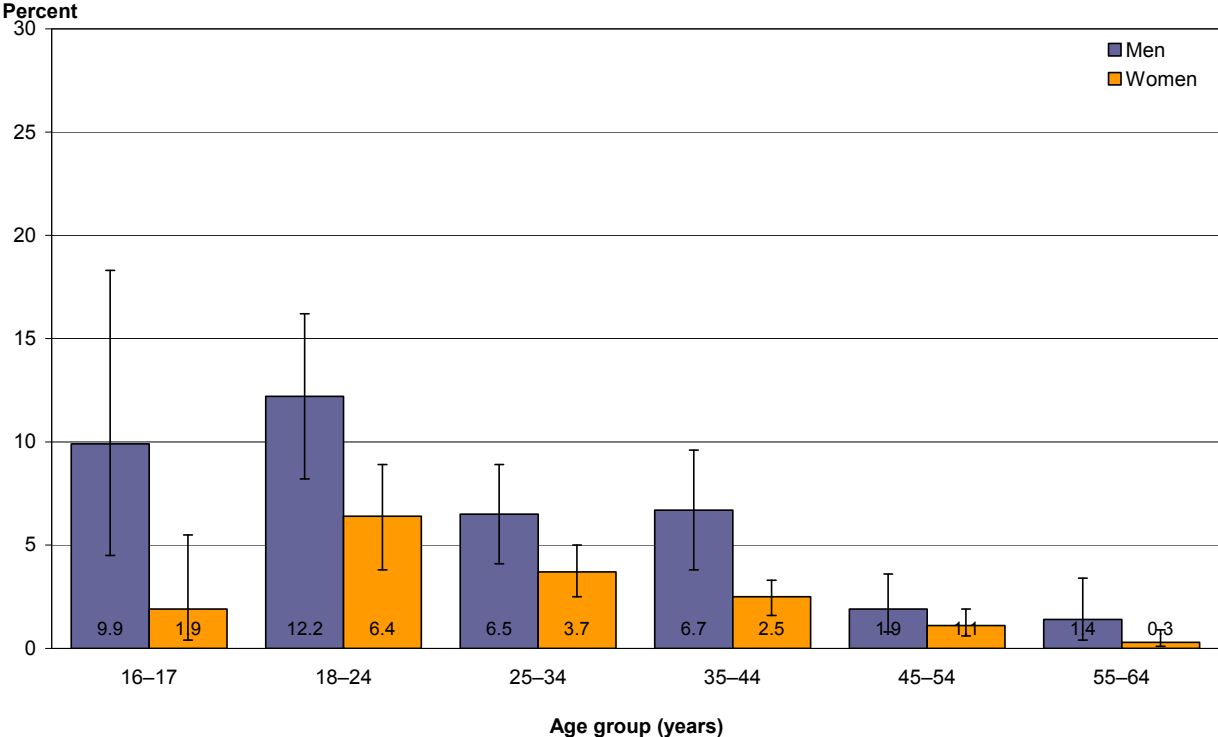
Overall, 4.1% (3.4–4.7) of adults aged 16–64 years reported having been assaulted (physically and/or sexually) as a result of actual force or violence by someone who was under the influence of alcohol or drugs in the last 12 months. This equates to 107,700 adults in the population.

Men (6.7%, 5.3–8.0) were over twice as likely as women (3.1%, 2.4–3.8) to have been assaulted in the past year by someone who was under the influence of alcohol or drugs, when adjusted for age.

### By age group

The prevalence of having experienced assault (physical and/or sexual) in the past 12 months due to someone else’s use of alcohol or drugs was highest among men aged 16–17 years and 18–24 years, and decreased with age (Figure 114).

**Figure 114:** Experienced assault (physical and/or sexual) due to someone else’s use of alcohol or drugs in the past 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)

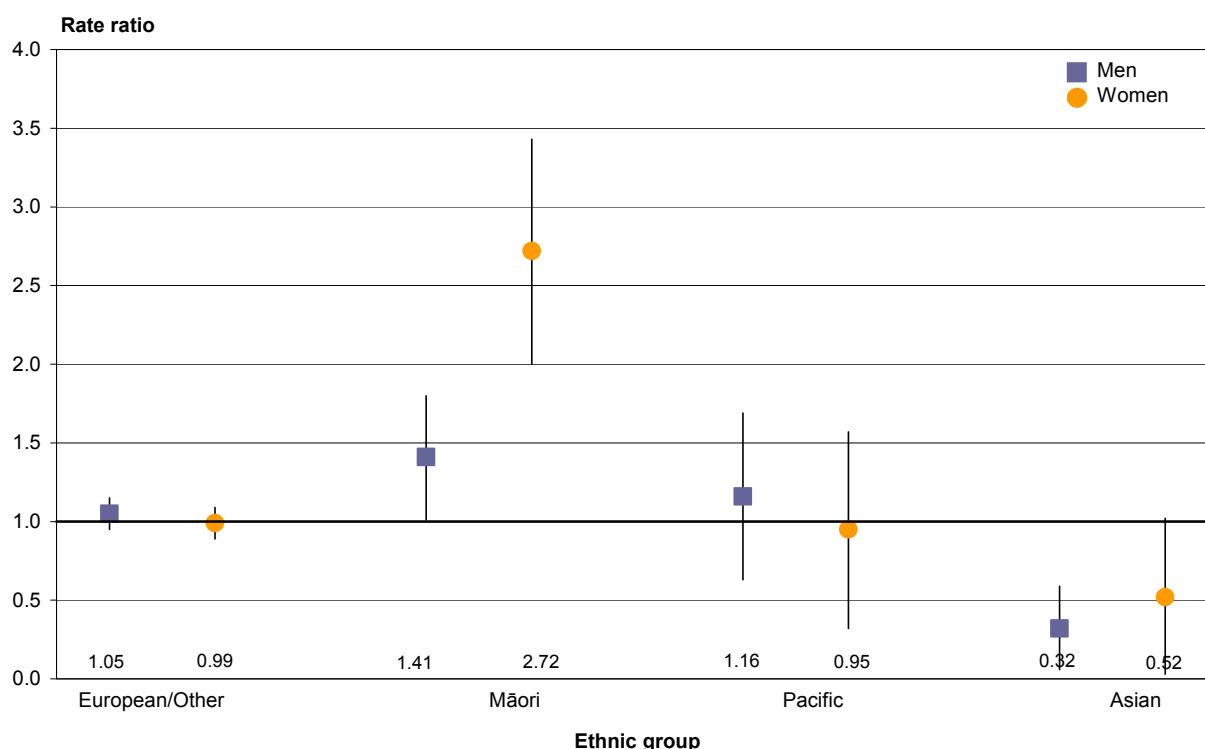


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## By ethnic group

After adjusting for age, Māori women were over 2.5 times more likely to have experienced assault (physical and/or sexual) in the past 12 months due to someone else's use of alcohol or drugs compared with women in the total population (Figure 115). Māori men were also significantly more likely to have experienced assault in the past year due to someone else's alcohol or drug use compared with men in the total population.

**Figure 115:** Experienced assault (physical and/or sexual) due to someone else's use of alcohol or drugs in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

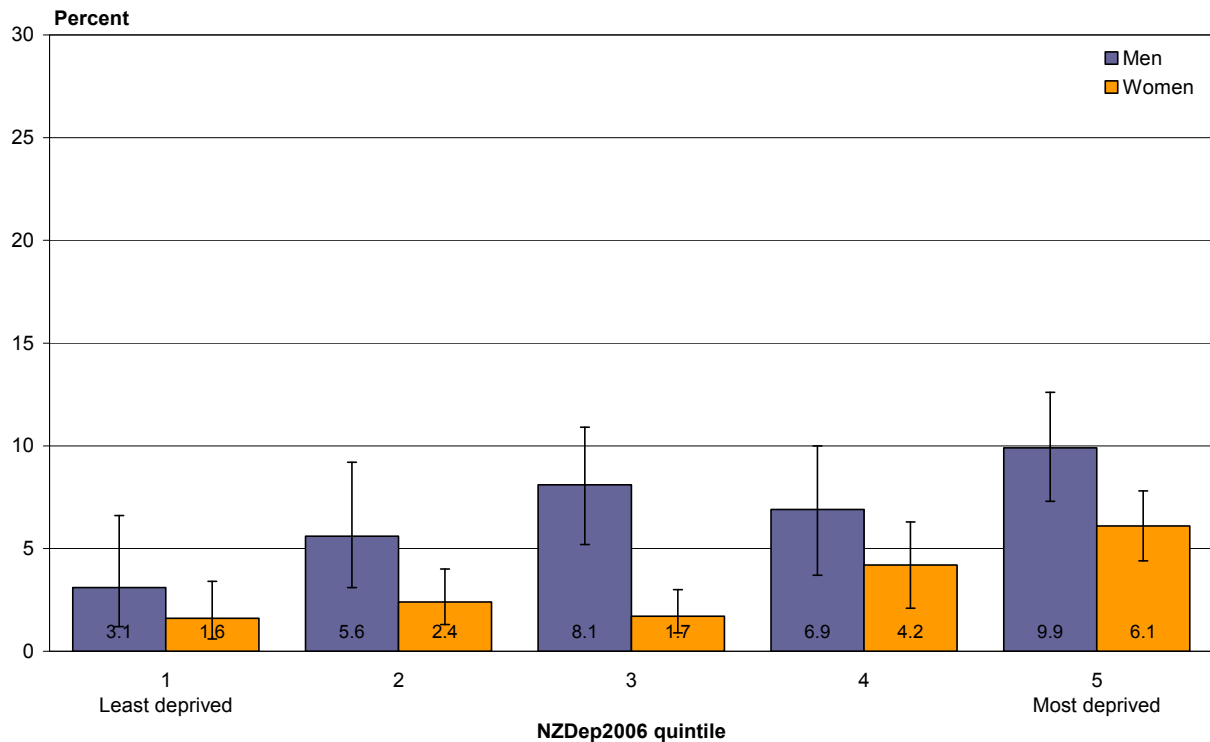
Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.



## By neighbourhood deprivation

In both men and women, people living in the most deprived areas (NZDep2006 quintile 5) were over three times more likely to have been assaulted (physically and/or sexually) by someone under the influence of alcohol or drugs in the last 12 months than people living in the least deprived areas (quintile 1), adjusted for age (Figure 116).

**Figure 116:** Experienced assault (physical and/or sexual) due to someone else's use of alcohol or drugs in the past 12 months, among total population aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Involved in motor vehicle accident due to someone else's drinking in past 12 months

This section presents the prevalence of being involved in a motor vehicle accident in the past year due to someone else's drinking. It should be noted that the respondent may have been a driver or passenger.

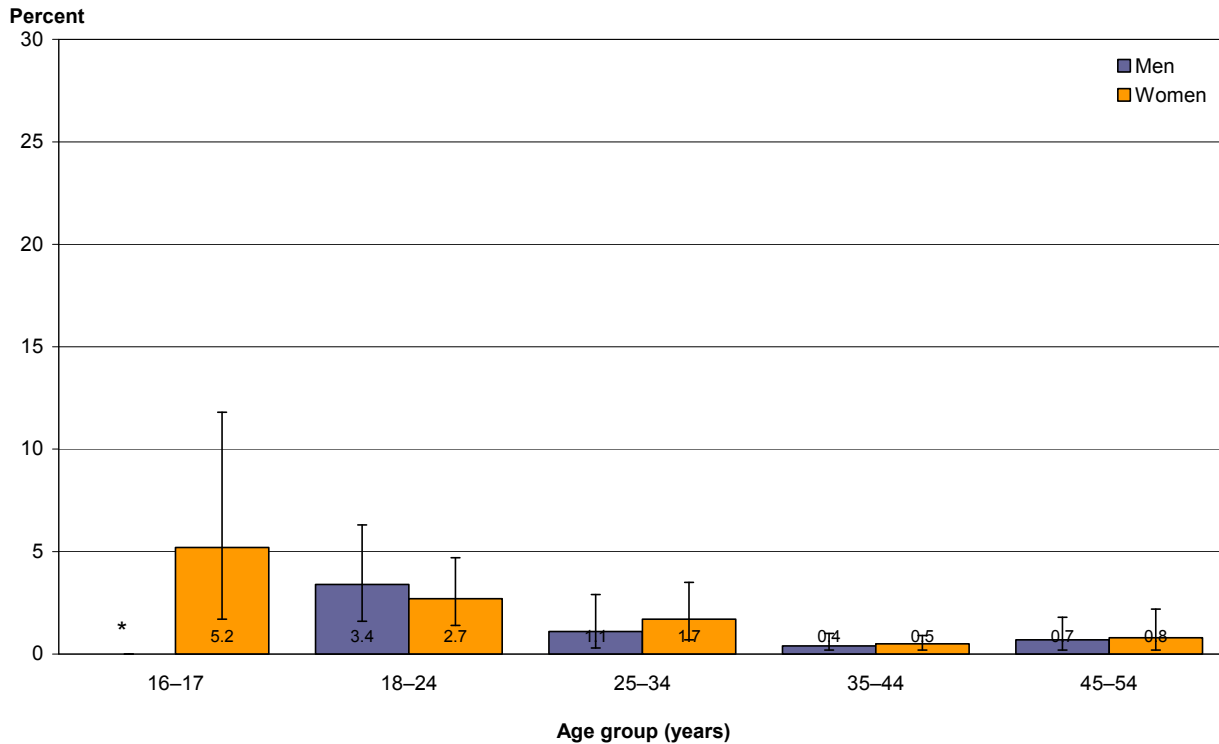
Overall, 1.2% (0.9–1.5) of adults aged 16–64 years had been involved in a motor vehicle accident due to someone else's alcohol use in the last 12 months. This equates to 30,700 people who had been involved in a motor vehicle accident in the past year due to someone else's drinking.

There was no significant difference between men (1.3%, 0.7–1.8) and women (1.6%, 1.0–2.2) in the prevalence of having been involved in a motor vehicle accident due to someone else's drinking in the past year, adjusted for age.

## By age group

The prevalence of having been involved in a motor vehicle accident in the past 12 months due to someone else's drinking was highest among females aged 16–17 years, although this result has a large confidence interval so should be interpreted with caution (Figure 117).

**Figure 117:** Involved in motor vehicle accident due to someone else's drinking in the past 12 months, among total population aged 16–54 years, by age group and gender (unadjusted prevalence)



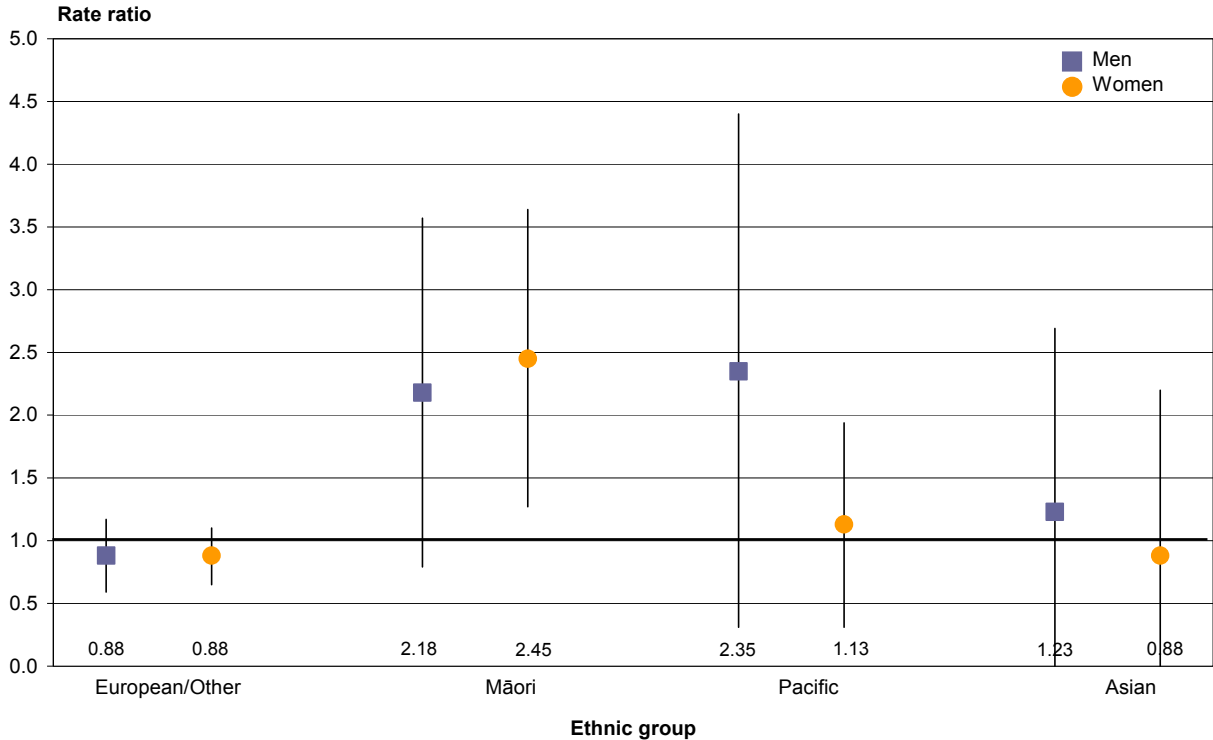
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

\* Numbers were too low for males aged 16–17 years, and for people aged 55–64 years.

**By ethnic group**

Adjusted for age, Māori women were significantly more likely to have been involved in a motor vehicle accident in the last year due to someone else’s drinking compared with women in the total population (Figure 118). There were no other statistically significant results.

**Figure 118:** Involved in motor vehicle accident due to someone else’s drinking in the past 12 months, among total population aged 16–64 years, by ethnic group and gender (age-standardised rate ratio)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey  
 Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years. Total response standard output for ethnic groups has been used.

**By neighbourhood deprivation**

The prevalence of having ever been involved in a motor vehicle accident due to someone else’s drinking was highest for men living in the most deprived areas (NZDep2006 quintile 5), adjusted for age.

# Part F: Specific Population Groups

This part examines specific population groups of interest. In particular, it covers the following topics:

- Chapter 12: Youth drinking
- Chapter 13: Māori and alcohol use
- Chapter 14: Pacific peoples and alcohol use
- Chapter 15: Alcohol use and pregnancy.

## Chapter 12: Youth drinking

Drinking at a young age is a risk factor for alcohol-related harms as a young adult and later in life (Murgraff et al 1999). In New Zealand there is no legal drinking age, but the minimum legal purchase age for alcohol is 18 years. This means that it is illegal for people under the age of 18 years to purchase alcohol, although minors are allowed to be supplied with alcohol in certain circumstances. The minimum legal purchase age was lowered from 20 to 18 in 1999. Youth are identified as a key at-risk population group in the *National Drug Policy 2007–2012*.

This chapter reports key findings of the 2007/08 New Zealand Alcohol and Drug Use Survey for people aged 16–17 years. Analysis of hazardous drinking (according to the Alcohol Use Disorders Identification Test, or AUDIT screen) from the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys for youth aged 16–17 years is available in Appendix 2.

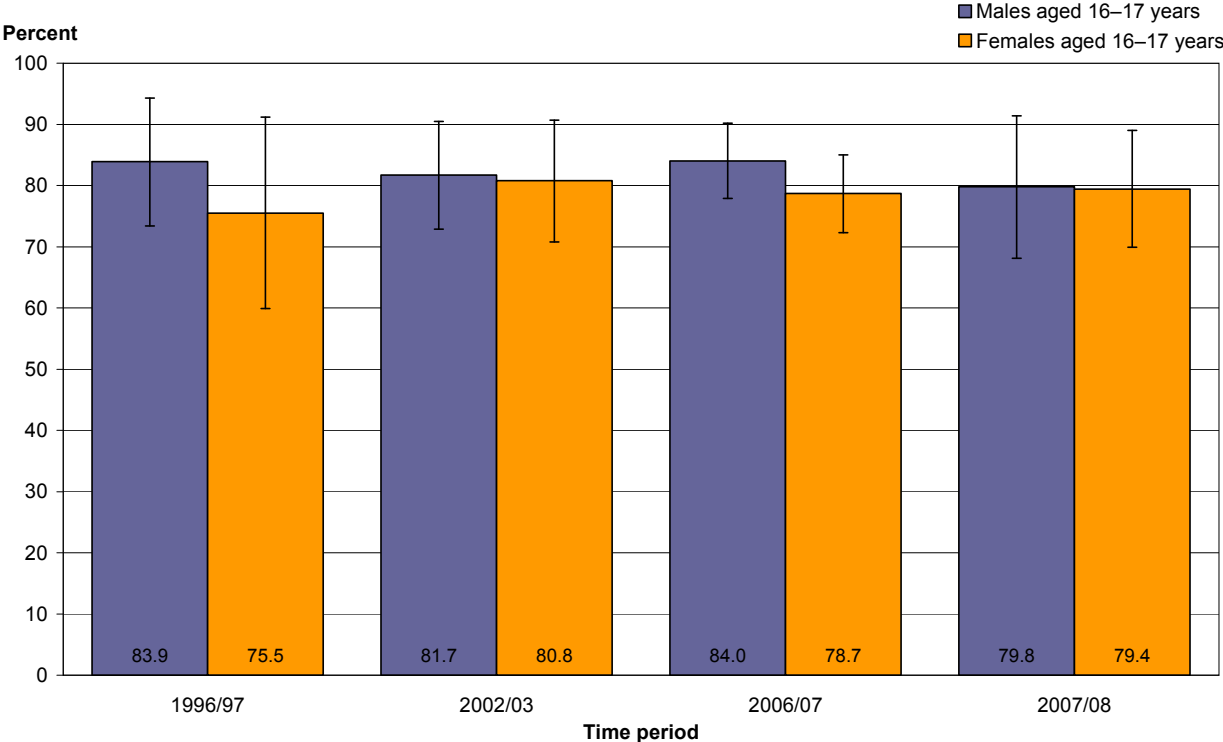
### Patterns of alcohol use

#### Alcohol use in last 12 months

Eight in ten (79.6%, 71.2–88.0) people aged 16–17 years had consumed alcohol in the past year. Among people aged 16–17 years there was no difference between males (79.8%, 68.1–91.4) and females (79.4%, 69.9–89.0) in past-year alcohol consumption. The prevalence of past-year alcohol consumption among people aged 16–17 years was not significantly different to the prevalence in the population aged 18–64 years (85.5%, 84.3–86.6).

There have been no significant differences in the prevalence of past-year drinking among 16–17-year-olds since 1996/97, by gender (Figure 119).

**Figure 119:** Prevalence of drinking alcohol in the past 12 months, among population aged 16–17 years, by gender, 1996/97, 2002/03, 2006/07 and 2007/08 (unadjusted prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys; 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Results have been reanalysed to allow comparability.

## Frequency of drinking alcohol

Among past-year drinkers aged 16–17 years, two-thirds (64.2%, 56.3–72.1) had consumed alcohol less than once a week in the past year (Table 32). Males were significantly more likely to have consumed alcohol three to six times a week (14.3%, 5.8–27.8) than females (2.9%, 0.5–9.0) (p-value < 0.05).

**Table 32:** Frequency of drinking alcohol in the last 12 months, among past-year drinkers aged 16–17 years (unadjusted prevalence)

Frequency of drinking alcohol	Prevalence (%) for past-year drinkers aged 16–17 years (95% CI)			Prevalence (%) for past-year drinkers aged 18–64 years (95% CI)
	Total	Males	Females	
Daily	0.1 (0.0–0.7)	–	0.3 (0.0–1.5)	7.1 (6.3–7.9)
3–6 times a week	8.7 (4.1–15.8)	14.3 (5.8–27.8)	2.9 (0.5–9.0)	22.6 (20.9–24.3)
1–2 times a week	27.0 (18.6–35.4)	23.8 (13.0–37.8)	30.3 (16.8–43.7)	32.4 (30.7–34.2)
Less than once a week	64.2 (56.3–72.1)	61.9 (49.4–74.4)	66.5 (53.0–80.0)	37.9 (36.1–39.7)
At least weekly	35.8 (27.9–43.7)	38.1 (25.6–50.6)	33.5 (20.0–47.0)	62.1 (60.3–63.9)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

About one in three past-year drinkers aged 16–17 years (35.8%, 27.9–43.7) had consumed alcohol at least weekly in the past year. There were no significant differences in weekly drinking between male (38.1%, 25.6–50.6) and female (33.5%, 20.0–47.0) past-year drinkers aged 16–17 years.

By comparison, about two in three past-year drinkers aged 18–64 years (62.1%, 60.3–63.9) had consumed alcohol at least weekly over the past year.

## Type of alcohol consumed in last 12 months

Three in five past-year drinkers aged 16–17 years (59.0%, 51.3–66.7) had consumed ready-to-drink beverages (RTDs) in the past year (Table 33). Other popular drinks with past-year drinkers aged 16–17 years were beer (56.1%, 49.2–62.9), spirits/liqueurs/mixed cocktails (39.4%, 29.6–49.3) and wine (31.5%, 21.6–41.4). Among past-year drinkers, people aged 16–17 years were significantly more likely to have consumed RTDs in the past year compared with all past-year drinkers aged 18–64 years (Table 33).

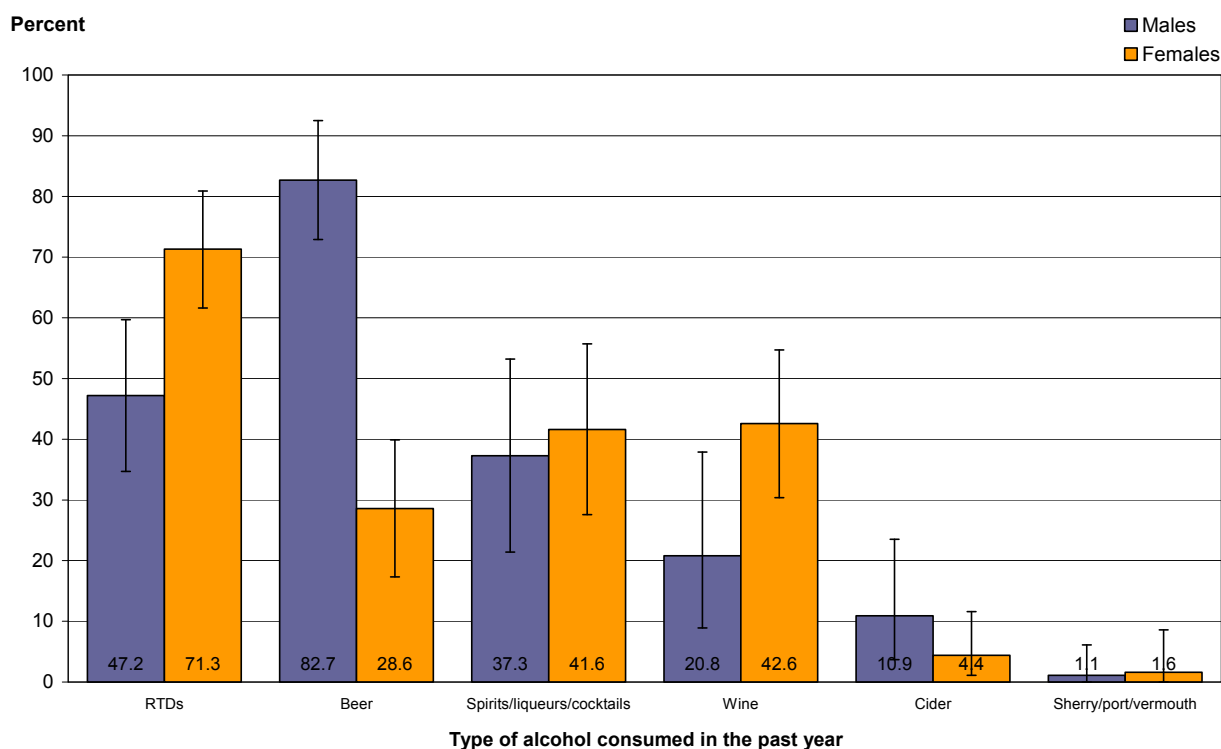
**Table 33:** Type of alcohol consumed in last 12 months, among past-year drinkers (unadjusted prevalence)

Type of alcohol	Prevalence (%) for past-year drinkers (95% CI)	
	Aged 16–17 years	Aged 18–64 years
Ready-to-drink beverages (RTDs)	59.0 (51.3–66.7)	20.5 (18.9–22.0)
Beer	56.1 (49.2–62.9)	60.8 (59.4–62.2)
Spirits/liqueurs/mixed cocktails	39.4 (29.6–49.3)	46.9 (45.2–48.5)
Wine	31.5 (21.6–41.4)	63.7 (61.8–65.5)
Cider	7.7 (3.5–14.4)	5.3 (4.4–6.2)
Sherry/port/vermouth	1.3 (0.1–4.7)	7.0 (5.8–8.2)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers aged 16–17 years, males were significantly more likely than females to have consumed beer in the past year (Figure 120). Females were significantly more likely to have consumed RTDs.

**Figure 120:** Type of alcohol consumed in last 12 months, among past-year drinkers aged 16–17 years, by gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Location of drinking alcohol in last 12 months

The majority of past-year drinkers aged 16–17 years had consumed alcohol at someone else's home (79.1%, 72.4–85.9) or their own home (74.3%, 66.6–82.0) in the past year (Table 34). One in four (23.9%, 16.0–31.7) past-year drinkers aged 16–17 years had consumed alcohol at an outdoor public place in the past year, which was significantly higher than for past-year drinkers aged 18–64 years (14.2%, 12.8–15.6).

**Table 34:** Location of drinking alcohol in the last 12 months, among past-year drinkers (unadjusted prevalence)

Location of drinking alcohol	Prevalence (%) for past-year drinkers (95% CI)	
	Aged 16–17 years	Aged 18–64 years
At someone else's home	79.1 (72.4–85.9)	70.5 (68.7–72.2)
At own home	74.3 (66.6–82.0)	88.1 (87.0–89.2)
At pubs, hotels, restaurants or cafes	29.9 (20.7–39.0)	66.3 (64.5–68.2)
At outdoor public places	23.9 (16.0–31.7)	14.2 (12.8–15.6)
At special events	20.6 (13.0–28.2)	17.8 (16.1–19.4)
At nightclubs or bars	13.5 (8.5–19.9)	28.3 (26.6–30.0)
At groups workplaces or meetings	12.2 (7.1–19.0)	26.0 (24.1–27.9)
At sports clubs or events	9.7 (5.0–16.7)	19.8 (18.2–21.4)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

There were no significant differences in the location of drinking alcohol in the past year by gender among past-year drinkers aged 16–17 years.

## Alcohol use in lifetime

The majority (87.3%, 81.3–93.4) of people aged 16–17 years had consumed alcohol at some point in their life. There was no difference in the prevalence of having ever consumed alcohol between males (87.0%, 78.4–95.7) and females (87.6%, 79.7–95.5).

## Risky drinking behaviours

### Consumed a large amount of alcohol on a drinking occasion in the last 12 months

Seven in ten (71.1%, 61.6–80.7) past-year drinkers aged 16–17 years had consumed a large amount of alcohol on a drinking occasion at least once in the past 12 months. There was no significant difference in the prevalence of drinking a large amount of alcohol in the past year between males (65.4%, 51.6–79.2) and females (77.2%, 65.3–89.0).

Past-year drinkers aged 16–17 years were significantly more likely to have consumed a large amount of alcohol on at least one drinking occasion in the last 12 months than past-year drinkers aged 18–64 years (61.2%, 59.3–63.1) ( $p$ -value < 0.05).



## Frequency of consuming a large amount of alcohol

Four in ten (38.9%, 29.0–48.8) past-year drinkers aged 16–17 years had consumed a large amount of alcohol on a drinking occasion less than once a month in the past year (Table 35).

Past-year drinkers aged 16–17 years had a similar prevalence of drinking a large amount of alcohol on a drinking occasion at least weekly (12.6%, 6.9–18.4) as past-year drinkers aged 18–64 years (12.6%, 11.4–13.8). Among past-year drinkers aged 16–17 years, there were no significant differences between males (9.0%, 3.0–19.6) and females (16.4%, 7.6–29.4) in the prevalence of drinking a large amount of alcohol weekly.

Furthermore, among past-year drinkers aged 16–17 years, one in three (32.3%, 24.3–40.3) had consumed a large amount of alcohol on a drinking occasion at least monthly over the past year. This was not significantly different to the prevalence for past-year drinkers aged 18–64 years (25.3%, 23.7–26.9) ( $p$ -value > 0.05). Among past-year drinkers aged 16–17 years there were no significant differences between males (25.6%, 14.7–39.1) and females (39.2%, 27.7–50.8) in the prevalence of drinking a large amount of alcohol monthly.

**Table 35:** Frequency of drinking a large amount of alcohol in the last 12 months, among past-year drinkers (unadjusted prevalence)

Frequency of drinking a large amount of alcohol	Prevalence (%) for past-year drinkers (95% CI)	
	Aged 16–17 years	Aged 18–64 years
3 or more times a week	0.9 (0.2–2.4)	3.3 (2.7–4.0)
1–2 times a week	11.7 (6.5–18.9)	9.3 (8.3–10.3)
1–3 times a month	19.6 (12.4–26.8)	12.7 (11.5–13.9)
Less than once a month	38.9 (29.0–48.8)	35.9 (34.2–37.6)
Not in the past 12 months	28.9 (19.3–38.4)	38.8 (36.9–40.7)
At least weekly	12.6 (6.9–18.4)	12.6 (11.4–13.8)
At least monthly	32.3 (24.3–40.3)	25.3 (23.7–26.9)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Location of drinking a large amount of alcohol

Almost two in three (60.6%, 51.0–70.1) past-year drinkers aged 16–17 years had consumed a large amount of alcohol on a drinking occasion at someone else’s house in the past 12 months, which was a significantly higher prevalence than among past-year drinkers aged 18–64 years (34.4%, 32.7–36.1) (Table 36). There were no significant differences in the location of drinking large amounts of alcohol in the past year by gender among past-year drinkers aged 16–17 years.

**Table 36:** Location of drinking a large amount of alcohol in the last 12 months, among past-year drinkers (unadjusted prevalence)

Location of drinking alcohol	Prevalence (%) for past-year drinkers (95% CI)	
	Aged 16–17 years	Aged 18–64 years
At someone else’s home	60.6 (51.0–70.1)	34.4 (32.7–36.1)
At own home	26.9 (19.2–34.6)	42.9 (41.0–44.8)
At special events	10.2 (5.5–16.9)	5.7 (5.0–6.5)
At outdoor public places	7.1 (3.4–12.8)	2.1 (1.6–2.7)
At pubs hotels restaurants or cafes	5.8 (2.5–11.1)	19.4 (17.7–21.1)
At nightclubs or bars	4.1 (1.3–9.4)	12.5 (11.1–13.8)
At sports clubs or events	2.1 (0.3–6.7)	4.2 (3.4–5.0)
At groups, workplaces or meetings	0.6 (0.1–2.2)	3.7 (3.0–4.5)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Drinking enough to feel drunk

Among people aged 16–17 years, six in ten (59.6%, 50.3–68.9) had consumed enough alcohol to feel drunk in the past year. This represents 75.0% (66.2–83.7) of past-year drinkers aged 16–17 years.

For people aged 16–17 years, there were no significant differences between males (57.9%, 44.6–71.1) and females (61.4%, 50.3–72.4) in the prevalence of having consumed enough alcohol to feel drunk in the past year. Past-year drinkers aged 16–17 years had a similar prevalence of drinking enough alcohol to feel drunk in the past year as past-year drinkers aged 18–64 years (58.5%, 56.7–60.3).

Among people aged 16–17 years, 14.6% (7.2–25.1) of males and 31.6% (19.7–43.6) of females reported having consumed enough alcohol to feel drunk when they were aged 14 years or younger.

## Frequency of drinking enough to feel drunk

Among past-year drinkers aged 16–17 years, the most common frequency of drinking enough to feel drunk was less than once a month (41.3%, 32.7–49.9) (Table 37). One in nine (11.4%, 5.4–17.5) past-year drinkers aged 16–17 had consumed enough alcohol to feel drunk at least weekly in the past year, and one in three (33.7%, 24.4–42.9) had consumed enough alcohol to feel drunk at least monthly in the past year.

**Table 37:** Frequency of drinking enough alcohol to feel drunk in the last 12 months, among past-year drinkers (unadjusted prevalence)

Frequency of drinking enough alcohol to feel drunk	Prevalence (%) for past-year drinkers (95% CI)	
	Aged 16–17 years	Aged 18–64 years
3 or more times a week	1.1 (0.3–2.8)	1.6 (1.1–2.1)
1–2 times a week	10.3 (5.1–18.0)	8.3 (7.5–9.2)
1–3 times a month	22.2 (14.0–30.5)	11.3 (10.3–12.4)
Less than once a month	41.3 (32.7–49.9)	37.2 (35.6–38.9)
Not in the past 12 months	25.0 (16.3–33.8)	41.5 (39.7–43.3)
At least weekly	11.4 (5.4–17.5)	9.9 (9.0–10.8)
At least monthly	33.7 (24.4–42.9)	21.3 (19.8–22.7)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Driving while feeling under the influence of alcohol

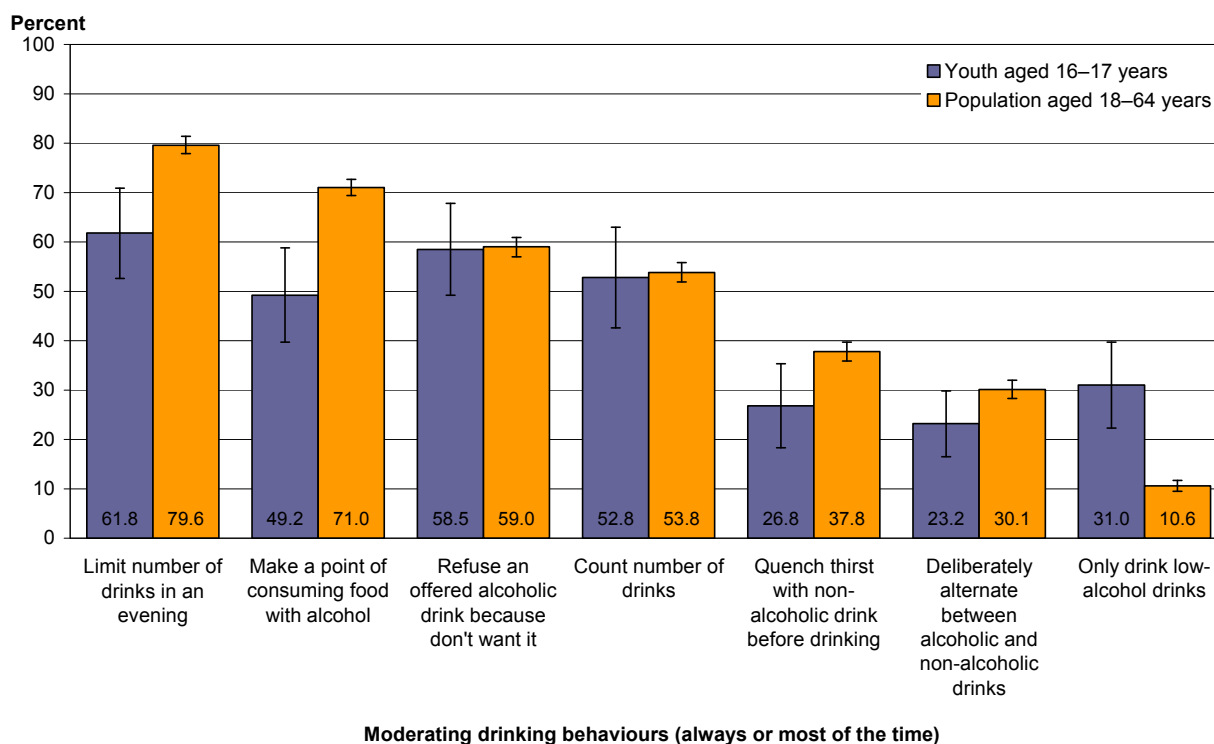
One in ten (10.8%, 6.1–17.5) people aged 16–17 years reported having driven while feeling under the influence of alcohol in the past 12 months. This represented 13.7% (7.8–21.8) of past-year drinkers in this age group. It should be noted that this analysis did not take into account whether or not people had driven in the past year.

## Moderating drinking behaviours

The moderating drinking behaviours used most commonly (always or most of the time) by past-year drinkers aged 16–17 years were limiting the number of drinks consumed in an evening (61.8%, 52.6–70.9) and refusing an offered alcoholic drink because of not wanting it (58.5%, 49.2–67.8) (Figure 121). Another commonly used moderating drinking behaviour was counting the number of drinks consumed when drinking (52.8%, 42.6–63.0).

Among past-year drinkers, those aged 16–17 years were significantly more likely to drink only low-alcohol drinks ‘always’ or ‘most of the time’ than those aged 18–64 years. However, past-year drinkers aged 16–17 years had a significantly lower prevalence than past-year drinkers aged 18–64 years for several moderating drinking behaviours: limiting the number of drinks in an evening, making a point of consuming food with alcohol, and quenching thirst with a non-alcoholic drink before drinking.

**Figure 121:** Moderating drinking behaviours done always or most of the time, among past-year drinkers aged 16–17 years and 18–64 years (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Help seeking

The prevalence of having ever received help to reduce the level of alcohol use was very low among 16–17-year-olds (0.8%, 0.1–2.5). Two percent (2.0%, 0.6–5.0) of people aged 16–17 years had ever wanted help to reduce their level of alcohol use but not received it.

One in ten (9.6%, 4.9–16.4) people aged 16–17 years reported that a relative, friend, doctor or health worker had been concerned about their drinking, or suggested cutting down their alcohol consumption, at some point in their life.

## Harmful effects experienced due to alcohol use

### Harmful effects experienced in the past year due to own alcohol use

Almost one in five (18.8%, 11.2–26.4) past-year drinkers aged 16–17 years had experienced injuries in the past year due to their own alcohol use (Table 38). Other harmful effects experienced by past-year drinkers aged 16–17 years included harmful effects on their financial position (13.3%, 8.4–19.7), friendships or social life (12.6%, 7.3–19.7), and work, study or employment (11.5%, 6.9–17.8). Overall, past-year drinkers aged 16–17 years experienced much higher rates of harmful effects in the past year due to their alcohol use than all past-year drinkers aged 16–64 years.

**Table 38:** Prevalence of experiencing harmful effects in the past year due to own alcohol use, among past-year drinkers and total population, by age group (unadjusted prevalence)

Harmful effect in the past year	Prevalence (%) for past-year drinkers (95% CI)		Prevalence (%) for total population (95% CI)	
	Aged 16–17 years	Aged 18–64 years	Aged 16–17 years	Aged 18–64 years
Experienced injuries	18.8 (11.2–26.4)	4.9 (4.1–5.7)	15.0 (8.8–21.2)	4.2 (3.5–4.9)
Harmful effect on financial position	13.3 (8.4–19.7)	5.9 (5.1–6.7)	10.5 (6.5–15.8)	5.1 (4.4–5.8)
Harmful effect on friendships or social life	12.6 (7.3–19.7)	7.5 (6.6–8.5)	10.1 (5.8–16.2)	6.7 (5.9–7.5)
Harmful effect on work, study or employment	11.5 (6.9–17.8)	3.3 (2.5–4.1)	9.2 (5.4–14.2)	2.9 (2.2–3.6)
Harmful effect on home life	8.3 (3.8–15.3)	6.1 (5.2–6.9)	6.6 (3.0–12.4)	5.4 (4.6–6.1)
Experienced legal problems	5.5 (2.4–10.6)	1.6 (1.2–2.0)	4.4 (1.9–8.4)	1.4 (1.1–1.8)
Experienced difficulty learning things	2.9 (0.8–7.1)	0.9 (0.6–1.2)	2.3 (0.7–5.7)	0.8 (0.5–1.1)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Harmful effects experienced in the past year due to someone else's alcohol use

One in four (23.0%, 15.9–30.1) people aged 16–17 years had experienced harmful effects on their friendships or social life in the past year due to someone else's alcohol use, which was a higher prevalence than the total population aged 18–64 years (Table 39). However, there was no statistically significant difference in experiencing harmful effects on home life between people aged 16–17 and those aged 18–64 years. People aged 18–64 years were significantly more likely to have experienced harmful effects on their financial position due to someone else's drinking in the past year than people aged 16–17 years.

**Table 39:** Prevalence of experiencing harmful effects in the past year due to someone else's alcohol use, among total population (unadjusted prevalence)

Harmful effect in the past year	Prevalence (%) for total population (95% CI)	
	Aged 16–17 years	Aged 18–64 years
Friendships or social life	23.0 (15.9–30.1)	15.6 (14.3–16.9)
Home life	5.6 (2.9–9.6)	8.7 (7.8–9.6)
Financial position	1.1 (0.3–3.0)	3.7 (3.1–4.4)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Almost 6% (5.9%, 3.1–10.2) of people aged 16–17 years had been assaulted (physically and/or sexually) in the past year by someone who was under the influence of alcohol or drugs. In the age group 16–17 years, males were significantly more likely to have been assaulted in the past year (9.9%, 4.5–18.3) than females (1.9%, 0.4–5.5).

Three percent (3.0%, 1.1–6.3) of people aged 16–17 years had been involved in a motor vehicle accident due to someone else's drinking in the last 12 months.

## Chapter 13: Māori and Alcohol Use

This chapter reports key findings of the 2007/08 NZADUS for Māori people compared with non-Māori. Māori are a key policy priority group in the *National Drug Policy 2007–2012* because it is recognised that Māori suffer disproportionate harm from alcohol and drug use and that these problems may be addressed more effectively when targeted approaches are developed by and for Māori.

In addition to the results presented in this chapter, further analysis of hazardous drinking (according to the Alcohol Use Disorders Identification Test, or AUDIT screen) from the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys for Māori is available in Appendix 2.

### Alcohol use

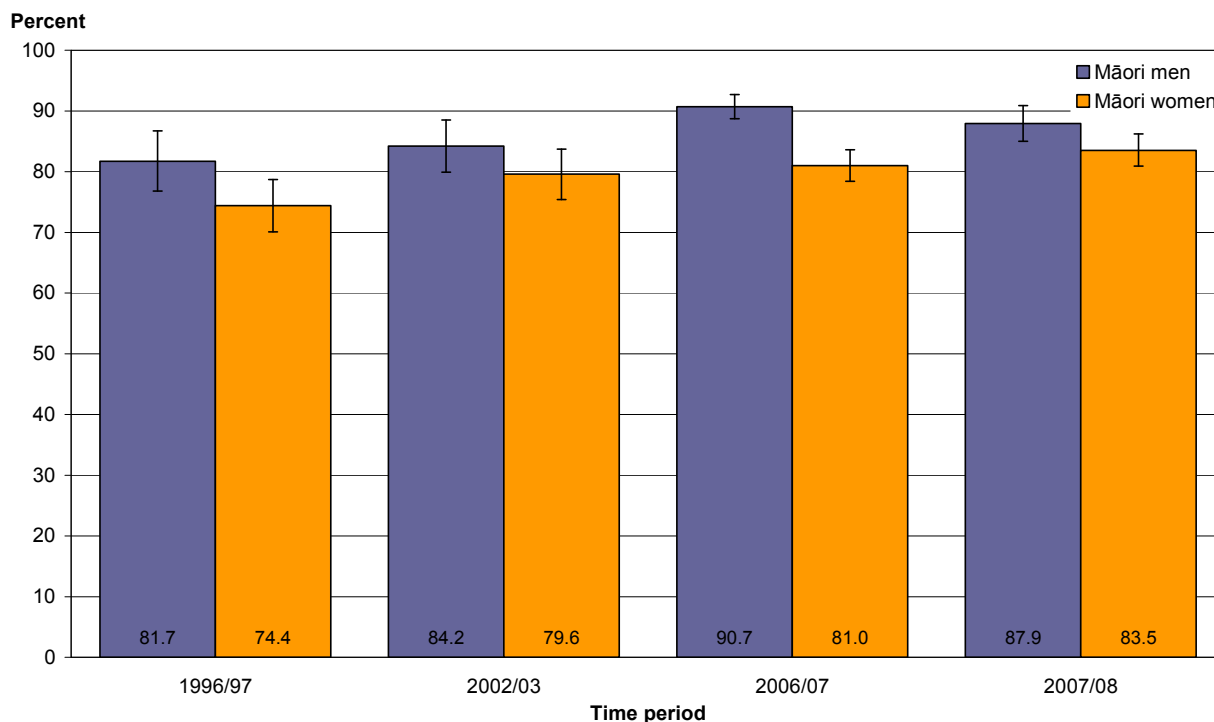
#### Alcohol use in last 12 months

Overall, 85.0% (83.2–86.9) of Māori aged 16–64 years had consumed alcohol in the past year.

Adjusted for age, there were no significant differences in the prevalence of drinking alcohol in the past 12 months between Māori (85.5%, 83.7–87.4) and non-Māori (85.2%, 83.8–86.6). Māori men were significantly more likely to have consumed alcohol in the past year (87.9%, 85.0–90.9) than Māori women (83.5%, 80.9–86.2), adjusted for age ( $p$ -value < 0.05).

For Māori men and women, there was a significant increase in the prevalence of drinking alcohol in the previous 12 months in the 11-year period from 1996/97 to 2007/08 ( $p$ -values < 0.05) (Figure 122). There were no statistically significant changes from 2006/07 to 2007/08 for either Māori men or Māori women ( $p$ -values > 0.05).

**Figure 122:** Prevalence of drinking alcohol in the last 12 months, among total Māori population aged 16–64 years, by gender, 1996/97, 2002/03, 2006/07 and 2007/08 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys; 2007/08 New Zealand Alcohol and Drug Use Survey

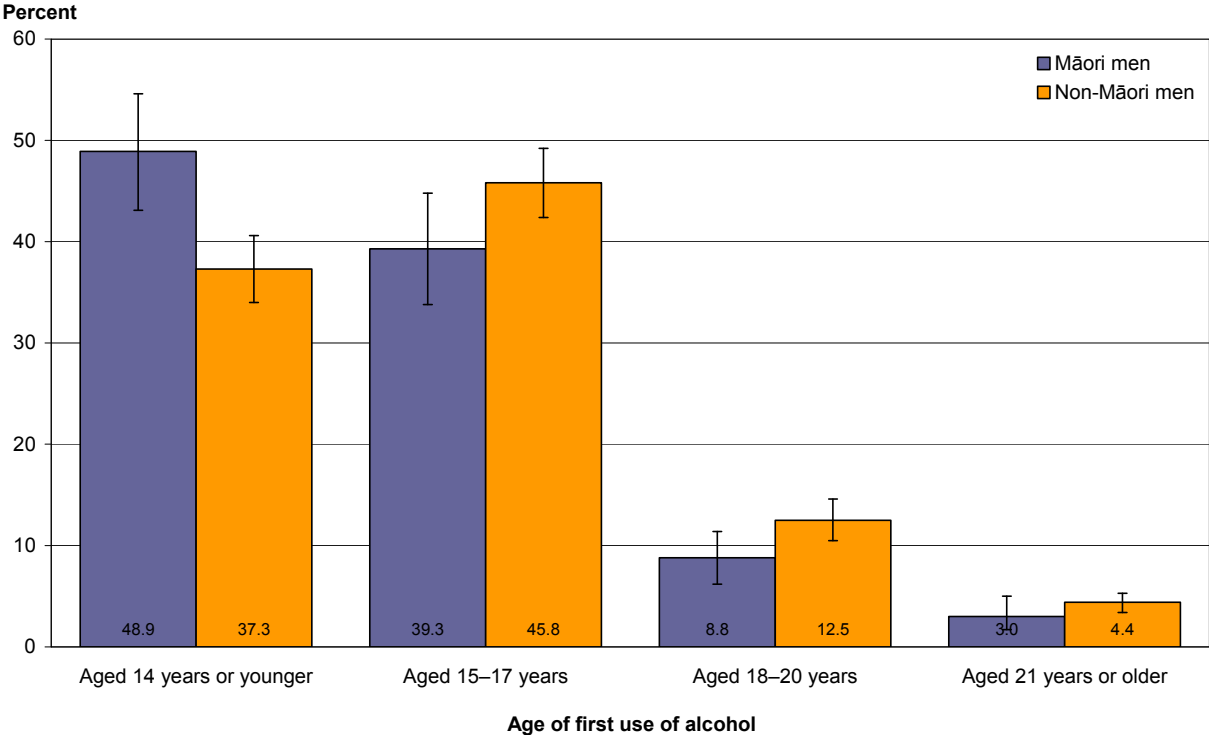
Note: Data from these surveys have been reanalysed to allow for comparability. Total response standard output for ethnic groups has been used.

### Age of first drinking alcohol

Overall, four in ten (43.4%, 39.9–47.0) Māori aged 16–64 years who had ever consumed alcohol had first done so when aged 14 years or younger. Among Māori who had ever consumed alcohol Māori men had a significantly higher prevalence (48.9%, 43.1–54.6) than Māori women (40.0%, 36.3–43.7) of first consuming alcohol when aged 14 years or younger, adjusted for age ( $p$ -value < 0.05). Among those people who had ever consumed alcohol, Māori were significantly more likely than non-Māori to have first tried alcohol when they were aged 14 years or younger, for both men (Figure 123) and women (Figure 124).

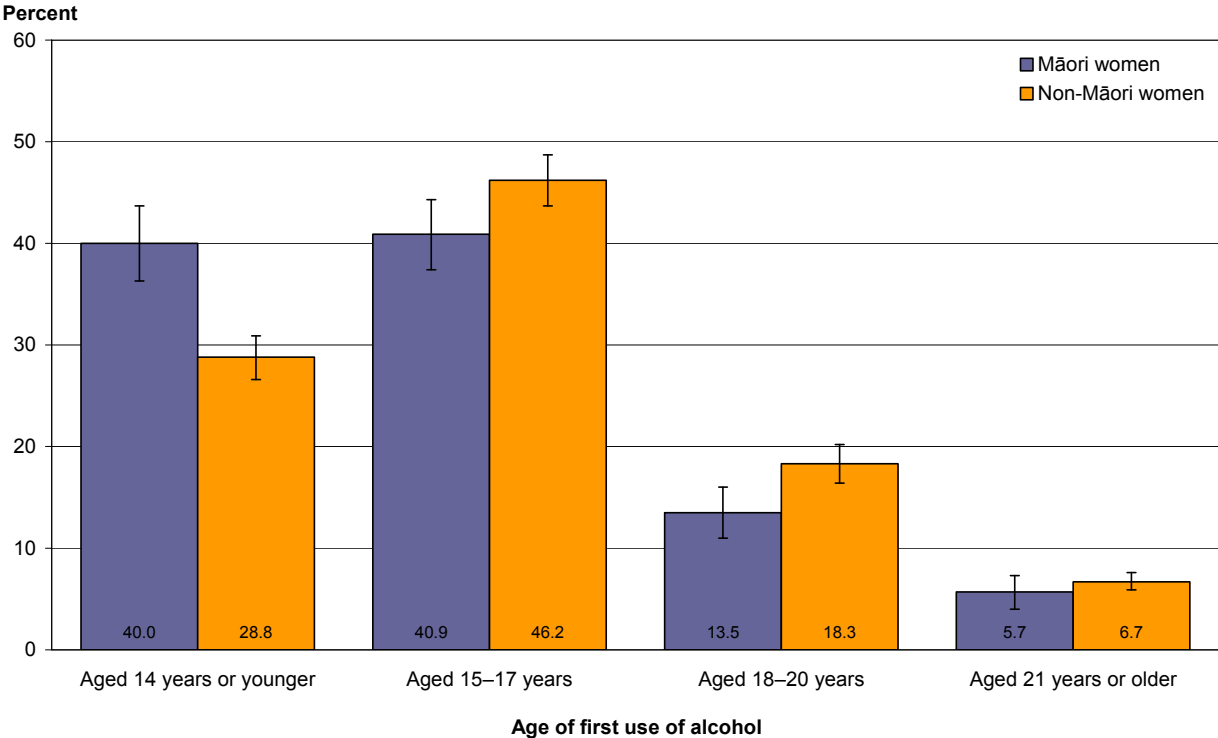


**Figure 123:** Age of first use of alcohol, among men aged 16–64 years who had ever tried alcohol, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 124:** Age of first use of alcohol, among women aged 16–64 years who had ever tried alcohol, by Māori/non-Māori (age-standardised prevalence)



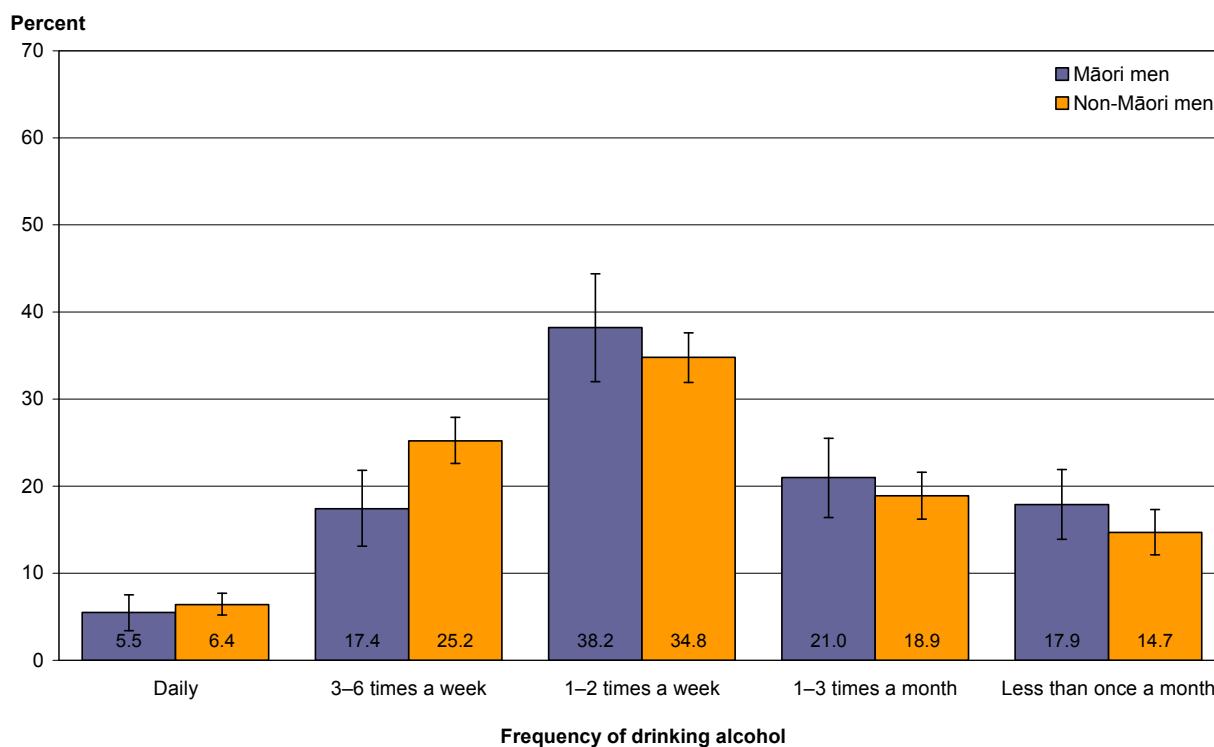
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Frequency of drinking alcohol

About 4% of Māori past-year drinkers had consumed alcohol daily in the past year (4.2%, 3.2–5.3), while a further 13.4% (11.0–15.8) had consumed alcohol three to six times per week in the past year. Among past-year drinkers, Māori men were significantly more likely to have consumed alcohol daily in the past year (5.5%, 3.4–7.5) than Māori women (2.9%, 1.8–3.9), adjusted for age ( $p$ -value < 0.05).

Among past-year drinkers, Māori generally consumed alcohol less frequently in the past year than non-Māori. For male past-year drinkers, Māori men were significantly less likely than non-Māori men to have consumed alcohol three to six times a week (Figure 125). There were no significant differences between Māori and non-Māori men for drinking alcohol daily or one to two times per week.

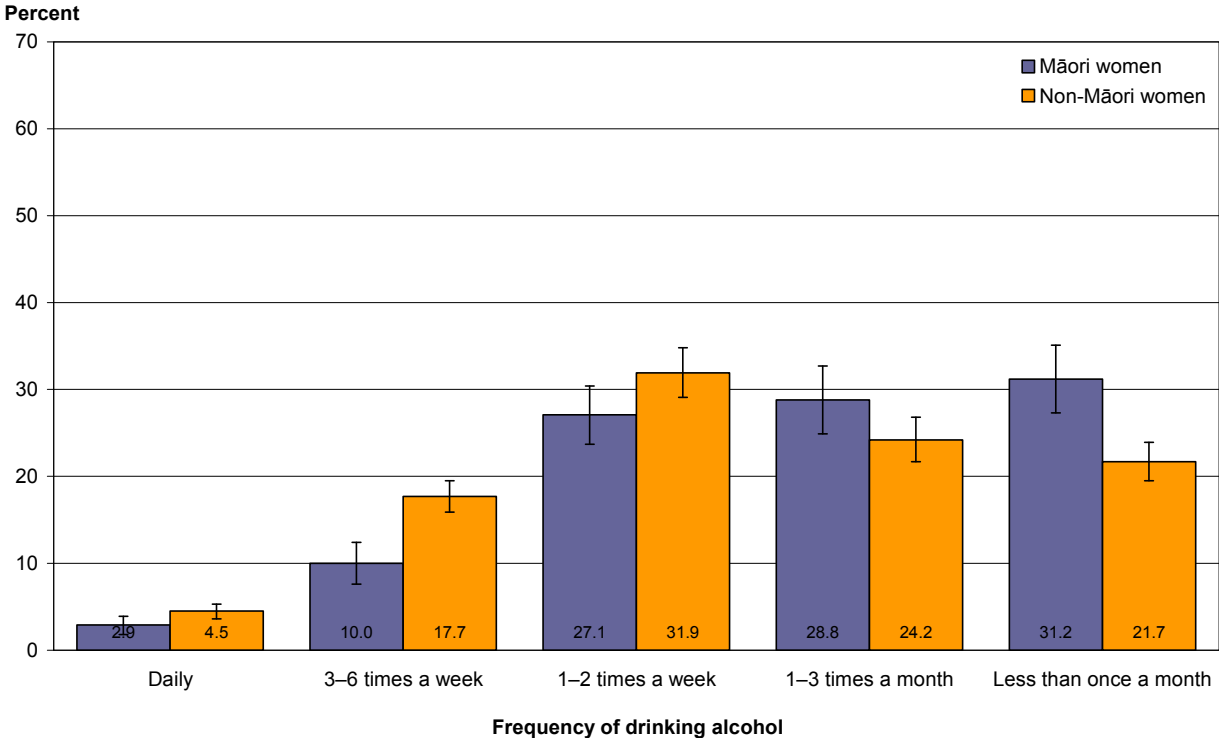
**Figure 125:** Frequency of drinking alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

For female past-year drinkers, Māori women were significantly less likely to have consumed alcohol daily, three to six times a week or one to two times a week than non-Māori women (p-values < 0.05) (Figure 126).

**Figure 126:** Frequency of drinking alcohol in the last 12 months, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

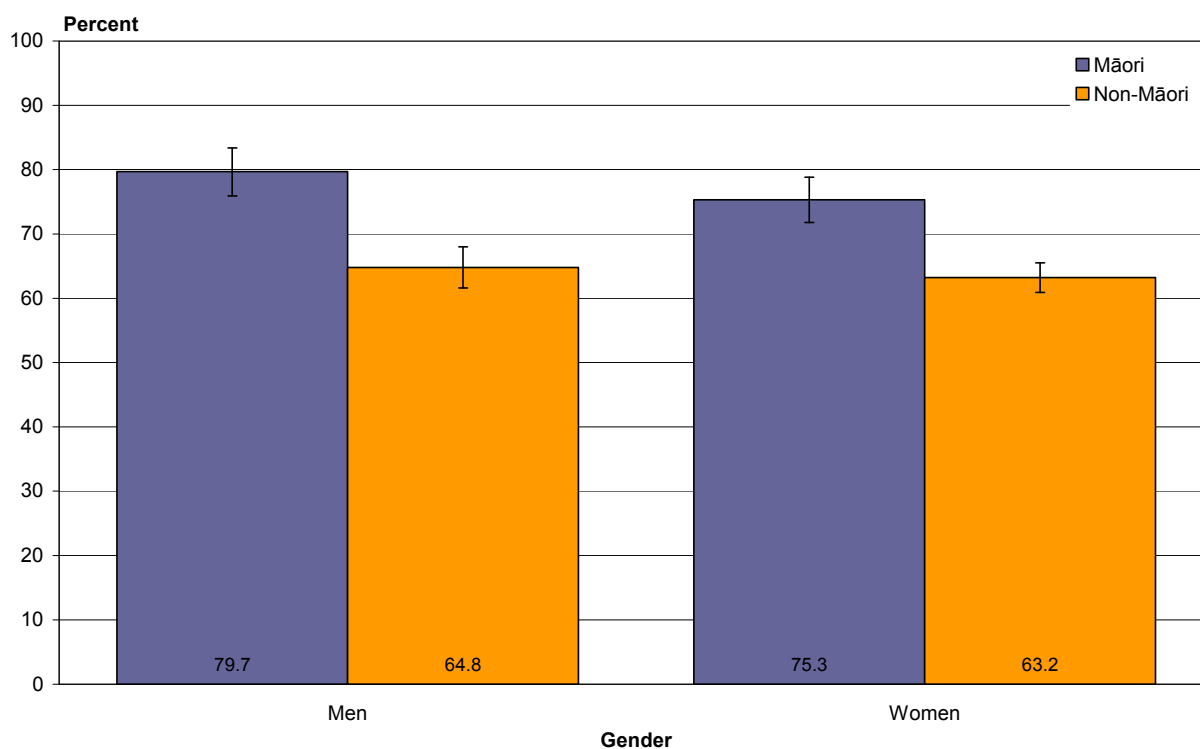
## Drinking large amounts of alcohol

### Consumed a large amount of alcohol on at least one occasion in the past year

Three in four Māori past-year drinkers (76.6%, 73.8–79.4) had consumed a large amount of alcohol on at least one occasion in the past year. Among past-year drinkers, there was no significant difference in the prevalence of having consumed a large amount of alcohol on a drinking occasion in the past year between Māori men (79.7%, 75.9–83.4) and Māori women (75.3%, 71.8–78.8), adjusted for age ( $p$ -value > 0.05).

Among past-year drinkers, Māori were significantly more likely to have consumed a large amount of alcohol on a drinking occasion in the past year than non-Māori, for both men and women, adjusted for age (Figure 127).

**Figure 127:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by Māori/non-Māori and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

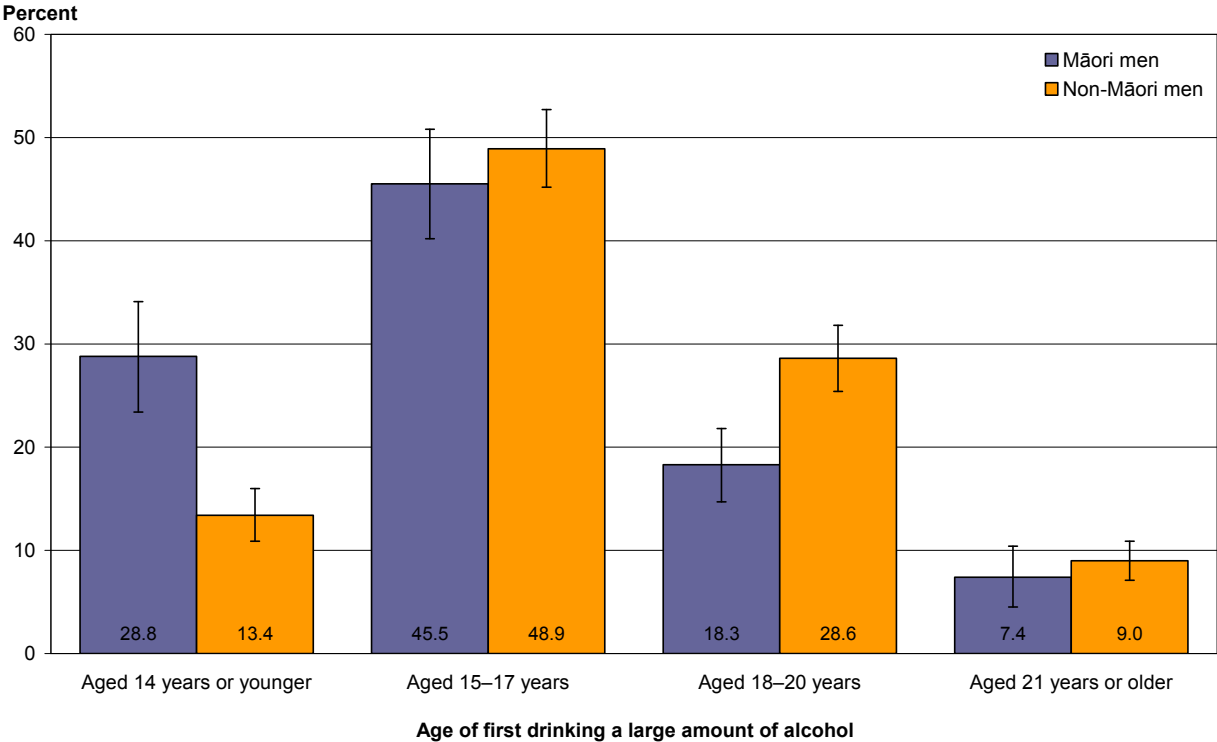
### Age of having first consumed a large amount of alcohol

Overall, one in four Māori who had ever consumed a large amount of alcohol on a drinking occasion had first done so when aged 14 years or younger (25.0%, 21.8–28.1). Two in five Māori who had ever drunk a large amount of alcohol had first done so when aged 15–17 years (43.1%, 39.8–46.4).

Among Māori who had ever consumed a large amount of alcohol, Māori men were significantly more likely to have first consumed a large amount when aged 14 years or younger (28.8%, 23.4–34.1) than Māori women (22.3%, 19.0–25.5), adjusted for age (p-value < 0.05).

Among men who had ever consumed a large amount of alcohol, Māori men were over twice as likely as non-Māori men to have first consumed a large amount of alcohol when aged 14 years or younger, adjusted for age (Figure 128).

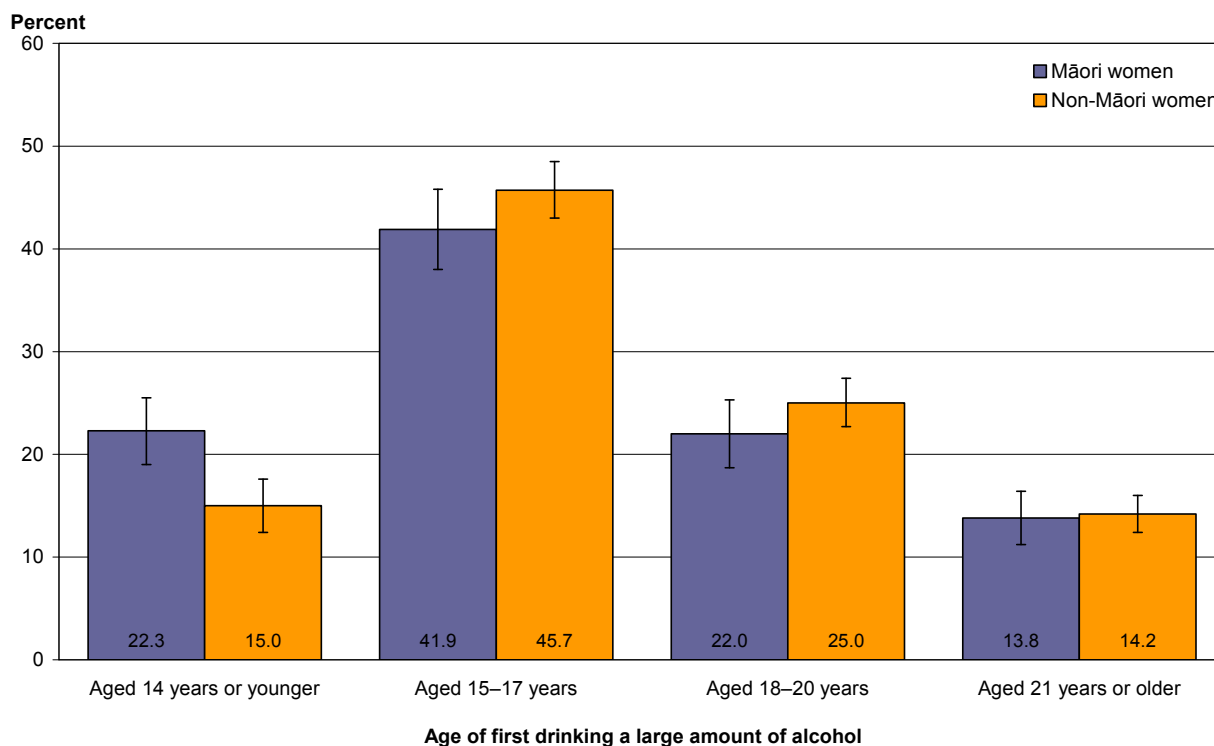
**Figure 128:** Age of first having consumed a large amount of alcohol, among men aged 16–64 years who had ever consumed a large amount of alcohol, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Similarly, Māori women were significantly more likely than non-Māori women to have first consumed a large amount of alcohol on a drinking occasion when aged 14 years or younger, adjusted for age (Figure 129).

**Figure 129:** Age of first having consumed a large amount of alcohol, among women aged 16–64 years who had ever consumed a large amount of alcohol, by Māori/non-Māori (age-standardised prevalence)



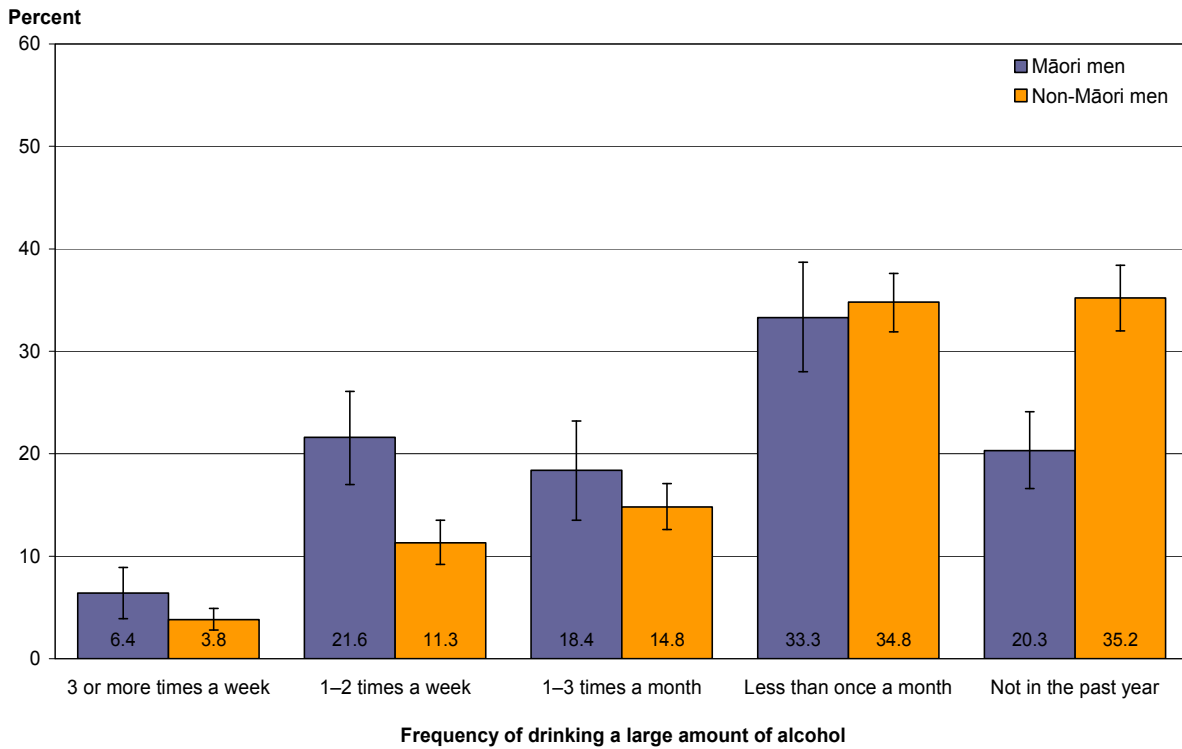
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Frequency of consuming a large amount of alcohol in the past year

Among Māori past-year drinkers, 5.2% (3.8–6.6) had consumed a large amount of alcohol on a drinking occasion three or more times a week in the past year, while a further 18.7% (16.1–21.4) had consumed a large amount one to two times a week. There were no significant differences between Māori men and Māori women in the frequency of drinking a large amount of alcohol in the past year, adjusted for age (p-values > 0.05 for all frequency categories).

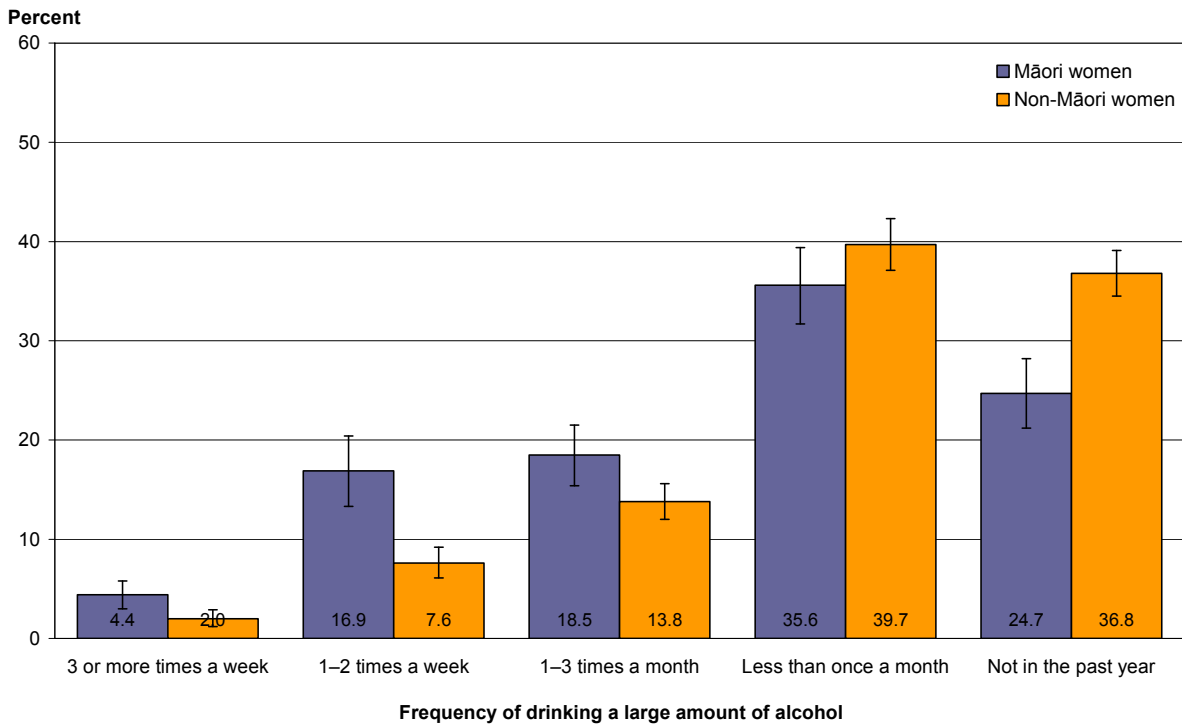
Adjusted for age, Māori past-year drinkers were significantly more likely than non-Māori past-year drinkers to have consumed a large amount of alcohol three or more times or one to two times a week in the past year, for both men (Figure 130) and women (Figure 131).

**Figure 130:** Frequency of drinking a large amount of alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 131:** Frequency of drinking a large amount of alcohol in the last 12 months, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



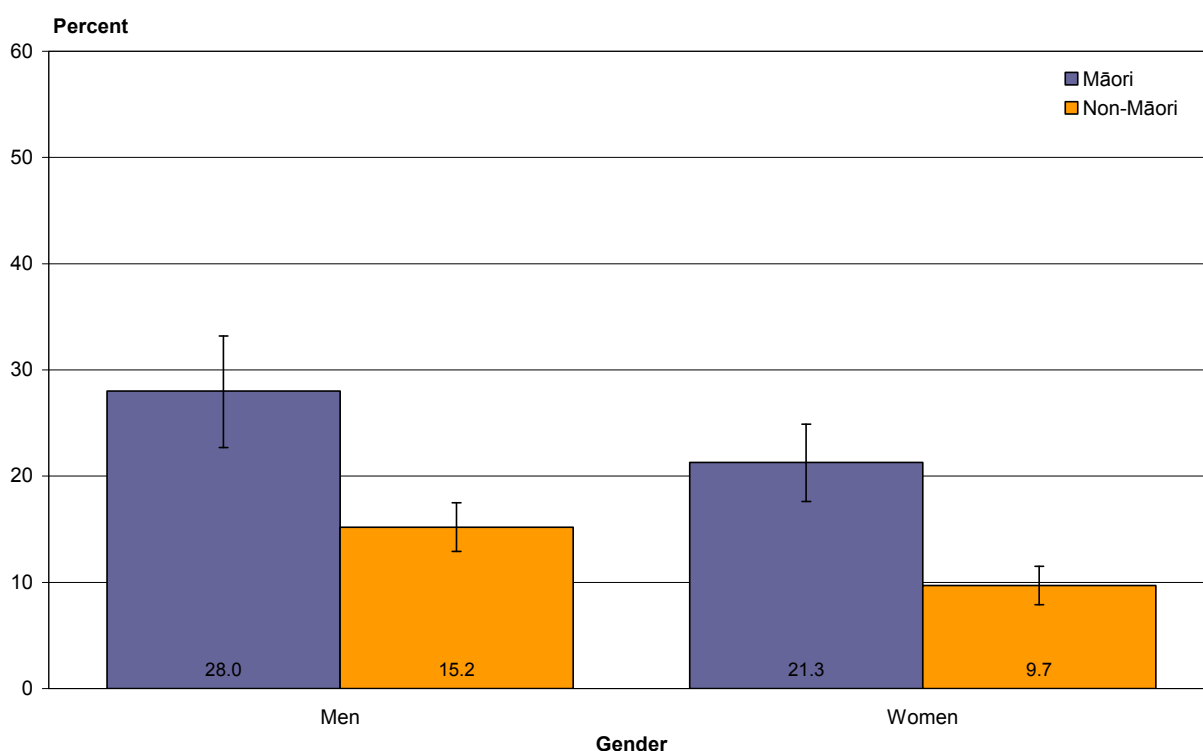
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Consuming a large amount of alcohol weekly in the past year

Overall, one in four Māori past-year drinkers had consumed a large amount of alcohol on a drinking occasion at least weekly in the past year (23.9%, 20.9–27.0). Among past-year drinkers, Māori men were significantly more likely to have consumed a large amount of alcohol weekly (28.0%, 22.7–33.2) than Māori women (21.3%, 17.6–24.9), adjusted for age (Figure 132).

For both men and women, Māori were significantly more likely than non-Māori to have consumed a large amount of alcohol at least weekly in the past year, adjusted for age (Figure 132).

**Figure 132:** Consumed a large amount of alcohol at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by Māori/non-Māori and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

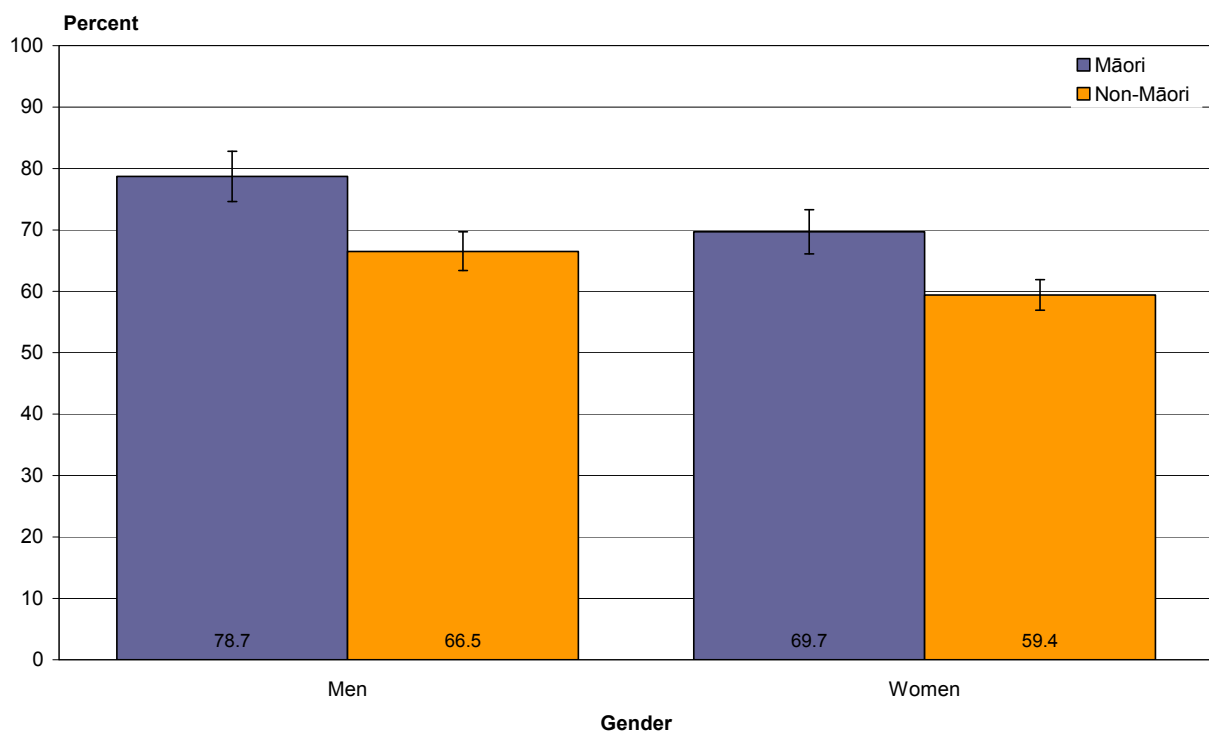


## Drinking enough alcohol to feel drunk

### Drinking enough to feel drunk in the past year

Seven in ten Māori past-year drinkers (72.9%, 70.3–75.5) had consumed enough alcohol to feel drunk in the past year. Among past-year drinkers, Māori men were significantly more likely to have consumed enough alcohol to feel drunk in the previous 12 months (78.7%, 74.6–82.8) than Māori women (69.7%, 66.1–73.3), adjusted for age. For both men and women, Māori were significantly more likely than non-Māori to have consumed enough alcohol to feel drunk in the past year (Figure 133).

**Figure 133:** Drank enough alcohol to feel drunk at least once in the past 12 months, among past-year drinkers aged 16–64 years, by Māori/non-Māori and gender (age-standardised prevalence)



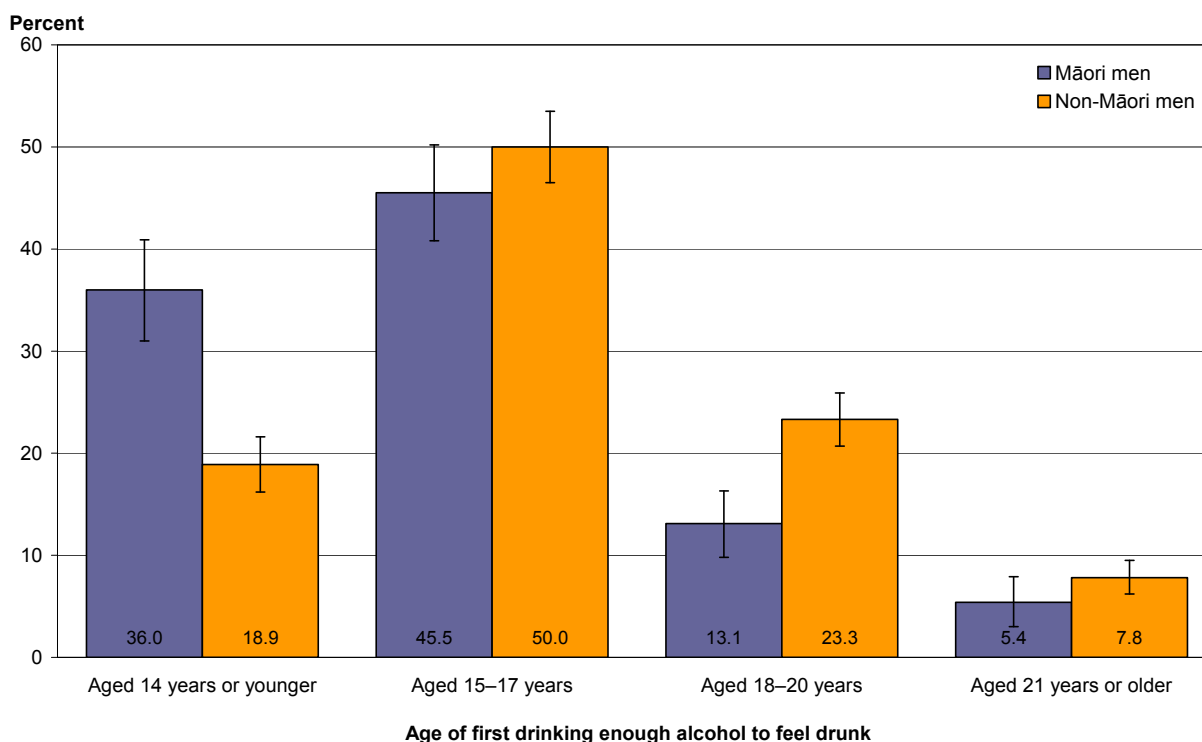
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Age of having first consumed enough alcohol to feel drunk

Among Māori who had ever been drunk, one in three had first consumed enough alcohol to feel drunk when they were aged 14 years or younger (30.8%, 27.8–33.8), while two in five had first done so when they were aged 15–17 years (44.4%, 41.6–47.2). Māori men were significantly more likely to have been 14 years or younger when they first felt drunk (36.0%, 31.0–40.9) than Māori women (27.2%, 23.9–30.4), adjusted for age.

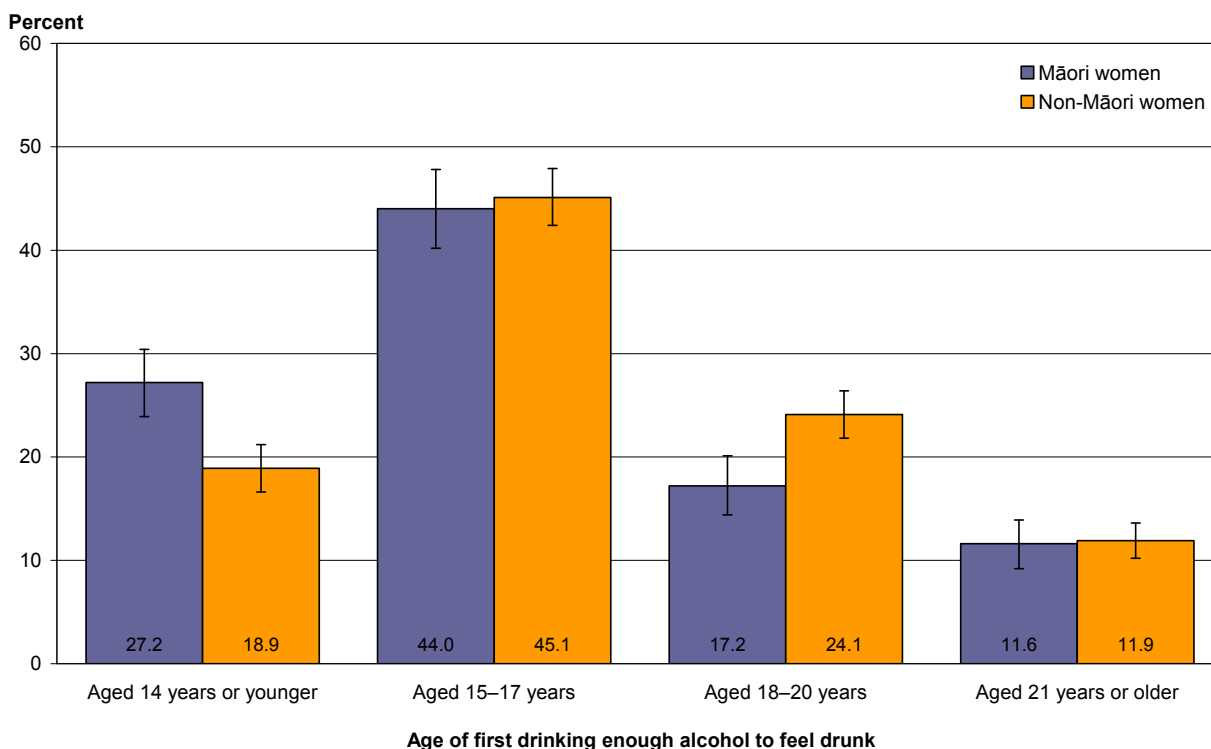
Among people who had ever consumed enough alcohol to feel drunk, Māori had about the same prevalence as non-Māori of having first consumed enough alcohol to feel drunk when aged 15–17 years, for both men (Figure 134) and women (Figure 135). However, among men and women, Māori were significantly more likely to have first consumed enough alcohol to feel drunk when aged 14 years or younger than non-Māori, when adjusted for age.

**Figure 134:** Age of first drinking enough alcohol to feel drunk, among men aged 16–64 years who had ever consumed enough alcohol to feel drunk, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 135:** Age of first drinking enough alcohol to feel drunk, among women aged 16–64 years who had ever consumed enough alcohol to feel drunk, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Risky behaviours

### Risky behaviours while feeling under the influence of alcohol

Overall, one in four Māori past-year drinkers reported having driven in the past year while feeling under the influence of alcohol (24.5%, 21.4–27.5) (Table 40). Also, one in seven Māori past-year drinkers reported having worked while feeling under the influence of alcohol in the previous 12 months (15.4%, 12.7–18.0).

**Table 40:** Reported risky behaviours carried out while feeling under the influence of alcohol in the last 12 months, among Māori aged 16–64 years (unadjusted prevalence)

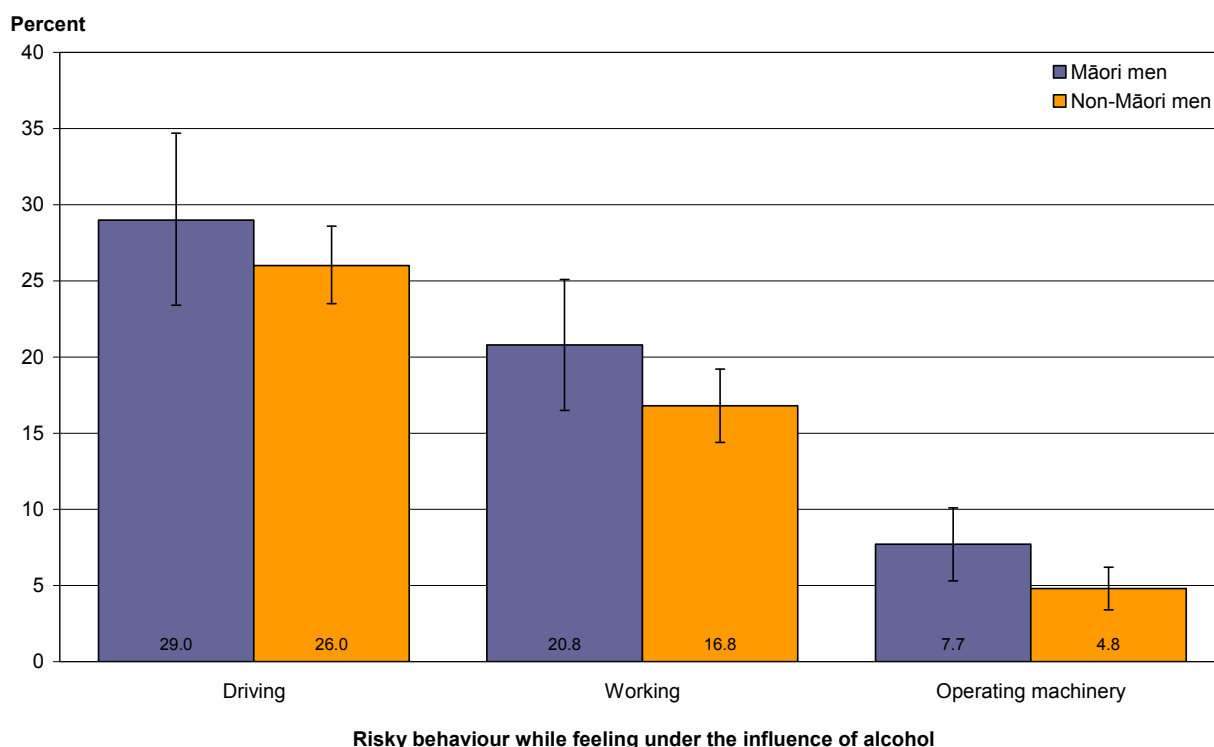
Risky behaviour in the last 12 months	Prevalence (%) for Māori past-year drinkers (95% CI)	Prevalence (%) for total Māori adults (95% CI)
Driving while feeling under the influence of alcohol	24.5 (21.4–27.5)	20.8 (18.1–23.4)
Working while feeling under the influence of alcohol	15.4 (12.7–18.0)	13.0 (10.8–15.3)
Operating machinery while feeling under the influence of alcohol	5.0 (3.7–6.3)	4.3 (3.2–5.4)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Māori men were significantly more likely than Māori women to have reported having done each of the risky behaviours while feeling under the influence of alcohol in the past year, adjusted for age (p-values < 0.05).

Among past-year drinkers, Māori men were significantly more likely than non-Māori men to have reported working and/or operating machinery while feeling under the influence of alcohol in the past year, when adjusted for age (p-values < 0.05) (Figure 136). There was no significant difference for driving while feeling under the influence of alcohol in the past year between Māori men and non-Māori men.

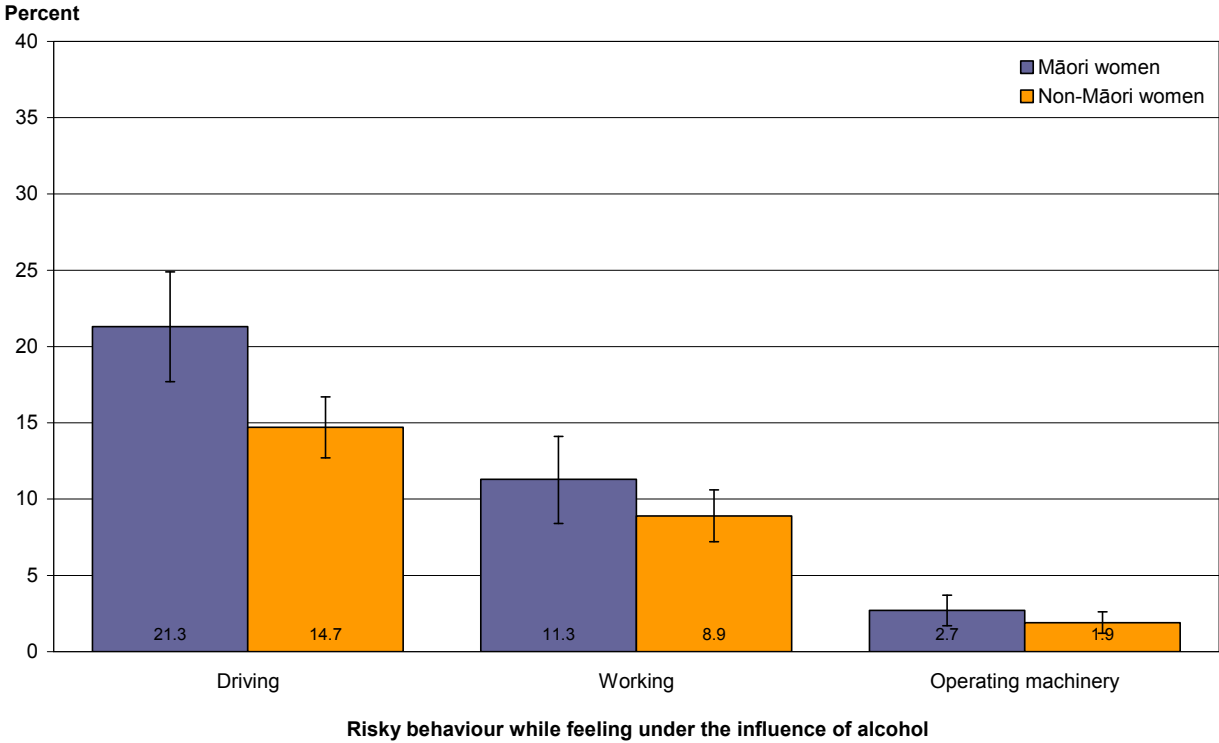
**Figure 136:** Reported risky behaviours carried out while feeling under the influence of alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

For female past-year drinkers, Māori women were significantly more likely than non-Māori women to have reported driving while feeling under the influence of alcohol in the past year (Figure 137). There were no other significant differences between Māori women and non-Māori women (p-values > 0.05).

**Figure 137:** Reported risky behaviours carried out while feeling under the influence of alcohol in the past 12 months, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Using alcohol with other drugs**

One in two Māori past-year drinkers had used alcohol and tobacco at the same time in the past year (50.5%, 47.1–53.9) (Table 41). Further, one in five Māori past-year drinkers had used alcohol and cannabis at the same time in the previous 12 months (20.2%, 17.2–23.2).

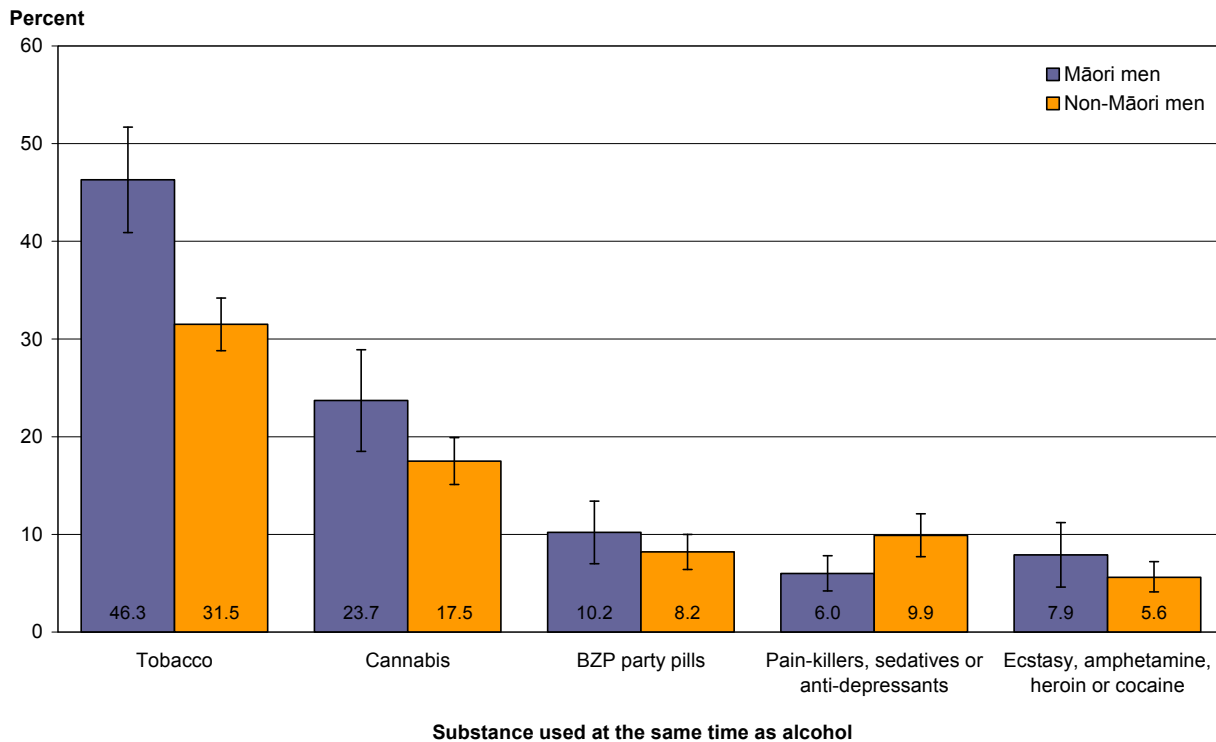
**Table 41:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among Māori past-year drinkers aged 16–64 years (unadjusted prevalence)

Combinations of drugs used on at least one occasion in the last 12 months	Prevalence (%) for Māori past-year drinkers (95% CI)
Alcohol and tobacco	50.5 (47.1–53.9)
Alcohol and cannabis	20.2 (17.2–23.2)
Alcohol and BZP party pills	8.9 (7.0–10.7)
Alcohol and pain-killers, sedatives or anti-depressants	7.5 (6.0–9.0)
Alcohol and ecstasy, amphetamine, heroin or cocaine	5.7 (3.9–7.5)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Māori men were significantly more likely than non-Māori men to have used alcohol at the same time as using tobacco or cannabis in the last 12 months, when adjusted for age (p-values < 0.05) (Figure 138). Māori men were significantly less likely to have used alcohol with pain-killers/sedatives/anti-depressants in the past year compared with non-Māori men.

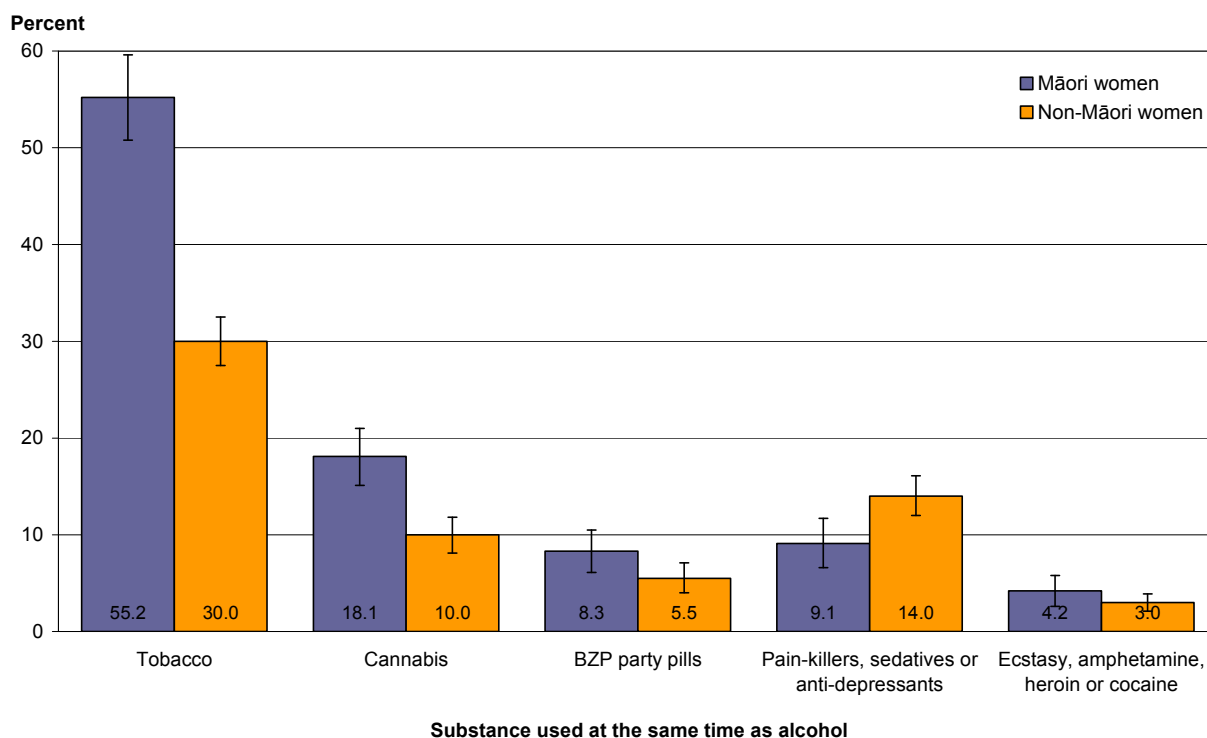
**Figure 138:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Māori women were significantly more likely than non-Māori women to have used alcohol with tobacco, cannabis or BZP party pills in the past year (p-values < 0.05), adjusted for age (Figure 139). By contrast, Māori women were significantly less likely to have used alcohol with pain-killers/sedatives/anti-depressants in the past 12 months compared with non-Māori women.

**Figure 139:** Prevalence of using alcohol with other drugs at the same time in the past 12 months, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Moderating behaviours

About two in three Māori past-year drinkers reported using the moderating drinking behaviour of limiting the number of drinks consumed in a night ‘always’ or ‘most of the time’ (67.6%, 63.6–71.6) (Table 42). Other commonly used moderating drinking behaviours used by Māori past-year drinkers included making a point of consuming food with alcohol (58.4%, 54.8–62.0) and refusing an alcoholic drink because of not really wanting it (53.0%, 49.2–56.7).

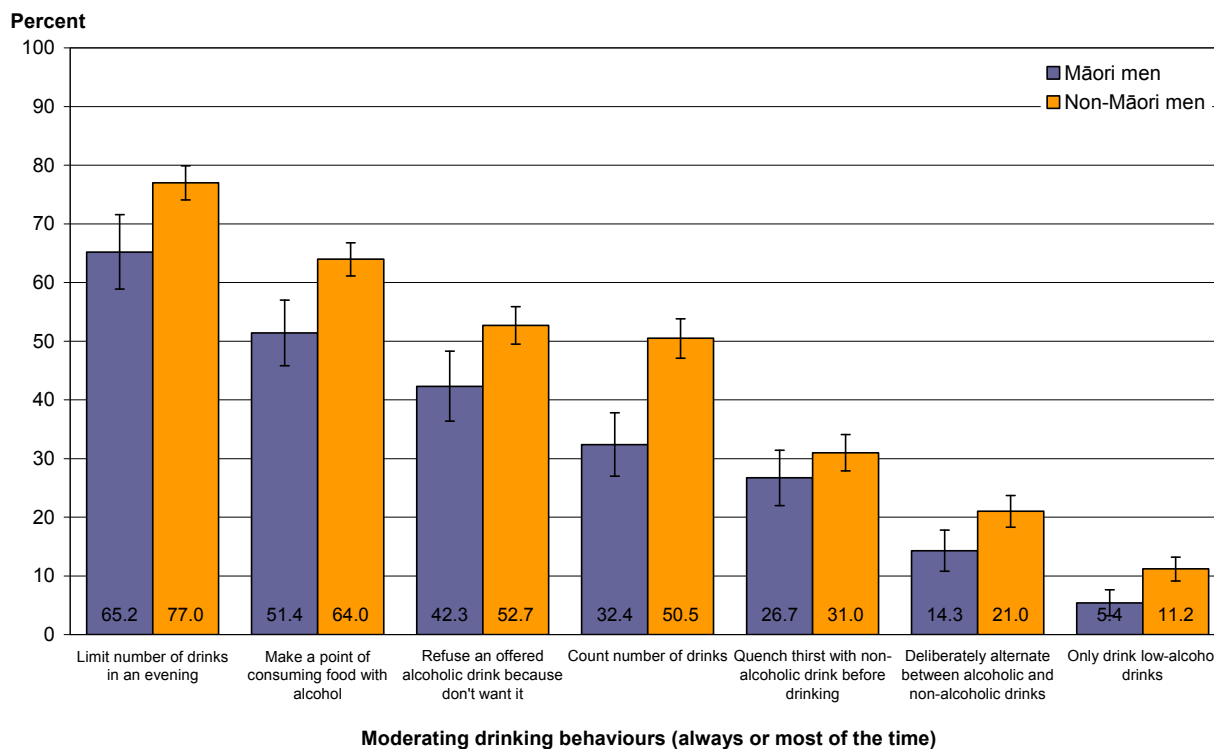
**Table 42:** Prevalence of using moderating drinking behaviours ‘always’ or ‘most of the time’, among Māori past-year drinkers aged 16–64 years (unadjusted prevalence)

Moderating drinking behaviour ‘always’ or ‘most of the time’	Prevalence (%) for Māori past-year drinkers (95% CI)
Limiting the number of drinks consumed in a night	67.6 (63.6–71.6)
Making a point of consuming food with alcohol	58.4 (54.8–62.0)
Refusing an alcoholic drink offered because of not really wanting it	53.0 (49.2–56.7)
Counting the number of drinks consumed when drinking	38.4 (34.6–42.1)
Quenching thirst with a non-alcoholic drink before drinking	32.4 (29.4–35.4)
Deliberately alternating between alcoholic drinks and non-alcoholic drinks	21.5 (18.8–24.1)
Drinking only low-alcohol drinks	10.4 (8.7–12.1)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Except for 'quenching thirst with non-alcoholic drink before drinking', Māori men were significantly less likely to have used each of the moderating drinking behaviours 'always' or 'most of the time' than non-Māori men, among past-year drinkers (adjusting for age) (Figure 140).

**Figure 140:** Prevalence of using moderating drinking behaviours 'always' or 'most of the time', among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)

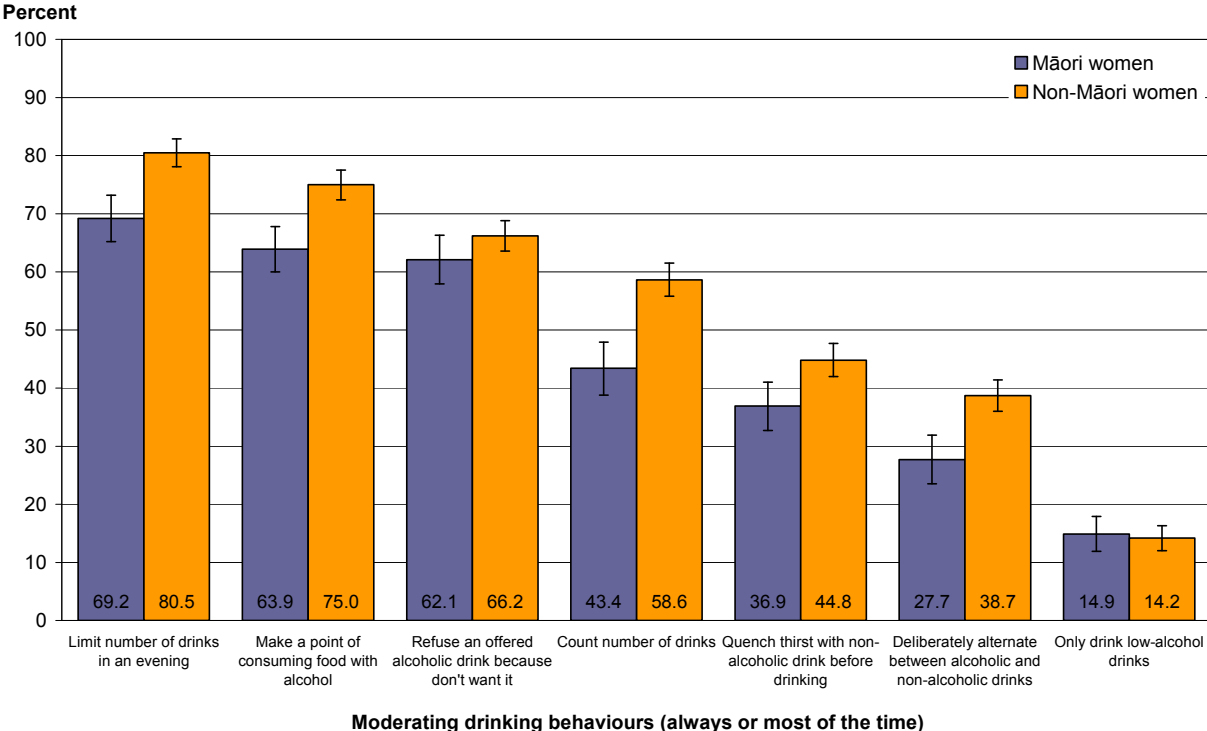


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Similarly, among past-year drinkers, Māori women were significantly less likely than non-Māori women to have used the moderating drinking behaviours except 'refusing an offered alcohol drink because of not wanting it' and 'only drinking low-alcohol drinks', 'always' or 'most of the time', adjusted for age (Figure 141).



**Figure 141:** Prevalence of using moderating drinking behaviours ‘always’ or ‘most of the time’, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Help-seeking behaviours

#### Help-seeking behaviours in the past year

Overall, 2.6% (1.8–3.5) of Māori past-year drinkers had received help to reduce their level of alcohol use in the past 12 months (Table 43). An additional 2.7% (1.8–3.6) had wanted help in the past year to reduce their level of alcohol use but had not received it.

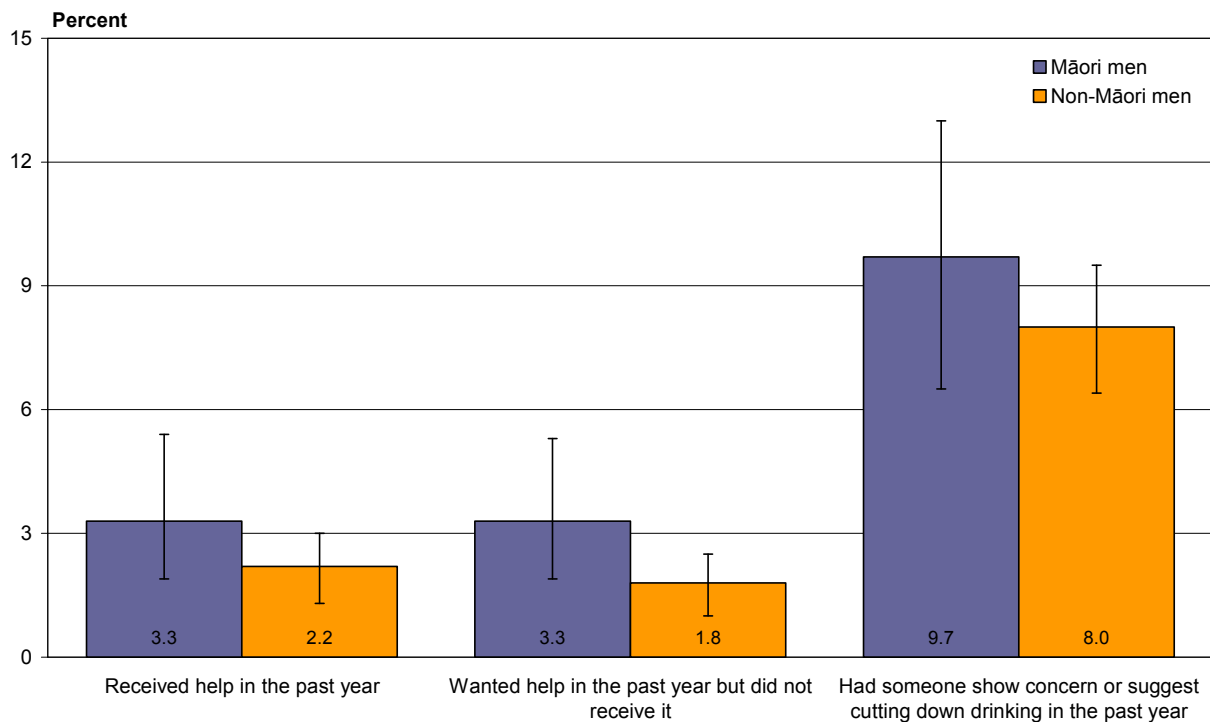
**Table 43:** Help-seeking behaviours in the past 12 months, among Māori aged 16–64 years (unadjusted prevalence)

Help-seeking behaviour in the past 12 months	Prevalence (%) (95% CI)	
	For Māori past-year drinkers	For total Māori population
Received help to reduce level of alcohol use	2.6 (1.8–3.5)	2.4 (1.6–3.1)
Wanted help to reduce level of alcohol use but did not receive it	2.7 (1.8–3.6)	2.4 (1.6–3.3)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

About 8% of Māori past-year drinkers reported that a relative, friend, doctor or other health worker had suggested they cut down their alcohol consumption in the past year (8.2%, 6.4–10.1). There were no significant differences between Māori men and non-Māori men in the prevalence of the individual help-seeking behaviours in the past year, adjusted for age (p-values > 0.05) (Figure 142).

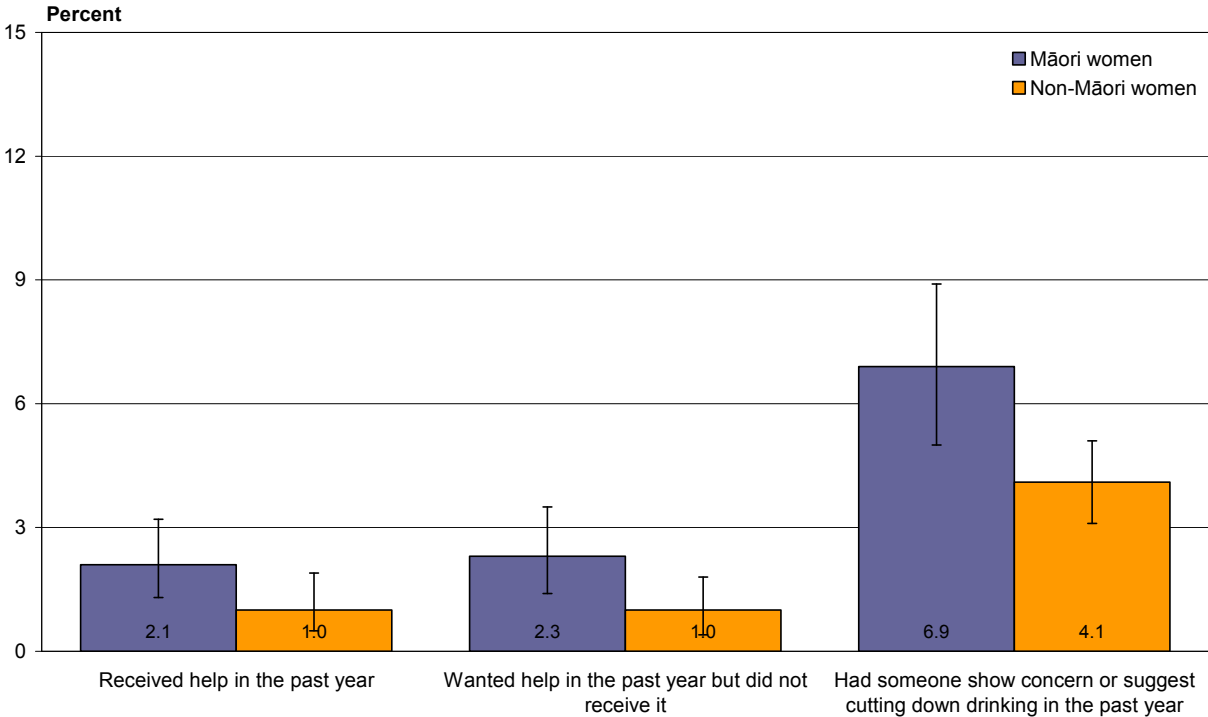
**Figure 142:** Help-seeking behaviours in the past year, among male past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Māori women were about twice as likely as non-Māori women to have wanted help but not received it, and were also significantly more likely to have had someone show concern or suggest cutting down in the past year, adjusted for age (p-values < 0.05) (Figure 143).

**Figure 143:** Help-seeking behaviours in the past year, among female past-year drinkers aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Receiving help in lifetime**

Overall, 6.1% (4.8–7.3) of Māori aged 16–64 years had ever received help to reduce their level of alcohol use in their lifetime. Among these people, about half had received help from a drug and alcohol counsellor (50.4%, 39.6–61.1). Other places where these people had received help included:

- friend or family member (23.9%, 14.5–35.5)
- GP (22.6%, 12.5–35.6)
- detox programme (19.6%, 11.1–30.8)
- psychiatrist or mental health service (11.8%, 6.0–20.2)
- Māori or Pacific health service (8.8%, 3.8–16.7)
- emergency department of a public hospital (2.6%, 0.3–8.8).

## Wanted help but had not received it in lifetime

In the total Māori population aged 16–64 years, 4.7% (3.5–5.8) had ever wanted help to reduce their level of alcohol use but had not received it. Among these people, the main reasons reported for not receiving help included:

- fear (34.1%, 19.5–51.2)
- social pressure (27.4%, 14.4–44.1)
- not knowing where to go (25.5%, 13.0–41.9)
- having no transport to get there (14.9%, 5.3–30.7)
- not being able to get in touch with the doctor or service (10.2%, 2.0–28.1)
- not being able to spare the time (9.0%, 3.4–18.3)
- service not being appropriate for type of use (8.1%, 2.8–18.2)
- not being able to get an appointment at the right time (5.4%, 1.4–13.6)
- there being no local service available (5.4%, 1.7–12.5)
- cost (2.5%, 0.4–7.8)
- lack of childcare (1.8%, 0.2–6.7).

## Harmful effects experienced due to alcohol use

### Harmful effects experienced due to own alcohol use

Overall, about one in ten Māori aged 16–64 years had experienced harmful effects on their friendships or social life in the past year due to their own drinking (10.3%, 8.1–12.5) (Table 44), while one in three Māori aged 16–64 years reported having ever experienced this harmful effect due to their own drinking in their lifetime (29.2%, 26.4–32.0). Other commonly experienced harmful effects experienced in the previous 12 months due to people's own alcohol use included harmful effects on home life, financial position and experiencing injuries.

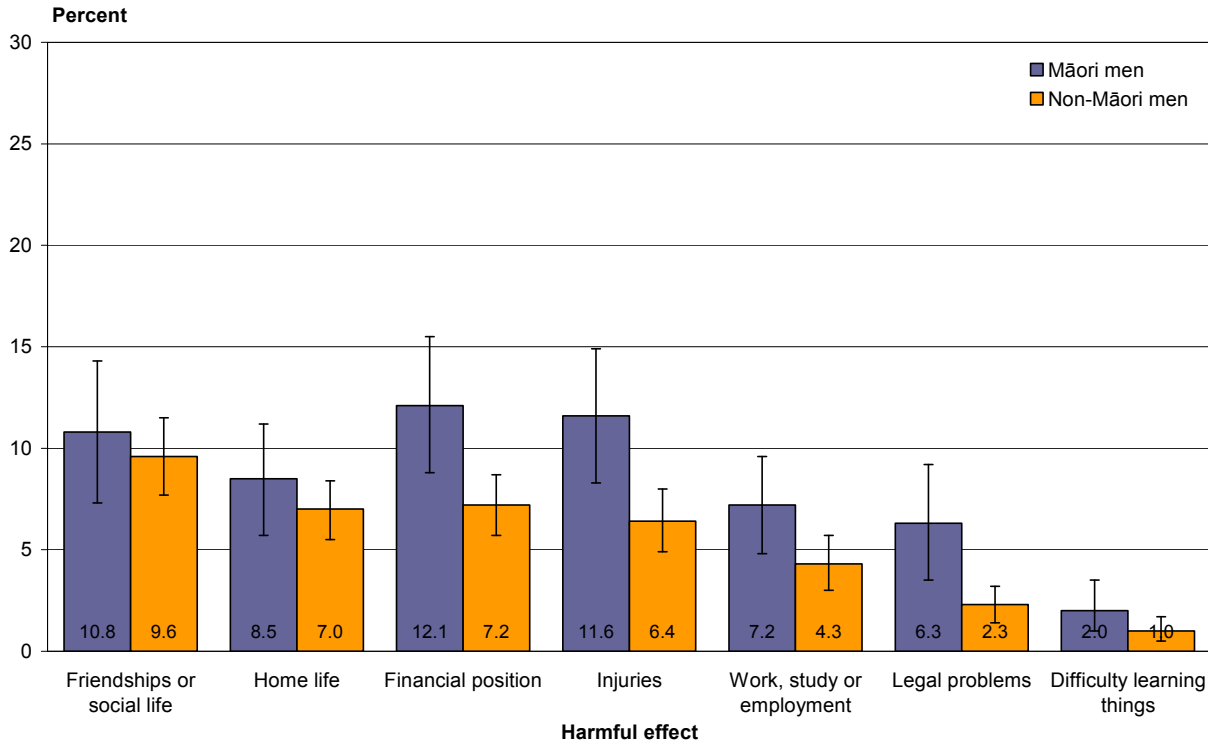
**Table 44:** Harmful effects experienced due to own alcohol use, among Māori aged 16–64 years (unadjusted prevalence)

Harmful effect	Prevalence (%) in the last 12 months (95% CI)		Prevalence (%) in lifetime (95% CI)
	For Māori past-year drinkers	For total Māori adults	For total Māori adults
Harmful effects on friendships or social life	11.8 (9.2–14.4)	10.3 (8.1–12.5)	29.2 (26.4–32.0)
Harmful effects on home life	10.1 (8.2–12.0)	8.9 (7.2–10.5)	24.5 (22.1–26.8)
Harmful effects on financial position	11.6 (9.3–13.9)	10.0 (8.0–12.0)	21.6 (19.2–24.0)
Had injuries	11.6 (9.4–13.7)	9.9 (8.1–11.8)	24.8 (22.4–27.3)
Harmful effects on work, study or employment	6.1 (4.7–7.6)	5.4 (4.1–6.8)	14.6 (12.6–16.7)
Had legal problems	5.0 (3.5–6.4)	4.4 (3.0–5.8)	14.8 (12.4–17.2)
Had difficulty learning things	1.6 (1.0–2.5)	1.7 (0.9–2.4)	6.3 (4.9–7.7)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Adjusted for age, Māori men were significantly more likely than non-Māori men to have experienced the following harmful effects in the past year due to their own alcohol use: harmful effects on their financial position; harmful effects on their work, study or employment; experiencing injuries; and having legal problems (p-values < 0.05) (Figure 144). There were no significant differences in the prevalences for Māori and non-Māori men for harmful effects on friendships or social life, harmful effects on home life, or having difficulty learning things in the past year.

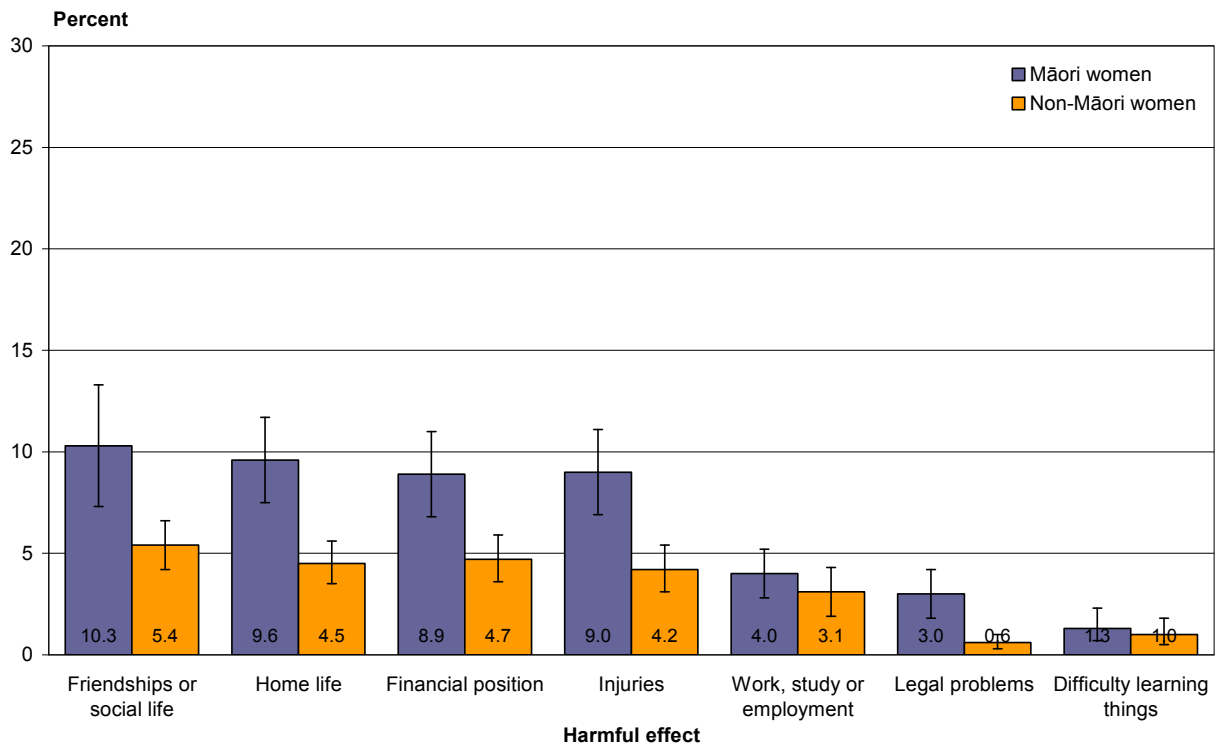
**Figure 144:** Prevalence of experiencing harmful effects in the past year due to own alcohol use, among men aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Adjusted for age, Māori women were about twice as likely as non-Māori women to have experienced the following harmful effects in the past year due to their own alcohol use: harmful effects on friendships or social life; harmful effects on home life; harmful effects on financial position; experiencing injuries; and having legal problems (Figure 145).

**Figure 145:** Prevalence of experiencing harmful effects in the past year due to own alcohol use, among women aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Harmful effects experienced due to someone else's alcohol use

Overall, one in five Māori adults aged 16–64 years reported experiencing harmful effects on their friendships or social life in the past year due to someone else's alcohol use (22.3%, 20.0–24.7) (Table 45). Almost half of all Māori adults reported having experienced this harm in their lifetime (47.2%, 44.0–50.4).

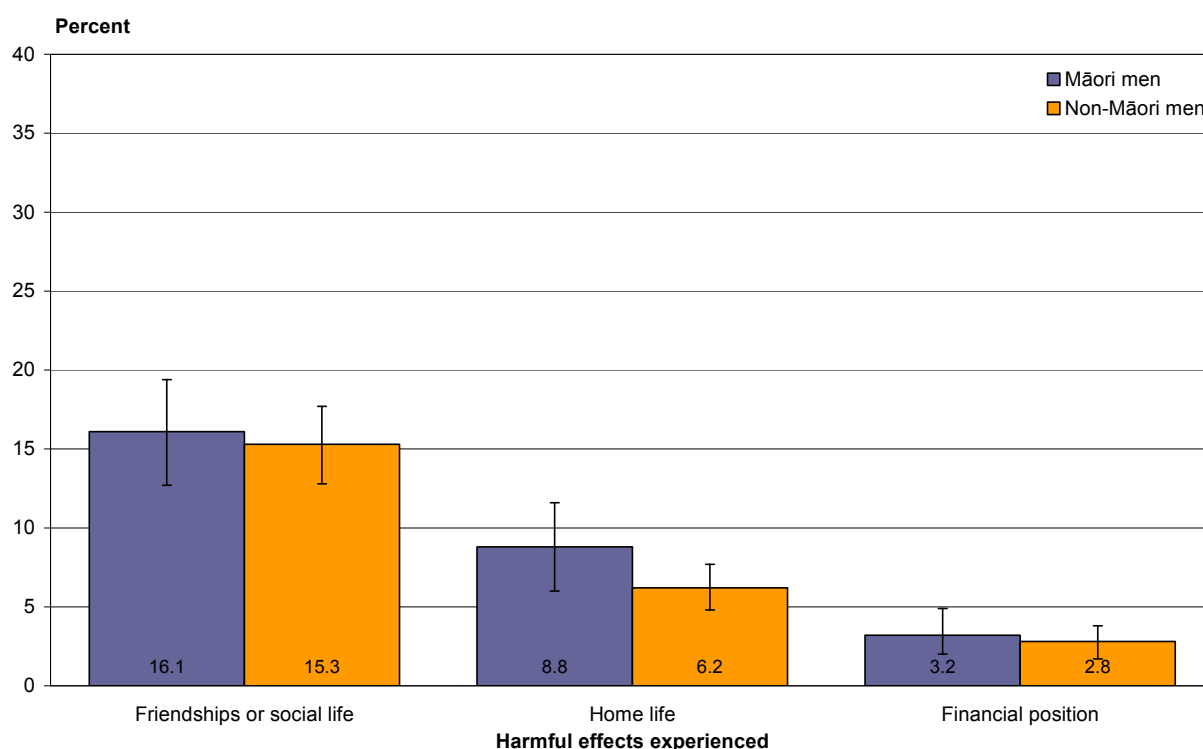
**Table 45:** Harmful effects experienced due to someone else's alcohol use, among Māori population aged 16–64 years (unadjusted prevalence)

Harmful effect due to someone else's alcohol use	Prevalence (%) for total Māori adults (95% CI)	
	In the last 12 months	In lifetime
Harmful effects on friendships or social life	22.3 (20.0–24.7)	47.2 (44.0–50.4)
Harmful effects on home life	14.9 (12.7–17.0)	34.4 (31.8–37.0)
Harmful effects on financial position	6.3 (5.0–7.7)	14.0 (12.1–15.9)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

There were no significant differences between Māori men and non-Māori men in the prevalence of having experienced harmful effects in the past year due to someone else's alcohol use, adjusted for age (p-values > 0.05) (Figure 146).

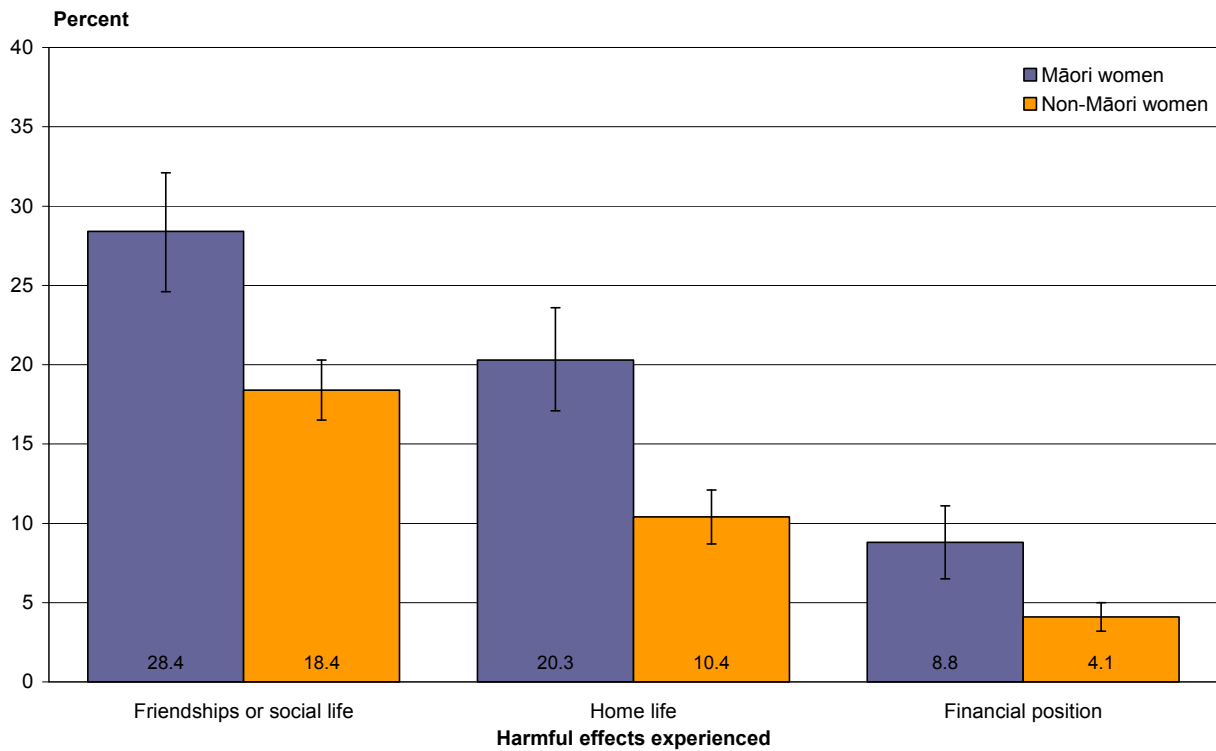
**Figure 146:** Harmful effects experienced in the past year due to someone else's alcohol use, among men aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

In the past year, Māori women were significantly more likely than non-Māori women to have experienced harmful effects due to someone else’s alcohol use on their friendships or social life, and were about twice as likely to have experienced harmful effects on their home life and/or financial position, adjusted for age (Figure 147).

**Figure 147:** Harmful effects experienced in the past year due to someone else’s alcohol use, among women aged 16–64 years, by Māori/non-Māori (age-standardised prevalence)

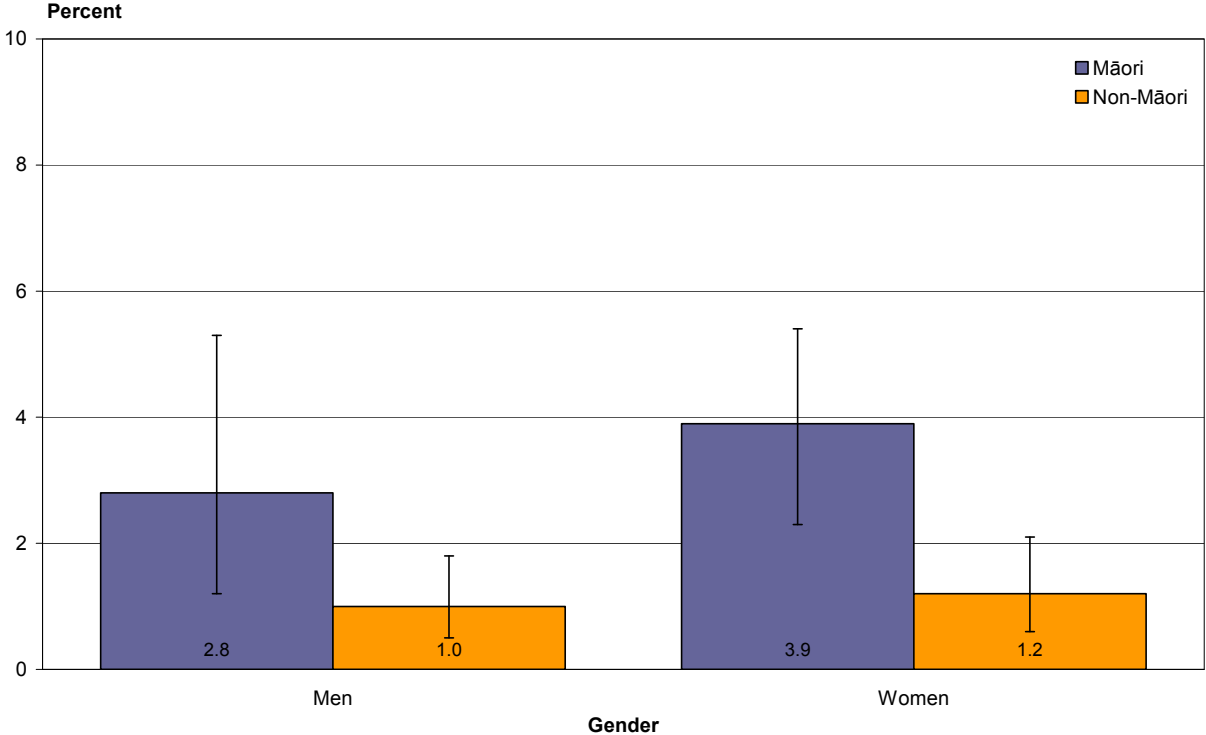


Source: 2007/08 New Zealand Alcohol and Drug Use Survey



Also, 3.3% (2.2–4.5) of Māori aged 16–64 years had been involved in a motor vehicle accident in the past 12 months due to someone else’s drinking. Māori women were significantly more likely than non-Māori women to have been involved in a motor vehicle accident in the past year due to someone else’s alcohol use, adjusted for age (Figure 148). There was no significant difference for men (p-value > 0.05).

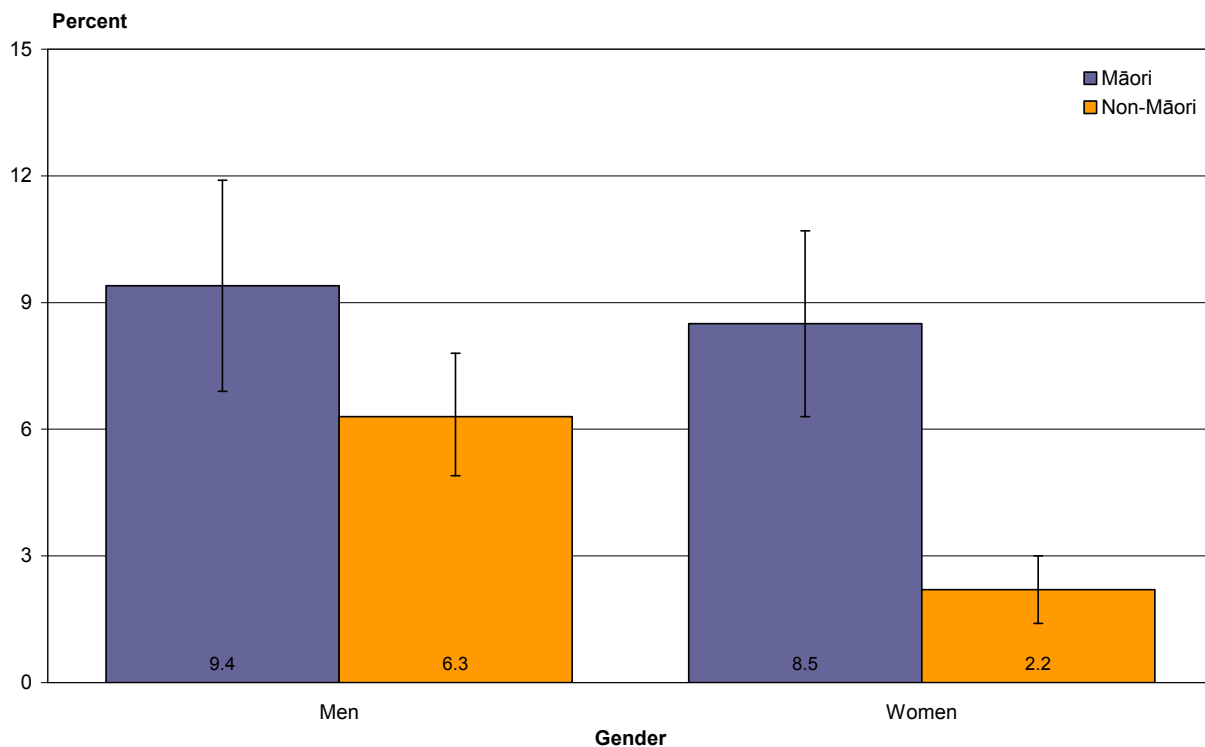
**Figure 148:** Involved in a motor vehicle accident due to someone else’s drinking in the past 12 months, among total population aged 16–64 years, by Māori/non-Māori and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Almost one in ten Māori (8.7%, 7.1–10.3) had been assaulted (physically and/or sexually) in the past year as a result of actual force or violence by someone who was under the influence of alcohol or drugs. For both men and women, Māori were significantly more likely than non-Māori to have been assaulted in the past year by someone under the influence of alcohol or drugs (p-values < 0.05) (Figure 149). In particular, Māori women were almost four times more likely than non-Māori women to have been assaulted in the past year by someone under the influence of alcohol or drugs in the past year, adjusted for age.

**Figure 149:** Been assaulted (physically and/or sexually) in the past 12 months as a result of actual force or violence by someone who was under the influence of alcohol or drugs, among total population aged 16–64 years, by Māori/non-Māori and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 14: Pacific Peoples and Alcohol Use

This chapter reports key findings of the 2007/08 NZADUS for Pacific peoples. Pacific peoples are a key policy priority group in the *National Drug Policy 2007–2012*, as levels of hazardous drinking patterns and increasing prevalence of alcohol consumption were identified as a growing concern for Pacific communities. It should be noted that Pacific peoples were necessarily treated as one group rather than as separate nations due to sample size issues.

Further analysis of hazardous drinking (according to the Alcohol Use Disorders Identification Test, or AUDIT screen) from the 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys for Pacific peoples is available in Appendix 2.

### Alcohol use

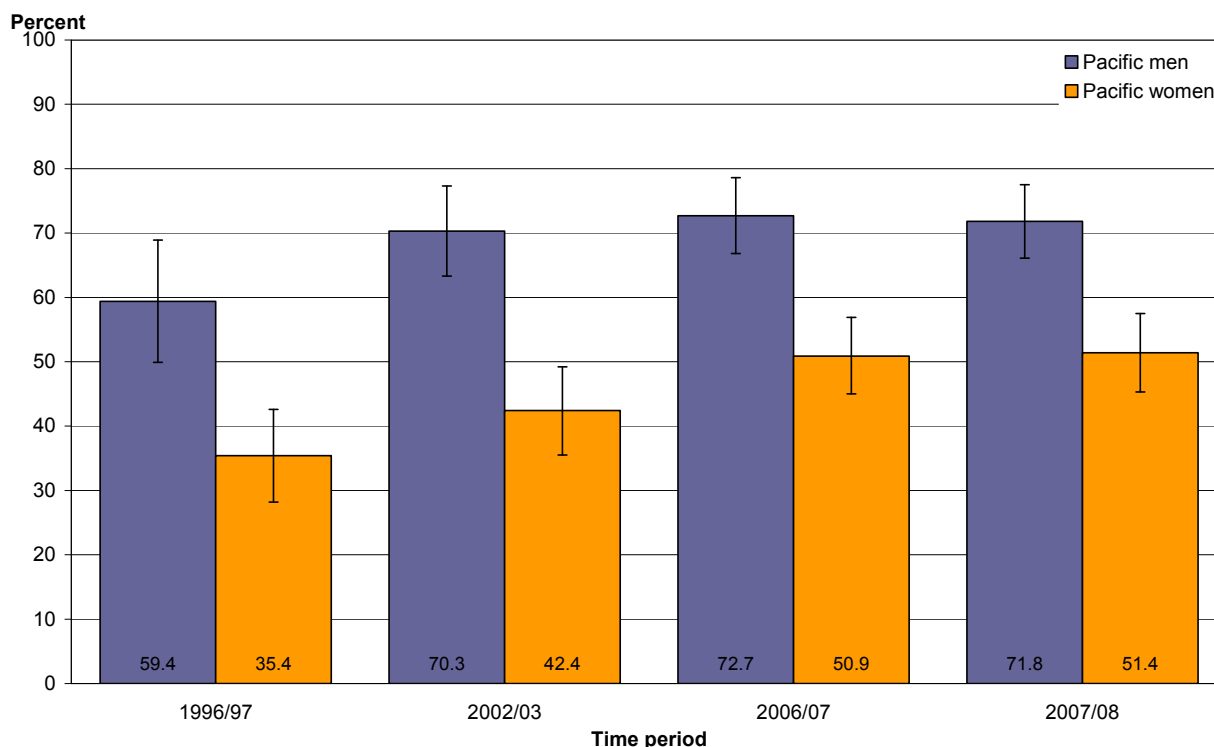
#### Alcohol use in past 12 months

Overall, six in ten Pacific peoples aged 16–64 years had consumed alcohol in the past year (61.2%, 57.0–65.3). Adjusted for age, Pacific peoples were significantly less likely to have consumed alcohol in the past year (61.2%, 57.1–65.2) than non-Pacific peoples (87.0%, 85.7–88.3).

There were notable gender differences in past-year alcohol consumption for Pacific peoples, with Pacific men significantly more likely to have consumed alcohol in the past year (71.8%, 66.1–77.5) than Pacific women (51.4%, 45.3–57.5), adjusting for age.

There have been increases in the prevalence of drinking alcohol in the past year among both Pacific men and Pacific women from 1996/97 to 2007/08 (p-values < 0.05), adjusted for age (Figure 150).

**Figure 150:** Prevalence of drinking alcohol in the past 12 months, among total Pacific population aged 16–64 years, by gender, 1996/97, 2002/03, 2006/07 and 2007/08 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys; 2007/08 New Zealand Alcohol and Drug Use Survey

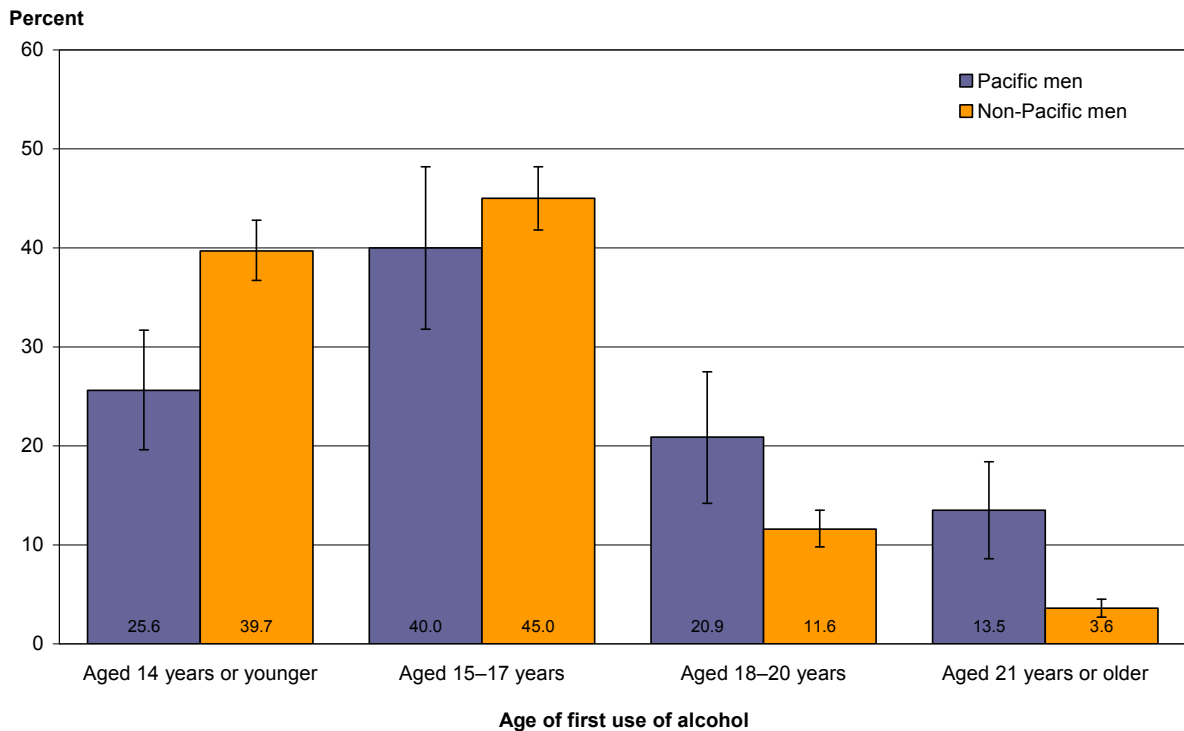
Note: Data from these surveys have been reanalysed to allow for comparability. Total response standard output for ethnic groups has been used.

### Age of first drinking alcohol

Overall, one in five (21.1%, 17.4–24.7) Pacific peoples aged 16–64 years who had ever consumed alcohol had first done so when aged 14 years or younger. Among Pacific peoples who had ever consumed alcohol, Pacific men had a higher prevalence (25.6%, 19.6–31.7) than Pacific women (15.1%, 10.8–19.5) of first consuming alcohol when aged 14 years or younger, adjusted for age.

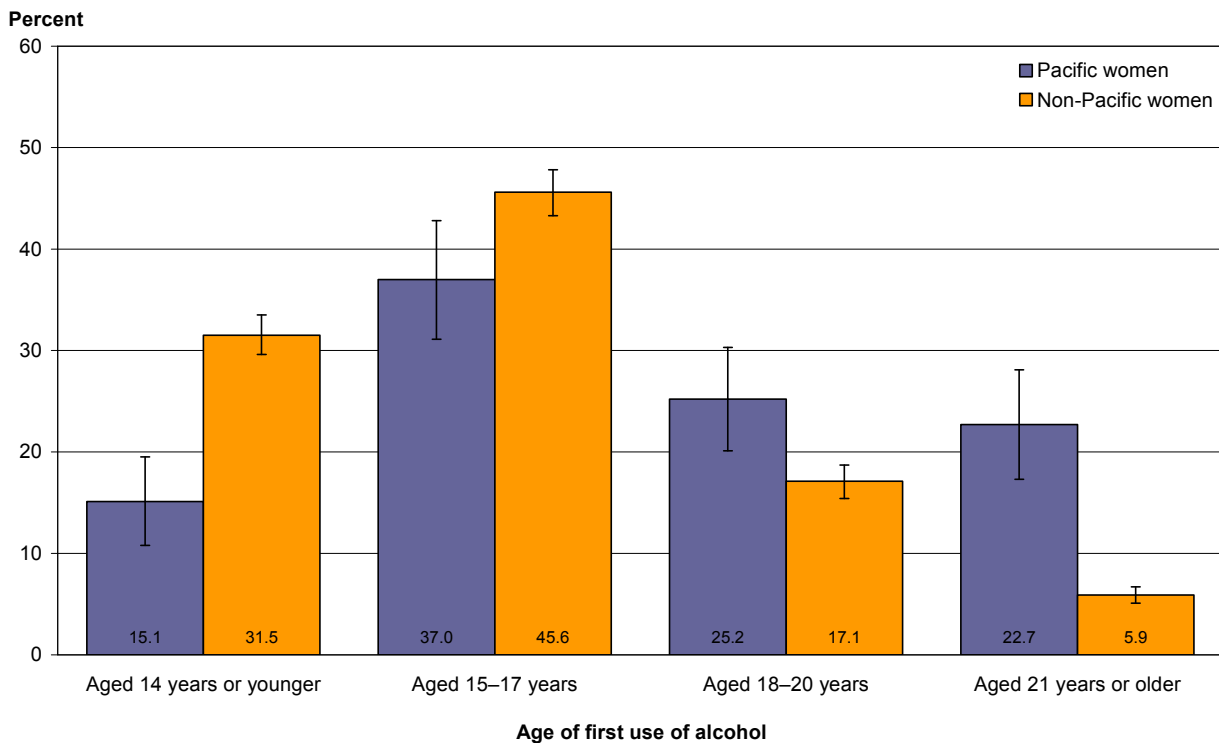
Among those people who had ever consumed alcohol, Pacific peoples were significantly less likely than non-Pacific peoples to have first tried alcohol when they were aged 14 years or younger, and significantly more likely than non-Pacific peoples to have first tried alcohol when they were aged 18–20 years or aged 21 years or over, for both men (Figure 151) and women (Figure 152).

**Figure 151:** Age of first use of alcohol, among men aged 16–64 years who had ever tried alcohol, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 152:** Age of first use of alcohol, among women aged 16–64 years who had ever tried alcohol, by Pacific/non-Pacific (age-standardised prevalence)



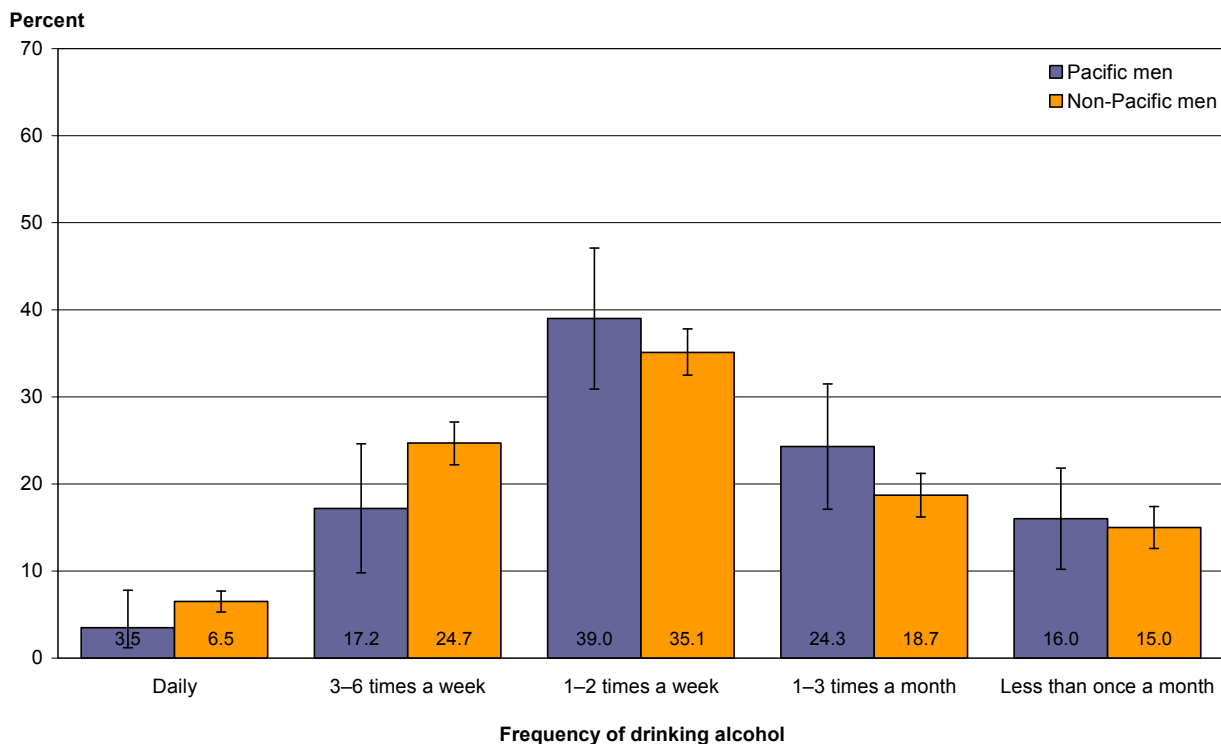
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Frequency of alcohol use

### Frequency of drinking alcohol

Two percent of Pacific past-year drinkers had consumed alcohol daily in the past year (2.0%, 0.9–4.0), while a further 13.5% (8.0–18.9) had consumed alcohol three to six times per week in the past year. For past-year drinkers, Pacific men were significantly less likely than non-Pacific men to have consumed alcohol three to six times a week ( $p$ -value < 0.05) (Figure 153). There were no significant differences between Pacific and non-Pacific men for drinking alcohol daily or one to two times per week.

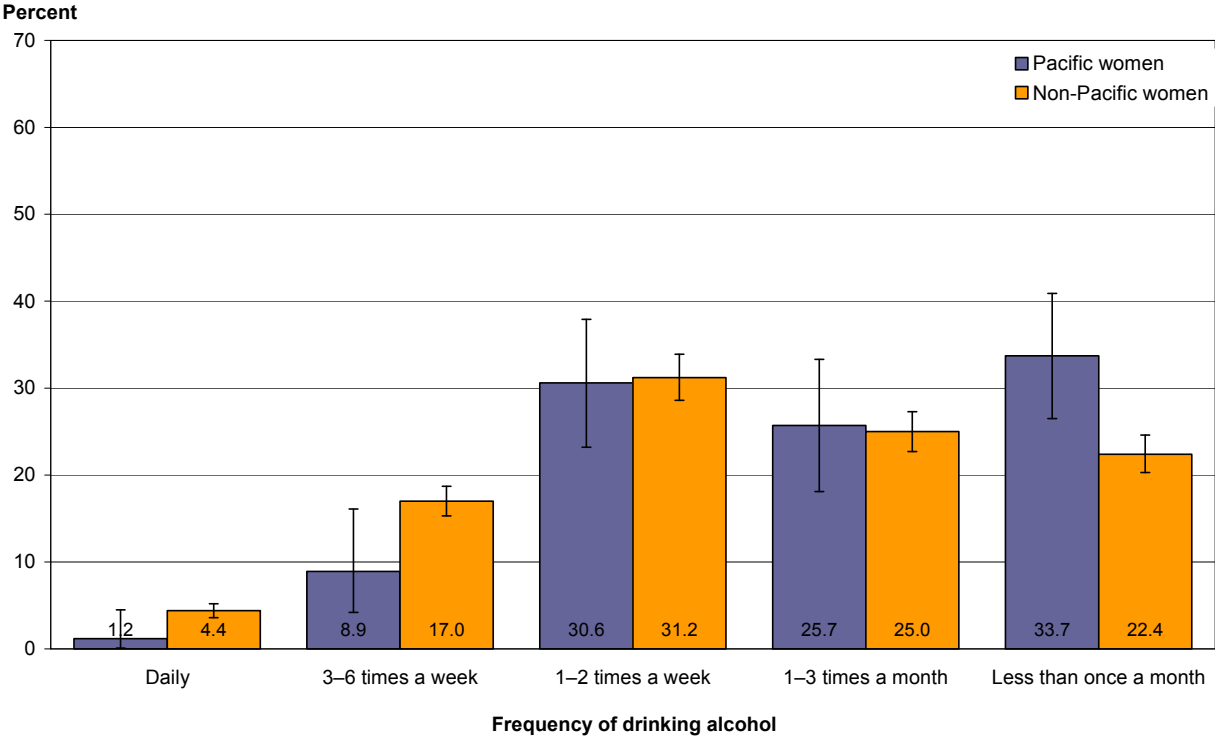
**Figure 153:** Frequency of drinking alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific women were significantly less likely to have consumed alcohol three to six times per week than non-Pacific women, adjusted for age (p-value < 0.05) (Figure 154). However, Pacific women were significantly more likely to have consumed alcohol less than once a month, compared with non-Pacific women.

**Figure 154:** Frequency of drinking alcohol in the past 12 months, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific women were significantly less likely to have consumed alcohol at least weekly in the past year (40.7%, 32.8–48.5) than Pacific men (59.7%, 51.9–67.5), adjusted for age.

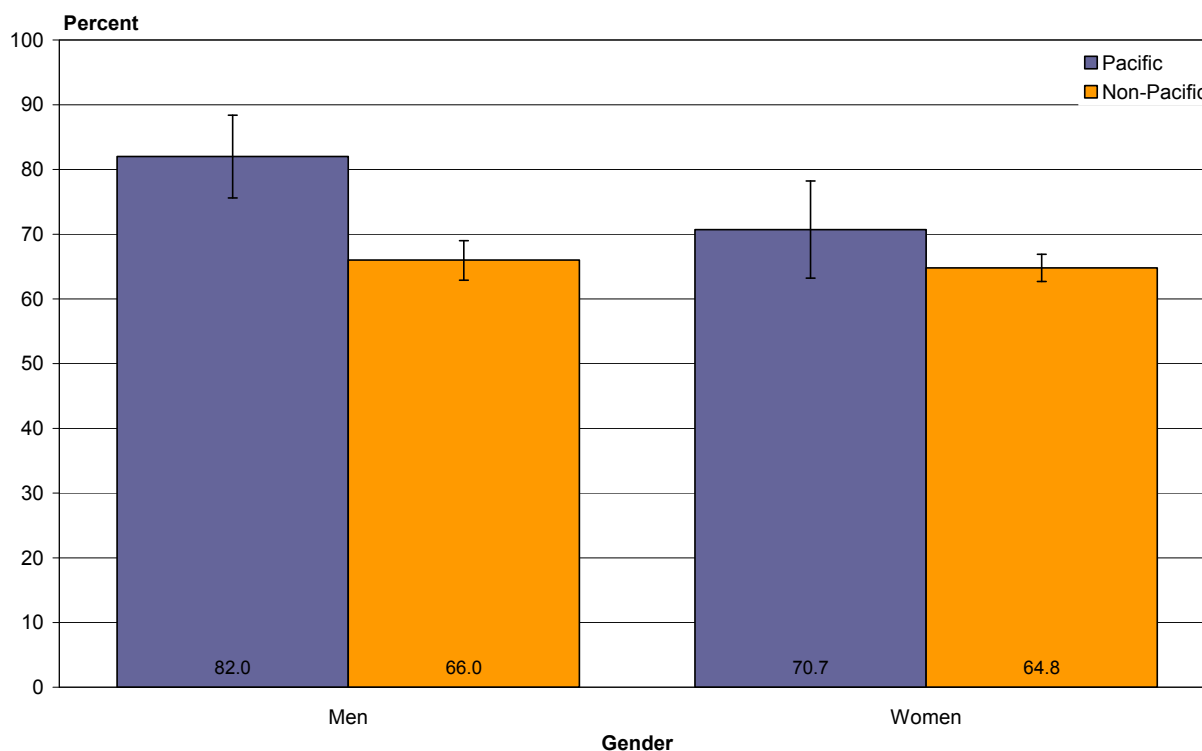
## Drinking large amounts of alcohol

### Consumed a large amount of alcohol on a drinking occasion in the past year

Three in four Pacific past-year drinkers (76.5%, 71.5–81.6) had consumed a large amount of alcohol on at least one drinking occasion in the past year. Adjusted for age, Pacific men were significantly more likely to have consumed a large amount of alcohol in the past year (82.0%, 75.6–88.4) than Pacific women (70.7%, 63.2–78.2) (p-value < 0.05).

Among past-year drinkers, Pacific men were significantly more likely to have consumed a large amount of alcohol in the past year than non-Pacific men, adjusted for age (Figure 155). There was no significant difference between Pacific women and non-Pacific women in this respect.

**Figure 155:** Consumed a large amount of alcohol on at least one drinking occasion in the last 12 months, among past-year drinkers aged 16–64 years, by Pacific/non-Pacific and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

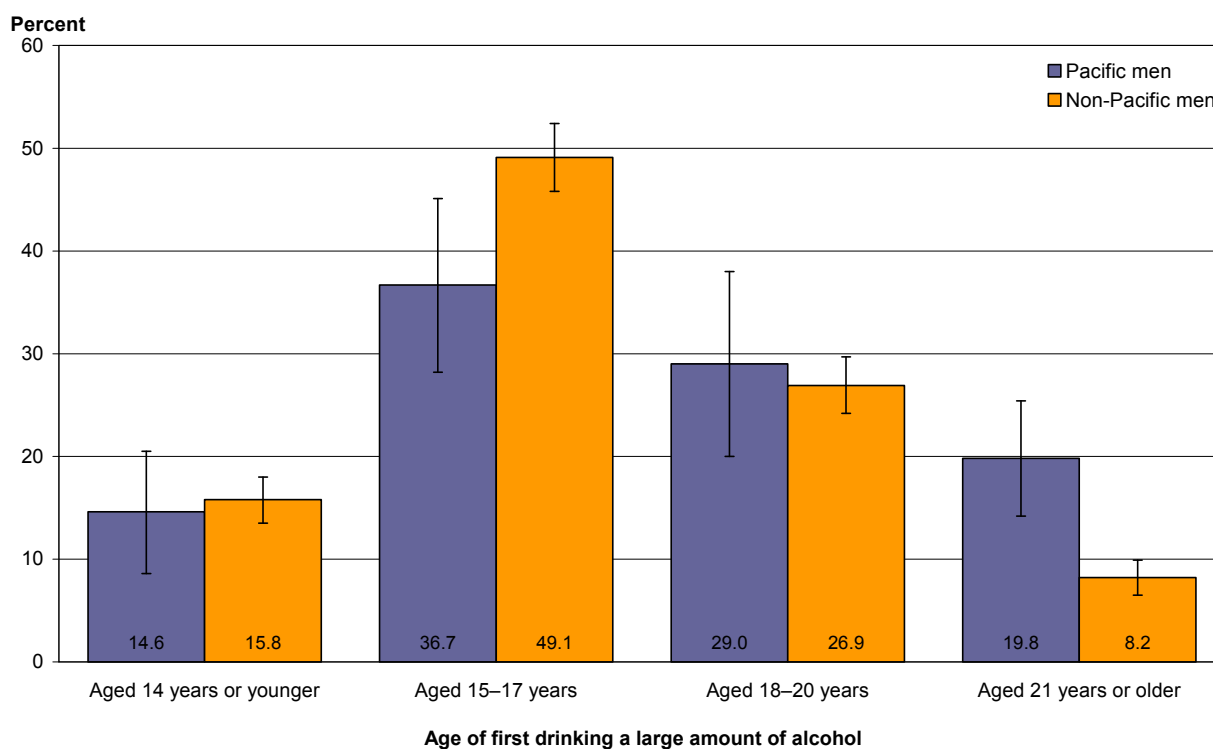


## Age of having first consumed a large amount of alcohol

Overall, one in nine Pacific peoples who had ever consumed a large amount of alcohol had first done so when aged 14 years or younger (11.3%, 7.6–15.0). Among Pacific peoples who had ever consumed a large amount of alcohol, Pacific men (14.6%, 8.6–20.5) were significantly more likely than Pacific women (6.3%, 3.5–10.4) to have first consumed a large amount of alcohol when aged 14 years or younger, adjusted for age ( $p$ -value < 0.05).

Among men who had ever consumed a large amount of alcohol, Pacific men were significantly less likely than non-Pacific men to have first consumed a large amount of alcohol when they were aged 15–17 years, adjusted for age (Figure 156). Furthermore, Pacific men were significantly more likely to have first consumed a large amount of alcohol when they were aged 21 years or older than non-Pacific men.

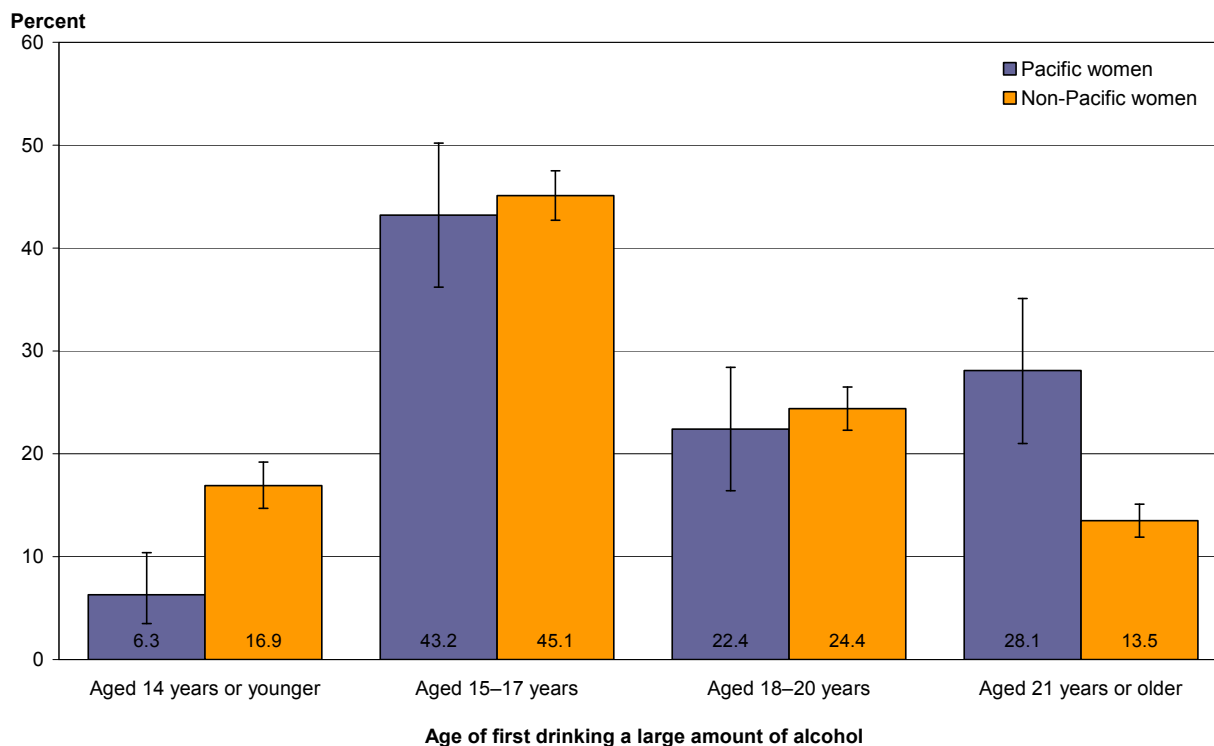
**Figure 156:** Age of first having consumed a large amount of alcohol, among men aged 16–64 years who had ever consumed a large amount of alcohol, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Pacific women were significantly less likely to have first consumed a large amount of alcohol when they were aged 14 years or younger, and significantly more likely to have first consumed a large amount of alcohol when they were aged 21 years or older, compared with non-Pacific women, when adjusting for age (Figure 157).

**Figure 157:** Age of first having consumed a large amount of alcohol, among women aged 16–64 years who had ever consumed a large amount of alcohol, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Frequency of consuming a large amount of alcohol in the past year

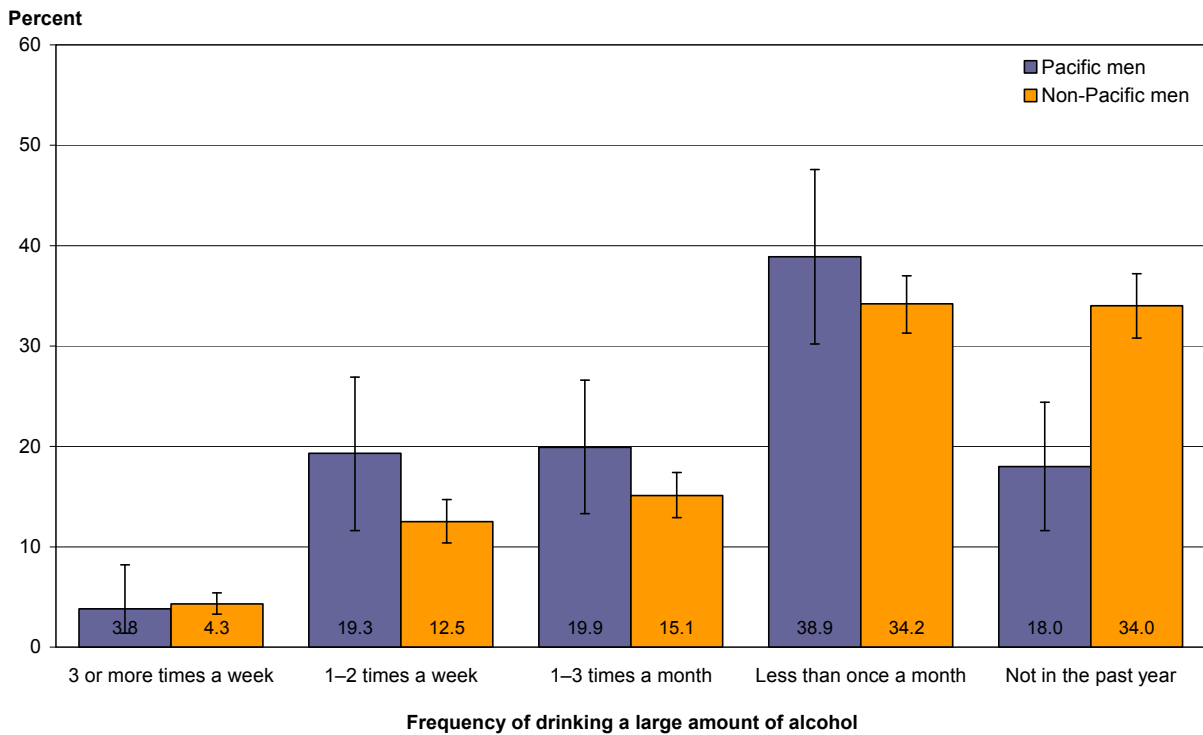
Among Pacific past-year drinkers, 3.1% (1.7–5.2) had consumed a large amount of alcohol on a drinking occasion three or more times a week in the past year, while a further 16.0% (11.4–20.6) had consumed a large amount one to two times a week.

There was no significant difference between Pacific men and Pacific women in the prevalence of drinking a large amount of alcohol three or more times a week in the past year, adjusted for age. However, Pacific women were significantly more likely not to have consumed a large amount of alcohol in the past year (29.3%, 21.8–36.8) compared with Pacific men (18.0%, 11.6–24.4), adjusted for age (p-value < 0.05).

Adjusted for age, Pacific male past-year drinkers were significantly less likely than non-Pacific male past-year drinkers to have not consumed a large amount of alcohol in the past year (Figure 158).

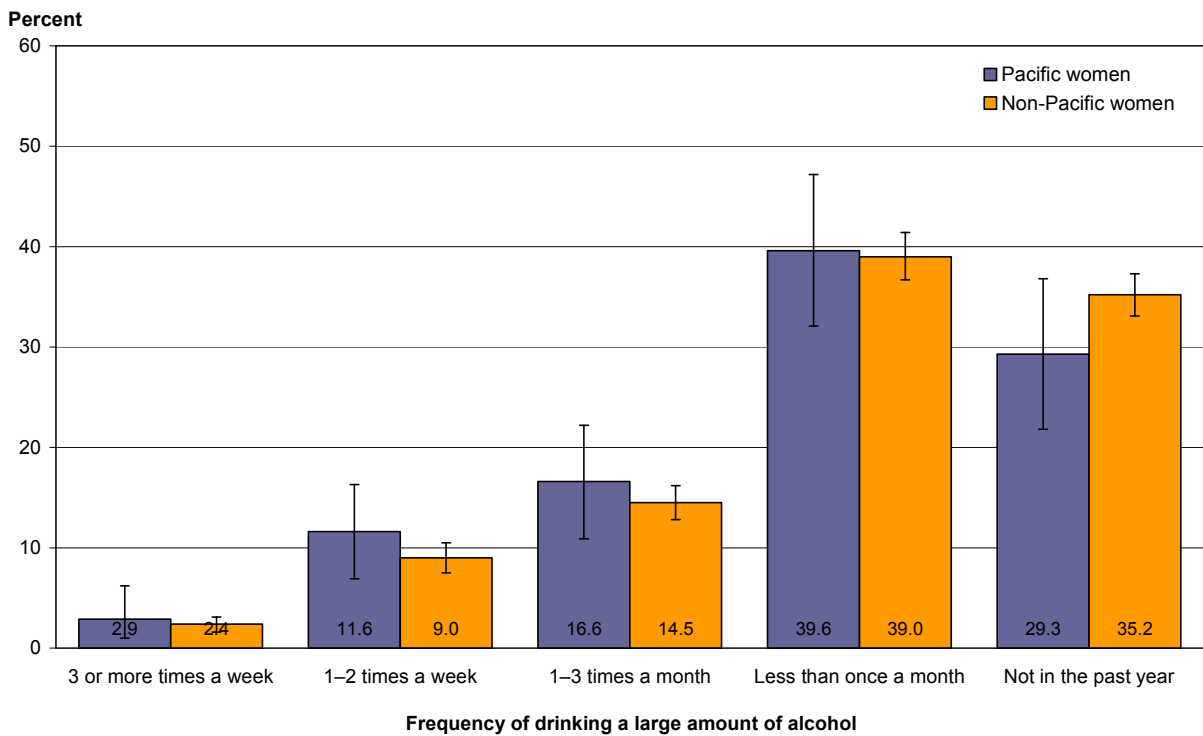
There were no significant differences between Pacific and non-Pacific women in the frequency of drinking a large amount of alcohol in any of the five categories (Figure 159).

**Figure 158:** Frequency of drinking a large amount of alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 159:** Frequency of drinking a large amount of alcohol in the last 12 months, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



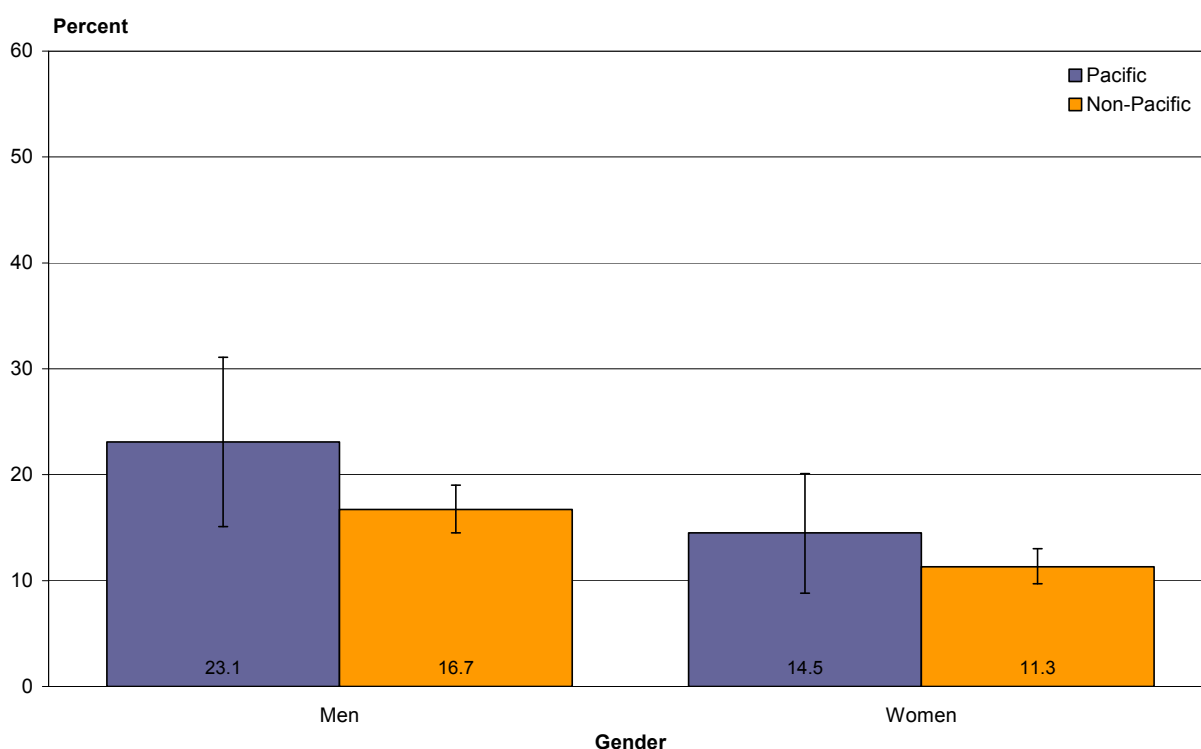
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Drinking a large amount of alcohol at least once a week in the past year

Overall, one in five Pacific past-year drinkers had consumed a large amount of alcohol at least weekly in the past year (19.1%, 14.3–24.0). Among past-year drinkers, there was no significant difference between Pacific men and Pacific women in the prevalence of having consumed a large amount of alcohol at least weekly in the past year, adjusted for age (Figure 160).

There was no significant difference between Pacific and non-Pacific men, or between Pacific and non-Pacific women, in relation to having consumed a large amount of alcohol at least weekly in the past year, adjusted for age (Figure 160).

**Figure 160:** Consumed a large amount of alcohol at least weekly in the last 12 months, among past-year drinkers aged 16–64 years, by Pacific/non-Pacific and gender (age-standardised prevalence)



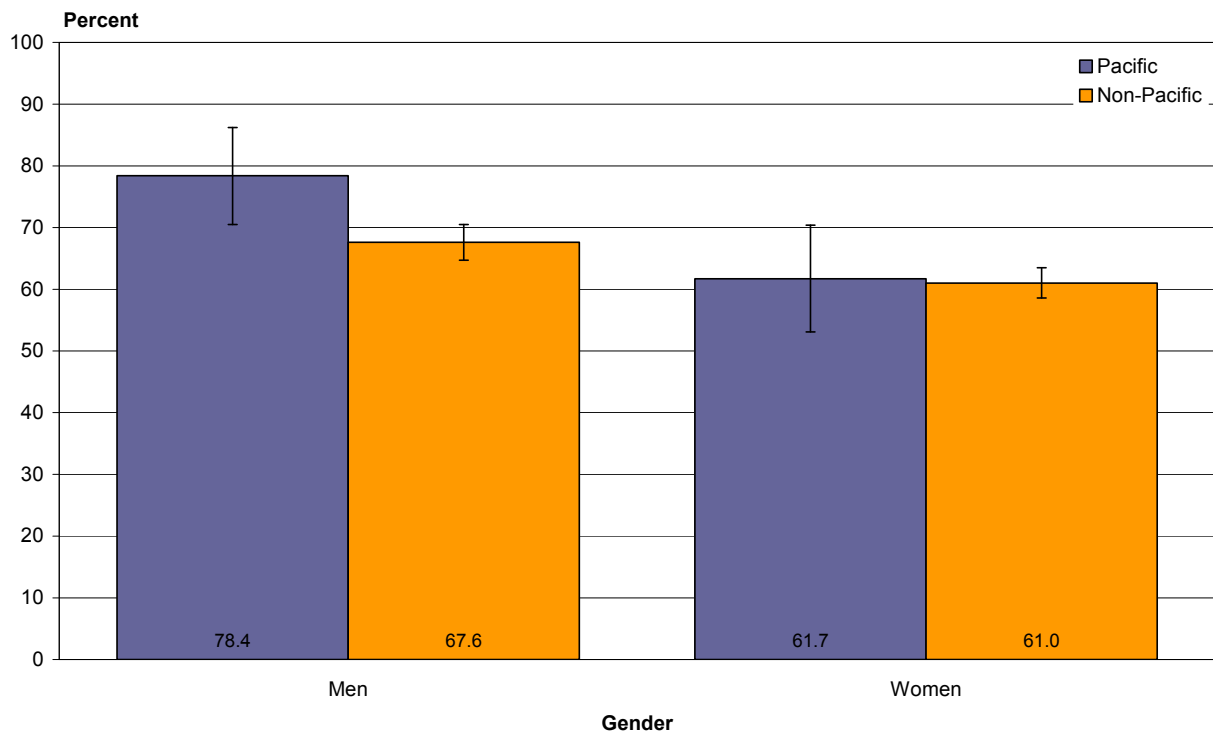
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Drinking enough to feel drunk in the past year

Seven in ten Pacific past-year drinkers (70.9%, 65.3–76.4) had consumed enough alcohol to feel drunk in the past year. Among past-year drinkers, Pacific men were significantly more likely to have consumed enough alcohol to feel drunk in the previous 12 months (78.4%, 70.5–86.2) than Pacific women (61.7%, 53.1–70.4), adjusted for age.

Pacific men were significantly more likely than non-Pacific men to have consumed enough alcohol to feel drunk in the past year (Figure 161). There was no significant difference between Pacific and non-Pacific women.

**Figure 161:** Drank enough alcohol to feel drunk at least once in the last 12 months, among past-year drinkers aged 16–64 years, by Pacific/non-Pacific and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

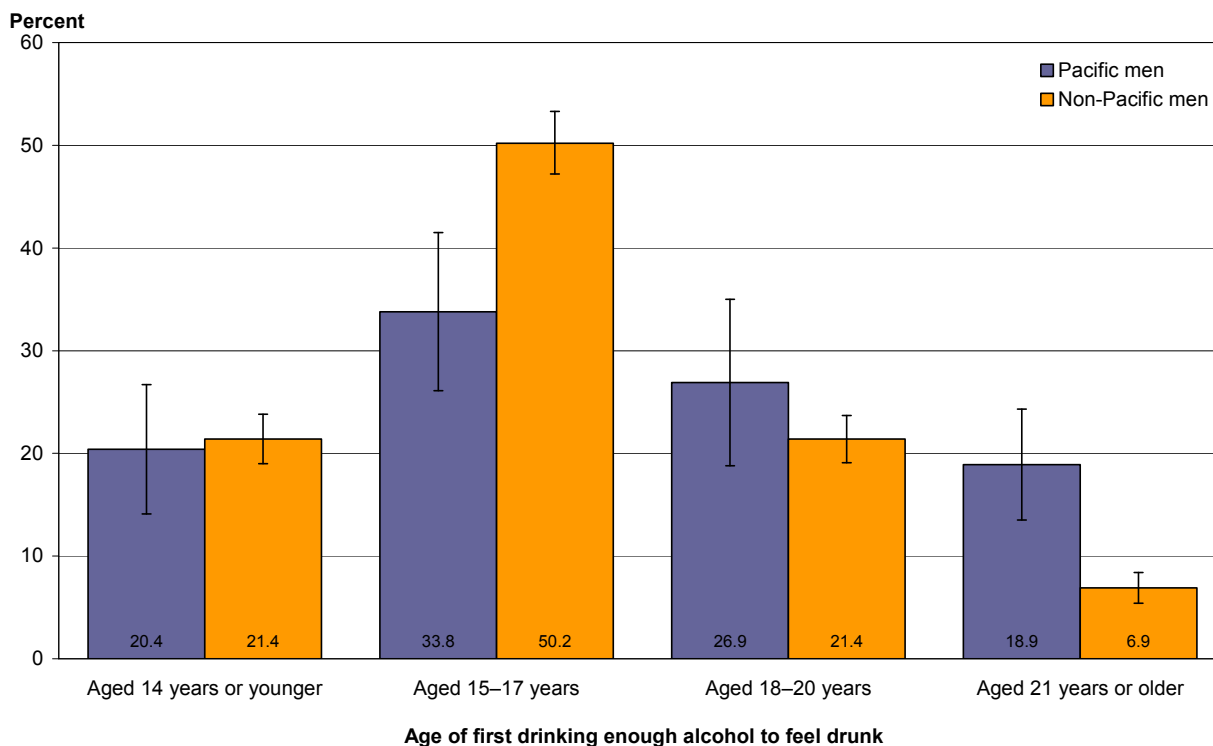
## Age of having first consumed enough alcohol to feel drunk

Among Pacific peoples who had ever been drunk, 17.1% (12.9–21.2) had first consumed enough alcohol to feel drunk when they were aged 14 years or younger. Pacific men were significantly more likely to have been 14 years or younger when they first got drunk (20.4%, 14.1–26.7) than Pacific women (12.0%, 6.9–17.2), adjusted for age ( $p$ -value < 0.05).

Among people who had ever been drunk, there was no significant difference between Pacific men and non-Pacific men in the prevalence of having first been drunk when aged 14 years or younger. However, Pacific men were less likely than non-Pacific men to have first consumed enough alcohol to feel drunk when aged 15–17 years, adjusted for age (Figure 162).

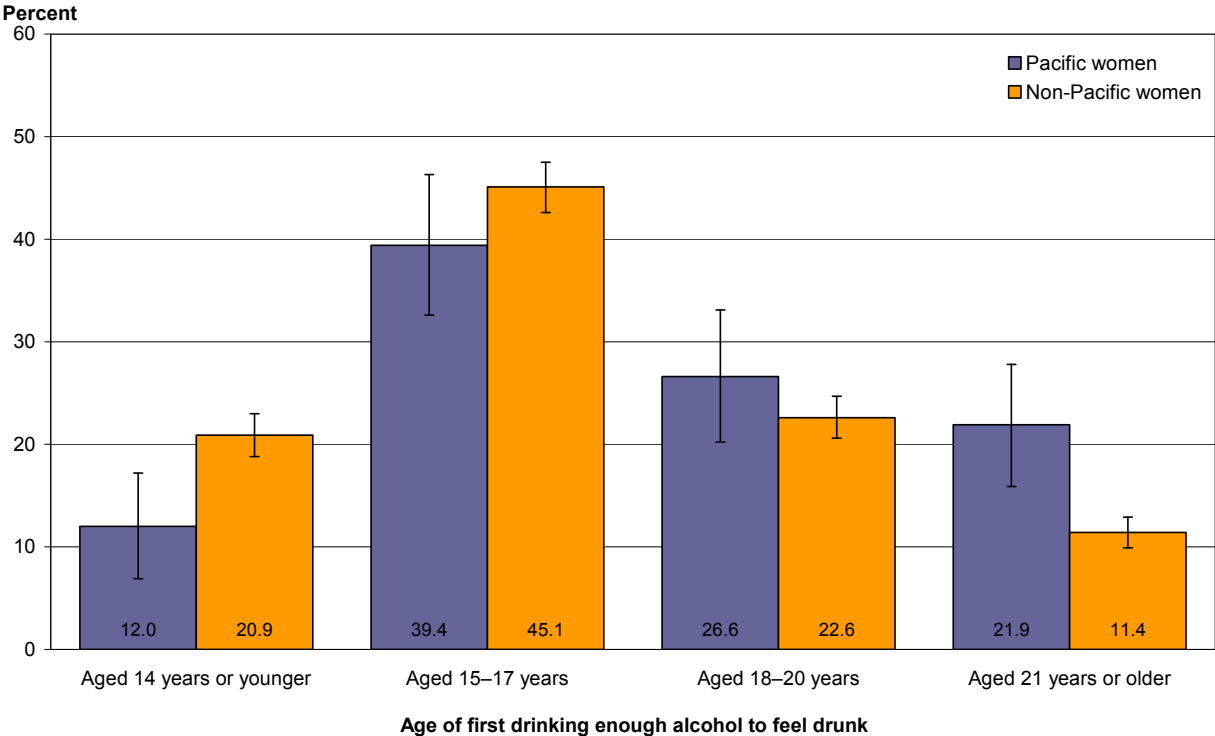
Pacific women were significantly less likely to have first consumed enough alcohol to feel drunk when aged 14 years or younger (12.0%, 6.9–17.2) than non-Pacific women (20.9%, 18.8–23.0), adjusted for age (Figure 163). Pacific men and women were more likely than non-Pacific men and women to have first consumed enough alcohol to feel drunk when aged 21 years or older, adjusted for age.

**Figure 162:** Age of first drinking enough alcohol to feel drunk, among men aged 16–64 years who had ever consumed enough alcohol to feel drunk, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 163:** Age of first drinking enough alcohol to feel drunk, among Pacific women aged 16–64 years who had ever consumed enough alcohol to feel drunk, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Risky behaviours

### Risky behaviours while feeling under the influence of alcohol

It should be noted that the results in this section are reported for all past-year drinkers, and were not limited to those people who had participated in the behaviour (ie, driving a motor vehicle or operating machinery) in the past year.

Overall, one in four Pacific past-year drinkers had driven in the last year while feeling under the influence of alcohol (24.9%, 19.6–30.2), representing one in seven (15.1%, 11.8–18.5) people in the total Pacific population aged 16–64 years (Table 46). Also, one in seven Pacific past-year drinkers had worked while feeling under the influence of alcohol in the previous 12 months (15.4%, 10.9–19.9).

**Table 46:** Risky behaviours reported while feeling under the influence of alcohol in the last 12 months, among Pacific peoples aged 16–64 years (unadjusted prevalence)

Risky behaviour in the last 12 months	Prevalence (%) for Pacific past-year drinkers (95% CI)	Prevalence (%) for total Pacific adults (95% CI)
Driving while feeling under the influence of alcohol	24.9 (19.6–30.2)	15.1 (11.8–18.5)
Working while feeling under the influence of alcohol	15.4 (10.9–19.9)	9.3 (6.5–12.1)
Operating machinery while feeling under the influence of alcohol	7.7 (4.3–11.1)	4.7 (2.6–6.7)

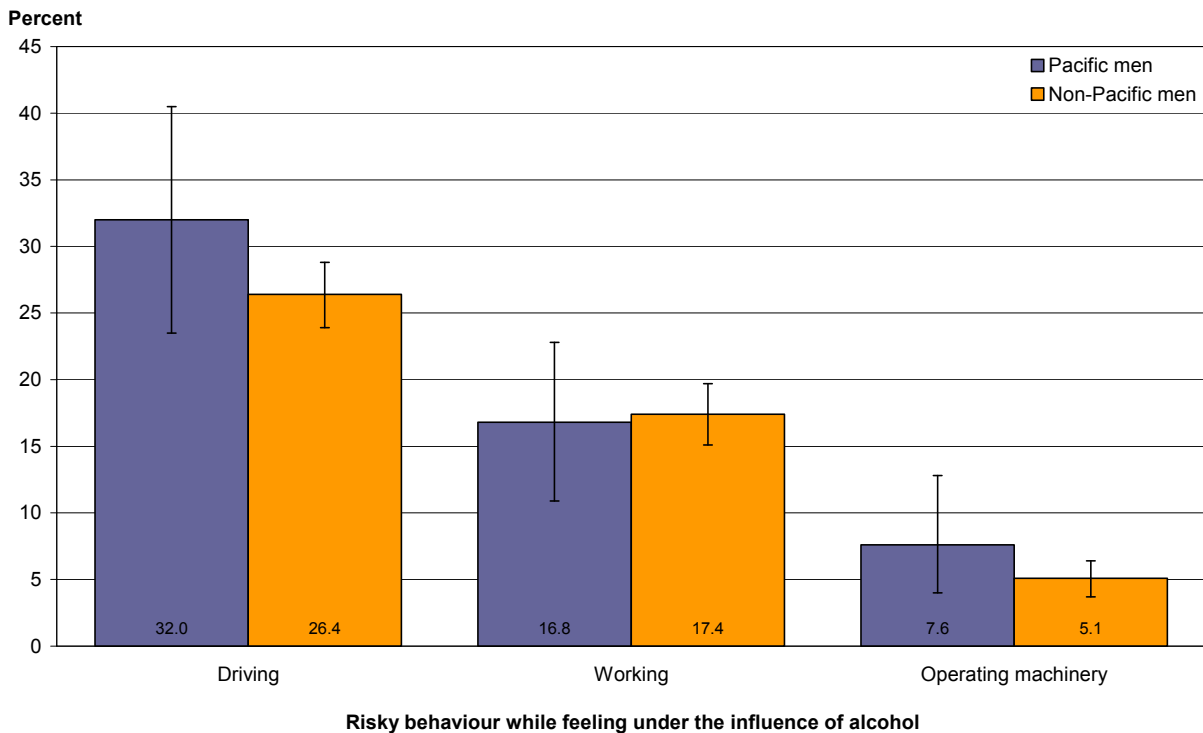
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific men (32.0%, 23.5–40.5) were significantly more likely than Pacific women (17.5%, 11.5–23.5) to have reported driving while feeling under the influence of alcohol in the past year, adjusted for age. There were no significant differences between Pacific men and women in their reports of working or operating machinery while feeling under the influence of alcohol in the past year, adjusted for age.

There was no significant difference for driving, working or operating machinery while feeling under the influence of alcohol in the past year between Pacific and non-Pacific men (Figure 164). Pacific women were significantly more likely than non-Pacific women to have reported operating machinery while feeling under the influence of alcohol in the past year, when adjusted for age (Figure 165).

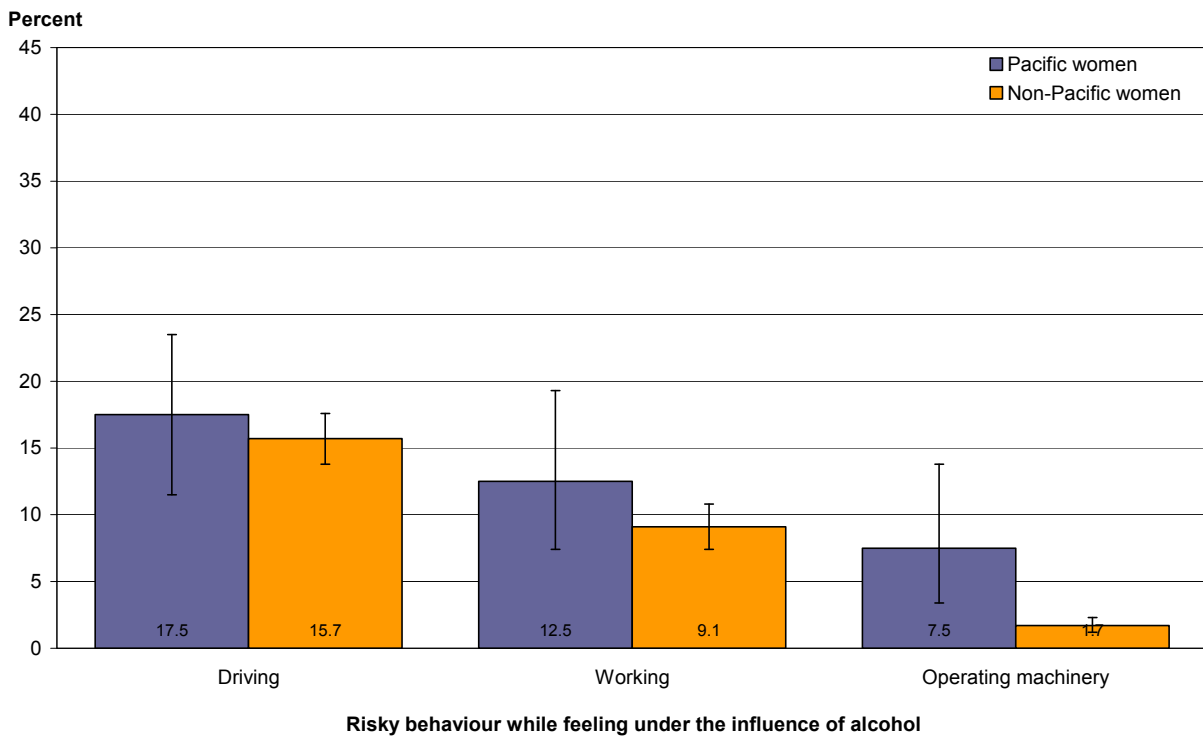


**Figure 164:** Risky behaviours reported while feeling under the influence of alcohol in the last 12 months, among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure 165:** Risky behaviours reported while feeling under the influence of alcohol in the last 12 months, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Using alcohol with other drugs

One in two Pacific past-year drinkers had used alcohol and tobacco at the same time in the past year (47.9%, 42.7–53.0) (Table 47). Further, one in eight Pacific past-year drinkers had used cannabis and alcohol at the same time in the previous 12 months (13.1%, 9.1–17.0).

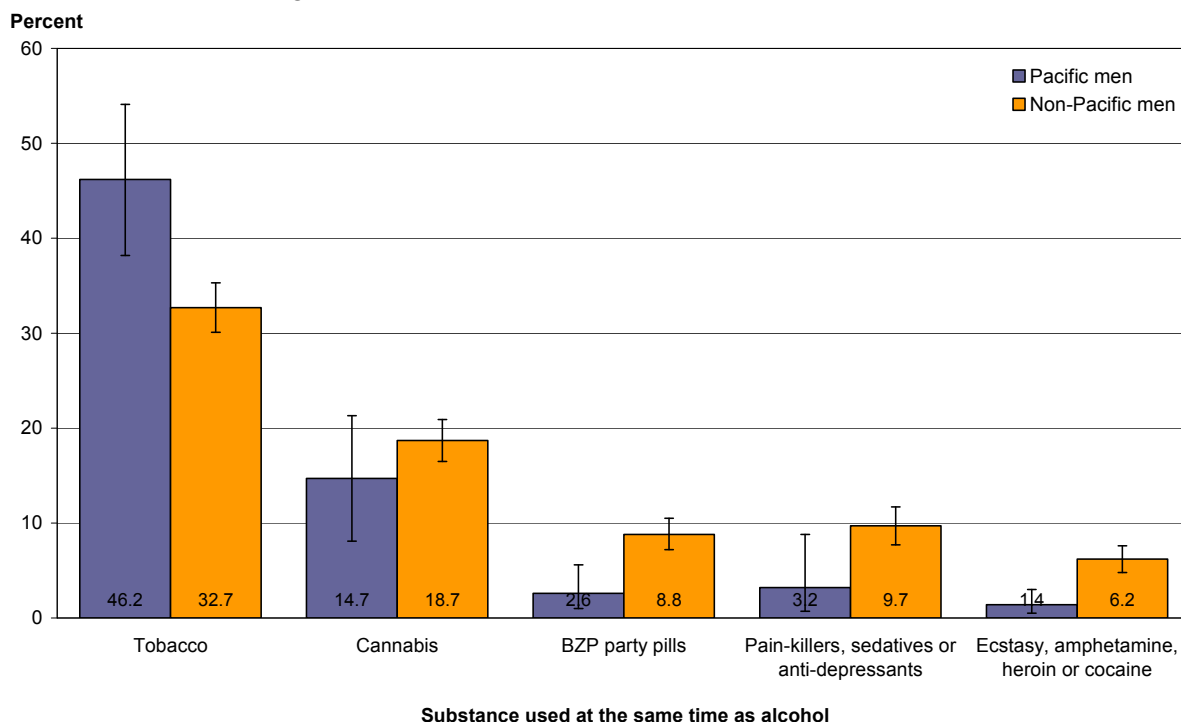
**Table 47:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among Pacific past-year drinkers aged 16–64 years (unadjusted prevalence)

Combinations of drugs used on at least one occasion in the last 12 months	Prevalence (%) for Pacific past-year drinkers (95% CI)
Alcohol and tobacco	47.9 (42.7–53.0)
Alcohol and cannabis	12.9 (8.9–16.9)
Alcohol and BZP party pills	4.0 (1.9–7.2)
Alcohol and pain-killers, sedatives or anti-depressants	4.2 (1.9–7.9)
Alcohol and ecstasy, amphetamines, heroin or cocaine	1.8 (0.7–3.9)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific men were significantly more likely than non-Pacific men to have used alcohol at the same time as using tobacco in the last 12 months, when adjusted for age (Figure 166). Non-Pacific men were significantly more likely to have used alcohol with BZP party pills, pain-killers/sedatives/anti-depressants and ecstasy/amphetamine/heroin/cocaine in the past year, compared with Pacific men (p-values < 0.05).

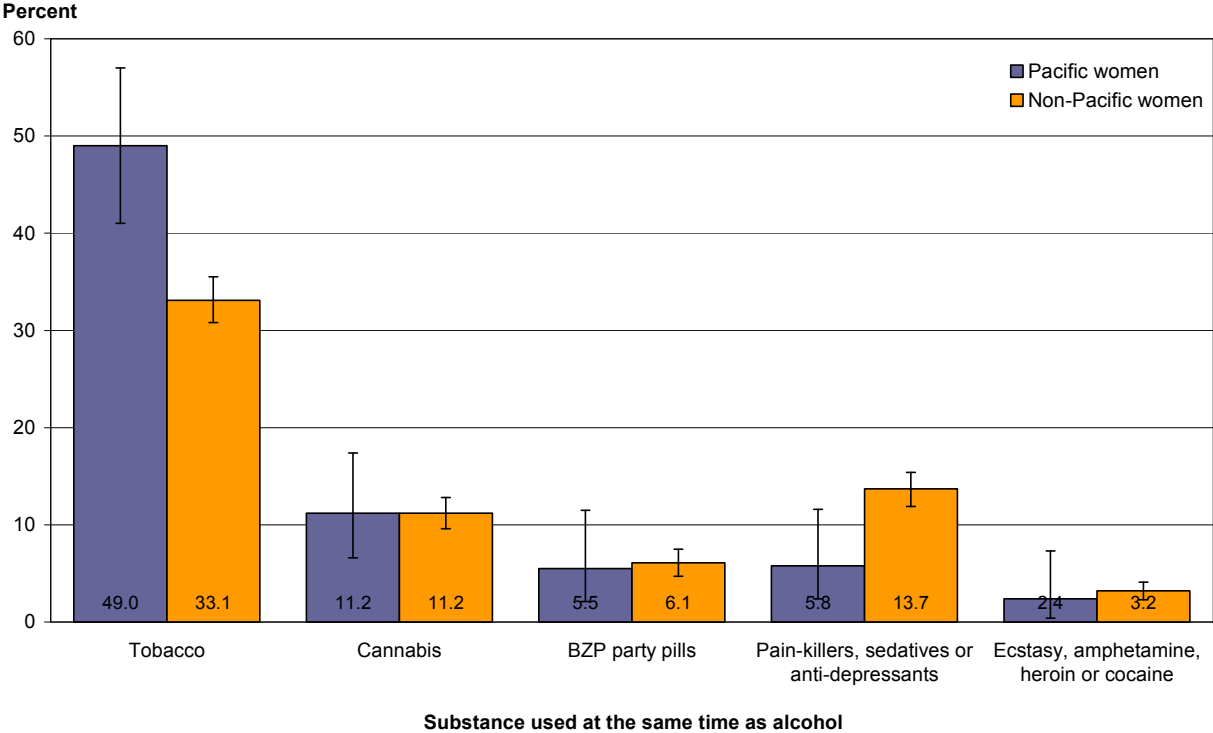
**Figure 166:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific women were significantly more likely than non-Pacific women to have used alcohol with tobacco in the past year, adjusted for age (Figure 167). In contrast, non-Pacific women were significantly more likely to have used alcohol with pain-killers/sedatives/anti-depressants in the past 12 months, compared with Pacific women.

**Figure 167:** Prevalence of using alcohol with other drugs at the same time in the last 12 months, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Moderating drinking behaviours

Approximately two in three Pacific past-year drinkers reported using the moderating drinking behaviour of limiting the number of drinks consumed in a night 'always' or 'most of the time' (68.0%, 62.4–73.6) (Table 48). Other commonly used moderating drinking behaviours used by Pacific past-year drinkers included making a point of consuming food with alcohol (56.4%, 50.7–62.1), refusing an alcoholic drink because of not really wanting it (53.3%, 46.8–59.8) and counting the number of drinks consumed when drinking (42.3%, 36.9–47.7).

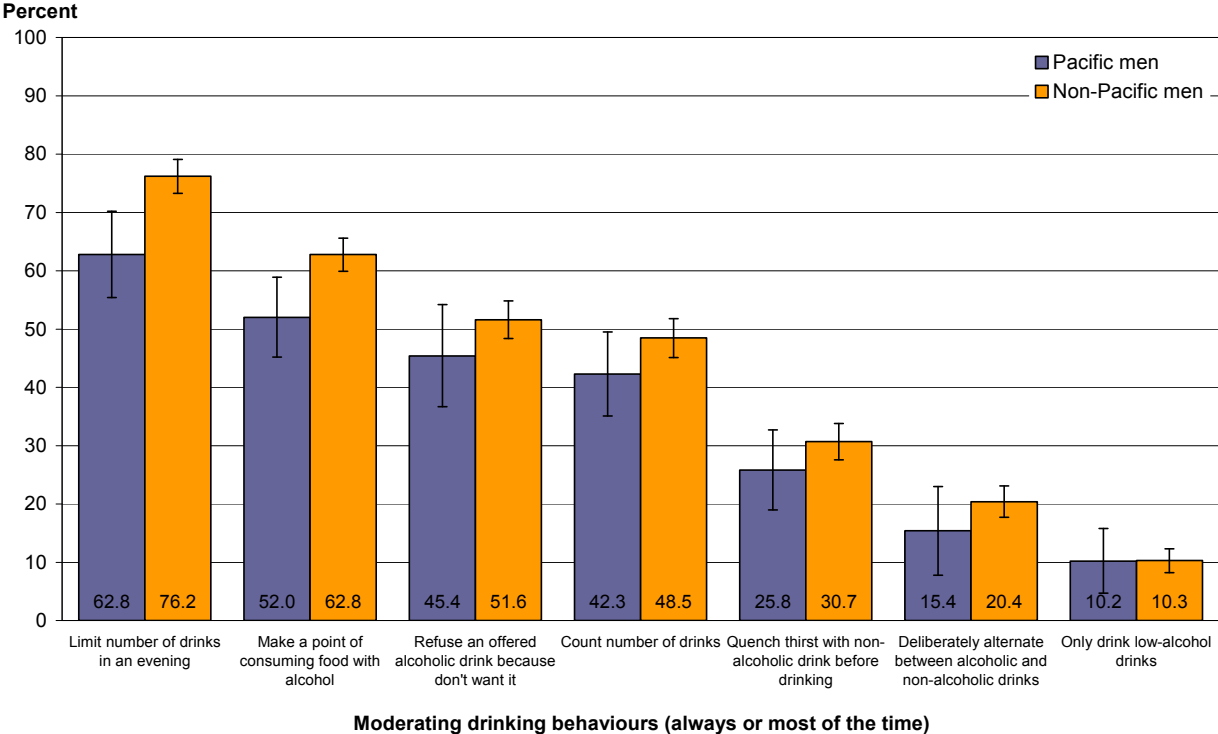
**Table 48:** Moderating drinking behaviours used 'always' or 'most of the time' in the last 12 months, among Pacific past-year drinkers aged 16–64 years (unadjusted prevalence)

Moderating drinking behaviour 'always' or 'most of the time'	Prevalence (%) for Pacific past-year drinkers (95% CI)
Limiting the number of drinks consumed in a night	68.0 (62.4–73.6)
Making a point of consuming food with alcohol	56.4 (50.7–62.1)
Refusing an alcoholic drink offered because of not really wanting it	53.3 (46.8–59.8)
Counting the number of drinks consumed when drinking	42.3 (36.9–47.7)
Quenching thirst with a non-alcoholic drink before drinking	28.9 (23.3–34.5)
Deliberately alternating between alcoholic drinks and non-alcoholic drinks	19.9 (16.0–23.8)
Drinking only low-alcohol drinks	12.4 (9.2–15.7)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific men were significantly less likely to have limited the number of drinks in an evening and made a point of consuming alcohol with food 'always' or 'most of the time' compared with non-Pacific men, adjusting for age (Figure 168).

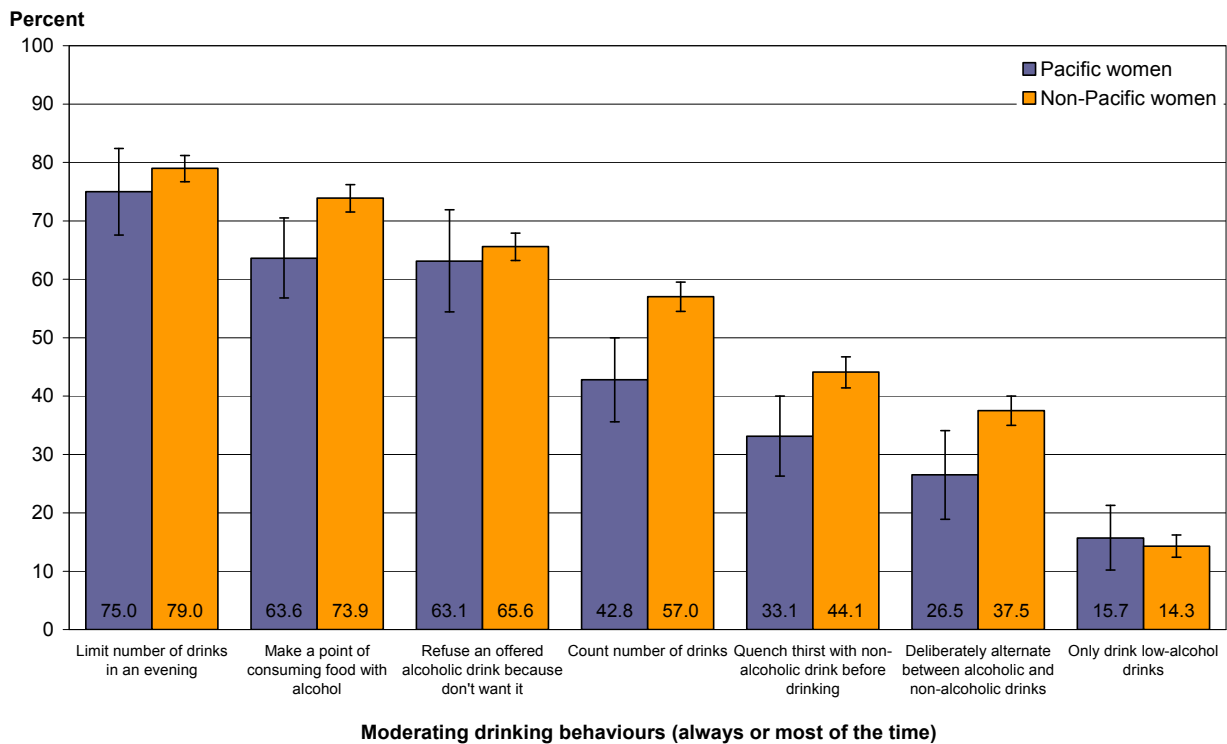
**Figure 168:** Prevalence of using moderating drinking behaviours 'always' or 'most of the time', among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers, Pacific women were significantly less likely than non-Pacific women to make a point of consuming food with alcohol, count the number of drinks, quench their thirst with non-alcoholic drinks before drinking or deliberately alternate between alcoholic and non-alcoholic drinks, adjusted for age (Figure 169).

**Figure 169:** Prevalence of using moderating drinking behaviours ‘always’ or ‘most of the time’, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Help-seeking behaviours

### Help-seeking behaviours in the past year

Overall, 6.3% (3.6–10.0) of Pacific past-year drinkers had received help to reduce their level of alcohol use in the past 12 months (Table 49). An additional 5.4% (3.2–8.5) had wanted help in the past year to reduce their level of alcohol use but not received it.

**Table 49:** Help-seeking behaviours in the last 12 months among Pacific peoples aged 16–64 years (unadjusted prevalence)

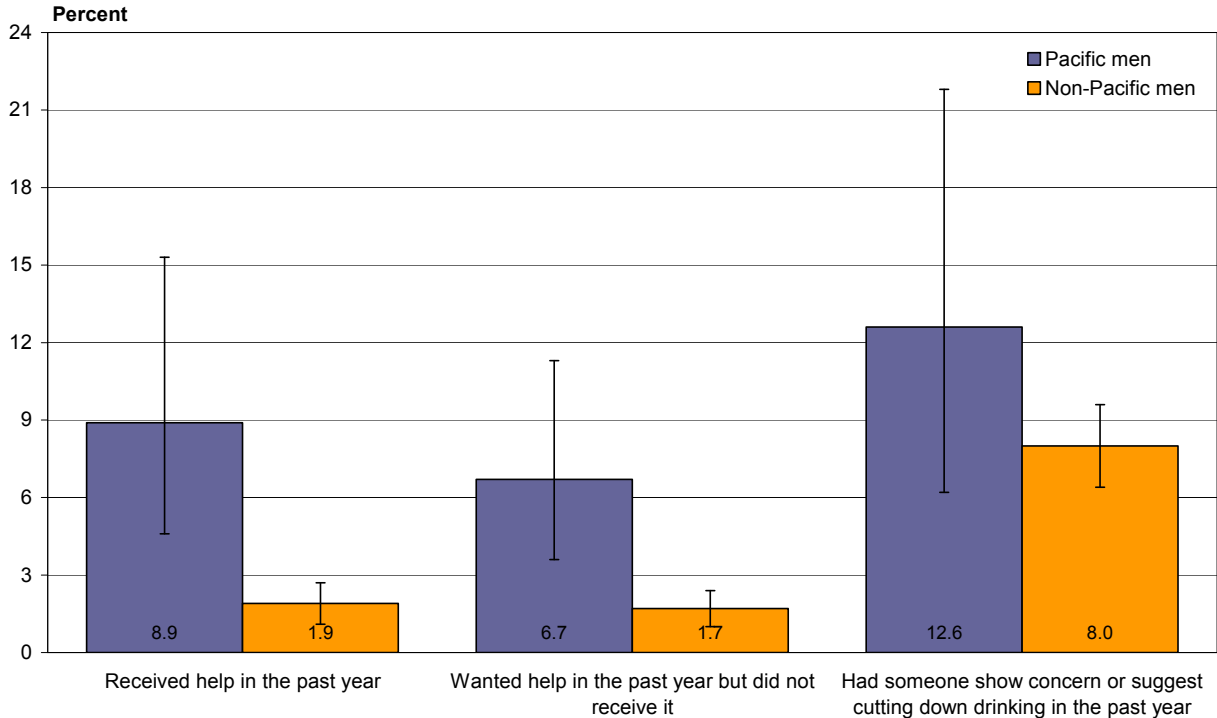
Help-seeking behaviour	Prevalence (%) (95% CI)	
	For Pacific past-year drinkers	For total Pacific population
Received help to reduce level of alcohol use in the last 12 months	6.3 (3.6–10.0)	4.2 (2.4–6.1)
Wanted help to reduce level of alcohol use, but did not receive it, in the last 12 months	5.4 (3.2–8.5)	3.6 (2.3–5.5)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

About 9% of Pacific past-year drinkers reported that someone had shown concern or suggested cutting down the amount of alcohol consumed in the past year (8.9%, 4.7–13.1).

Among past-year drinkers, Pacific men were significantly more likely than non-Pacific men to have received help to reduce their level of alcohol use, or wanted help but had not received it, in the past year, adjusted for age (Figure 170). There was no significant difference between Pacific and non-Pacific men in the prevalence of having someone show concern or suggest cutting down their drinking in the past year.

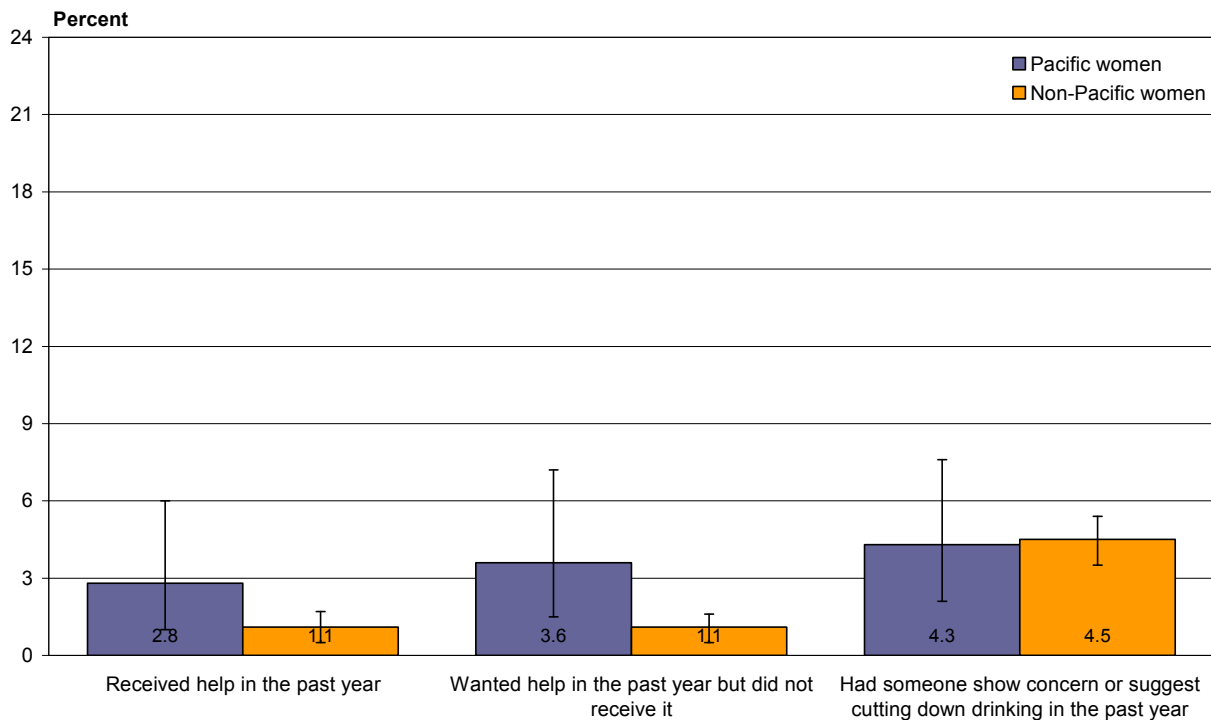
**Figure 170:** Help-seeking behaviours in the past year, among male past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Among past-year drinkers there was no difference between Pacific and non-Pacific women in terms of having received help to reduce level of alcohol use, wanting help but not receiving it or having someone show concern or suggest cutting down on drinking in the past year, adjusted for age (p-values all > 0.05) (Figure 171).

**Figure 171:** Help-seeking behaviours in the past year, among female past-year drinkers aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Receiving help in lifetime

Overall, 6.8% (4.6–9.1) of Pacific peoples aged 16–64 years had ever received help to reduce their level of alcohol use in their lifetime. Among these people, nearly two-thirds had received help from a friend or family member (63.0%, 43.9–79.5). Other places where Pacific peoples received help were:

- a drug and alcohol counsellor (18.8%, 7.0–37.1)
- a GP (13.7%, 4.5–29.6)
- a Māori or Pacific health service (6.7%, 1.4–18.6)
- a psychiatrist or mental health service (6.0%, 0.9–18.5)
- a detox programme (1.1%, 0.0–6.5)
- an emergency department of a public hospital (prevalence suppressed due to small numbers).



## Wanted help but had not received it in lifetime

In the total Pacific population aged 16–64 years, 5.0% (3.2–6.8) had ever wanted help to reduce their level of alcohol use but had not received it. The two main reasons given for wanting help but not receiving it were not knowing where to go to get help (27.6%, 10.7–51.1) and social pressure (23.7%, 8.4–46.6). Other reasons reported for not receiving help included:

- not being able to spare the time (11.9%, 1.5–36.8)
- there being no local service available (6.2%, 0.3–27.2)
- having no transport to get there (5.0%, 0.1–27.4)
- lack of childcare (3.2%, 0.1–17.9)
- fear (3.2%, 0.1–18.1)
- not being able to get in touch with the doctor or service (1.1%, 0.0–6.2)
- service not being appropriate for type of use (1.1%, 0.0–6.2)
- not being able to get an appointment at the right time (prevalence suppressed due to small numbers)
- cost (prevalence suppressed due to small numbers).

## Harmful effects experienced due to alcohol use

### Harmful effects experienced due to own alcohol use

Overall, about one in nine Pacific peoples aged 16–64 years had experienced harmful effects on their friendships or social life in the past year due to their own drinking (11.3%, 7.1–15.4) (Table 50). One in four Pacific peoples reported having ever experienced this harmful effect due to their own drinking in their lifetime (24.3%, 19.9–28.7). Other common harmful effects experienced in the previous 12 months due to people’s own alcohol use included harmful effects on home life and financial position.

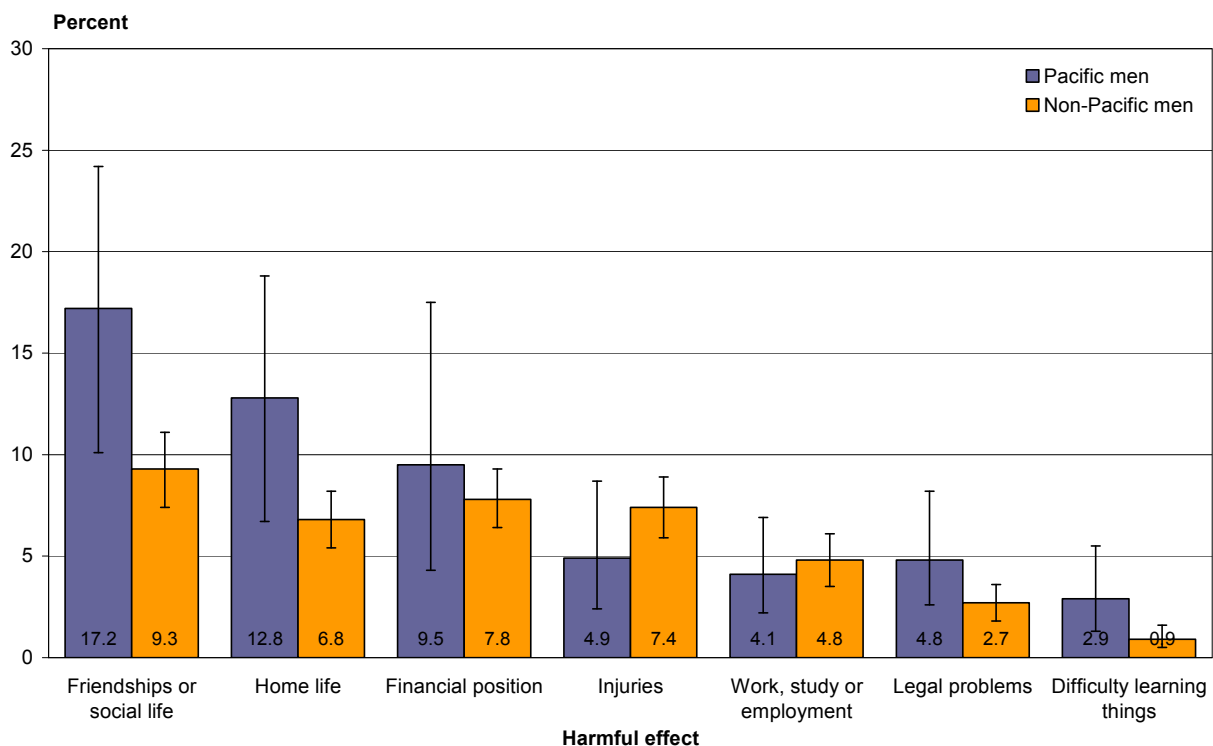
**Table 50:** Harmful effects experienced due to own alcohol use, among Pacific population aged 16–64 years (unadjusted prevalence)

Harmful effect	Prevalence (%) in the last 12 months (95% CI)		Prevalence (%) in lifetime (95% CI)
	For Pacific past-year drinkers	For total Pacific adults	For total Pacific adults
Harmful effects on friendships or social life	16.3 (10.6–22.0)	11.3 (7.1–15.4)	24.3 (19.9–28.7)
Harmful effects on home life	11.1 (6.5–15.6)	7.8 (4.6–10.9)	18.4 (14.8–22.1)
Harmful effects on financial position	12.1 (7.5–16.6)	8.1 (4.8–11.3)	15.6 (11.9–19.3)
Had injuries	7.0 (4.2–9.7)	4.4 (2.6–6.1)	12.7 (9.8–15.5)
Harmful effects on work, study or employment	5.2 (3.2–7.8)	3.7 (2.2–5.1)	12.8 (9.8–15.7)
Had legal problems	4.3 (2.5–6.8)	3.1 (1.8–4.9)	10.3 (6.8–13.8)
Had difficulty learning things	3.0 (1.6–5.2)	1.9 (1.0–3.2)	5.7 (3.5–7.9)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Pacific men were significantly more likely than non-Pacific men to have experienced harmful effects on friendships or social life and home life in the past year due to their own alcohol use, adjusted for age (p-value < 0.05) (Figure 172). There were no significant differences between Pacific and non-Pacific men for the other harmful effects investigated.

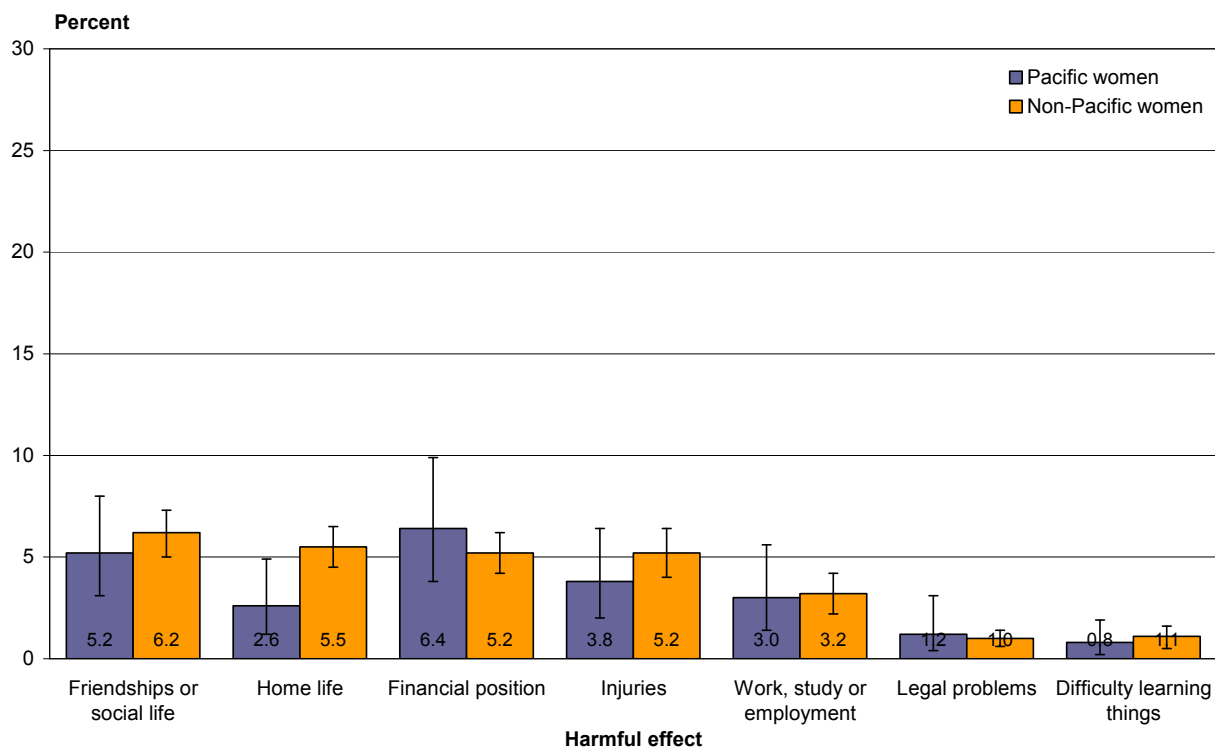
**Figure 172:** Prevalence of experiencing harmful effects in the past year due to own alcohol use, among men aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Pacific women were about half as likely as non-Pacific women to have experienced harmful effects on their home life in the past year due to their own alcohol use, adjusted for age (p-value < 0.05) (Figure 173). There were no other significant differences between Pacific and non-Pacific women in terms of harmful effects experienced in the past year due to their own alcohol use.

**Figure 173:** Prevalence of experiencing harmful effects in the past year due to own alcohol use, among women aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Harmful effects experienced due to someone else's alcohol use

Overall, one in six Pacific adults aged 16–64 years reported experiencing harmful effects on their friendships or social life in the past year, due to someone else's alcohol use (16.7%, 12.9–20.5) (Table 51). Just over a third of all Pacific adults reported having experienced this harm in their lifetime (37.4%, 32.1–42.7).

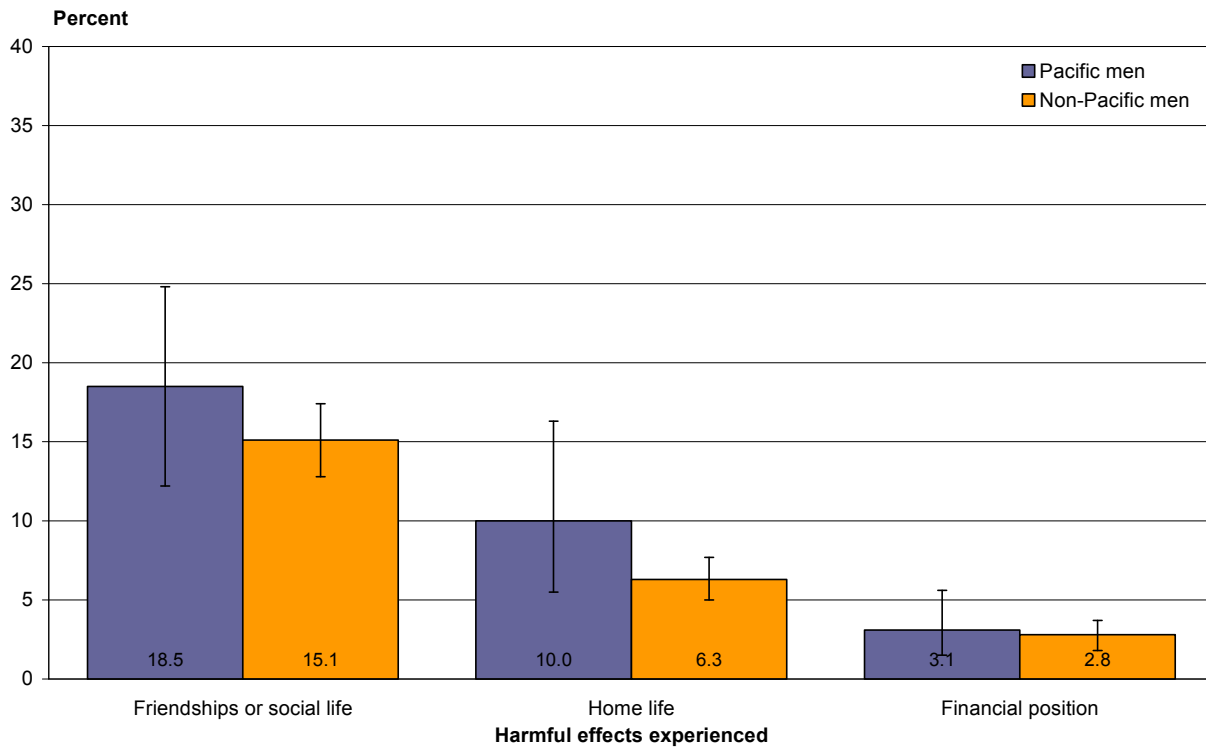
**Table 51:** Harmful effects experienced due to someone else's alcohol use, among Pacific population aged 16–64 years (unadjusted prevalence)

Harmful effect due to someone else's alcohol use	Prevalence (%) for total Pacific adults (95% CI)	
	In the last 12 months	In lifetime
Harmful effects on friendships or social life	16.7 (12.9–20.5)	37.4 (32.1–42.7)
Harmful effects on home life	9.9 (6.9–12.9)	22.3 (18.0–26.6)
Harmful effects on financial position	5.5 (3.1–7.9)	12.2 (9.2–15.1)

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

There were no significant differences between Pacific men and non-Pacific men in terms of harmful effects they had experienced in the past year due to someone else's alcohol use (p-values > 0.05) (Figure 174).

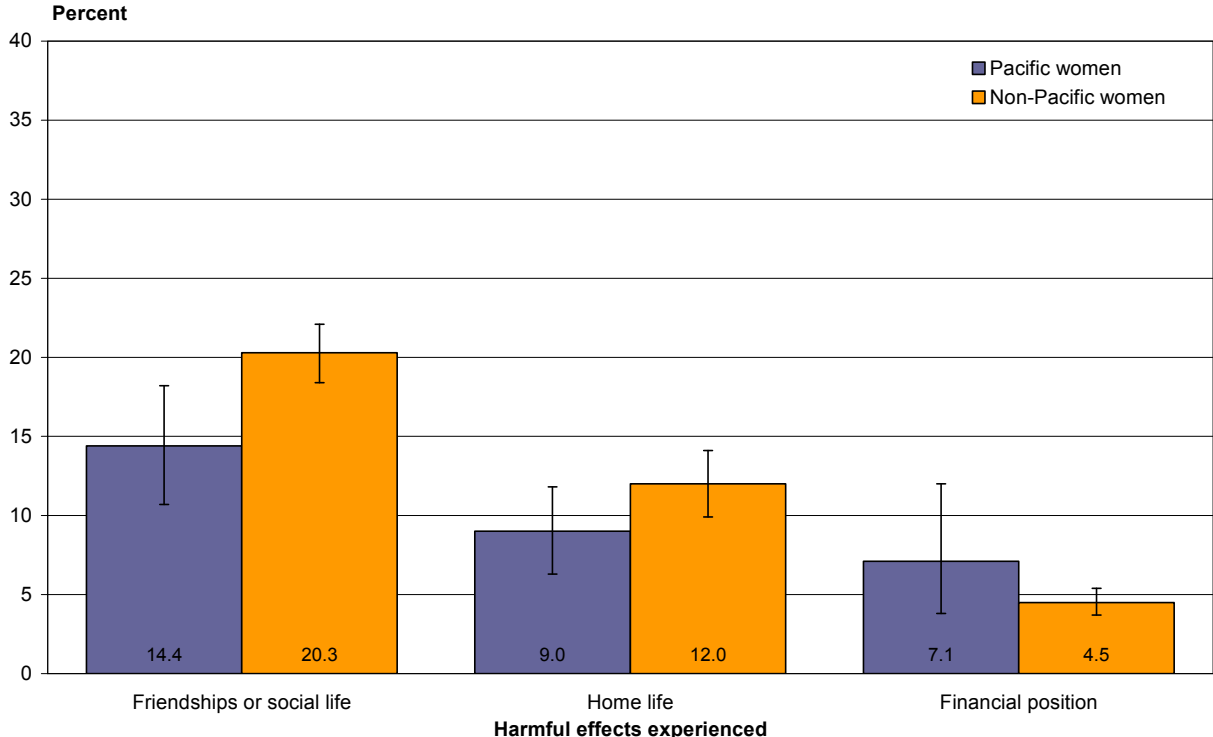
**Figure 174:** Harmful effects experienced in the past year due to someone else's alcohol use, among men aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

In the past year, Pacific women were significantly less likely than non-Pacific women to have experienced harmful effects due to someone else’s alcohol use on their friendships or social life, adjusted for age (Figure 175). There were no significant differences between Pacific women and non-Pacific women in experiencing harmful effects on their home life or financial position due to someone else’s alcohol use.

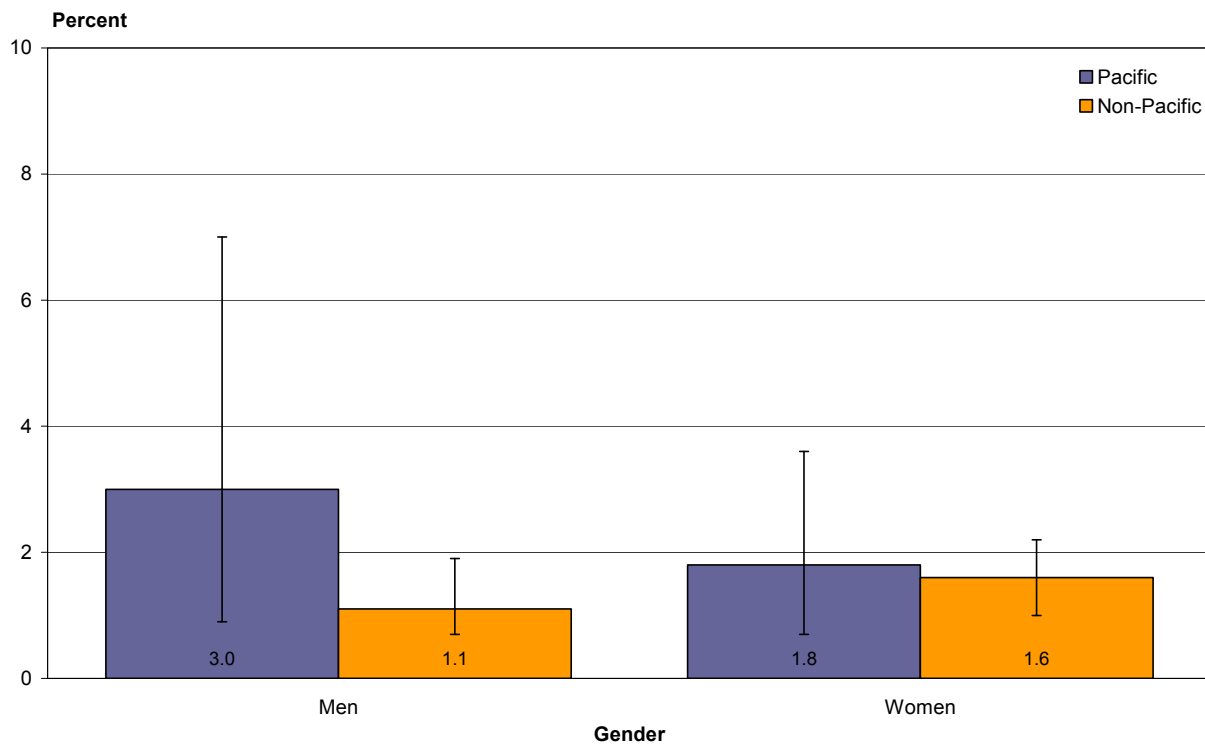
**Figure 175:** Harmful effects experienced in the past year due to someone else’s alcohol use, among women aged 16–64 years, by Pacific/non-Pacific (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Overall, 2.4% (1.1–4.5) of Pacific peoples aged 16–64 years had been involved in a motor vehicle accident in the past 12 months due to someone else’s drinking. For both men and women, there were no significant differences between Pacific and non-Pacific peoples in the likelihood of being involved in a motor vehicle accident in the past year due to someone else’s alcohol use, adjusted for age (Figure 176).

**Figure 176:** Involved in a motor vehicle accident due to someone else’s drinking in the past 12 months, among total population aged 16–64 years, by Pacific/non-Pacific and gender (age-standardised prevalence)

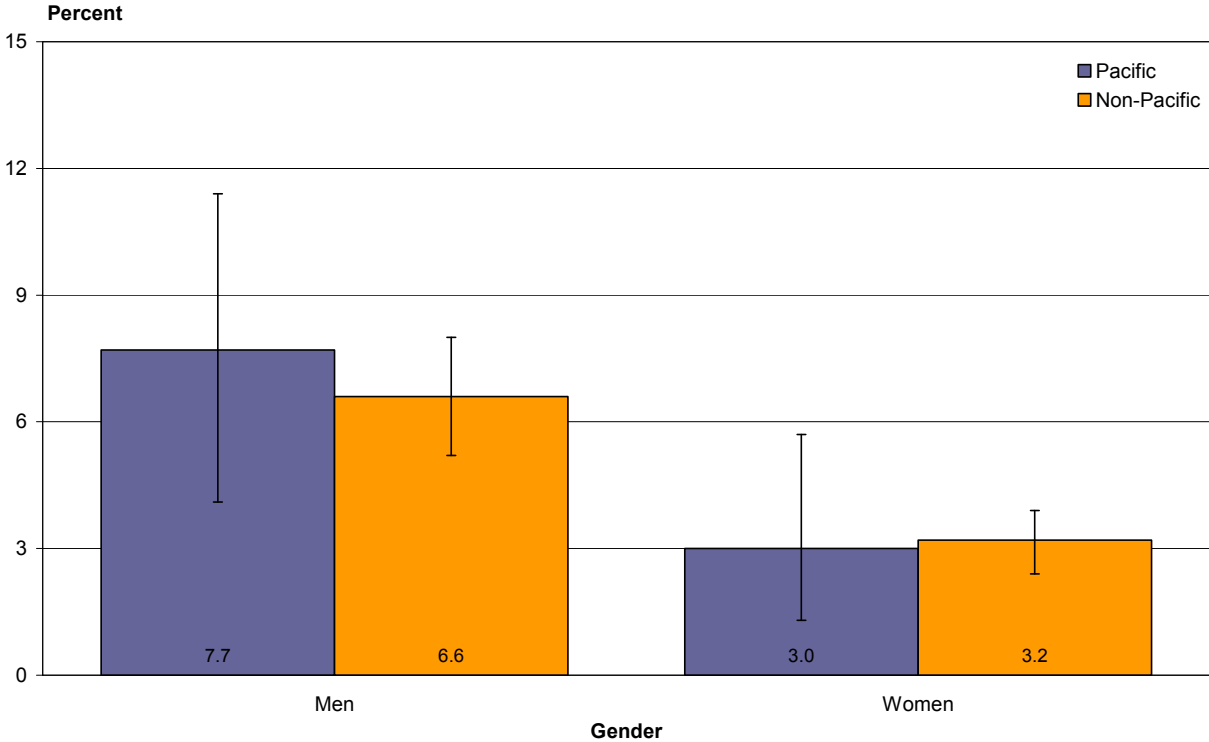


Source: 2007/08 New Zealand Alcohol and Drug Use Survey

One in twenty Pacific peoples (5.3%, 3.2–7.4) had been assaulted (physically and/or sexually) in the past year as a result of actual force or violence by someone who was under the influence of alcohol or drugs.

For both men and women there were no differences between Pacific peoples and non-Pacific peoples in the likelihood of being assaulted in the past year by someone under the influence of alcohol or drugs (Figure 177). For both Pacific and non-Pacific peoples men were more likely than women to have been assaulted in the past year by someone under the influence of alcohol or drugs, adjusted for age.

**Figure 177:** Been assaulted (physically and/or sexually) in the past 12 months as a result of actual force or violence by someone who was under the influence of alcohol or drugs, among total population aged 16–64 years, by Pacific/non-Pacific and gender (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

## Chapter 15: Alcohol Use and Pregnancy

Alcohol use during pregnancy can cause harm to the foetus, including birth defects and foetal alcohol syndrome. The damage caused by alcohol can depend on the level of maternal alcohol consumption, the pattern of alcohol exposure and the stage of pregnancy during which the foetus is exposed, although evidence suggests that alcohol can have harmful effects on the foetus throughout pregnancy (Elliot et al 2008).

Although it is thought that binge drinking is associated with an increased risk, there is currently no known safe level of alcohol consumption during pregnancy (Ministry of Health 2008b). For this reason, the Ministry of Health has recommended since 2006 that women who are pregnant or planning to become pregnant do not consume alcohol. 'The message from health practitioners to abstain from alcohol during the entire pregnancy is unequivocal and should be promoted by all health practitioners' (Ministry of Health 2008b).

### What were the survey questions?

In the 2007/08 NZADUS female participants were asked whether, in the last three years, they had been pregnant at any time. If they had been, participants were asked whether, at any time when they were pregnant in the last three years, they had used alcohol, even once. Female participants who had been pregnant in the past three years were also asked whether, when they were pregnant in the last three years, anyone had advised them not to drink alcohol.

### Drinking alcohol when pregnant

About one in four women who had been pregnant in the past three years reported that they had consumed alcohol while pregnant (28.7%, 24.7–32.7). This represented 73,000 women who had used alcohol while pregnant in the past three years (out of an estimated 254,200 women who had been pregnant in the past three years).

#### By age group

There were no significant differences by age group for drinking alcohol when pregnant among women who had been pregnant in the past three years.

#### By ethnic group

Table 52 gives an indication of the prevalence of reporting having consumed alcohol while pregnant, among women who had been pregnant in the past three years, by New Zealand's main ethnic population groups.



**Table 52:** Prevalence of reporting having consumed alcohol while pregnant, among women who had been pregnant in the past three years, by ethnic group (unadjusted prevalence)

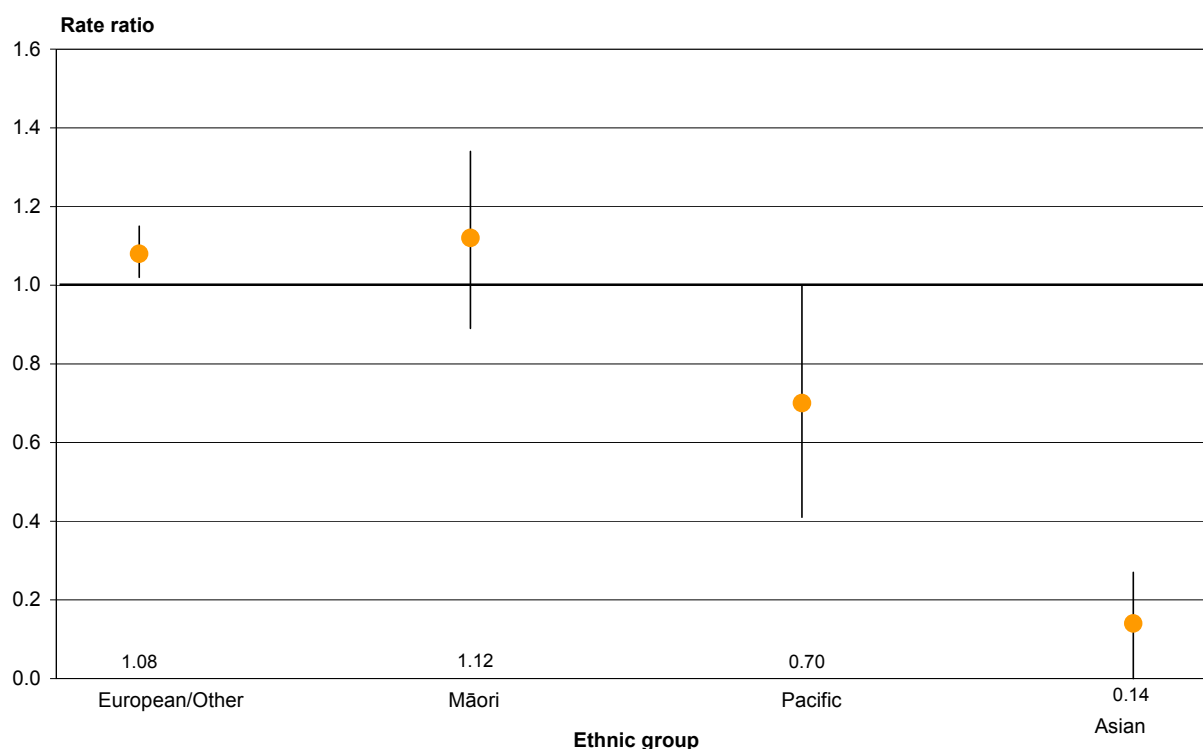
Ethnic group	Prevalence (%) (95% CI)	Estimated number of adults
European/Other	31.6 (26.5–36.7)	60,200
Māori	31.8 (25.9–37.7)	15,700
Pacific	20.2 (11.9–31.1)	4,300
Asian	4.0 (1.0–10.3)	600

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, European/Other women were significantly more likely to have reported consuming alcohol while pregnant compared with women in the total population who had been pregnant in the previous three years (Figure 178). Pacific and Asian women were significantly less likely to have reported consuming alcohol while pregnant. There was no significant difference for Māori women.

**Figure 178:** Reporting having consumed alcohol while pregnant, among women who had been pregnant in the past three years, by ethnic group (age-standardised rate ratio)



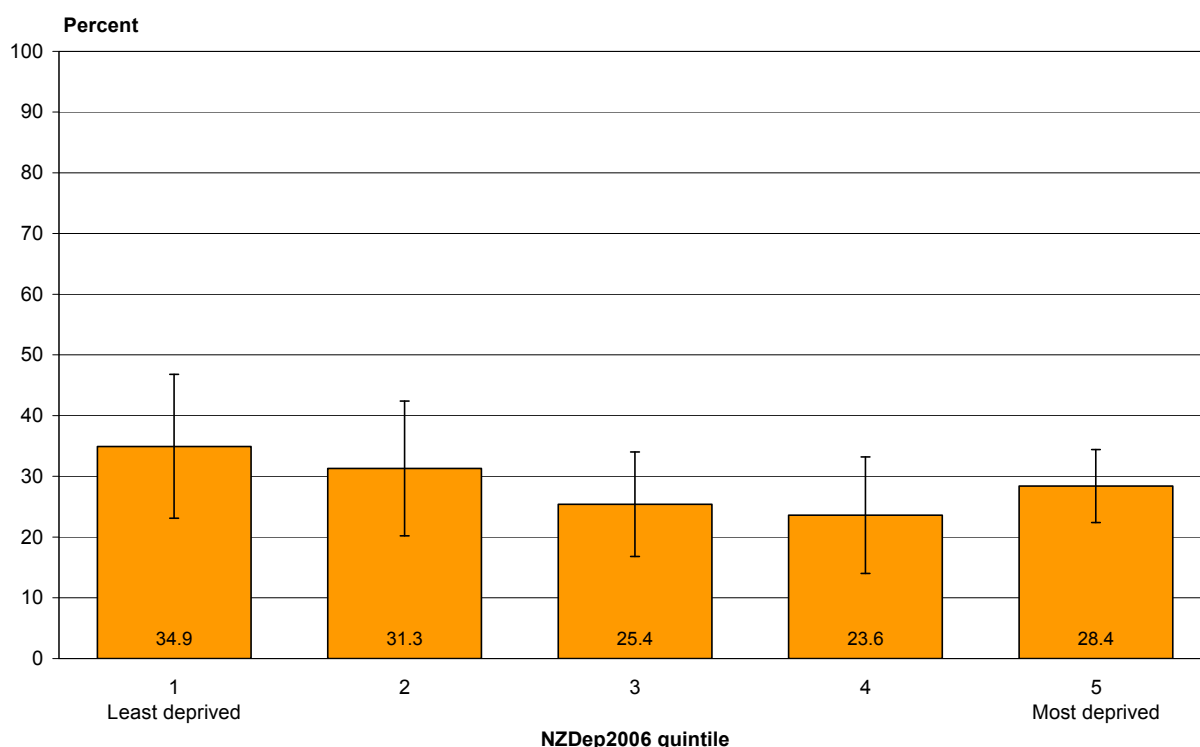
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total female population aged 16–64 years who had been pregnant in the past three years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

There was no significant difference in the prevalence of drinking alcohol while pregnant among women who had been pregnant in the past three years by neighbourhood deprivation (NZDep2006 quintiles) (Figure 179).

**Figure 179:** Prevalence of reporting having consumed alcohol while pregnant, among women who had been pregnant in the past three years, by NZDep2006 quintile (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

### Pregnant women advised not to drink when pregnant

Seven in ten women who had been pregnant in the past three years had been advised not to drink alcohol when pregnant (68.0%, 64.2–71.8), equating to 172,900 women.

### By age group

Among women who had been pregnant in the past three years, there were no significant differences in being advised not to drink when pregnant between women aged 18–24 years (72.4%, 63.5–81.3), 25–34 years (69.8%, 64.0–75.6) and 35–44 years (63.9%, 55.7–72.0).

## By ethnic group

Table 53 gives an indication of the prevalence of being advised not to drink alcohol while pregnant, among women who had been pregnant in the past three years, by New Zealand's main ethnic population groups.

**Table 53:** Advised not to drink alcohol while pregnant, among women who had been pregnant in the past three years, by ethnic group (unadjusted prevalence)

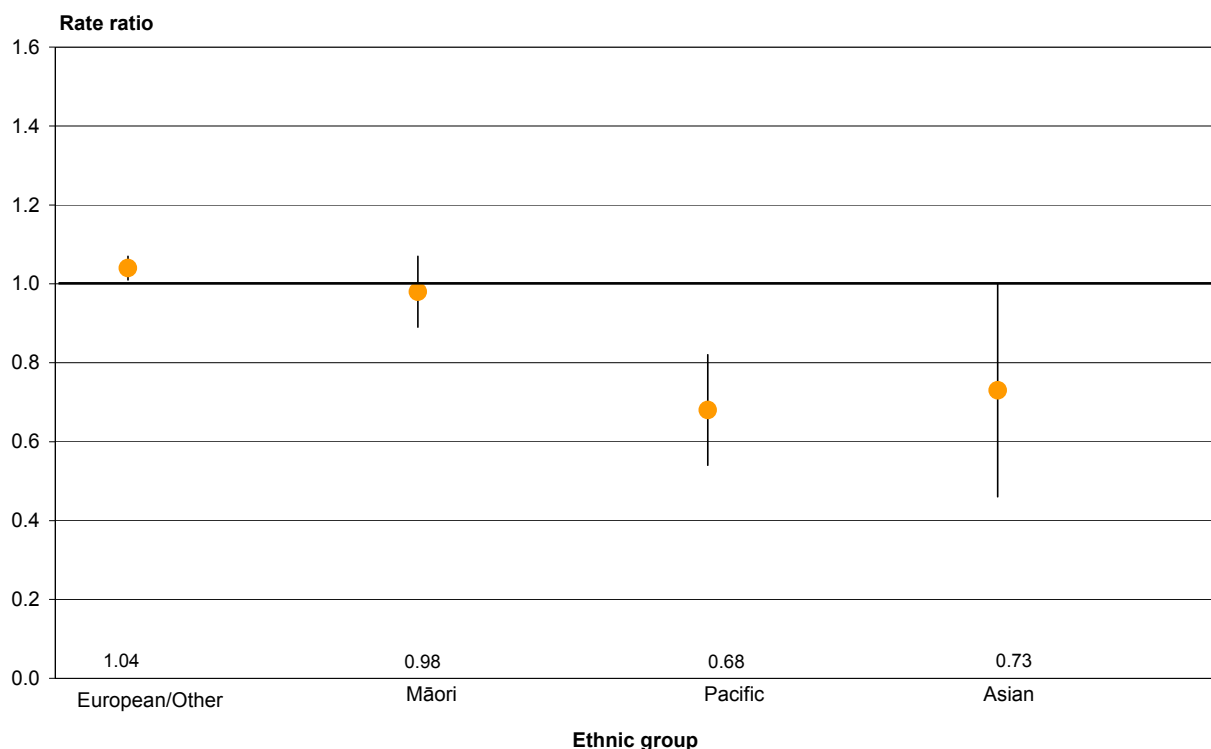
Ethnic group	Prevalence (%) (95% CI)	Estimated number of women
European/Other	70.9 (66.4–75.3)	135,000
Māori	67.3 (60.7–73.8)	33,100
Pacific	46.6 (36.8–56.4)	9,900
Asian	49.5 (29.4–69.7)	7,700

Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Pacific and Asian women were significantly less likely to have been advised not to drink alcohol while pregnant compared with women in the total population who had been pregnant in the past three years (Figure 180).

**Figure 180:** Advised not to drink alcohol while pregnant, among women who had been pregnant in the past three years, by ethnic group (age-standardised rate ratio)



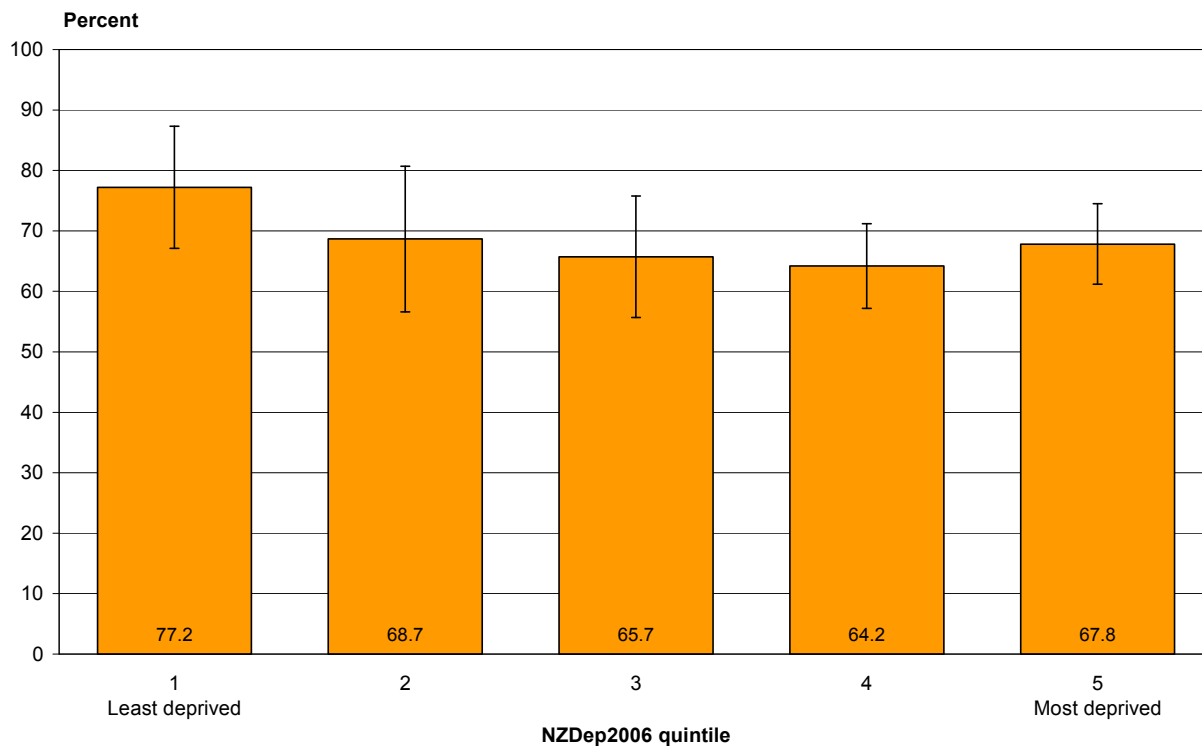
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

Notes: Age standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total female population aged 16–64 years who had been pregnant in the past three years. Total response standard output for ethnic groups has been used.

### By neighbourhood deprivation

In women who had been pregnant in the previous three years, there was no significant difference in the prevalence of being advised not to drink while pregnant between women living in least deprived areas (NZDep2006 quintile 1) and most deprived areas (quintile 5), adjusted for age (Figure 181).

**Figure 181:** Advised not to drink alcohol while pregnant, among women who had been pregnant in the past three years, by NZDep2006 quintile (age-standardised prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

# Part G: Discussion

## Chapter 16: Summary and conclusions

### Summary of key results

This report presents the key findings on alcohol use from the 2007/08 New Zealand Alcohol and Drug Use Survey (NZADUS). Alcohol consumption is very common in New Zealand, with the majority of adults having consumed alcohol in the past year. Most New Zealanders start drinking alcohol at a young age (younger than 17 years). There were some differences in past-year alcohol consumption between population groups, with men, people of European/Other ethnicity and people living in neighbourhoods of low deprivation more likely to have had an alcoholic drink in the past year. This report found that some population groups are disproportionately affected by alcohol-related harm, and these population groups will be discussed below.

### Patterns of alcohol use

The Alcohol Advisory Council (ALAC) recommends having at least two alcohol-free days a week. Although a reasonable proportion of people who had consumed alcohol in the past year had only consumed alcohol less than once a week, 6.8% of past-year drinkers had had an alcoholic drink on average daily.

### Drinking behaviours

There was a reasonably widespread use of moderating drinking behaviours among drinkers in New Zealand. The most commonly used moderating drinking behaviour was to limit the number of drinks, which four in five (78.9%) past-year drinkers reported doing most, if not all, of the time. Other commonly used moderating drinking behaviours included consuming food with alcohol, refusing an alcoholic drink because of not really wanting it, and counting the number of drinks consumed. Moderating drinking behaviours were more commonly used by women than by men.

Although the majority of past-year drinkers moderated their drinking behaviours, the prevalence of risky drinking was high among New Zealanders. One measure of risky drinking in the survey was *drinking a large amount of alcohol*, defined as more than six (for men) or four (for women) standard drinks on one drinking occasion. This definition is the limit recommended by the World Health Organization and endorsed by ALAC in New Zealand. Overall, this level of drinking was relatively common in New Zealand, with three in five (61.6%) past-year drinkers having had a large amount of alcohol at least once in the past year, and 12.6% of past-year drinkers having consumed a large amount of alcohol on a drinking occasion at least weekly in the past year.

There was also a high prevalence of engaging in risky behaviours when under the influence of alcohol. For example, one in five (19.8%) past-year drinkers reported having driven a car or other motor vehicle while under the influence of alcohol in the past year.

## Help-seeking behaviours

A small proportion of adults aged 16–64 years (1.3%) had received help to reduce their level of alcohol use in the past year, equating to about 35,500 people. Also, in the past year 1.2% of adults had wanted help but not received it, representing about 31,600 people. Overall, this suggests that for every person who received help to reduce their level of alcohol use in the past year, there was another person who had wanted help but not received it. Furthermore, one in four (28.4%) people who had ever wanted help but not received it reported that this was because they did not know where to go. This result could have implications for how services are provided and promoted to people.

## Harmful effects from alcohol

The results from this survey suggested a high amount of harm from alcohol is experienced by New Zealanders. These harms include social harms (such as interpersonal problems), economic harms (such as financial problems) and health harms (such as experiencing injuries). Harms were experienced by individuals not only due to their own drinking but also due to other people's drinking.

The most common harm experienced was on friendships or social life: about 6.9% of adults aged 16–64 years reported this harm in the past year due to their own alcohol use. One in six people (16.0%) in the population had had their friendships or social life affected in the last 12 months due to someone else's drinking.

A particular area of concern is the prevalence of experiencing injuries due to alcohol use. About 5.5% of past-year drinkers injured themselves due to their own alcohol use in the past year, with younger drinkers being more likely than older age groups to have experienced injuries in the past year. Another common harmful effect from own alcohol use was impacts on work, with 6.6% of past-year drinkers having had days off work or school in the previous year because of their alcohol use.

Also, 4.1% of people aged 16–64 years reported having been assaulted (physically and/or sexually) as a result of actual force or violence in the past 12 months, from someone who was under the influence of alcohol or drugs. In particular, Māori women were almost four times more likely than non-Māori women to have reported this harm.

Overall, some population groups experienced higher levels of alcohol-related harm than others. In general, harmful effects were experienced more by men, people aged 16–24 years, Māori men and women, Pacific men and people living in more deprived neighbourhoods.

## Trends over time

There were limited time trend analyses available from this survey, given that this is the first face-to-face survey to comprehensively examine alcohol and drug use patterns in New Zealand. However, analyses of previous 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys were carried out to examine changes in alcohol consumption over time. These analyses showed that there have been no significant changes in past-year alcohol consumption in 16–64-year-olds from 1996/97 to 2007/08, or in the prevalence of hazardous drinking (according to the AUDIT screen, given in Appendix 2)

among past-year drinkers from 1996/97 to 2006/07. Time trend analysis in relation to the key population groups identified in the *National Drug Policy 2007–2012* are described below.

### **Alcohol and pregnancy**

Evidence suggests that drinking alcohol during pregnancy can cause harm to the foetus, including birth defects and foetal alcohol syndrome. Results from this survey showed that about one in four women who had been pregnant in the past three years reported drinking alcohol when pregnant (28.7%). However, it is not known whether the women knew they were pregnant when they consumed this alcohol. Seven in ten women who had been pregnant in the past three years had been advised not to drink alcohol when pregnant (68.0%). A key finding was that Pacific and Asian women were significantly less likely to consumed alcohol while pregnant, and were also significantly less likely to have been advised not to drink when pregnant, compared with women in the total population.

### **Key population groups**

The *National Drug Policy 2007–2012* identifies three key population groups in New Zealand who are at greater risk from alcohol- and drug-related harms: Māori, Pacific peoples and young people. This section summarises key findings on alcohol use and alcohol-related harms for these specific population groups. It should be noted that these results should be interpreted in the context of the broader determinants of health, which include the social and physical environment, socioeconomic deprivation, inequalities in the distribution of and access to material resources such as health care, and other determinants of health (such as education, employment and housing).

#### **Young people**

Drinking at a young age is a risk factor for potentially leading to, or exacerbating, alcohol-related harm in young people. In New Zealand there is no legal drinking age, but the minimum legal purchase age for alcohol is 18 years, lowered from the age of 20 years in 1999.

This survey found that New Zealand youths aged 16–17 years had high rates of alcohol use and misuse. Overall, eight in ten (79.6%) people aged 16–17 years had consumed alcohol in the past year. This was not significantly different from the prevalence of past-year drinking for all people aged 18–64 years (85.5%). Time trends suggest there have been no significant differences in the prevalence of past-year drinking among 16–17-year-olds from 1996/97 to 2007/08.

However, results suggested that past-year drinkers aged 16–17 years had the same prevalence of having consumed a large amount of alcohol on a drinking occasion in the past year (12.6%) as all past-year drinkers aged 18–64 years. Furthermore, among past-year drinkers, those aged 16–17 years had a significantly higher prevalence of having consumed a large amount of alcohol on a drinking occasion at least monthly in the past year (32.3%) than past-year drinkers aged 18–64 years (25.3%).

Also, people aged 16–17 years generally had a higher prevalence of experiencing harmful effects from their drinking than other age groups. For example, in the past year, 15.0% of people aged 16–17 years had had an injury due to their drinking, while 10.5% reported experiencing harmful effects on their financial position and 10.1% had experienced harmful effects on their friendships or social life due to their alcohol use. Youth aged 16–17 years generally also had a higher prevalence of experiencing harmful effects due to other people's alcohol use in the past year. About one in four (23.0%) people aged 16–17 had experienced harmful effects on their friendships or social life in the past year due to someone else's alcohol use.

Although people aged 16–17 years had experienced high levels of harm from their alcohol use, they had a low prevalence of help seeking, with 0.8% of people in this age group having ever received help to reduce their level of alcohol use in their lifetime.

An interesting finding from the survey was that 31.6% of all 16–17-year-old females had consumed enough alcohol to feel drunk when they were 14 years or younger, which was a significantly higher prevalence than for women aged 35–64 years. Although these results may be affected by recall bias (particularly in the older age groups), the results suggest a cohort effect, whereby younger people, and especially young women, are starting drinking at a younger age than previous generations, and are more likely to have started drinking a large amount of alcohol on drinking occasions at a younger age than previous generations.

People aged 18–24 years also had a high level of risky drinking behaviour. Among past-year drinkers one in three (33.8%) men in this age group had consumed, on a weekly basis, a large amount of alcohol on a drinking occasion. Furthermore, past-year drinkers in this age group (particularly men) were more likely to have engaged in risky behaviours when feeling under the influence of alcohol, such as driving, working or operating machinery.

The age group of 18–24 years generally had a higher prevalence of experiencing harmful effects due to their own alcohol use in the past year. Among all people aged 18–24 years, 18.1% of males and 11.3% of females reported having had injuries in the past year due to their alcohol use. People in this age group also had a higher prevalence of experiencing harmful effects in the past year due to other people's alcohol use.

People aged 18–24 years also had the highest rate of having received help in the past year to reduce their level of alcohol use, with 3.5% of past-year drinkers aged 18–24 years having received help to reduce their level of alcohol use in the past year.

## **Māori**

This survey showed that Māori are disproportionately affected by alcohol-related harms in New Zealand, both from their own drinking and from other people's alcohol use. Overall, there was no significant difference in past-year prevalence of drinking alcohol between Māori and non-Māori. In general, among past-year drinkers, Māori men and women consumed alcohol less frequently than non-Māori men and women. However, Māori past-year drinkers were more likely to have consumed a large amount of alcohol



on a drinking occasion in the past year, and were also more likely to have consumed a large amount more frequently on average compared with non-Māori past-year drinkers.

Māori had experienced higher levels of harm in the last year related to alcohol use than other people. Māori, and in particular Māori women, were significantly more likely to have experienced harmful effects (eg, on their friendships or social life, home life and/or financial position) from their own alcohol use in the past year than non-Māori. A key finding of this survey was that Māori women consistently experienced a higher prevalence of harmful effects due to someone else's alcohol use compared with other women. For example, Māori women were almost four times more likely to have experienced assault (physical and/or sexual) in the past year due to someone else's use of alcohol or drugs compared with non-Māori women.

This survey also found that 2.4% of Māori aged 16–64 years had received help to reduce their level of alcohol use in the past year. Of interest for health services was the prevalence of unmet need for help to reduce alcohol use among Māori (2.4%). The results suggest that, in the past year, Māori past-year drinkers were 60% more likely to have received help, and 80% more likely to have wanted help to reduce their level of alcohol use in the past year but not received it, compared with the total population, after adjusting for age.

The majority of Māori had started drinking alcohol when they were aged 15–17 years, a similar proportion to non-Māori. However, compared with non-Māori, Māori were more likely to have first tried alcohol when aged 14 years or younger, and were also more likely to have first been drunk when 14 years or younger. This increases the risk of alcohol-related harm for these individuals.

Time trend analyses show that there has been a significant increase in the prevalence of past-year drinking for both Māori men and women over the 11-year period from 1996/97 to 2007/08. However, there has been no statistically significant change in the prevalence of hazardous drinking from 1996/97 to 2006/07 for Māori men or women (either among past-year drinkers or among the total population).

### **Pacific peoples**

There was clear evidence from this survey that Pacific men experience disproportionate harm due to alcohol use, while Pacific women did not experience a higher level of alcohol-related harm overall than non-Pacific women.

Overall, Pacific peoples were much less likely to have consumed alcohol in the past year compared with non-Pacific peoples, with 61.2% of Pacific peoples having consumed alcohol in the past year. There was a gender difference in past-year alcohol consumption, with Pacific men much more likely to have consumed alcohol in the past year than Pacific women. Among past-year drinkers, Pacific peoples generally consumed alcohol less frequently than non-Pacific peoples. Pacific peoples were also less likely than non-Pacific peoples to have started drinking alcohol when they were 14 years or younger.

However, the survey results suggest that among past-year drinkers, Pacific men were significantly more likely to have consumed a large amount of alcohol on a drinking occasion in the past year compared with non-Pacific men. These findings were supported by findings from the 2006/07 New Zealand Health Survey, which suggested that among past-year drinkers Pacific men and women were significantly more likely to have hazardous drinking behaviours than men and women in the total population.

Pacific peoples, and in particular Pacific men, showed much higher rates of help-seeking behaviour in the past year (that is, having received help to reduce their level of alcohol use, and having wanted help but not received it) compared with non-Pacific peoples. About 4.2% of Pacific peoples aged 16–64 years had received help in the past year, while 3.6% had wanted help in the past year to reduce their level of alcohol use but had not received it. These results suggest that Pacific past-year drinkers were 3.7 times more likely to have received help, and 3.5 times more likely to have wanted help but not received it, compared with all past-year drinkers in the population.

Among Pacific past-year drinkers, one in six (16.3%) reported that they had experienced harmful effects on their friendships or social life in the past year due to their own alcohol use. Adjusted for age, the rate for Pacific men was significantly higher than for non-Pacific men, but there was no difference found between Pacific and non-Pacific women.

Time trend analysis shows that the prevalence of drinking alcohol in the past year had significantly increased over the past 11 years from 1996/97 to 2007/08 for both Pacific men and Pacific women. However, there was no significant change in the prevalence of hazardous drinking from 1996/97 to 2006/07 for Pacific men or women, either among past-year drinkers or for the total population aged 16–64 years.

## Conclusions

In conclusion, alcohol continues to affect the lives of many people in New Zealand. This survey has confirmed that there are high prevalence rates of heavy drinking in the New Zealand population. Alcohol use – particularly drinking large amounts of alcohol, drinking at a young age and carrying out risky behaviours (such as driving a motor vehicle) while under the influence of alcohol – can have harmful effects on people's lives, and can cause social, economic and health effects. There continue to be large disparities in New Zealand, with Māori, Pacific men, young people and people living in more deprived neighbourhoods more likely to engage in risky drinking and also experiencing higher rates of alcohol-related harm. It is hoped that the results of this survey will be used to guide the development, implementation and evaluation of policies and services to address alcohol-related harm in New Zealand.

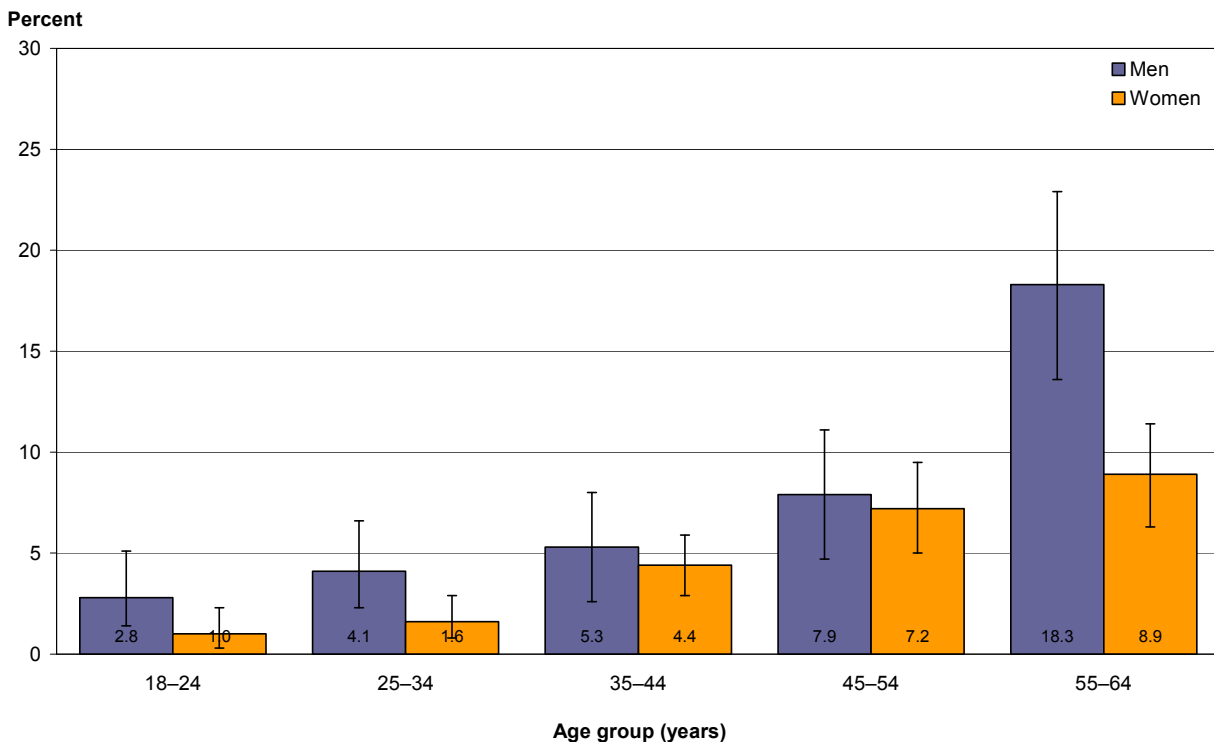
## Glossary

<b>95% confidence interval</b>	Indicates the accuracy of a survey estimate. 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. In this report, 95% confidence intervals have been presented in brackets after estimates in the text, and as error bars in graphs.
<b>Age-standardised rates</b>	Rates that have been adjusted to take account of differences in the age distribution between different groups (eg, different ethnic groups). The standard population used in HDI analyses is the World Health Organization world population (Ahmad et al 2000).
<b>ALAC</b>	Alcohol Advisory Council of New Zealand.
<b>BZP party pills</b>	Products containing benzylpiperazine.
<b>Median</b>	The mid-point of a sorted set of values. For example, the median age of first drinking alcohol for a population group is the age at which half of the population group had first consumed alcohol when younger than (or at) that age, and half of the population group had first consumed alcohol when older than (or at) that age.
<b>NZDep2006</b>	New Zealand Index of Socioeconomic Deprivation 2006; an area-level (meshblock) measure of the socioeconomic status of an area.
<b>Prevalence</b>	The number of cases (or proportion) in a population.
<b>Quintile</b>	A quintile contains a fifth (20%) of the data. For example, each quintile of the New Zealand Index of Socioeconomic Deprivation (NZDep2006) contains approximately 20% of the population.
<b>Rate</b>	The prevalence of an indicator within a defined population (eg, Māori) and a defined time period (eg, 2006/07).
<b>Rate ratio</b>	Indicates how prevalent an indicator is in one population group (eg, Māori) compared with another (eg, the total New Zealand population).
<b>RTD</b>	Ready-to-drink (pre-mixed) alcoholic beverages.
<b>Standardised rate ratio</b>	The ratio of two age-standardised rates (eg, Māori men versus men in the total population). The reference groups used in this report are the men and women in the total population (ie, the national age-standardised rate for each gender). An SRR is said to indicate a statistically significant difference between the group of interest and the reference group when the confidence interval does not include the value 1.
<b>Total response ethnicity</b>	A method that assigns each person to all ethnicities they identify with. Total response ethnicity has been used in this publication.
<b>Unadjusted prevalence</b>	A rate that has not been age standardised. This is an unadjusted rate that can be used to estimate the number of people affected in a population.
<b>Weighting</b>	A technique used in all analyses in this report to ensure that estimates of population totals, averages and proportions can be said to be representative of the total resident population aged 16–64 years in New Zealand.

## Appendix 1: Additional Graphs

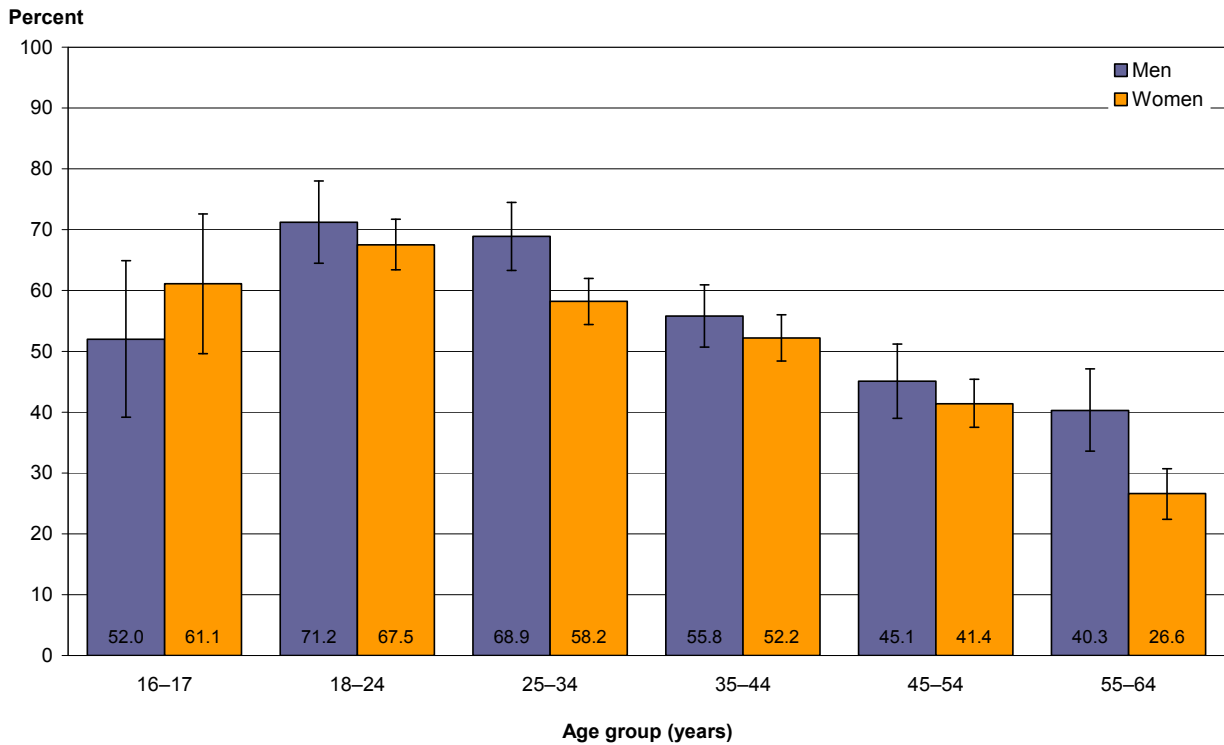
This appendix presents additional graphs by age group and gender for the total population, for selected indicators of frequency of drinking, drinking large amounts of alcohol, and risky behaviours carried out while feeling under the influence of alcohol. These results are the unadjusted prevalence estimates for the *total population* (rather than past-year drinkers, as are presented in the main body of the report).

**Figure A1:** Prevalence of drinking alcohol daily in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



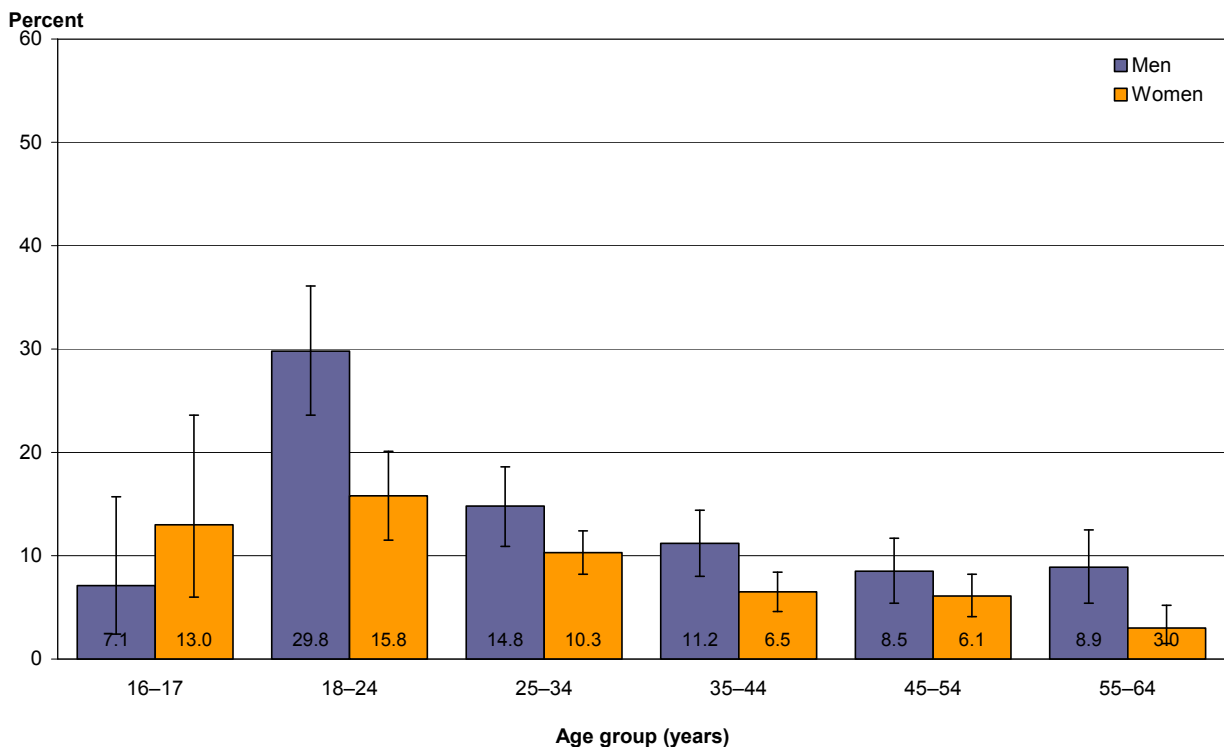
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A2:** Consumed a large amount of alcohol on at least one occasion in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



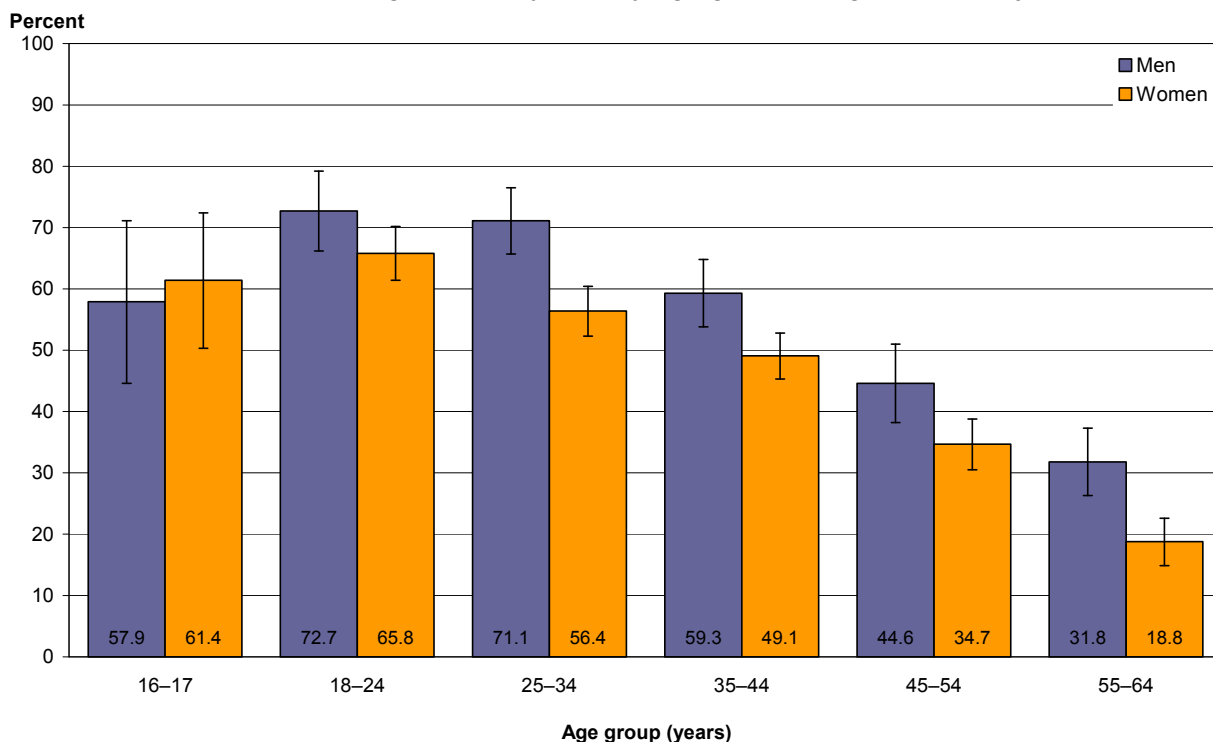
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A3:** Consumed a large amount of alcohol at least weekly in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



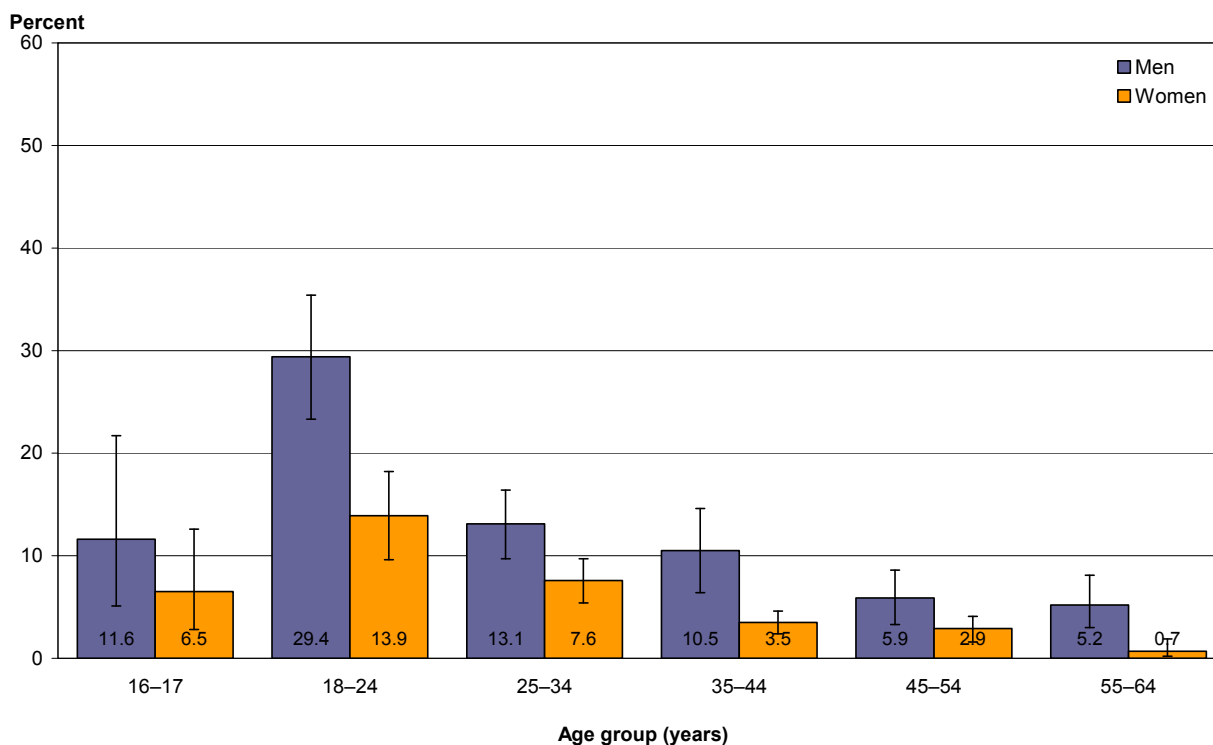
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A4:** Consumed enough alcohol to feel drunk at least once in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



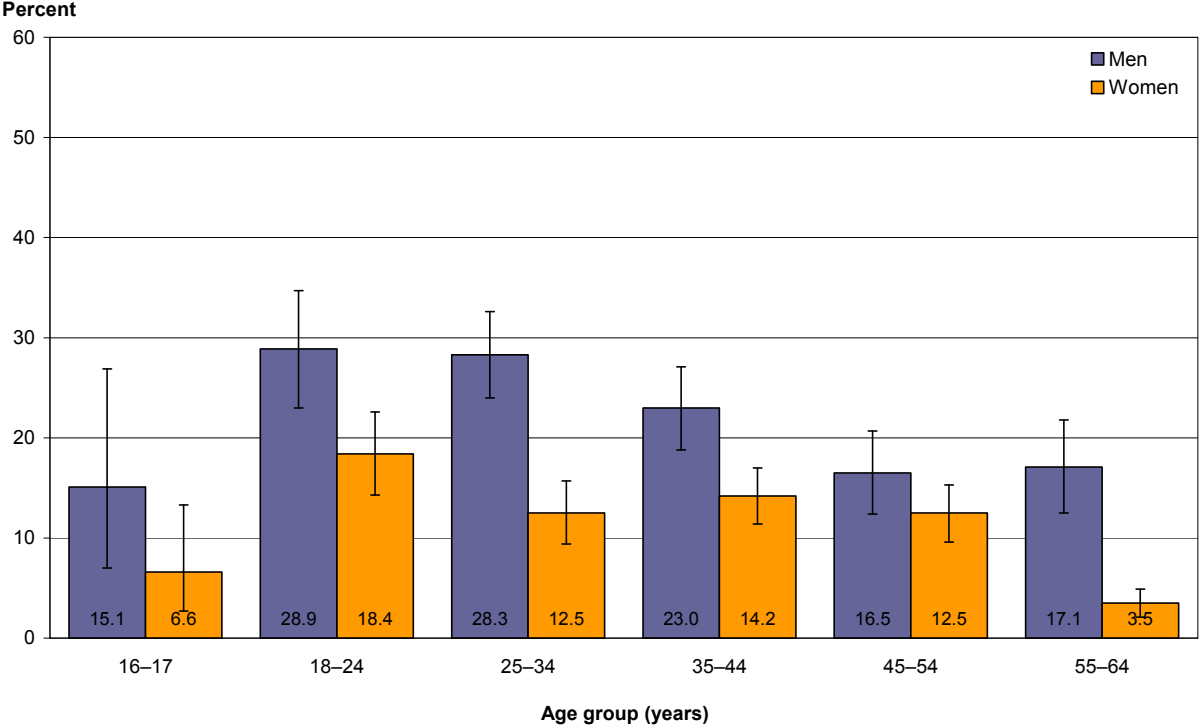
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A5:** Consumed enough alcohol to feel drunk at least weekly in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



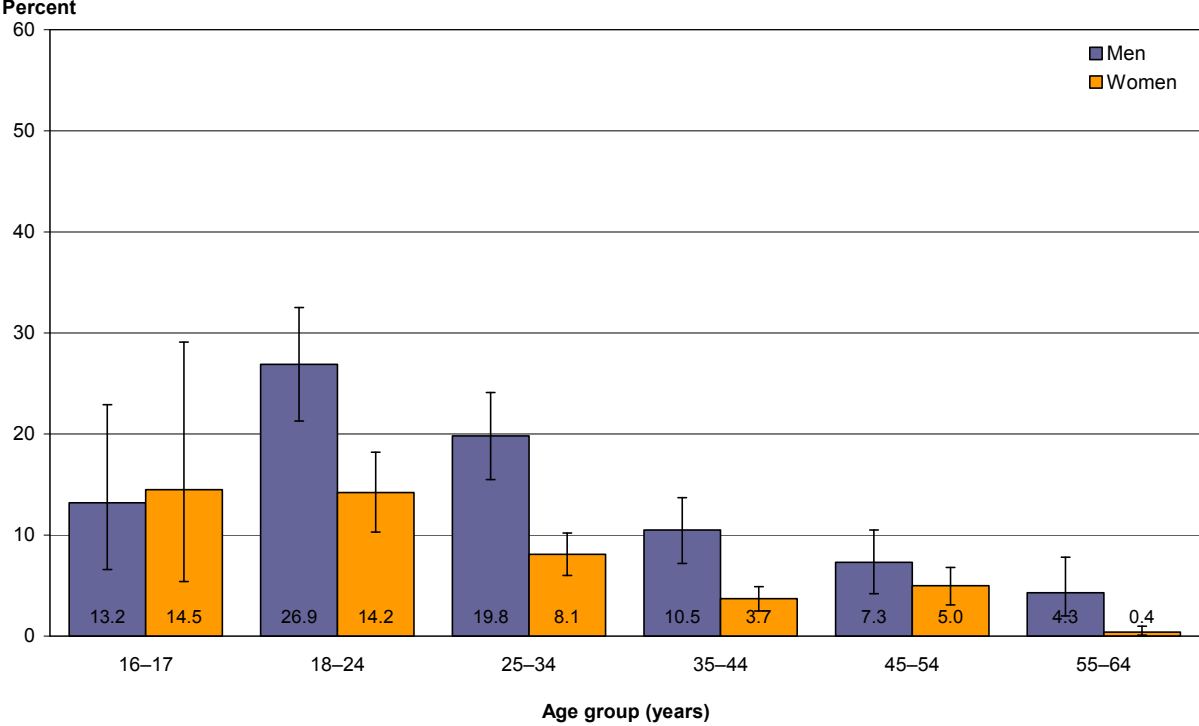
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A6:** Reporting having driven while feeling under the influence of alcohol in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



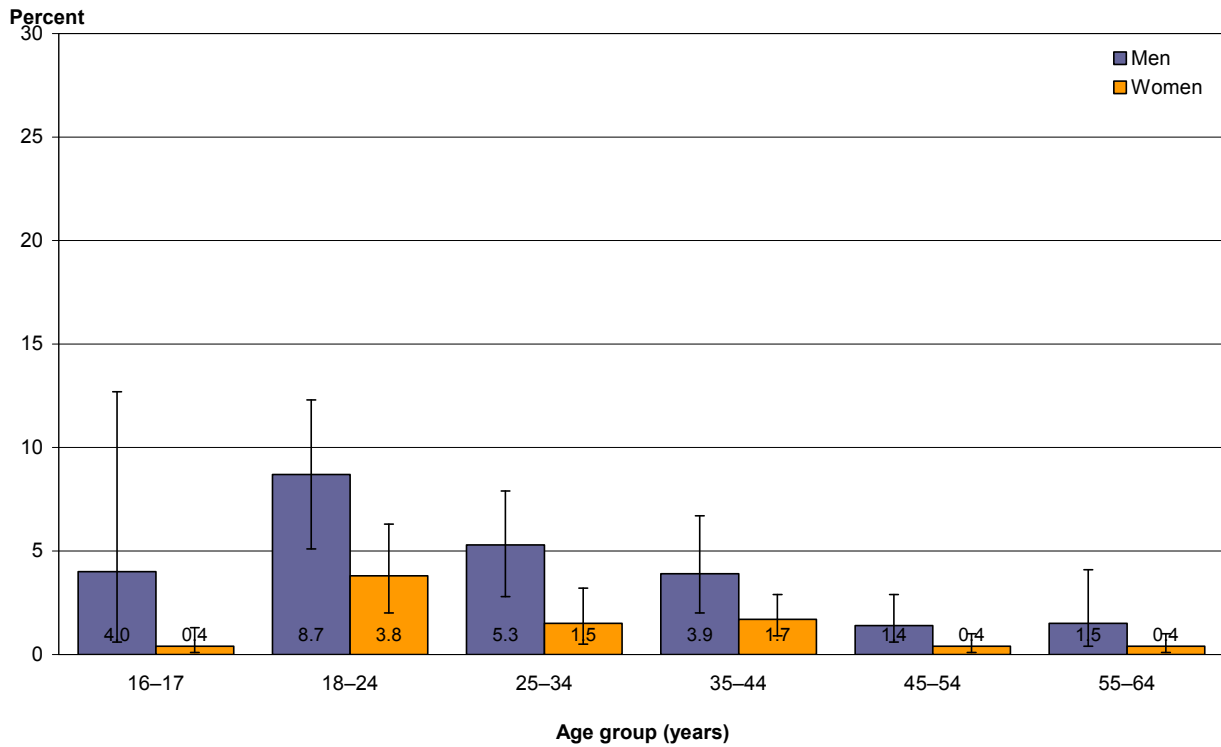
Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A7:** Reporting having worked while feeling under the influence of alcohol in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey

**Figure A8:** Reporting having operated machinery while feeling under the influence of alcohol in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence)



Source: 2007/08 New Zealand Alcohol and Drug Use Survey



## Appendix 2: Results on Hazardous Drinking Patterns from the 2006/07 New Zealand Health Survey

This section presents results for the population aged 16–64 years from the 2006/07 New Zealand Health Survey on hazardous drinking behaviour, as measured by the Alcohol Use Disorders Identification Test (AUDIT).

The AUDIT screen was included in the questionnaire for the 2006/07 New Zealand Health Survey (Ministry of Health 2008a), although not for the 2007/08 New Zealand Alcohol and Drug Use Survey. Analyses from the 2006/07 NZHS have been included in this report in order to provide a useful context for the results from the 2007/08 New Zealand Alcohol and Drug Use Survey.

In this report, the international definition of hazardous drinking as an AUDIT score of 8 or more has been reported, representing an established pattern of drinking that carries a high risk of future damage to physical or mental health but that may not yet have resulted in significant adverse effects (Babor et al 2001).

### What were the survey questions?

In the 2006/07 New Zealand Health Survey, adult participants who had had an alcoholic drink in the past year were asked 10 questions about their alcohol use, covering volume and frequency of alcohol consumed, alcohol-related problems and abnormal drinking behaviour. These 10 questions were developed by the WHO, and are known as the Alcohol Use Disorders Identification Test (AUDIT).

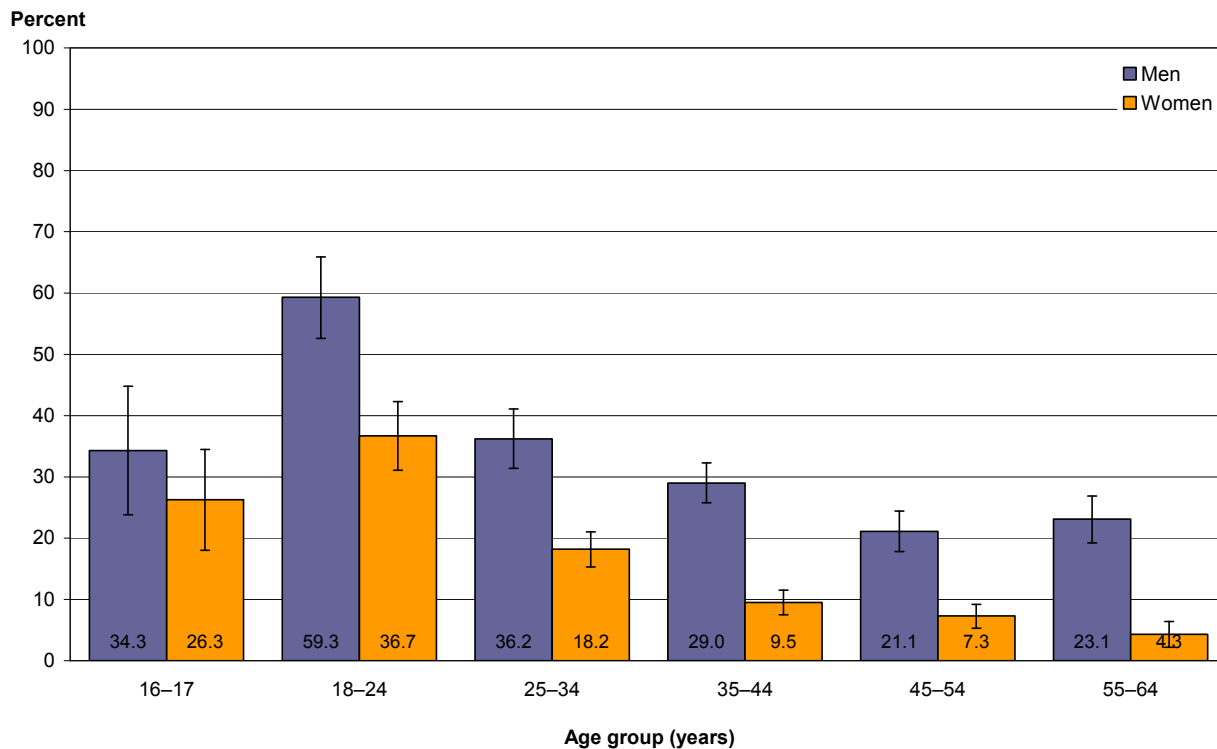
### Hazardous drinking patterns (AUDIT)

One in four (23.5%, 22.3–24.7) past-year drinkers aged 16–64 years had a potentially hazardous drinking pattern in 2006/07. This represented one in five (20.1%, 19.1–21.2) adults in the total population, or 518,100 people aged 16–64 years. Among past-year drinkers, men (34.3%, 32.1–36.4) were significantly more likely than women (16.4%, 14.9–17.9) to have a potentially hazardous drinking pattern, adjusted for age.

#### By age group

The prevalence of hazardous drinking was highest in the age group 18–24 years for both men and women and decreased with increasing age. In all age groups except 16–17-year-olds, men were significantly more likely than women to have hazardous drinking behaviour (Figure A9).

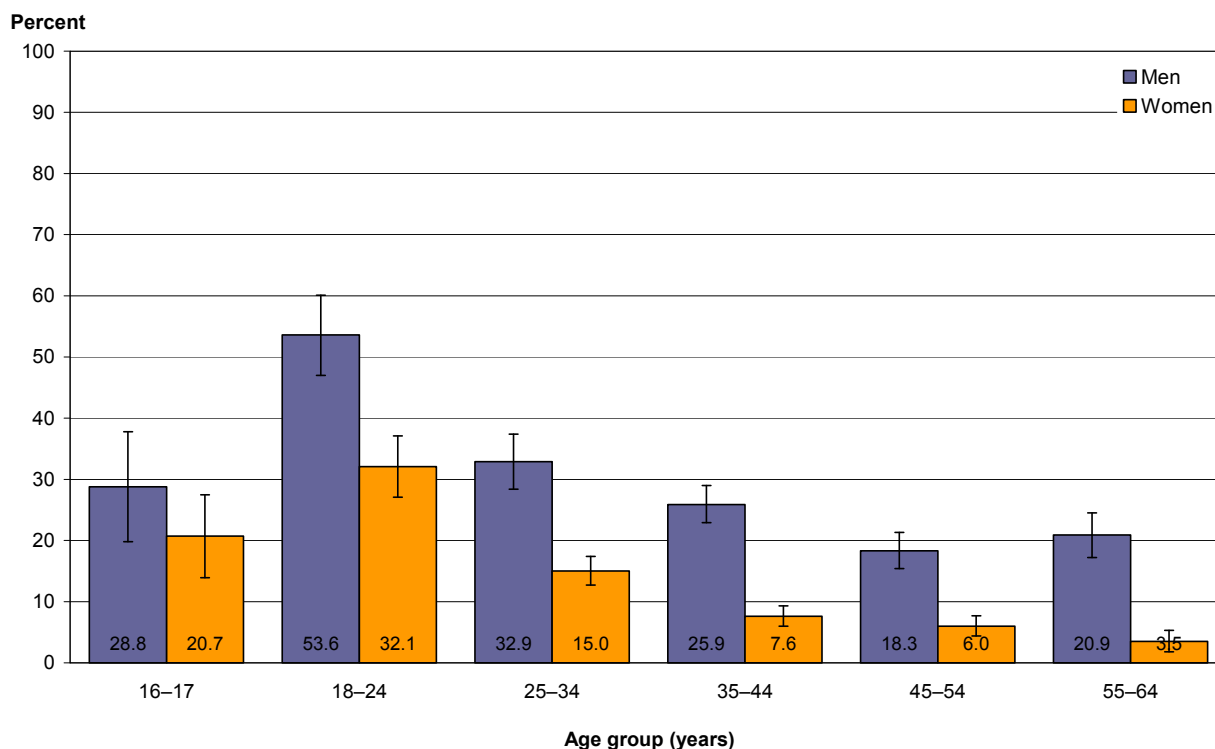
**Figure A9:** Hazardous drinking (AUDIT score of 8 or more) in the last 12 months, among past-year drinkers aged 16–64 years, by age group and gender (unadjusted prevalence), 2006/07



Source: 2006/07 New Zealand Health Survey

There were similar trends by age group when examining the prevalence of hazardous drinking in the total population by age group (Figure A10). One in two males aged 18–24 years had hazardous drinking patterns in 2006/07.

**Figure A10:** Hazardous drinking (AUDIT score of 8 or more) in the last 12 months, among total population aged 16–64 years, by age group and gender (unadjusted prevalence), 2006/07



Source: 2006/07 New Zealand Health Survey

### By ethnic group

Table A1 gives an indication of the prevalence of hazardous drinking among adults in New Zealand’s main ethnic population groups.

**Table A1:** Hazardous drinking (AUDIT score of 8 or more) in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group (unadjusted prevalence)

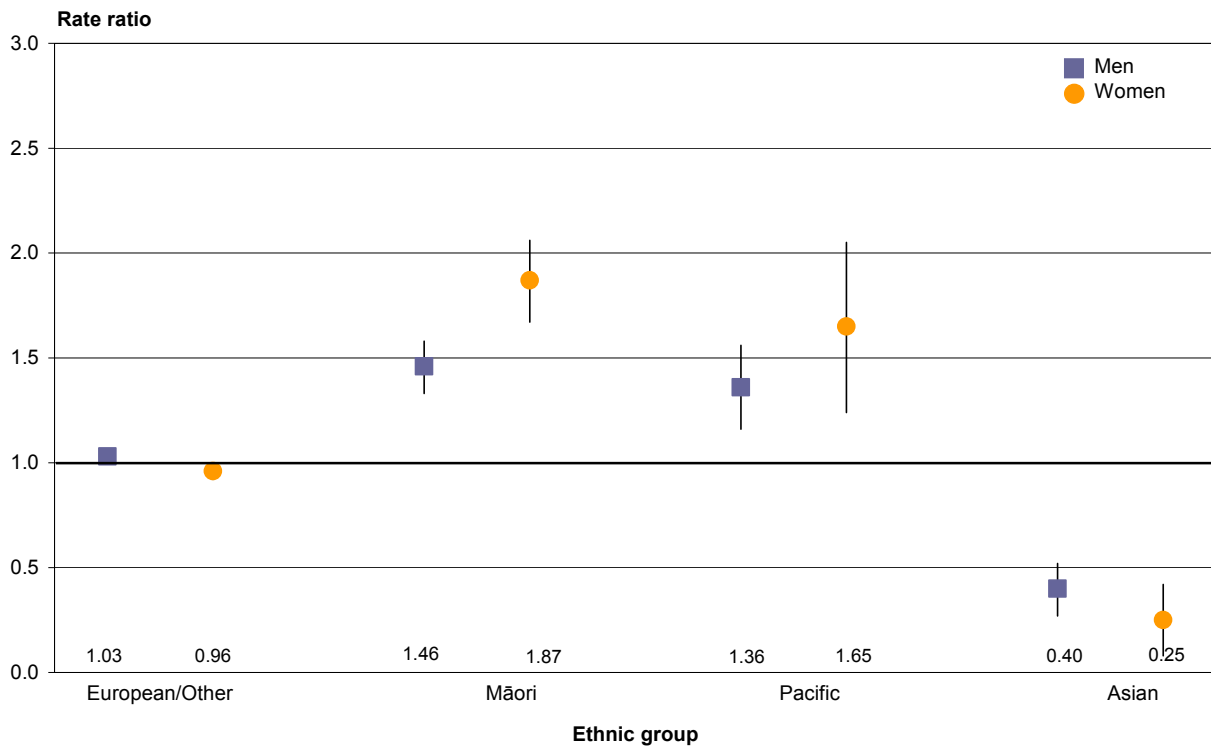
Ethnic group	Prevalence (%) for past-year drinkers (95% CI)	Prevalence (%) for total population (95% CI)	Estimated number of adults
European/Other	22.7 (21.3–24.0)	20.5 (19.3–21.8)	421,900
Māori	40.9 (38.5–43.2)	35.1 (33.0–37.2)	112,900
Pacific	39.7 (35.5–44.0)	24.5 (21.3–27.8)	36,500
Asian	9.7 (6.7–12.7)	6.0 (4.2–7.9)	15,500

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

Among past-year drinkers, Māori and Pacific men and women were significantly more likely to have potentially hazardous drinking patterns compared with men and women in the total population, adjusting for age (Figure A11). Asian male and female past-year drinkers were significantly less likely to have hazardous drinking patterns.

**Figure A11:** Hazardous drinking (AUDIT score of 8 or more) in the last 12 months, among past-year drinkers aged 16–64 years, by ethnic group and gender (age-standardised rate ratio), 2006/07



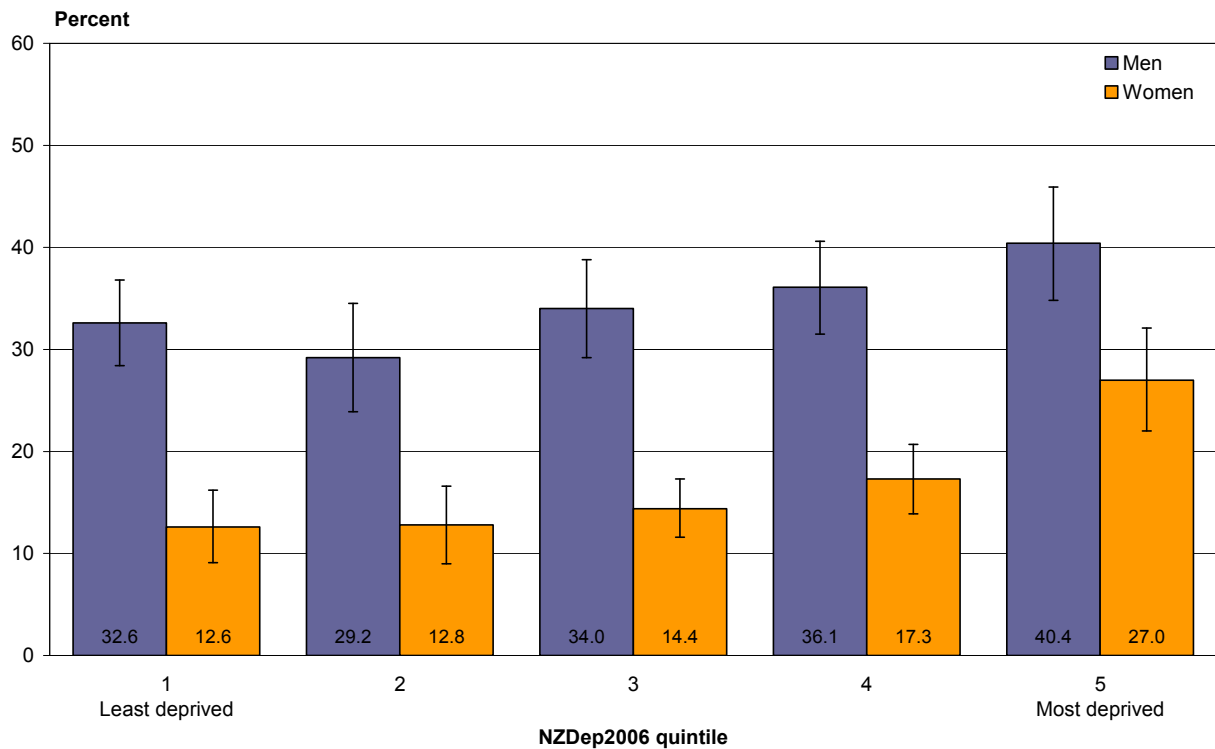
Source: 2006/07 New Zealand Health Survey

Notes: Age-standardised to WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 16–64 years who had consumed alcohol in the past year. Total response standard output for ethnic groups has been used.

## By neighbourhood deprivation

For both men and women the prevalence of hazardous drinking increased with increasing neighbourhood deprivation (Figure A12).

**Figure A12:** Hazardous drinking (AUDIT score of 8 or more) in the last 12 months, among past-year drinkers aged 16–64 years, by NZDep2006 quintile and gender (age-standardised prevalence), 2006/07



Source: 2006/07 New Zealand Health Survey

## Hazardous drinking among youth

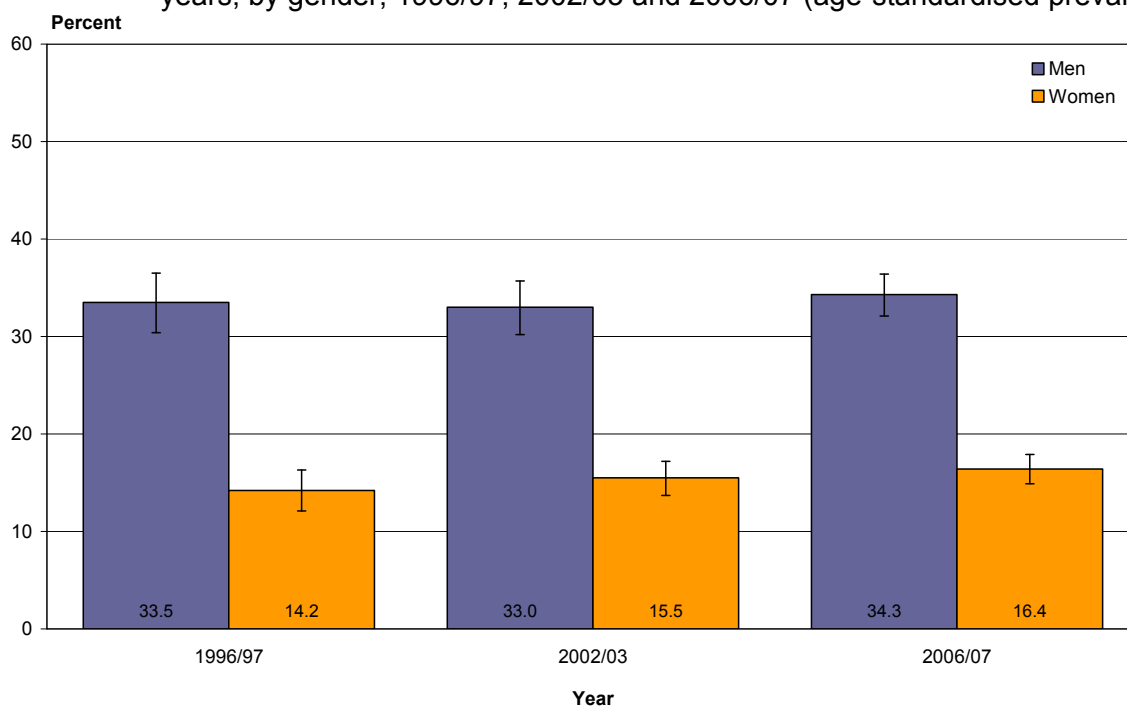
In 2006/07 one in four (24.7%, 19.2–30.2) people aged 16–17 years had potentially hazardous drinking patterns according to AUDIT in the 2006/07 New Zealand Health Survey. This represented almost one in three (30.4%, 23.8–37.0) past-year drinkers aged 16–17 years.

In 2006/07, among past-year drinkers aged 16–17 years, males (34.3%, 23.8–44.8) were significantly more likely than females (26.3%, 18.0–34.5) to have a potentially hazardous drinking pattern. However, among all people aged 16–17 years there was no significant difference between males (28.8%, 19.8–37.8) and females (20.7%, 13.9–27.5) in the prevalence of hazardous drinking.

## Changes over time in hazardous drinking patterns (AUDIT)

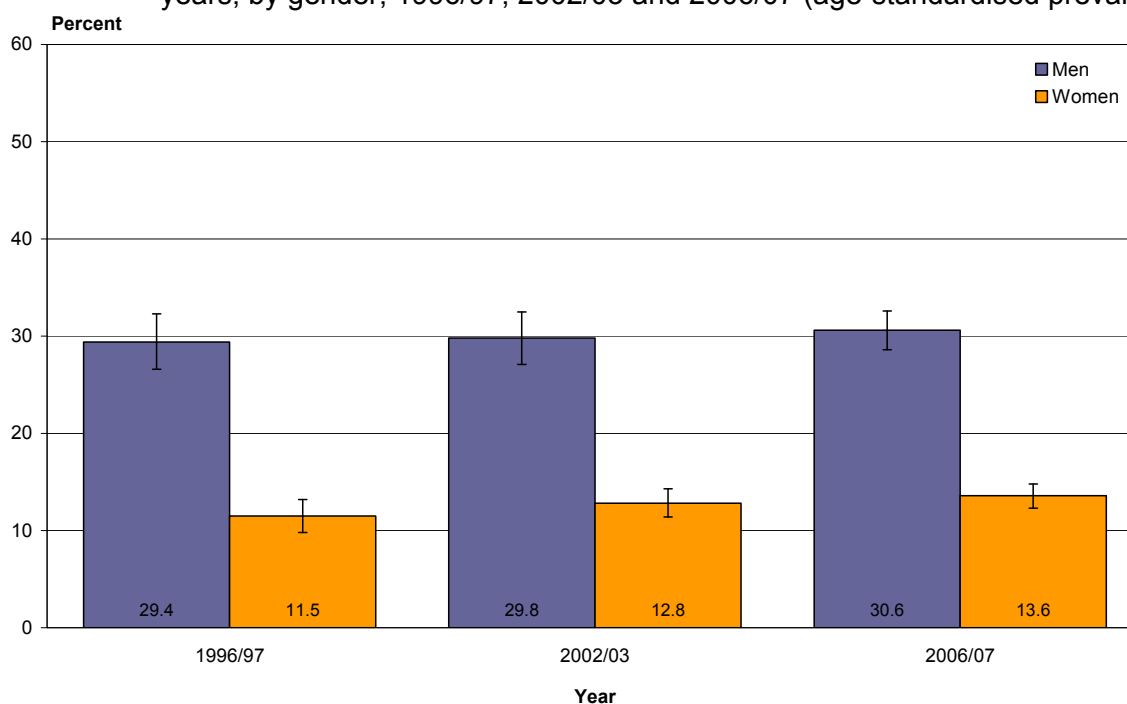
There have been no significant changes in the prevalence of hazardous drinking in men or women from 1996/97 to 2006/07, among past-year drinkers aged 16–64 years (Figure A13) or among the total population aged 16–64 years (Figure A14).

**Figure A13:** Hazardous drinking in the last 12 months, among past-year drinkers aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

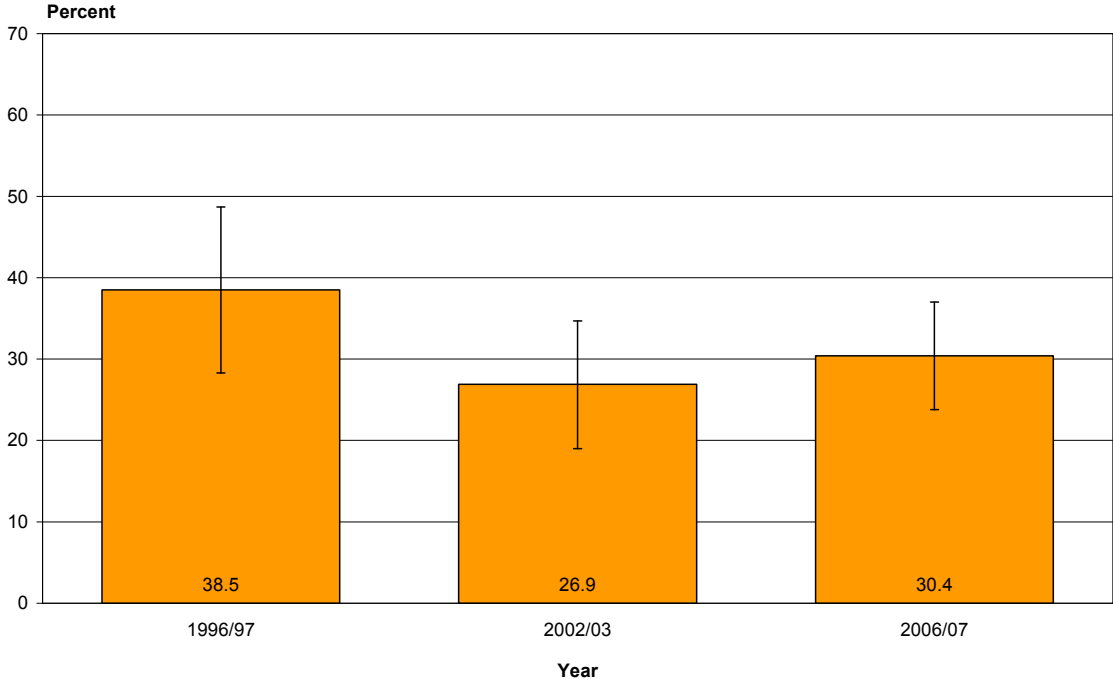
**Figure A14:** Hazardous drinking in the last 12 months, among total population aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)



### Hazardous drinking among youth

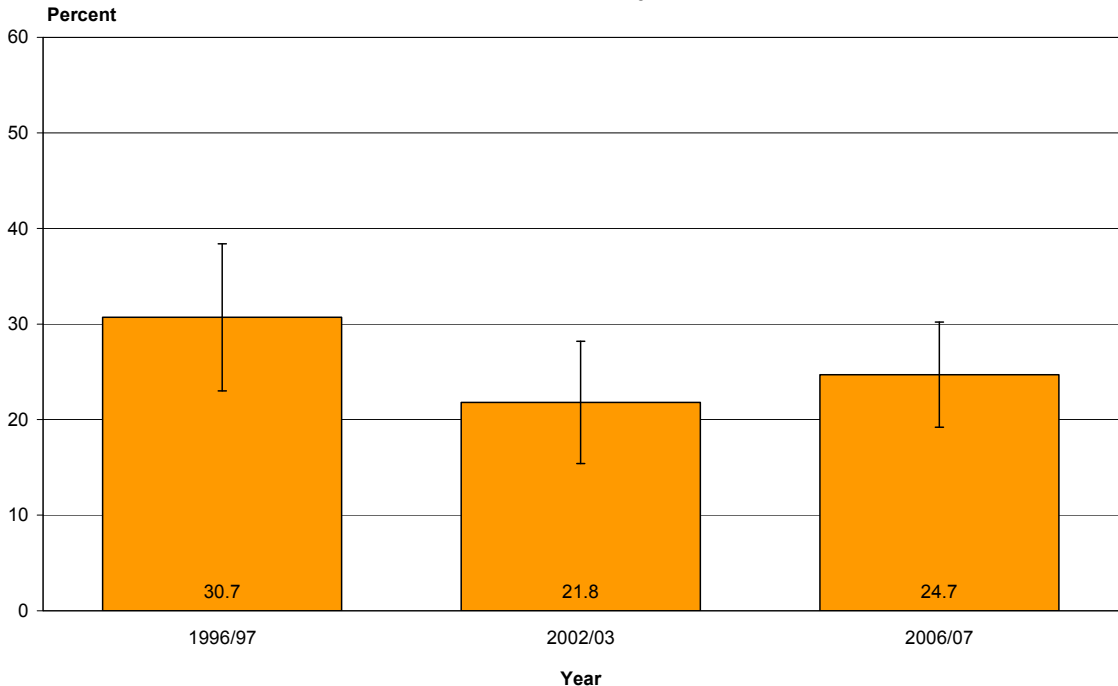
There was no significant change in the prevalence of hazardous drinking among past-year drinkers aged 16–17 years from 1996/97 to 2006/07 (Figure A15).

**Figure A15:** Prevalence of hazardous drinking, among past-year drinkers aged 16–17 years, 1996/97, 2002/03 and 2006/07 (unadjusted prevalence)



Among the total population aged 16–17 years, there have also been no significant changes in the prevalence of hazardous drinking since 1996/97 (Figure A16).

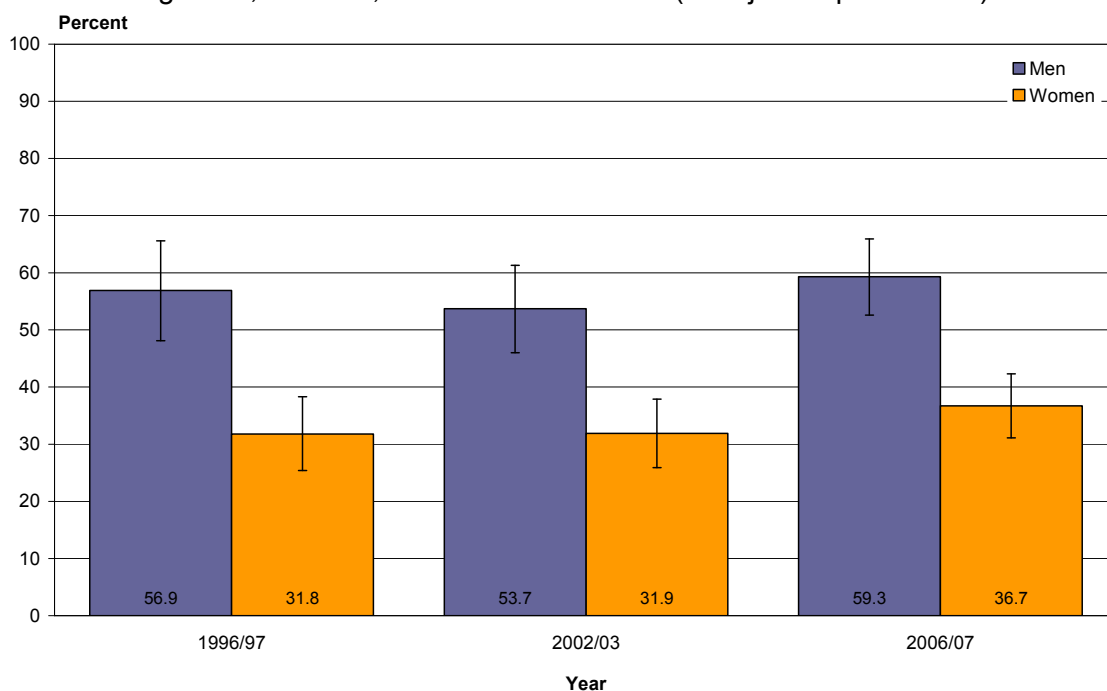
**Figure A16:** Prevalence of hazardous drinking, among total population aged 16–17 years, 1996/97, 2002/03 and 2006/07 (unadjusted prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

There was no significant change in the prevalence of hazardous drinking among past-year drinkers aged 18–24 years from 1996/07 to 2006/07 (Figure A17).

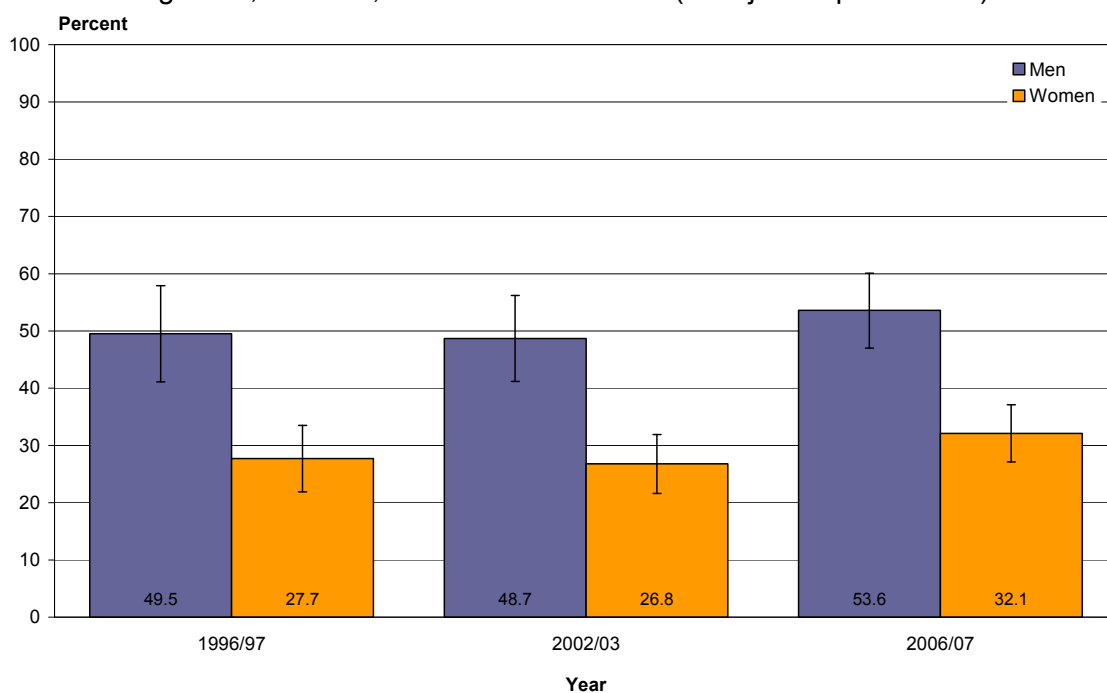
**Figure A17:** Prevalence of hazardous drinking, among past-year drinkers aged 18–24 years, by gender, 1996/97, 2002/03 and 2006/07 (unadjusted prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

Among the total population aged 18–24 years there have also been no significant changes in the prevalence of hazardous drinking since 1996/97 (Figure A18).

**Figure A18:** Prevalence of hazardous drinking, among total population aged 18–24 years, by gender, 1996/97, 2002/03 and 2006/07 (unadjusted prevalence)



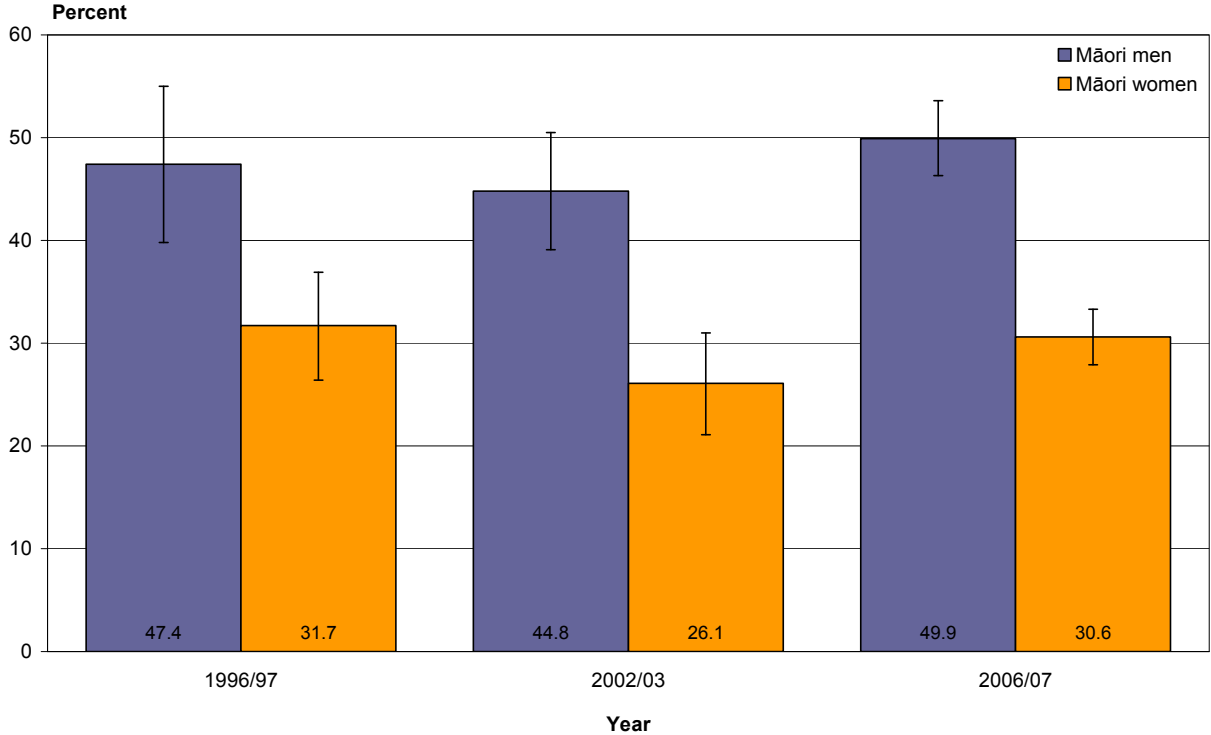
Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys



### Hazardous drinking among Māori

Among Māori past-year drinkers there has been no significant change in the prevalence of hazardous drinking over the past 10 years (1996/97 to 2006/07) for either men or women, when adjusting for age (Figure A19).

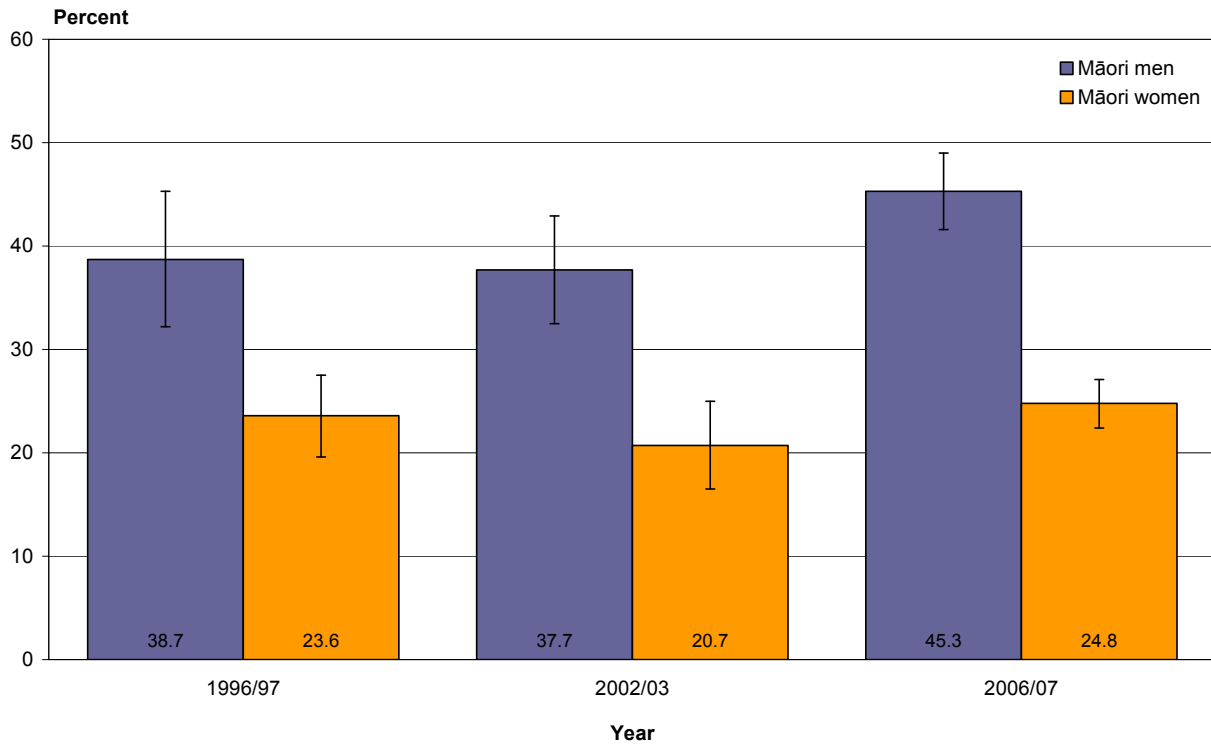
**Figure A19:** Hazardous drinking in the last 12 months, among Māori past-year drinkers aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

When looking at the total Māori population aged 16–64 years, there were no significant increases in the 10-year period from 1996/97 to 2006/07 in the prevalence of hazardous drinking among Māori men or women, adjusting for age (p-values > 0.05) (Figure A20).

**Figure A20:** Hazardous drinking in the last 12 months, among total Māori population aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)

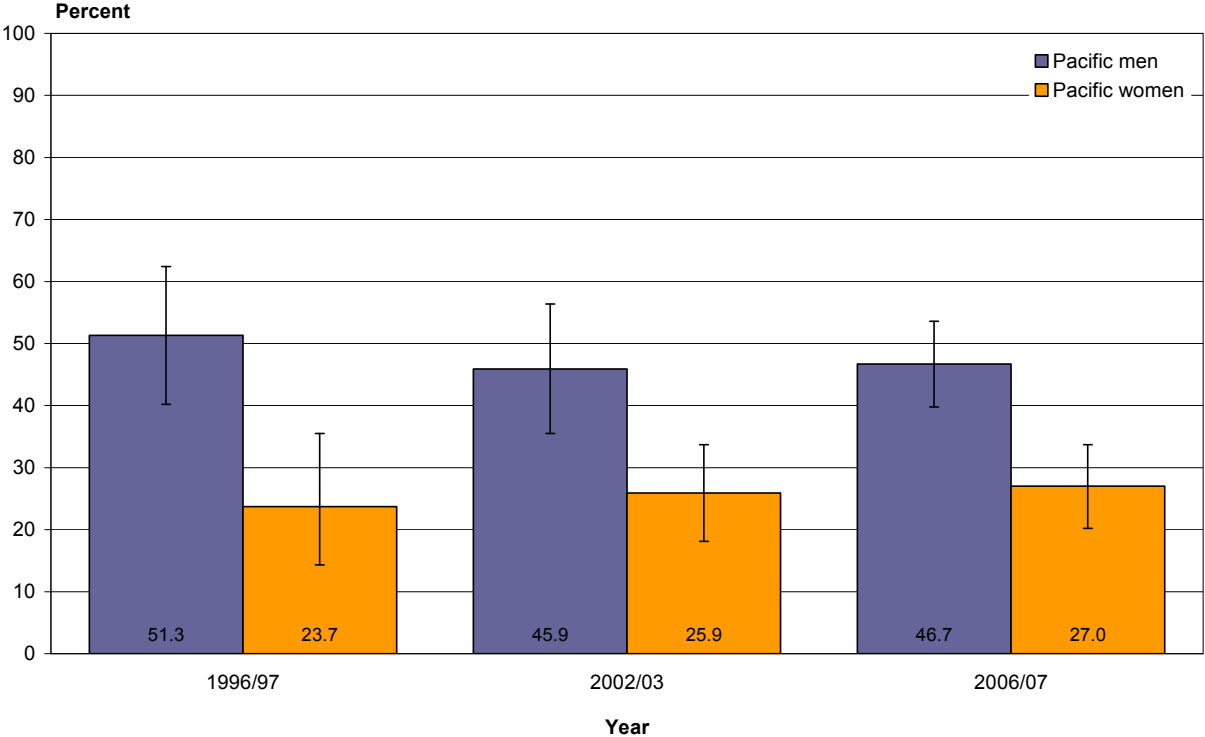


Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

### Hazardous drinking among Pacific peoples

Among Pacific past-year drinkers there has also been no significant increase in the prevalence of hazardous drinking for men or women in the past 10 years, adjusting for age (Figure A21).

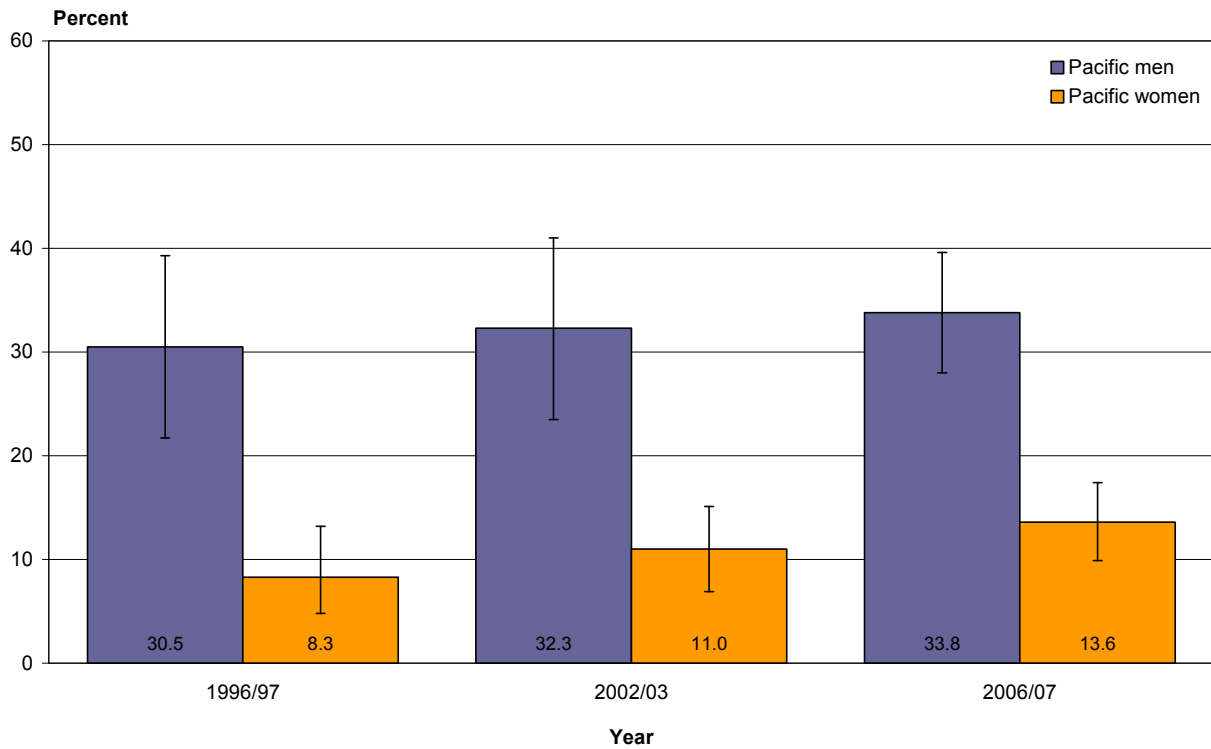
**Figure A21:** Hazardous drinking in the last 12 months, among Pacific past-year drinkers aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

When examining the total Pacific population aged 16–64 years, there was also no significant change over the past 10 years in the prevalence of hazardous drinking for men or women, when adjusting for age (p-values > 0.05) (Figure A22).

**Figure A22:** Hazardous drinking in the last 12 months, among total Pacific population aged 16–64 years, by gender, 1996/97, 2002/03 and 2006/07 (age-standardised prevalence)



Source: 1996/97, 2002/03 and 2006/07 New Zealand Health Surveys

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