

New Zealand Tobacco Use Survey 2006

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MANATŪ HAUORA

Foreword

The New Zealand Tobacco Use Survey (NZTUS) is an integral part of the New Zealand Health Monitor, a programme of national surveys established in 2001 and managed by Public Health Intelligence (PHI), the epidemiology group of the Ministry of Health.

New Zealand has made vast progress in tobacco control over the past seven years through smoke-free environments legislation and ratification of the Framework Convention on Tobacco Control in January 2004. Smoking behaviours, the use of tobacco and attitudes towards smoking have changed as a result of legislation and increased awareness. The NZTUS provides an opportunity to examine these changes and is an essential monitoring tool, providing key information about the use of tobacco and smoking-related behaviours in New Zealand. The NZTUS is the first nationally representative survey to provide robust estimates by key ethnic and age groups over a wide range of information indicators.

Having ratified the Framework Convention on Tobacco Control, an international tobacco treaty designed to reduce global harm from tobacco use, the NZTUS provides data to an international standard that can be used to inform international monitors. As result, New Zealand is now able to contribute substantially better data across more indicators of interest towards international reporting every year. Contributions at a global level allow international comparisons to be made while enabling New Zealand to gauge itself and its progress in tobacco control on the international stage.

As well as being a monitoring tool to inform public health initiatives and policies, the NZTUS can be used as a research tool. The survey covers a wide range of indicators (some that are not included in this report), which can be expanded and researched more thoroughly. Researchers wishing to use this data to investigate indicators further should apply to PHI. Further information about this can be found on the PHI website: <http://www.moh.govt.nz/phi>

This report presents information about all aspects of the survey, methodology and implementation. Descriptive statistics are also used to report the following indicators:

- prevalence of smoking
- second-hand smoke
- cessation programmes and services
- youth smoking.

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

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Author and Acknowledgements

This report was written by Sharon Ponniah, Advisor (Tobacco Research), Public Health Intelligence, Ministry of Health.

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Executive Summary

The New Zealand Tobacco Use Survey (NZTUS) is the first nationally representative survey of tobacco use to be conducted in New Zealand. It is comprehensive, providing accurate and robust estimates of prevalence and smoking behaviour. An essential part of the New Zealand Health Monitor, it contributes vital information for the monitoring of tobacco use, consumption, behaviours and attitudes in New Zealand.

The prevalence of smoking in New Zealand in 2006 was 23.5%, with the highest smoking rates among Māori and Pacific ethnic groups. Younger age groups (15–24 years) show higher rates of smoking compared to older age groups, but younger age groups also demonstrate higher rates of never having smoked compared to older age groups.

Higher rates of smoking are found in areas of greater deprivation – the rates of smoking decrease as levels of deprivation decrease. Similarly, the rate of smoking among people with no educational qualifications is significantly higher than among people with a qualification of some sort.

There has been a clear impact from smoke-free environments legislation and several media campaigns educating people about the dangers of second-hand smoke. Only 8% of New Zealanders report others smoking inside at work and around 7.5% report others smoking indoors at public venues. Around 12.5% of New Zealanders report others smoking inside their home and 15% report others smoking inside the car.

Importantly, around 65% of smokers in New Zealand have made a quit attempt in the last five years, with high numbers of Māori and Pacific peoples having made quit attempts. Around 64% of smokers who had deliberately quit for more than a week made at least one quit attempt in the previous 12 months. Of people who made quit attempts, around 26% utilised advice and/or some form of quitting product during their last attempt.

Almost three-quarters of youth (72.3%) would not smoke if they had their lives over again. On average, most youth aged 15–19 years start smoking at 14.6 years of age and almost three-quarters of youth in this age group purchase their cigarettes themselves. Significantly, higher proportions of youth smokers report parents, siblings or girlfriends/boyfriends being smokers compared to youth who do not smoke.

The data contained in this report represents the first data point from the NZTUS 2006. Data from waves to come – 2007 (New Zealand Health Survey), 2008 and 2009 – will enable time series to be constructed, allowing comparisons to be made and trends to be monitored over time.

Chapter 1: Introduction and Methodology

Introduction

This chapter provides an overview of the 2006 New Zealand Tobacco Use Survey (NZTUS), including detail on its background, objectives, content and methodology.

Background

The NZTUS is part of the New Zealand Health Monitor (Ministry of Health 2005), an integrated programme of household surveys and cohort studies managed by Public Health Intelligence (PHI), the epidemiology unit of the Ministry of Health. The 2006 NZTUS is the first comprehensive national tobacco use survey to be conducted in New Zealand. All New Zealanders aged 15 to 64 years who are usually resident in permanent, private dwellings were eligible for selection in this survey.

The NZTUS will be conducted annually in those years in which the New Zealand Health Survey is not run; ie, data collection for the NZTUS will occur two out of every three years. The New Zealand Health Survey contains a set of 10 questions, which will be used to produce national estimates of prevalence in 2007.

The NZTUS questionnaire was developed by Action on Smoking and Health (ASH) and the University of Auckland (Uniservices 2003a, 2003b, 2003c), under contract to PHI in 2003. The development of the NZTUS involved the following phases:

- a literature review
- questionnaire development
- key stakeholder consultation
- focus group consultation
- pilot testing of questions by computer-assisted telephone interviewing (CATI).

The National Research Bureau fielded the survey in 2006, and will do so in 2008 and 2009. PHI has analysed and published the 2006 data, and this will be repeated for 2008 and 2009.

As a signatory to the protocols of official statistics (Statistics New Zealand 1998), PHI employs best-practice survey techniques to produce high-quality data through the NZTUS. Standard frameworks and classifications are used where possible to allow for the integration of data.

This survey was approved by the Multi-Regional Ethics Committee in October 2005. Approval has been granted until November 2008.

Objectives

The objectives of the NZTUS are to:

1. provide a measure for the prevalence of smoking annually
2. collect valid and reliable measures of tobacco use, including consumption, initiation, addiction, quitting, relapse and exposure to second-hand smoke
3. collect comprehensive measures of knowledge, attitudes and beliefs about tobacco smoking and control
4. provide reliable measures for populations of interest: New Zealand Māori, Pacific and Asian peoples, and 15- to 19-year-olds
5. monitor changes in tobacco use, quitting behaviour and attitudes and beliefs about tobacco over time.

Questionnaire content

The 2006 NZTUS has three components: adult, youth and socio-demographics. The adult component was administered to people aged 20–64 years, and the youth component was administered to people aged 15–19 years. Modules in the adult and youth components were largely similar, except that the youth component contained extra questions specifically targeted at youth. All three components are outlined in the following tables.

Table 1: Adult and youth components

Module	Information domains	Output details
Prevalence	Prevalence and exposure to second-hand smoke (SHS)	<ul style="list-style-type: none">• Prevalence of smoking status• SHS exposure at home, work and public environments
Smoking history	Smoking history: initiation, and cessation	<ul style="list-style-type: none">• Smoking history, by smoking status• Age of initiation and age of cessation
Consumption	Individual consumption, product details and source	<ul style="list-style-type: none">• Average self-reported consumption, weekly and daily• Product details: brand, brand type, brand variant and source of purchase
Intensity	Smoking intensity	<ul style="list-style-type: none">• Self-reported intensity of inhalation
Dependence	Addiction and dependence	<ul style="list-style-type: none">• Self-reported dependence• Smoking patterns• Stage of change
Cessation	Cessation attempts: success, services and products utilised	<ul style="list-style-type: none">• History of quit attempts• Success of quit attempts• Advice received• Use of cessation products

Module	Information domains	Output details
Attitudes	Knowledge and attitudes	<ul style="list-style-type: none"> Attitudes and knowledge towards SHS, tobacco use and weight loss
Pregnancy	Smoking prevalence and cessation behaviours	<ul style="list-style-type: none"> Smoking prevalence: during and after pregnancy SHS exposure after pregnancy Cessation behaviours during and after pregnancy

Note: Information presented in the table above contains questions that were common to both adult and youth components.

Table 2: Youth component

Module	Information domains	Output details
Youth specific	Parental awareness, access, dependence, attitudes and knowledge	<ul style="list-style-type: none"> Parental awareness Cigarette source Dependence Attitudes and knowledge Exposure/perception of media

Note: Information presented in the table above contains additional questions that were asked specifically in the youth component, and not in the adult component.

Table 3: Socio-demographic component

Topics	Output details
Gender	<ul style="list-style-type: none"> Male Female
Date of birth	<ul style="list-style-type: none"> Full date of birth
Household composition	<ul style="list-style-type: none"> Age, gender and relationships of all household members
Ethnicity	<ul style="list-style-type: none"> Ethnicity Māori descent Country of birth Year of arrival in New Zealand Languages spoken
Education (based on New Zealand Register qualification level criteria – NZREG); categories have been collapsed	<ul style="list-style-type: none"> None Secondary only Tertiary Postgraduate tertiary Trade/diploma
Income support	<ul style="list-style-type: none"> Past 12 months Current

Topics	Output details
Occupation: based on the New Zealand Standard Classification of Occupations (NZSCO), 2002	<ul style="list-style-type: none"> • Agriculture and fisheries workers • Clerks • Elementary occupations • Legislators, administrators and managers • Plant and machine operators and assemblers • Professionals • Service and sales workers • Technicians and associate professionals • Trades workers • Response outside scope
Unpaid activities (categories are collapsed)	<ul style="list-style-type: none"> • Household work • Care (child, disability, older people) • Voluntary work • Studying
Income (based on collapsed categories)	<ul style="list-style-type: none"> • Personal and household • Less than \$20,000 • \$20,001–\$40,000 • \$40,001–\$60,000 • More than \$60,000 • No response
Address	<ul style="list-style-type: none"> • District Health Board

Notes:

1. Information presented in the table above contains questions that were asked of all respondents.
2. Classification of Education: NZQA 2003. New Zealand Register Qualification Level Criteria (NZREG), NZQA, Wellington.
3. Classification of Occupation from Statistics New Zealand 2001.

Methodology

Overview

The mode of data collection was computer-assisted personal interviewing (CAPI). The NZTUS collects information about the New Zealand population (smokers and non-smokers) aged 15–64 years, usually resident in permanent private dwellings.

Specific groups are of particular interest in the New Zealand population and were included in the survey sampling strategy so that inequalities could be monitored. The 2006 NZTUS aimed to produce reasonably precise estimates nationally by age group (15–19, 20–24, 25–44 and 45–64 years), gender (male, female) and ethnic group (Māori, Pacific peoples, Asian and European/Other, which includes New Zealand European and all other ethnic groups).

The sample size for 2006 was 5703. The total sample consisted of a main sample and a screened sample. The purpose of the screened sample was to boost the sample sizes for key age and ethnic sub-groups (15–24 years, Māori, Pacific peoples and Asians). The main sample had 4695 and the screened sample 1008 people. This sample design will apply for the 2008 and 2009 NZTUS.

Population and frame

Survey population

The survey aimed to include representative numbers of the New Zealand population aged 15–64 years living in permanent private dwellings. The population in 2006 was approximately 4,150,000 according to the 2006 New Zealand Census of Population and Dwellings.¹

Geographic coverage and frame

All mainland (North and South Island) New Zealand households were included in the survey coverage. Small offshore islands were excluded. Dwellings were clustered into meshblocks, as defined by Statistics New Zealand (see the Glossary for definitions).

Dwellings coverage

The survey covered the eligible population living within permanent, private dwellings, which included apartments and flats where possible. Private dwelling types not included in the survey were temporary dwellings such as caravans, cabins and boats. Non-private dwellings such as hotels, motels, guesthouses, boarding houses, homes for older people, hostels, motor camps, hospitals, barracks, prisons and other institutions were not included.

Eligible respondents

All people aged 15–64 years inclusive, usually resident in permanent private dwellings were eligible for selection as respondents. People who were present within the dwelling at the time of interview but who usually lived elsewhere, such as visitors, short-term students and house-sitters, were excluded.

Sample design

The survey was designed to be able to produce nationally representative estimates of tobacco smoking. To do this, a complex systematic, stratified sampling approach was taken.

Sampling

Two strata were used: Pacific (with 20% Pacific concentration) and other stratum.

¹ Statistics New Zealand 2006.

Stratification of the frame, as described, required a total of 500 meshblocks to be systematically sampled with probability proportional to size. Of these, 100 meshblocks were sampled from the Pacific peoples stratum and 400 from the other stratum.

Within a meshblock of the *other stratum*, 16 occupied dwellings were systematically sampled. Sixteen of the remaining dwellings were then screened for the screened sample. Within the *Pacific peoples* stratum, the only sample taken was a main sample of 16 dwellings from each meshblock. No screened sample was taken. Because the boundaries of the Pacific stratum were designed to produce a higher likelihood of producing ethnic estimates for the booster, it was not necessary to have a screened sample in this stratum.

Once 500 meshblocks were drawn systematically, the specific set of meshblocks was submitted to Statistics New Zealand to determine whether the characteristics drawn were aligned with the suggested frame. Table 4 outlines the comparison between the meshblocks that were drawn and the suggested frame.

Table 4: Proportion of dwellings containing at least one person within the eligible age, by ethnic sub-group: suggested frame versus drawn meshblocks

Stratum	Māori	Pacific	Asian	Other	Total	Number of meshblocks
Pacific	0.208	0.326	0.095	0.307	0.936	1890
	<i>0.203</i>	<i>0.316</i>	<i>0.100</i>	<i>0.323</i>	<i>0.942</i>	<i>1890</i>
Other	0.120	0.025	0.053	0.643	0.842	30225
	<i>0.115</i>	<i>0.026</i>	<i>0.057</i>	<i>0.627</i>	<i>0.825</i>	<i>30225</i>

Note: Drawn meshblock characteristics are presented underneath suggested frame characteristics in italics.

As can be seen in Table 4, the drawn meshblocks aligned very well with the suggested frame. Based on this similarity, no alterations were made to the main or the screening cluster sizes.

Main sample of homes

Using the updated enumeration of dwellings in assigned meshblocks, each interviewer was given a sampling interval in order to select dwellings for the sample. This number (N-factor) allowed around the same number of dwellings to be sampled for each meshblock, regardless of the size of the meshblock (size is defined as number of dwellings). Main sample homes were identified and contacted, and persons aged 15–64 years (inclusive) of any ethnicity are listed for selection by Kish Grid (see the Glossary for a definition).

Screened sample of homes

These are dwellings that lie between the main sample dwellings. For these, only boosted groups are eligible. This enables Māori, Pacific peoples, Asian peoples and 15–24-year-old sub-group sample numbers to be boosted. Only dwellings from meshblocks in the other stratum were screened for sub-groups. No screening was performed for dwellings from meshblocks in the Pacific stratum.

Probability of selection

The probability of a respondent being selected depended on the probability of:

- a meshblock being selected
- their dwelling being selected within the meshblock
- the respondent being selected from all the eligible individuals within the dwelling.

Probability of meshblock being selected

The first stage of sampling was at the meshblock level. Meshblocks were arranged from north to south, sorted into regions, then urban, secondary urban and rural areas. A systematic sample was taken from each stratum, starting from a random point. Every meshblock within each stratum had a known, non-zero probability of selection. No meshblock, either within a stratum or across the strata, had more than one chance of selection.

Meshblocks from all strata are selected with a probability proportional to their size. The probability of selection for each meshblock was directly proportional to the number of eligible dwellings within that meshblock.

Probability of dwelling being selected

The target number of dwellings selected for the main sample was 16 per meshblock. The target number of dwellings selected for the screened sample from the other stratum was also 16. The dwellings for the screened sample were drawn from remaining dwellings in the meshblock after the main sample had been taken.

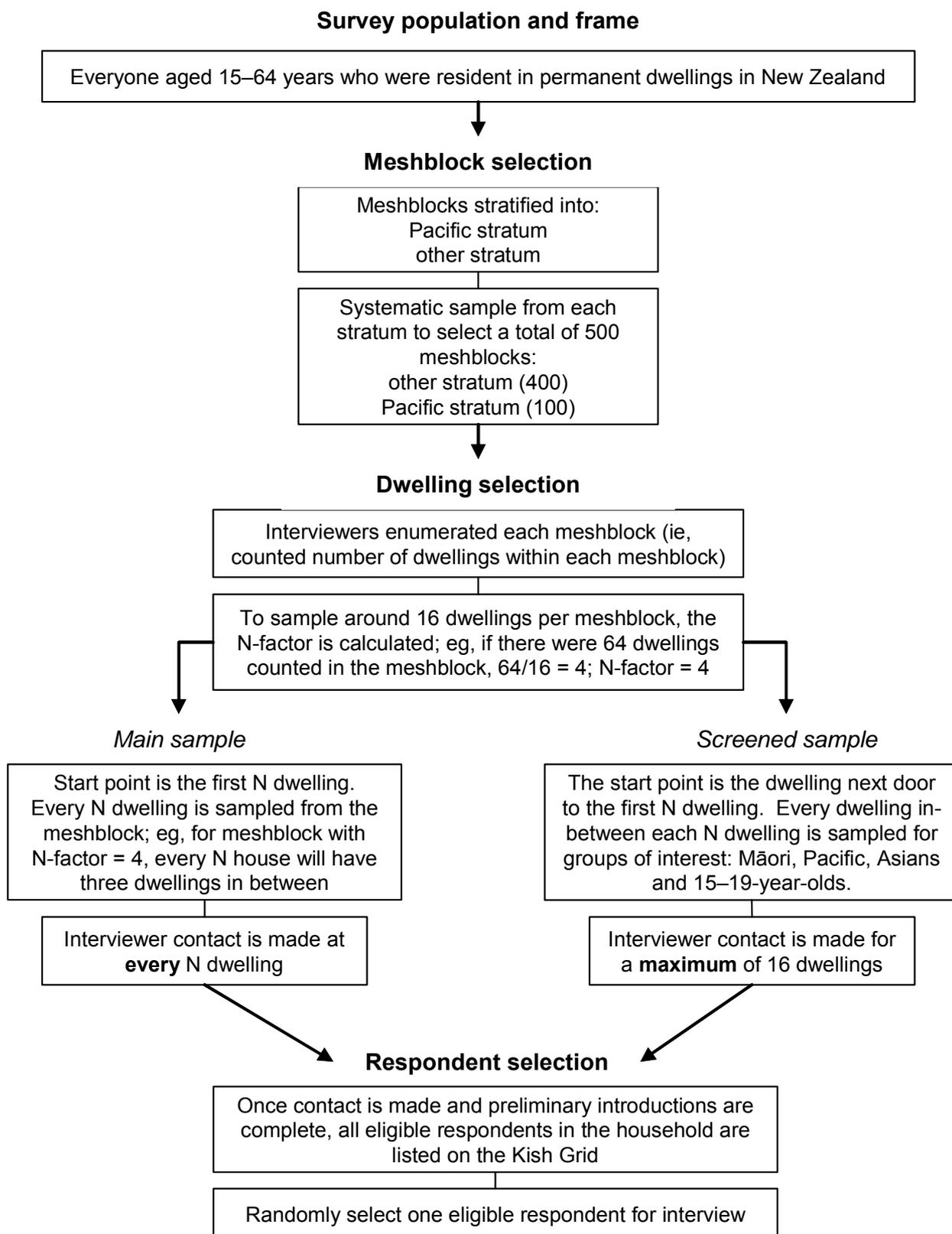
Small meshblocks with less than 16 dwellings available for the screening sample were encountered minimally. Meshblocks with fewer than nine homes were removed. Coverage of all New Zealand homes was approximately 99%, even after removing some meshblocks.

Interviewers enumerated the number of dwellings in the meshblocks assigned to them before interviewing began. This ensured that the number of eligible dwellings in each meshblock was updated from the 2001 census counts.

Probability of a respondent being selected

Within each dwelling all people of eligible age (ie, 15–64 years inclusive) were identified. The Kish Grid procedure was used to ensure that one eligible person in a selected dwelling would be randomly selected to be interviewed irrespective of the number of eligible individuals in the dwelling. The names of all eligible respondents were listed in descending order of age onto a sampling grid. This grid (the Kish Grid) was then used to select the respondent whose name fell alongside a predetermined indicator. No substitution of any refusing or un-contactable respondent was permitted.

Figure 1: Flowchart of NZTUS sampling methodology



Data collection

The collection mode for the NZTUS was computer-assisted personal interviewing (CAPI); that is, face-to-face interviewing by trained interviewers.

Interviewers

Selecting interviewers who are competent and engaging is extremely important when conducting face-to-face interviews. Interviewers used for this survey consisted of a mix of existing, experienced survey company interviewers, supplemented by new recruits to account for attrition and specific local need.

New recruits were interviewed and assessed on personal presentation, people skills, confidence, availability, computer skills, reliability, previous experience and attitude.

Interviewer training sessions were conducted over two days and covered all aspects of interviewer conduct, technical procedures and interviewing methods. Training was conducted by survey company field supervisors and research staff assigned to the NZTUS project. Further training was provided from time to time in addition to the first session for supervisor training and for replacement/supplemental interviewers.

Along with training, all interviewers are provided with a training manual, which includes information about the NZTUS, its objectives and purpose, various information sources and forms to provide to interviewees, interview processes, sampling methods, tips for getting better response rates, and other issues like cultural awareness and respondent safety.

Performance and quality control

All interviewers' performances were regularly monitored by supervisors. Supervisors are responsible for interviewers maintaining professionalism and high-quality interviewing at all times. Support provided by supervisors included:

- training for interviewing skills and laptop interviewing
- providing follow-up training where required
- quality checking enumerations
- auditing interviews (including contacting up to 15% of households to confirm and check aspects of the interview)
- progress appraisals
- safety reports.

Calling and call-backs

Interviewers approached households between 9:30 am and 6 pm on weekdays and between 4 pm and 8 pm during weekends. Up to eight calls were made at each sampled home to attempt to contact the respondent, but could include up to 20 attempts. Days of the week and times of the day for these calls were varied to maximise contact. Towards the end of the survey sampling schedule some households

were approached again in meshblocks where response rates were particularly low. The households approached were those that indicated they could not complete an interview at that time but did not refuse to participate.

Interviewer supplements

The following supplements were carried by interviewers at all times to be provided to selected households:

- letter of introduction
- survey information brochure
- consent form

A letter of introduction was provided by the interviewer to all eligible households regardless of whether contact had or had not been made. The letter outlined that the survey was being conducted by the survey company, on behalf of the Ministry of Health, and included general information about the survey, including how the household had been selected, what the survey was about and the intended use of the information.

Once contact had been made with selected households, an information brochure with additional details about the survey was provided. The brochure provided information about the structure of the survey, answers to general questions and several NZTUS contact details. The information brochure was available in several languages, including English, Māori, Samoan, Tongan, Hindi and Chinese.

Consent for the NZTUS was voluntary and respondents were able to withdraw their consent at any time. Once contact had been made with a selected household and an eligible respondent had been identified, participants were required to sign an informed consent form. This, too, was available in several languages (see above) and interviewees were given the opportunity to request an interpreter.

Minimising respondent burden

A number of processes were in place to reduce respondent burden as much as possible, including:

- using a well-tested questionnaire
- having survey company staff who are experienced in planning, designing and implementing survey fieldwork
- having experienced and skilled field supervisors and interviewers
- being flexible when making appointments to suit respondents
- having well-designed and efficient call-pattern procedures
- highly developed monitoring processes.

Every effort was also made to provide interviewers of the same gender and/or ethnicity if requested. An interpreter was provided (in person) where language difficulties were present or if English was not the respondent's first language.

Ethics

Consent for this survey was voluntary, as outlined above, and participants were given the opportunity to withdraw their consent. Respondents between the ages of 15 and 18 were not required to have parental consent, but were assessed on a case-by-case basis as to their ability to understand and participate in the survey. Respondents aged 15 to 18 were required to give informed consent.

The information collected in this survey is protected by the Privacy Act 1993. All identifying features from the information collected were removed from the data set, which is stored securely at the Ministry of Health. The information collected is combined with other information from other people to produce summary statistics about whole groups of people. No one can be personally identified by looking at the final data set.

Approval for this survey and its analysis was granted by the Multi Regional Ethics Committee, Ministry of Health, in October 2005. Approval has been granted until November 2008.

Survey testing

A dress rehearsal was conducted in the first three weeks of November 2005. The objective was to check all aspects of the survey, including interview duration, training, software, sampling methods, data collection, and public reaction to the questionnaire and the overall survey.

Sample design objectives

The total target sample size for the main survey was required to be around 5300. Within this total sample size there were to be minimum sample sizes for the following population groups of interest:

- Māori (total target sample): 1000
- Pacific peoples (total target sample): 500
- Asian peoples (total target sample): 500
- 15–19-year-old age group: 500.

Note that one person may identify with more than one ethnicity.

Expected sample sizes

An initial approach was tested to see whether total ethnic target samples could be reached by screening within the 500 meshblocks to be selected for the main sample. The average size of meshblocks was found to be too small to yield the minimum targets required for Pacific and Asian peoples.

The second approach tested a combination of stratification and screening. A boundary with a concentration of 20% Pacific peoples was selected for stratification of the ethnic booster sample, meaning that the Pacific stratum consisted of meshblocks containing at least 20% eligible people who identified themselves as being of Pacific ethnicity.

Interviewing

Eleven survey company interviewers were specifically trained to administer the NZTUS for the 'dress rehearsal', and each was assigned a single meshblock to sample respondents and interview in the same manner as anticipated for the survey. Over this period, 110 complete interviews were achieved with a response rate of 70%.

The dress rehearsal was successful in testing the questionnaire, survey design and methodology, and only a few minor changes were made to the questionnaire as a result. The 110 interviews completed in the dress rehearsal have been included in the final data set for the 2006 NZTUS.

Main survey

The main survey was undertaken during the first quarter of 2006 (January to March). The survey was well received and no problems were encountered with interviewers or interviewees.

From the 500 meshblocks sampled, 13,393 dwellings were enumerated and visited. A total of 5703 people responded to the survey, of whom 1071 were Māori, 615 Pacific peoples and 710 Asian; 756 were 15–19 years old. These are total response ethnicity counts, where people who reported more than one ethnic group are counted in each group they reported.

The mean duration of the interview itself (not including the time taken to obtain or set up the interview) was approximately 13 minutes.

Response rate

The overall response rate for the main survey was 75.4%. Four components were used to calculate the response:

- ineligibles (eg, vacant sections, vacant dwellings and non-residential dwellings)
- eligible responding
- eligible non-responding
- unknown eligibility (eg, non-contacts and refusals who provide insufficient information to determine eligibility).

The response rate is calculated as follows:

$$\text{Response rate} = \frac{\text{number of eligible responding}}{\left[\begin{array}{c} \text{number of eligible} \\ \text{responding} \end{array} \right] + \left[\begin{array}{c} \text{number of eligible} \\ \text{non-responding} \end{array} \right] + \left[\begin{array}{c} \text{estimated number of eligibles} \\ \text{from the unknowns} \end{array} \right]} \times 100$$

Justification for this response rate is that a proportion of unknowns are likely to be eligible if contact could have been made. It was not possible to make contact with the estimated number who would be eligible, so they become classified as non-respondents. An assumption is made that the estimated number of eligibles from the list of unknowns is in the same proportion as eligibles from the set of known eligibility (Ministry of Health 2006).

Data processing

The survey was programmed on to laptops using Blaise software,² a program specifically designed for health and social science purposes and used internationally. All responses were directly entered into the interviewers' laptops at the time of the interviews. Predetermined processes, tested during the dress rehearsal, ensured that any non-sampling errors (eg, keying errors and coding outputs) were kept to a minimum (if any). Show cards were also used where there were many response options (see the Glossary for definitions). All completed interviews were uploaded to a secure upload site at least once a week.

Coding and editing

Only limited editing was required for interviews. The Blaise program ensured that fields could not be missed. All routing was checked repeatedly beforehand to avoid difficulties later. Because age was asked at the beginning of the survey (to appropriately route respondents to adult or youth questionnaires) and date of birth was asked at the end, 55 respondents age groups were changed to reflect birth date, which was assumed to be accurate. These respondents had rounded their age when stating age group. Thirteen interviews, where a youth had completed an adult interview incorrectly due to rounding of age, were removed from the data set.

Imputation

Imputation for non-response or refused answers was generally not undertaken. The only exception was imputation of exact age for the 81 respondents who refused to give their exact date of birth. This was necessary for calculating weights. Estimation of 14 of these cases was possible because their age group was known; the remaining 66 cases were imputed by generating random birth years within each known age group.

All final data sets were delivered to the Ministry of Health at the end of field work in March 2006.

Security

A number of processes were used to ensure security of data. All completed questionnaires were held in electronic format only. Interviews held on laptops before upload were in Blaise format only, which is not readable by standard programs. Any interview data on laptops was deleted after the data collection phase. Respondent names were recorded separately from the interview; only NZTUS identification numbers

² Information about Blaise software can be found at URL: www.westat.com/blaise.

were recorded with interviewer data, which made interview data anonymous, thereby protecting the respondent and their responses at all times. The survey company upload site is password protected, which prevents unauthorised access. During fieldwork, few employees had access to data held at the survey company. All data was handed over to the Ministry of Health at the conclusion of fieldwork.

Weighting estimation

The NZTUS has been designed to produce estimates that are representative of the New Zealand population. In order to achieve national estimates, each complete interview (unit) in the survey is weighted to the national population in 2006.

There are two stages of weighting. The first stage involves calculating the selection weight for each unit. Because the total sample comprises a main sample and a screened sample, the probability of selection for each unit in these two samples was calculated differently. The selection weight is the inverse of the selection probability. The second stage involved a weighting adjustment using generalised regression to ensure that the respondents are consistent with the national population in 2006.

Benchmarks used for the NZTUS were estimated for the number of people aged 15 to 64 years living in permanent private dwellings in 2005, by Māori and non-Māori, gender and age group (15–19, 20–24, 25–34, 35–44, 45–54, 55–64).

Age-standardised weights

Age standardisation was performed with the direct method, using World Health Organization (WHO) population age distributions. For the NZTUS, each prioritised ethnic group (Māori, non-Māori), gender and age group (15–24, 25–34, 35–44, 45–54, 55–64) was adjusted to match the WHO world standard population distribution.

Age standardisation is a useful way to summarise age-specific rates into a cross-comparable summary index, which is not affected by differing population size and age structure. Age standardisation involves a standard (reference) population and a study population. Direct age standardisation uses the age structure of the standard population as a weight to apply to the age-specific rates of the study group. The directly standardised rate can be readily compared with other directly standardised rates using the same standard population.

Variance estimation method and estimation reliability

The method of variance estimation used in this survey is called the delete-a-group (DAG) jack-knife method (Kott 1998). This method divides the full sample into G random groups, and weights each G random group to the population using the same weighting methodology as for the full sample. Differences between the full sample estimate and the random group estimates were then calculated. One hundred random groups were chosen ($G = 100$) for the NZTUS.

The variation of estimates was calculated by taking the sum of the squared differences between the G random group estimates and the full sample estimate, and multiplying by $(G-1)/G$. All rates presented in the report are for numerator counts of indicators higher or equal to 5. For confidence intervals less than zero or greater than 100, and for counts less than 29, a non-symmetric confidence interval method was used (Korn and Graubard 1998).

Replicate weights

To create replicate weights, each member of the full sample was assigned to a group in a way that reflected the sample design, so each G sub-sample replicated the design of the full sample with fewer members. G sub-samples were produced by removing A random groups in turn from the full sample, and the records belonging to the removed random group were assigned a replicate weight of 0. The records from the remaining random groups were then reweighted to the population using exactly the same weighting estimation methodology as for the full sample. Removing each of the A random groups in turn means that these weighting procedures were repeated A times to produce the A sets of replicate weights.

Data presentation

The purpose of this report is to present data from the 2006 NZTUS. Certain indicators (such as prevalence) are measured and available through other sources (eg, the New Zealand census measures the prevalence of smoking, which is reported by Statistics New Zealand). Data from other sources reporting on the same indicators may or may not be similar to the data reported here for a number of reasons, including differences in survey methodology and final response rates. This report does not attempt to make comparisons against other data or data sources; it provides only findings based on sound sampling and methodological procedures. Comparisons against data from other sources requires different analytical procedures, so the reader is cautioned against making direct comparisons.

Descriptive tables and graphs have been used to present all data in this report. The prevalence rates presented are age-specific. Age-standardised calculations are available, but only age-specific rates have been presented.

Demographic breakdowns

All indicators are reported by key demographics, which include:

- gender – male and female
- ethnicity – Māori, Pacific, Asian and other
- age group – 15–19, 20–24, 25–29, 30–39, 40–49, 50–59, 60–64 years.

Where sample numbers allow, indicators are presented broken down by:

- level of socioeconomic deprivation, NZDep01 quintile – quintile 1 (low deprivation), quintile 2, quintile 3, quintile 4 and quintile 5 (high deprivation)
- smoking status – never smoker, ex-smoker, current smoker

- ethnicity – Māori and non-Māori (Pacific peoples, Asian and European/Other)
- age stage – youth (15–19 years), young adult (20–24 years), adult (25–64 years)
- education – none, trade/diploma, secondary, tertiary and postgraduate tertiary
- occupation – agriculture and fishery workers; clerks, legislators, administrators and managers; plant and machine operators and assemblers; professionals; service and sales workers; technicians and associate professionals; trades workers and elementary occupations
- District Health Board – Northland, Waitemata, Auckland, Counties Manukau, Waikato, Lakes, Bay of Plenty, Tairāwhiti, Taranaki, Hawke’s Bay, Whanganui, MidCentral, Hutt Valley, Capital and Coast, Wairarapa, Nelson–Marlborough, West Coast, Canterbury, South Canterbury, Otago, and Southland.

Prioritised ethnicity

Due to people identifying with more than one ethnic group, breakdowns by ethnicity do not always equal the total population count. Prioritised ethnicity is a method used to overcome this by condensing multiple responses for ethnicity into a single ethnic response. Priority is given in the following order of identity: Māori, Pacific peoples, Asian, and European/Other. Analysis and presentation of ethnicity data in this report are by prioritised ethnicity.

Ninety-five percent confidence intervals

Ninety-five percent confidence intervals are used in this report to represent the sampling error for a prevalence rate. Ninety-five percent confidence intervals are presented in brackets after estimates in the text, as error bars in graphs and underneath prevalence rates in tables.

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

The differences between variables are commented on in the text when they are found to be statistically significant at the 5% level. When the confidence intervals of the two groups do not overlap, the difference in rates between the groups is statistically significant at the 5% level.

Limitations

The NZTUS is designed to provide nationally representative estimates across a comprehensive range of tobacco use indicators in New Zealand. The total sample size of 5703 obtained in 2006 does not enable representative estimates to be made by every socio-demographic variable, however; for example, the sample numbers of smokers when broken down by DHB were very small, resulting in wide confidence intervals.

This survey used self-reported information, so there will be influences from social desirability, understanding of questions and memory issues that will affect the data. Every step was taken to reduce these effects, where possible. For instance, people with language difficulties, or where English was not the first language, were offered interpreters (in person) to administer the survey. All questions used were validated instruments that were previously cognitively tested and re-tested through the dress rehearsal process.

Questions that required some level of memory and recall were largely capped to 'in the last 12 months', and where social desirability bias could have affected responses, privacy of responding was always offered (eg, respondents were able to type their responses into the laptop themselves, thereby avoiding the interviewer's judgement on certain items). As a result, any effects due to self-report are likely to be minimal, and the data presented in this report should be valid and reliable.

Finally, interviewing was completed in the field between January and March 2006. There may be some seasonal effects due to not sampling throughout the course of the year; for instance, the first quarter of the year is summer in New Zealand, where more people tend to be on holiday and are therefore more likely to be away from their homes, or living in non-private dwellings (eg, hotels), in temporary dwellings such as caravans, or staying with friends and family (temporary residents), thereby making them ineligible for the sample. There may be some biases in the type of people who were excluded from the sampling frame due to this, but these differences are thought to be negligible.

Questionnaire

The 2006 NZTUS has eight modules and a socio-demographics section that are common to both the adult and youth components. The youth component has an additional youth-specific component. Questions used for the NZTUS have been largely derived from the Canadian Tobacco Use Monitoring Survey (Health Canada 2002) and other well-validated instruments.

A copy of the 2006 NZTUS questionnaire is available on the Ministry of Health's website: <http://www.moh.govt.nz/phi/surveys/tus>

Modules

Prevalence

This module measures self-reported prevalence of smoking, and enables breakdowns of smoker type (never smoker, current smoker and ex smoker) to be made. These are well-validated questions that also provide an element of smoking history. The prevalence module also measures self-reported prevalence of second-hand smoke (SHS) exposure in the home, in vehicles, at work and in the environment.

Smoking history

Along with contributing to classification of smoker type, the measure of smoking history provides a timeframe for smoking behaviours. This module also provides important information about the age of smoking initiation and cessation, where applicable. This information is useful for revealing relationships between smoking behaviours, cessation, addiction and health outcomes.

Consumption

This module measures self-reported consumption and frequency of tobacco use, including individual daily and weekly consumption. Individual product consumption (roll-your-own cigarettes and manufactured cigarettes) is also measured by brand, brand type and brand variant. Source of purchase for tobacco products is also measured in this module.

Intensity

This is the only module containing questions that have not been used before in New Zealand. It consists of a set of three questions that measure self-reported smoking intensity during inhalation. These measures provide self-reported information about smoking topography that otherwise would be measured physically.

Dependence

The questions in this module differ between the adult and youth components. Questions from both components have been taken directly or derived from the Hooked on Nicotine Checklist (Difranza et al 2002) and the Modified Fagerstrom Tolerance Questionnaire (Fagerstrom and Schneider 1989). In the adult module, a set of three questions measure level of addiction and dependence on nicotine. The youth module uses the same questions as above, plus an additional selection of Hooked on Nicotine Checklist questions that are well validated to produce reliable estimates of nicotine dependence and addiction in youth.

Quitting

The quitting module is a monitoring tool for measuring quitting behaviour, motivation to quit, relapse, and use of quitting aids and services during recent attempts. This module contains a stage of change question that identifies three important behavioural stages of change: pre-contemplation, contemplation and preparation. These classifications are particularly useful in smoking cessation (Prochaska and Velicer 1997).

Attitudes

The questions in this module are generic questions measuring attitudes to weight loss, SHS exposure, SHS harm, peer and parental smoking and tobacco use in general. These questions are to be evaluated for usefulness for the 2008 NZTUS.

Pregnancy

The key measures from this module are pregnancy status, smoking behaviour during and post-pregnancy, and post-partum exposure to SHS. It is the first time that questions of this nature are being asked in this context and of a national population. It was expected that this module would only produce small sample numbers; the intention is to build the sample over time (2008 and 2009) in order to provide nationally reliable estimates.

Youth specific

This module measures a range of items specific to youth, including parental awareness of smoking behaviour, access to cigarettes, experience of first cigarette, parental smoking and knowledge, and exposure to and perception of the media.

Demographics

This module includes the standard socio-demographic variables: age, gender and ethnicity. It also measures the age, gender and relationships of all household members. Ethnicity is measured by self-reported identification, allowing identification with more than one ethnic group; country of birth and year arrived in New Zealand are also measured. Other measurements include education at secondary and tertiary level, occupation, unpaid activities, income support, household income and personal income. Socioeconomic status and District Health Board (DHB) were identified using meshblock identification.

Chapter 2: Prevalence of Smoking

The prevalence of current tobacco use is an important measure of the tobacco burden in a given population. Prevalence of smoking is a key monitoring indicator and is measured annually. It provides a way to evaluate the effectiveness of national tobacco control policies over time and enables comparisons to be made internationally.

Respondents who are identified as ever smokers (see Glossary) in the NZTUS are asked a number of questions about smoking behaviours and smoking history. This chapter presents information about current smokers in New Zealand. Data from this module of the survey was briefly outlined in *Tobacco Trends 2006* (Ministry of Health 2006b). The data presented here adds to previous data.

Data in this chapter is presented in three parts:

- prevalence of current smokers
- ethnicity: Māori versus non-Māori
- access to tobacco products.

All data is presented by gender, age group and ethnicity. Data for prevalence extends the analyses presented in *Tobacco Trends 2006*, and presents analyses by NZDep01 quintile, DHB and level of education.

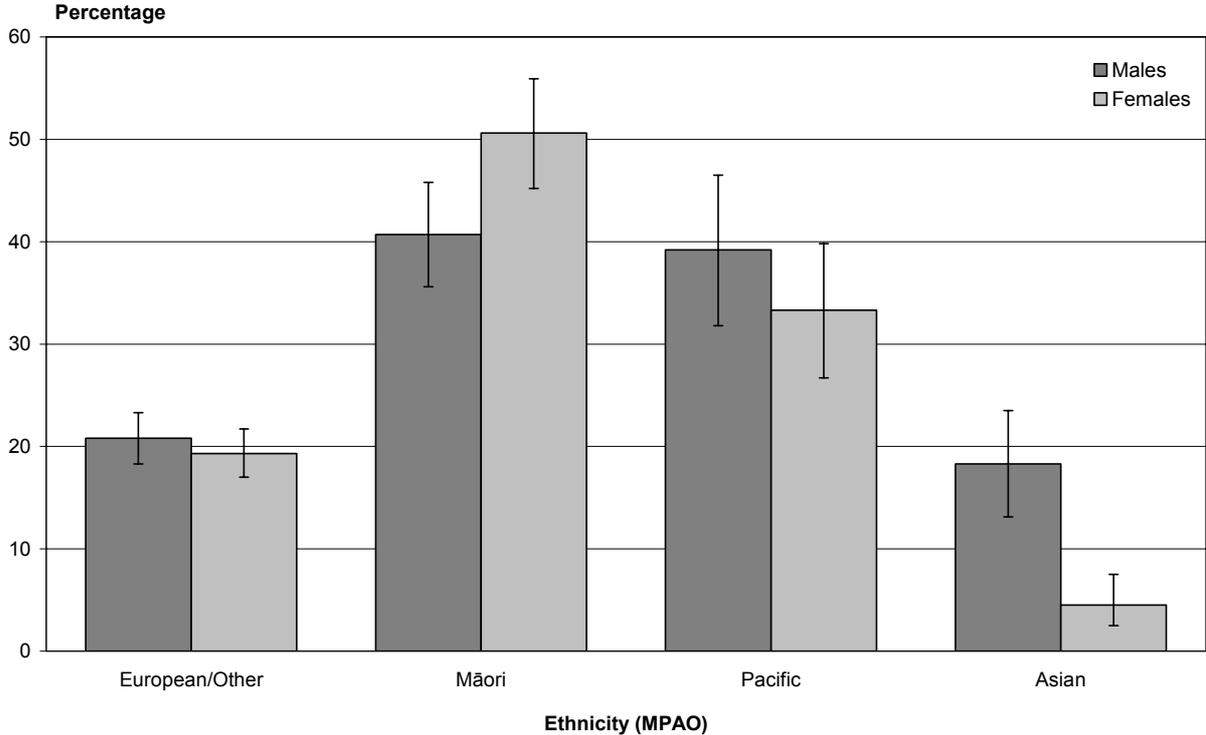
Summary

- The prevalence of current smokers in New Zealand in 2006 was 23.5%.
- Smoking rates are significantly higher among Māori (45.8%) and Pacific (36.2%) ethnic groups than European/Other (20.0%) and Asian (12.0%) ethnic groups.
- High rates of smoking are reported among people aged 20–24 years (30.3%). Smoking rates are also high among 25–29-year-olds (28.7%) and 15–19-year-olds (26.8%).
- People in more deprived socioeconomic quintiles demonstrate higher rates of smoking compared to less deprived areas: 29.2% in NZDep01 quintile 4 and 34.2% in NZDep01 quintile 5.
- Smoking is related to education level: the prevalence of smoking is highest among people who have no educational qualifications (39.2%).
- DHBs with high smoking rates include Lakes (34.3%), Northland (35.7%), Tairāwhiti (32.1%), Whanganui (35.3%) and Southland (31.2%).
- Almost half (42.9%) of smokers purchase their cigarettes from dairies or other shops, followed by supermarkets (25.4%) and petrol stations (23.2%).

Prevalence of current smokers

The prevalence of current smokers in New Zealand in 2006 was 23.5% (CI = 22.0, 25.0). Overall, the prevalence of males who currently smoke is 24.1% (CI = 22.0, 26.2); the prevalence of females who currently smoke is 22.9% (CI = 21.0, 24.7).

Figure 2: Prevalence of current smokers (%), by gender and ethnicity



Note: 95% confidence intervals are presented for each bar.

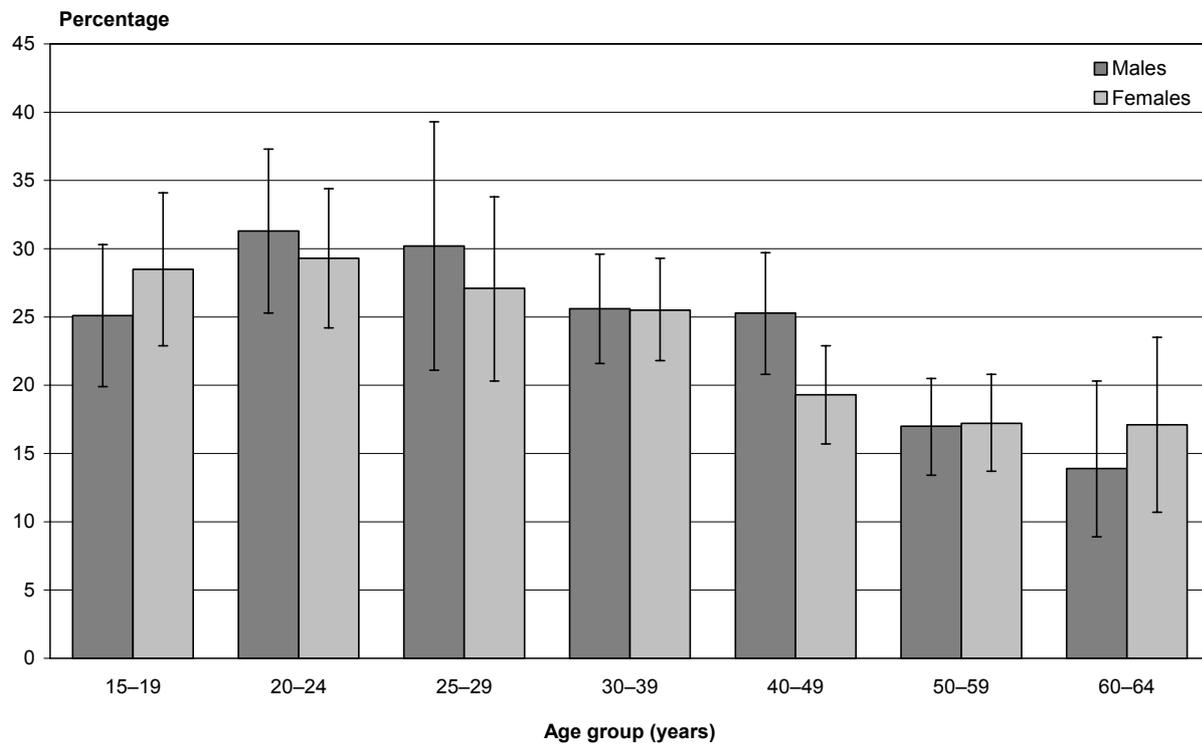
Ethnicity, gender and smoking prevalence

The smoking rate among Māori is 45.8% (CI = 42.2, 49.5); smoking rates among Pacific peoples is 36.2% (CI = 31.3, 41.1). The rates of smoking among Māori and Pacific peoples are significantly different from the rates of smoking among European/Other and Asian ethnic groups. The rates of smoking among European/Other and Asian ethnic groups are 20.0% (CI = 18.1, 22.0) and 12.0% (CI = 8.9, 15.0), respectively.

Among Māori, the prevalence of female smokers is high, at 50.6% (CI = 45.2, 55.9) compared to the prevalence of male smokers (40.7%; CI = 35.6, 45.8). This difference is not statistically significant. Among Asians, the prevalence of male smokers is significantly higher than that of female smokers (18.3%; CI = 13.1, 23.5 and 4.5%; CI = 2.5, 7.5 respectively).

Age group and smoking prevalence

Figure 3: Prevalence of current smokers (%), by gender and age group

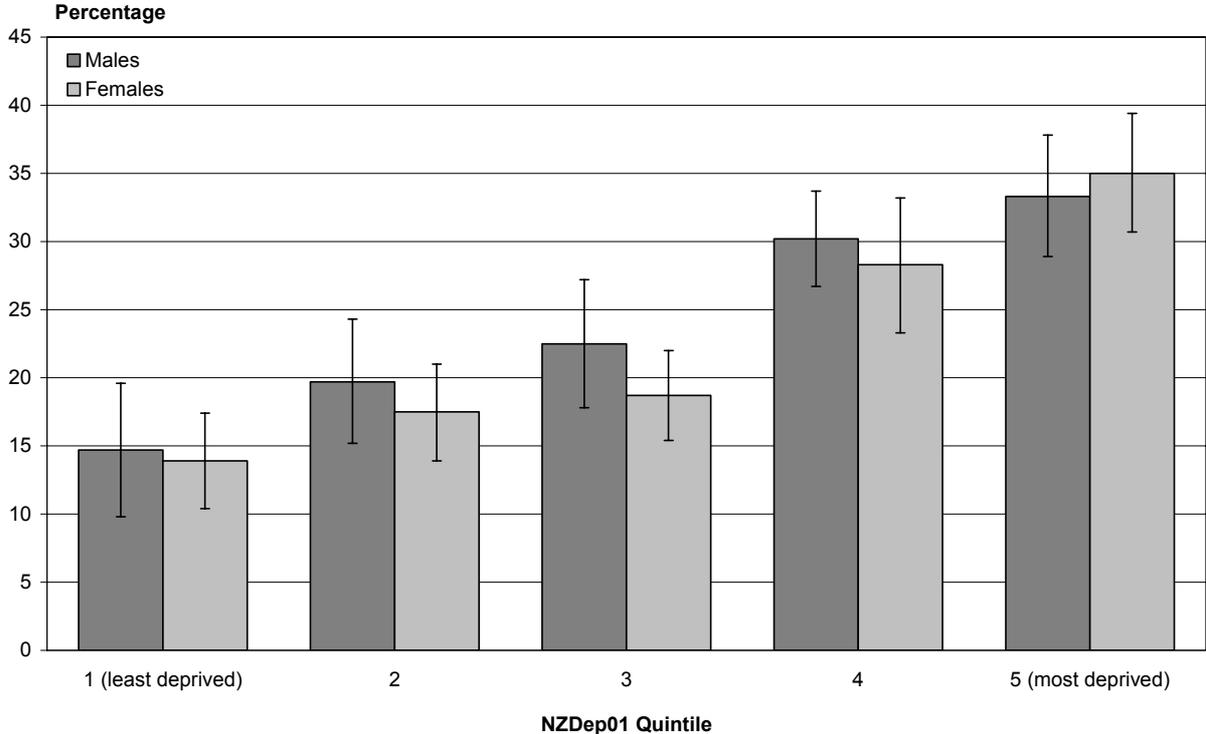


Note: 95% confidence intervals are presented for each bar.

The prevalence of smoking is high among younger age groups, 30.3% (CI = 26.6, 34.1) of people aged 20–24 currently smoke. Smoking rates are also high among 15–19-year-olds (26.8%; CI = 23.1, 30.4), 25–29-year-olds (28.7%; CI = 22.8, 34.5) and 30–39-year-olds (25.6%; CI = 22.8, 28.3). Male and female smoking rates are similar across all age groups.

Socioeconomic deprivation and smoking prevalence

Figure 4: Prevalence of current smokers (%), by gender and NZDep01 quintile

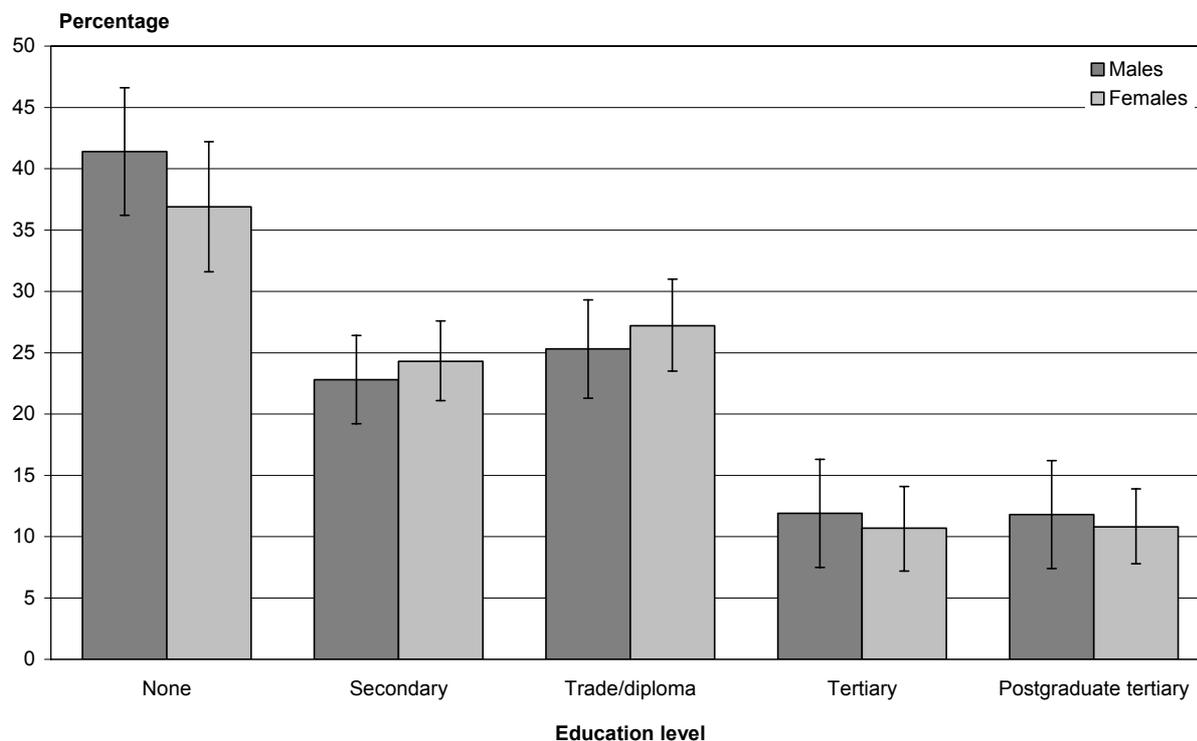


Note: 95% confidence intervals are presented for each bar.

The prevalence of smoking increases in a linear manner for both males and females with increasing level of deprivation. The prevalence of smoking is significantly higher in the most deprived areas (NZDep01 quintile 4 has 29.2%; CI = 26.0, 32.4 and NZDep01 quintile 5 has 34.2%; CI = 30.7, 37.8) than in the lowest areas of deprivation (NZDep01 quintile 1 has 14.3%; CI = 11.0, 17.6 and NZDep01 quintile 2 has 18.5%; CI = 15.3, 21.8). Male and female smoking rates are similar in each NZDep01 quintile.

Education and smoking prevalence

Figure 5: Prevalence of current smokers (%), by gender and level of education



Note: 95% confidence intervals are presented for each bar.

The prevalence of smoking was highest among people who had no educational qualifications (39.2%; CI = 35.5, 42.8). Smoking rates were also high among people with only secondary qualifications (23.6%; CI = 21.1, 26.2) and people with trade certificates and diplomas (26.1%; CI = 23.2, 29.1), though both rates are significantly lower than among people with no education whatsoever.

Smoking rates were significantly lower among people with tertiary (11.2%; CI = 8.6, 13.9) and postgraduate tertiary qualifications (11.2%; CI = 8.8, 13.7) than smoking rates in other educational groups.

Prevalence of smoking in District Health Boards (DHBs)

Table 5 presents estimates of current smoking prevalence in all 21 DHBs, stratified by gender. Note that the sample sizes in some DHBs are small, resulting in wide confidence intervals and the results should be interpreted with caution.

DHBs with the highest smoking rates include Lakes (34.3%), Northland (35.7%), Tairāwhiti (32.1%), Whanganui (35.3%) and Southland (31.2%). Other DHBs with smoking rates higher than 25% include Counties Manukau, MidCentral, Wairarapa and Taranaki (see Table 5 for confidence intervals).

Table 5: Prevalence of current smokers (%), by DHB and gender

DHB	Males	Females	Total
Northland	33.3 (23.4, 44.5)	37.4 (25.0, 49.8)	35.7 (28.3, 43.1)
Whanganui	33.5 (15.2, 56.4)	36.6 (19.1, 57.2)	35.3 (22.8, 47.9)
Lakes	36.0 (20.1, 54.6)	32.2 (16.3, 48.1)	34.3 (20.5, 48.0)
Tairāwhiti	28.2 (7.2, 60.1)	34.9 (5.6, 77.1)	32.1 (9.0, 64.5)
Southland	24.5 (8.7, 47.6)	39.4 (20.5, 61.0)	31.2 (16.7, 45.8)
Counties Manukau	27.4 (20.9, 33.9)	27 (20.6, 33.5)	27.2 (22.3, 32.1)
Taranaki	31.1 (15.8, 50.2)	23.2 (14.4, 34.1)	26.8 (18.6, 34.9)
MidCentral	24.0 (15.5, 34.4)	28.9 (16.6, 41.2)	26.6 (18.3, 34.9)
Wairarapa	27.9 (7.6, 58.4)	21.7 (2.6, 59.6)	25.1 (5.6, 57.3)
Hawke's Bay	25.7 (13.0, 42.3)	23.3 (11.9, 34.7)	24.4 (14.2, 34.5)
Bay of Plenty	28.0 (16.9, 41.5)	21.5 (11.0, 32.0)	24.3 (15.3, 33.3)
West Coast	34.6 (0.0, 98.9)	–	23.5 (0.5, 79.9)
Waikato	25.3 (16.9, 33.7)	22.0 (14.4, 29.7)	23.5 (17.9, 29.2)
Otago	23.6 (15.2, 33.9)	21.7 (12.9, 32.8)	22.8 (15.8, 29.7)
Hutt Valley	25.5 (13.8, 40.6)	19.8 (9.4, 30.2)	22.7 (13.2, 32.2)
Nelson–Marlborough	21.4 (7.6, 42.4)	21.2 (9.6, 37.7)	21.3 (10.5, 32.1)
Waitemata	22.4 (16.5, 28.4)	19.7 (15.4, 24.1)	21.0 (17.2, 24.9)
South Canterbury	21.0 (2.0, 61.0)	19.6 (1.6, 60.1)	20.3 (6.8, 41.6)
Capital and Coast	22.2 (13.8, 30.6)	16.6 (10.2, 22.9)	19.4 (13.2, 25.7)
Canterbury	19.6 (12.8, 26.5)	18.2 (12.3, 24.1)	18.9 (13.7, 24.2)
Auckland	17.9 (12.7, 23.1)	19.5 (14.6, 24.3)	18.7 (15.1, 22.2)
Total	24.1 (22.0, 26.2)	22.9 (21.0, 24.7)	23.5 (22.0, 25.0)

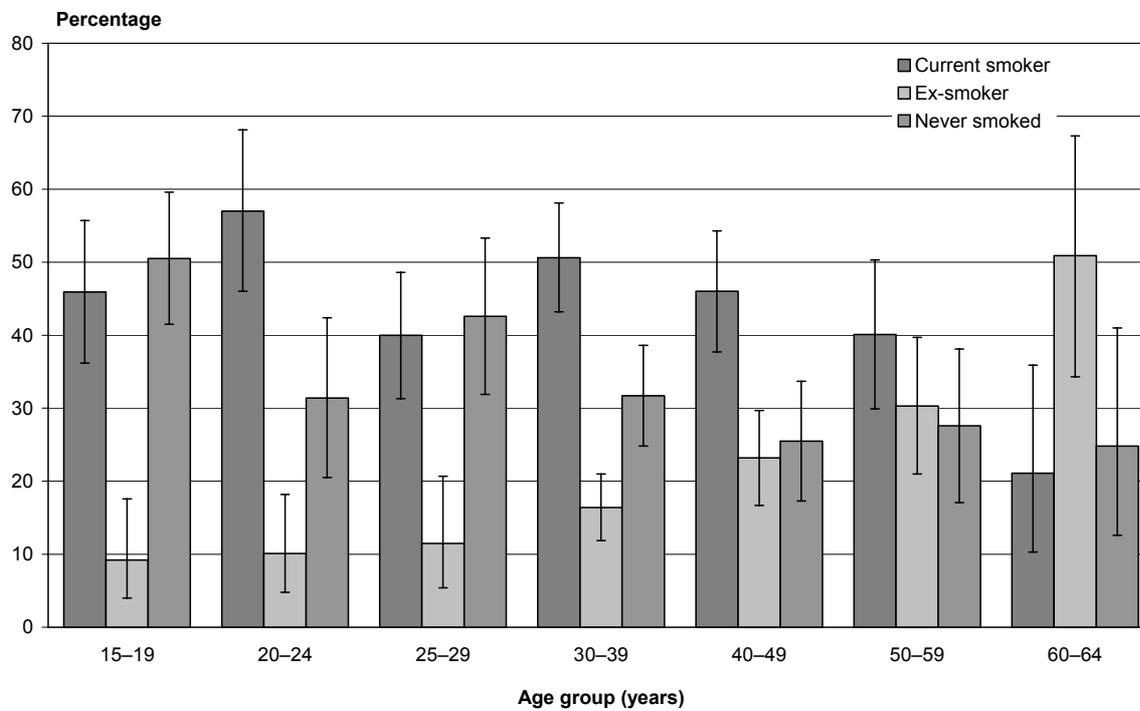
Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

3. Confidence intervals have been truncated to 0.0 where negative intervals have been produced.

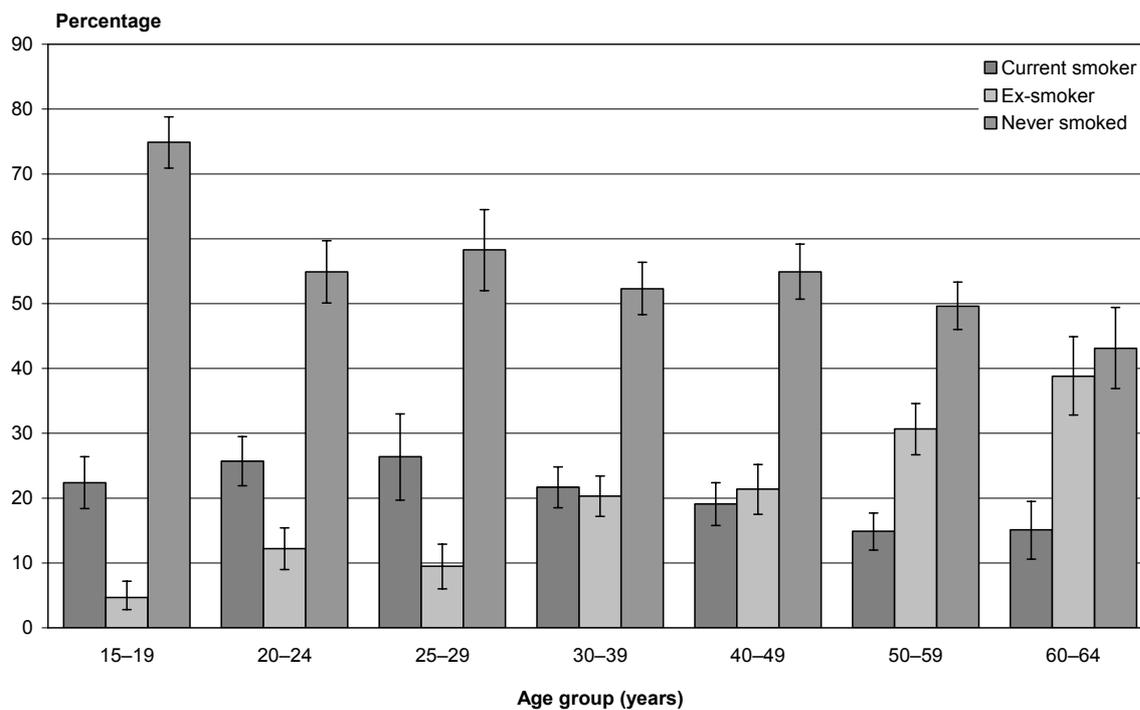
Smoking status and smoking prevalence: comparisons by Māori and non-Māori

Figure 6: Māori smoking status (%), by age group



Note: 95% confidence intervals are presented for each bar.

Figure 7: Non-Māori smoking status (%), by age group



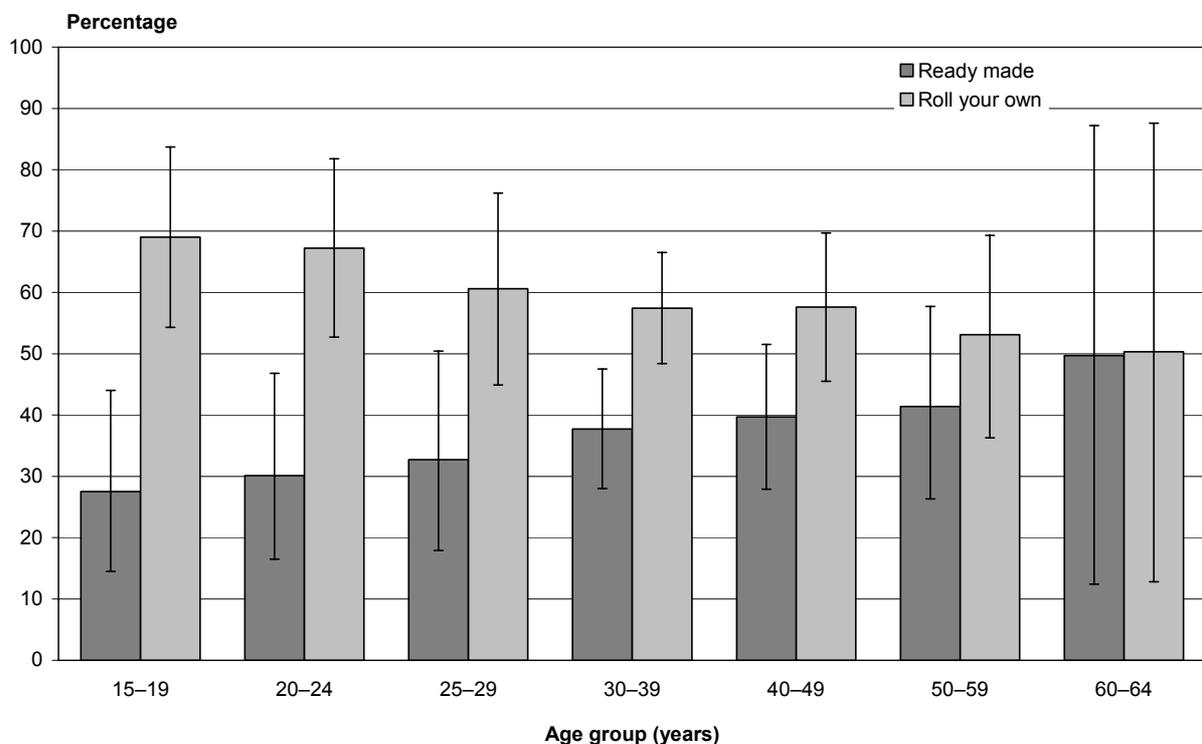
Note: 95% confidence intervals are presented for each bar.

The proportions of “never smokers” are significantly higher among non-Māori than Māori across all age groups. The proportions of current smokers follow a similar trend for Māori and non-Māori across age group. The prevalence of ex-smokers is similar for Māori and non-Māori across all age groups.

The prevalence of current smokers among younger Māori (15–19: 45.9%; CI = 36.2, 55.7, and 20–24 years: 57.0%; CI = 46.0, 68.1) is significantly higher than among non-Māori in the same age groups (22.4%; CI = 18.4, 26.4, and 25.7%; CI = 21.9, 29.5) respectively). Differences are also significant in the 30–39, 40–49 and 50–59 age groups.

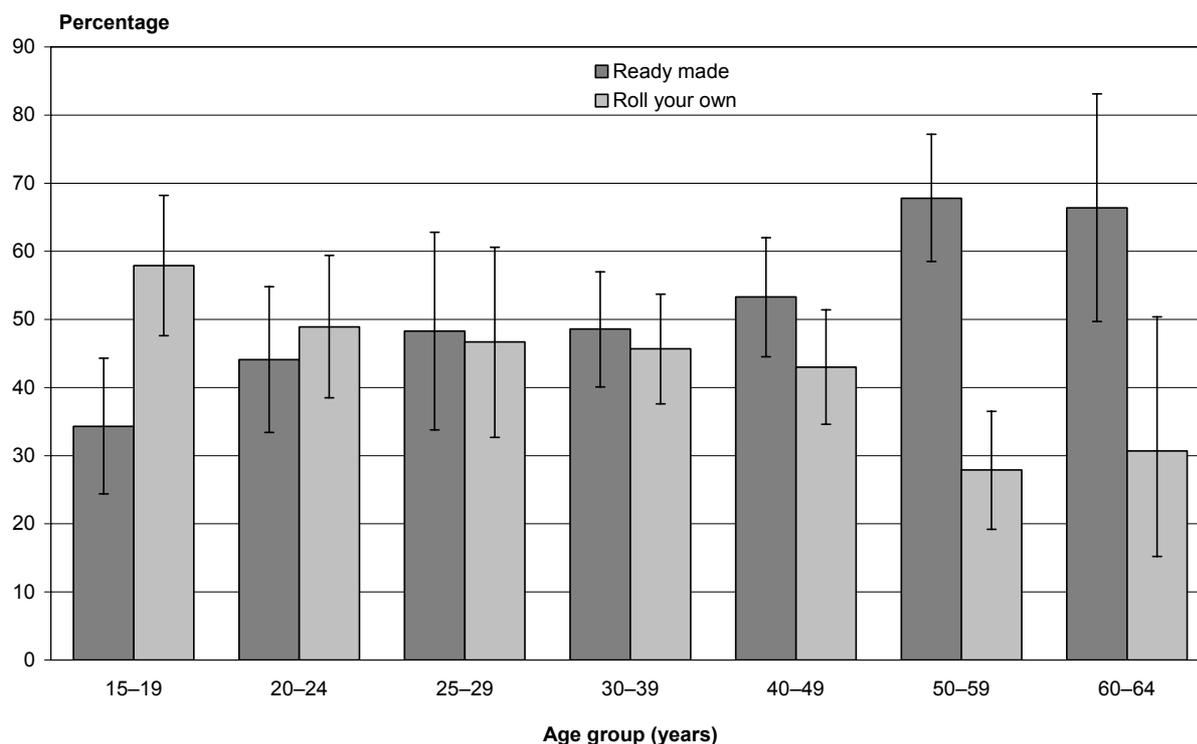
Type of tobacco products used: comparisons by Māori and non-Māori

Figure 8: Prevalence of smoking of ready-made cigarettes and roll-your-own cigarettes (%) among Māori, by age group



Note: 95% confidence intervals are presented for each bar.

Figure 9: Prevalence of smoking of ready-made cigarettes and roll-your-own cigarettes (%) among non-Māori, by age group



Note: 95% confidence intervals are presented for each bar.

Among Māori, the use of roll-your-own cigarettes rather than ready-made cigarettes is higher in younger age groups compared to older age groups. The proportion of people who use roll-your-own cigarettes decreases with age, while the proportion of people who use ready-made cigarettes increases with age. Differences between people who use roll-your-own cigarettes and people who use ready-made cigarettes are significant among people aged 15–19 (69.0%; CI = 54.3, 83.7 versus 27.5%; CI = 14.5, 44.0) 20–24 (67.2%; CI = 52.7, 81.8 versus 30.1%; CI = 16.5, 46.8) and 30–39 (57.4%; CI = 48.4, 66.5 versus 37.7%; CI = 28.0, 47.5).

Among non-Māori, a significantly higher proportion of 15–19-year-olds smoke roll-your-own cigarettes (57.9%; CI = 47.6, 68.2) instead of ready-made cigarettes (34.3%; CI = 24.4, 44.3) compared to older age groups. In contrast, higher percentages of people aged 50–59 (67.8%; CI = 58.5, 77.2) and 60–64 (66.4%; CI = 49.7, 83.1) smoke ready-made cigarettes instead of roll-your-own cigarettes compared to younger age groups.

Comparisons between Māori and non-Māori indicate higher overall use of roll-your-own tobacco among Māori compared to non-Māori across all age groups. Although the proportion of Māori who smoke ready-made cigarettes increases with age (39.7%; CI = 27.9, 51.5 among 40-49-year-olds and 41.4%; CI = 26.3, 57.7 among 50–59-year-olds), the proportion of non-Māori who smoke ready-made cigarettes in the same age groups (53.3%; CI = 44.5, 62.0 and 67.8%; CI = 58.5, 77.2 respectively) appears higher, although the difference is not statistically significant.

Source of tobacco products

In order to provide an indication of where people purchase their tobacco products (manufactured and roll-your-own cigarettes) in New Zealand, all current smokers were asked: 'Thinking about the packet of cigarettes that you are currently smoking, where did you get it from?'

Table 6: Setting where cigarettes were purchased (%), by gender

Setting	Males	Females	Total
Supermarket	19.8 (15.8, 23.8)	31.1 (26.4, 35.9)	25.4 (22.2, 28.6)
Hotel/pub/restaurant	3.6 (1.8, 6.3)	1.1 (0.3, 2.6)	2.3 (1.2, 4.1)
Petrol station	27.6 (23.0, 32.2)	18.7 (15.3, 22.0)	23.2 (20.2, 26.2)
Dairy or other shop	43.2 (37.9, 48.5)	42.6 (37.4, 47.7)	42.9 (39.1, 46.7)
Duty free	3.7 (2.2, 5.9)	3.9 (2.3, 6.0)	3.8 (2.5, 5.1)
Other	2.1 (1.0, 3.7)	2.3 (1.2, 4.0)	2.2 (1.4, 3.3)

Note: 95% confidence intervals are presented below each rate.

There is a clear preference for where people choose to purchase their cigarettes, with 42.9% of smokers purchasing their cigarettes from dairies (or other shops). Over a quarter (25.4%) of smokers purchase their cigarettes from the supermarket and 23.2% purchase their cigarettes from the petrol station.

Significantly more males (27.6%) purchase their cigarettes from the petrol station compared to females (18.7%), while significantly more females purchase their cigarettes from the supermarket (31.1%) compared to males (19.8%) (see Table 6 for confidence intervals).

Chapter 3: Exposure to Second-hand Smoke

One of the objectives identified in the Ministry of Health's five-year plan for tobacco control in New Zealand is to prevent harm to non-smokers from second-hand smoke (SHS) (Ministry of Health 2004). The objective focuses on reducing harm to children and other adult non-smokers from exposure to SHS. A secondary aim was to reduce the proportion of indoor workers exposed to environmental tobacco smoke during working hours to zero by 2006.

New Zealand has made significant progress in this area. Strategies implemented to reduce harm from exposure to SHS include:

- the Smoke-free Environments Act 1990, which introduced controls on smoking in workplaces
- the Smoke-free Environments Amendment Act 2003, which extended the initial Act by requiring all indoor workplaces including bars, clubs, restaurants, cafes, casinos and gaming machine venues to be completely smoke free
- requiring schools and educational institutions for young people (excluding tertiary institutions) to become completely smoke free, both indoors and outdoors, 24 hours a day, seven days a week
- promoting smoke-free homes and cars through media campaigns
- increasing health promotion activities with messages appropriate for a Māori audience
- continued promotion of mass media campaigns, including warnings on cigarette packets about the risks of second-hand smoke
- implementation of a monitoring framework, with the National Tobacco Use Survey (NZTUS) as a key monitoring tool, enabling measurement of SHS exposure annually.

All respondents who participated in the NZTUS (smokers and non-smokers) were asked about SHS. Exposure to SHS is monitored in four key settings: the home, vehicle, work and public venues. All results are presented by gender and ethnicity (Māori, Pacific, Asian, European/Other and Māori/non-Māori estimates). Where applicable, results are presented by level of deprivation and age range.

The chapter will be presented in five parts:

- second-hand smoke exposure at home
- second-hand smoke exposure in vehicles
- second-hand smoke exposure at work
- second-hand smoke exposure at public venues
- attitudes towards second-hand smoke.

Summary

- The prevalence of others smoking inside the home in New Zealand is 12.5%.
- Significantly more Māori report others smoking inside the home (23.0%) compared to non-Māori (10.9%).
- Around 14.9% of people report others smoking inside the car.
- Significantly more Māori report others smoking in the car (30.1%) compared to non-Māori (12.6%).
- The prevalence of smoking inside at work is around 8.1%, while 89.4% report no one smoking indoors at work.
- Plant machine operators and assemblers identified the largest percentage of indoor smoking at work (10.6%), followed by trades workers (9.5%).
- Around 7.4% of people report others smoking indoors in public venues.

Second-hand smoke exposure at home

To measure second-hand smoke exposure inside the home, respondents are asked, 'Do other people smoke inside your house?'.

Prevalence of exposure to SHS at home

The prevalence of smoking inside the home in New Zealand is 12.5% (CI = 11.3, 13.7). The prevalence of no smoking inside the home is 83.2% (CI = 81.7, 84.7), while 4.3% (CI = 3.6, 5.0) sometimes smoke inside the home.

Gender and exposure to SHS at home

Table 7: Smoking inside the home (%), by gender

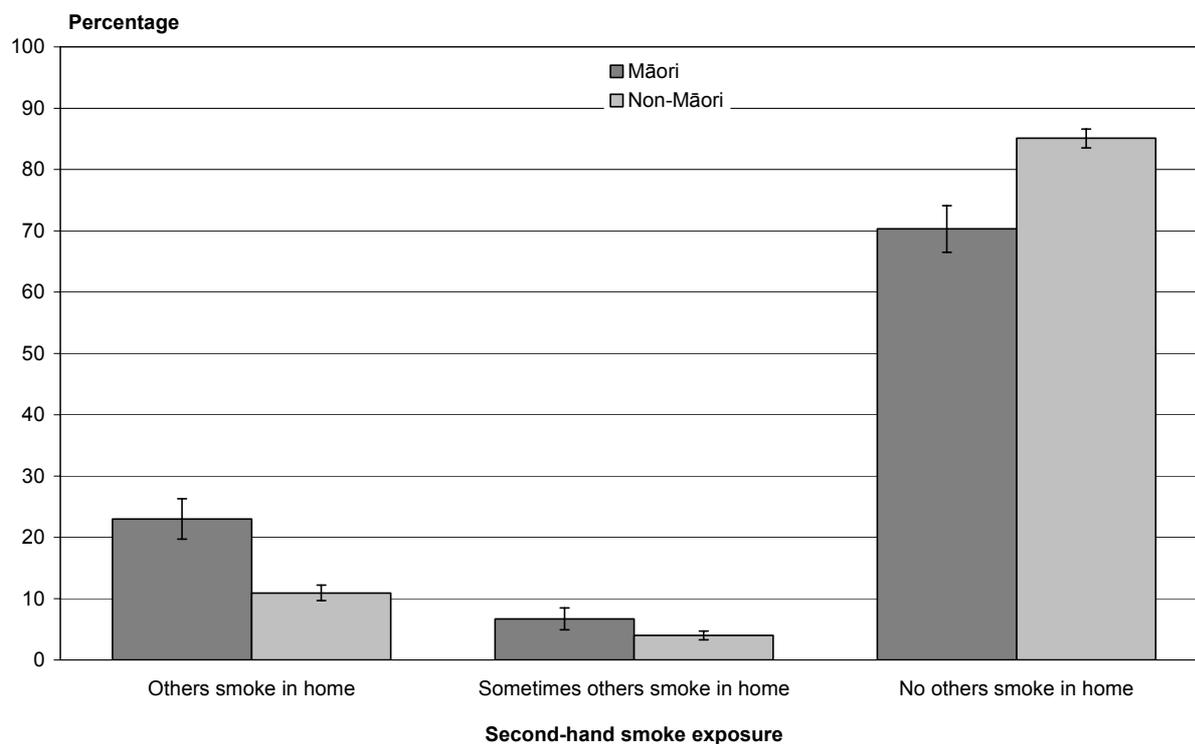
	Females	Males	Total
Others smoke in home	11.9 (10.5, 13.4)	13.1 (11.4, 14.7)	12.5 (11.3, 13.7)
Sometimes others smoke in home	4.2 (3.4, 5.0)	4.5 (3.4, 5.5)	4.3 (3.6, 5.0)
No others smoke in home	83.9 (82.2, 85.5)	82.5 (80.4, 84.5)	83.2 (81.7, 84.7)

Note: 95% confidence intervals are presented below each rate.

Rates of smoking inside the home are similar between males (13.1%) and females (11.9%) (see Table 7 for confidence intervals).

Ethnicity and exposure to SHS at home

Figure 10: Smoking inside the home (%), Māori versus non-Māori



Note: 95% confidence intervals are presented for each bar.

Significantly more Māori report others smoking inside the home (23.0%; CI = 19.7, 26.3) compared to non-Māori who smoke inside the home (10.9%; CI = 9.7, 12.2) (see Figure 10). Where no one smokes inside the home there is a significant difference between Māori, 70.3% (CI = 66.5, 74.1) and non-Māori, 85.1% (CI = 83.5, 86.6).

Among Pacific peoples, 16.1% report others smoking inside the home, which is significantly higher than European/Other (10.3%) ethnic groups (see Table 8 for confidence intervals).

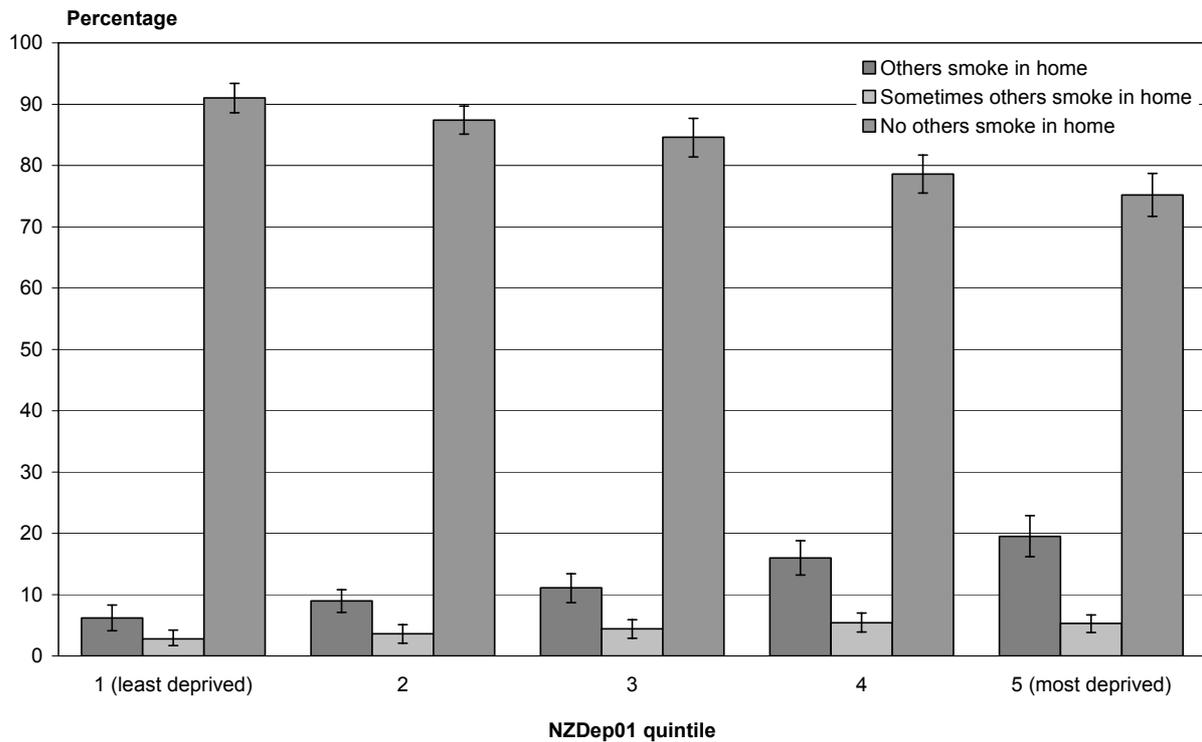
Table 8: Smoking inside the home (%), by ethnicity

Smoking in the home	European/Other	Māori	Pacific	Asian	Total
Others smoke in home	10.3 (8.9, 11.6)	23.0 (19.7, 26.3)	16.1 (12.5, 19.6)	12.4 (9.0, 15.7)	12.5 (11.3, 13.7)
Sometimes others smoke in home	4.0 (3.2, 4.8)	6.7 (4.9, 8.5)	5.0 (3.0, 7.0)	3.3 (1.9, 5.4)	4.3 (3.6, 5.0)
No others smoke in home	85.7 (84.0, 87.4)	70.3 (66.5, 74.1)	79.0 (74.9, 83.0)	84.3 (80.7, 87.9)	83.2 (81.7, 84.7)

Note: 95% confidence intervals are presented below each rate.

Socioeconomic deprivation and exposure to SHS at home

Figure 11: Smoking inside the home (%), by NZDep01 quintile



Note: 95% confidence intervals are given for each bar.

The rates of smoking inside the home by others increases in areas that are more deprived (ie, in quintiles 4 and 5). Only 6.2% (CI = 4.1, 8.3) of people in quintile 1 identify others as smoking inside the home, compared to 19.5% (CI = 16.2, 22.9) in quintile 5. The trend is the opposite for no smoking inside the home, with 91.0% (CI = 88.6, 93.4) of homes in quintile 1 identifying no smoking inside the home, compared to 75.2% (CI = 71.7, 78.7) of homes in quintile 5.

DHB and exposure to SHS in the home

The percentages of people who identify others as smoking in the home do not differ greatly by DHB. However, Whanganui DHB has a significantly higher percentage (27.9%) of others smoking in the home compared to the whole of New Zealand, (12.5%) (see Table 9 for confidence intervals).

Table 9: Smoking inside the home (%), by DHB

DHB	Others smoke in home	Sometimes others smoke in home	No others smoke in home
Whanganui	27.9 (16.5, 41.9)	8.7 (1.1, 27.4)	63.4 (49.9, 76.9)
Southland	25.4 (13.3, 37.4)	–	71.1 (57.5, 84.8)
West Coast	19.6 (1.3, 62.1)	–	80.4 (37.9, 98.7)
Tairāwhiti	18.1 (0.7, 64.1)	8.0 (3.4, 15.4)	74.0 (51.1, 96.8)
Northland	17.9 (11.7, 24.0)	7.5 (2.1, 17.9)	74.6 (66.6, 82.7)
Taranaki	17.1 (6.4, 33.8)	9.9 (4.1, 19.3)	73.0 (63.6, 82.4)
Wairarapa	15.3 (11.4, 20.0)	12.3 (0.1, 61.7)	72.3 (54.3, 90.4)
Otago	15.0 (9.1, 20.8)	4.1 (1.4, 9.1)	80.9 (74.7, 87.2)
Counties Manukau	13.8 (10.1, 17.5)	2.5 (1.4, 4.3)	83.7 (79.8, 87.6)
South Canterbury	13.6 (6.2, 24.9)	5.9 (2.0, 12.9)	80.5 (75.5, 85.5)
Hawke's Bay	13.1 (6.4, 19.8)	6.5 (3.0, 12.1)	80.4 (72.8, 87.9)
Lakes	12.2 (4.6, 24.7)	4.7 (1.4, 11.3)	83 (72.7, 93.3)
MidCentral	12.0 (6.7, 19.3)	5.6 (2.2, 11.5)	82.4 (77.0, 87.8)
Waikato	12.0 (7.6, 16.4)	3.4 (1.9, 5.5)	84.6 (79.9, 89.3)
Hutt	11.6 (4.6, 18.6)	3.7 (0.8, 10.2)	84.6 (77.7, 91.6)
Nelson–Marlborough	11.0 (3.7, 23.6)	4.4 (1.8, 8.8)	84.6 (75.9, 93.4)
Auckland	10.0 (7.2, 12.7)	3.9 (2.4, 5.5)	86.1 (83.1, 89.1)
Canterbury	10.4 (6.8, 14.0)	3.1 (1.9, 4.8)	86.5 (82.3, 90.6)
Capital and Coast	10.4 (6.2, 14.5)	2.5 (0.9, 5.4)	87.1 (82.8, 91.4)
Bay of Plenty	10.0 (4.9, 17.6)	7.8 (4.3, 12.9)	82.2 (76.6, 87.8)
Waitemata	9.2 (6.7, 11.6)	3.5 (2.2, 5.3)	87.3 (84.5, 90.2)
New Zealand	12.5 (11.3, 13.7)	4.3 (3.6, 5.0)	83.2 (81.7, 84.7)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Second-hand smoke exposure in cars

To measure second-hand smoke exposure inside the car, all respondents were asked, 'Do other people smoke in the car?'

Prevalence of exposure to SHS in cars

Smoking in the car is prevalent, with 14.9% (CI = 13.8, 16.0) of respondents identifying others smoking in the car, 6.9% (CI = 6.1, 7.6) reporting others sometimes smoking in the car, and 78.2% (CI = 77.0, 79.5) reporting no smoking in the car (see Table 10).

Table 10: Smoking in the car (%), by gender

	Males	Females	Total
Others smoke in car	15.7 (14.0, 17.4)	14.1 (12.7, 15.5)	14.9 (13.8, 16.0)
Sometimes others smoke in car	7.6 (6.5, 8.8)	6.1 (5.3, 6.9)	6.9 (6.1, 7.6)
No others smoke in car	76.7 (74.8, 78.6)	79.7 (78.2, 81.3)	78.2 (77.0, 79.5)

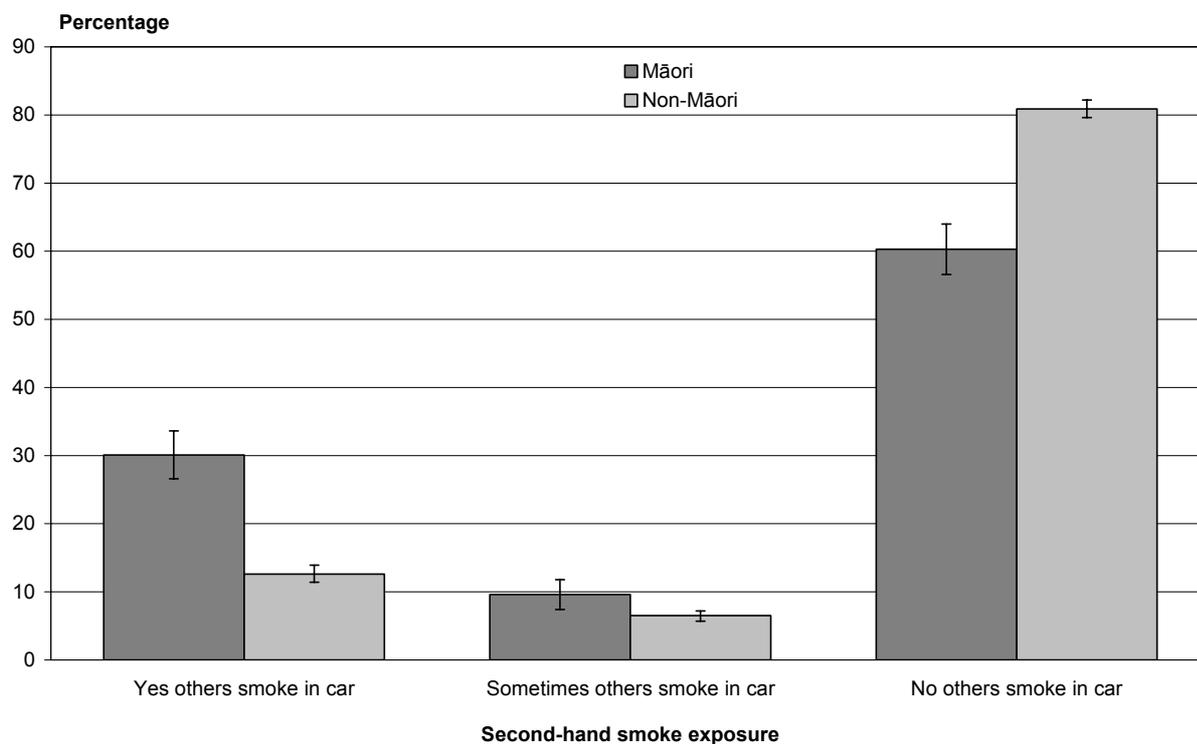
Note: 95% confidence intervals are presented below each rate.

Gender and exposure to SHS in cars

The rates of others smoking inside the car were similar for males and females (see Table 10). The percentage of females who report others smoking in the car is 14.1%, the percentage of males who report others smoking in the car is 15.7% (see Table 10 for confidence intervals).

Ethnicity and exposure to SHS in cars

Figure 12: Smoking in the car (%), Māori versus non-Māori



Note: 95% confidence intervals are given for each bar.

There is a significant difference in people who report others smoking in the car between Māori (30.1%; CI = 26.6, 33.6) and non-Māori (12.6%; CI = 11.4, 13.9).

Those reporting no others smoking in the car is highest among Asian people, at 83.2% (see Table 11 for confidence intervals).

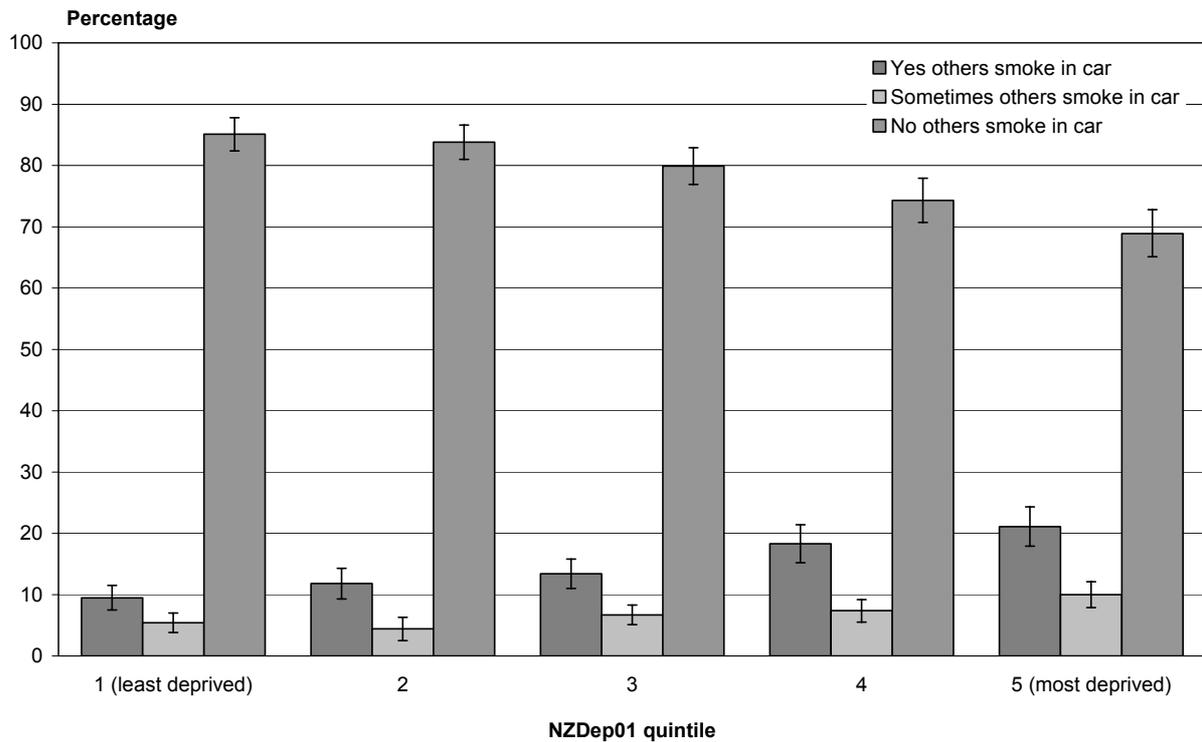
Table 11: Smoking in the car (%), by ethnicity

Smoking in car	European/Other	Māori	Pacific	Asian	Total
Others smoke in car	12.5 (11.2, 13.9)	30.1 (26.6, 33.6)	20.8 (16.4, 25.2)	8.7 (5.6, 11.7)	14.9 (13.8, 16.0)
Sometimes others smoke in car	5.6 (4.8, 6.4)	9.6 (7.4, 11.8)	14.0 (10.5, 17.4)	8.1 (5.8, 10.5)	6.9 (6.1, 7.6)
No others smoke in car	81.9 (80.5, 83.3)	60.3 (56.6, 64.0)	65.2 (60.6, 69.8)	83.2 (79.7, 86.7)	78.2 (77.0, 79.5)

Note: 95% confidence intervals are presented below each rate.

Socioeconomic deprivation and exposure to SHS in cars

Figure 13: Smoking in the car (%), by NZDep01 quintile



Note: 95% confidence intervals are given for each bar.

Similar to SHS exposure in the home, the percentage of others smoking in the car increases with the level of deprivation, with 9.5% (CI = 7.5, 11.5) of people in the area with the lowest level of deprivation (NZDep01 quintile 1) identifying others smoking in the car, compared to 21.1% (CI = 17.9, 24.3) identifying others smoking in the car in the area with the highest level of deprivation (quintile 5).

The percentage of people reporting others not smoking in the car is highest in least deprived areas (85.1%; CI = 82.4, 87.8 in quintile 1) and lowest in the most deprived areas (68.9%; CI = 65.1, 72.8 in quintile 5).

Second-hand smoke exposure at work

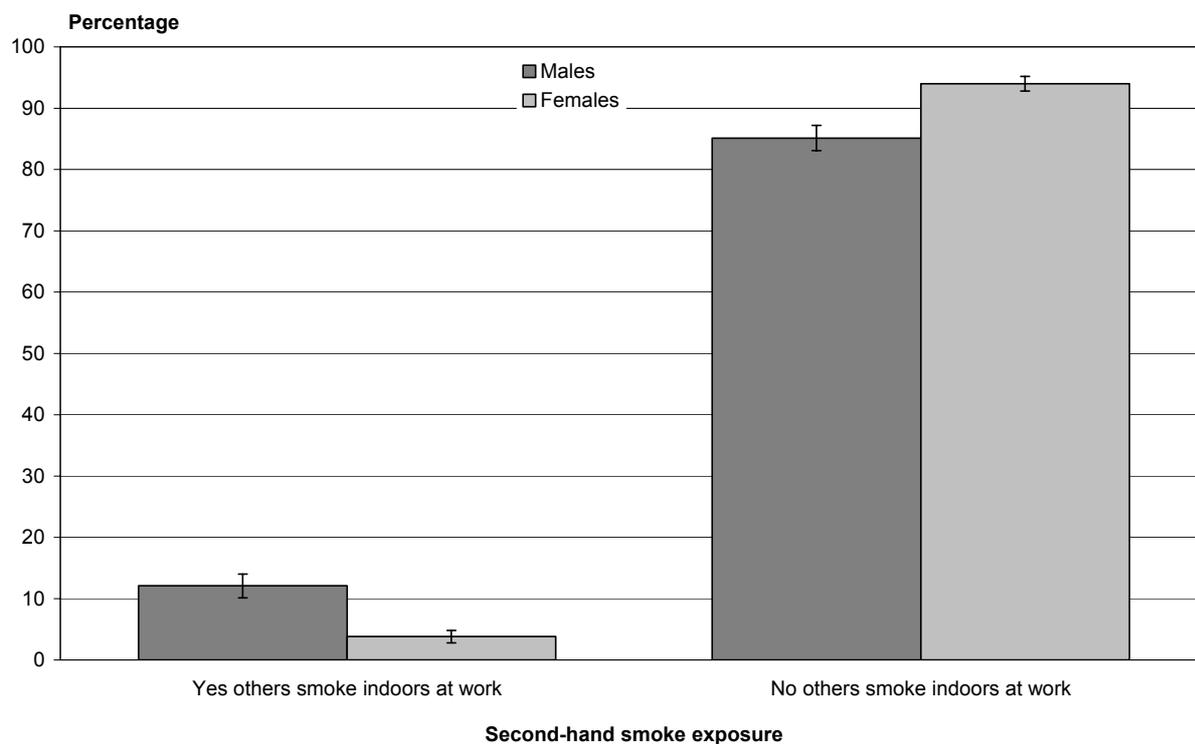
To measure second-hand smoke exposure at workplaces, respondents aged 20 years and over were asked, 'At work, do other people smoke around you indoors?'

Prevalence of SHS exposure at work

In New Zealand, some SHS exposure is reported indoors, at workplaces, despite existing laws. A high percentage of people (89.4%; CI = 88.1, 90.7) report no smoking indoors at work and very few (2.5%; CI = 1.9, 3.1) report that although there is no smoking indoors at work, smoke comes in from the outside. The prevalence of others smoking inside at work is 8.1% (CI = 6.9, 9.3).

Gender and exposure to SHS at work

Figure 14: Smoking indoors at work (%), by gender (20+ years)

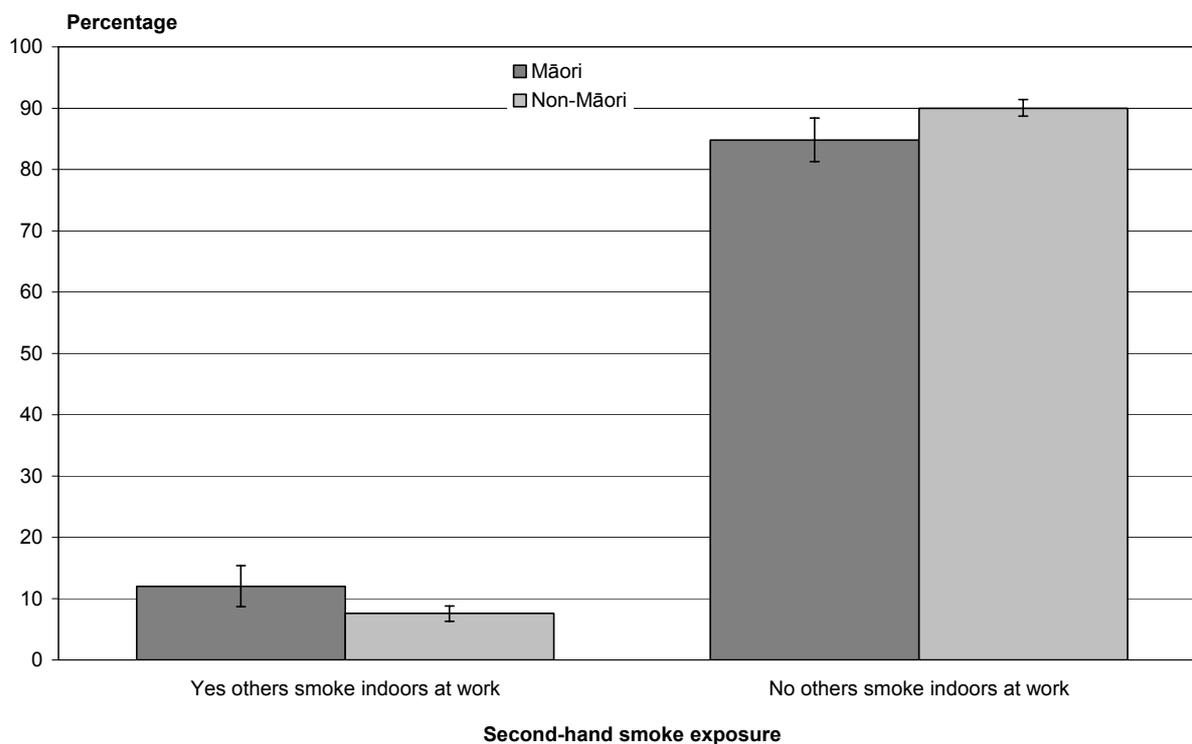


Note: 95% confidence intervals are given for each bar.

Significantly fewer females report others smoking indoors at work (3.8%; CI = 2.8, 4.8), compared to males (12.1%; CI = 10.1, 14.0). Significantly more females report no indoor smoking at work (94.0%; CI = 92.8, 95.2) compared to males (85.1%; CI = 83.1, 87.2) reporting the same.

Ethnicity and exposure to SHS at work

Figure 15: Smoking indoors at work (%), Māori versus non-Māori (20+ years)



Note: 95% confidence intervals are given for each bar.

Similar percentages of Māori (12.0%; CI = 8.7, 15.4) and non-Māori (7.6%; CI = 6.3, 8.8) report second-hand smoke exposure at work.

Similar percentages of Māori (12.0%) and Pacific peoples (11.9%) also report others smoking indoors at work (see Table 12 for confidence intervals).

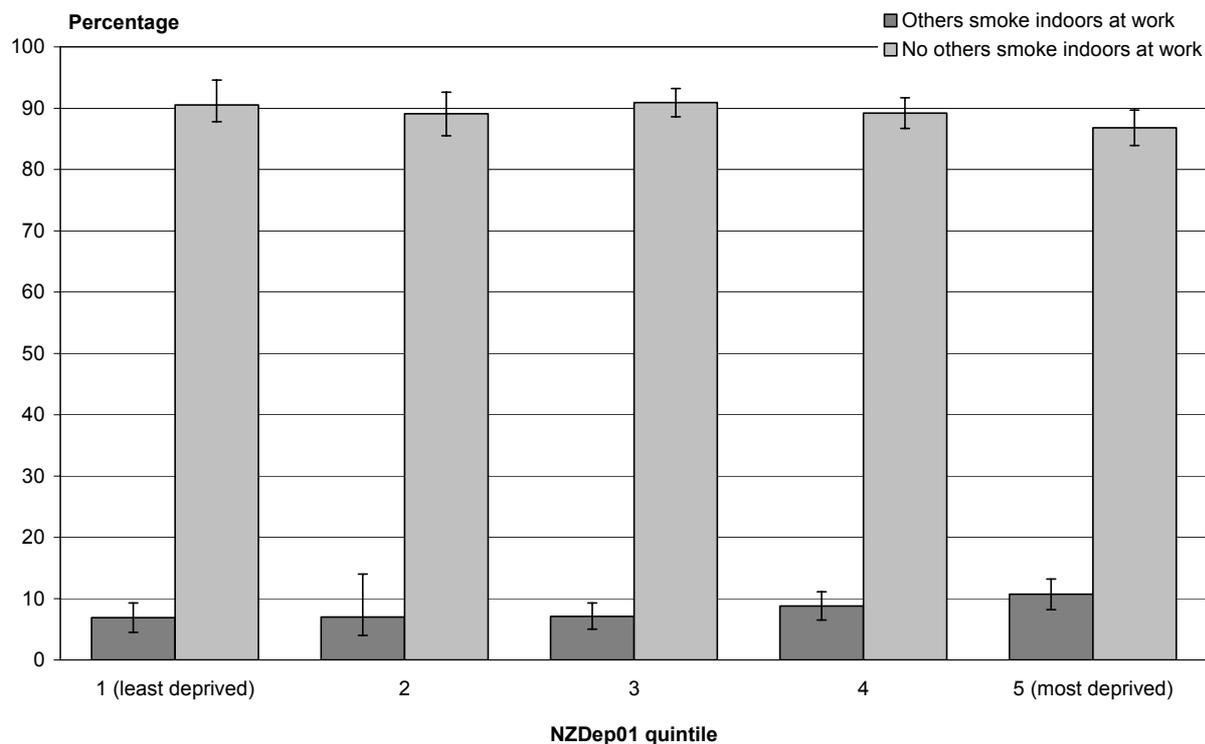
Table 12: Smoking indoors at work (%), by ethnicity (20+ years)

	Māori	Pacific	Asian	European/Other	Total
Others smoke indoors at work	12.0 (8.7, 15.4)	11.9 (6.9, 17.0)	4.3 (2.2, 7.4)	7.7 (6.3, 9.1)	8.1 (6.9, 9.3)
No others smoke indoors at work	84.8 (81.3, 88.4)	83.6 (78.0, 89.3)	92.6 (89.9, 95.3)	90.1 (88.6, 91.7)	89.4 (88.1, 90.7)

Note: 95% confidence intervals are presented below each rate.

Socioeconomic deprivation and exposure to SHS at work

Figure 16: Smoking indoors at work (%), by NZDep01 quintile (20+ years)



Note: 95% confidence intervals are given for each bar.

The proportion of people who report others smoking indoors in workplaces are similar across all NZDep01 quintiles.

Occupation and exposure to SHS at work

It is important to provide an indication of which workplaces have been identified as continuing to have workers exposed to indoor smoking and whether there are any trends or common workplaces. Definitions of occupations are included in the Glossary.

Of people who identified indoor smoking in the workplace, plant and machine operators and assemblers identified the largest percentage of indoor smoking (10.6%), followed by trades workers (9.5%). Interestingly, 9.0% of people in professional occupations and 9.0% of people in technician and associated professional occupations identify indoor smoking exposure.

It is important to note that there are a large number of people with occupations that were outside the scope of our occupational categories. Also, there are no significant differences between occupational groups, as all confidence intervals overlap (see Table 13 for confidence intervals).

Table 13: Smoking indoors at work (%), by occupation (20+ years)

Occupation	Percentage exposed to smoke indoors at work
Agriculture and fishery workers	8.0 (3.6, 15.1)
Clerks	7.7 (4.8, 10.7)
Legislators, administrators and managers	6.2 (3.6, 9.8)
Plant and machine operators and assemblers	10.6 (6.6, 14.7)
Professionals	9.0 (6.1, 11.8)
Service and sales workers	7.9 (4.8, 11.0)
Technicians and associate professionals	9.0 (5.5, 12.5)
Trades workers	9.5 (5.9, 14.4)
Elementary occupations	8.0 (4.7, 12.4)
Total	8.1 (6.9, 9.3)

Note: 95% confidence intervals are presented below each rate.

Exposure to second-hand smoke in public venues

In order to establish whether the public are still being exposed to indoor smoking at public venues, and which venues these are, all respondents were asked, 'In the last month, have you been in a public venue such as a pub, club or restaurant, where other people were smoking inside? At which venues?'

The impact of smoke-free legislation (Smoke-free Amendments Act 2003), which banned smoking at all public venues and indoor workplaces, can be clearly seen, with only 7.4% (CI = 6.7, 8.2) of people reporting others smoking indoors at public venues, Table 14 outlines which types of venues.

Table 14: Public venues where smoking inside was identified (%)

Public venue	% experiencing smoking
Pub	39.2 (33.0, 45.4)
Club	14.4 (10.4, 18.4)
Nightclub	14.1 (10.9, 17.3)
Restaurant	39.0 (31.9, 46.1)
Other public venue	6.8 (3.7, 9.9)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Percentages presented above are out of the 7.4% who reported exposure at public venues.

Some of the 'other' public venues identified where indoor smoking was reported included during travel overseas, gambling venues, dairies, indoor concert venues, the inter-island ferry, coffee bars, public halls, shopping malls and marae.

Attitudes towards second-hand smoke

Two questions were asked to gain an idea of attitudes towards second-hand smoke and knowledge about the health effects of SHS. Respondents were asked the following:

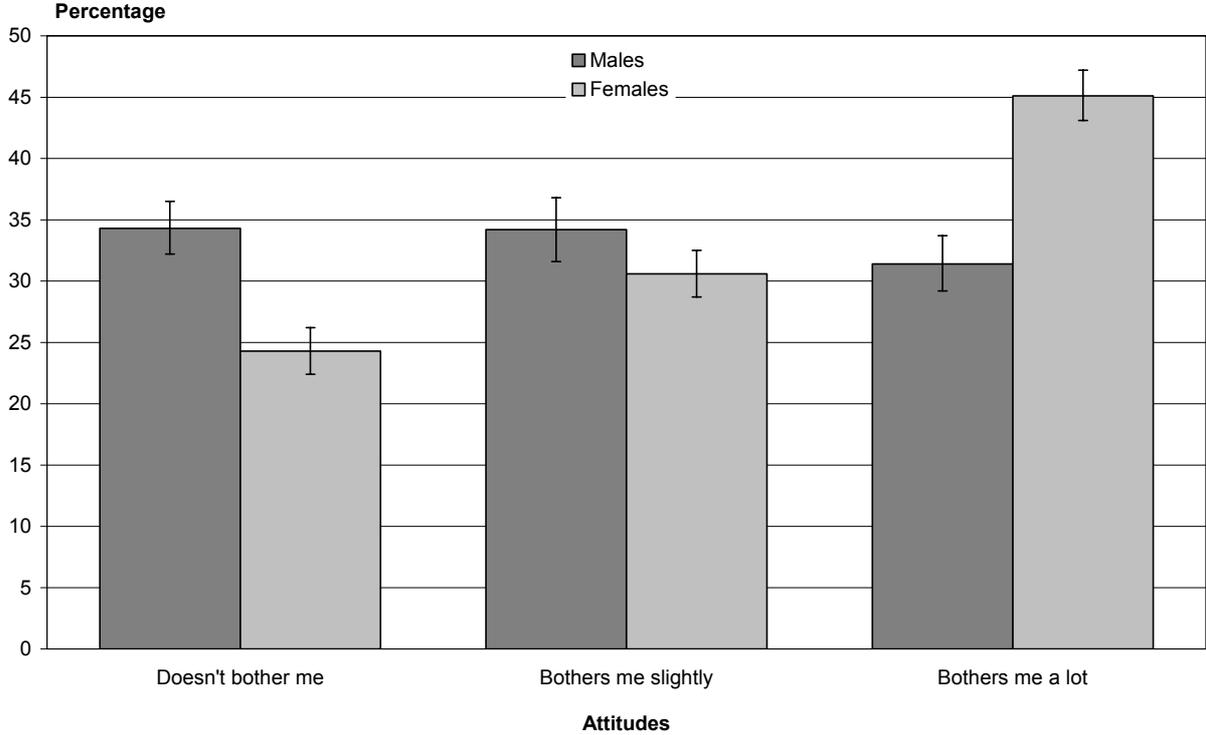
Generally if someone has been smoking cigarettes within a couple of metres of you inside, how are you about the smoke?

- smoking inside does not bother me
- smoking inside bothers me slightly
- smoking inside bothers me a lot.

Overall, 29.2% (CI = 27.7, 30.7) of respondents identified smoking inside as not bothering them, 32.4% (CI = 30.7, 34.0) identified smoking inside as bothering them slightly and 38.4% (CI = 36.9, 39.9) identified smoking inside as bothering them a lot.

Gender and attitudes towards SHS

Figure 17: Attitudes towards SHS (%), by gender

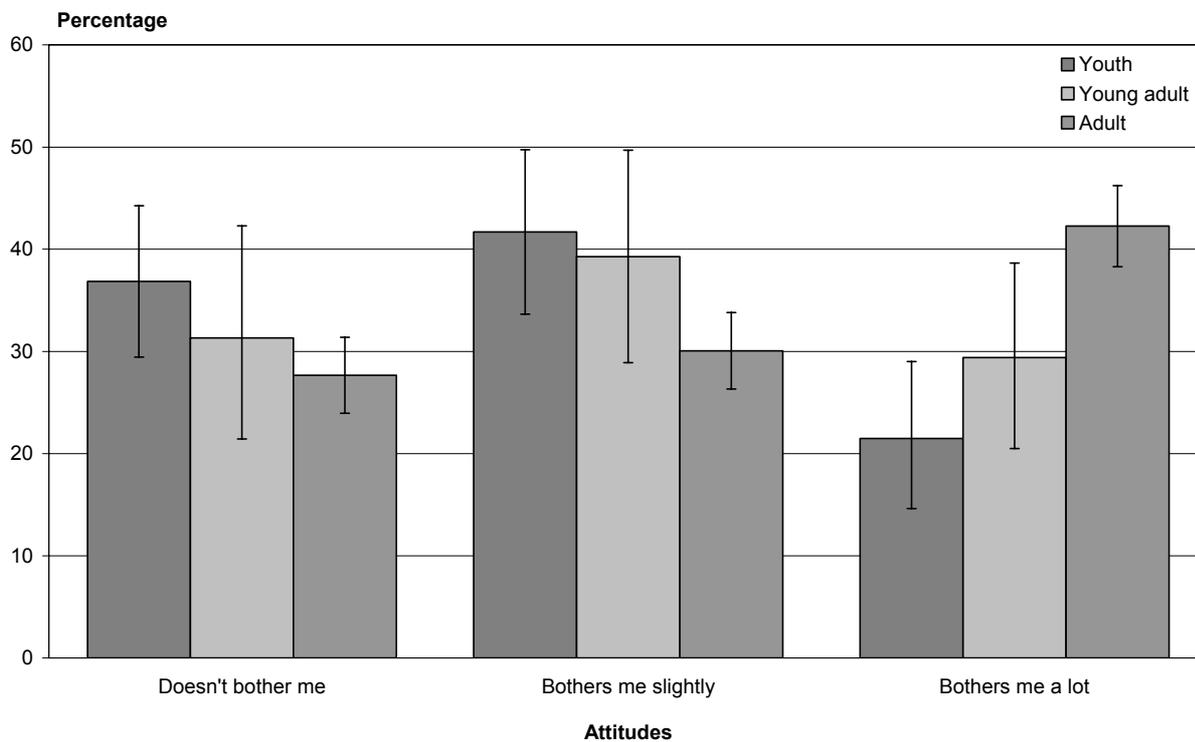


Note: 95% confidence intervals are given for each bar.

Significantly more females (45.1%; CI = 43.1, 47.2) are bothered a lot by smoking around them than males (31.4%; CI = 29.2, 33.7) are. Significantly fewer females (24.3%; CI = 22.4, 26.2) are not bothered by smoking around them than males (34.3%; CI = 32.2, 36.5).

Age and attitudes towards SHS

Figure 18: Attitudes towards SHS (%), by age



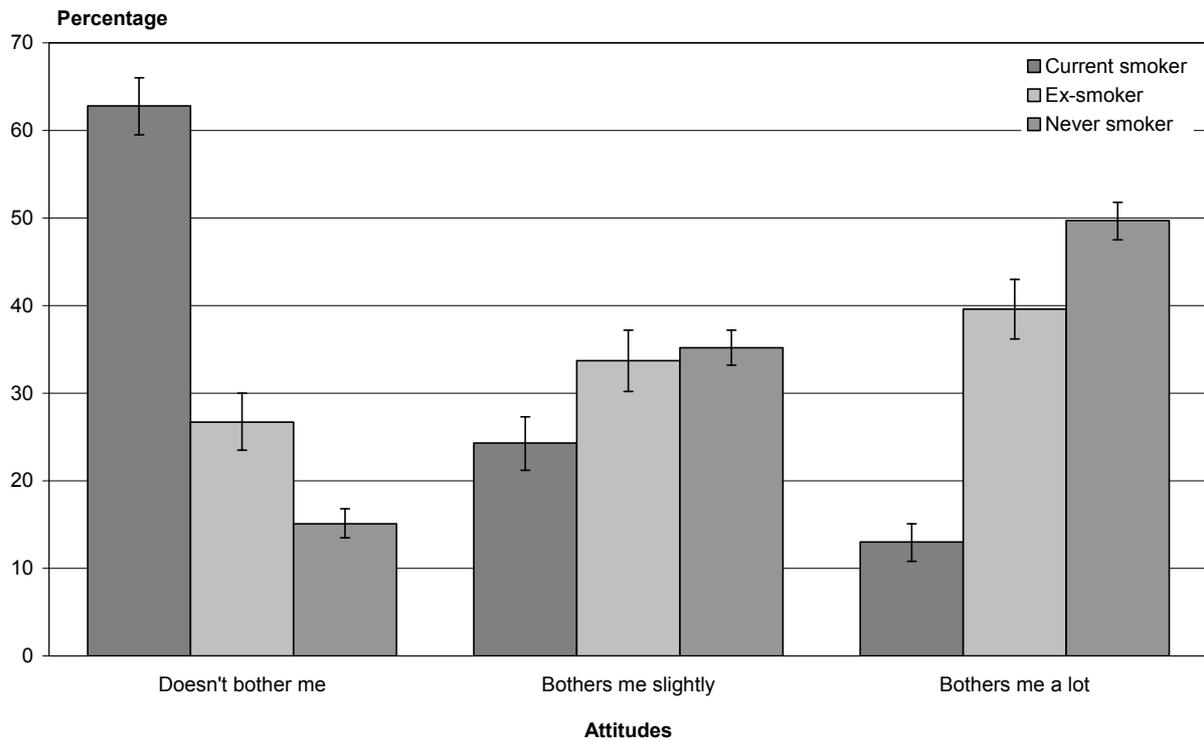
Note: 95% confidence intervals are given for each bar.

Figure 18 shows that the percentage of adults who are bothered a lot by smoke around them is significantly higher (42.1%; CI = 40.2, 44.0) than the percentage of young adults (29.2%; CI = 25.2, 33.2) and youth (21.5%; CI = 14.6, 29.0) who are bothered by it.

The percentage of youth who are not bothered by others smoking around them appears higher (36.9%; CI = 29.5, 44.3) than the percentage of young adults (31.3%; CI = 21.4, 42.3) and adults (27.7%; CI = 23.9, 31.4), however these differences are not statistically significant.

Smoking status and attitudes towards SHS

Figure 19: Attitudes towards SHS (%), by smoker type



Note: 95% confidence intervals are given for each bar.

A significantly higher number of current smokers (62.8%; CI = 59.5, 66.0) are not bothered by others smoking around them compared to ex-smokers (26.7%; CI = 23.5, 30.0) and never smokers (15.1%; CI = 13.5, 16.8) (see Figure 19).

A significantly higher number of never smokers (49.7%; CI = 47.5, 51.8) are bothered a lot by others smoking around them compared to ex-smokers (39.6%; CI = 36.2, 43.0) and current smokers (13.0%; CI = 10.8, 15.1).

Ethnicity and attitudes towards SHS

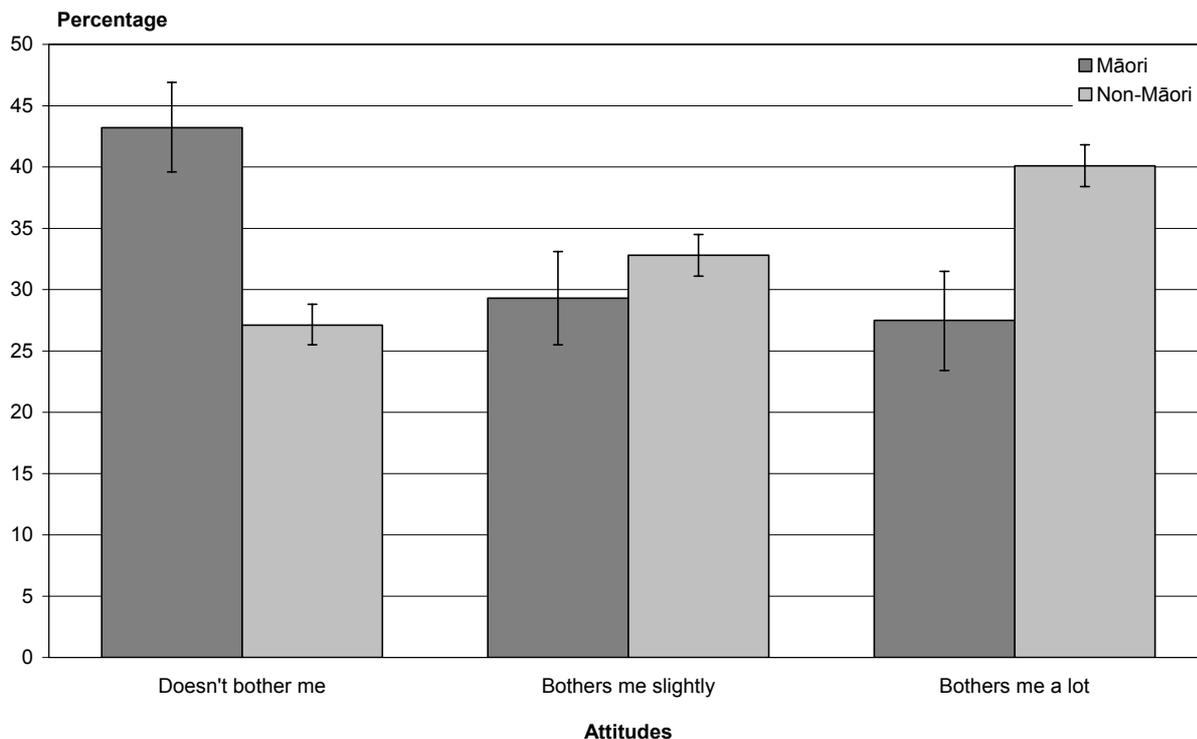
Table 15: Attitudes towards SHS (%), by ethnicity

	European/Other	Māori	Pacific	Asian	Total
Doesn't bother me	28.0 (25.9, 30.0)	43.2 (39.6, 46.9)	33.9 (28.7, 39.1)	17.3 (13.6, 21.0)	29.2 (27.7, 30.7)
Bothers me slightly	32.9 (30.9, 34.8)	29.3 (25.5, 33.1)	30.4 (25.4, 35.4)	33.8 (29.5, 38.1)	32.4 (30.7, 34.0)
Bothers me a lot	39.2 (37.2, 41.1)	27.5 (23.4, 31.5)	35.7 (31.1, 40.3)	48.9 (44.6, 53.2)	38.4 (36.9, 39.9)

Note: 95% confidence intervals are presented below each rate.

Pacific peoples appear to be less bothered by smoke around them, with 33.9% reporting not being bothered by smoking around them. Around 27% (CI = 25.5, 28.8) of non-Māori are not bothered by smoking around them, compared to 43.2% (CI = 39.6, 46.9) of Māori. The reverse is seen in people who are bothered by smoking around them, with 40.1% (CI = 38.4, 41.8) of non-Māori being bothered a lot by smoking around them compared to 27.5% (CI = 23.4, 31.5) of Māori.

Figure 20: Attitudes towards second-hand smoke (%), Māori versus non-Māori



Note: 95% confidence intervals are given for each bar.

Knowledge about harm from second-hand smoke

To gain an idea about knowledge of the health effects of second-hand smoke, respondents were asked the following:

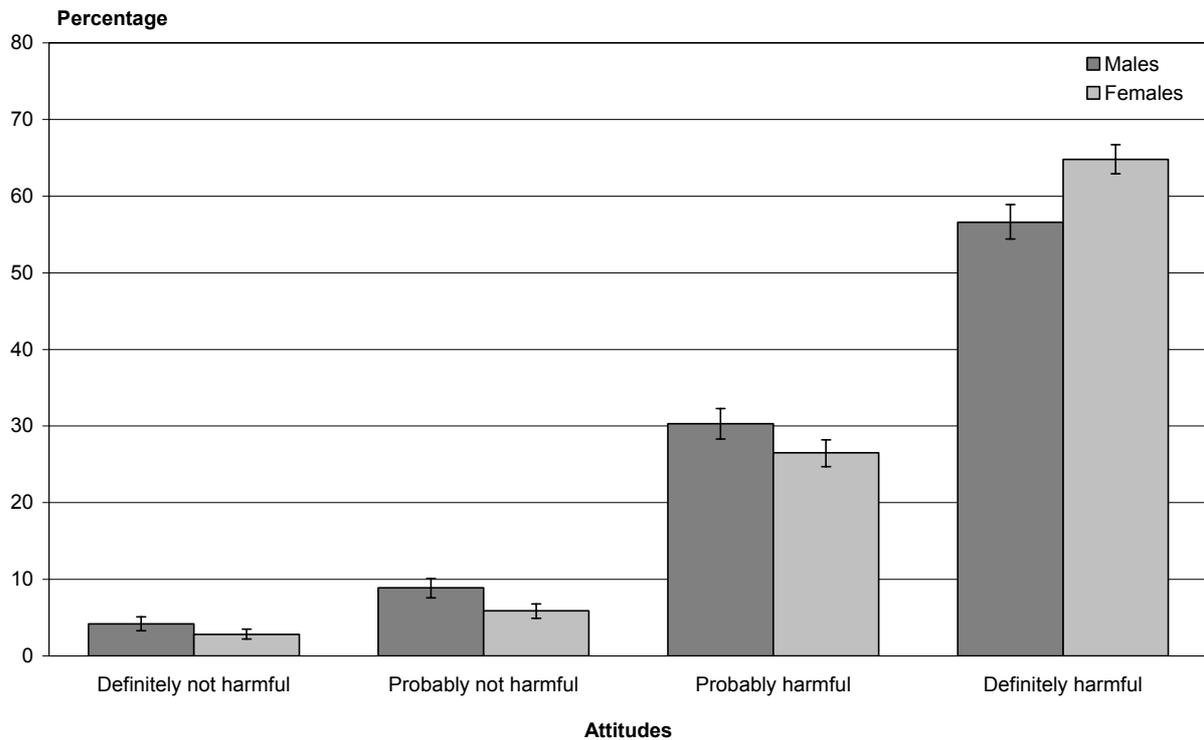
Do you think the smoke from other people's cigarettes is harmful to you?

- Definitely not
- Probably not
- Probably yes
- Definitely yes.

Overall, 60.8% (CI = 59.5, 62.2) of people think that smoke from other people's cigarettes is definitely harmful to them, 28.4% (CI = 27.2, 29.6) think that it is probably harmful to them, 7.3% (CI = 6.6, 8.0) think that it is probably not harmful to them, and 3.5% (CI = 2.9, 4.1) think that smoke from other people's cigarettes is definitely not harmful to them.

Gender and knowledge about SHS

Figure 21: Knowledge about harm from SHS (%), by gender



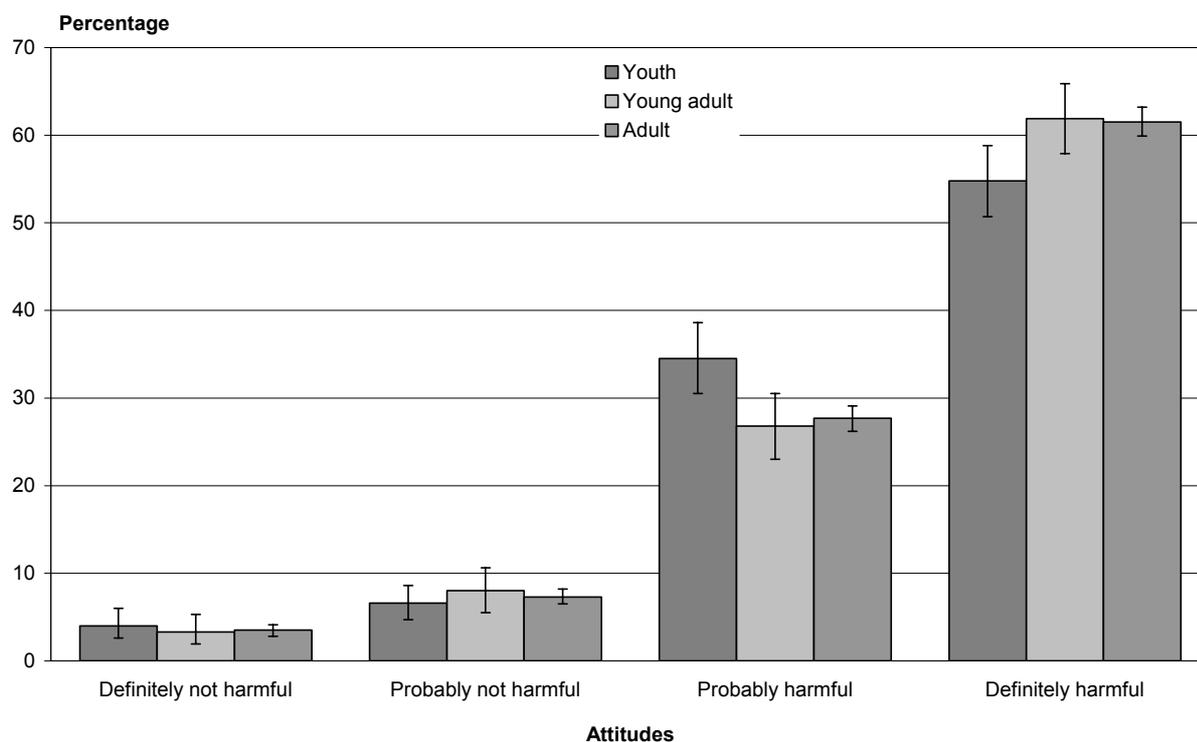
Note: 95% confidence intervals are given for each bar.

Figure 21 shows a clear trend of more people thinking that smoke from other people's cigarettes are at least probably harmful to health compared to people who think that it is not harmful.

A significantly higher percentage of females (64.8%; CI = 62.9, 66.7) think that smoke from other people's cigarettes is definitely harmful to health, compared to males (56.6% (CI = 54.4, 58.9)).

Age stage and knowledge about SHS

Figure 22: Knowledge about harm from SHS (%), by age stage



Note: 95% confidence intervals are given for each bar.

Figure 22 shows a clear trend of more people thinking that smoke from other people's cigarettes is at least probably harmful compared to people who do not.

Similar percentages of young adults (61.9%; CI = 57.9, 65.9) and adults (61.5%; CI = 59.9, 63.2) think that smoke from other people's cigarettes is definitely harmful to health. Similar percentages of young adults (26.8%; CI = 23.0, 30.5) and adults (27.7%; CI=26.2, 29.1) also think that smoke from other people's cigarettes is probably harmful.

Ethnicity and knowledge about SHS

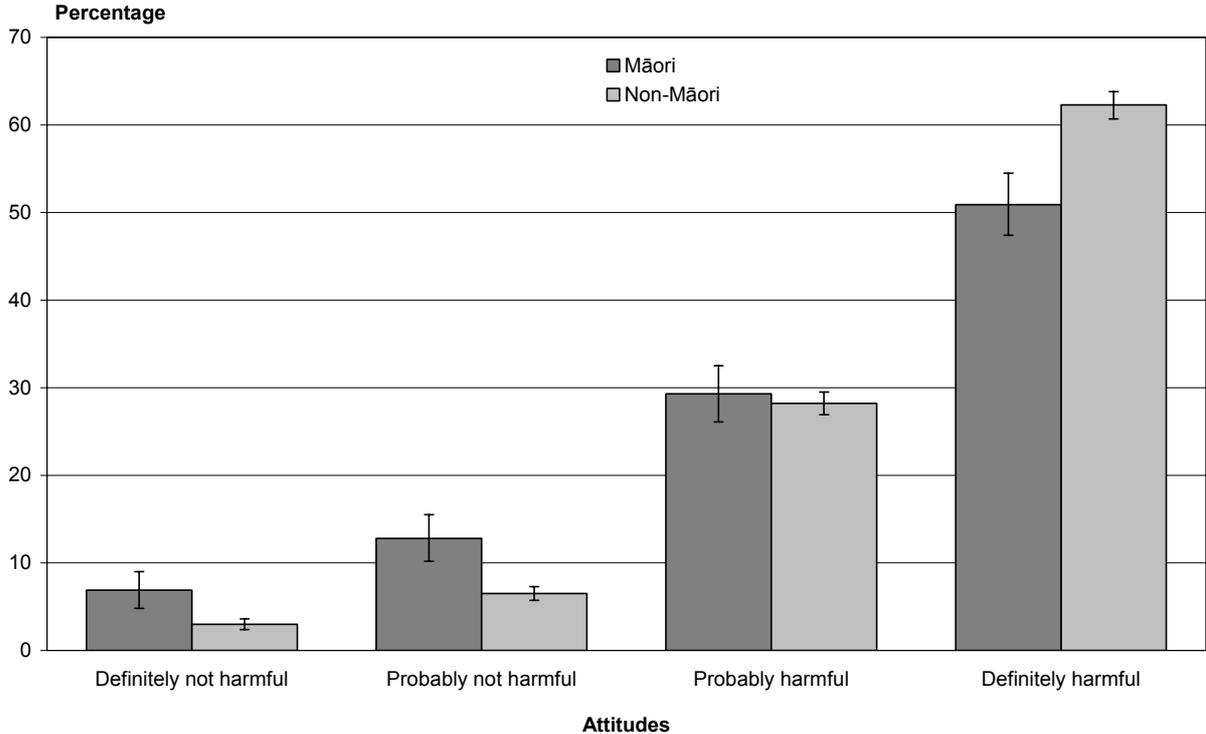
Table 16: Knowledge about harm from SHS (%), by ethnicity

	European/Other	Māori	Pacific	Asian	Total
Definitely not harmful	2.9 (2.2, 3.6)	6.9 (4.8, 9.0)	5.5 (3.7, 7.4)	1.8 (1.0, 3.1)	3.5 (2.9, 4.1)
Probably not harmful	6.3 (5.3, 7.2)	12.8 (10.2, 15.5)	11.4 (8.6, 14.3)	5.3 (3.3, 7.3)	7.3 (6.6, 8.0)
Probably harmful	28.8 (27.2, 30.3)	29.3 (26.1, 32.5)	25.3 (20.3, 30.3)	26.2 (22.6, 29.8)	28.4 (27.2, 29.6)
Definitely harmful	62.0 (60.2, 63.8)	50.9 (47.4, 54.5)	57.8 (52.6, 62.9)	66.7 (62.6, 70.8)	60.8 (59.5, 62.2)

Note: 95% confidence intervals are presented below each rate.

Similar percentages of Māori (6.9% and 12.8%) and Pacific peoples (5.5% and 11.4%) think that smoke from other people’s cigarettes is definitely not and probably not harmful to health. Similar percentages of European/Other (2.9% and 6.3%) and Asian (1.8% and 5.3%) ethnicities think that smoke from other people’s cigarettes is definitely not and probably not harmful to health respectively (see Table 16).

Figure 23: Knowledge about harm from SHS (%), Māori versus non-Māori



Note: 95% confidence intervals are given for each bar.

Significantly more Māori think that smoke from other people’s cigarettes is definitely not (6.9%; CI = 4.8, 9.0) and probably not (12.8%; CI = 10.2, 15.5) harmful to health compared to non-Māori (3.0%; CI = 2.4, 3.6 and 6.5%; CI = 5.7, 7.3 respectively).

Significantly more non-Māori (62.3%; CI = 60.7, 63.8) think that smoke from other people’s cigarettes is definitely harmful to the health than Māori (50.9%; CI = 47.4, 54.5).

Chapter 4: Cessation Behaviour and Support

One of the objectives of the NZTUS is to collect reliable measures of quitting behaviour. This includes information such as motivation to quit smoking, quit attempts, and use of cessation programmes and services during these attempts.

All respondents who are identified as current and ex-smokers are asked about cessation behaviour and support used (ie, programmes and services). The cessation module in the NZTUS identifies a range of quitting behaviours. This chapter focuses on quit attempts, advice/services received and products used during these quit attempts. Data are presented by gender, age group and ethnicity (Māori, Pacific, Asian and European/Other) and Māori versus non-Māori. Where available, data is presented by NZDep01 quintile, income and age stage (youth, young adult and adult).

Data in this chapter is presented in five parts:

- quit attempts in the last five years
- quit attempts in the last 12 months
- advice or services used during the last quit attempt
- products used during the last quit attempt.
- attitudes towards quitting.

Summary

- Around 65% of smokers in New Zealand have made a quit attempt in the last five years.
- High percentages of Māori (67.8%) and Pacific smokers (59.9%) have made quit attempts in the last five years.
- Of smokers who had ever deliberately quit for more than a week over the last 5 years, 36.3% did not make any quit attempts and around 33.4% quit once in the previous 12 months.
- Around 26.0% of smokers who made quit attempts in the last 12 months, received some form of advice on how to quit smoking, and 26.5% of smokers used some form of quitting product during their last quit attempt.
- Around 38.0% of people agree with the statement that smokers who fail to quit do not really want to quit, compared to 27.5% who disagree.
- Around 38.0% of people disagree with the statement that people should be able to quit without the help of programmes or products, compared to around 28.0% who agree with it.

Quit attempts in the last five years

To provide an indication of the proportion of New Zealand smokers who have deliberately tried to quit smoking in the last five years, respondents 20 years and older were asked the following: 'In the last five years, have you tried to quit smoking?'. To ascertain people who have ever made deliberate quit attempts, respondents were asked: 'Have you ever deliberately quit for more than a week?'

In New Zealand, 64.9% (CI = 61.9, 67.9) of smokers have tried to quit in the last five years. Of smokers, 69.2% (CI = 66.0, 72.3) have deliberately quit for more than one week.

Gender and quit attempts in the last five years

Table 17: Quit attempts in last five years (%), by gender (20+ years)

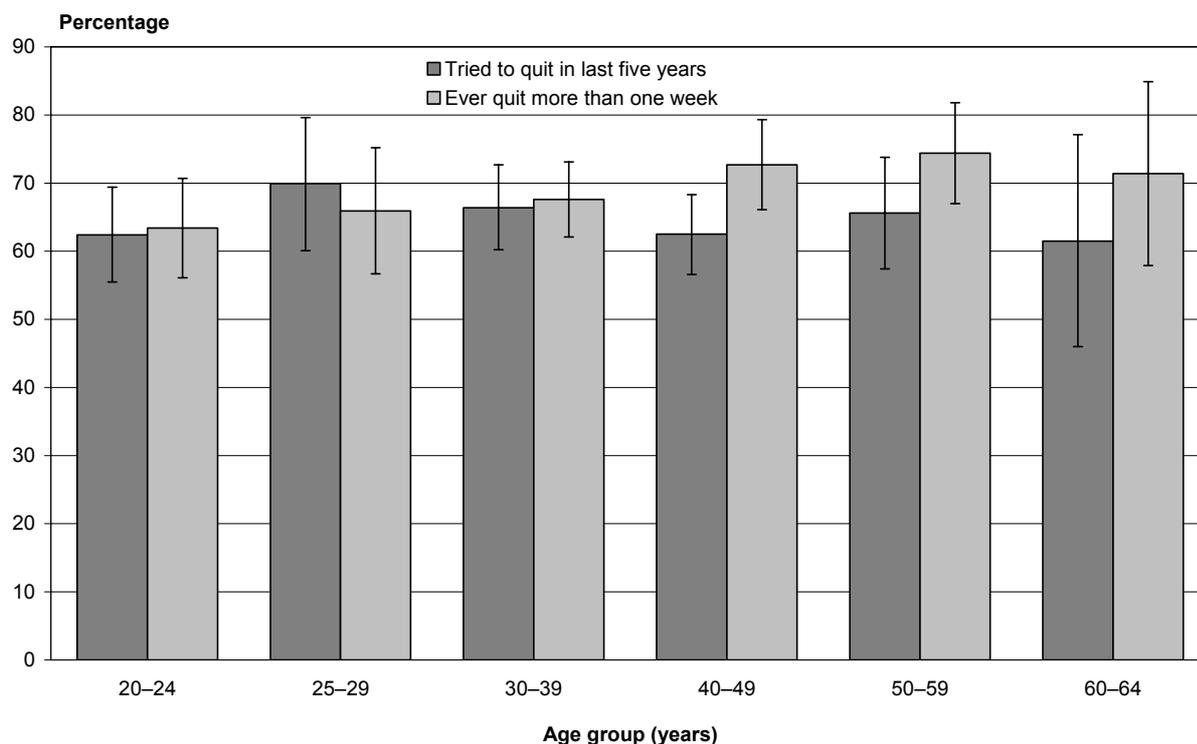
	Males	Females	Total
Tried to quit in last 5 years	61.0 (56.2, 65.8)	68.9 (64.5, 73.4)	64.9 (61.9, 67.9)
Ever quit for more than 1 week	66.5 (62.2, 70.8)	71.9 (67.5, 76.3)	69.2 (66.0, 72.3)

Note: 95% confidence intervals are presented below each rate.

Around 68.9% of female and 61.0% of male smokers made a quit attempt in the last five years. Similarly, 71.9% of female and 66.5% of male smokers have ever deliberately quit for more than a week (see Table 17 for confidence intervals).

Age group and quit attempts in the last five years

Figure 24: Quit attempts in last five years (%), by age group (20+ years)



Note: 95% confidence intervals are given for each bar.

Similar proportions of smokers across all age groups made quit attempts in the last five years.

A large proportion of smokers have deliberately quit for more than one week, across all age groups. Higher percentages of people between the ages of 40 and 59 appear to have ever deliberately quit for more than one week compared to people in younger age groups but these differences are not statistically significant (see Figure 24).

Ethnicity and quit attempts in the last five years

Table 18: Quit attempts in last five years (%), by ethnicity (20+ years)

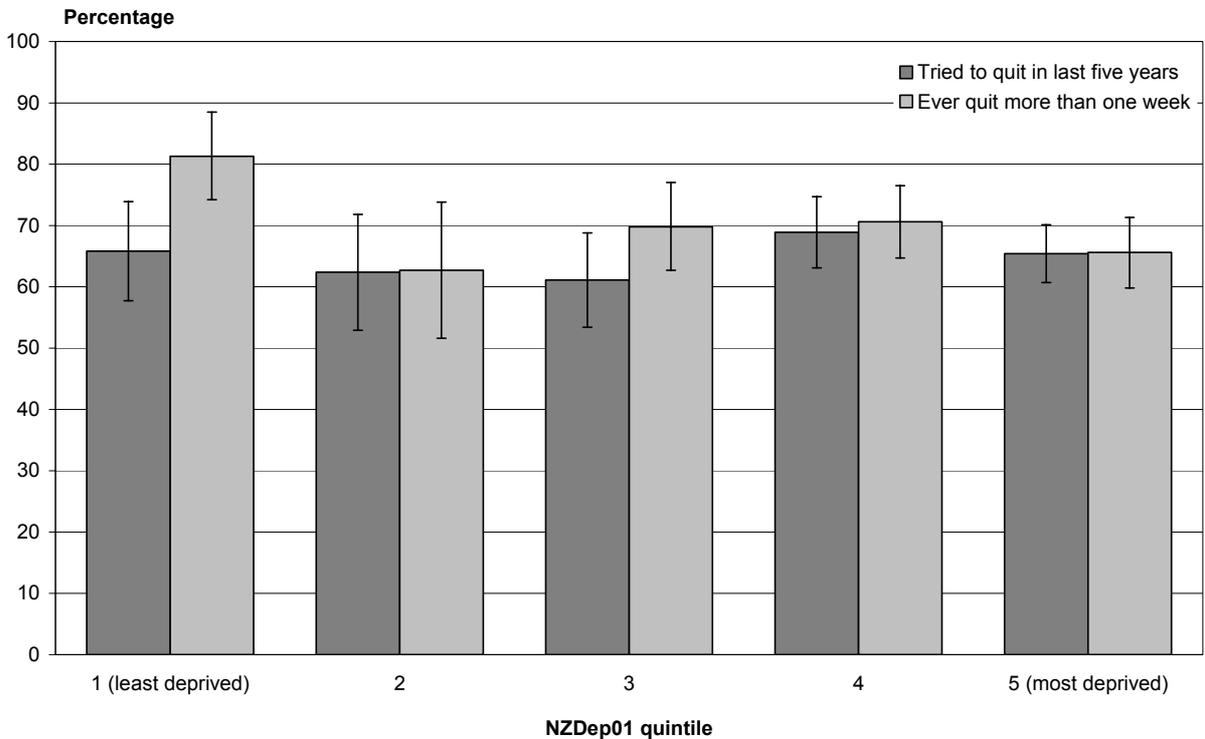
	European/Other	Māori	Pacific	Asian	Total
Tried to quit in last five years	64.8 (60.5, 69.1)	67.8 (62.5, 73.0)	59.9 (49.3, 70.5)	62.2 (49.0, 75.4)	64.9 (61.9, 67.9)
Ever quit for more than one week	70.9 (66.3, 75.4)	68.8 (63.6, 74.0)	63.9 (53.8, 74.0)	59.9 (45.2, 74.6)	69.2 (66.0, 72.3)

Note: 95% confidence intervals are presented below each rate.

A large proportion of smokers have attempted to quit in the last five years, across all ethnic groups. High percentages of Māori (67.8%) and Pacific smokers (59.9%) have attempted to quit smoking in the last five years (see Table 18 for confidence intervals).

Socioeconomic deprivation and quit attempts in the last five years

Figure 25: Quit attempts in last five years (%), by NZDep01 quintile (20+ years)



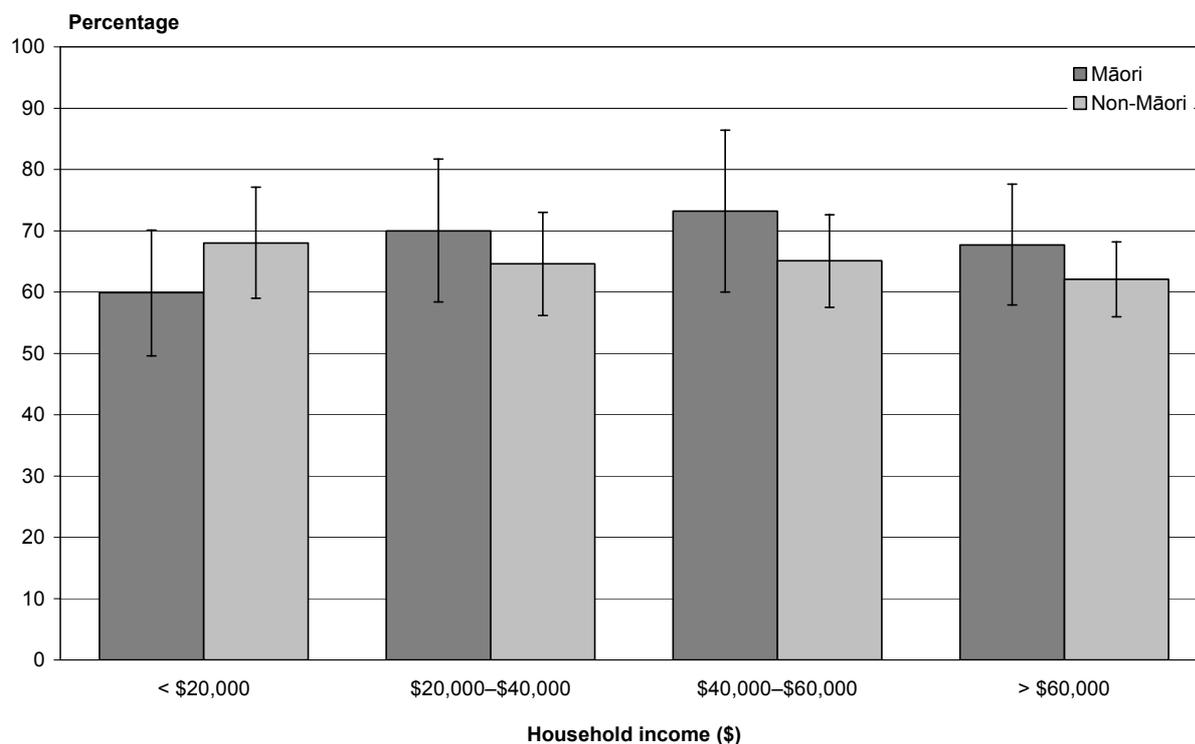
Note: 95% confidence intervals are given for each bar.

Similar proportions of smokers who had made a quit attempt in the last five years are evident across all NZDep01 quintiles.

A significantly higher proportion of smokers who ever deliberately quit for more than a week compared to people who had made a quit attempt in the last five years was evident in NZDep01 quintile 1 (81.3%; CI = 74.2, 88.5 versus 65.8%; CI = 57.7, 73.9).

Income and quit attempts in the last five years

Figure 26: Quit attempts in last five years (%), Māori versus non-Māori, by household income



Note: 95% confidence intervals are given for each bar.

Similar percentages of Māori and non-Māori smokers have made quit attempts in the last five years across all household income brackets (see Figure 26).

It is important to note that there is always a higher level of non-response in income-related categories (percentages of non-response are presented in the Appendix, see Table A24).

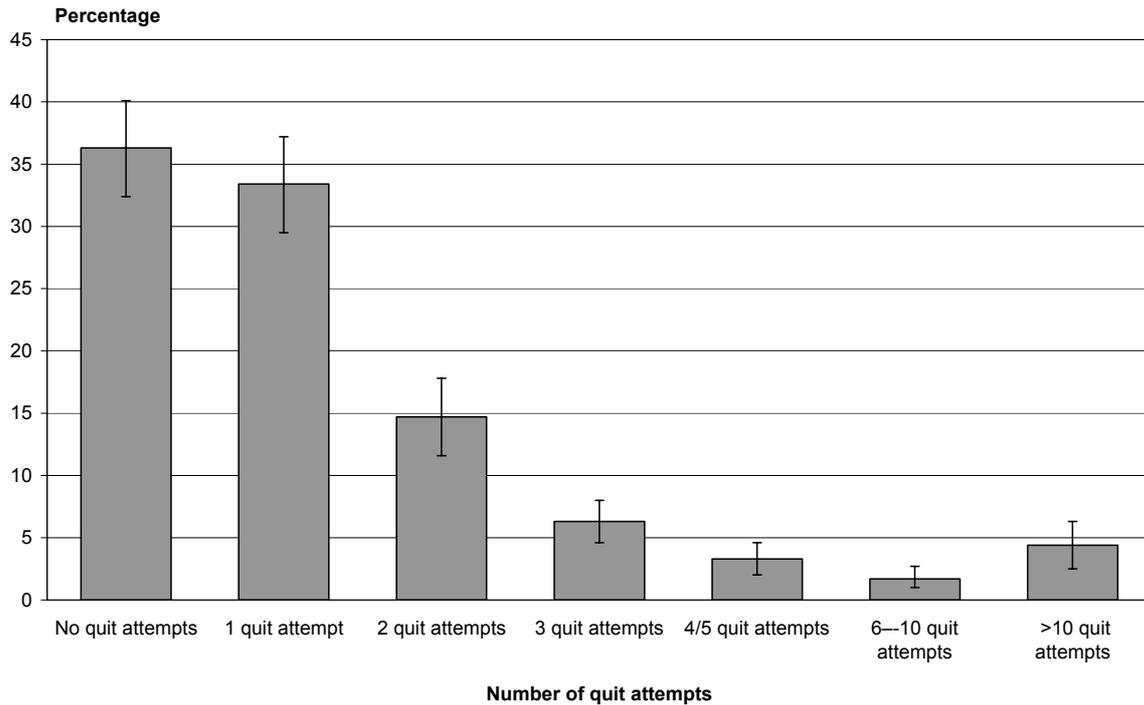
Quit attempts in the last 12 months

To provide information about quit attempts in the past 12 months, respondents who had quit for more than a week were asked: 'In the last 12 months, how many times did you quit for more than a week?'. People who did not make any quit attempts in the past 12 months are identified as no quit attempts.

Prevalence of quit attempts in the last 12 months

Overall, 63.7% of smokers who had deliberately quit for more than a week made at least one quit attempt in the previous 12 months, and 30.4% had made more than two quit attempts.

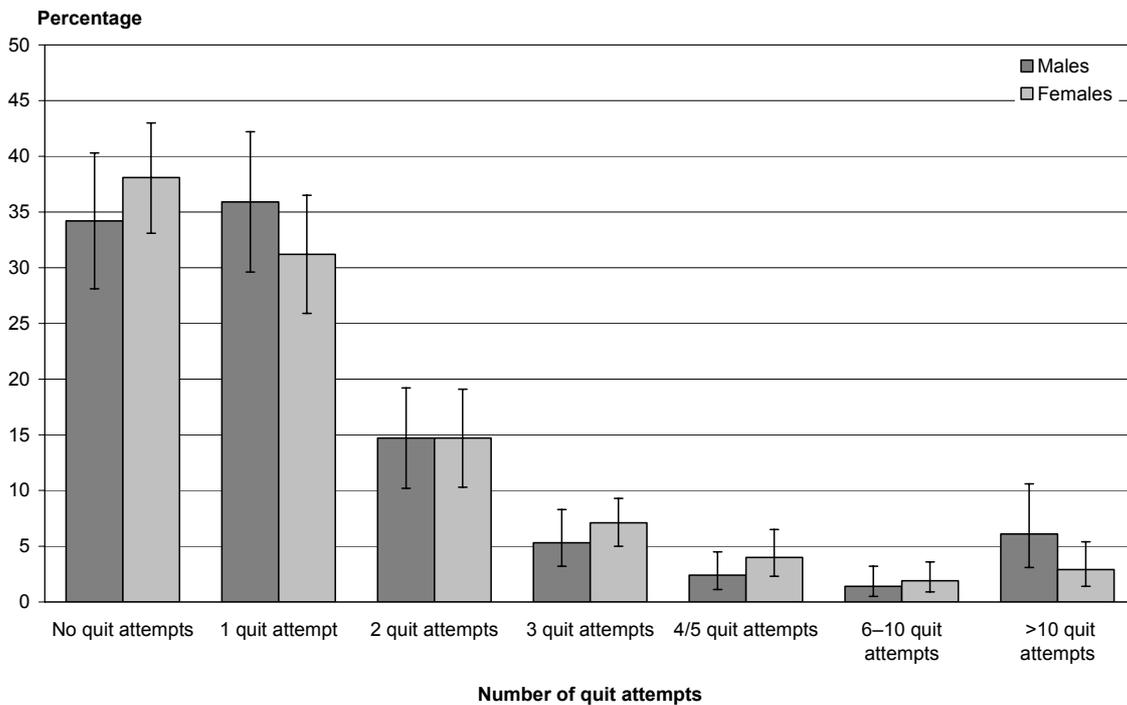
Figure 27: Number of quit attempts in the last 12 months (%) among smokers who have ever quit for more than a week



Note: 95% confidence intervals are given for each bar.

Gender and quit attempts in the last 12 months

Figure 28: Number of quit attempts in last 12 months (%), smokers who have ever quit for more than a week, by gender



Note: 95% confidence intervals are given for each bar.

Of smokers who have ever deliberately quit for more than a week, the percentage of female smokers who made no quit attempts in the last 12 months was similar to males (38.1%; CI = 33.1, 43.0 compared to 34.2%: CI = 28.1, 40.3) respectively.

Ethnicity and quit attempts in the last 12 months

Table 19: Number of quit attempts in the last 12 months (%), smokers who have ever quit for more than a week, Māori versus non-Māori

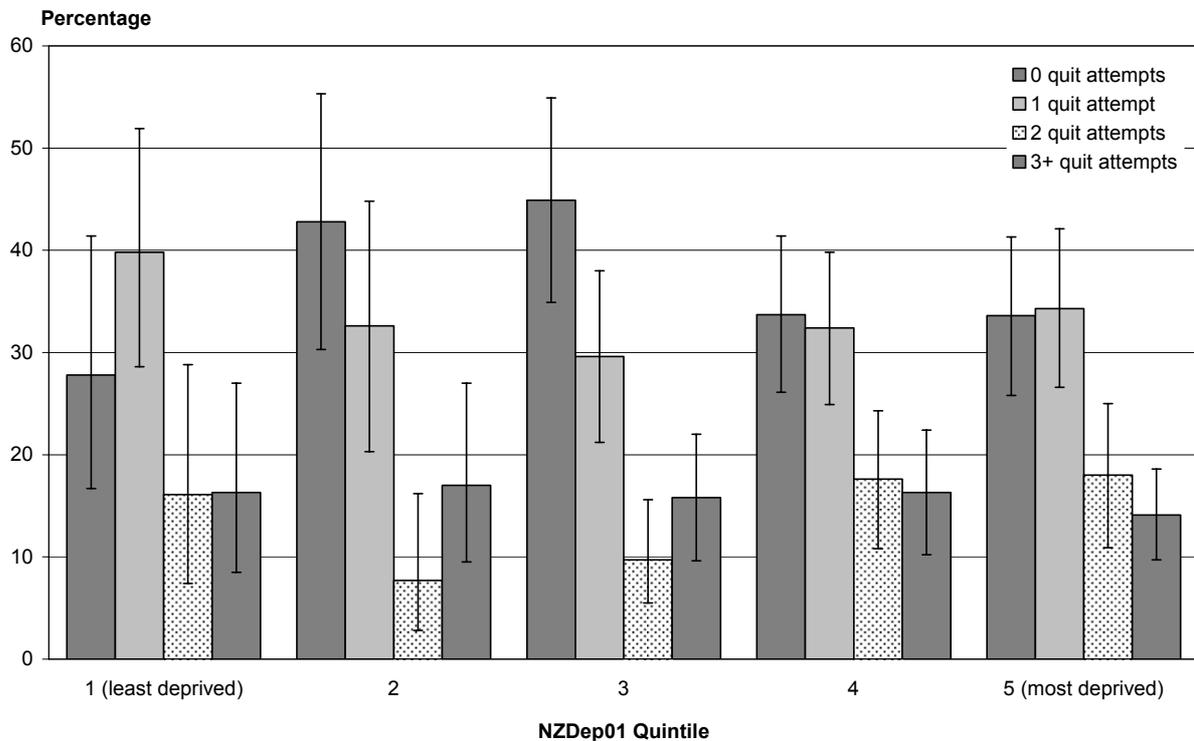
Number of quit attempts	Māori	Non-Māori	Total
0	33.1 (27.0, 39.3)	37.3 (32.5, 42.0)	36.3 (32.4, 40.1)
1	33.5 (25.8, 41.2)	33.3 (28.9, 37.7)	33.4 (29.5, 37.2)
2	14.6 (9.7, 19.5)	14.8 (11.1, 18.4)	14.7 (11.6, 17.8)
3	8 (4.8, 12.3)	5.8 (3.9, 7.7)	6.3 (4.6, 8.0)
4–5	3.3 (1.6, 6.1)	3.3 (1.9, 5.2)	3.3 (2.0, 4.6)
6–10	2.2 (0.6, 5.4)	1.5 (0.7, 2.8)	1.7 (1.0, 2.7)
More than 10	5.3 (1.3, 13.4)	4.1 (2.4, 6.5)	4.4 (2.5, 6.3)

Note: 95% confidence intervals are presented below each rate.

Of people who have ever made a deliberate quit attempt for more than a week, Māori and non-Māori made similar numbers of quit attempts in the last 12 months (see Table 19 for confidence intervals).

Socioeconomic deprivation and quit attempts in the last 12 months

Figure 29: Number of quit attempts in last 12 months (%), smokers who have ever quit for more than a week, by NZDep01 quintile



Note: 95% confidence intervals are given for each bar.

In NZDep01 quintile 1, 39.8% (CI = 28.6, 51.9) of smokers who have ever deliberately quit for more than a week made one quit attempt in the last 12 months, 27.8% (CI = 16.7, 41.4) of people from these areas made no quit attempt.

There are no significant differences in the proportion of people who had made quit attempts or the number of quit attempts made across socio-economic quintile.

Quit advice received

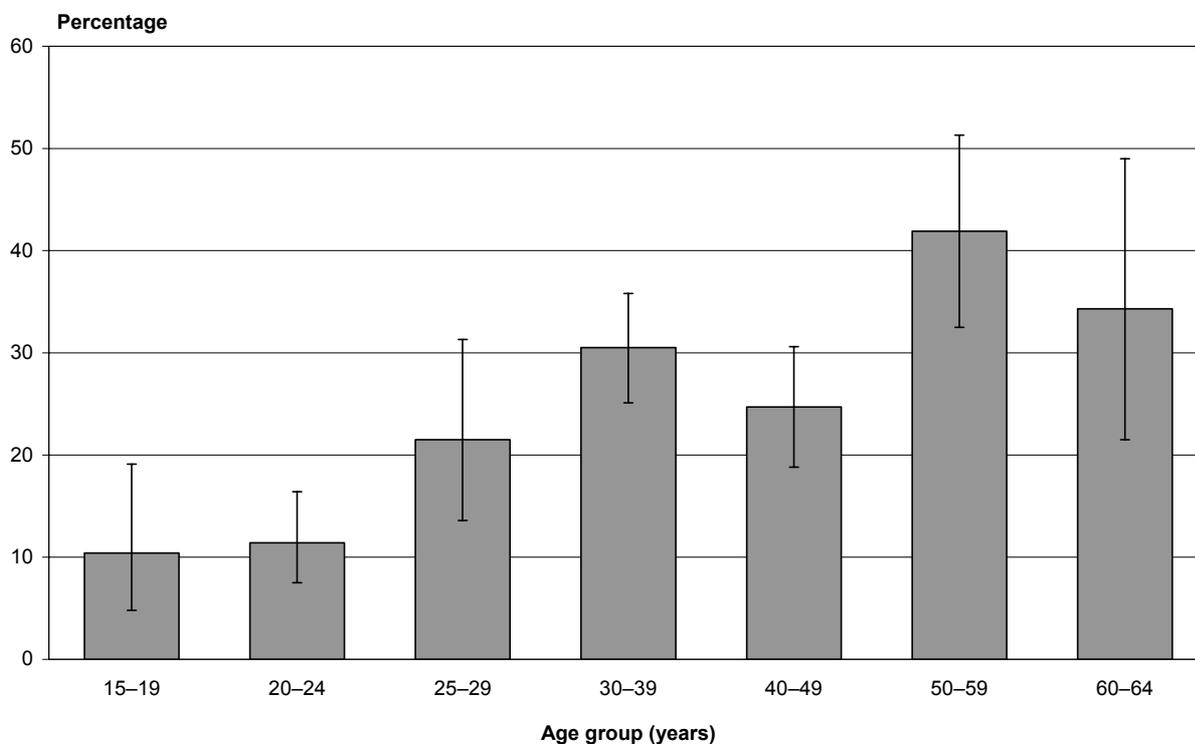
All respondents who were identified as being current smokers or ex-smokers and had made a quit attempt in the last 12 months were asked: 'The last time you stopped smoking or attempted to quit, did you receive any help or advice on how to quit from a health worker or a stop-smoking programme?'. If they had, respondents were asked to identify the services and/or advice they had received. These results are presented below.

Prevalence of receiving quit advice

Of people who had quit or tried to quit smoking, 25.7% (CI = 22.8, 28.6) received some form of advice on how to quit smoking during their last quit attempt. There were no significant gender differences between people who received advice and those who did not, with 26.4% (CI = 22.7, 30.0) of female smokers and 24.9% (CI = 20.4, 29.5) of male smokers reporting having received advice during their last quit attempt.

Of people who had quit or tried to quit smoking, 28.9% (CI = 23.4, 34.3) of Māori and 24.8% (CI = 21.5, 28.1) of non-Māori received advice during their last quit attempt.

Figure 30: Quit advice received during last quit attempt (%), by age group



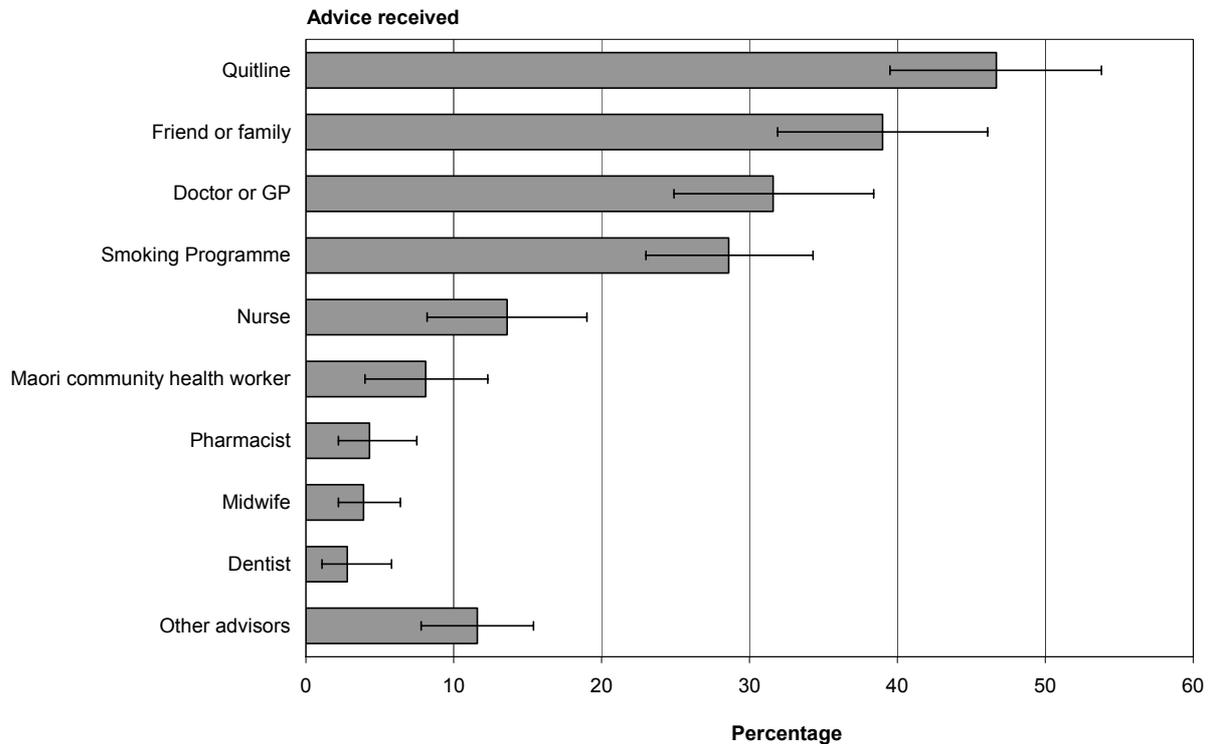
Note: 95% confidence intervals are given for each bar.

A smaller proportion of people aged under 25 years used quit advice during their last quit attempts. In comparison, people aged over 25 years showed higher percentages of having used advice, with the largest proportions being among people in the 50–59 (41.9%; CI = 32.5, 51.2) and 60–64 (34.3%; CI = 21.5, 49.0) years age groups.

The differences between people aged 15–24 and people aged 30–39 and 50–64 years who used quit advice during their last quit attempt are significant.

Services and advice received

Figure 31: Services and advice received during last quit attempt (%)



Note: 95% confidence intervals are given for each bar.

Smokers appear to receive advice or help to quit predominantly from four types of providers. Quitline provided advice to 46.7% (CI = 39.5, 53.8) of smokers who have quit or tried to quit, 39.0% (CI = 31.9, 46.1) received advice from a friend or family member, 31.6% (CI = 24.9, 38.4) received advice from a doctor or general practitioner (GP), and 28.6% (CI = 23.0, 34.3) received advice from a stop-smoking programme of some sort to quit smoking during their last attempt.

Receiving advice or help from an 'other advisor or helper' was also common, at 11.6% (CI = 7.8, 15.4). Examples of other advisors or helpers identified included other health advisors and sources of advice, church people, courses, and work and school. The two most commonly identified in this category were hypnotists and reading stop-smoking books.

Gender and quit advice received

Table 20: Services and advice received during last quit attempt (%), by gender

Provider	Males	Females	Total
Quitline	47.8 (37.0, 58.7)	45.6 (36.9, 54.4)	46.7 (39.5, 53.8)
Friend or family member	41.5 (31.1, 51.9)	36.8 (27.4, 46.2)	39.0 (31.9, 46.1)
Doctor or GP	27.8 (18.3, 37.4)	34.9 (27.3, 42.5)	31.6 (24.9, 38.4)
Stop-smoking programme	27.6 (17.7, 37.6)	29.5 (22.4, 36.5)	28.6 (23.0, 34.3)
Nurse	14.9 (7.3, 25.9)	12.5 (7.1, 19.8)	13.6 (8.2, 19.0)
Māori community health worker	6.4 (2.5, 13.1)	9.6 (4.8, 16.8)	8.1 (4.0, 12.3)
Pharmacist	3.6 (0.8, 9.8)	4.9 (2.3, 9.0)	4.3 (2.2, 7.5)
Midwife	–	6.9 (3.8, 11.3)	3.9 (2.2, 6.4)
Dentist	–	4.4 (1.4, 10.0)	2.8 (1.1, 5.8)
Other advisor or helper	11.0 (5.6, 19.0)	12.1 (7.2, 18.6)	11.6 (7.8, 15.4)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

There were no significant differences between males and females in the type of quitting advice received during their last quit attempt.

Ethnicity and quit advice received

Table 21: Services and advice received during last quit attempt (%), Māori versus non-Māori

Provider	Māori	Non-Māori	Total
Quitline	50.9 (39.4, 62.5)	45.3 (36.6, 54.0)	46.7 (39.5, 53.8)
Friend or family member	49.1 (39.1, 59.2)	35.7 (27.2, 44.2)	39.0 (31.9, 46.1)
Doctor or GP	35.5 (23.5, 47.5)	30.4 (22.0, 38.8)	31.6 (24.9, 38.4)
Stop-smoking programme	23.3 (15.4, 31.2)	30.4 (23.2, 37.6)	28.6 (23.0, 34.3)
Nurse	12.8 (4.5, 26.9)	13.8 (8.3, 19.3)	13.6 (8.2, 19.0)
Māori community health worker	20.6 (12.4, 31.1)	4.1 (1.3, 9.4)	8.1 (4.0, 12.3)
Pharmacist	–	5.0 (2.4, 9.1)	4.3 (2.2, 7.5)
Midwife	6.4 (2.9, 11.8)	3.1 (1.2, 6.4)	3.9 (2.2, 6.4)
Dentist	–	3.2 (1.1, 7.3)	2.8 (1.1, 5.8)
Other advisor or helper	7.0 (3.0, 13.5)	13.1 (8.3, 19.2)	11.6 (7.8, 15.4)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Similar proportions of Māori and non-Māori smokers identified receiving advice from the Quitline, friend or family member, a doctor or a GP and stop smoking programmes. A significantly higher percentage of Māori smokers received advice from a Māori community health worker (20.6%) than non-Māori (4.1%) (see Table 21 for confidence intervals).

Quitting products used

All respondents who were identified as being current smokers or ex-smokers were asked: 'Did you use any quitting products?'. Respondents who answered 'Yes' were then asked: 'What kind of quitting product did you use?'. The results from these questions are presented below.

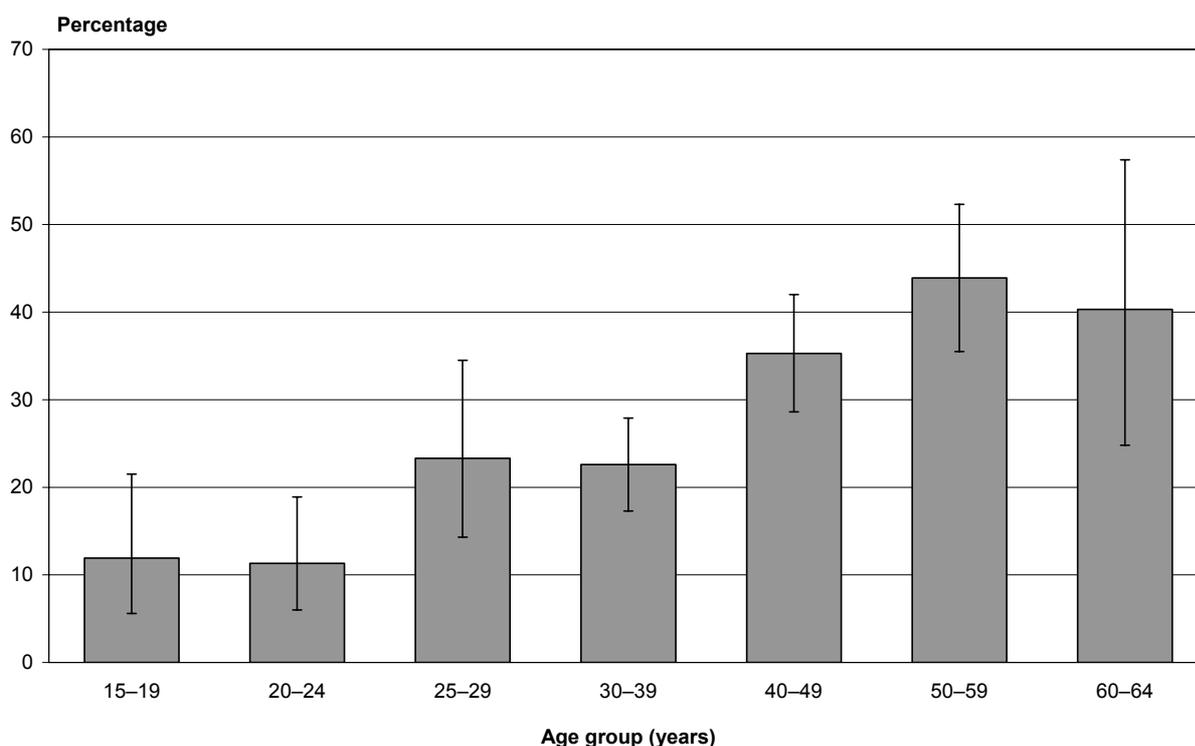
Prevalence of receiving quitting products

The percentage of people identifying having used a quitting product of some sort during their last quit attempt was 26.5% (CI = 23.9, 29.0). There was no significant differences

between genders; 25.8% (CI = 21.6, 30.0) of males used a quitting product, 27.1% (CI = 23.3, 30.8) of females used a quitting product.

Of people who have quit or tried to quit smoking, 26.6% (CI = 21.0, 32.2) of Māori and 26.4% (CI = 23.3, 29.6) of non-Māori used quitting products during their last quit attempt.

Figure 32: Percentage who used quitting products during last quit attempt, by age group

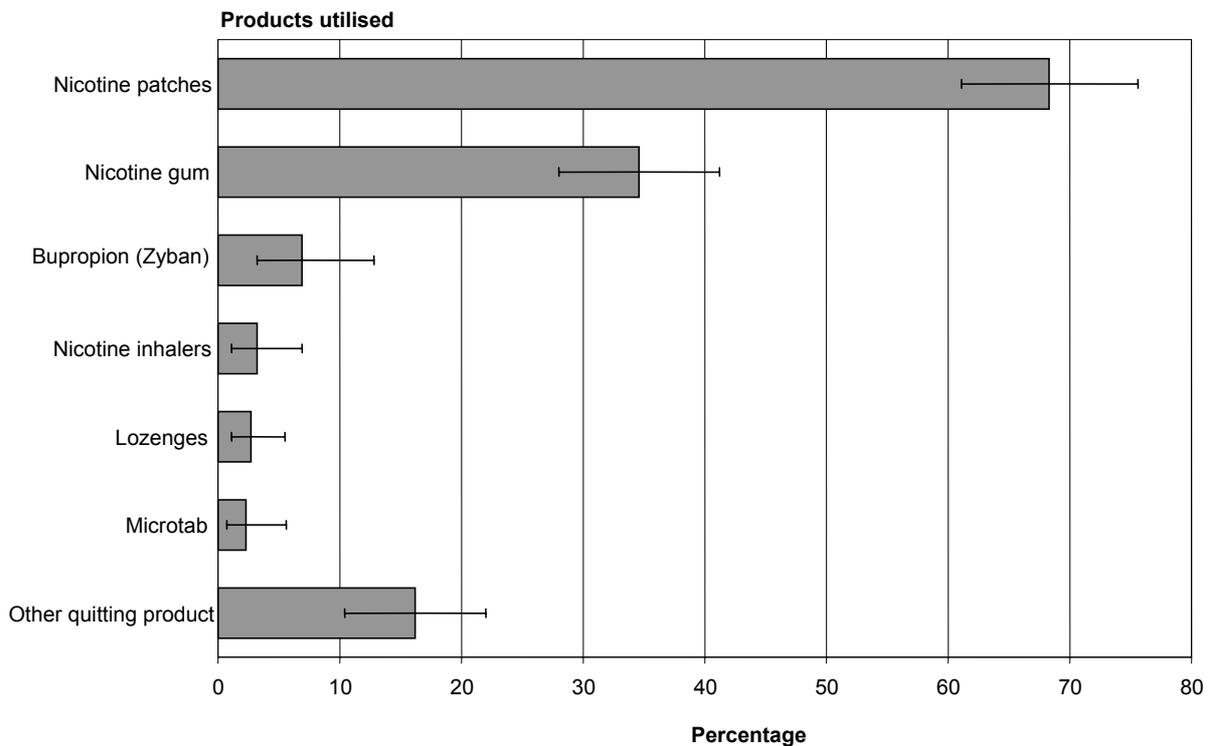


Note: 95% confidence intervals are given for each bar.

Higher percentages of people aged 40 years and over used quitting products during their last quit attempt: 35.3% (CI = 28.6, 42.0) of people aged 40–49, 43.9% (CI = 35.5, 52.3) of people aged 50–59 and 40.3% (CI = 24.8, 57.4) of people aged 60–64 years. In comparison, significantly lower percentages of 15–24-year-olds used quitting products during their last quit attempt: 11.9% (CI = 5.6, 21.5) of 15–19-year-olds, and 11.3% (CI = 6.0, 18.9) of 20–24-year-olds. The 25–29 (23.3%; CI = 14.3, 34.5) and the 30–39 (22.6%; CI = 17.3, 27.9) years age groups were significantly different from the 50–59 years age group.

Products used

Figure 33: Products used during last quit attempt (%)



Notes:

1. 95% confidence intervals are given for each bar.
2. Questionnaire options for nicotine patch, nicotine gum, nicotine inhaler and other were available for youth and adult modules (15+ years). Bupropion (Zyban), lozenges, Microtab and nicotine spray were available in adult module only (20+ years). Data for nicotine spray was not presented because counts were less than 5.

From Figure 33 there appears to be a clear preference for the use of nicotine patches over any other product (68.3%; CI = 61.1, 75.6). Nicotine gum appears to be the next most commonly used product, with 34.6% (CI = 28.0, 41.2) of people who used quit products during their last quit attempt using gum. A very small proportion of adults who used quit products in their last quit attempt used Bupropion (Zyban) (6.9%; CI = 3.2, 12.8) and Microtab (2.3%; CI = 0.7, 5.6).

Of those who used quit products in their last quit attempt, 16.2% (CI = 10.4, 22.0) identified having used an 'other' quitting product. Products identified included herbal pills and cigarettes, acupuncture, hypnotism, antidepressants and books.

Gender and quitting products used

Table 22: Products used during last quit attempt (%), by gender

Product	Males	Females	Total
Nicotine patches	69.4 (59.0, 79.7)	67.5 (58.4, 76.6)	68.3 (61.1, 75.6)
Nicotine gum	45.1 (33.2, 57.0)	25.9 (18.8, 33.1)	34.6 (28.0, 41.2)
Bupropion (Zyban)	5.1 (1.2, 13.8)	8.5 (3.3, 17.1)	6.9 (3.2, 12.8)
Other quitting product	12.4 (5.5, 22.8)	19.4 (11.7, 29.3)	16.2 (10.4, 22.0)

Note: 95% confidence intervals are presented below each rate.

Of the more popular products that were utilised for quit attempts, a significantly greater percentage of males (around 45%) used nicotine gum compared to females (around 26%) (see Table 22 for confidence intervals).

Ethnicity and quitting products used

Table 23: Products used during last quit attempt (%), Māori versus non-Māori

Product	Māori	Non-Māori	Total
Nicotine patches	84.4 (76.1, 92.6)	64.2 (55.6, 72.9)	68.3 (61.1, 75.6)
Nicotine gum	45.7 (32.6, 58.8)	31.8 (23.9, 39.6)	34.6 (28.0, 41.2)
Bupropion (Zyban)	4.1 (1.1, 10.4)	7.6 (3.1, 15.1)	6.9 (3.2, 12.8)
Other quitting product	14.6 (6.8, 26.1)	16.6 (10.1, 25.0)	16.2 (10.4, 22.0)

Note: 95% confidence intervals are presented below each rate.

Comparisons between Māori and non-Māori indicate that a significantly higher percentage of Māori (84.4%) used nicotine patches during quit attempts, compared to non-Māori (64.2%). More Māori also used nicotine gum (45.7%) compared to non-Māori (31.8%), although this was not a significant difference (see Table 23 for confidence intervals).

Attitudes towards quitting

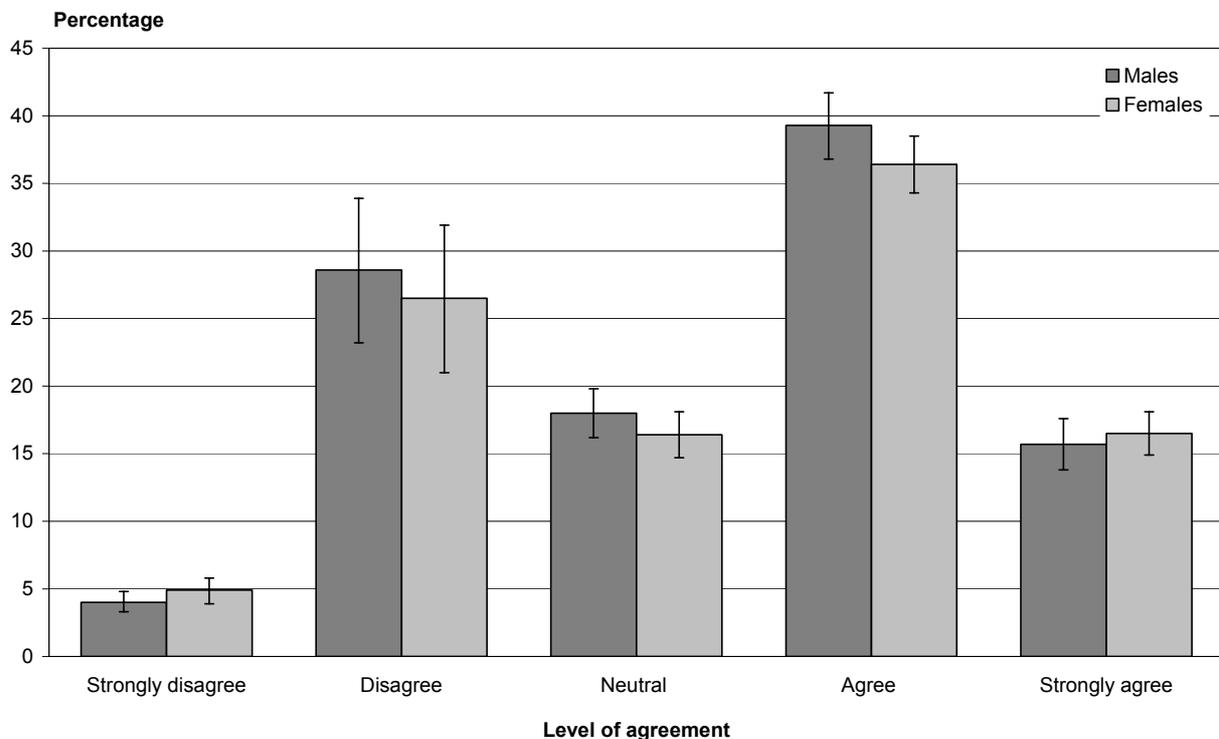
To gain insight into the attitudes of smokers and non-smokers towards quitting, all respondents (15–64 years) were asked to indicate their level of agreement with the following statements. Statements are presented individually below.

'Smokers who fail to quit do not really want to quit'

Overall, 37.8% (CI = 36.1, 39.4) of people agree and 16.0% (CI = 14.8, 17.4) strongly agree with the statement that smokers who fail to quit do not really want to quit, compared to 27.5% (CI = 23.8, 31.3) who disagree and 4.5% (CI = 3.9, 5.0) who strongly disagree.

Gender

Figure 34: Level of agreement with the statement 'Smokers who fail to quit do not really want to quit' (%), by gender

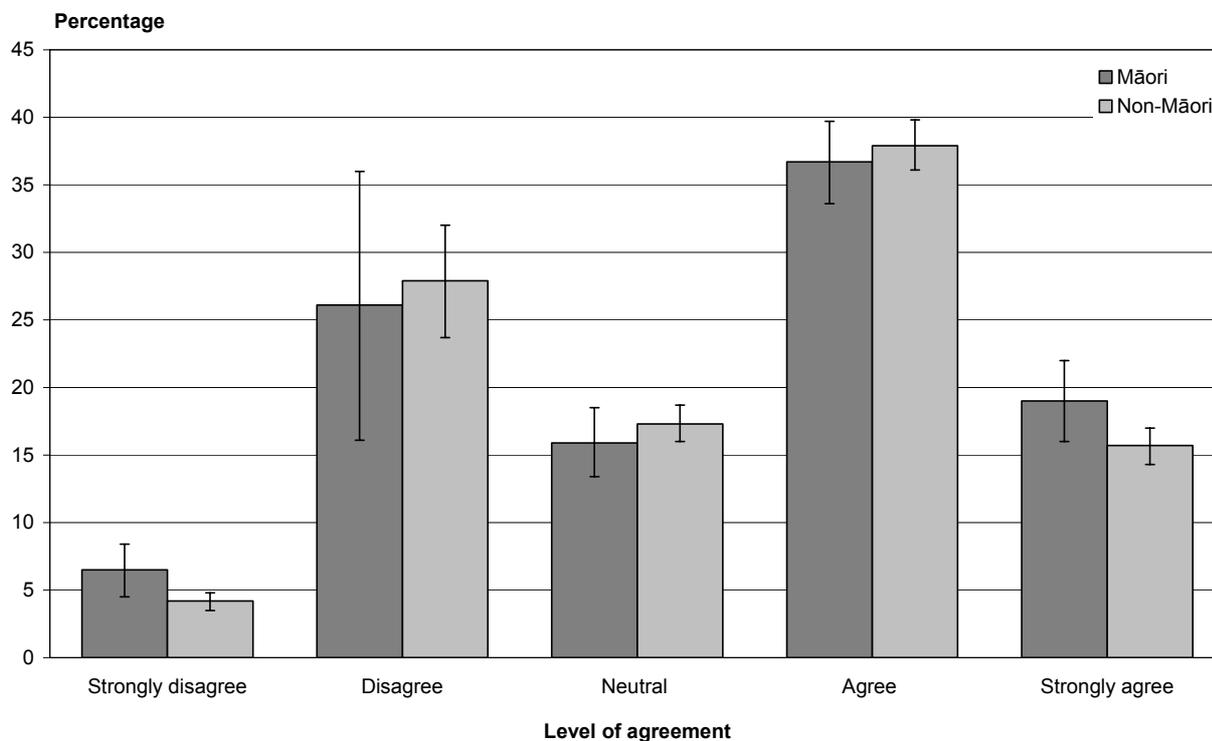


Note: 95% confidence intervals are given for each bar.

The proportions of levels of agreement to the statement above are similar between genders: 28.6% (CI = 23.2, 33.9) of males disagree compared to 26.5% (CI = 21.0, 31.9) of females, while 39.3% (CI = 36.8, 41.7) of males agree compared to 36.4% (CI = 34.3, 38.5) of females.

Ethnicity

Figure 35: Level of agreement with the statement 'Smokers who fail to quit do not really want to quit' (%), Māori versus non-Māori



Note: 95% confidence intervals are given for each bar.

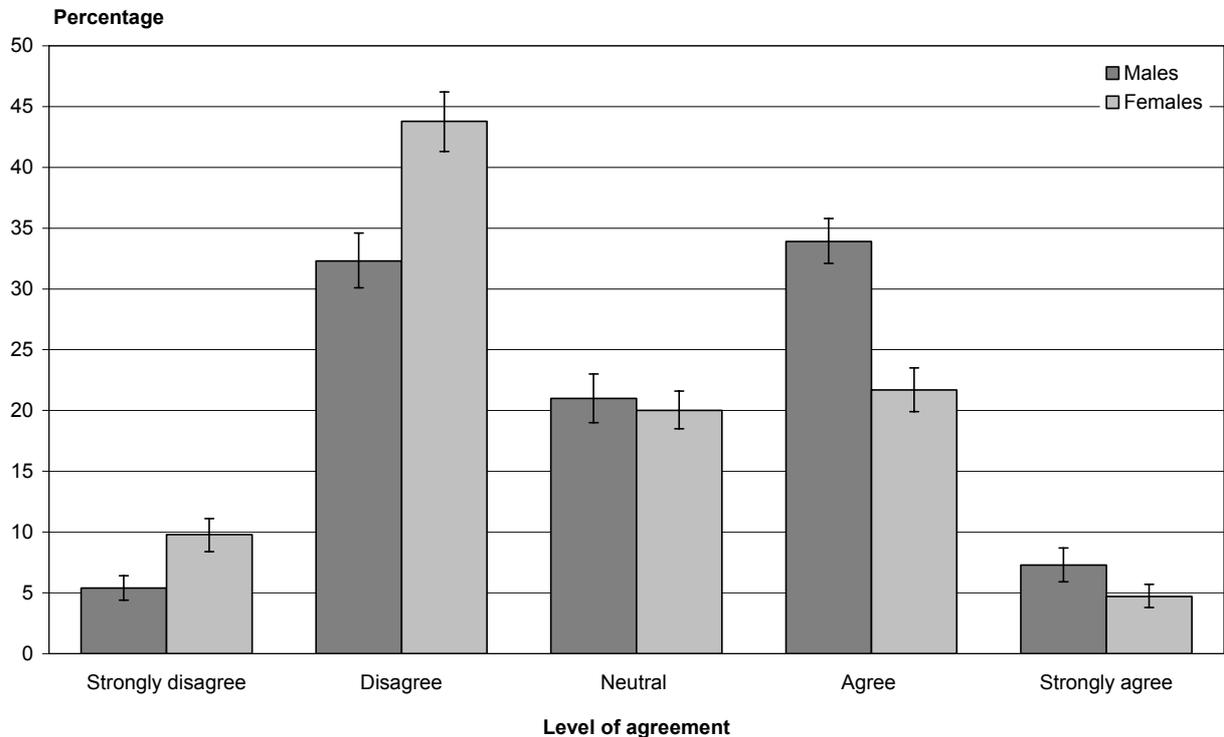
Around 19.0% (CI = 16.0, 22.0) of Māori and 15.7% (CI = 14.3, 17.0) of non-Māori strongly agree, while 6.5% (CI = 4.5, 8.4) of Māori and 4.2% (CI = 3.5, 4.8) non-Māori strongly disagree.

'People should be able to quit without the help of programmes or products.'

Overall, 38.2% (CI = 36.4, 39.9) of people disagree with this statement, while 27.7% (CI = 26.3, 29.0) agree. Around 6.0% (CI = 5.2, 6.8) strongly agree, while 7.7% (CI = 6.7, 8.6) strongly disagree, and 20.5% (CI = 19.2, 21.8) are neutral towards this statement.

Gender

Figure 36: Level of agreement with the statement 'People should be able to quit without the help of programmes or products' (%), by gender

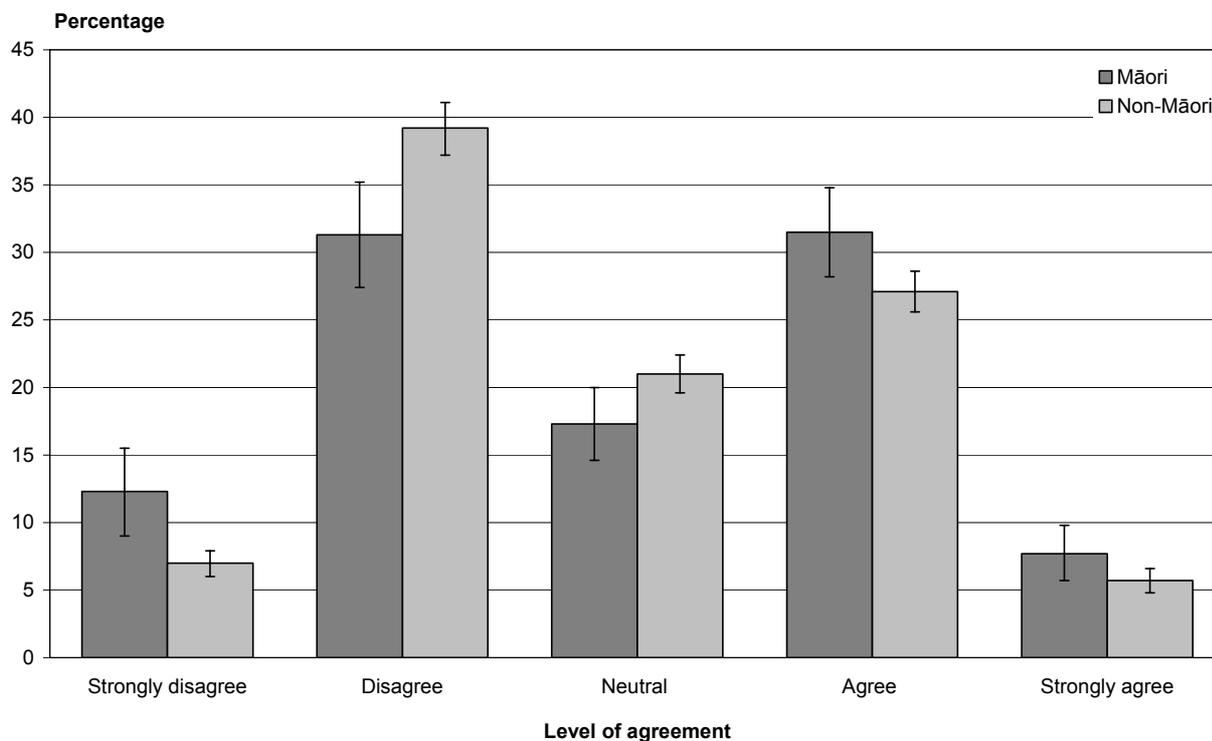


Note: 95% confidence intervals are given for each bar.

Significantly more females strongly disagree (9.8%; CI = 8.4, 11.1) and disagree (43.8%; CI = 41.3, 46.2) with the statement that people should be able to quit without the help of programmes or products compared to males (5.4%; CI = 4.4, 6.4 and 32.3%; CI = 30.1, 34.6 respectively). However, significantly more males agree (33.9%; CI = 32.1, 35.8) and strongly agree (7.3%; CI = 5.9, 8.7) with the statement above compared to females (21.7%; CI = 19.9, 23.5 and 4.7%; CI = 3.8, 5.7 respectively).

Ethnicity

Figure 37: Level of agreement with the statement 'People should be able to quit without the help of programmes or products' (%), Māori versus non-Māori



Note: 95% confidence intervals are given for each bar.

Significantly more Māori strongly disagree (12.3%; CI = 9.0, 15.5) with the statement that people should be able to quit without the help of programmes and products compared to non-Māori (7%; CI = 6.0, 7.9). However, significantly more non-Māori (39.2%; CI = 37.2, 41.1) disagree with the statement compared to 31.3% (CI = 27.4, 35.2) of Māori. More Māori (31.5%; CI = 28.2, 34.8) also agree with the statement compared to non-Māori (27.1%; CI = 25.6, 28.6).

Chapter 5: Youth

New Zealand youth form a dynamic population who are guided by contemporary social norms, influences and technologies and are therefore a key population for smoking prevention interventions. Youth hold essential information, at a key developmental stage (both social and behavioural), and surveying youth provides insight into determinants and influences on behaviours and attitudes later on in their lives. It is therefore important to better understand and monitor smoking and smoking-related behaviours among New Zealand youth.

The NZTUS is divided into two components: adult and youth. Respondents aged 15 to 19 years (inclusive) are administered the youth component. Information about youth smoking prevalence and general tobacco-use behaviours are presented earlier in this report (see Chapters 1 and 4). Data in this chapter is presented by gender and ethnicity (Māori versus non-Māori). Where available, data is presented by smoker type.

This chapter presents data that is specific to youth smoking, and is presented in five parts:

- age of initiation
- access to cigarettes
- first cigarette
- other smoking influences
- youth perceptions and attitudes.

Summary

- The mean age of smoking initiation among New Zealand youth is 14.6 years.
- Most youth smokers (74.2%) purchase cigarettes themselves.
- Two-thirds (66.7%) of youth smokers had their first cigarette with friends.
- Significantly higher percentages of youths who smoke daily report mothers, fathers, siblings or girlfriends and boyfriends as being smokers, compared to youths who have never smoked.
- Significantly higher percentages of Māori youth report mothers, fathers, siblings or girlfriends and boyfriends as being smokers, compared to non-Māori.
- Overall, the majority of youth (72.3%) would not smoke if they had their lives over.
- Overall, around 85.0% of youth reported that they would not be smokers in their 20s.

Age of initiation

To gain an idea about the age of smoking initiation among youth, respondents aged 15 to 19 years were asked: 'At what age did you start smoking daily?'. Results are presented below.

Gender and age of initiation

Table 24: Age of smoking initiation (%), by gender (15–19 years)

Age of initiation (years)	Males	Females	Total
Under 12	–	3.5 (0.7, 10.2)	3.8 (1.1, 9.0)
12	–	9.9 (4.4, 18.6)	8.2 (4.0, 14.6)
13	15.1 (7.1, 26.9)	17.6 (10.3, 27.2)	16.4 (10.3, 22.6)
14	11.5 (5.3, 20.9)	16.3 (10.7, 23.3)	14.0 (9.5, 18.5)
15	23.4 (12.8, 37.2)	20.1 (12.6, 29.7)	21.7 (14.8, 28.6)
16	31.6 (19.2, 46.4)	22.2 (12.8, 34.3)	26.5 (18.6, 34.4)
17	9.9 (2.7, 23.8)	16.0 (7.3, 28.8)	13.2 (7.0, 22.0)
18–19	14.5 (4.8, 30.8)	–	7.4 (2.7, 15.6)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

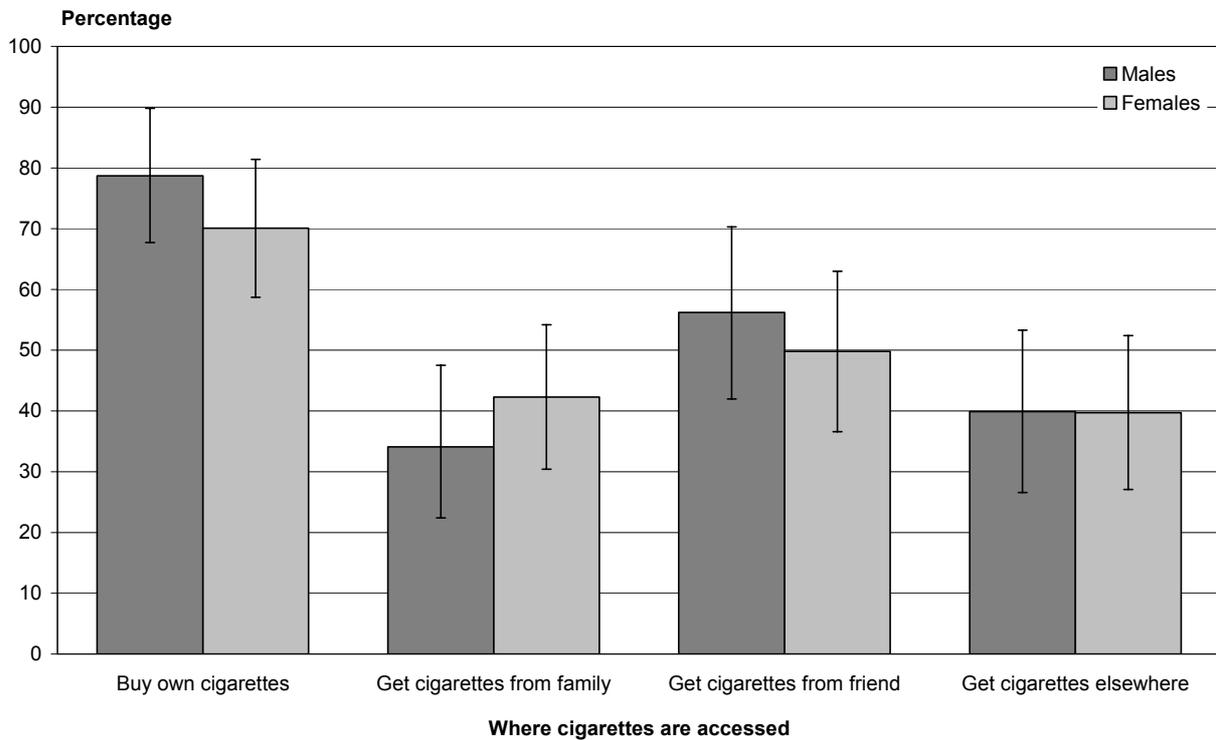
The mean age of smoking initiation among New Zealand youth is 14.6 years. The mean age is the same for males (14.7) and females (14.5). High percentages of youth start smoking at around 15 (21.7%) and 16 years (26.5%).

Source of cigarettes

To provide information about where youth access cigarettes, all youth respondents identified as being smokers were asked: 'Where do you get your cigarettes?'

Gender and cigarette source

Figure 38: Source of cigarettes (%), by gender (15–19 years)



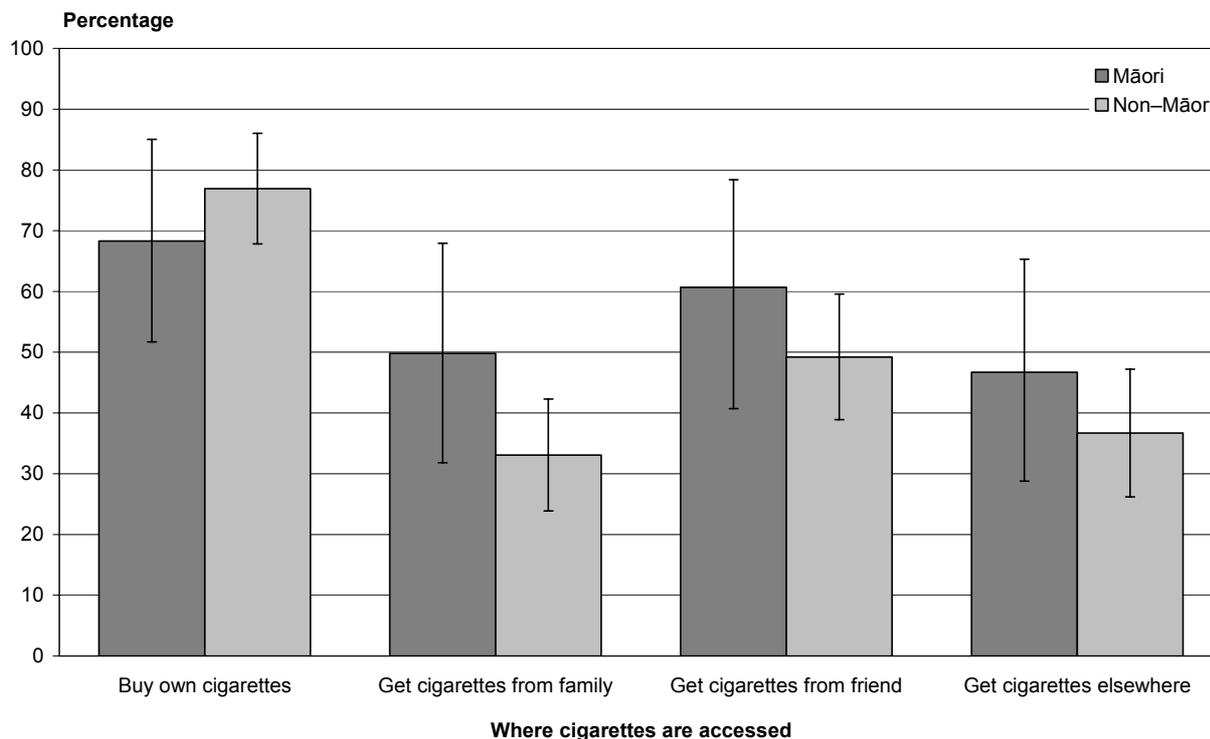
Note: 95% confidence intervals are given for each bar.

Most youth smokers purchase cigarettes themselves (74.2%; CI = 66.4, 82.1). Around 78.7% (CI = 67.7, 89.8) of males and 70.1% (CI = 58.7, 81.4) of females purchase cigarettes themselves. Around 34.1% (CI = 22.4, 47.5) of male smokers report having obtained cigarettes from family members; 42.3% (CI = 30.4, 54.2) of female smokers report the same. Around 56.2% (CI = 42.0, 70.3) of male smokers report getting cigarettes from friends, 49.8% (CI = 36.6, 63.0) of female smokers report getting cigarettes from friends.

Over a third (39.8%; CI = 30.9, 48.8) of youth smokers report obtaining cigarettes from elsewhere.

Ethnicity and source of cigarettes

Figure 39: Source of cigarettes (%), Māori versus non-Māori (15–19 years)



Note: 95% confidence intervals are given for each bar.

Among youth smokers who are Māori, 49.8% (CI = 31.8, 67.9) obtain cigarettes from family, 60.7% (CI = 40.7, 78.4) obtain cigarettes from friends and 46.7% (CI = 28.8, 65.3) get their cigarettes from elsewhere. Among youth smokers who are non-Māori, 33.1% (CI = 23.9, 42.3) obtain cigarettes from family, 49.2% (CI = 38.9, 59.6) obtain cigarettes from friends and 36.7% (CI = 26.2, 47.2) get their cigarettes from elsewhere (see Figure 39).

First cigarette

To look at the experience of the 'first cigarette', respondents were asked: 'Who did you have your first cigarette with?'

Gender and first cigarette

Table 25: Experience of first cigarette (%), by gender (15–19 years)

Had first cigarette with	Males	Females	Total
A friend	71.1 (57.4, 84.8)	62.7 (50.0, 75.4)	66.7 (57.3, 76.2)
A sibling	21.7 (10.5, 37.1)	17.5 (9.1, 29.3)	19.5 (12.1, 29.0)
A cousin	5.3 (2.0, 11.1)	13.6 (6.9, 23.1)	9.6 (5.5, 15.3)
On own	–	8.0 (1.7, 21.7)	6.0 (2.1, 12.8)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

A large number of youth smokers (66.7%) had their first cigarette with friends. Around 71.1% of male smokers had their first cigarette with friends and 62.7% of female smokers had their first cigarette with friends. A fifth, 19.5% of youth smokers had their first cigarette with siblings; 21.7% of males and 17.5% of females (see Table 25 for confidence intervals).

Other smoking influences

To provide an indication of other smoking influences, such as family and peers, all youth respondents (smokers and non-smokers) were asked the following: ‘Which of these people smoke?’. Responses are presented below.

Smoking status and other smoking influences

Table 26: Other smoking influences (%), by smoking status (15–19 years)

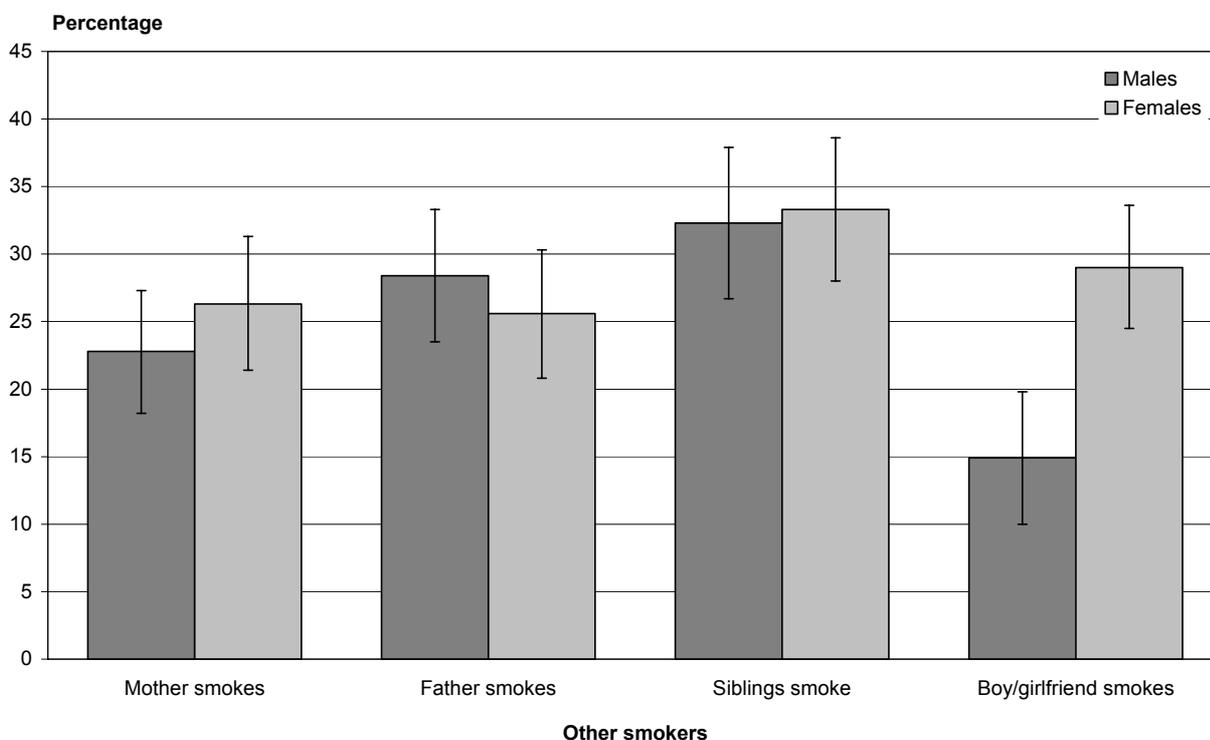
Environmental influence	Daily	Never	Total
Mother smokes	46.4 (37.4, 55.4)	16.3 (13.0, 19.7)	24.5 (21.0, 28.1)
Father smokes	49.7 (41.1, 58.3)	18.6 (14.9, 22.2)	27.0 (23.6, 30.4)
Siblings smoke	66.8 (58.2, 75.3)	21.8 (17.4, 26.3)	32.8 (29.0, 36.5)
Boy/girlfriend smokes	56.9 (48.3, 65.5)	12.0 (8.2, 15.8)	22.1 (18.6, 25.6)

Note: 95% confidence intervals are presented below each rate.

Compared to “never smokers”, significantly higher percentages of youth who are smokers report mothers, fathers, siblings or girlfriends or boyfriends as being smokers (see Table 26).

Gender and other smoking influences

Figure 40: Other smoking influences (%), by gender (15–19 years)



Note: 95% confidence intervals are given for each bar.

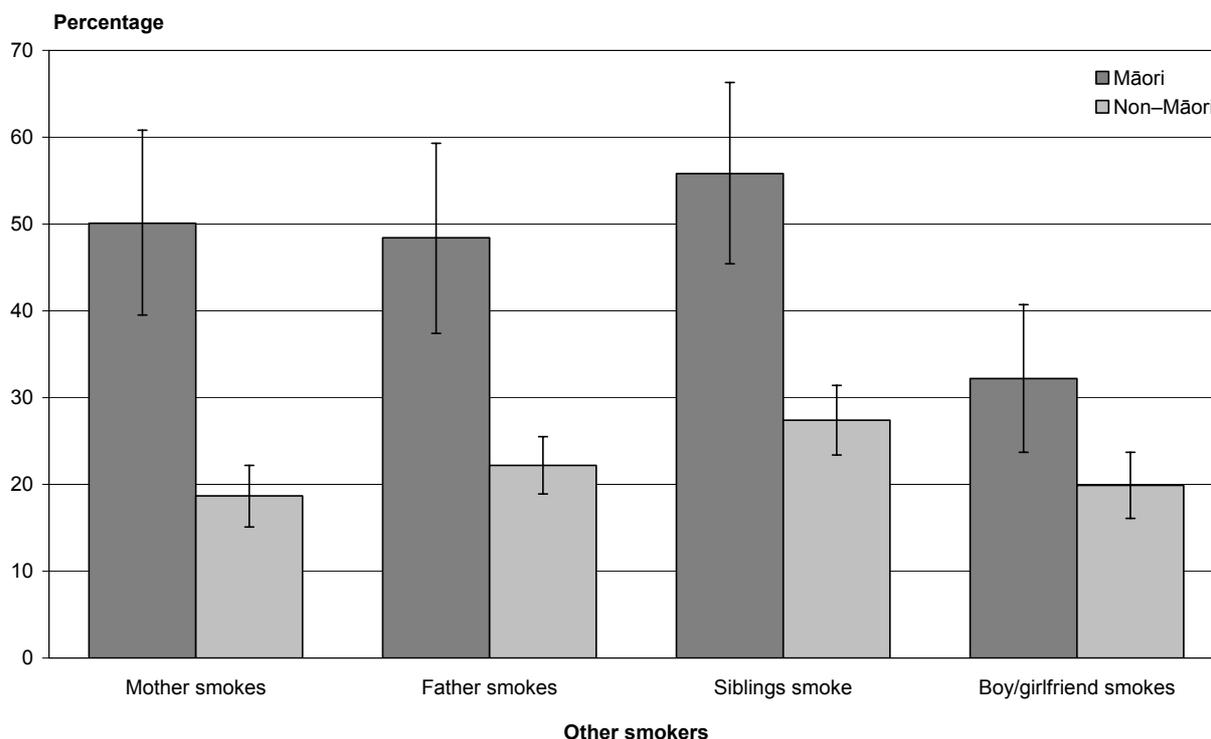
Among youth, 24.5% (CI = 21.0, 28.1) report that their mothers and 27.0% (CI = 23.6, 30.4) report that their fathers are smokers.

Almost a third (32.8%; CI = 29.0, 36.5) of all youth report siblings as being smokers; percentages are similar between males (32.3%; CI = 26.7, 37.9) and females (33.3: CI = 28.0, 38.6).

Significantly more (29.0%; CI=24.5, 33.6) female youth report their boyfriend/girlfriend as being smokers compared to males who report the same (14.9%; CI = 10.0, 19.8).

Ethnicity and other smoking influences

Figure 41: Other smoking influences (%), Māori versus non-Māori (15–19 years)



Note: 95% confidence intervals are given for each bar.

There are clear, significant differences among youth who are Māori and report other smoking influences compared to people who are non-Māori. Around 50% of Māori youth report mothers smoking compared to 18.7% (CI = 15.1, 22.2) of non-Māori youth. Similarly, 48.4% (CI = 37.4, 59.3) of Māori youth report fathers as being smokers compared to 22.2% (CI = 18.9, 25.5) of non-Māori. Māori youth whose siblings smoke came in at 55.8% (CI = 45.4, 66.3), compared to 27.4% (CI = 23.4, 31.4) of non-Māori smokers whose siblings smoke. Finally, 32.2% (CI = 23.7, 40.7) of Māori youth report girlfriends/boyfriends as being smokers compared to 19.9% (CI = 16.1, 23.7) of non-Māori. These differences are all significant.

Youth perceptions and attitudes

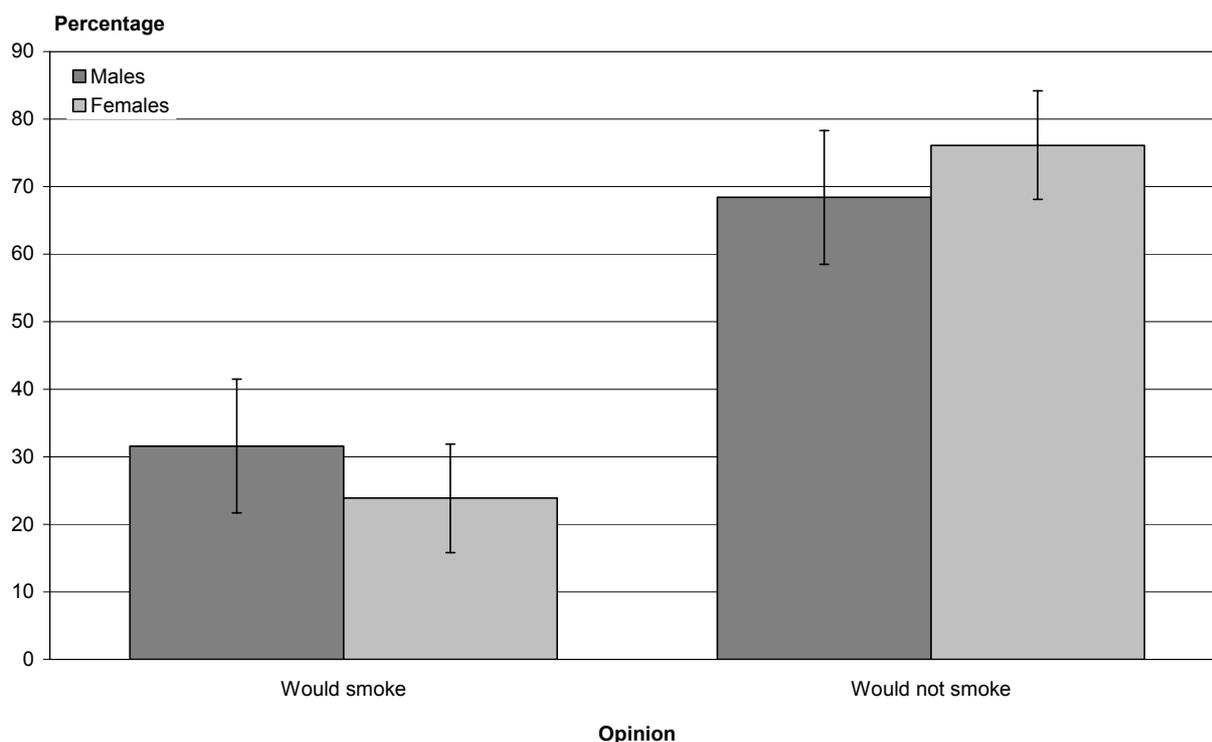
All youth have perceptions of and attitudes towards smoking and smoking-related behaviours. These attitudes change over time and depend on a variety of social influences, including parental, peer and environmental behaviours, ideas, social constructs, identity, etc. To provide a general idea on youth perceptions and attitudes, a number of youth-specific questions were included in the youth module of the questionnaire. Each question is presented individually below.

'If you had your life over again, would you smoke?'

Overall, the majority of youth (72.3%; CI = 65.6, 79.0) would not smoke if they had their lives over again, compared to 27.7% (CI = 21.0, 34.4) who reported that they would smoke if they had their lives over again.

Gender

Figure 42: 'If you had your life over again, would you smoke?' (%), by gender (15–19 years)



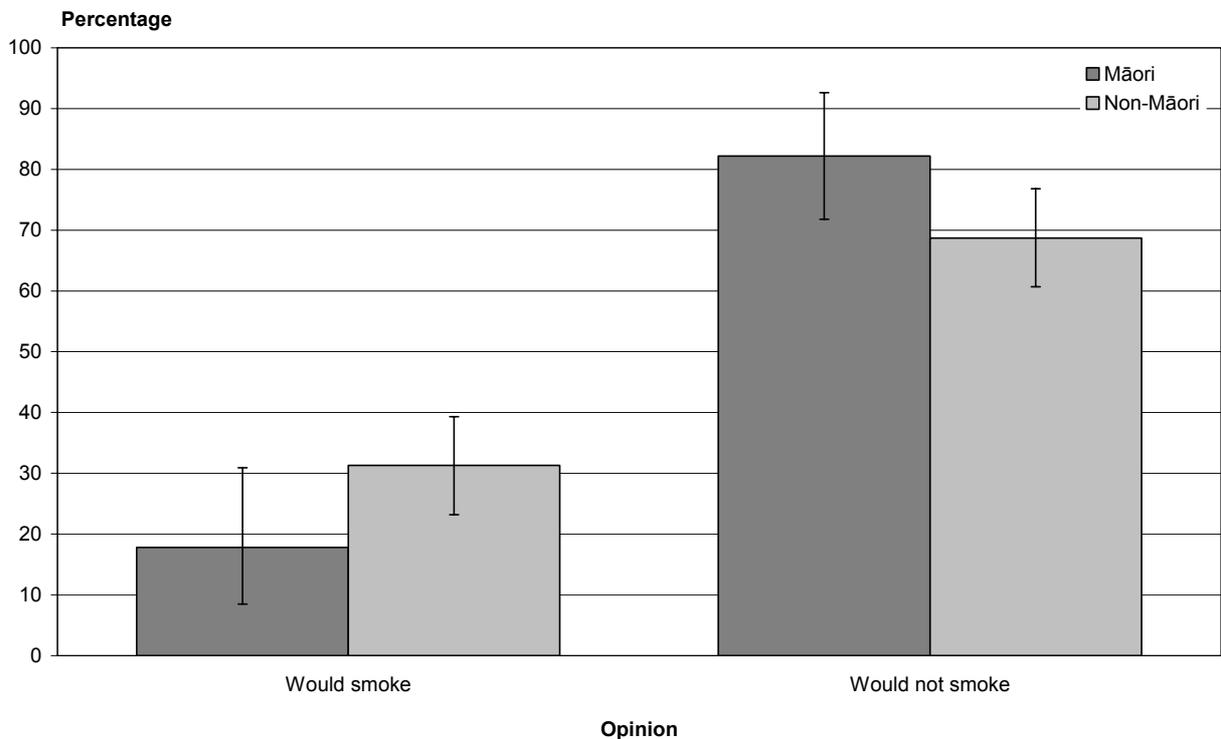
Note:

1. 95% confidence intervals are given for each bar.
2. Data presented above is of current smokers only.

Overall, 76.1% (CI = 68.1, 84.2) of females would not smoke if they had their lives over, 68.4% (CI = 58.5, 78.3) of males not smoke if they had their lives over.

Ethnicity

Figure 43: 'If you had your life over again, would you smoke?' (%), Māori versus non-Māori (15–19 years)



Notes:

1. 95% confidence intervals are given for each bar.
2. Data presented above is of current smokers only.

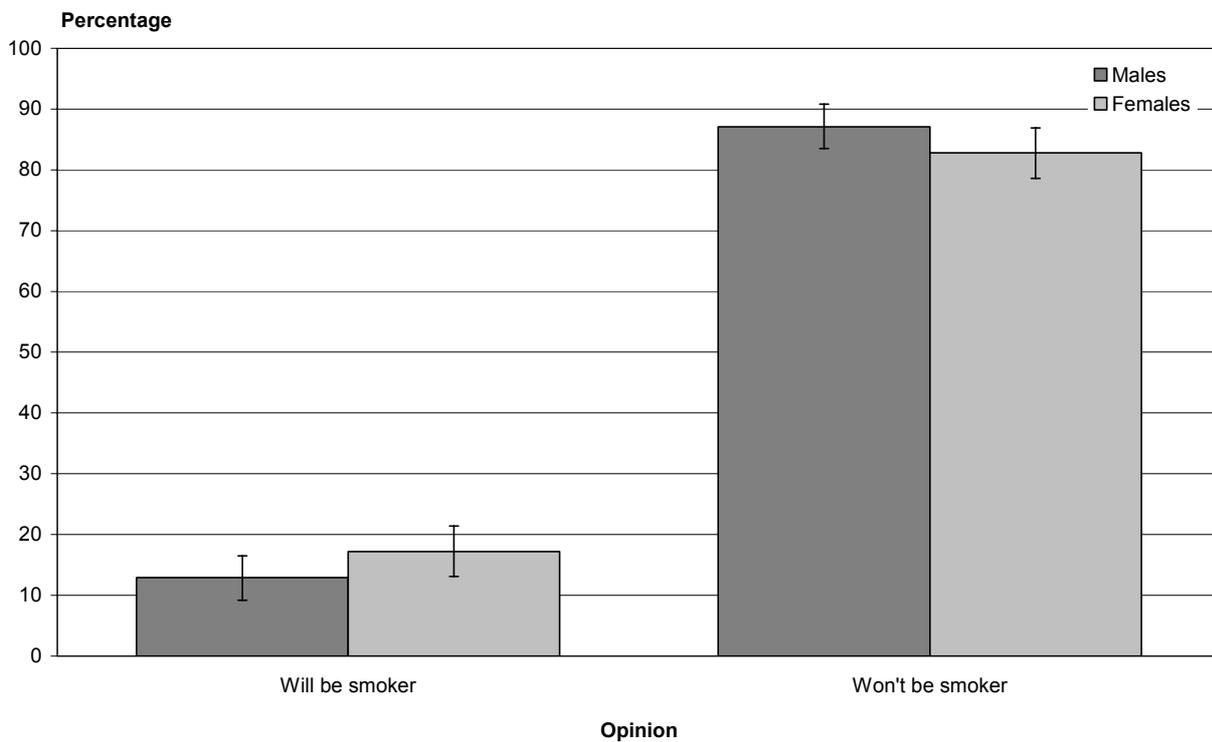
Overall, 82.2% (CI = 71.8, 92.6) of Māori youth smokers would not smoke if they had their lives over, 68.7% (CI = 60.5, 76.9) of non-Māori would not smoke if they had their lives over.

'Do you think you'll be a smoker in your twenties?'

Overall, around 85.0% (CI = 82.4, 87.6) of youth reported that they would not be smokers in their 20s, compared to 15.0% (CI = 12.4, 17.6) who reported that they would.

Gender

Figure 44: 'Do you think you'll be a smoker in your twenties?' (%), by gender (15–19 years)

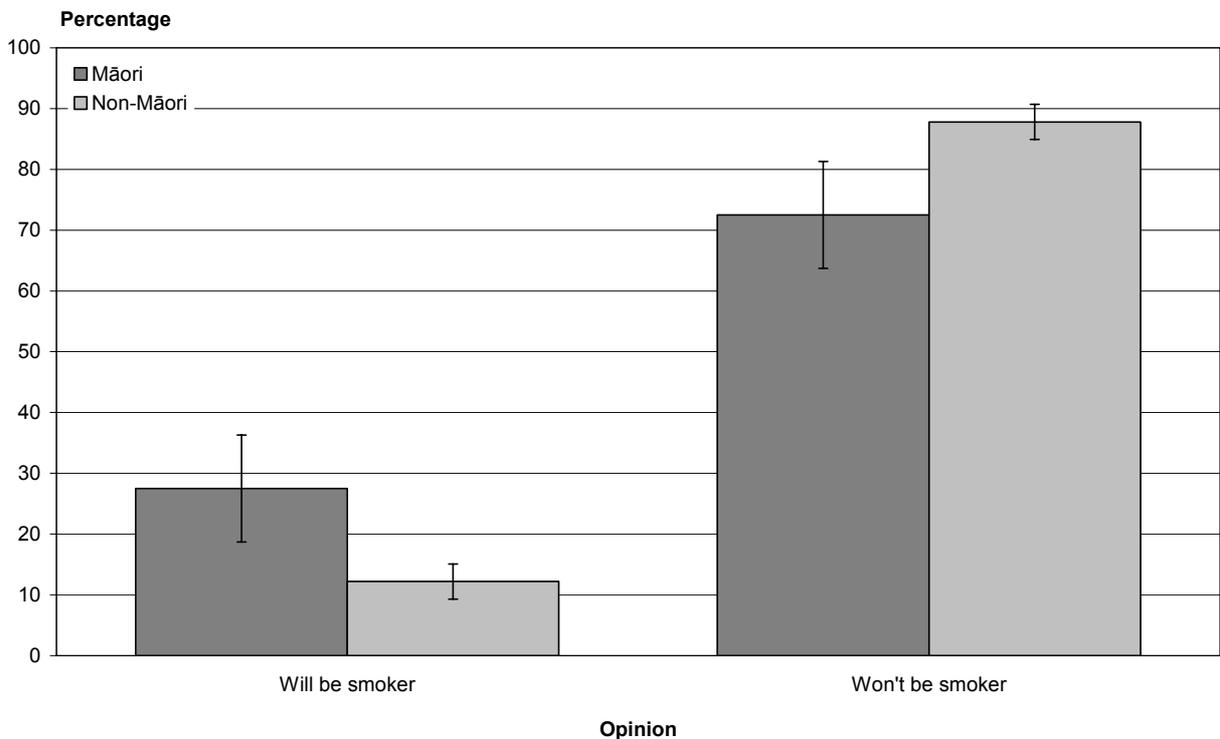


Note: 95% confidence intervals are given for each bar.

Around 17.2% (CI = 13.1, 21.4) females reported that they would be smokers in their 20s, 12.9% (CI = 9.2, 16.5) of males reported the same.

Ethnicity

Figure 45: 'Do you think you'll be a smoker in your twenties?' (%), Māori versus non-Māori (15–19 years)



Note: 95% confidence intervals are given for each bar.

Significantly more Māori youth reported that they would be smokers in their 20s (27.5%; CI = 18.7, 36.3) compared to non-Māori (12.2%; CI = 9.3, 15.1).

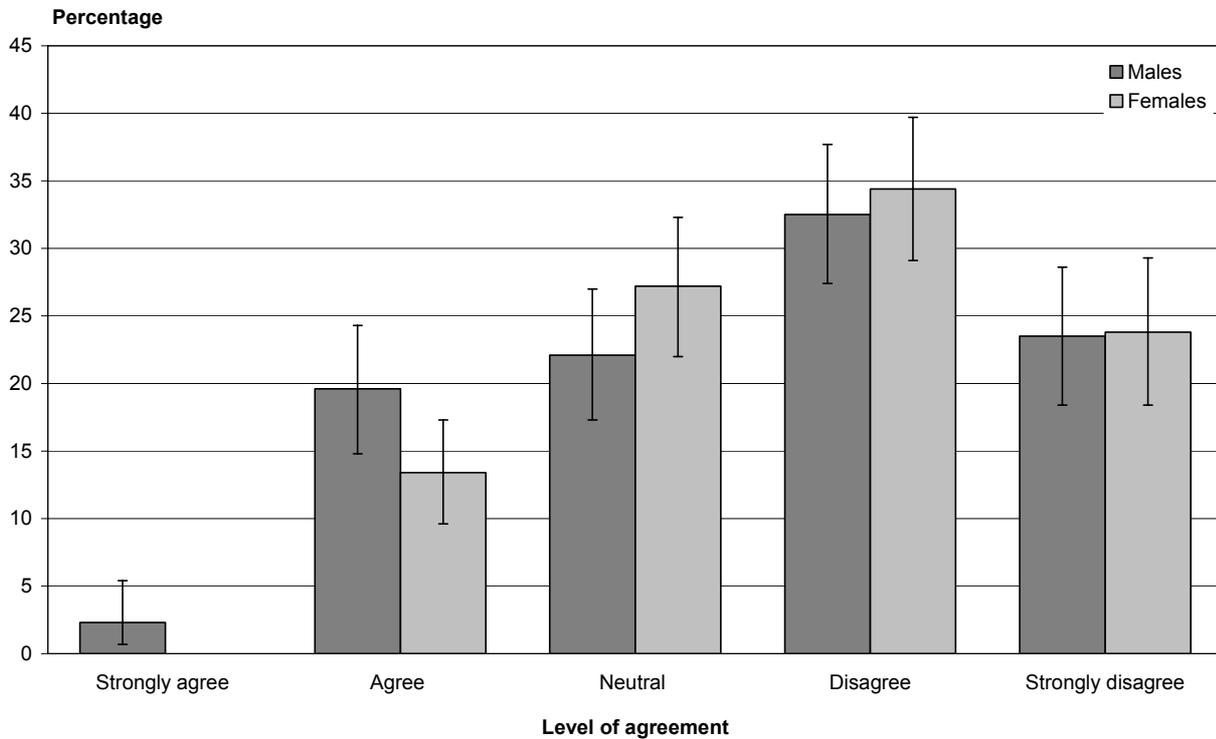
The following five questions were asked of all youth respondents and followed the same attitudinal scale for each question; ie, do you strongly agree, agree, are neutral, disagree or strongly disagree with each of the following statements:

'It is okay for young people under the age of 18 to smoke'

Overall, there are more youth who disagree (33.5%; CI = 29.8, 37.1) and strongly disagree (23.7%; CI = 19.7, 27.6) with the statement that it is okay for young people to smoke. In comparison, 16.6% (CI = 13.3, 19.8) of youth agree with the statement, and 1.7% (CI = 0.7, 3.4) strongly agree.

Gender

Figure 46: Level of agreement with 'It is okay for young people under the age of 18 to smoke' (%), by gender (15–19 years)



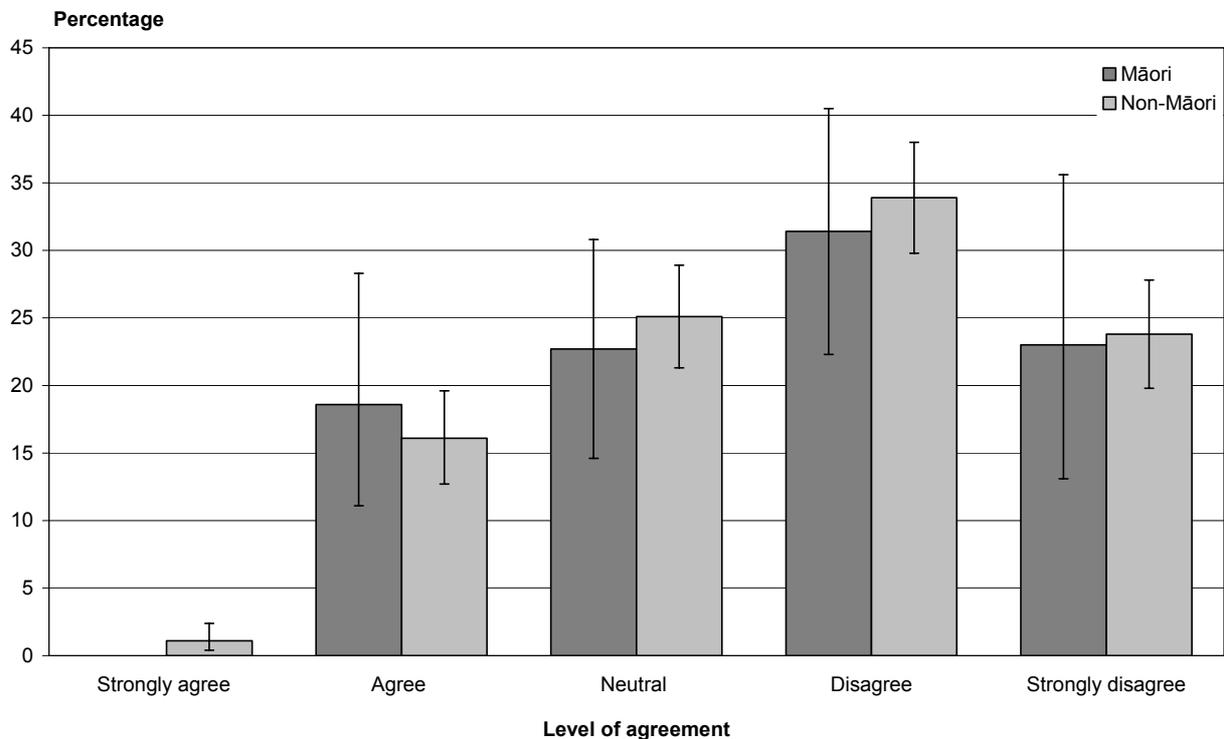
Notes:

1. 95% confidence intervals are given for each bar.
2. The category 'Strongly agree' has been suppressed for females due to counts less than 5.

Around 19.6% (CI = 14.8, 24.3) of males agree with the statement that it is okay for young people under the age of 18 to smoke; 13.4% (CI = 9.6, 17.3) of females agreed.

Ethnicity

Figure 47: Level of agreement with statement 'It is okay for young people under the age of 18 to smoke' (%), Māori versus non-Māori (15–19 years)



Notes:

1. 95% confidence intervals are given for each bar.
2. The category 'Strongly agree' has been suppressed for Māori due to counts less than 5.

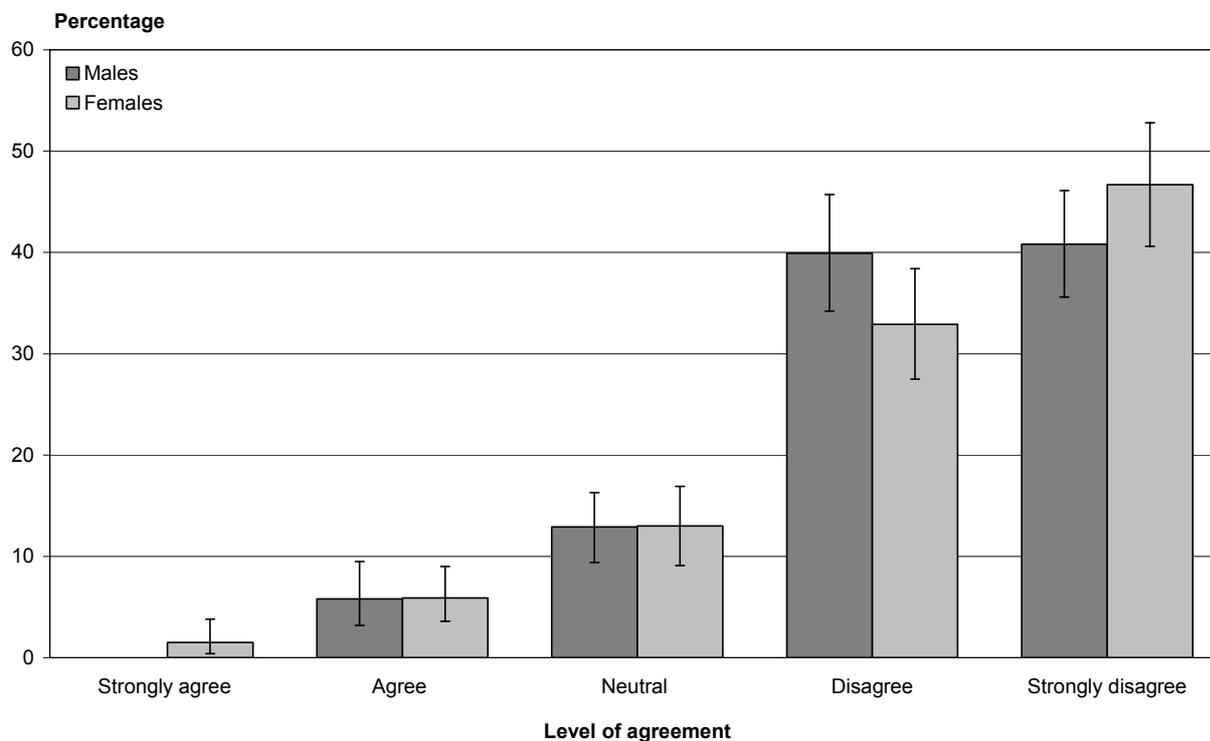
Comparisons between Māori and non-Māori indicate similar levels of agreement and disagreement to the statement 'It is okay for young people under the age of 18 to smoke'.

'My parents think it's okay for people under the age of 18 to smoke'

More youth strongly disagreed (43.7%; CI = 39.7, 47.7) and disagreed (36.5%; CI = 32.5, 40.5) with the above statement that 'My parents think it's okay for people under the age of 18 to smoke'. Fewer youth agreed (5.8%; CI = 4.1, 7.6) and were neutral (12.9%; CI = 10.3, 15.6) towards the above statement.

Gender

Figure 48: Level of agreement with statement 'My parents think it's okay for people under the age of 18 to smoke' (%), by gender (15–19 years)



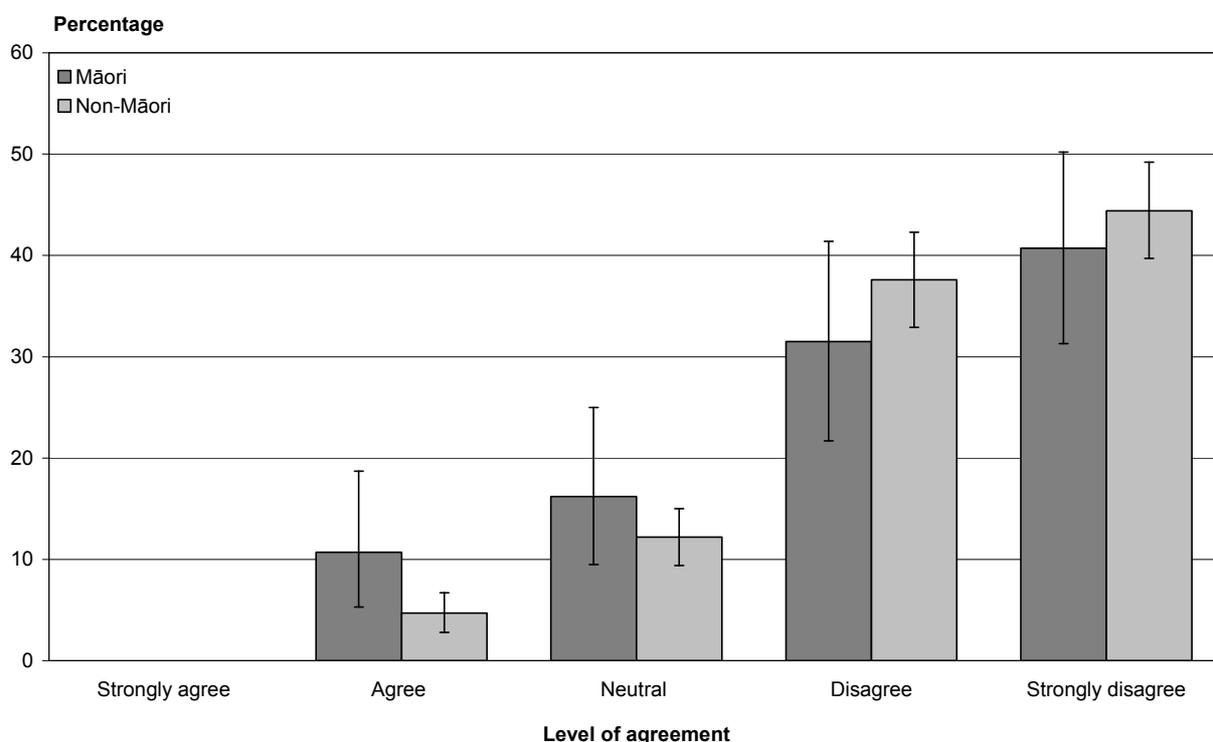
Notes:

1. 95% confidence intervals are given for each bar.
2. The category 'Strongly agree' has been suppressed for males due to counts less than 5.

Percentages are similar between males and females for people agreeing and people who are neutral to the statement. More males (39.9%; CI = 34.2, 45.7) disagreed with it compared to females (32.9%; CI = 27.5, 38.4), while more females strongly disagreed with it (46.7%; CI = 40.6, 52.8) compared to males (40.8%; CI = 35.6, 46.1).

Ethnicity

Figure 49: Level of agreement with the statement 'My parents think it's okay for people under the age of 18 to smoke' (%), Māori versus non-Māori (15–19 years)



Notes:

1. 95% confidence intervals are given for each bar.
2. The category 'Strongly agree' has been suppressed due to counts less than 5.

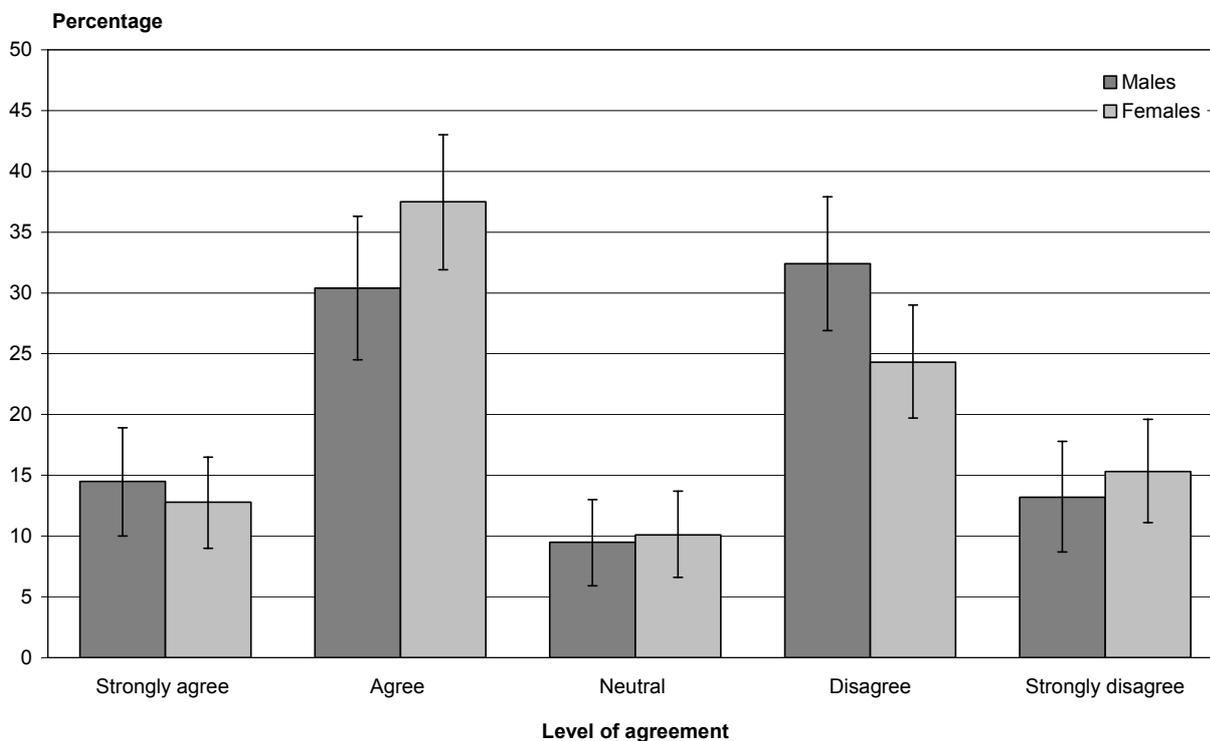
Among Māori, 10.7% (CI = 5.3, 18.7) agree with and 16.2% (CI = 9.5, 25.0) are neutral to the statement that my parents think it's okay for people under the age of 18 to smoke. Among non-Māori, 4.7% (CI = 2.8, 6.7) agree and 12.2% (CI = 9.4, 15.0) are neutral to the statement above. Around 37.6% (CI = 32.9, 42.3) of non-Māori disagree and 43.7% (CI = 39.7, 47.7) strongly disagree with the above statement; 31.5% (CI = 21.7, 41.4) of Māori disagree and 40.7% (CI = 31.3, 50.2) strongly disagree.

'Smoking is common among my friends'

Overall, there are relatively similar proportions of youth who agree with (33.9%; CI = 29.7, 38.0) and disagree with (28.4%; CI = 25.1, 31.8) this statement. Proportions of people who strongly agreed (13.6%; CI = 10.7, 16.6) compared to people who strongly disagreed (14.3%; CI = 11.3, 17.2) were also similar. A small proportion (9.8%; CI = 7.5, 12.2) of youth were neutral about this statement.

Gender

Figure 50: Level of agreement with the statement 'Smoking is common among my friends' (%), by gender (15–19 years)

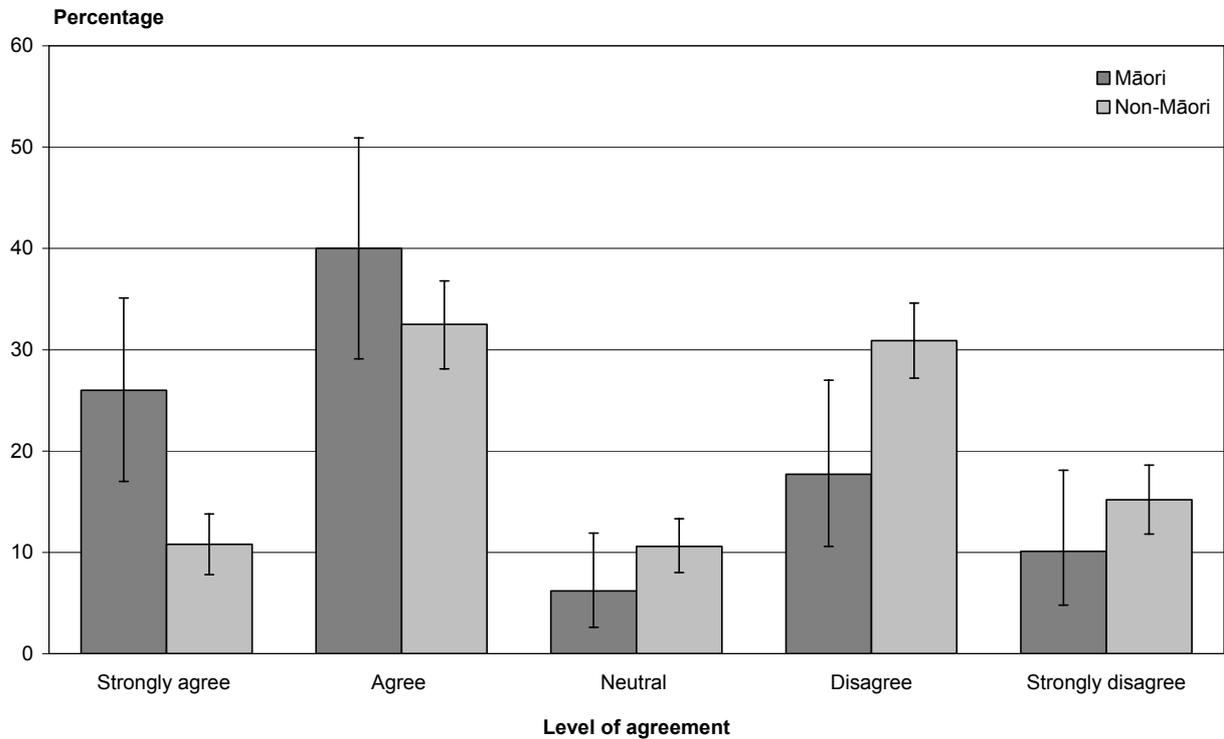


Note: 95% confidence intervals are given for each bar.

Overall, 37.5% (CI = 31.9, 43.0) of females agree that smoking is common among their friends; 30.4% (CI = 24.5, 36.3) of males agree. Around 32.4% (CI = 19.7, 29.0) of males disagree that smoking is common among their friends; 24.3% (CI = 26.9, 37.9) of females disagree.

Ethnicity

Figure 51: Level of agreement with the statement 'Smoking is common among my friends' (%), Māori versus non-Māori (15–19 years)



Note: 95% confidence intervals are given for each bar.

Significantly more Māori youth strongly agree with the statement 'Smoking is common among my friends' (26.0%; CI = 17.0, 35.1) compared to non-Māori youth (10.8%; CI = 7.8, 13.8). Around 40.0% (CI = 29.1, 50.9) of Māori and 32.5% (CI = 28.1, 36.8) of non-Māori youth agree with the statement above.

Significantly more non-Māori youth (30.9%; CI = 27.2, 34.6) disagree with the statement compared to Māori youth (17.7%; CI = 10.6, 27.0). Around 15.2% (CI = 11.8, 18.6) of non-Māori and 10.1% (CI = 4.8, 18.1) of Māori youth strongly disagree with this statement.

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Glossary

Term	Definition
CAPI	Computer-assisted personal interview.
Cigarette smoking	<p>The active smoking of one or more manufactured or hand-rolled tobacco cigarettes, from purchased or home-grown tobacco, per day. Cigarette smoking does not include:</p> <ul style="list-style-type: none">• the smoking of tobacco in cigars, pipes and cigarillos• the smoking of any other substances (eg, herbal cigarettes or marijuana)• the consumption of tobacco products by other means, such as chewing.
Daily smoker	Someone who smokes any tobacco product at least once a day.
Dwelling	A building or structure used for living in. In this survey, only private, permanent dwellings were used (ie, houses, flats and apartments).
Enumeration	Counting of each dwelling in each meshblock.
Ethnicity	<p>A social construct of group affiliation and identity. Members of an ethnic group have one or more of the following characteristics (Statistics NZ):</p> <ul style="list-style-type: none">• they share a sense of common origins• they claim a common and distinctive history and destiny• they possess one or more dimensions of collective cultural individuality• they feel a sense of unique collective solidarity. <p>Ethnicity is self-perceived and people can belong to more than one ethnic group. People can and do change their ethnic affiliation, both over time and in different contexts.</p>
Ever smoker	Someone who has smoked at least 100 cigarettes (or the equivalent amount of tobacco) in their lifetime.
Experimenter	Someone who has smoked less than 100 cigarettes (or the equivalent amount of tobacco) and now smokes occasionally.
Ex-smokers	Someone who was formerly a daily smoker but currently does not smoke at all.
Household	A group of people who share a private dwelling, normally spending four or more nights a week in the household.
Kish Grid	A procedure that enables interviewers to randomly select a respondent from the household. All eligible respondents in the household are listed on the grid and listed in alphabetical order. Respondents are listed, and using the Kish Grid (a random grid of numbers) are picked by a randomly determined number.

Meshblock	The smallest geographical area unit. Meshblocks may be aggregated to form primary sampling units. There are around 38,000 meshblocks in New Zealand.
Never smoker	Someone who either has never smoked at all or has never been a daily smoker and has smoked less than 100 cigarettes (or the equivalent amount of tobacco) in their lifetime.
Non-smoker	Someone who, at the time of the survey, does not smoke at all. Non-smokers can be divided into two categories: <ul style="list-style-type: none"> • ex-smokers • never smokers.
Postgraduate tertiary qualification	A formally recognised tertiary school qualification from a recognised provider of tertiary education. In this survey, postgraduate tertiary qualifications included an honour's degree, a master's degree, a doctor of philosophy and postgraduate diplomas.
Ready-made cigarette	A cylinder of finely cut tobacco rolled in paper using mechanical production-line techniques, and sold in packets of 20 or more. Also known as tailor-made or manufactured cigarettes.
Roll-your-own cigarettes	These are the same as manufactured cigarettes except that loose tobacco, cigarette papers and/or fillers are purchased separately and hand-rolled by the smoker. Hand-rolled cigarettes include cigarettes rolled using hand-held rolling machines. Also known as rollies.
Secondary (only) qualification	A formally recognised secondary school qualification from a recognised provider of secondary school education. For this survey, qualifications included NCEA qualifications up to Level 3, NZ Scholarship, up to Level 4, School Certificate, Sixth Form Certificate, Bursary and/or any recognised overseas qualification.
Second-hand smoke	The unintentional release of tobacco smoke into the atmosphere by smokers. Also referred to as passive or environmental smoke.
Smoker	Someone who, at the time of the survey, smokes any tobacco product either daily or non-daily. Smokers may be further divided into two categories: <ul style="list-style-type: none"> • daily smoker • non-daily smoker.
Smoking	The use of tobacco in the following forms: <ul style="list-style-type: none"> • ready-made (tailor-made) cigarettes • roll-your own cigarettes • pipe smoking • cigar smoking.

Tertiary qualification	A formally recognised tertiary school qualification from a recognised provider of tertiary education. In this survey, tertiary qualifications included a bachelor's degree and/or a professional qualification.
Tobacco	The leaves of any plant of the genus <i>Nicotiana</i> as prepared for smoking.
Total household income	The total gross income received by all people living in a household for the financial year, ending 31 March.
Trade/diploma	This category included diplomas that were for trade or technical certificates taking three or more months of full-time study. Postgraduate diplomas and certificates were not included.

Appendix 1: Prevalence and Smoking History

Table A1: Prevalence of smoking (%), by gender, smoking status and age group

Age group	Current smoker			Ex-smoker			Never smoker			Age group total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
15–19	24.5 (17.6, 31.3)	21.7 (15.3, 28.1)	23.1 (18.4, 27.8)	–	5.8 (2.8, 10.4)	3.6 (2.0, 6.0)	76.4 (70.2, 82.6)	73.9 (67.5, 80.4)	75.2 (70.6, 79.7)	26.8 (23.1, 30.4)
20–24	24.0 (16.9, 31.1)	26.1 (19.5, 32.7)	25.0 (20.4, 29.7)	9.9 (5.8, 15.5)	14.9 (9.3, 22.3)	12.4 (8.5, 16.3)	57.3 (48.4, 66.1)	48.9 (40.5, 57.4)	53.2 (46.7, 59.6)	30.3 (26.6, 34.1)
25–29	29.0 (16.0, 45.0)	27.2 (17.8, 36.6)	28.1 (19.6, 36.6)	9.1 (3.5, 18.5)	12.2 (6.6, 20.0)	10.6 (6.5, 16.1)	54.3 (42.0, 66.5)	55.8 (45.9, 65.6)	55.0 (47.2, 62.8)	28.7 (22.8, 34.5)
30–39	21.5 (15.6, 27.3)	22.0 (17.1, 26.9)	21.7 (17.8, 25.7)	20.1 (14.2, 26.0)	25.0 (20.1, 29.8)	22.7 (19.1, 26.4)	53.4 (46.8, 59.9)	46.9 (41.1, 52.7)	49.8 (45.2, 54.4)	25.6 (22.8, 28.3)
40–49	21.7 (16.6, 26.9)	17.3 (13.1, 21.6)	19.4 (15.6, 23.2)	22.9 (16.9, 28.8)	22.6 (17.4, 27.7)	22.7 (18.4, 27.0)	50.4 (43.6, 57.1)	55.4 (50.1, 60.7)	53.0 (48.3, 57.7)	22.1 (19.0, 25.3)
50–59	15.1 (10.7, 19.5)	13.4 (9.6, 17.3)	14.3 (11.1, 17.4)	36.1 (30.2, 42.0)	28.8 (22.4, 35.1)	32.5 (28.2, 36.8)	43.5 (37.5, 49.4)	53.3 (47.2, 59.4)	48.3 (44.3, 52.3)	17.1 (14.4, 19.8)
60–64	15.1 (9.5, 22.3)	15.4 (8.9, 24.2)	15.3 (10.5, 20.1)	46.7 (37.3, 56.0)	33.0 (24.3, 41.8)	39.3 (32.9, 45.8)	37.3 (27.6, 47.0)	47.2 (38.6, 55.7)	42.6 (35.9, 49.3)	15.6 (11.4, 19.8)
Total	20.8 (18.3, 23.3)	19.3 (17.0, 21.7)	20.0 (18.1, 22.0)	22.6 (20.2, 24.9)	22.2 (19.7, 24.7)	22.4 (20.5, 24.2)	52.1 (49.3, 54.8)	53.6 (51.1, 56.2)	52.9 (50.9, 54.8)	26.8 (23.1, 30.4)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A2: Prevalence of smoking (%), by gender and ethnicity

Ethnicity	Males	Females	Total
European/Other	20.8 (18.3, 23.3)	19.3 (17.0, 21.7)	20.0 (18.1, 22.0)
Māori	40.7 (35.6, 45.8)	50.6 (45.2, 55.9)	45.8 (42.2, 49.5)
Pacific	39.2 (31.8, 46.5)	33.3 (26.7, 39.8)	36.2 (31.3, 41.1)
Asian	18.3 (13.1, 23.5)	4.5 (2.5, 7.5)	12.0 (8.9, 15.0)
Total	24.1 (22.0, 26.2)	22.9 (21.0, 24.7)	23.5 (22.0, 25.0)

Note: 95% confidence intervals are presented below each rate.

Table A3: Prevalence of smoking (%), by gender and age group

Gender	15–19	20–24	25–29	30–39	40–49	50–59	60–64	Total
Males	25.1 (19.9, 30.3)	31.3 (25.3, 37.3)	30.2 (21.1, 39.3)	25.6 (21.6, 29.6)	25.3 (20.8, 29.7)	17.0 (13.4, 20.5)	13.9 (8.9, 20.3)	24.1 (22.0, 26.2)
Females	28.5 (22.9, 34.1)	29.3 (24.2, 34.4)	27.1 (20.3, 33.8)	25.5 (21.8, 29.3)	19.3 (15.7, 22.9)	17.2 (13.7, 20.8)	17.1 (10.7, 23.5)	22.9 (21.0, 24.7)
Total	26.8 (23.1, 30.4)	30.3 (26.6, 34.1)	28.7 (22.8, 34.5)	25.6 (22.8, 28.3)	22.1 (19.0, 25.3)	17.1 (14.4, 19.8)	15.6 (11.4, 19.8)	23.5 (22.0, 25.0)

Note: 95% confidence intervals are presented below each rate.

Table A4: Prevalence of smoking among European/Other ethnic groups (%), by gender, smoking status and age group

Age group	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
15–19	24.5 (17.6, 31.3)	21.7 (15.3, 28.1)	23.1 (18.4, 27.8)	–	5.8 (2.8, 10.4)	3.6 (2.0, 6.0)	76.4 (70.2, 82.6)	73.9 (67.5, 80.4)	75.2 (70.6, 79.7)
20–24	24.0 (16.9, 31.1)	26.1 (19.5, 32.7)	25.0 (20.4, 29.7)	9.9 (5.8, 15.5)	14.9 (9.3, 22.3)	12.4 (8.5, 16.3)	57.3 (48.4, 66.1)	48.9 (40.5, 57.4)	53.2 (46.7, 59.6)
25–29	29.0 (16.0, 45.0)	27.2 (17.8, 36.6)	28.1 (19.6, 36.6)	9.1 (3.5, 18.5)	12.2 (6.6, 20.0)	10.6 (6.5, 16.1)	54.3 (42.0, 66.5)	55.8 (45.9, 65.6)	55.0 (47.2, 62.8)
30–39	21.5 (15.6, 27.3)	22.0 (17.1, 26.9)	21.7 (17.8, 25.7)	20.1 (14.2, 26.0)	25.0 (20.1, 29.8)	22.7 (19.1, 26.4)	53.4 (46.8, 59.9)	46.9 (41.1, 52.7)	49.8 (45.2, 54.4)
40–49	21.7 (16.6, 26.9)	17.3 (13.1, 21.6)	19.4 (15.6, 23.2)	22.9 (16.9, 28.8)	22.6 (17.4, 27.7)	22.7 (18.4, 27.0)	50.4 (43.6, 57.1)	55.4 (50.1, 60.7)	53.0 (48.3, 57.7)
50–59	15.1 (10.7, 19.5)	13.4 (9.6, 17.3)	14.3 (11.1, 17.4)	36.1 (30.2, 42.0)	28.8 (22.4, 35.1)	32.5 (28.2, 36.8)	43.5 (37.5, 49.4)	53.3 (47.2, 59.4)	48.3 (44.3, 52.3)
60–64	15.1 (9.5, 22.3)	15.4 (8.9, 24.2)	15.3 (10.5, 20.1)	46.7 (37.3, 56.0)	33.0 (24.3, 41.8)	39.3 (32.9, 45.8)	37.3 (27.6, 47.0)	47.2 (38.6, 55.7)	42.6 (35.9, 49.3)
Total	20.8 (18.3, 23.3)	19.3 (17.0, 21.7)	20.0 (18.1, 22.0)	22.6 (20.2, 24.9)	22.2 (19.7, 24.7)	22.4 (20.5, 24.2)	52.1 (49.3, 54.8)	53.6 (51.1, 56.2)	52.9 (50.9, 54.8)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A5: Prevalence of smoking among Māori (%), by gender, smoking status and age group

Age group	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
15–19	32.1 (17.3, 50.2)	60.4 (44.6, 76.3)	45.9 (36.2, 55.7)	9.2 (2.4, 22.6)	9.3 (2.6, 22.1)	9.2 (4.0, 17.6)	62.5 (48.6, 76.5)	38.3 (24.0, 54.3)	50.5 (41.5, 59.6)
20–24	53.0 (35.2, 70.2)	60.9 (46.9, 74.9)	57.0 (46.0, 68.1)	13.0 (3.9, 29.1)	7.4 (2.8, 15.2)	10.1 (4.8, 18.2)	33.3 (17.9, 51.7)	29.7 (16.4, 46.1)	31.4 (20.5, 42.4)
25–29	40.9 (24.4, 59.2)	39.1 (26.5, 51.6)	40.0 (31.3, 48.6)	13.6 (3.9, 30.8)	9.5 (3.7, 19.1)	11.5 (5.4, 20.7)	37.2 (20.4, 56.6)	47.8 (33.2, 62.8)	42.6 (31.9, 53.3)
30–39	44.0 (33.3, 54.8)	56.8 (47.3, 66.3)	50.6 (43.2, 58.1)	13.1 (7.4, 20.9)	19.5 (12.4, 26.7)	16.4 (11.9, 21.0)	40.9 (29.9, 52.0)	23.0 (15.0, 30.9)	31.7 (24.8, 38.6)
40–49	51.0 (40.4, 61.6)	42.0 (30.4, 53.6)	46.0 (37.7, 54.3)	24.7 (16.1, 35.2)	22.0 (13.0, 31.0)	23.2 (16.7, 29.7)	18.9 (10.6, 29.9)	30.7 (18.1, 43.2)	25.5 (17.3, 33.7)
50–59	30.4 (18.3, 44.8)	49.8 (36.9, 62.6)	40.1 (29.9, 50.3)	29.6 (16.5, 45.7)	31.1 (18.8, 45.8)	30.3 (21.0, 39.7)	38.3 (22.0, 56.7)	17.0 (8.9, 28.2)	27.6 (17.1, 38.1)
60–64	–	35.5 (16.5, 58.5)	21.1 (10.3, 35.9)	65.7 (38.4, 87.0)	37.1 (19.8, 57.2)	50.9 (34.3, 67.3)	22.0 (5.9, 48.6)	27.5 (11.5, 49.1)	24.8 (12.6, 41.0)
Total	40.7 (35.6, 45.8)	50.6 (45.2, 55.9)	45.8 (42.2, 49.5)	19.0 (15.1, 23.0)	18.0 (14.8, 21.2)	18.5 (16.0, 21.1)	38.0 (32.4, 43.6)	30.2 (25.5, 35.0)	34.0 (30.2, 37.7)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A6: Prevalence of smoking among Pacific peoples (%), by gender, smoking status and age group

Age group	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
15–19	45.8 (26.5, 66.0)	27.8 (11.7, 49.6)	36.1 (23.4, 50.4)	–	–	10.6 (3.4, 23.5)	47.7 (28.8, 67.0)	67.8 (50.8, 84.7)	58.3 (46.1, 70.4)
20–24	39.0 (16.0, 66.3)	38.5 (21.9, 57.4)	38.7 (25.7, 53.0)	–	20.8 (8.2, 39.6)	14.8 (5.2, 30.5)	57.6 (29.3, 82.7)	34.0 (14.3, 58.9)	42.2 (24.9, 61.0)
25–29	60.0 (34.0, 82.4)	46.8 (22.2, 72.6)	53.1 (35.6, 70.0)	–	–	–	33.7 (11.9, 62.3)	42.3 (22.6, 64.1)	38.2 (23.7, 54.5)
30–39	43.2 (26.0, 61.7)	30.8 (20.6, 42.6)	38 (27.0, 49.0)	19.1 (9.9, 31.7)	17.2 (8.1, 30.2)	18.3 (11.6, 26.7)	24.8 (13.0, 40.1)	46.1 (33.6, 58.7)	33.8 (24.0, 43.6)
40–49	30.1 (17.8, 44.8)	23.5 (12.2, 38.4)	27.2 (17.9, 36.5)	10.2 (4.1, 20.2)	17.1 (5.5, 36.2)	13.1 (6.6, 22.6)	59.8 (45.5, 74.0)	56.3 (42.1, 70.4)	58.2 (47.9, 68.6)
50–59	28.3 (12.8, 48.8)	40.1 (18.1, 65.5)	34.3 (20.4, 50.5)	28.4 (10.8, 52.8)	20.0 (7.1, 39.9)	24.2 (13.1, 38.5)	43.3 (23.8, 64.4)	37.6 (16.7, 62.6)	40.4 (25.7, 56.5)
60–64	–	–	20.5 (4.4, 49.4)	–	–	23.1 (5.9, 51.2)	–	65.2 (21.3, 95.1)	56.4 (22.7, 86.1)
Total	39.2 (31.8, 46.5)	33.3 (26.7, 39.8)	36.2 (31.3, 41.1)	14.5 (10.2, 18.8)	15.8 (10.8, 20.7)	15.1 (11.9, 18.4)	43.4 (35.4, 51.5)	48.3 (40.5, 56.0)	45.9 (40.4, 51.3)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A7: Prevalence of smoking among Asian ethnic groups (%), by gender, smoking status and age group

Age group	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
15–19	–	–	6.2 (2.0, 14.0)	–	–	–	91.2 (71.9, 98.9)	84.9 (64.2, 96.1)	88.7 (80.0, 97.5)
20–24	33.7 (17.7, 53.1)	–	20.3 (10.7, 33.1)	16.1 (4.0, 38.2)	–	10.0 (2.7, 24.1)	48.5 (32.0, 65.3)	96.4 (85.9, 99.7)	67.6 (56.3, 78.9)
25–29	16 (6.7, 30.1)	–	9.7 (4.0, 19.1)	–	–	5.9 (1.7, 14.0)	67.8 (53.6, 82.0)	94.6 (77.1, 99.7)	78.2 (68.7, 87.8)
30–39	13.9 (6.0, 26.0)	9.3 (3.7, 18.6)	11.4 (6.5, 18.1)	9.9 (3.3, 21.6)	–	6.4 (2.6, 12.6)	70.9 (58.3, 83.6)	85.9 (78.0, 93.8)	79.1 (71.8, 86.4)
40–49	21.3 (9.4, 38.4)	–	10.1 (4.9, 17.9)	21.3 (9.8, 37.3)	6.7 (2.1, 15.4)	13.0 (7.3, 20.8)	48.7 (34.4, 63.0)	89.9 (83.1, 96.7)	72.2 (64.6, 79.8)
50–59	16.5 (7.4, 30.0)	–	11.8 (5.6, 21.2)	22.3 (9.3, 41.1)	–	12.7 (5.4, 24.3)	54.5 (34.1, 73.9)	89.6 (79.6, 99.6)	69.6 (58.3, 80.9)
60–64	–	–	–	51.5 (9.5, 91.8)	–	40.8 (10.5, 77.7)	–	90.5 (44.8, 100.0)	44.4 (13.9, 78.4)
Total	18.3 (13.1, 23.5)	4.5 (2.5, 7.5)	12.0 (8.9, 15.0)	14.5 (9.3, 19.8)	3.9 (2.0, 6.8)	9.6 (6.5, 12.7)	61.8 (54.2, 69.3)	89.9 (86.5, 93.3)	74.7 (70.2, 79.3)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A8: Prevalence of smoking in District Health Boards (%), by gender and smoking status

DHB	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Northland	33.3 (23.4, 44.5)	37.4 (25.0, 49.8)	35.7 (28.3, 43.1)	14.8 (4.1, 34.1)	11.0 (3.2, 25.4)	12.6 (4.2, 27.0)	48.8 (37.7, 60.0)	48.9 (34.6, 63.1)	48.9 (39.5, 58.2)
Waitemata	22.4 (16.5, 28.4)	19.7 (15.4, 24.1)	21.0 (17.2, 24.9)	21.5 (15.6, 27.3)	17.0 (12.8, 21.2)	19.1 (15.5, 22.7)	51.2 (44.1, 58.3)	58.0 (52.7, 63.3)	54.8 (50.2, 59.3)
Auckland	17.9 (12.7, 23.1)	19.5 (14.6, 24.3)	18.7 (15.1, 22.2)	17.6 (12.9, 22.2)	15.5 (11.1, 19.8)	16.6 (13.4, 19.8)	58.5 (51.4, 65.6)	61.7 (55.6, 67.8)	60.0 (55.2, 64.8)
Counties Manukau	27.4 (20.9, 33.9)	27.0 (20.6, 33.5)	27.2 (22.3, 32.1)	22.0 (14.8, 29.2)	14.2 (9.3, 19.1)	18.4 (14.5, 22.2)	47.7 (40.2, 55.3)	56.3 (48.7, 64.0)	51.8 (46.6, 57.0)
Waikato	25.3 (16.9, 33.7)	22.0 (14.4, 29.7)	23.5 (17.9, 29.2)	22.0 (14.6, 29.5)	25.6 (19.0, 32.2)	24.0 (19.4, 28.5)	49.8 (39.9, 59.7)	50.8 (43.7, 58.0)	50.4 (43.8, 56.9)
Lakes	36.0 (20.1, 54.6)	32.2 (16.3, 48.1)	34.3 (20.5, 48.0)	18.1 (8.2, 32.5)	19.7 (8.5, 36.0)	18.8 (9.4, 31.9)	44.9 (26.0, 63.9)	45.9 (31.0, 60.7)	45.4 (30.6, 60.2)
Bay of Plenty	28.0 (16.9, 41.5)	21.5 (11.0, 32.0)	24.3 (15.3, 33.3)	25.4 (16.2, 36.4)	23.7 (12.6, 34.7)	24.4 (16.9, 31.9)	41.5 (28.9, 54.1)	50.0 (38.6, 61.4)	46.4 (37.4, 55.4)
Tairāwhiti	28.2 (7.2, 60.1)	34.9 (5.6, 77.1)	32.1 (9.0, 64.5)	18.7 (1.3, 59.6)	15.5 (5.7, 31.4)	16.9 (3.9, 40.8)	43.4 (25.0, 63.2)	48.2 (18.0, 79.4)	46.1 (31.1, 61.1)
Taranaki	31.1 (15.8, 50.2)	23.2 (14.4, 34.1)	26.8 (18.6, 34.9)	27.8 (11.2, 50.4)	24.2 (11.7, 41.0)	25.8 (14.6, 37.0)	38.1 (17.8, 61.9)	51.2 (37.6, 64.8)	45.3 (34.6, 55.9)
Hawke's Bay	25.7 (13.0, 42.3)	23.3 (11.9, 34.7)	24.4 (14.2, 34.5)	16.9 (7.8, 30.2)	15.3 (7.3, 27.0)	16.0 (11.3, 20.7)	53.8 (39.3, 68.2)	56.9 (46.0, 67.8)	55.5 (46.3, 64.8)
Whanganui	33.5 (15.2, 56.4)	36.6 (19.1, 57.2)	35.3 (22.8, 47.9)	22.0 (5.8, 48.8)	25.1 (15.1, 37.4)	23.8 (15.1, 34.6)	44.4 (17.0, 74.6)	36.4 (20.6, 54.7)	39.7 (26.3, 53.1)
MidCentral	24.0 (15.5, 34.4)	28.9 (16.6, 41.2)	26.6 (18.3, 34.9)	19.9 (10.7, 32.3)	17.0 (7.9, 30.2)	18.4 (12.3, 25.9)	56.0 (41.8, 70.3)	50.0 (32.5, 67.4)	52.8 (41.6, 64.0)
Hutt Valley	25.5 (13.8, 40.6)	19.8 (9.4, 30.2)	22.7 (13.2, 32.2)	20.4 (13.0, 29.6)	23.1 (15.7, 32.0)	21.7 (17.8, 25.7)	42.5 (33.2, 51.8)	51.0 (37.5, 64.6)	46.8 (38.5, 55.2)

DHB	Current smoker			Ex-smoker			Never smoker		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Capital and Coast	22.2 (13.8, 30.6)	16.6 (10.2, 22.9)	19.4 (13.2, 25.7)	18.5 (10.9, 26.1)	20.2 (12.6, 29.6)	19.3 (14.5, 24.2)	52.9 (43.6, 62.2)	57.2 (50.0, 64.5)	55.0 (49.4, 60.6)
Wairarapa	27.9 (7.6, 58.4)	21.7 (2.6, 59.6)	25.1 (5.6, 57.3)	40.2 (15.3, 69.6)	–	29.3 (12.0, 52.5)	31.9 (10.6, 60.8)	56.3 (27.5, 82.3)	43.4 (22.2, 66.4)
Nelson–Marlborough	21.4 (7.6, 42.4)	21.2 (9.6, 37.7)	21.3 (10.5, 32.1)	29.1 (18.0, 42.4)	21.2 (8.8, 39.1)	24.6 (13.9, 35.2)	44.1 (28.6, 59.6)	52.1 (36.7, 67.5)	48.7 (35.2, 62.2)
West Coast	34.6 (0.0, 98.9)	–	23.5 (0.5, 79.9)	41.2 (0.0, 99.9)	–	32.2 (2.4, 81.8)	–	48.5 (2.6, 96.7)	38.8 (4.4, 85.5)
Canterbury	19.6 (12.8, 26.5)	18.2 (12.3, 24.1)	18.9 (13.7, 24.2)	21.3 (15.2, 27.4)	19.0 (14.5, 23.6)	20.2 (16.1, 24.2)	55.1 (49.4, 60.8)	57.6 (51.8, 63.4)	56.3 (51.8, 60.9)
South Canterbury	21.0 (2.0, 61.0)	19.6 (1.6, 60.1)	20.3 (6.8, 41.6)	23.0 (9.8, 41.8)	29.4 (5.4, 67.3)	26.2 (13.4, 42.7)	54.5 (25.3, 81.6)	46.9 (9.8, 87.0)	50.8 (40.8, 60.8)
Otago	23.6 (15.2, 33.9)	21.7 (12.9, 32.8)	22.8 (15.8, 29.7)	14.3 (8.7, 21.8)	28.2 (17.6, 40.9)	20.6 (14.8, 26.4)	59.7 (51.3, 68.1)	44.8 (35.2, 54.4)	53.0 (46.2, 59.8)
Southland	24.5 (8.7, 47.6)	39.4 (20.5, 61.0)	31.2 (16.7, 45.8)	14.0 (7.2, 23.6)	25.5 (14.0, 40.2)	19.2 (12.4, 27.7)	53.3 (39.9, 66.6)	32.5 (15.1, 54.3)	43.8 (29.9, 57.8)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A9: Prevalence of smoking, Māori versus non-Māori (%), by smoking status and socioeconomic quintile (NZDep01)

NZDep01 quintile	Current smoker			Ex-smoker			Never smoker		
	Māori	Non-Māori	Total	Māori	Non-Māori	Total	Māori	Non-Māori	Total
1 (least deprived)	25.9 (12.8, 43.2)	13.8 (10.4, 17.2)	14.3 (11.0, 17.6)	28.3 (16.7, 42.5)	22.5 (19.4, 25.6)	22.8 (19.6, 25.9)	44.7 (31.4, 58.1)	58.7 (55.0, 62.3)	58.0 (54.3, 61.7)
2	34.4 (20.4, 48.3)	17.3 (13.9, 20.7)	18.5 (15.3, 21.8)	13.8 (6.6, 24.4)	21.0 (16.6, 25.3)	20.5 (16.2, 24.7)	50.5 (35.2, 65.8)	56.8 (52.5, 61.1)	56.3 (52.1, 60.6)
3	49.5 (41.7, 57.4)	17.5 (14.4, 20.6)	20.6 (17.5, 23.7)	14.8 (8.4, 21.3)	20.5 (17.5, 23.5)	20.0 (17.2, 22.7)	33.8 (24.8, 42.7)	57.5 (54.1, 60.9)	55.2 (51.9, 58.4)
4	46.2 (39.3, 53.1)	26.2 (22.5, 29.9)	29.2 (26.0, 32.4)	21.2 (15.6, 26.7)	21.5 (18.4, 24.5)	21.4 (18.9, 23.9)	28.8 (22.2, 35.4)	49.0 (45.1, 52.9)	45.9 (42.6, 49.3)
5 (most deprived)	49.5 (43.6, 55.3)	28.7 (25.0, 32.4)	34.2 (30.7, 37.8)	18.1 (13.6, 22.6)	15.8 (13.1, 18.4)	16.4 (13.8, 19.0)	31.8 (25.4, 38.2)	51.0 (47.4, 54.7)	45.9 (42.3, 49.4)
Total	45.8 (42.2, 49.5)	20.2 (18.5, 22.0)	23.5 (22.0, 25.0)	18.5 (16.0, 21.1)	20.4 (18.9, 21.9)	20.1 (18.8, 21.5)	34.0 (30.2, 37.7)	54.9 (53.3, 56.5)	52.2 (50.8, 53.7)

Note: 95% confidence intervals are presented below each rate.

Table A10: Prevalence of smoking (%), by gender and socioeconomic quintile (NZDep01)

NZDep01 quintile	Males	Females	Total
1 (least deprived)	14.7 (9.8, 19.6)	13.9 (10.4, 17.4)	14.3 (11.0, 17.6)
2	19.7 (15.2, 24.3)	17.5 (13.9, 21.0)	18.5 (15.3, 21.8)
3	22.5 (17.8, 27.2)	18.7 (15.4, 22.0)	20.6 (17.5, 23.7)
4	30.2 (26.7, 33.7)	28.3 (23.3, 33.2)	29.2 (26.0, 32.4)
5 (most deprived)	33.3 (28.9, 37.8)	35.0 (30.7, 39.4)	34.2 (30.7, 37.8)
Total	24.1 (22.0, 26.2)	22.9 (21.0, 24.7)	23.5 (22.0, 25.0)

Note: 95% confidence intervals are presented below each rate.

Table A11: Prevalence of smoking ready-made cigarettes (%), by gender, ethnicity and age group

Age group	European/Other			Māori			Pacific			Asian		
	Males	Females	Total									
15–19	9.8 (3.1, 22.0)	41.4 (23.6, 61.0)	24.7 (14.8, 37.0)	–	28.5 (13.3, 48.3)	27.5 (14.5, 44.0)	45.9 (15.5, 78.7)	88.3 (52.3, 99.6)	63.4 (38.0, 84.3)	–	–	100.0
20–24	22.3 (10.0, 39.5)	34.2 (19.7, 51.1)	28.4 (17.8, 39.0)	32.6 (9.7, 64.0)	28.0 (15.5, 43.6)	30.1 (16.5, 46.8)	88.0 (49.8, 99.7)	65.0 (22.6, 94.5)	73.1 (45.3, 91.8)	73.6 (36.9, 95.4)	–	73.6 (36.9, 95.4)
25–29	46.7 (22.7, 71.9)	30.6 (12.0, 55.4)	38.7 (21.7, 58.1)	37.3 (13.0, 67.5)	28.1 (12.3, 49.2)	32.7 (17.9, 50.4)	71.6 (33.2, 95.2)	84.6 (50.5, 98.7)	77.6 (53.5, 93.0)	90.5 (49.8, 99.9)	–	90.5 (49.8, 99.9)
30–39	40.5 (26.4, 55.8)	46.1 (35.2, 57.1)	43.6 (34.4, 52.8)	36.0 (20.2, 54.4)	39.0 (24.8, 53.1)	37.7 (28.0, 47.5)	69.8 (37.9, 91.8)	75.2 (52.2, 91.0)	71.7 (53.4, 89.9)	69.9 (31.5, 94.5)	50.0 (7.3, 92.6)	61.1 (31.1, 85.9)
40–49	42.5 (29.1, 55.9)	60.6 (47.1, 74.1)	50.9 (40.9, 60.9)	31.0 (17.5, 47.4)	47.9 (31.2, 65.0)	39.7 (27.9, 51.5)	61.7 (30.5, 87.1)	69.7 (26.2, 96.1)	64.7 (44.4, 81.7)	83.8 (45.4, 99.0)	–	79.0 (43.4, 97.1)
50–59	60.0 (43.7, 76.3)	68.5 (53.6, 83.4)	63.9 (53.2, 74.7)	42.0 (13.6, 75.1)	41.0 (21.4, 62.9)	41.4 (26.3, 57.7)	84.9 (28.3, 99.9)	81.3 (41.1, 98.6)	82.8 (55.8, 96.7)	100.0	–	100.0
60–64	48.9 (21.4, 76.9)	83.1 (58.8, 96.2)	67.5 (47.2, 83.9)	–	51.6 (10.9, 90.7)	49.7 (12.4, 87.2)	–	–	–	–	–	–
Total	40.1 (33.4, 46.7)	51.5 (45.3, 57.7)	45.8 (40.6, 50.9)	33.8 (25.9, 41.6)	37.0 (30.8, 43.2)	35.6 (30.5, 40.7)	67.8 (56.6, 78.9)	74.6 (64.4, 84.7)	70.9 (63.8, 78.0)	81.1 (69.2, 93.0)	65.1 (27.8, 92.2)	78.4 (67.2, 89.5)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A12: Prevalence of smoking roll-your-own cigarettes (%), by gender, ethnicity and age group

Age group	European/Other			Māori			Pacific			Asian		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
15–19	78.2 (63.6, 92.8)	56.4 (37.2, 74.3)	67.9 (56.3, 79.6)	69.7 (32.6, 94.0)	68.6 (48.4, 84.7)	69.0 (54.3, 83.7)	35.7 (9.4, 70.7)	–	25.8 (8.8, 50.8)	–	–	–
20–24	75.8 (61.6, 90.0)	56.6 (39.6, 72.6)	65.9 (55.2, 76.6)	64.3 (33.6, 88.2)	69.7 (56.2, 83.1)	67.2 (52.7, 81.8)	–	35.0 (5.5, 77.4)	23.5 (6.5, 50.5)	–	–	–
25–29	52.0 (27.2, 76.2)	61.0 (36.3, 82.1)	56.4 (39.4, 73.5)	55.2 (27.0, 81.1)	66.0 (45.2, 83.1)	60.6 (44.9, 76.2)	–	–	–	–	–	–
30–39	50.6 (37.2, 64.0)	51.0 (40.0, 62.0)	50.8 (42.0, 59.6)	58.6 (41.6, 74.2)	56.6 (42.6, 70.6)	57.4 (48.4, 66.5)	24.8 (4.9, 58.3)	21.1 (6.7, 43.9)	23.5 (7.9, 47.2)	–	–	29.0 (7.1, 62.2)
40–49	53.0 (39.6, 66.4)	37.0 (23.9, 51.6)	45.6 (36.1, 55.1)	65.5 (47.8, 80.5)	50.2 (34.2, 66.3)	57.6 (45.5, 69.7)	31.5 (8.4, 64.5)	–	31.1 (14.5, 52.1)	–	–	–
50–59	36.0 (20.2, 54.3)	25.3 (12.9, 41.5)	31.0 (20.9, 41.1)	46.1 (17.3, 77.0)	57.3 (34.7, 77.8)	53.1 (36.3, 69.3)	–	–	–	–	–	–
60–64	45.1 (18.1, 74.4)	16.3 (3.5, 40.7)	29.5 (13.6, 50.2)	–	48.4 (9.3, 89.1)	50.3 (12.8, 87.6)	–	–	–	–	–	–
Total	54.3 (47.6, 61.1)	44.2 (38.0, 50.4)	49.3 (44.4, 54.2)	60.9 (52.7, 69.1)	59.9 (53.5, 66.4)	60.4 (55.1, 65.7)	23.8 (14.1, 36.0)	23.8 (14.3, 35.9)	23.8 (16.8, 30.8)	8.7 (1.8, 23.2)	–	13.2 (5.0, 26.5)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Appendix 2: Exposure to Second-hand Smoke

Table A13: Prevalence of reported exposure to SHS among Māori compared to non-Māori (%), by setting

Setting	Exposure	Māori	Non-Māori	Total
SHS exposure in home	Others smoke in home	23.0 (19.7, 26.3)	10.9 (9.7, 12.2)	12.5 (11.3, 13.7)
	Sometimes others smoke in home	6.7 (4.9, 8.5)	4.0 (3.3, 4.7)	4.3 (3.6, 5.0)
	No others smoke in home	70.3 (66.5, 74.1)	85.1 (83.5, 86.6)	83.2 (81.7, 84.7)
SHS exposure in car	Others smoke in car	30.1 (26.6, 33.6)	12.6 (11.4, 13.9)	14.9 (13.8, 16.0)
	Sometimes others smoke in car	9.6 (7.4, 11.8)	6.5 (5.7, 7.2)	6.9 (6.1, 7.6)
	No others smoke in car	60.3 (56.6, 64.0)	80.9 (79.6, 82.2)	78.2 (77.0, 79.5)
SHS exposure at work (20 years +)	Others smoke indoors at work	12.0 (8.7, 15.4)	7.6 (6.3, 8.8)	8.1 (6.9, 9.3)
	No others smoke indoors at work	84.8 (81.3, 88.4)	90.0 (88.7, 91.4)	89.4 (88.1, 90.7)

Note: 95% confidence intervals are presented below each rate.

Table A14: Prevalence of reported exposure to SHS (%), by socioeconomic quintile (NZDep01) and setting

Setting	Exposure	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
SHS exposure in home	Others smoke in home	6.2 (4.1, 8.3)	9.0 (7.1, 10.8)	11.1 (8.7, 13.4)	16.0 (13.2, 18.8)	19.5 (16.2, 22.9)	12.5 (11.3, 13.7)
	Sometimes others smoke in home	2.8 (1.7, 4.2)	3.6 (2.1, 5.1)	4.4 (2.9, 5.9)	5.4 (3.9, 7.0)	5.3 (3.8, 6.7)	4.3 (3.6, 5.0)
	No others smoke in home	91.0 (88.6, 93.4)	87.4 (85.1, 89.7)	84.6 (81.4, 87.7)	78.6 (75.5, 81.7)	75.2 (71.7, 78.7)	83.2 (81.7, 84.7)
SHS exposure in car	Others smoke in car	9.5 (7.5, 11.5)	11.8 (9.3, 14.3)	13.4 (11.0, 15.8)	18.3 (15.2, 21.4)	21.1 (17.9, 24.3)	14.9 (13.8, 16.0)
	Sometimes others smoke in car	5.4 (3.8, 7.0)	4.4 (2.5, 6.3)	6.7 (5.1, 8.3)	7.4 (5.5, 9.2)	10.0 (7.9, 12.1)	6.9 (6.1, 7.6)
	No others smoke in car	85.1 (82.4, 87.8)	83.8 (81.0, 86.6)	79.9 (76.9, 82.9)	74.3 (70.7, 77.9)	68.9 (65.1, 72.8)	78.2 (77.0, 79.5)
SHS exposure at work (20 years +)	Others smoke indoors at work	6.9 (4.5, 9.4)	7.0 (4.0, 10.1)	7.1 (5.0, 9.3)	8.8 (6.5, 11.1)	10.7 (8.2, 13.2)	8.1 (6.9, 9.3)
	No others smoke indoors at work	90.5 (87.8, 93.2)	89.1 (85.5, 92.6)	90.9 (88.6, 93.2)	89.2 (86.7, 91.7)	86.8 (83.9, 89.7)	89.4 (88.1, 90.7)

Note: 95% confidence intervals are presented below each rate.

Table A15: Attitudes towards SHS (%), by gender

Attitude	Males	Females	Total
Doesn't bother me	34.3 (32.2, 36.5)	24.3 (22.4, 26.2)	29.2 (27.7, 30.7)
Bothers me slightly	34.2 (31.6, 36.8)	30.6 (28.7, 32.5)	32.4 (30.7, 34.0)
Bothers me a lot	31.4 (29.2, 33.7)	45.1 (43.1, 47.2)	38.4 (36.9, 39.9)

Note: 95% confidence intervals are presented below each rate.

Table A16: Attitudes towards SHS (%), by smoking status

Attitude	Current smoker	Ex-smoker	Never smoker
Doesn't bother me	62.8 (59.5, 66.0)	26.7 (23.5, 30.0)	15.1 (13.5, 16.8)
Bothers me slightly	24.3 (21.2, 27.3)	33.7 (30.2, 37.2)	35.2 (33.2, 37.2)
Bothers me a lot	13.0 (10.8, 15.1)	39.6 (36.2, 43.0)	49.7 (47.5, 51.8)

Note: 95% confidence intervals are presented below each rate.

Table A17: Attitudes towards SHS (%), by age group

Attitude	15–19	20–24	25–29	30–39	40–49	50–59	60–64
Doesn't bother me	37.6 (34.0, 41.2)	31.6 (27.3, 35.8)	29.0 (23.9, 34.0)	27.3 (24.4, 30.3)	26.1 (23.0, 29.3)	29.0 (25.3, 32.7)	28.9 (23.5, 34.3)
Bothers me slightly	40.8 (37.1, 44.5)	39.2 (34.6, 43.9)	34.2 (29.5, 38.9)	31.7 (28.7, 34.6)	31.5 (28.4, 34.6)	27.2 (23.3, 31.0)	24.1 (19.2, 29.0)
Bothers me a lot	21.6 (18.5, 24.7)	29.2 (25.2, 33.2)	36.8 (31.8, 41.8)	41.0 (37.9, 44.1)	42.4 (38.9, 45.8)	43.9 (40.2, 47.6)	47.0 (41.3, 52.7)

Note: 95% confidence intervals are presented below each rate.

Table A18: Knowledge about harm from SHS (%), by gender

Knowledge	Males	Females	Total
Definitely not harmful	4.2 (3.3, 5.1)	2.8 (2.2, 3.5)	3.5 (2.9, 4.1)
Probably not harmful	8.9 (7.6, 10.1)	5.9 (4.9, 6.8)	7.3 (6.6, 8.0)
Probably harmful	30.3 (28.3, 32.3)	26.5 (24.7, 28.2)	28.4 (27.2, 29.6)
Definitely harmful	56.6 (54.4, 58.9)	64.8 (62.9, 66.7)	60.8 (59.5, 62.2)

Note: 95% confidence intervals are presented below each rate.

Table A19: Knowledge about harm from SHS (%), by age group

Knowledge	15–19	20–24	25–29	30–39	40–49	50–59	60–64
Definitely not harmful	4.0 (2.6, 6.0)	3.3 (1.9, 5.3)	2.9 (1.2, 6.0)	2.4 (1.5, 3.3)	3.5 (2.2, 4.8)	3.7 (2.4, 4.9)	7.0 (3.9, 11.5)
Probably not harmful	6.6 (4.7, 8.6)	8.0 (5.5, 10.6)	5.2 (2.4, 9.6)	5.6 (4.3, 6.9)	5.8 (4.4, 7.3)	11.1 (8.9, 13.3)	11.2 (7.2, 15.2)
Probably harmful	34.5 (30.5, 38.6)	26.8 (23.0, 30.5)	28.3 (23.3, 33.3)	26.0 (23.1, 28.8)	29.4 (26.5, 32.4)	26.9 (24.0, 29.8)	28.5 (23.2, 33.7)
Definitely harmful	54.8 (50.7, 58.8)	61.9 (57.9, 65.9)	63.6 (57.5, 69.7)	66.1 (62.9, 69.2)	61.3 (58.0, 64.5)	58.3 (54.9, 61.7)	53.3 (47.4, 59.3)

Note: 95% confidence intervals are presented below each rate.

Table A20: Knowledge about harm from SHS (%), Māori versus non-Māori

Knowledge	Māori	Non Māori
Definitely not harmful	6.9 (4.8, 9.0)	3.0 (2.4, 3.6)
Probably not harmful	12.8 (10.2, 15.5)	6.5 (5.7, 7.3)
Probably harmful	29.3 (26.1, 32.5)	28.2 (26.9, 29.5)
Definitely harmful	50.9 (47.4, 54.5)	62.3 (60.7, 63.8)

Note: 95% confidence intervals are presented below each rate.

Table A21: Knowledge about harm from SHS (%), by age stage

Knowledge	Youth	Young adult	Adult
Definitely not harmful	4.0 (2.6, 6.0)	3.3 (1.9, 5.3)	3.5 (2.8, 4.1)
Probably not harmful	6.6 (4.7, 8.6)	8.0 (5.5, 10.6)	7.3 (6.5, 8.2)
Probably harmful	34.5 (30.5, 38.6)	26.8 (23.0, 30.5)	27.7 (26.2, 29.1)
Definitely harmful	54.8 (50.7, 58.8)	61.9 (57.9, 65.9)	61.5 (59.9, 63.2)

Note: 95% confidence intervals are presented below each rate.

Appendix 3: Cessation Behaviour and Support

Table A22: Quit attempts in last five years (%), by age group

Quit attempt	20–24	25–29	30–39	40–49	50–59	60–64	Total
Tried to quit in last five years	62.4 (55.5, 69.4)	69.9 (60.1, 79.6)	66.4 (60.2, 72.7)	62.5 (56.6, 68.3)	65.6 (57.4, 73.8)	61.5 (46.0, 77.1)	64.9 (61.9, 67.9)
Ever quit for more than one week	63.4 (56.1, 70.7)	65.9 (56.7, 75.2)	67.6 (62.1, 73.1)	72.7 (66.1, 79.3)	74.4 (67.0, 81.8)	71.4 (57.9, 84.9)	69.2 (66.0, 72.3)

Note: 95% confidence intervals are presented below each rate.

Table A23: Quit attempts in last five years (%), by NZDep01 quintile (20+ years)

Quit attempt	1 (least deprived)	2	3	4	5 (most deprived)	Total
Tried to quit in last five years	65.8 (52.9, 71.8)	62.4 (52.9, 71.8)	61.1 (53.4, 68.8)	68.9 (63.1, 74.7)	65.4 (60.7, 70.1)	64.9 (61.9, 67.9)
Ever quit for more than one week	81.3 (51.6, 73.8)	62.7 (51.6, 73.8)	69.8 (62.7, 77.0)	70.6 (64.7, 76.5)	65.6 (59.8, 71.3)	69.2 (66.0, 72.3)

Note: 95% confidence intervals are presented below each rate.

Table A24: Quit attempts in last five years (%), Māori versus non-Māori, by household income

Household income	Tried to quit in last five years			Ever quit for more than one week		
	Māori	Non-Māori	Total	Māori	Non-Māori	Total
Less than 20,000	59.9 (49.6, 70.1)	68.0 (59.0, 77.1)	65.3 (58.1, 72.5)	63.4 (52.2, 74.5)	64.6 (54.4, 74.8)	64.2 (56.7, 71.6)
\$20,000–\$40,000	70.0 (58.4, 81.7)	64.6 (56.2, 73.0)	66.1 (59.9, 72.3)	73.8 (63.8, 83.9)	66.6 (58.5, 74.7)	68.6 (62.3, 74.9)
\$40,000–60,000	73.2 (60.0, 86.4)	65.1 (57.5, 72.6)	67.2 (60.8, 73.6)	70.1 (56.7, 83.4)	72.1 (64.3, 79.9)	71.6 (65.2, 77.9)
More than \$60,000	67.7 (57.9, 77.6)	62.1 (56.0, 68.2)	63.1 (57.9, 68.4)	69.1 (59.4, 78.9)	71.5 (64.7, 78.3)	71.1 (65.4, 76.7)
No response	59.1 (32.5, 82.2)	65.6 (49.9, 81.3)	64.4 (51.9, 76.9)	53.9 (27.5, 78.8)	62.8 (46.4, 79.3)	61.2 (47.9, 74.4)
Total	67.8 (62.5, 73.0)	64.0 (60.2, 67.9)	64.9 (61.9, 67.9)	68.8 (63.6, 74.0)	69.3 (65.3, 73.2)	69.2 (66.0, 72.3)

Note: 95% confidence intervals are presented below each rate.

Table A25: Number of quit attempts in last 12 months (%), smokers who have ever quit for more than one week, by gender

Quit attempts	Males	Females	Total
No quit attempts	34.2 (28.1, 40.3)	38.1 (33.1, 43.0)	36.3 (32.4, 40.1)
1 quit attempt	35.9 (29.6, 42.2)	31.2 (25.9, 36.5)	33.4 (29.5, 37.2)
2 quit attempts	14.7 (10.2, 19.2)	14.7 (10.3, 19.1)	14.7 (11.6, 17.8)
3 quit attempts	5.3 (3.2, 8.3)	7.1 (5.0, 9.3)	6.3 (4.6, 8.0)
4/5 quit attempts	2.4 (1.1, 4.5)	4 (2.3, 6.5)	3.3 (2.0, 4.6)
6–10 quit attempts	1.4 (0.5, 3.2)	1.9 (0.9, 3.6)	1.7 (1.0, 2.7)
Greater than 10 quit attempts	6.1 (3.1, 10.6)	2.9 (1.4, 5.4)	4.4 (2.5, 6.3)

Note: 95% confidence intervals are presented below each rate.

Table A26: Number of quit attempts in last 12 months (%), smokers who have ever quit for more than one week, by NZDep01 quintile

Quit attempts	1 (least deprived)	2	3	4	5 (most deprived)	Total
No quit attempts	27.8 (16.7, 41.4)	42.8 (30.3, 55.3)	44.9 (34.9, 54.9)	33.7 (26.1, 41.4)	33.6 (25.8, 41.3)	36.3 (32.4, 40.1)
1 quit attempt	39.8 (28.6, 51.9)	32.6 (20.3, 44.8)	29.6 (21.2, 38.0)	32.4 (24.9, 39.8)	34.3 (26.6, 42.1)	33.4 (29.5, 37.2)
2 quit attempts	16.1 (7.4, 28.8)	7.7 (2.8, 16.2)	9.7 (5.5, 15.6)	17.6 (10.8, 24.3)	18.0 (10.9, 25.0)	14.7 (11.6, 17.8)
3 quit attempts	–	4.4 (1.3, 10.7)	7.2 (3.8, 12.2)	7.7 (4.3, 12.7)	6.9 (4.1, 10.9)	6.3 (4.6, 8.0)
4/5 quit attempts	–	–	–	5.3 (2.7, 9.0)	2.5 (1.2, 4.7)	3.3 (2.0, 4.6)
6–10 quit attempts	–	–	–	–	2.6 (1.0, 5.5)	1.7 (1.0, 2.7)
Greater than 10 quit attempts	8.7 (3.1, 18.5)	–	6.4 (3.0, 11.6)	–	2.1 (0.7, 4.7)	4.4 (2.5, 6.3)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A27: Quit advice received during last quit attempt (%), by gender and age group

Age group	Males	Females	Total
15–19	16.6 (5.3, 35.4)	5.5 (1.8, 12.4)	10.4 (4.8, 19.1)
20–24	14.6 (7.9, 24.0)	8.0 (4.2, 13.8)	11.4 (7.5, 16.4)
25–29	27.2 (14.5, 43.5)	14.8 (7.2, 25.8)	21.5 (13.6, 31.3)
30–39	28.4 (19.6, 37.1)	32.0 (25.7, 38.4)	30.5 (25.1, 35.8)
40–49	22.9 (14.6, 31.3)	26.4 (17.2, 35.6)	24.7 (18.8, 30.6)
50–59	37.6 (23.5, 53.4)	46.5 (33.4, 59.6)	41.9 (32.5, 51.2)
60–64	–	44.6 (23.2, 67.6)	34.3 (21.5, 49.0)
Total	24.9 (20.4, 29.5)	26.4 (22.7, 30.0)	25.7 (22.8, 28.6)

Table A28: Quitting products used during last quit attempt (%), by gender and age group

Age group	Males	Females	Total
15–19	–	14.6 (6.2, 27.5)	11.9 (5.6, 21.5)
20–24	13.7 (5.2, 27.4)	8.9 (3.5, 17.8)	11.3 (6.0, 18.9)
25–29	30.9 (16.0, 49.4)	14.4 (6.0, 27.4)	23.3 (14.3, 34.5)
30–39	20.5 (12.9, 30.0)	24.1 (17.2, 31.0)	22.6 (17.3, 27.9)
40–49	34.1 (23.3, 44.9)	36.4 (26.7, 46.1)	35.3 (28.6, 42.0)
50–59	40.9 (28.1, 54.6)	47.5 (33.3, 61.7)	43.9 (35.5, 52.3)
60–64	–	49.1 (25.0, 73.5)	40.3 (24.8, 57.4)
Total	25.8 (21.6, 30.0)	27.1 (23.3, 30.8)	26.5 (23.9, 29.0)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A29: Level of agreement with the statements 'Smokers who fail to quit, do not really want to quit' and 'People should be able to quit without the help of programmes or products' (%), by gender

Level	Smokers who fail to quit, do not really want to quit			People should be able to quit without the help of programmes or products		
	Males	Females	Total	Males	Females	Total
Strongly agree	15.7 (13.8, 17.6)	16.5 (14.9, 18.1)	16.1 (14.8, 17.4)	7.3 (5.9, 8.7)	4.7 (3.8, 5.7)	6.0 (5.2, 6.8)
Agree	39.3 (36.8, 41.7)	36.4 (34.3, 38.5)	37.8 (36.1, 39.4)	33.9 (32.1, 35.8)	21.7 (19.9, 23.5)	27.7 (26.3, 29.0)
Neutral	18.0 (16.2, 19.8)	16.4 (14.7, 18.1)	17.2 (15.9, 18.4)	21.0 (19.0, 23.0)	20.0 (18.5, 21.6)	20.5 (19.2, 21.8)
Disagree	28.6 (23.2, 33.9)	26.5 (21.0, 31.9)	27.5 (23.8, 31.3)	32.3 (30.1, 34.6)	43.8 (41.3, 46.2)	38.2 (36.4, 39.9)
Strongly disagree	4.0 (3.3, 4.8)	4.9 (3.9, 5.8)	4.5 (3.9, 5.0)	5.4 (4.4, 6.4)	9.8 (8.4, 11.1)	7.7 (6.7, 8.6)

Note: 95% confidence intervals are presented below each rate.

Table A30: Level of agreement with statements ‘Smokers who fail to quit, do not really want to quit’ and ‘People should be able to quit without the help of programmes or products’ (%), Māori versus non-Māori

Level	Smokers who fail to quit, do not really want to quit			People should be able to quit without the help of programmes or products		
	Māori	Non-Māori	Total	Māori	Non-Māori	Total
Strongly agree	19.0 (16.0, 22.0)	15.7 (14.3, 17.0)	16.1 (14.8, 17.4)	7.7 (5.7, 9.8)	5.7 (4.8, 6.6)	6.0 (5.2, 6.8)
Agree	36.7 (33.6, 39.7)	37.9 (36.1, 39.8)	37.8 (36.1, 39.4)	31.5 (28.2, 34.8)	27.1 (25.6, 28.6)	27.7 (26.3, 29.0)
Neutral	15.9 (13.4, 18.5)	17.3 (16.0, 18.7)	17.2 (15.9, 18.4)	17.3 (14.6, 20.0)	21.0 (19.6, 22.4)	20.5 (19.2, 21.8)
Disagree	26.1 (16.1, 36.0)	27.9 (23.7, 32.0)	27.5 (23.8, 31.3)	31.3 (27.4, 35.2)	39.2 (37.2, 41.1)	38.2 (36.4, 39.9)
Strongly disagree	6.5 (4.5, 8.4)	4.2 (3.5, 4.8)	4.5 (3.9, 5.0)	12.3 (9.0, 15.5)	7.0 (6.0, 7.9)	7.7 (6.7, 8.6)

Note: 95% confidence intervals are presented below each rate.

Appendix 4: Youth

Table A31: Source of cigarettes (%), by gender (15–19 years)

Source	Males	Females	Total
Buy own cigarettes	78.7 (67.7, 89.8)	70.1 (58.7, 81.4)	74.2 (66.4, 82.1)
Get cigarettes from family	34.1 (22.4, 47.5)	42.3 (30.4, 54.2)	38.4 (31.0, 45.7)
Get cigarettes from friend	56.2 (42.0, 70.3)	49.8 (36.6, 63.0)	52.8 (43.8, 61.9)
Get cigarettes elsewhere	39.9 (26.6, 53.3)	39.7 (27.1, 52.4)	39.8 (30.9, 48.8)

Note: 95% confidence intervals are presented below each rate.

Table A32: Source of cigarettes (%), Māori versus non-Māori (15–19 years)

Source	Māori	Non-Māori	Total
Buy own cigarettes	68.3 (51.7, 85.0)	76.9 (67.8, 86.0)	74.2 (66.4, 82.1)
Get cigarettes from family	49.8 (31.8, 67.9)	33.1 (23.9, 42.3)	38.4 (31.0, 45.7)
Get cigarettes from friend	60.7 (40.7, 78.4)	49.2 (38.9, 59.6)	52.8 (43.8, 61.9)
Get cigarettes elsewhere	46.7	36.7	39.8

	(28.8, 65.3)	(26.2, 47.2)	(30.9, 48.8)
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Note: 95% confidence intervals are presented below each rate.

Table A33: Other smoking influences (%), by gender (15–19 years)

Influence	Males	Females	Total
Mother smokes	22.8 (18.2, 27.3)	26.3 (21.4, 31.3)	24.5 (21.0, 28.1)
Father smokes	28.4 (23.5, 33.3)	25.6 (20.8, 30.3)	27.0 (23.6, 30.4)
Siblings smoke	32.3 (26.7, 37.9)	33.3 (28.0, 38.6)	32.8 (29.0, 36.5)
Boy/girlfriend smokes	14.9 (10.0, 19.8)	29 (24.5, 33.6)	22.1 (18.6, 25.6)

Note: 95% confidence intervals are presented below each rate.

Table A34: Other smoking influences (%), Māori versus non-Māori (15–19 years)

Influence	Māori	Non-Māori	Total
Mother smokes	50.1 (39.5, 60.8)	18.7 (15.1, 22.2)	24.5 (21.0, 28.1)
Father smokes	48.4 (37.4, 59.3)	22.2 (18.9, 25.5)	27 (23.6, 30.4)
Siblings smoke	55.8	27.4	32.8

	(45.4, 66.3)	(23.4, 31.4)	(29.0, 36.5)
Boy/girlfriend smokes	32.2 (23.7, 40.7)	19.9 (16.1, 23.7)	22.1 (18.6, 25.6)

Note: 95% confidence intervals are presented below each rate.

Table A35: Youth perceptions and attitudes (%), by gender (15–19 years)

If you had your life over again, would you smoke?			
Attitude	Males	Females	Total
Would smoke	31.6 (21.7, 41.5)	23.9 (15.8, 31.9)	27.7 (21.0, 34.4)
Would not smoke	68.4 (58.5, 78.3)	76.1 (68.1, 84.2)	72.3 (65.6, 79.0)
Do you think you'll be a smoker in your twenties?			
Will be a smoker	12.9 (9.2, 16.5)	17.2 (13.1, 21.4)	15.0 (12.4, 17.6)
Won't be a smoker	87.1 (83.5, 90.8)	82.8 (78.6, 86.9)	85.0 (82.4, 87.6)

Note: 95% confidence intervals are presented below each rate.

Table A36: Youth perceptions and attitudes (%), Māori versus non-Māori (15–19 years)

If you had your life over again, would you smoke?			
Attitude	Māori	Non-Māori	Total
Would smoke	17.8 (8.5, 30.9)	31.3 (23.1, 39.5)	27.7 (21.0, 34.4)
Would not smoke	82.2 (71.8, 92.6)	68.7 (60.5, 76.9)	72.3 (65.6, 79.0)

Do you think you'll be a smoker in your twenties?			
Will be a smoker	27.5 (18.7, 36.3)	12.2 (9.3, 15.1)	15.0 (12.4, 17.6)
Won't be a smoker	72.5 (63.7, 81.3)	87.8 (84.9, 90.7)	85.0 (82.4, 87.6)

Note: 95% confidence intervals are presented below each rate.

Table A37: Level of agreement to the statements 'It is okay for young people under the age of 18 to smoke', 'My parents think it's okay for people under the age of 18 to smoke' and 'Smoking is common among my friends' (%), by gender (15–19 years)

Level	It is okay for young people under the age of 18 to smoke			My parents think it's okay for people under the age of 18 to smoke			Smoking is common among my friends		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Strongly agree	2.3 (0.7, 5.4)	–	1.7 (0.7, 3.4)	–	1.5 (0.4, 3.8)	1.0 (0.3, 2.3)	14.5 (10.0, 18.9)	12.8 (9.0, 16.5)	13.6 (10.7, 16.6)
Agree	19.6 (14.8, 24.3)	13.4 (9.6, 17.3)	16.6 (13.3, 19.8)	5.8 (3.2, 9.5)	5.9 (3.6, 9.0)	5.8 (4.1, 7.6)	30.4 (24.5, 36.3)	37.5 (31.9, 43.0)	33.9 (29.7, 38.0)
Neutral	22.1 (17.3, 27.0)	27.2 (22.0, 32.3)	24.6 (21.1, 28.1)	12.9 (9.4, 16.3)	13.0 (9.1, 16.9)	12.9 (10.3, 15.6)	9.5 (5.9, 13.0)	10.1 (6.6, 13.7)	9.8 (7.5, 12.2)
Disagree	32.5 (27.4, 37.7)	34.4 (29.1, 39.7)	33.5 (29.8, 37.1)	39.9 (34.2, 45.7)	32.9 (27.5, 38.4)	36.5 (32.5, 40.5)	32.4 (26.9, 37.9)	24.3 (19.7, 29.0)	28.4 (25.1, 31.8)
Strongly disagree	23.5 (18.4, 28.6)	23.8 (18.4, 29.3)	23.7 (19.7, 27.6)	40.8 (35.6, 46.1)	46.7 (40.6, 52.8)	43.7 (39.7, 47.7)	13.2 (8.7, 17.8)	15.3 (11.1, 19.6)	14.3 (11.3, 17.2)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.

Table A38: Level of agreement to the statements 'It is okay for young people under the age of 18 to smoke', 'My parents think it's okay for people under the age of 18 to smoke' and 'Smoking is common among my friends' (%), Māori versus non-Māori (15–19 years)

	It is okay for young people under the age of 18 to smoke			My parents think it's okay for people under the age of 18 to smoke			Smoking is common among my friends		
	Māori	Non-Māori	Total	Māori	Non-Māori	Total	Māori	Non-Māori	Total
Strongly agree	–	1.1 (0.4, 2.4)	1.7 (0.7, 3.4)	–	–	1.0 (0.3, 2.3)	26.0 (17.0, 35.1)	10.8 (7.8, 13.8)	13.6 (10.7, 16.6)
Agree	18.6 (11.1, 28.3)	16.1 (12.7, 19.6)	16.6 (13.3, 19.8)	10.7 (5.3, 18.7)	4.7 (2.8, 6.7)	5.8 (4.1, 7.6)	40.0 (29.1, 50.9)	32.5 (28.1, 36.8)	33.9 (29.7, 38.0)
Neutral	22.7 (14.6, 30.8)	25.1 (21.3, 28.9)	24.6 (21.1, 28.1)	16.2 (9.5, 25.0)	12.2 (9.4, 15.0)	12.9 (10.3, 15.6)	6.2 (2.6, 11.9)	10.6 (8.0, 13.3)	9.8 (7.5, 12.2)
Disagree	31.4 (22.3, 40.5)	33.9 (29.8, 38.0)	33.5 (29.8, 37.1)	31.5 (21.7, 41.4)	37.6 (32.9, 42.3)	36.5 (32.5, 40.5)	17.7 (10.6, 27.0)	30.9 (27.2, 34.6)	28.4 (25.1, 31.8)
Strongly disagree	23.0 (13.1, 35.6)	23.8 (19.8, 27.8)	23.7 (19.7, 27.6)	40.7 (31.3, 50.2)	44.4 (39.7, 49.2)	43.7 (39.7, 47.7)	10.1 (4.8, 18.1)	15.2 (11.8, 18.6)	14.3 (11.3, 17.2)

Notes:

1. 95% confidence intervals are presented below each rate.
2. Boxes with dashes represent rates that have been suppressed due to counts less than 5.