

EVALUATION REPORT

Prepared For The Quit Group

NEW QUITLINE SERVICE EVALUATION - LONGITUDINAL SURVEY

***Results from Three-Week and Six-Month
Follow-Up Survey***

Prepared by Gravitas Research and Strategy Limited

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1. Executive Summary

1.1 Introduction

Funded by the Ministry of Health, The Quit Group delivers smoking cessation services across New Zealand. The Quit Group is responsible for Quitline, which provides free telephone support to people quitting smoking, as well as providing tobacco and smoking related information to other stakeholders including students, school children and workplaces. Based on 2002/03 evaluation research, changes and refinements were made to the original Quitline service. The resulting service is referred to as the New Quitline Service (NQS). NQS is similar to the original Quitline, but with greater tailoring of services to meet the person-specific needs of the individual caller. The Quit Group has commissioned an evaluation of the NQS to assess the impact of changes made to the service with callers.

1.2 Research Objectives

The primary objectives of the NQS evaluation are to determine:

- Is the programme enhancing access to NRT, support and advice?
- Is the programme appropriate?
- Is the programme effective?

1.3 Methodology

Three-week and six-month surveys were conducted using telephone interviewing following their registration with Quitline. All interviewing was conducted using Computer Assisted Telephone Interviewing (CATI).

The Quit Group identified eight groups of interest. To ensure a robust sample size was achieved for each group, minimum quotas were set. For the three-week survey, respondents were randomly selected from the database of research consenters provided weekly by The Quit Group within the quotas outlined. Multiple attempts were made to re-contact all three-week survey respondents at the six-month follow-up.

Interviews for the three-week survey were conducted from 14 March 2007 to 10 April 2008. A total of n=3,969 three-week surveys were completed at an average length of 20 minutes. The three-week survey response rate was 85%. Interviews for the six-month survey were conducted from 14 September 2007 to 24 October 2008. Sixty-eight percent of the three-week survey respondents were able to be followed up and completed the six-month survey, yielding a total sample size of n=2,716. For the six-month survey, the average interview length was 15 minutes with a response rate of 88%.

1.4 Demographic Profile of Survey Respondents

Seventy-six percent of respondents identified as being of New Zealand European descent, 26% of Māori descent and 6% of Pacific descent.

Just less than seven in ten respondents were aged between 20 and 49 years old, including 21% aged between 20 and 29 years, 25% aged between 30 and 39 years, and a further 21% between 40 and 49 years. Overall, 47% of respondents were in the Quitline's target age range of 25-44 years.

Fifty-five percent of respondents were female, while 45% were male.

Just less than half of all respondents (48%) lived in a family with at least one child, including 25% living in a two parent family with one or two children, 11% in a two parent family with three or more children and 12% in a one parent family. The greatest single share of respondents lived in a two-person household (29%). One-fifth (20%) lived in a three-person household, while a further 20% lived in a four-person household. Twelve percent of respondents lived alone.

1.5 Quit Rates

At the six-month follow-up, just less than one-third of respondents (31%) had not smoked at all in the seven days prior to the survey being undertaken ('Seven Day Point Prevalence')¹. This compares with 43% at the three-week follow-up survey. While there were no significant differences in Seven Day Point Prevalence rates by ethnicity and gender, those 25 years or older were significantly more likely to have not smoked in the last seven days (33% of those aged between 25 and 44 years, 30% of those aged between 45 and 64 years and 40% of those aged 65 years or older) than those aged 18-24 years (23%) or younger than 18 years (18%). Those in the highest socio-economic group were most likely to have not smoked in the last seven days (40%) while those in the lowest group were least likely (26%).

The Continuous Quit Rate at the six-month follow-up was 24% (that is the respondent had not smoked at all since they registered with Quitline). This compares with 47% at the three-week survey. At six-months, the Continuous Quit Rate was significantly higher among Pacific (32%) respondents than Māori (21%). The Continuous Quit Rate at six-months increased with age and socio-economic status.

The six-month Intention to Treat (Seven Day Point Prevalence) Quit Rate (assuming those lost to follow-up had smoked in the last seven days) was 21%.

The six-month Intention to Treat (Continuous) Quit Rate (assuming those lost to follow-up had not quit) was 17%.

¹Using the 'responder-only rate

1.6 Impact of NRT, Support and Advice on Outcomes

Of the four key interventions (independent variables) tested (NRT redemption, NRT use, number of times spoken with a Quit Advisor and amount of Quit Pack read), NRT redemption and NRT use are identified as having the strongest positive relationship with being quit at the six-month follow-up survey (using the Seven Day Point Prevalence Quit Rate²). A statistically-reliable positive relationship also exists between the number of times spoken with a Quit Advisor and being quit. However the notably smaller coefficient suggests that the relationship is considerably less strong than for NRT redemption and use.

In contrast, the relationship between the amount of the Quit Pack read and being quit is not statistically valid, indicating no true relationship between these two variables. Note however that there is evidence of a statistically-reliable positive relationship between the amount of the Quit Pack read and being quit among Maori callers.

NRT redemption and NRT use also have a statistically-reliable, positive relationship with reduced tobacco consumption between registration and the six-month follow-up survey. The relationship between reduced tobacco consumption and both the number of times spoken to a Quit Advisor and the amount of the Quit Pack read are also statistically reliable, albeit less strong than for NRT redemption and use.

No statistically-valid relationships were found between the extent of change in smokefree environment status (home and property) and any of the four key interventions.

² Using the 'responders only' rate.

1.7 Nicotine Replacement Therapy

At the six-month survey, more than three quarters of respondents (79%) recalled receiving at least one quit card. This included 40% receiving two cards and 20% receiving three or more.

A strong positive relationship is evident between the issuing of quit cards and being quit (using Seven Day Point Prevalance Quit Rate). Those who were not quit were over-represented among those who did not receive any quit cards (20%, compared with 15% of those who were quit). A strong positive relationship also exists between number of cards received and quit status. Those quit were significantly more likely to have received two, three or four cards (67%) than those not quit (54%).

Two in five patch card recipients (39%) used more than a month's worth of patches from all cards received and redeemed, including 19% using the standard period for patches of eight weeks. A quarter (27%) used two weeks' worth of patches or less including 4% who used none of the patches from the cards they redeemed. By comparison, one in five respondents (19%) used more than a month's worth of gum. Half used two weeks' worth of gum or less, including 10% who used none of the gum from the cards they redeemed.

Almost all patch users (90%) reported using one patch a day and replacing smoking totally with patches (81%). Gum users reported using the gum when they got cravings (61%) and/or every day as part of a regular routine (44%). The greatest share of gum users (69%) reported replacing smoking totally with the gum.

Being quit/having used enough NRT/having achieved what the respondent wanted, and giving up trying to quit were the main reasons for not using all the patches/gum received. Patches users also frequently mentioned experiencing negative physical reactions to the patches while gum users expressed a dislike of the taste of the gum.

Nicotine patches were considered an effective smoking cessation aid. Eighty percent of six-month survey respondents agreed to some extent that patches increased the chances of quitting. By comparison, nicotine gum was less likely to be perceived as an effective cessation aid, with 51% agreeing/strongly agreeing that gum increased the chances of quitting. Similarly, nicotine patches (80%) were more likely to be perceived as safe than nicotine gum (59%).

Personal experience with Nicotine Replacement Therapies has a strong positive influence on perceptions of effectiveness and safety. However, results suggest a lack of knowledge of both the effectiveness and safety of nicotine gum among Quitline callers.

1.8 Quit Attempts

At the three-week survey, 78% of respondents had made at least one prior attempt to quit smoking. A quarter (24%) had made one attempt, while 21% had made two attempts, and 33% had made three or more. One in five (20%) had made no previous attempts to quit.

Eighty-three percent of respondents at the six-month follow-up who had relapsed reported having made one or more quit attempt during the study period. Thirty-one percent made at least one other quit attempt during the study period, in addition to the quit attempt they made when they first called the Quitline.

1.9 Behaviour Change

Among respondents who reported smoking tailor-made cigarettes at registration, over the study period more than three-quarters (79%) had reduced the amount they smoked, including 43% who reported being quit at the six-month follow-up survey.

Of those respondents who reported smoking roll-your-own cigarettes at registration, over the study period more than two-thirds (69%) had reduced the amount they smoked, including 37% who reported being quit at the six-month follow-up survey.

Overall, 74% of respondents reported having reduced their tobacco consumption over the course of the study period. At the six-month survey, one in five (21%) were smoking about the same amount of tobacco as they had been at the three-week survey. Only 5% of respondents had increased their tobacco consumption over the course of the study period.

At the six-month survey, over four in five respondents (82%) did not allow smoking anywhere indoors (compared with 79% at the three-week survey). Over the study period, 7% of respondents reported placing greater restrictions on where they allowed smoking around the home.

At the six-month survey, four in five respondents (81%) allowed smoking anywhere outdoors around their property. Over the study period, 4% of respondents reported placing greater restrictions on where they allowed smoking around their property.

1.10 Attitudes to the Quitline

Just less than half (46%) had spoken to a Quit Advisor once (18%) or twice (28%) following registration. A third (32%) had spoken to a Quit Advisor on at least three occasions. One in six respondents (17%) reported that they had not spoken to a Quit Advisor since their registration call.

Callers' satisfaction with the Quitline service was clearly evident. Ninety-eight percent of those quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up survey stated that they would recommend the service to friends and family wanting to quit. Eighty-five percent of all callers not quit reported being likely to re-use the service again in future.

Satisfaction was further evidenced by the fact that more than half of callers (54%) stated that no improvements to Quitline were needed.

A desire for more frequent and/or regular contact with Quit Advisors was the most frequently mentioned suggestion for improvement to the service (cited by 18% of respondents).

1.11 Relapse

A third of respondents who had relapsed after their first call to the Quitline (33%) reported stress/a stressful situation/anxiety as the main reason they started smoking again. Being tempted by other people smoking around them (11%) and a difficult personal or family life event (10%) were also frequently mentioned as were not being ready to quit (9%) and giving into cravings (8%).

Most respondents (86%) who had stopped smoking but had relapsed during the study period had not called Quitline again since relapsing.

Of those who had not called Quitline back when they started smoking again, 17% reported that they did not do so because they were too embarrassed to admit that they hadn't quit/felt like a failure/felt guilty. Fifteen percent were not ready to quit/didn't want to quit/lacked motivation. Being too busy to re-contact (13%) and a perception of being able to quit without Quitline's support (13%) were also frequently mentioned.

Of those who decided to call the Quitline again when they relapsed, the greatest single share (35%) rang because they wanted to attempt to quit again. Two in five (39%) rang because they wanted access to cheap (26%) or more (13%) NRT, while 38% rang back because they liked the support offered (19%), wanted the guidance/help offered by Quitline (11%) or wanted the information/brochures available through Quitline (8%).

1.12 Use of Other Cessation Medication and Services

During the study period, almost all respondents (95%) reported not using any stop-smoking medication other than those provided by the Quitline.

Two in five of the 136 respondents who used non Quitline-provided medications (40%) had accessed them over-the-counter or off-the-shelf. Twenty-eight percent had obtained their medications from the Quitline, while 22% had done so by prescription.

Most respondents (98%) reported that they had not used any cessation services other than the Quitline during the study period. One percent used the services of a health worker (eg doctor, nurse, dentist).

1.13 Attitudes to Point of Sale Displays

Views on the impact of cigarette displays on quitting were mixed with half of all respondents (49%) agreeing that seeing cigarette and tobacco displays makes it more difficult to quit or to stay quit. In contrast, 48% disagreed with this statement to some extent. Levels of agreement were significantly higher for youth (68%), Pacific (63%), and Māori (54%) respondents, and those in lower SES³ groups (53% of those in Group 5 and 54% of those in Group 6).

Similarly, half of all respondents (50%) agreed that banning such displays would make it easier to quit or to stay quit. Pacific (58%) and Māori (54%) respondents were again significantly more likely to agree with this statement than their non-Māori/non-Pacific counterparts (48%). Those aged younger than 45 years were also significantly more likely to agree – particularly youth (57%).

Fifty-seven percent of all respondents would support a ban on cigarette and tobacco displays, including 61% of Pacific respondents and 59% of Māori respondents. Those aged between 25 and 44 years were the most likely to support a ban (61%).

1.14 Awareness and Effectiveness of Tobacco Packet Warning Labels

More than two in five respondents (42%) reported that they noticed tobacco packet warning labels all the time. In contrast, just over one-quarter (27%) rarely or never noticed the labels. Māori (51%), female respondents (45%) and those not quit (59%) were the most likely to notice warning labels all the time.

Two in five (40%) of those who reported having noticed the warning labels stated that they made them think about the health risks of smoking a lot. A further 36% found the labels made them think about the health risks a little. Of the three ethnic groups, warning labels seem to be most effective for Pacific and Māori smokers, with 48% of Pacific and 46% of Māori noting that the labels made them think a lot about the health risks associated with smoking (compared with 37% of non-Māori/non-Pacific respondents).

³ Respondents' socio-economic status was classified using the New Zealand Socioeconomic Index (NZSEI). This is an occupationally-based, New Zealand-specific index that assigns socio-economic scores to occupations on the basis of the education and income profiles of New Zealanders. SES Group 5 includes such professions as machine operators and office administrators; SES Group 6 includes hairdressers and cleaners among others. The process used to classify the socio-economic status of each survey respondent is outlined further in Section 3 and in the Appendix (Section 3).

2. Introduction

2.1 Introduction

Funded by the Ministry of Health, The Quit Group delivers smoking cessation services across New Zealand. The Quit Group is responsible for the Quitline, which provides free telephone support and advice to people quitting smoking, as well as providing tobacco and smoking related information to other stakeholders including students and workplaces. The Quit Group also develops and delivers communication messages to promote their innovative quit smoking programmes, through television, radio, and print campaigns. The Quit Group aims to reduce the number of New Zealanders who smoke, with a particular focus on Māori smokers.

New Quitline Service (NQS)

Based on 2002/03 evaluation research, changes and refinements were made to the original Quitline service. The resulting service is referred to as the New Quitline Service (NQS). NQS is similar to the original Quitline service, but with greater tailoring to meet the person-specific needs of the individual caller.

The Quit Group has commissioned an evaluation of the NQS to assess the impact of changes made to the service with callers. The evaluation comprises two key activities:

- **Longitudinal survey of a cohort of New Quitline Service callers.**
The longitudinal survey follows up a sample of Quitline callers at three weeks and six months after starting the Quitline programme. This is the main focus of the evaluation as it provides the most information and is the only source of outcome data – that is, of quit rates.
- **Quitline customer satisfaction survey.**
The customer satisfaction survey has been delivered in conjunction with the three-week survey.

2.2 Evaluation Objectives

The primary objectives of the NQS evaluation are to determine:

- Is the programme enhancing access to NRT, support and advice?
- Is the programme appropriate?
- Is the programme effective?

In addition, it is also intended that the evaluation assess the key features of the NQS, primarily:

- How the service is delivered.
- Who is accessing the service?
- How many people are accessing the service?
- Suggestions for enhancements to the NQS.

3. Method

3.1 Research Method

The three-week and six-month surveys were conducted using telephone interviewing. Key advantages of telephone interviewing for an evaluation such as this include:

- the ability to conveniently and cost-effectively contact a national sample of respondents, including those who live in more isolated areas;
- maximising the response rate through:
 - allowing a robust callback regime, with each respondent being called up to a maximum of twenty times over the course of the fieldwork period in an effort to find them home;
 - offering convenience to respondents, allowing them to participate in the survey at a time that suits them (including day/evenings and weekends); and
 - the physical absence of the interviewer, thereby ensuring respondent anonymity and increasing the respondent's willingness to answer more personal questions.
- the ability to obtain more diagnostic information by the interviewer being in direct contact with the respondent, and therefore able to ask for clarification or elaboration of answers given;
- the ability to monitor the quality of interviewing in-house, thereby further ensuring quality (and accuracy) of the data set; and
- the appropriateness of using telephones, as that is how callers interact with Quitline.

All interviewing was conducted using Computer Assisted Telephone Interviewing (CATI). This enhanced the accuracy of the results as data collected from respondents was entered directly into the survey programme, rather than being recorded first on paper and then entered into the programme at a later date.

3.2 Sample Design

The Quit Group identified the following groups of interest. To ensure a robust sample size was achieved for each group, minimum quotas were set. Table 3.1 lists each of the quota groups, the target sample size, actual sample size achieved, and the maximum margin of error for each quota group.

Table 3.1: Sample Sizes and Associated Margins of Error

Ethnicity	Action	NRT sent/NRT not sent	Three-Week Survey			Six-Month Survey		
			Quota Target	Actual Sample Size	Margin of Error*	Quota Target	Actual Sample Size	Margin of Error*
Māori	First time	NRT sent	700	807	± 3.4%	629	511	± 4.3%
	First time	NRT not sent	50	58	± 12.9%	45	33	± 17.15
	Relapsed	All	400	412	± 4.8%	360	267	± 6.0%
			1150	1277	± 2.7%	1034	811	± 3.4%
Non-Māori	First time	NRT sent	900	1340	± 2.7%	823	952	± 3.2%
	First time	NRT not sent	75	89	± 10.4%	54	57	± 13.0%
	Relapsed	All	700	750	± 3.6%	629	571	± 4.1%
			1675	2179	± 2.1%	1506	1580	± 2.5%
Youth (<18 yrs)	All	All	450	152	± 7.9%	405	88	± 10.4%
Pacific Peoples	All	All	350	361	± 5.2%	315	237	± 6.4%
Total Survey Sample			3625	3969	± 1.6%	3260	2716	± 1.9%

* Maximum margin of error at the 95% confidence interval

For the three-week survey, respondents were randomly selected from the database of research consenters provided weekly by The Quit Group within the quotas outlined above.

To ensure that the impact of seasonal effects such as tobacco control advertising affected all quota groups equally, as far as practical, care was taken to ensure that quota groups were recruited for the survey at an equal rate.

3.3 Questionnaire Development and Pilot

The Quit Group provided Gravitas with a draft of the three-week questionnaire.

A three-stage questionnaire pilot was undertaken to ensure that the questionnaire met the objectives of the evaluation, was understandable, relevant and culturally safe for participants, and could be administered efficiently. The first stage involved an internal review of the questionnaire by the Gravitas project team while the second and third stages involved undertaking a small number of interviews with Quitline callers. *Note: Further detail on the pilot is provided in a separate document⁴.* Final versions of the three-week and six-month questionnaires can be found in the Appendices (Appendix Section 1 for the three-week questionnaire and Appendix Section 2 for the six-month questionnaire).

3.4 Conducting The Interviews

Interviews for the three-week survey were conducted from 14 March 2007 to 10 April 2008. Interviews for the six-month survey were conducted from 14 September 2007 to 24 October 2008. For the three-week survey, the names and contact details of callers who had contacted Quitline and consented to research three weeks prior were merged into the CATI programme. For the six-month survey, names and contact details of those called and interviewed six months earlier were merged into the programme. Names and telephone numbers were electronically presented to interviewers at random. Where Quitline callers had provided multiple telephone numbers (home, work, mobile), a strict protocol was followed to ensure every opportunity of finding the potential respondent was taken but limiting the number of calls on any one channel to in order to minimise nuisance (the list of the telephone protocols used is provided in the Appendix (Section 3)). For the six-month survey, where the respondent was unable to be contacted by telephone (due to having moved etc.), where an email address had been supplied as part of the three-week survey, the respondent was contacted via email and asked to provide their new telephone contact details. Upon making contact with the respondent's household, the interviewer clearly introduced themselves and the research company, and asked to speak to the Quitline caller. If the caller was not available, a time was made to re-contact.

⁴ Gravitas Research and Strategy Limited (2007) *New Quitline Service Evaluation Longitudinal Survey - Pilot Report*.

The questionnaire was administered by computer, responding to the input of the interviewer. For open-ended questions, the interviewer entered the respondent's comments verbatim. At the end of the interview, the respondent was thanked for their time, and reminded of the interviewer's name and company.

A strict record was kept of the number of refusals and the reason for each refusal (too busy, concerned about confidentiality, language issues etc). Records were also kept of other reasons why interviews could not be completed (respondent had moved etc). This information has been provided in the Appendix (Section 3). The response rate for the three-week survey was 85%. The response rate for the six-month survey (of those able to be contacted) was 88%.

Strict quality assurance measures were applied throughout the fieldwork period. These are detailed in the Appendix (Section 3).

A total of n=3,969 three-week surveys were completed. The average interview length was 20 minutes. Sixty-eight percent of these respondents were able to be followed up and completed the six-month survey, yielding a total sample size of n=2,716. For the six-month survey, the average interview length was 15 minutes.

A demographic profile of the final sample achieved is provided in the Appendix (Section 3).

Enhancing the Response Rate

To enhance awareness of the survey, all callers in the sample received from The Quit Group each week were sent prior notification postcards. Prior notification cards were also sent to those who had participated in the three-week survey, a week prior to be contacted again for the six-month survey. These postcards gave the name of the research company and its relationship to The Quit Group, a brief overview of the purpose of the research, the likely survey dates, confidentiality and privacy statements, and also provided contact details for both the research company and The Quit Group should the respondent wish to check the legitimacy of the research or want to opt out.

In order to further enhance the survey response rate, all potential respondents were offered the opportunity of being entered into a monthly prize draw for one of two prizes of \$100 worth of vouchers (of the respondent's choice) on completion of an interview.

Finally, potential respondents who were too busy to complete the interview over the phone, or who had hearing or language difficulties were offered the opportunity to complete the questionnaire either on-line, or on hard copy as a self-completion questionnaire.

However, it should be noted that these additional methods of completion were seldom used – one respondent was provided with the link to the three-week online version of the questionnaire but did not complete it. Three respondents were sent hard copies of the three-week survey, but only one of these was returned. No respondents requested copies of the six-month survey, either in hard copy or online.

3.5 Analysis

Backcoding

At the end of each month of interviewing, all open-ended responses, as well as those entered into 'other' categories, were 'backcoded'. This involved fitting responses into existing categories, and where necessary, creating new categories so that all results had a numeric code. Coding was undertaken by an experienced member of Gravitas' coding team, and all coding was checked by the Gravitas field manager and project manager prior to incorporation into the main database.

Data Cleaning

The data cleaning process was conducted once interviewing for the three-week and six-month surveys was complete, and involved manual checking of the dataset by the Gravitas EDP manager to ensure each record was complete. Checking of data for each question to ensure responses given were valid (that is, were contained within the options provided) also took place.

Data Weighting

As stated earlier, to ensure sufficiently robust sample sizes for the key groups of interest, minimum quotas were set. In order to boost the sample size of some of the smaller groups, the quotas set were typically higher than the group's actual share of the Quitline caller population – and consequently, quotas set for the larger groups were generally smaller than their actual share of the Quitline caller population.

To ensure that the results for the total sample were representative of the actual Quitline caller population, they have been weighted – by call status (first time/previous), and within this, by ethnicity. Results by ethnicity were further broken down by gender and NRT status, with all results then weighted by age. Due to the complexity of the weighting, iterative proportional fitting (rim weighting⁵) was used. The results presented in this report are weighted.

⁵ Rim-weighting uses a mathematical algorithm to provide an even distribution of results across the entire dataset while balancing certain categories such as age or gender to pre-determined totals. It weights the specified characteristics simultaneously and disturbs each variable as little as possible. For example, for samples to be weighted so that they were 50% male and 50% female, and also 20% in each of five age brackets, the algorithm would calculate correct weighting that needed to be applied to each table entry (combining age and gender).

Cross-Tabulations

All data presented in the report has been cross-tabulated by key demographic variables:

- ethnicity (Pacific, Māori, non-Māori/non-Pacific);
- age group (younger than 18 years, 18-24 years, 25-44 years, 45-64 years, 65+ years);
- gender;
- socio-economic status; and
- quit status at the six-month follow-up survey (using the Seven Day Point Prevalence quit rate⁶).

Statistically significant differences in results by demographic characteristics have been reported in the text. Cross-tabulated tables for each question – with all statistically significant differences identified – have been provided in the Appendices. All significant differences are reported at the 95% confidence interval/5% significance level.

Important Note About Ethnicity Classification

In identifying which key group of interest a Quitline caller should be assigned to, first priority was given to the youth quota (that is, any caller identified as being younger than 18 years of age was assigned to the ‘youth’ quota, irrespective of their ethnic group). Second priority was given to the Pacific Peoples quota (that is, any caller 18 years or older identified as Pacific was assigned to the ‘Pacific’ quota, rather than ‘non-Māori’). This prioritisation meant that a Pacific caller younger than 18 years was assigned to the ‘youth’ quota, rather than ‘Pacific’.

Therefore, in the tables in the Appendix (Section 3), the sample size for ‘Pacific’ in the key groups of interest table (n=361) is smaller than the ‘Pacific’ sample in the tables by ethnicity (n=377) as n=16 of the ‘Pacific’ sample were younger than 18 years and therefore have been prioritised to the ‘youth’ quota.

Defining Socio-Economic Status

Respondents’ socio-economic status was classified using the New Zealand Socioeconomic Index (NZSEI)⁷. This is an occupationally-based, New Zealand-specific index that assigns socio-economic scores to occupations on the basis of the education and income profiles of New Zealanders. The process used to classify the socio-economic status of each survey respondent is outlined in the Appendix (Section 3).

For the purpose of analysis, respondents have been grouped into six SES Groups – as follows:

⁶ That is, have not smoked a cigarette in the last seven days.

⁷ The research report detailing the construction and validity of the NZSEI is available online at the Statistics New Zealand website:

<http://www.stats.govt.nz/NR/rdonlyres/6D423C2C-2F04-4AE8-BD319012A279BF7D/0/NewZealandSocioeconomicIndex1996.pdf>.

The spreadsheet containing the NZSEI scores for three levels of the occupational classification (NZSCO90) is also available online at the Statistics New Zealand website:

<http://www.stats.govt.nz/NR/rdonlyres/590E5425-5354-4CDD-B289-E2BEC4A6A129/0/NewZealandSocioEconomicIndex1996.xls>

Note: As Table 3.2 indicates, sample sizes for SES Groups 1 and 2 are relatively small. Consequently, unless they have been identified as being statistically significant, results for these two groups should be considered indicative only.

Table 3.2: SES Class Divisions Examples

SES Group	Example Occupations	Share of Six-Month Survey Sample
Group 1	Anaesthetist Company director Lawyer	1%
Group 2	Accountant Secondary school teacher Mechanical engineer	4%
Group 3	Journalist Nurse Police officer	22%
Group 4	Builder Farmer School secretary	31%
Group 5	Truck driver Machine operator Office administrator	25%
Group 6	Waiter Hairdresser Cleaner	17%

Rounding

The cross-tabulated results provided in the Appendices have been presented to one decimal place. In contrast, for ease of reading, results in this main report are presented as whole numbers, with decimals between 0.1 and 0.4 rounded down to the nearest whole number and decimals between 0.5 and 0.9 rounded up to the nearest whole number. As a result of this rounding process, occasionally numbers presented in the text and in graphs in the main report may add to slightly more or less than 100%.

4. Demographic Profile of Survey Respondents

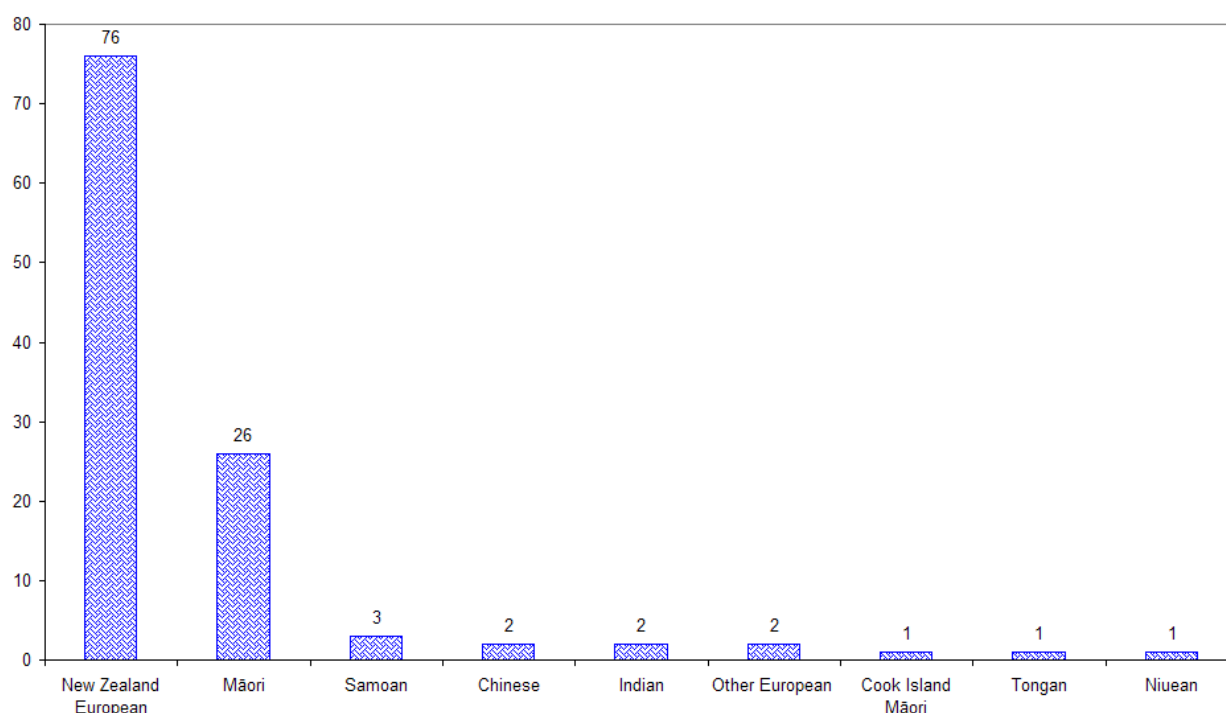
Key Points

- Seventy-six percent of respondents identified as being of New Zealand European descent, 26% of Māori descent and 6% of Pacific descent.
- Just less than seven in ten respondents were aged between 20 and 49 years old, including 21% aged between 20 and 29 years, 25% aged between 30 and 39 years, and a further 21% between 40 and 49 years. Overall, 47% of respondents were in the Quitline's target age range of 25-44 years.
- Fifty-five percent of respondents were female, while 45% were male.
- Just less than half of all respondents (48%) lived in a family with at least one child, including 25% living in a two parent family with one or two children, 11% in a two parent family with three or more children and 12% in a one parent family.
- The greatest single share of respondents lived in a two-person household (29%). One-fifth (20%) lived in a three-person household, while a further 20% lived in a four-person household. Twelve percent of respondents lived alone.
- *A full sample profile is provided in the Appendix (Section 3.4).*

4.1 Ethnicity

Just over three-quarters of all respondents (76%) identified as being of New Zealand European descent. A quarter (26%) of respondents were of Māori descent, while 6% identified as being of Pacific descent⁸, including 3% of Samoan ethnicity. Two percent of respondents were Chinese, and 2% were Indian. Multiple responses to this question were permitted. (See Table 4.1 in Appendix).

Figure 4.1: Ethnicity (%)



Base: $n=2,716$ (All respondents in the six-month follow-up survey)

Multiple responses to this question permitted. Consequently, graph may total more than 100%

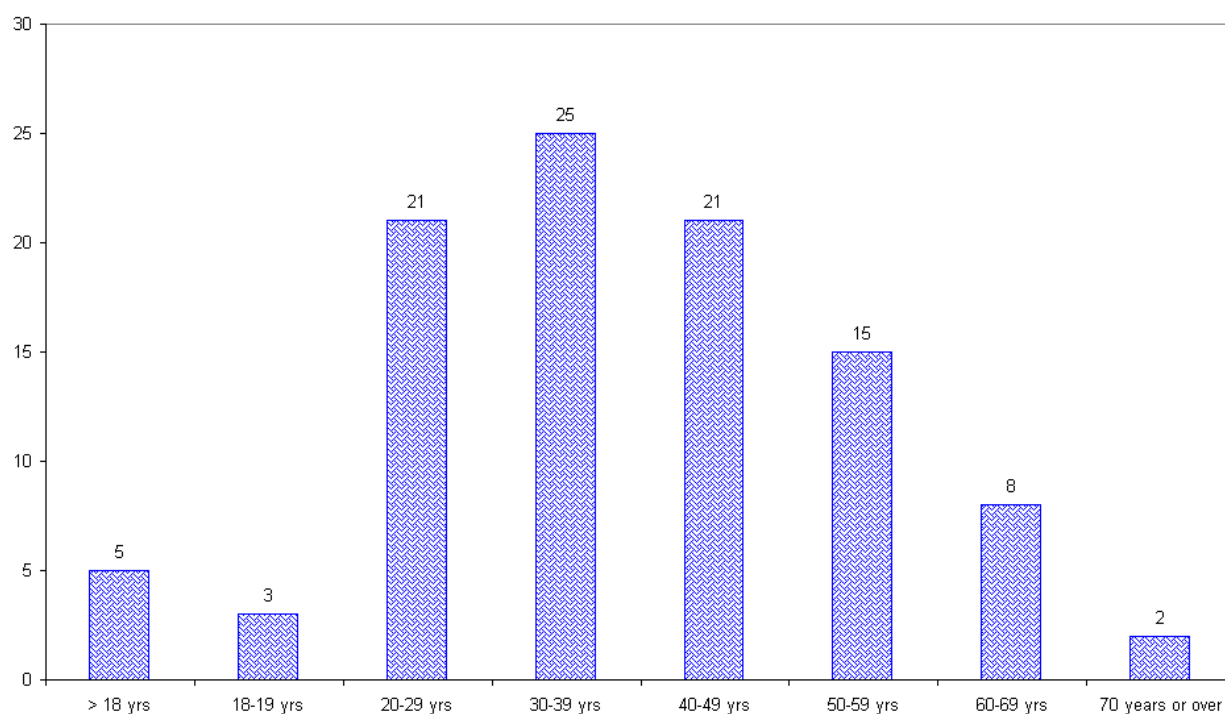
⁸ In identifying which key group of interest a Quitline caller should be assigned to, first priority was given to the youth quota (that is, any caller identified as being younger than 18 years of age was assigned to the 'youth' quota, irrespective of their ethnic group). Second priority was given to the Pacific Peoples quota (that is, any caller 18 years or older identified as Pacific was assigned to the 'Pacific' quota, rather than 'non-Māori'). This prioritisation meant that a Pacific caller younger than 18 years was assigned to the 'youth' quota, rather than 'Pacific'. Therefore, in the tables in the Appendix (Section 3.4), the sample size for 'Pacific' in the key groups of interest table ($n=361$) is smaller than the 'Pacific' sample in the tables by ethnicity ($n=377$) as $n=16$ of the 'Pacific' sample were younger than 18 years and therefore have been prioritised to the 'youth' quota.

4.2 Age

Overall, 47% of respondents were in the Quitline's target age range of 25-44 years. Just less than seven in ten respondents were aged between 20 and 49 years old, including 21% aged between 20 and 29 years, 25% aged between 30 and 39 years, and a further 21% between 40 and 49 years. Five percent of respondents were younger than 18 years, while 2% were 70 years or older.

Those of non-Māori/non-Pacific descent (29%) were significantly more likely than those of Māori (18%) or Pacific (11%) descent to be aged 50 years or older. In contrast, those aged between 18 and 29 years were over-represented among Pacific respondents (38% of all Pacific callers aged between 18 and 29 years, compared with 25% of Māori and 22% of non-Māori/non-Pacific respondents). (See Table 4.2 in Appendix).

Figure 4.2: Age (%)



Base: $n=2,716$ (All respondents in the six-month follow-up survey)

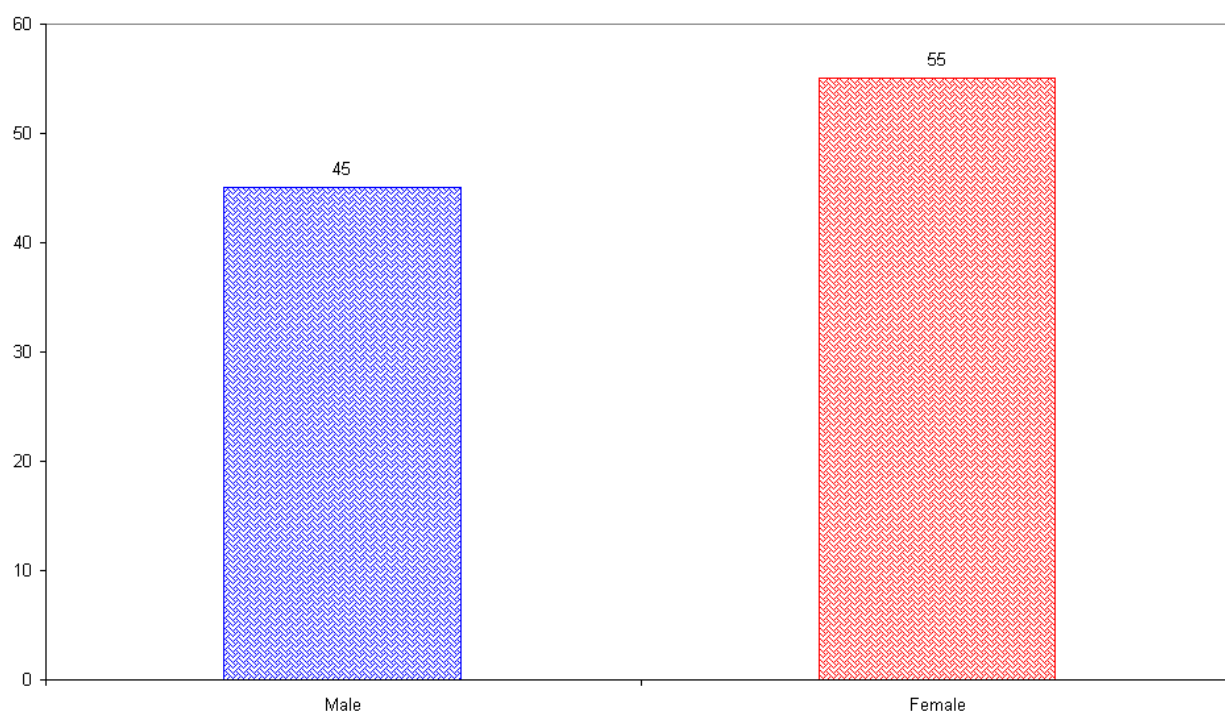
4.3 Gender

Fifty-five percent of respondents were female, while 45% were male.

Māori respondents (64%) were significantly more likely to be female than was the case for Pacific (52%) or non-Māori/non-Pacific (52%) respondents.

Among respondents in the lowest SES Group (Group 6), the share of females (65%) was significantly higher than the share of males (35%). (See Table 4.3 in Appendix).

Figure 4.3: Gender (%)



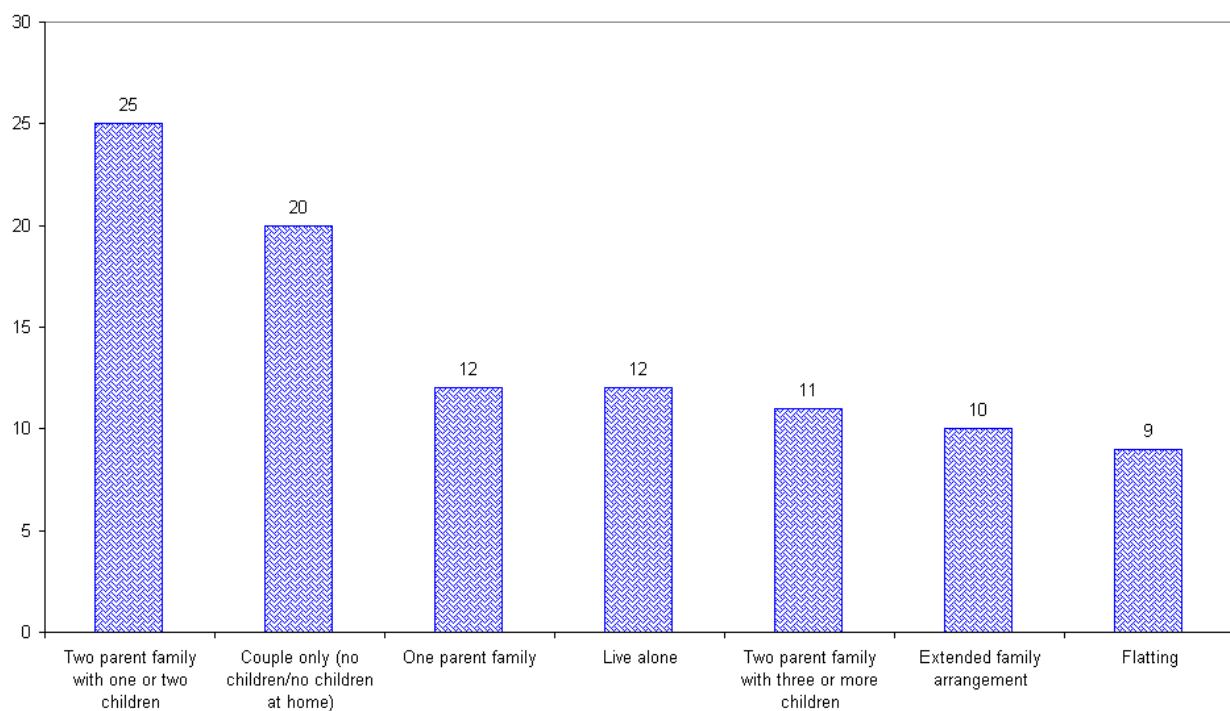
Base: $n=2,716$ (All respondents in the six-month follow-up survey)

4.4 Living Situation

Around half of all respondents (48%) lived in a family with at least one child, including 25% living in a two parent family with one or two children, 11% in a two parent family with three or more children and 12% in a one parent family⁹. One in five (20%) lived with their partner only, while 12% lived alone.

Pacific (22%) and Māori (15%) respondents were significantly more likely than non-Māori/non-Pacific respondents (7%) to be living in a household with extended family. In contrast, non-Māori/non-Pacific respondents were more likely to live in a couple-only household (24%) than Māori (13%) and Pacific (9%) respondents. Pacific (19%) and Māori (15%) were also significantly more likely to be living as a two-parent family with three or more children than non-Māori/non-Pacific respondents (9%). Furthermore, Pacific respondents were significantly less likely to live alone (2%) than both non-Māori/non-Pacific (13%) and Māori (9%) respondents. (See Table 4.4 in Appendix).

Figure 4.4: Living Situation (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

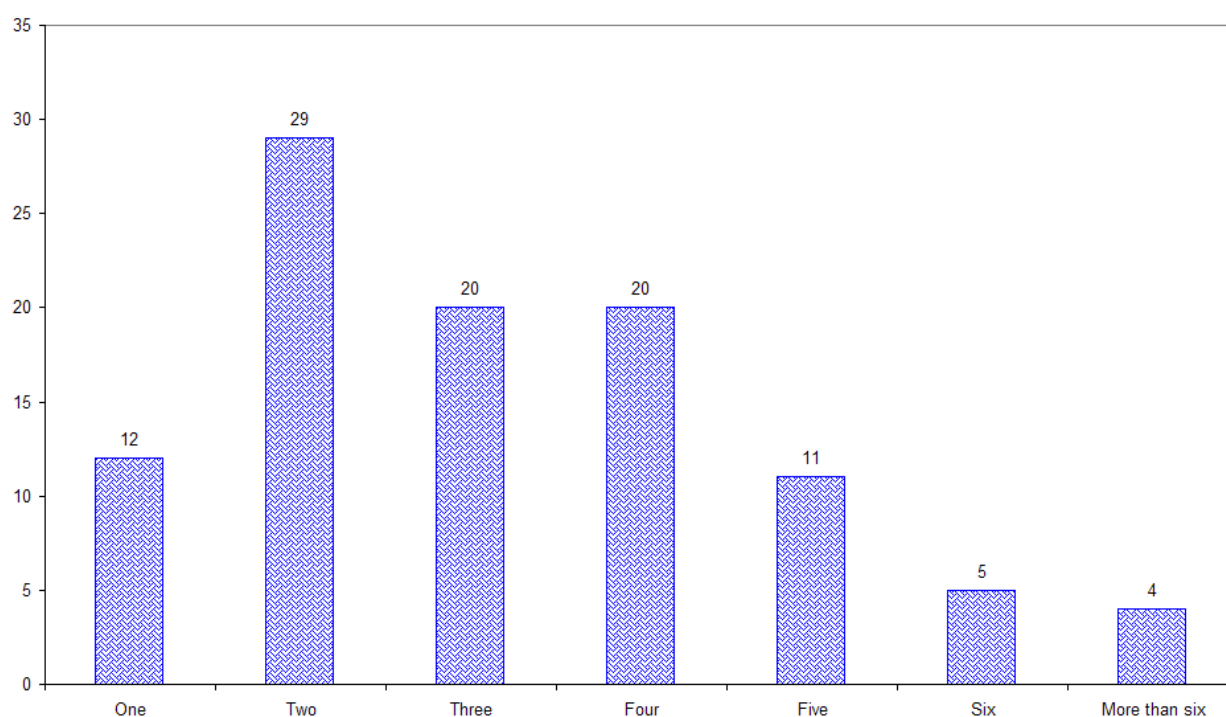
⁹ Note: The 'extended family' category has not been included in assessing the share of survey respondents living as a family with at least one child in the household. Extended family arrangements may include adult children living with their parents and grandparents, adult siblings living together etc. While, in some cases, there will be children living in the household eg grandparents raising grandchildren, it cannot be assumed that this is the case for every household.

4.5 Number in Household

The greatest single share of respondents lived in a two-person household (29%). One-fifth (20%) lived in a three-person household, while a further 20% lived in a four-person household. One in five respondents lived in a household of five or more people, including 4% in a household comprised of more than six people. Twelve percent of respondents lived alone.

Pacific (39%) and Māori (30%) respondents were significantly more likely to live in a household of five or more people than non-Māori/non-Pacific respondents (13%). (See Table 4.5 in Appendix).

Figure 4.5: Number of People Living in Household (%)

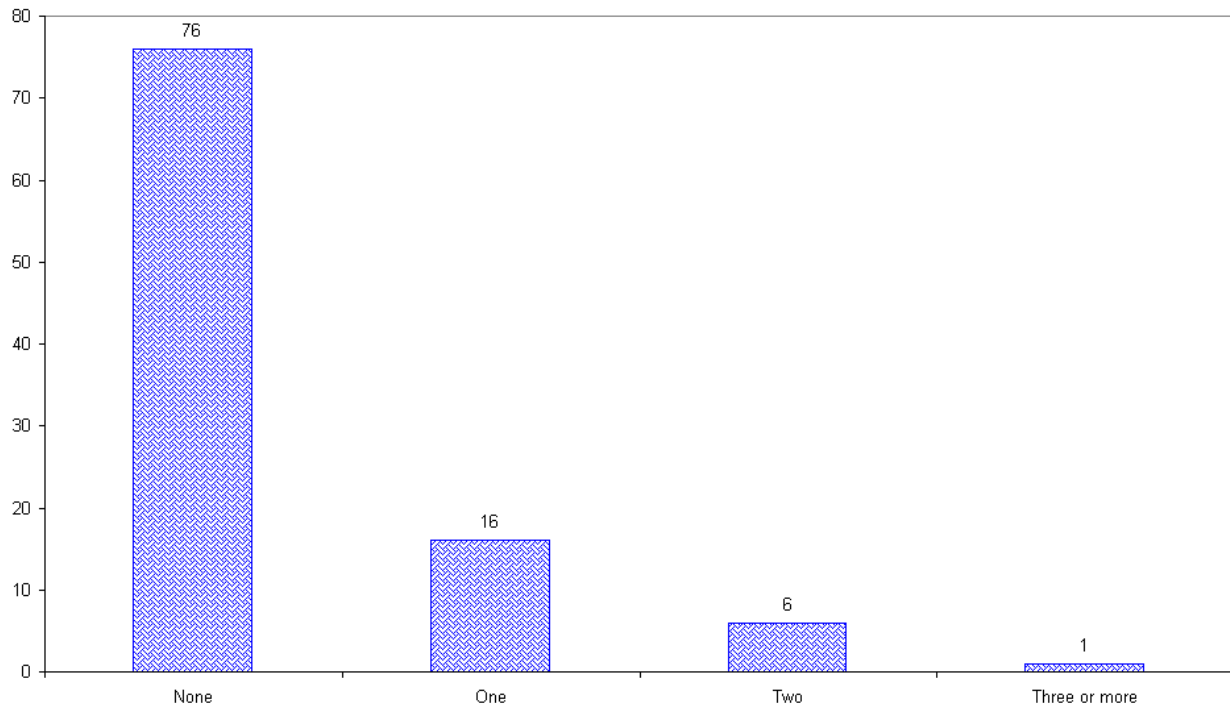


Base: n=2,716 (All respondents in the six-month follow-up survey)

4.6 Number of Children Younger Than Five Years In Household

Just over three-quarters of respondents (76%) did not have any children younger than five years of age living in their household. Sixteen percent of respondents had one child younger than five years living in their household, while 6% lived with two pre-school children. (See Table 4.6 in Appendix).

Figure 4.6: Number Younger Than Five Years Old (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

4.7 Number of Smokers In Household

Respondents were asked how many people in their household, including themselves if they were not quit, were daily smokers. A quarter of respondents (26%) reported living in a household where there were no daily smokers. Over two in five (44%) lived in a household where there was one daily smoker (this being the respondent if they were currently not quit), and just over a quarter (29%) lived in a household with at least two people who smoked every day, including 8% living in a household with three or more daily smokers.

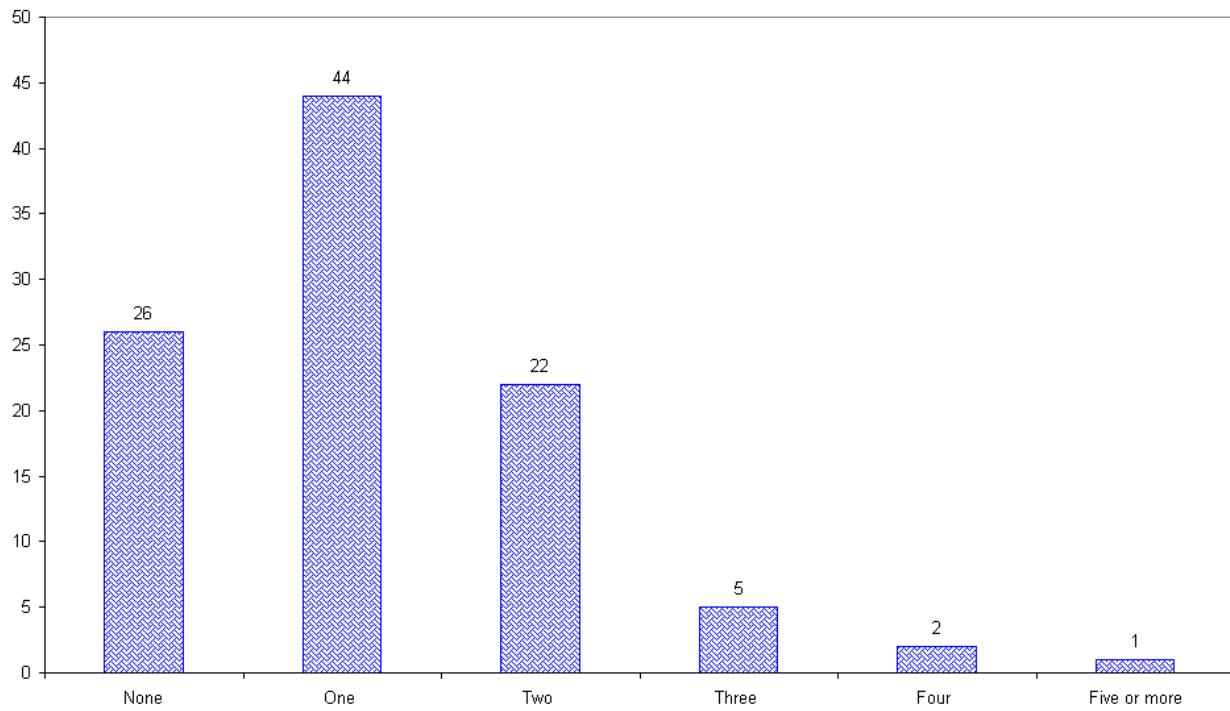
Pacific (12%) and Māori (10%) respondents were significantly more likely to live in a household with three or four daily smokers than non-Māori/non-Pacific respondents (5%).

Respondents younger than 18 years of age (18%) and those between 18 and 24 years old (15%) were significantly more likely to live in a household with three or four daily smokers than all other respondents (including 5% of those aged 25 to 44 years or 45 to 64 years, and no respondents aged 65 years or older).

Those who were not quit at the six-month follow-up (using Seven Day Point Prevalence quit rate) (10%) were significantly more likely to live in a household with three or more daily smokers than those who had quit (1%). Of those who were not quit (using Seven Day Point Prevalence Quit Rate) at the six-month survey, 39% lived in a household with other smokers (that is, lived in a household with at least one other smoker), compared with 7% of those who were quit (that is, lived in a household with at least one other daily smoker) - a significant difference¹⁰. (See Table 4.7 in Appendix).

Note: Respondents who lived alone were not asked this question but have been included in the data set for this question. In the graph below, those living alone and quit at the six-month survey (using Seven Day Point Prevalence quit rate) have been recorded as 'none' and those not quit have been recorded as 'one'.

¹⁰ Of those who were quit, 73% lived in a household with no other daily smokers, suggesting the respondent was (prior to quitting) the only smoker in the household. Of those who were not quit, 54% lived in a household with one daily smoker (ie. the respondent). The anomaly of the 6% of those 'not quit' living in a household with no daily smokers occurs because these respondents self-identified as being quit at the six-month survey, but are not considered quit using the Seven Day Point Prevalence Quit Rate calculation .

Figure 4.7: Number of Daily Smokers in Household (%)

Base: $n=2,716$ (All respondents in the six-month follow-up survey)

4.8 Smoking Status of Partner

Just over half of respondents with a partner (53%) stated that their partner had either never smoked/never smoked regularly (29%) or their partner had been a smoker in the past but was currently quit (24%). A further 5% had a partner who was currently attempting to quit. Two in five respondents with a partner (42%) described their partner as either a current¹¹ (34%) or occasional¹² (8%) smoker.

Māori respondents (23%) were significantly less likely than Pacific (33%) and non-Māori/non-Pacific respondents (30%) to have a partner who had never smoked/never smoked regularly.

The share of respondents with a partner who was a past smoker increased significantly with age - from 8% among those younger than 18 years to 58% among respondents aged 65 years or older. In contrast, the share of respondents with a partner who is an occasional smoker decreased with age - from 16% among those younger than 18 years, to 2% among respondents 65 years or older. Those aged 65 years or older were also significantly less likely to have a partner who is a current smoker (16%, compared with 43% of those aged younger than 18 years, 47% of those aged 18 to 24 years, 33% of those aged 25-44 years and 32% of respondents aged 45-64 years).

Males were significantly more likely to have a partner who had never smoked/never smoked regularly (34%) than female respondents (24%), while females were significantly more likely to have a partner who was a current smoker (38%, compared with 29% of male respondents).

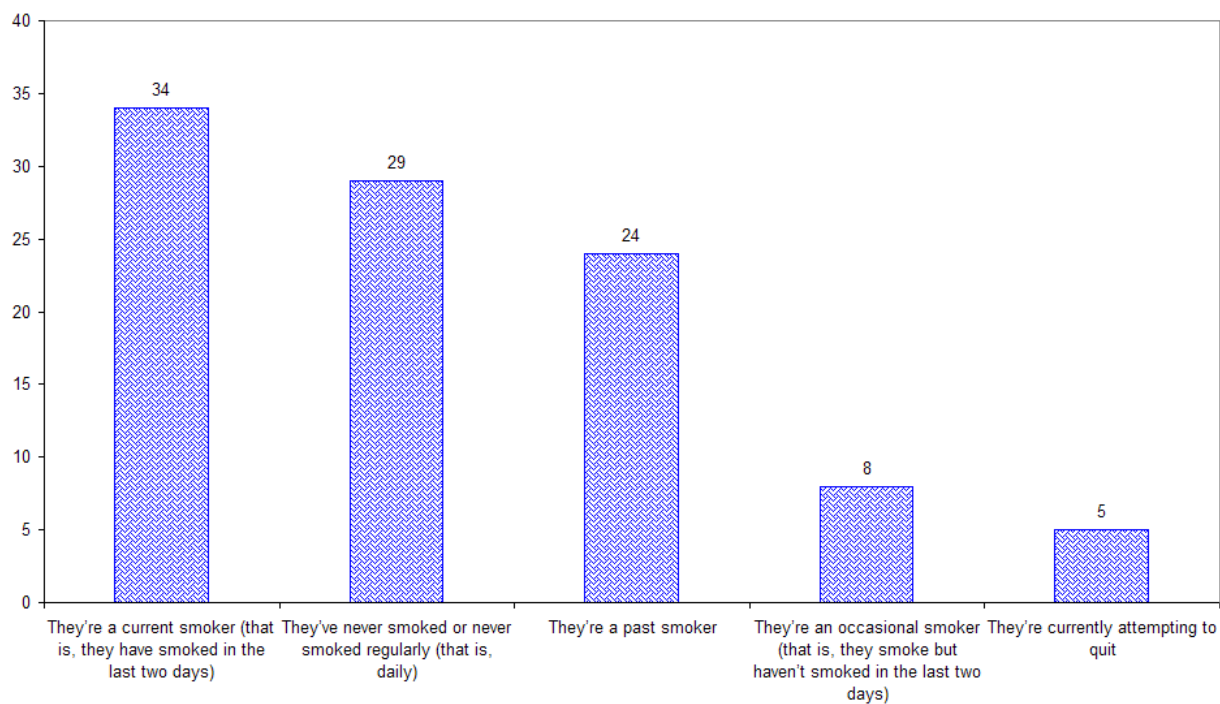
Those in Groups 4 (35%), 5 (37%) and 6 (38%) were significantly more likely to have a partner who smokes than those in Group 3 (27%).

The relationship between the smoking status of the respondent's partner and their likelihood of quitting is clearly evident, with those who were quit (using Seven Day Point Prevalence Quit Rate) at the six-month survey being significantly more likely to have a non-smoking partner (33%), or a partner who was a previous smoker (37%) than those who were not quit (27% and 18% respectively). In contrast, 40% of those who were not quit had a partner who currently smoked, a significantly greater share than for those who were quit (21%). (See Table 4.8 in Appendix).

¹¹ That is, had smoked in the last two days

¹² That is, they smoke but haven't done so in the last two days

Figure 4.8: Smoking Status of Partner (%)



Base: n=1,784 (All respondents in the six-month follow-up survey who had a partner)

4.9 Occupation

Sixty-four percent of respondents were employed either full-time or part-time outside the household, with the greatest share being either service/sales workers (15% of the total six-month survey sample) or technicians/associate professionals (8%). One in ten respondents (10%) were beneficiaries, while 7% (each) reported being students, retired, or involved in home responsibilities.

Pacific (67%) and non-Māori/non-Pacific (66%) respondents were significantly more likely than Māori respondents (58%) to be employed outside of the home, as were male respondents (70%, compared with 60% of females) and those in SES Group 6 (100%, significantly higher than all other SES groups).

Of those who had quit smoking (using Seven Day Point Prevalance Quit Rate):

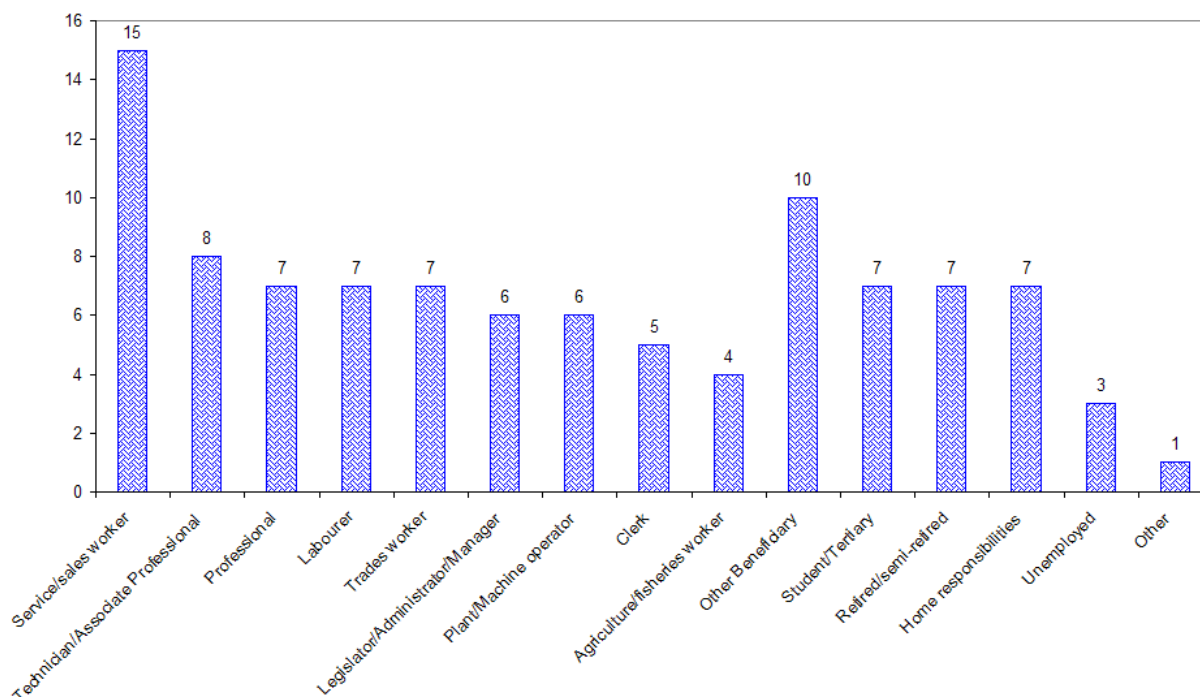
- 9% were professionals, significantly higher than 6% of those who had not quit;
- 8% were retired/semi-retired, significantly higher than 6% of those who had not quit; and
- 8% were involved in home responsibilities, significantly higher than 6% of those who had not quit.

Of those who had not quit smoking (using Seven Day Point Prevalance Quit Rate):

- 11% were other beneficiaries, significantly higher than 8% of those who had quit; and
- 4% were unemployed, significantly higher than 2% of those who had quit.

(See Table 4.9 in Appendix).

Figure 4.9: Occupation (%)



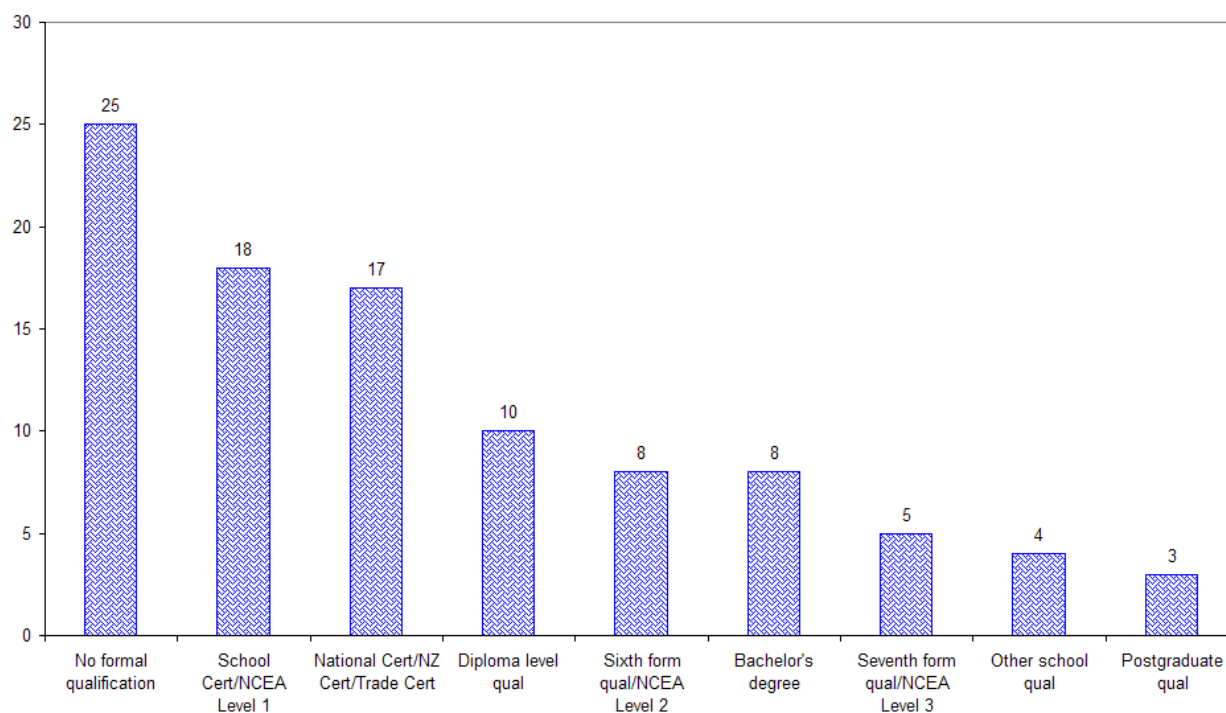
Base: n=2,716 (All respondents in the six-month follow-up survey)

4.10 Highest Education Qualification

One-quarter (25%) of respondents had no formal educational qualification. Thirty-six percent of respondents' highest formal education qualification was a secondary school level qualification, including 18% with School Certificate/NCEA Level 1, 8% with Sixth Form Certificate/NCEA Level 2, 5% with Seventh Form Certificate/NCEA Level 3 and 4% with an overseas school qualification. Seventeen percent of respondents had a National Certificate/New Zealand Certificate/Trade Certificate, 10% had a diploma-level qualification, while a further 11% had either a Bachelor's (8%) or post-graduate (3%) qualification.

Those who were not quit (using Seven Day Point Prevalance Quit Rate) were significantly more likely to have no formal qualifications (28%) than those who were quit (19%). In contrast, those who were quit (9%) were significantly more likely than those who were not quit (7%) to have a bachelor degree. (See Table 4.10 in Appendix).

Figure 4.10: Highest Formal Educational Qualification (%)

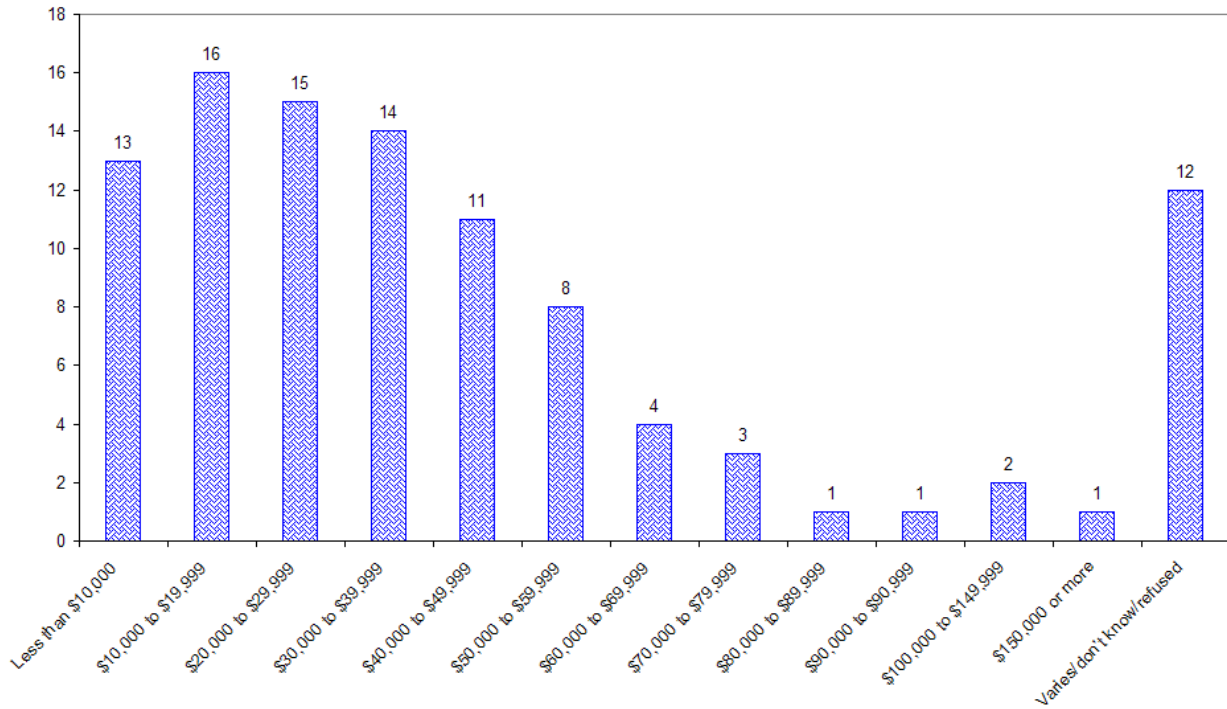


Base: n=2,716 (All respondents in the six-month follow-up survey)

4.11 Personal Income

Three in five respondents (59%) had a personal annual income of less than \$39,999, including 13% with an income of less than \$10,000. A quarter of respondents (26%) had a personal income of between \$40,000 and \$79,999 annually, while a further 5% had an annual income of \$80,000 or more. (See Table 4.11 in Appendix).

Figure 4.11: Personal Income (%)



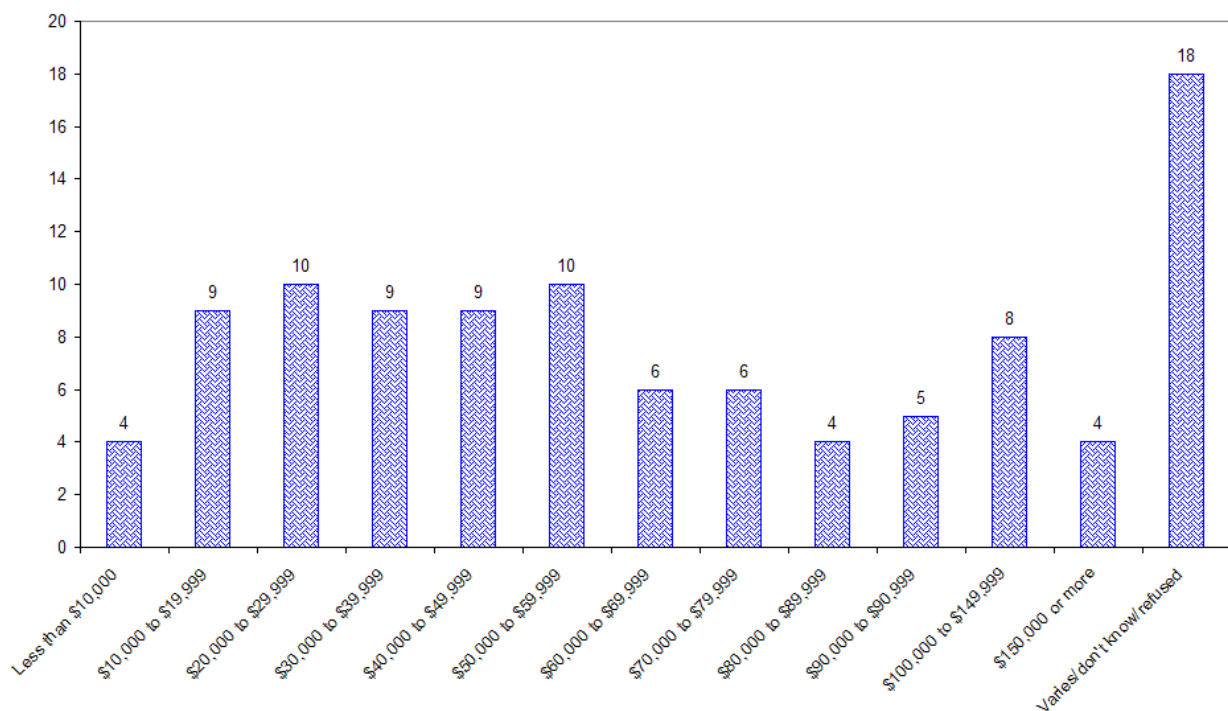
Base: n=2,716 (All respondents in the six-month follow-up survey)

4.12 Household Income

Thirty-two percent of respondents lived in a household with an income of less than \$40,000, while just less than a third (31%) had an annual household income between \$40,000 and \$79,999 before tax. One in five respondents (21%) had an annual household income of at least \$80,000, including 12% with a household income of \$100,000 or more.

Respondents who had an annual household income of between \$10,000 and \$19,999 (10%) were over-represented among those who had not quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey compared with those who had quit (7%). In contrast, those who had an annual household income of \$150,000 or more were over-represented among those who had quit when compared with those who had not (5% of those who had quit, compared with 3% of those who were not quit). (See Table 4.12 in Appendix).

Figure 4.12: Household's Annual Income Before Tax (%)



Base: n=2,469 (All respondents in the six-month follow-up survey, excluding those who lived in a flatting situation or in an institution)

5. Quit Rates

Key Points

- At the six-month follow-up, just less than one-third of respondents (31%) had not smoked at all in the seven days prior to the survey being undertaken (**'Seven Day Point Prevalence'**). This compares with 43% at the three-week follow-up survey.
- While there were no significant differences in seven-day point prevalence rates by ethnicity and gender, those 25 years or older were significantly more likely to have not smoked in the last seven days (33% of those aged between 25 and 44 years, 30% of those aged between 45 and 64 years and 40% of those aged 65 years or older) than those aged 18-24 years (23%) or younger than 18 years (18%). Those in the highest socio-economic group were most likely to have not smoked in the last seven days (40%) while those in the lowest group were least likely (26%).
- The **Continuous Quit Rate** at the six-month follow-up was 24% (that is the respondent had not smoked at all since they registered with Quitline). This compares with 47% at the three-week survey.
- At six-months, the Continuous Quit Rate was significantly higher among Pacific (32%) respondents than Māori (21%).
- The Continuous Quit Rate at six-months increased with age and socio-economic status, being lowest among youth (4%) and highest among those aged 65 years and older (37%) and those in SES Group 1 (40%).
- The six-month **Intention to Treat (Seven Day Point Prevalence) Quit Rate** (assuming those lost to follow-up had smoked in the last seven days) was 21%.
- The six-month **Intention to Treat (Continuous) Quit Rate** (assuming those lost to follow-up had not quit) was 17%.

5.1 Seven Day Point Prevalence Quit Rate¹³

Note: 'Seven Day Point Prevalence' is a measure of the share of the sample that had not smoked at all in the seven days prior to the survey.

At the six-month follow-up, just less than a third of respondents (31%) had not smoked at all in the seven days prior to the survey being undertaken. This compared with 43% at the three-week follow-up survey.

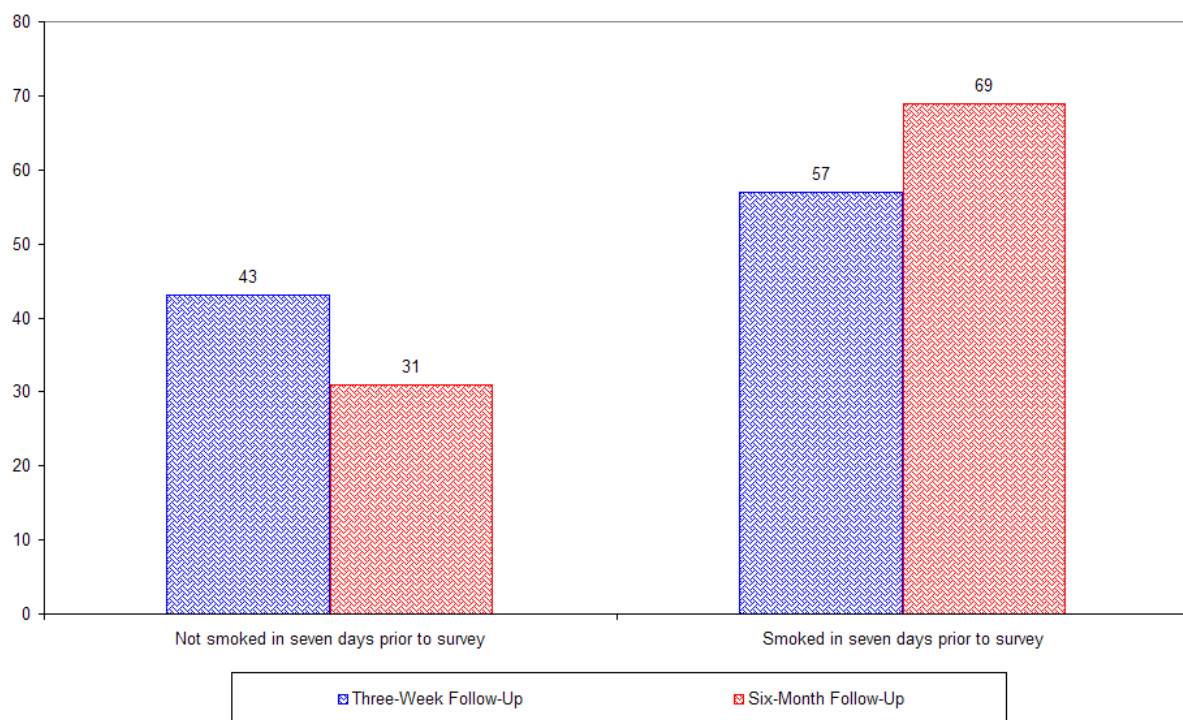
While there were no significant differences in Seven Day Point Prevalence rates by ethnicity, respondents 25 years or older were significantly more likely not to have smoked in the seven days leading up to the survey (33% of those aged between 25 and 44 years, 30% of those aged between 45 and 64 years and 40% of those aged 65 years or older) than respondents younger than 18 years (18%) or aged 18 to 24 years (23%). Of the five age groups, those aged 65 years or older had the highest seven day point prevalence quit rate (40%).

¹³ Using the 'responder-only rate'

While females were significantly more likely than males to have smoked in the seven days prior to the three-week survey, no difference was reported between males and females at the six-month follow-up.

A relationship was evident between SES Group and likelihood of not having smoked in the last seven days, with respondents in the highest SES Group (Group 1) being most likely to not have smoked in the seven days prior to the survey (40%) and those in the lowest group (Group 6) being least likely (26%). Those in the mid-SES Groups - Group 3 (33%) and Group 4 (34%) - were also significantly more likely to have not smoked in the seven days leading up to the survey than respondents in the lowest SES Groups - Group 5 (27%) and Group 6 (26%). (See Table 5.1 in Appendix).

Figure 5.1: Seven Day Point Prevalence Quit Rate at Three-Week and Six-Month Follow-Up (%)



Base: Three-week follow-up n=3,969; Six-month follow-up n=2,716 (All respondents)

Of all respondents interviewed as part of the six-month survey:

- 22% had not smoked in the seven days prior to being interviewed for both the three-week and six-month surveys;
- 22% had not smoked in the seven days prior to being interviewed for the three-week survey but had smoked at least once in the seven days prior to being interviewed for the six-month survey;
- 9% had smoked in the seven days prior to being interviewed for the three-week survey, but had not smoked at least seven days before being interviewed for the six-month survey; and
- 46% reported having smoked in the seven days prior to being interviewed for both surveys.

Of the three ethnic groups, Pacific (25%) and non-Māori/non-Pacific (23%) callers were most likely to be quit at both surveys (compared with 18% of Māori). In contrast, Māori callers were the most likely to still be smoking when contacted for both the three-week and six-month follow-ups (49%, compared with 45% of non-Māori/non-Pacific and 43% of Pacific callers).

Rates of being quit at both points of follow-up increased considerably by age. Among youth (those aged younger than 18 years), only 4% reported being quit at both the three-week and six-month follow-ups. This compared with a third of those aged 65 years or older (33%). However, youth had the highest share of those not quit at the three-week survey, but quit at the six-month follow-up (14%). This result suggests that youth take more time than older smokers to prepare/get ready to quit.

Rates of being quit at both points of follow-up also increased with socio-economic status. Among SES Group 5 and 6 participants, 18% reported not having smoked in the seven days prior to both surveys. In contrast, among SES Group 1 participants, 32% reported being quit at both surveys. (See Table 5.2 in Appendix).

Table 5.1: Seven Day Point Prevalence Quit Rate at Three-Week and Six-Month Follow-Ups (%)

Seven Day Point Prevalence at Six-Month Follow Up	Seven Day Point Prevalence at Three-Week Follow Up		
	Not Smoked In Last 7 Days	Smoked In Last 7 Days	Total
Not smoked in last 7 days	22	9	31
Smoked in last 7 days	22	46	68
Don't know/Refused	< 1	0	9
Total	44	55	

Base: n=2,716 (All respondents participating in the six-month follow-up survey)

Note: The three-week seven day point prevalence rate reported above (44%) is the rate for those 2,716 respondents who participated in both surveys. The three-week seven day point prevalence rate for all n=3,969 respondents, including those 'lost to follow-up', is 43%.

Note: For the purpose of identifying statistically significant differences in survey responses, the Seven Day Point Prevalence Quit Rate has been used throughout this report to distinguish between those 'quit' (defined as those who had not smoked in the seven days prior to the six-month follow-up survey) and 'not quit' (those who had smoked in the last seven days).

5.2 Continuous Quit Rate at Six-Month Follow-Up

Note: 'Continuous Quit Rate' is a measure of the share of the sample that have smoked no more than five cigarettes over a designated time period – in the case of this study, between three weeks and six months after making contact with the Quitline.

At the six-month follow-up, 24% of respondents reported having quit smoking. This included 14% who had not smoked at all (down from 31% at the three-week survey) and 6% who reported only having had a few puffs in the six months since calling the Quitline (similar to 9% at the three-week survey). Four percent reported having smoked between one and five cigarettes. In contrast, 76% had smoked more than five cigarettes since contacting the Quitline six months previously. This compared with just over half of respondents (53%) at the three-week follow-up.

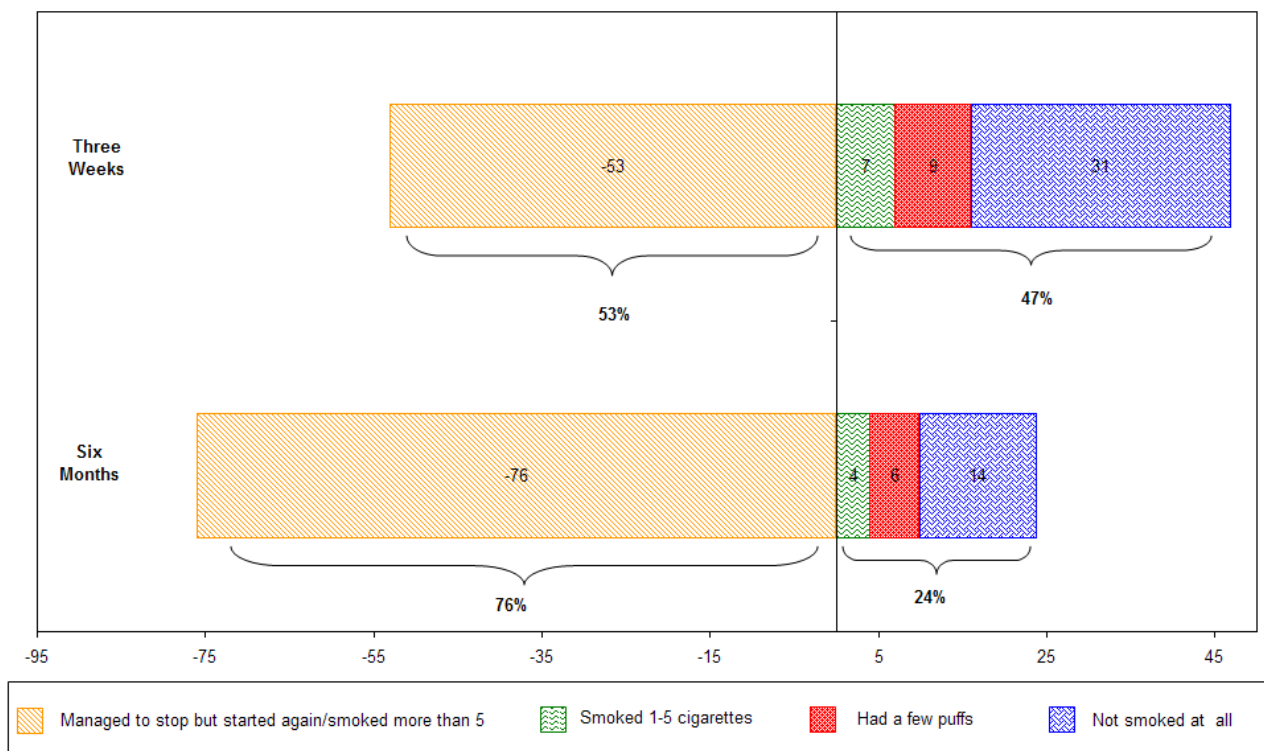
Pacific (32%) respondents were significantly more likely to have quit than their Māori counterparts (21%). Māori were significantly more likely to be not quit between the three-week and six-month follow-up surveys (79%) than non-Māori/non-Pacific (75%) and Pacific (68%) respondents.

Reflecting the pattern observed in the three-week follow-up, the proportion of those respondents who had quit smoking increased with age. Thirty-seven percent of those aged 65 years or older reported being quit at the six-month follow-up compared with 18% of those aged 18-24 years, and 4% of respondents aged 18 years or younger.

No significant difference in continuous quit rate was reported between males and females at the six-month follow-up, with 25% of males and 24% of females having quit. This differs from the three-week follow-up where males (51%) were significantly more likely to have quit than females (44%).

Results by socio-economic status showed that those in the highest group (SES Group 1) were significantly more likely to be quit (33%) compared with those in SES Groups 5 and 6 (11% of each group). Respondents in the mid-SES groups (Groups 3 and 4 each with 16%) were also significantly more likely to have be quit when compared with respondents in the lower SES groups (11% of those in Groups 5 and 6 not having smoked at all). (See Table 5.3 in Appendix).

Figure 5.2: Continuous Quit Rate at Three-Week and Six-Month Follow-Ups (%)



5.3 Intention To Treat Quit Rate

Seven Day Point Prevalence Quit Rate

Note: 'Intention To Treat Quit Rate' counts respondents who were lost to follow-up between the three-week and six-month surveys as smokers .

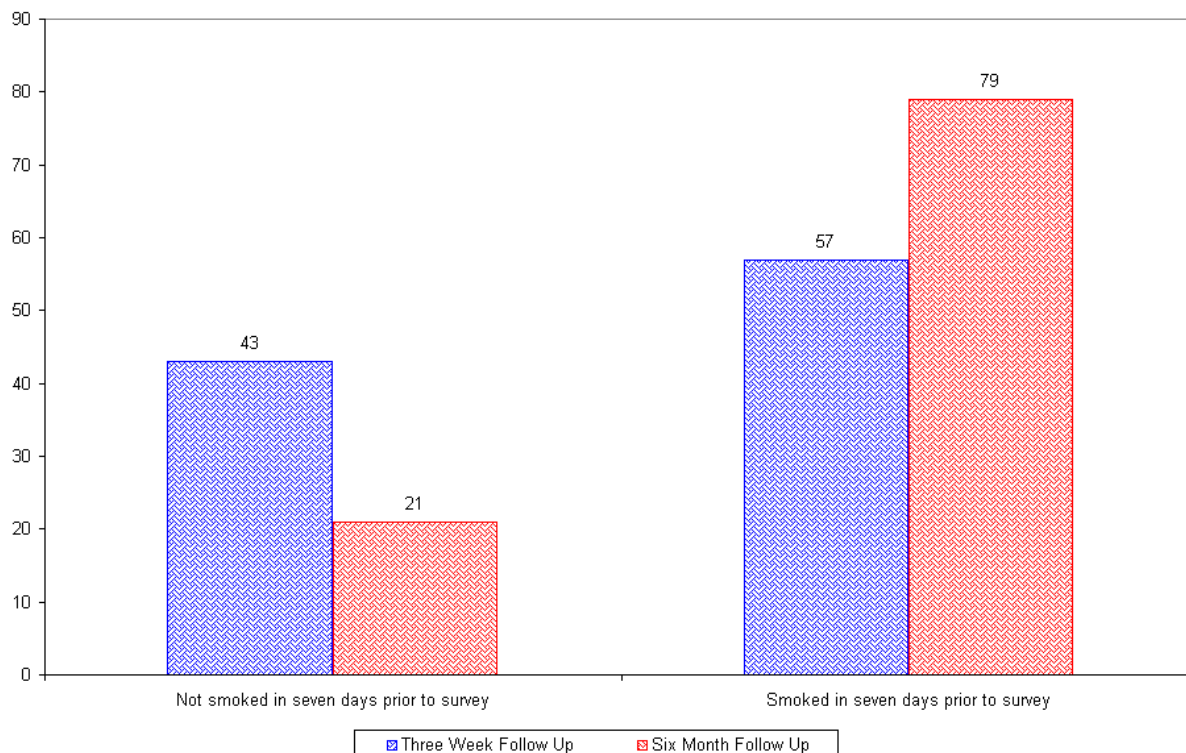
At the six-month follow-up, just over one in five respondents (21%) had not smoked at all in the seven days prior to the survey being undertaken. In contrast, 79% reported having smoked at least once in the seven days prior to the survey, or were unable to be contacted and therefore were assumed to have smoked.

Non-Māori/non-Pacific callers (22%) were significantly more likely to report being quit (that is, not having smoked in the last seven days) than their Māori counterparts (18%).

A strong relationship between age and not having smoked in the last seven days was evident, with those aged 25 to 44 years (23%), 45 to 64 years (22%) or 65 years and older (30%) significantly more likely to have not smoked than those younger than 18 years (10%) or aged between 18 and 24 years (13%).

While there were no significant differences by gender, a relationship was evident between SES Group and likelihood of not having smoked in the last seven days. The likelihood of not smoking decreased across the SES Groups, with respondents in the highest SES Group (Group 1) most likely to not have smoked in the seven days prior to the survey (36%) and those in the lowest group (Group 6) least likely (18%). (See Table 5.4 in Appendix).

Figure 5.3: Intention to Treat Seven Day Point Prevalence Quit Rate at Six-Month Follow-Up (%)



Base: Three-week follow-up n=3,969; Six-month follow-up n=2,716 (All respondents)

Continuous Quit Rate

Just over one in six respondents (17%) reported that they had quit smoking at the six-month follow-up. This includes 10% who had not smoked at all during the study period, 4% who had only had a few puffs, and a further 3% who had smoked between one and five cigarettes. In contrast, 83% reported having smoked more than five cigarettes in the previous six months or were unable to be contacted and therefore were assumed to have smoked.

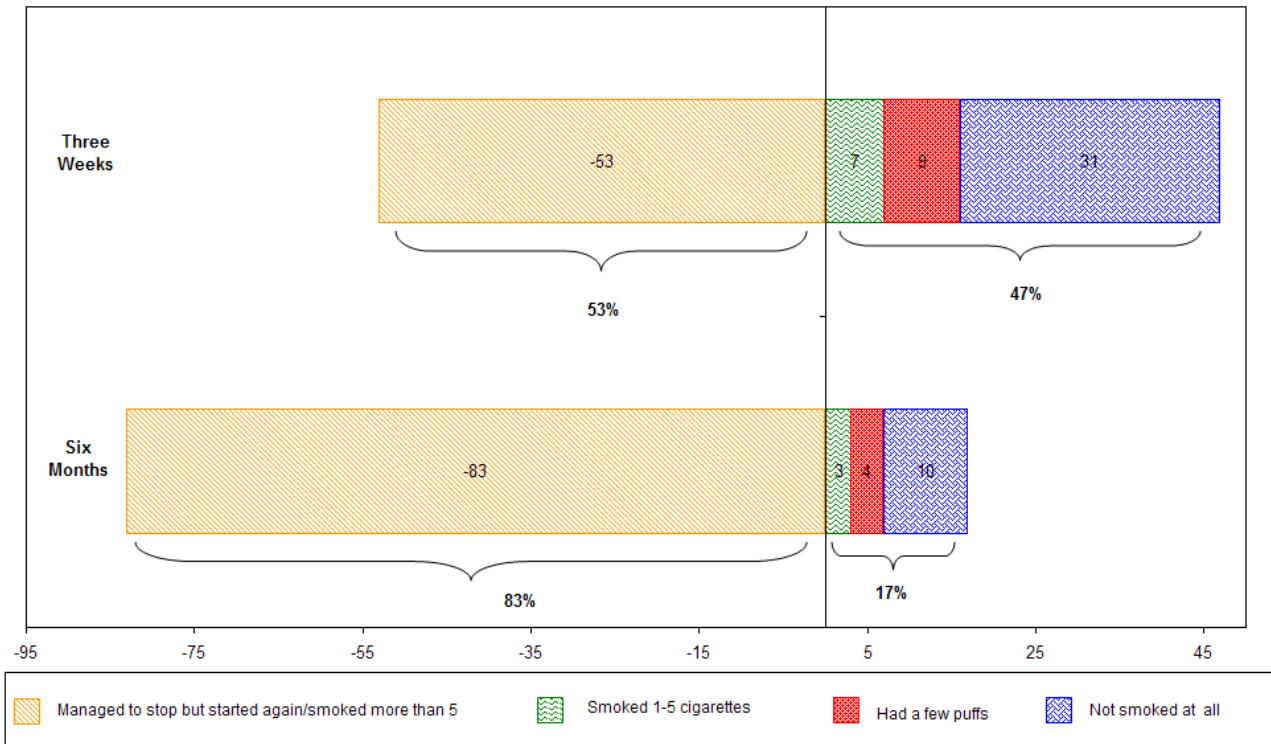
Of the three ethnic groups, Pacific (20%) and non-Māori/non-Pacific (18%) callers were significantly more likely to have quit at the six-month follow-up than Māori callers (13%). In contrast, Māori were significantly more likely to have smoked more than five cigarettes in the previous six months (87%, compared with 82% of non-Māori/non-Pacific and 80% of Pacific callers).

The likelihood of being quit increased with age, with those aged 25 to 44 years (18%), 45 to 64 years (19%) or 65 years and older (28%) significantly more likely to have quit smoking than youth (younger than 18 years - 3%) or those aged 18 to 24 years (10%).

No difference in continuous quit rate was reported between males and females at the six-month follow-up, with 17% of males and 16% of females having quit smoking.

Results by socio-economic status show that SES Group 1 callers (36%) were significantly more likely to be quit than all other participants, particularly when compared with those in SES Groups 5 (13%) and 6 (16%), (See Table 5.5 in Appendix).

Figure 5.4: Three-Week Continuous Quit Rate and Intention To Treat Continuous Quit Rate at Six-Month Follow-Up (%)



Base: Three-week follow-up n=3,969; Six-month follow-up n=2,716 (All respondents)

6. Impact of NRT, Support and Advice on Outcomes

Key Points

- Of the four key interventions (independent variables) tested (NRT redemption, NRT use, number of times spoken with a Quit Advisor and amount of Quit Pack read), NRT redemption and NRT use are identified as having the strongest positive relationship with being quit at the six-month follow-up survey (using the Seven Day Point Prevalence Quit Rate¹⁴).
- A statistically-reliable positive relationship also exists between the number of times spoken with a Quit Advisor and being quit. However the notably smaller coefficient suggests that the relationship is considerably less strong than for NRT redemption and use.
- In contrast, the relationship between the amount of the Quit Pack read and being quit is not statistically valid, indicating no true relationship between these two variables. Note however that there is evidence of a statistically-reliable positive relationship between the amount of the Quit Pack read and being quit among Maori callers.
- NRT redemption and NRT use also have a statistically-reliable, positive relationship with reduced tobacco consumption between registration and the six-month follow-up survey.
- The relationship between reduced tobacco consumption and both the number of times spoken to a Quit Advisor and the amount of the Quit Pack read are also statistically reliable, albeit less strong than for NRT redemption and use.
- No statistically-valid relationships were found between the extent of change in smokefree environment status (home and property) and any of the four key interventions.

As part of the three-week and six-month follow-up surveys, respondents were questioned about a range of variables that may have potentially impacted on their quit status, tobacco consumption and smokefree status of their home and property at the six-month follow-up survey. Multi-variate regression analysis has been used to determine and measure the predictive relationship between these three (dependent) variables and four key interventions (independent variables):

- NRT redemption;
- NRT use (defined as applied at least one patch/chewed any gum);
- Contact with Quit Advisors (number of times spoken with a Quit Advisor); and
- Engagement with the Quit Pack (amount of Quit Pack read).

Regression models were run for the total six-month follow-up survey sample and by each of the key demographic groups:

- Gender (female, male)
- Ethnicity (Māori, Pacific, Non-Māori/non Pacific);
- Age (younger than 25 years, 25 to 44 years, 45 years and over); and
- Socioeconomic status¹⁵ (SES Groups 1 and 2, SES Groups 3 and 4, SES Groups 5 and 6).

¹⁴ Using the 'responders only' rate.

¹⁵ Respondents' socio-economic status was classified using the New Zealand Socioeconomic Index (NZSEI)¹⁵. This is an occupationally-based, New Zealand-specific index that assigns socio-economic scores to occupations on the basis of

Note: Because 'NRT redeemed' is a subset of 'NRT used' and the two groups are relatively similar in size (given that most callers who redeem their NRT use at least some of it), if used in the same regression model, they would cancel one another out so that neither would show a statistically significant relationship with quit status/behaviour change/smokefree environment status. Consequently, separate regression models have been run for 'NRT redeemed' and 'NRT used'.

Note too that it is not valid to compare the coefficients between models – that is, it is not valid to say that, because 'NRT redeemed' has a higher coefficient than 'NRT used', the relationship is stronger.

the education and income profiles of New Zealanders. Groups One and Two represent respondents with the highest socioeconomic indices, with those with the lowest socioeconomic indices classified in Groups Five and Six.

6.1 Impacts on Quit Status

Note: 'Quit status' is calculated using Seven Day Point Prevalence Quit Rate¹⁶.

Total Sample

The relationship between being quit at the six-month follow-up survey and both NRT redemption and NRT use is statistically reliable (99.99%) which indicates a strong relationship between the dependent and independent variables. The coefficient of +0.673 for NRT redeemed and +0.579 for NRT used further indicates a positive relationship between NRT and being quit.

The relationship between being quit and the number of times spoken with a Quit Advisor is also statistically reliable (95%). However, the coefficient (0.076 with NRT redeemed; +0.073 with NRT used) is considerably smaller than that for NRT redemption/use, illustrating that, while there is a statistically valid relationship between being quit and number of times spoken with a Quit Advisor, it is considerably less strong than that between quit status and NRT redemption/use.

The relationship between being quit and the amount of the Quit Pack read is not statistically valid, indicating no true relationship between these two variables.

Table 6.1: Impacts on Being Quit – Total Sample

Independent Variable	P-Value	Coefficient
NRT redeemed	99.99% significant	0.67271
Total number of times spoken with QA	95% significant	0.07578
Amount of Quit Pack read	< 90% significant	-

Independent Variable	P-Value	Coefficient
NRT used	99.99% significant	0.5793
Total number of times spoken with QA	95% significant	0.0735
Amount of Quit Pack read	< 90% significant	-

¹⁶ Using 'responders only' rate.

Gender

The relationship between being quit at the six-month follow-up survey and each of the four interventions tested is significantly stronger for females than for males. Among females, all four independent variables have a statistically reliable relationship with the dependent variable. The coefficient of +0.775 for NRT redeemed and +0.687 for NRT used indicates a strong positive relationship between NRT used/redemption and being quit among female respondents. While the coefficients for number of times spoken with the Quit Advisor (+0.138/+0.137) and amount of Quit Pack read (+0.113/+0.106) are less strong than for NRT use/redemption, results show that, for females, positive relationships between these variables and being quit at the six-month follow-up survey also exist.

In contrast, among males, the relationship between being quit at the six-month follow-up survey and each of the four independent variables is considerably weaker. The relationship between NRT redemption and being quit is reliable at the 95% confidence interval, while the relationship between NRT use and being quit is reliable only at the 90% confidence interval. For males, the relationships between contact with Quit Advisors and the amount of the Quit Pack read with being quit is not statistically valid, indicating no true relationship between these variables.

Table 6.2: Impacts on Being Quit – Gender

Independent Variable	Female		Male	
	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	99.99% significant	0.77492	95% significant	0.47392
Total number of times spoken with QA	99.99% significant	0.13798	< 90%	-
Amount of Quit Pack read	95% significant	0.11286	< 90%	-

Independent Variable	Female		Male	
	P-Value	Coefficient	P-Value	Coefficient
NRT used	99.99% significant	0.68688	90% significant	0.36319
Total number of times spoken with QA	99.99% significant	0.13669	< 90%	-
Amount of Quit Pack read	95% significant	0.10577	< 90%	-

Ethnicity

Among Māori respondents, NRT redemption, NRT use and contact with the Quit Advisor have no statistically reliable relationship with being quit. In contrast however, among Māori there is a statistically reliable relationship evident between being quit and the amount of the Quit Pack read, the coefficients (+0.157/+0.157) indicating that this is a moderate positive relationship.

Among Pacific respondents, the relationships between being quit and each of the four interventions tested are not statistically valid, indicating no true relationship between being quit and any of the independent variables.

In contrast, among non-Māori/non-Pacific respondents, all four interventions tested have a statistically reliable relationship with being quit. The coefficients of +1.005 for NRT redemption and +0.904 for NRT use indicate a strong positive influence between these variable and being quit for this group. Among non-Māori/non-Pacific respondents, the relationship between the number of times spoken with a Quit Advisor and being quit is notably less strong than for NRT redemption and use.

Table 6.3: Impacts on Being Quit – Ethnicity

Independent Variable	Māori		Pacific		Non Māori/Pacific:	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	< 90%	-	95% significant	0.99791	99.99% significant	1.00502
Total number of times spoken with QA	< 90%	-	90% significant	0.16856	90% significant	0.06582
Amount of Quit Pack read	95% significant	0.15747	< 90%	-	< 90%	-

Independent Variable	Māori		Pacific		Non Māori/Pacific:	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT used	< 90%	-	95% significant	0.69892	99.99% significant	0.90388
Total number of times spoken with QA	< 90%	-	< 90%	-	< 90%	-
Amount of Quit Pack read	95% significant	0.15741	< 90%	-	< 90%	-

Age

Among those younger than 25 years, there is no statistically valid relationship between being quit and each of the four independent variables.

In contrast, among Quitline's target group of those aged 25 and 44 years, NRT redemption, NRT use and engagement with the Quit Pack have a statistically reliable relationship with being quit. The coefficients of +0.450 for NRT redemption and +0.294 for NRT use indicate a positive influence between these variables and being quit among respondents aged 25 to 44 years. While statistically valid, the relationship between quit status and engagement with the Quit Pack is less strong (+0.111/+0.112).

Of the three age groups, the relationship between being quit at the six-month follow-up survey and redemption and use of NRT is strongest among those aged 45 years and older, with both independent variables being statistically reliable (99.99%). The coefficient of +0.890 for NRT redemption and +0.880 for NRT use further indicates a strong positive influence between NRT redemption/use and being quit. Whilst not as strong as for NRT redemption/use, for those aged 45 years and over, a positive relationship also exists between being quit and the number of times spoken with a Quit Advisor (+0.113/+0.112). However, in contrast to those aged 25 to 44 years, among respondents 45 years or older, there is no true relationship between amount of the Quit Pack read and being quit.

Table 6.4: Impacts on Quit Status – Age

Independent Variable	<u>Younger than 25 years</u>		<u>25-44 years</u>		<u>45 years +</u>	
	P-Value	Coefficient	P-Value	Coefficient t	P-Value	Coefficient t
NRT redeemed	< 90%	-	95% significant	0.45068	99.99% significant	0.88984
Total number of times spoken with QA	< 90%	-	< 90%	-	99% significant	0.11345
Amount of Quit Pack read	< 90%	-	95% significant	0.1105	< 90%	-

Independent Variable	<u>Younger than 25 years</u>		<u>25-44 years</u>		<u>45 years +</u>	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT used	< 90%	-	90% significant	0.29442	99.99% significant	0.880495
Total number of times spoken with QA	< 90%	-	< 90%	-	95% significant	0.111699
Amount of Quit Pack read	< 90%	-	95% significant	0.11236	< 90%	-

Socio-Economic Group

Among respondents in SES Groups 1 and 2, there are no statistically valid relationships between being quit and any of the four interventions.

In contrast, among those in SES Groups 3 and 4, NRT redemption, NRT use and contact with the Quit Advisor have a statistically reliable relationship with being quit. The coefficients of +0.822 for NRT redemption and +0.665 for NRT use indicate a strong positive influence between NRT used/redemption and being quit, the strongest of the three SES categories. While statistically valid, the coefficient for the number of times spoken with a Quit Advisor (+0.073/+0.069) is less strong than for NRT use/redemption, indicating a weaker relationship with being quit.

Among SES Groups 5 and 6, a statistically reliable relationship exists between being quit at the six-month follow-up survey and redemption and use of NRT (95%). The coefficient of +0.512 for NRT redemption and +0.444 for NRT use further indicates a positive influence between NRT redemption/use and being quit. However, no true relationships exist between quit status and either contact with Quit Advisors (<90% significant) or amount of Quit Pack read (<90% significant).

Table 6.5: Impacts on Quit Status – Socioeconomic Group

Independent Variable	Group 1-2		Group 3-4		Group 5-6	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	< 90%	-	99.99% significant	0.82221	95% significant	0.51167
Total number of times spoken with QA	< 90%	-	90% significant	0.07304	< 90%	-
Amount of Quit Pack read	< 90%	-	< 90%	-	< 90%	-

Independent Variable	Group 1-2		Group 3-4		Group 5-6	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT used	< 90%	-	99.99% significant	0.66505	95% significant	0.44434
Total number of times spoken with QA	< 90%	-	90% significant	0.06853	< 90%	-
Amount of Quit Pack read	< 90%	-	< 90%	-	< 90%	-

6.2 Impacts on Reduction in Tobacco Consumption

It should be noted that the relationship between reduction in tobacco consumption (as the dependent variable) and the range of independent variables considered is notably less strong than for being quit. This is attributable to two issues:

- The proportion of the total sample that reported having reduced their tobacco consumption since registering with the Quitline is large (74% - compared with 21% smoking the same and 5% smoking more since registration), meaning that fewer statistically significant differences between groups are evident; and
- A broad definition of 'reduced tobacco consumption' was used, with any respondent whose tobacco consumption at the six-month follow-up came within a lower five-cigarette/five-gram interval than reported at registration being considered to have reduced their tobacco consumption. By this definition then, it is possible for respondents to be reported as having reduced their tobacco consumption over the period since registration but still be heavy smokers (smoking 30 or more cigarettes a day). The category of 'reduced tobacco consumption' includes those respondents who were quit at the six-month follow-up through to respondents still smoking 30 cigarettes a day. The heterogeneous nature of this group contributes to the fact that few strong relationships with the independent variables exist.

Total Sample

The relationship between having reduced tobacco consumption between registration and the six-month follow-up survey and both NRT redemption (99%) and NRT use (99.99%) is statistically reliable which indicates a strong relationship between these variables. The coefficient of +0.380 for NRT redeemed and +0.449 for NRT used further indicates a strong positive relationship between NRT redemption/use and reduced tobacco consumption.

The relationship between reduced tobacco consumption and the amount of the Quit Pack read is also statistically reliable (99%). However, the coefficient (0.116 with NRT redeemed and +0.112 with NRT used) is considerably smaller than that for NRT redemption/use, illustrating that, while a statistically valid relationship exists, it is considerably less strong than that between reduced tobacco consumption and NRT redemption/use.

Similarly, the relationship between reduced tobacco consumption and the number of times spoken with the Quit Advisor is also statistically reliable (95%). The coefficient (0.082 with NRT redeemed and +0.077 with NRT used) is also considerably smaller than that for NRT redemption/use, suggesting that, of the four independent variables, contact with the Quit Advisor has the least impact on reducing tobacco consumption.

Table 6.6: Impacts on Change in Tobacco Consumption – Total Sample

Independent Variable	P-Value	Coefficient
NRT redeemed	99% significant	0.3799
Total number of times spoken with QA	95% significant	0.08217
Amount of Quit Pack read	99% significant	0.11553

Independent Variable	P-Value	Coefficient
NRT used	99.99% significant	0.44889
Total number of times spoken with QA	95% significant	0.07713
Amount of Quit Pack read	99% significant	0.11193

Gender

As with being quit, the relationship between reduced tobacco consumption at the six-month follow-up survey and the four interventions tested is significantly stronger for females than for males. For females, all four independent variables have a statistically reliable relationship with quit status. The coefficient of +0.541 for NRT redeemed and +0.583 for NRT used indicates a positive influence between these variables and reduced tobacco consumption among female respondents. Whilst still statistically valid, the coefficients for number of times spoken with the Quit Advisor (+0.120/+0.116) and amount of Quit Pack read (+0.161/+0.154) are notably less strong, illustrating that contact with Quit Advisors and engagement with the Quit Pack have a lesser impact on reducing tobacco consumption among females.

In contrast, among males, the relationship between reduced tobacco consumption and each of the four independent variables is weak, with none of the relationships being statistically reliable.

Table 6.7: Impacts on Change in Tobacco Consumption – By Gender

Independent Variable	Female		Male	
	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	99% significant	0.541418	< 90%	-
Total number of times spoken with QA	95% significant	0.119874	< 90%	-
Amount of Quit Pack read	99% significant	0.161807	< 90%	-

Independent Variable	Female		Male	
	P-Value	Coefficient	P-Value	Coefficient
NRT used	99.99% significant	0.58336	< 90%	-
Total number of times spoken with QA	95% significant	0.11623	< 90%	-
Amount of Quit Pack read	99% significant	0.15429	< 90%	-

Ethnicity

Among Māori respondents, there are no statistically reliable relationships between reduced tobacco consumption and NRT redemption, NRT use or contact with the Quit Advisor. In contrast however, there is a statistically reliable relationship evident between reduced tobacco consumption and amount of the Quit Pack read, the coefficients (+0.155/+0.152) indicating that this is a moderately strong relationship.

Among Pacific respondents, the relationships between reduced tobacco consumption and each of the four interventions tested are not statistically valid.

In contrast, among non-Māori/non-Pacific respondents, all four interventions tested have a statistically reliable relationship with reduced tobacco consumption. The coefficients of +0.559 for NRT redemption and +0.633 for NRT use indicate a strong positive influence between NRT used/redemption and reduced tobacco consumption for this group. While statistically valid, the coefficients for amount of Quit Pack read (+0.101/+0.098) and the number of times spoken with a Quit Advisor (+0.091/+0.083) indicate a weaker relationship between reduced tobacco consumption and these independent variables than with NRT redemption and use.

Table 6.8: Impacts on Change in Tobacco Consumption – By Ethnicity

Independent Variable	<u>Māori</u>		<u>Pacific</u>		<u>Non Māori/Pacific:</u>	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	< 90%	-	< 90%	-	99% significant	0.55941
Total number of times spoken with QA	< 90%	-	< 90%	-	90% significant	0.09079
Amount of Quit Pack read	95% significant	0.15508	< 90%	-	90% significant	0.10072

Independent Variable	<u>Māori</u>		<u>Pacific</u>		<u>Non Māori/Pacific:</u>	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT used	< 90%	-	< 90%	-	99.99% significant	0.63347
Total number of times spoken with QA	< 90%	-	< 90%	-	90% significant	0.08278
Amount of Quit Pack read	95% significant	0.15159	< 90%	-	90% significant	0.09773

Age

Among those younger than 25 years, the relationships between reduced tobacco consumption and each of the four interventions are not statistically valid, indicating no true relationship between reduced tobacco consumption and any of the independent variables. In contrast, among Quitline's target group of those aged 25 and 44 years, whilst there is no statistically reliable relationship evident between NRT redemption, NRT use and contact with Quit Advisors, a statistically reliable relationship exists between the amount of the Quit Pack read and reduced tobacco consumption (99% significant). The coefficients (+0.146/+0.145) indicate a positive influence between engagement with the Quit Pack and reduced tobacco consumption.

Of the three age groups, the relationship between reduced tobacco consumption, and redemption and use of NRT is strongest among those aged 45 years and older, with both independent variables being statistically reliable (95% for redemption and 99.99% for use). The coefficients of +0.521 for NRT redemption and +0.676 for NRT use further indicate strong relationships between NRT redemption/use and reduced tobacco consumption. However, among those aged 45 years or over, there is no statistically reliable relationship between reduced tobacco consumption and contact with Quit Advisors or engagement with Quit Pack.

Table 6.9: Impacts on Change in Tobacco Consumption – By Age

Independent Variable	Younger than 25 years		25-44 years		45 years +	
	P-Value	Co-efficient	P-Value	Co-efficient	P-Value	Co-efficient
NRT redeemed	< 90%	-	< 90%	-	95% significant	0.52112
Total number of times spoken with QA	< 90%	-	< 90%	-	< 90%	-
Amount of Quit Pack read	< 90%	-	99% significant	0.14617	< 90%	-

Independent Variable	Younger than 25 years		25-44 years		45 years +	
	P-Value	Co-efficient	P-Value	Co-efficient	P-Value	Co-efficient
NRT used	< 90%	-	< 90%	-	99.99% significant	0.67615
Total number of times spoken with QA	< 90%	-	< 90%	-	< 90%	-
Amount of Quit Pack read	< 90%	-	99% significant	0.14451	< 90%	-

Socio-Economic Group

Among respondents in SES Groups 1 and 2, there are no statistically valid relationships between reduced tobacco consumption and any of the four interventions.

Like their SES Group 1 and 2 counterparts, those in SES Groups 3 and 4, NRT redemption, NRT use and contact with the Quit Advisor do not have statistically reliable relationships with reduced tobacco consumption. In contrast however, the relationship between reduced tobacco consumption and the amount of the Quit Pack read is statistically valid, the coefficients (+0.116/+0.111) indicating that this is a moderately strong relationship.

In contrast, among those in SES Groups 5 and 6, all four interventions tested have a statistically reliable relationship with reduced tobacco consumption. The coefficients of +0.594 for NRT redemption and +0.693 for NRT use indicate a strong positive influence. While the coefficients for amount of Quit Pack read (+0.179/+0.182) and the number of times spoken with a Quit Advisor (+0.108/+0.103) are less strong than for NRT use/redemption, results indicate that positive relationships also exist between reduced tobacco consumption and these independent variables.

Table 6.10: Impacts on Change in Tobacco Consumption – By Socioeconomic Group

Independent Variable	Group 1-2		Group 3-4		Group 5-6	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT redeemed	< 90%	-	< 90%	-	99% significant	0.594094
Total number of times spoken with QA	< 90%	-	< 90%	-	90% significant	0.107965
Amount of Quit Pack read	< 90%	-	95% significant	0.11554	99% significant	0.17883

Independent Variable	Group 1-2		Group 3-4		Group 5-6	
	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient
NRT used	< 90%	-	< 90%	-	99.99% significant	0.69292
Total number of times spoken with QA	< 90%	-	< 90%	-	90% significant	0.1025
Amount of Quit Pack read	< 90%	-	95% significant	0.11078	99% significant	0.18203

6.3 Impacts on Smokefree Environments

Regression models were also run to assess the relationship between the four interventions (independent variables) and changes in the smokefree status of respondents' homes and properties. However, because the extent of change in smokefree status between the three-week and six-month surveys was small – particularly with respect to respondents' properties – none of the relationships were statistically reliable.

7. Nicotine Replacement Therapy

Key Points

- At the six-month survey, more than three quarters of respondents (79%) recalled receiving at least one quit card. This included 40% receiving two cards and 20% receiving three or more. Pacific (23%) and Māori (21%) respondents were over-represented among those who had not been sent any quit cards (compared to 16% of non-Māori/non-Pacific respondents).
- A strong positive relationship is evident between the issuing of quit cards and being quit, those who were not quit over-represented among those who did not receive any quit cards (20%, compared with 15% of those who were quit). A strong positive relationship also exists between number of cards received and quit status, those quit significantly more likely to have received two, three or four cards (67%) than those not quit (54%).
- Of those who received quit cards for patches, 87% redeemed at least one card, 64% redeeming all the cards for patches they received from the Quitline. Non-Māori/non-Pacific respondents (68%) were significantly more likely to report having redeemed all their cards for patches than Māori (57%) and Pacific (51%) respondents.
- In contrast, 75% of respondents who received quit cards for gum reported having redeemed at least one card, 52% having redeemed all of them. Non-Māori/non-Pacific respondents (55%) were significantly more likely to report having redeemed all their cards for gum than Māori respondents (46%).
- Two in five patch card recipients (39%) used more than a month's worth of patches from all cards received and redeemed, including 19% using the standard period for patches of eight weeks. A quarter (27%) used two weeks' worth of patches or less including 4% who used none of the patches from the cards they redeemed.
- By comparison, one in five respondents (19%) used more than a month's worth of gum. Half used two weeks' worth of gum or less, including 10% who used none of the gum from the cards they redeemed.
- Almost all patch users (90%) reported using one patch a day and replacing smoking totally with patches (81%). Gum users reported using the gum when they got cravings (61%) and/or every day as part of a regular routine (44%). The greatest share of gum users (69%) reported replacing smoking totally with the gum.
- Being quit/having used enough NRT/having achieved what the respondent wanted, and giving up trying to quit were the main reasons for not using all the patches/gum received. Patches users also frequently mentioned experiencing negative physical reactions to the patches while gum users expressed a dislike of the taste of the gum.
- Nicotine patches were considered an effective smoking cessation aid, 80% of six-month survey respondents agreeing to some extent that patches increased the chances of quitting.
- By comparison, nicotine gum was less likely to be perceived as an effective cessation aid, with 51% agreeing/strongly agreeing that gum increased the chances of quitting.
- Similarly, nicotine patches (80%) were more likely to be perceived as safe than nicotine gum (59%).

- Personal experience with Nicotine Replacement Therapies has a strong positive influence on perceptions of effectiveness and safety. However, results suggest a lack of knowledge of both the effectiveness and safety of nicotine gum among Quitline callers.

7.1 Who Was Sent NRT?

Who Was Sent Quit Cards at the Three-Week Follow-up Survey?

At the three-week survey, according to information provided in the Quitline database, the greatest single share of respondents (63%) had been sent at least one quit card for patches only. Ten percent had been sent at least one card for gum only, while a further 9% had been sent at least one quit card for both patches and gum ('co-therapy'). Almost one in five respondents (18%) were not sent any NRT quit cards by the Quitline.

Non-Māori/non-Pacific respondents (66%) were significantly more likely to have been sent at least one quit card for patches only, than Māori (59%) and Pacific (53%) respondents. Pacific respondents (13%) were significantly more likely than non-Māori/non-Pacific respondents (9%) to have been sent a card for gum. In contrast, Pacific (23%) and Māori (21%) respondents were significantly more likely to have not been sent any quit cards (compared to 16% of non-Māori/non-Pacific respondents).

Respondents younger than 18 years of age were over-represented among those who were not sent any quit cards (54%, compared to 23% of those aged 18 to 24 years, 14% of those aged 25 to 44 years or 45 to 64 years, and 20% of those aged 65 years and older).

Males (12%) were significantly more likely than their female counterparts (7%) to have been sent at least one quit card for both patches and gum. In contrast, female respondents were over-represented among those who had not been sent any NRT quit cards (19%, compared with 16% of males).

There were no notable differences in NRT quit cards sent between those of different SES groups or those who were quit and not quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey. (See Table 7.1 in Appendix).

Who Received Quit Cards at the Three-Week Follow-up Survey?

At the three-week survey, the greatest single share of respondents (62%) reported that they had received at least one quit card for patches only. Ten percent had received at least one card for gum only, while a further 10% had received at least one quit card for both patches and gum ('co-therapy'). Almost one in five respondents (18%) reported at the three-week survey that they had not received any NRT quit cards by the Quitline. (See Table 7.2 in Appendix).

Who Received First and/or Second Quit Cards at the Six-Month Follow-up Survey?

Note: Prior to November 16, 2007, one NRT card at a time was issued. One (or two if co-therapy) was issued on the first incoming call. The second (or fourth if co-therapy) was issued on the first follow-up call (around three weeks after first call). From November 17 2007, two cards were issued at the same time on the first call and one or two discretionary cards for co-therapy.

Sixty-three percent of respondents reported that they had received a quit card for patches. This compares with 62% in the three-week survey. Ten percent reported receiving a quit card for gum, while a further 10% received cards for both patches and gum. Eighteen percent reported that they did not receive any NRT quit cards (unchanged from the three-week survey).

Significant differences between demographic groups were also very similar to those reported for the three-week survey. Non-Māori/non-Pacific (65%) respondents were significantly more likely than Māori (60%) and Pacific (55%) respondents to report having received a quit card for patches. In contrast, Pacific (23%) respondents were significantly more likely than non-Māori/non-Pacific respondents (17%) to report that they did not receive any NRT quit cards.

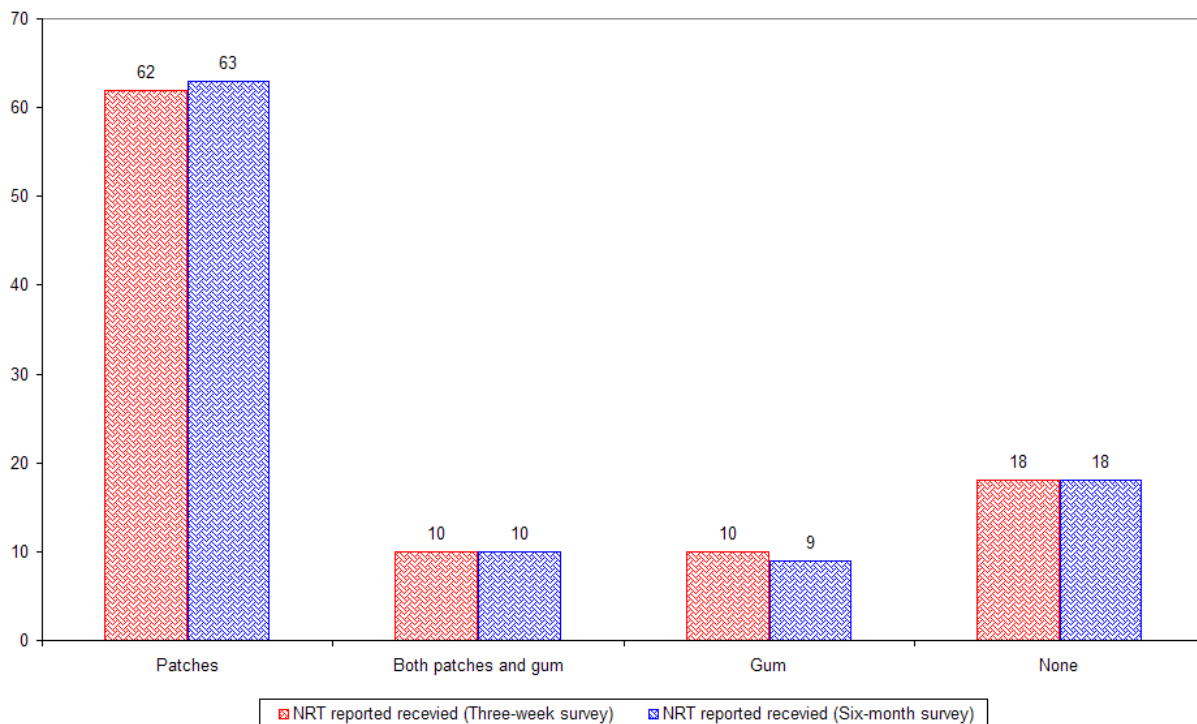
Those younger than 18 years were over-represented among those who did not receive any quit cards (56%, compared with 27% of those aged 18 to 24 years, 13% of those aged 25 to 44 years, 14% of those aged 45 to 64 years, and 22% of respondents aged 65 years or older). Youth respondents were also significantly less likely than all other respondents to have received a card for patches (38%, compared with 53% of those aged 18 to 24 years, 67% of those aged 25 to 44 years, 66% of those aged 45 to 64 years, and 61% of respondents aged 65 years or older).

Male respondents were over-represented among those who received cards for both patches and gum (12%, compared with 8% of females).

There were no notable differences by SES Group.

Respondents who were not quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up survey (19%) were over-represented among those who reported that they did not receive any quit cards (compared with 15% of those who were quit). (See Table 7.3 in Appendix).

Figure 7.1: First and/or Second Quit Cards for NRT Sent (Three Weeks) and Received (Six-Months – Self-Reported) (%)



Base: NRT sent (at three-week survey) $n=3,969$ /NRT reported received (at six-month survey) $n=2,716$ (All respondents)

Total Number of Quit Cards Received (Self-Reported)

The majority of respondents (89%) reported definitely not receiving any cards in addition to the first and/or second card they had received at the time of the six-month follow-up survey. Six percent had received one additional card, while 2% had received two or more additional quit cards.

In total then, at the six-month follow-up, two in five respondents (40%) reported that they had received a total of two quit cards, while 20% had received three or more. One-fifth of respondents (19%) reported they had only received one quit card at the time of the six-month follow-up survey.

Pacific (25%) and Māori (21%) respondents were significantly more likely to report that they had not received any quit cards than non-Māori/non-Pacific respondents (17%). In contrast, non-Māori/non-Pacific respondents (42%) were significantly more likely to receive two cards than Pacific callers (33%).

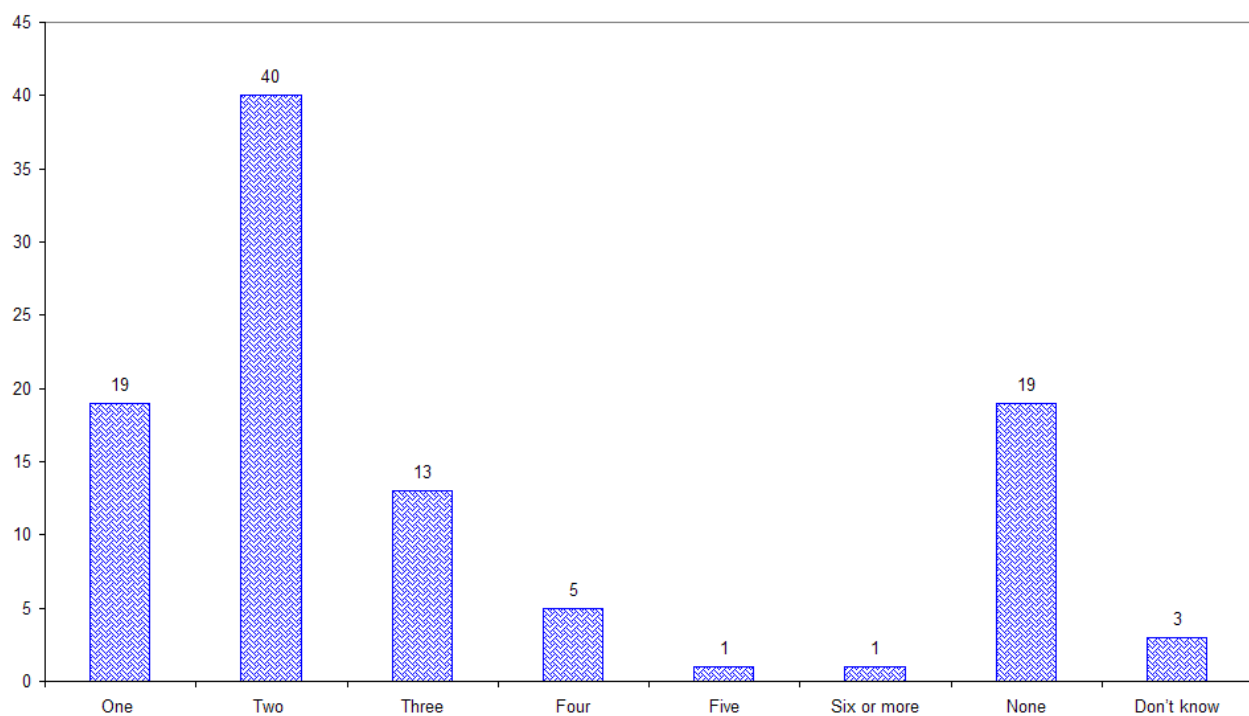
Youth respondents (those younger than 18 years old) were over-represented among those who had not received any quit cards (59%, compared with 27% of those aged 18 to 24 years, 14% of those aged 25 to 44 years or 45 to 64 years, and 25% of those aged 65 years or older).

No significant differences were reported in the total number of quit cards received between male and female respondents.

There is clearly a positive relationship between the number of quit cards received and being quit. Those who were quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey were significantly more likely to have received two, three or four cards (67%) than those who were not quit (54%). In contrast, those who were not quit at the six-month follow-up survey were over-represented among those who did not receive any NRT quit cards (20%, compared with 15% of those who were quit). (See Table 7.4 in Appendix).

Self-report for the total number of quit cards received was similar for both first/second cards (see Table 7.5 in Appendix) and additional cards (see Table 7.6 in Appendix).

Figure 7.2: Total Number of Quit Cards Reportedly Received (%)



Base: n=2,716 (All respondents at the six-month survey)

7.2 Redemption of Quit Cards

Redemption of Cards for Patches

Of those who received quit cards for patches, 87% redeemed at least one card, 64% redeeming all the cards for patches they received from the Quitline and 23% redeeming some.

Non-Māori/non-Pacific respondents (68%) were significantly more likely to report having redeemed all their cards for patches than Māori (57%) and Pacific (51%) respondents. In contrast, Pacific (21%) and Māori (17%) respondents were over-represented among those who had not redeemed any of the cards (compared with 11% of non-Māori/non-Pacific respondents).

Younger respondents (29% of those aged younger than 18 years and 23% of those aged between 18 and 24 years) were over-represented among those who reported not having redeemed any of their cards for patches (compared with 13% of those aged 25 to 44 years, 11% of those aged 45 to 64 years and 8% of respondents aged 65 years or older). Of the five age groups, those aged 65 years and older (74%) were the most likely to report having redeemed all their cards for patches.

There were no notable differences in card redemption between genders or SES Groups.

Respondents quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey (68%) were significantly more likely to have redeemed all their cards for patches than those who were not quit (62%). In contrast, respondents not quit were over-represented among those who had redeemed none of the cards they had received (16%, compared with 8% of those quit). (See Table 7.7 in Appendix).

Redemption of Cards for Gum

Just over half of all respondents who received quit cards for gum (52%) reported having redeemed all of them (this compares with 64% of those who received cards for patches). Twenty-three percent reported having redeemed some of their cards. Twenty-five percent redeemed none.

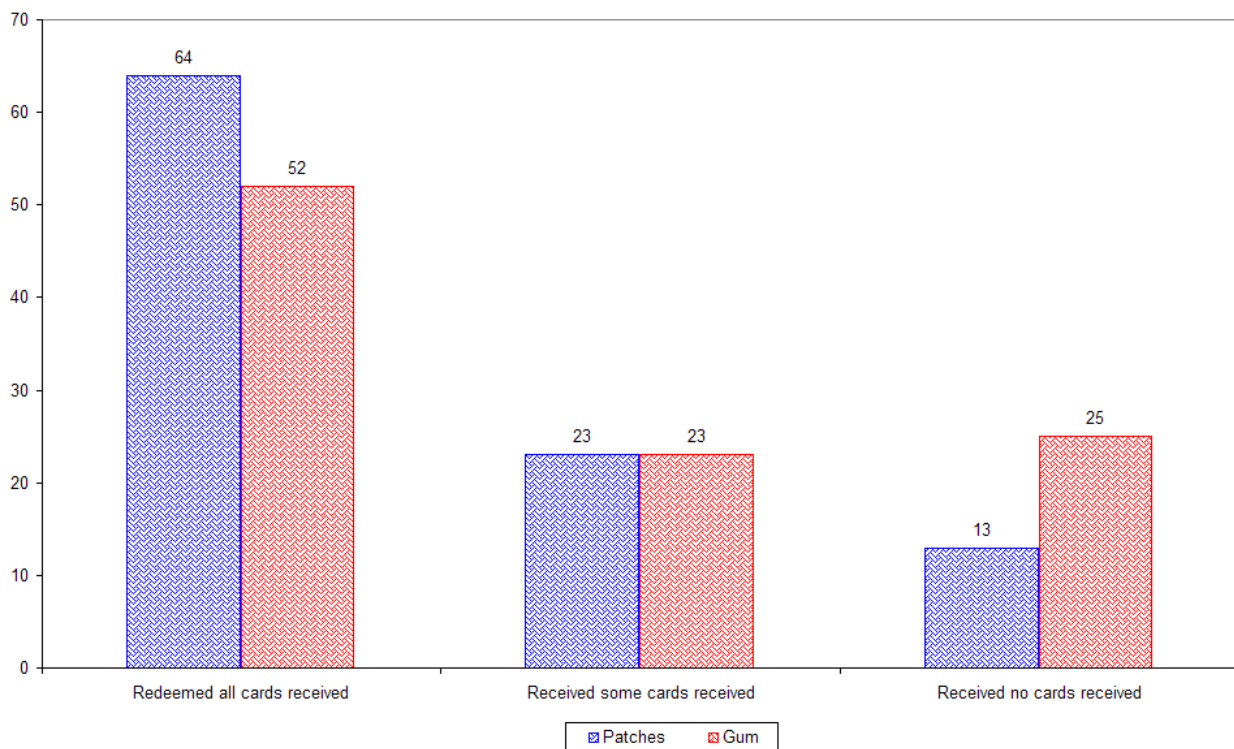
Non-Māori/non-Pacific respondents (55%) were significantly more likely to report having redeemed all their cards for gum than Māori respondents (46%). In contrast, Māori (31%) were over-represented among those who had not redeemed any of their cards for gum (compared with 22% of non-Māori/non-Pacific respondents).

As with patches, younger respondents were over-represented among those who reported not having redeemed any of their cards for gum (42% of those aged between 18 and 24 years not having redeemed any of their cards, compared with 25% of those aged 25 to 44 years and 18% of those aged 45 to 64 years).

Males (59%) were significantly more likely to report having redeemed all their cards for gum than females (46%), while females were over-represented among those who had not redeemed any cards (30%, compared with 20% of males).

There were no notable differences in redemption rates between SES Groups or between those who were quit/not quit (using Seven Day Point Prevalence Quit Rate) at the six-month survey. (See Table 7.8 in Appendix).

Figure 7.3: Redemption of Cards (%)

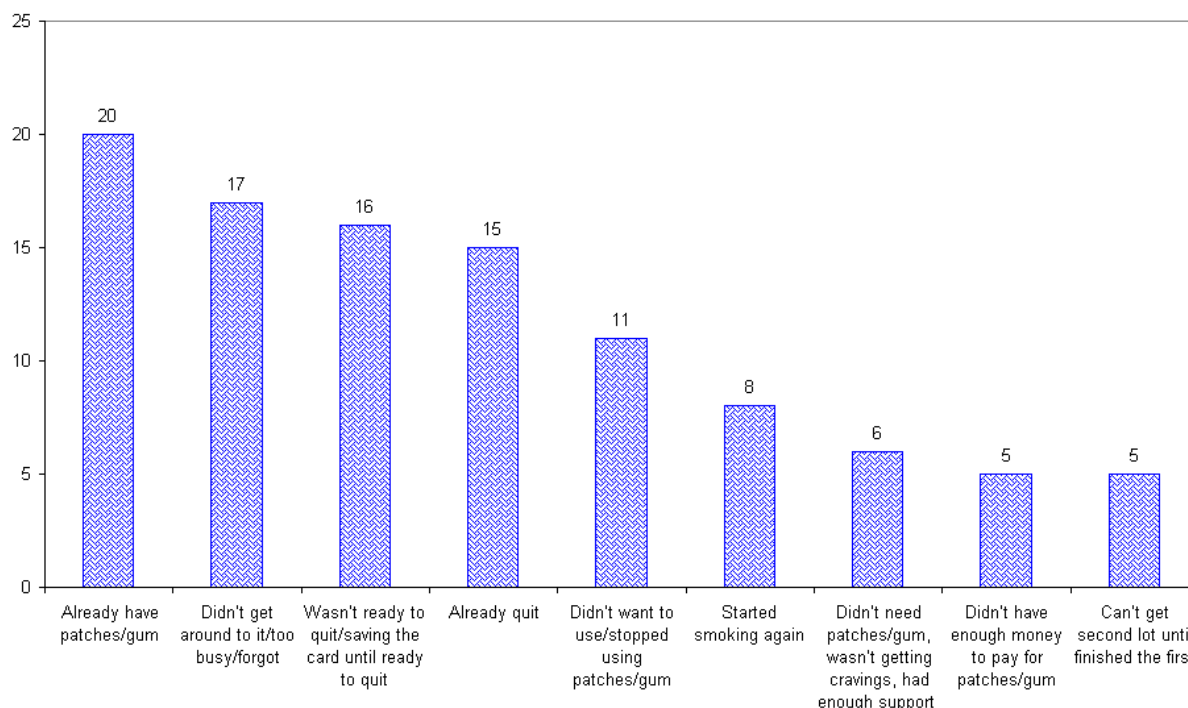


Base: Patches n=1,968; Gum n=559
 (All respondents who received at least one quit card for patches and/or gum)

Reasons for Non-Redemption of First and/or Second Quit Card(s)

One in five respondents (20%) did not exchange their first or second card because they already had NRT left over from previous packets. Seventeen percent reported that they did not get around to it, were too busy or forgot, while 16% weren't ready to quit/decided to save the card until they were ready to quit. Just over one in seven respondents (15%) did not exchange their quit card because they were already quit. (See Table 7.9 in Appendix).

Figure 7.4: Reasons for Non-Redemption of First and/or Second Quit Card(s) (%)



Base: n=775 (Respondents who had not exchanged either their first or second quit card at the three-week or six-month follow-up survey)

Graph shows those reasons mentioned by 5% or more of respondents

Multiple responses permitted. Consequently graph may total more than 100%.

The reasons for non-redemption of additional cards were similar to those outlined above. (See Table 7.10 in Appendix).

7.3 Patches

Total Amount of Patches Used from all Cards (First, Second and Additional)

In total, two in five respondents (40%) used more than a month's worth of patches from all cards received and redeemed. Thirty-three percent of respondents used five to eight weeks' worth of patches, including 19% who used the standard period for patches of eight weeks. Eighteen percent used one to two weeks' worth of patches in total, while 5% used less than one weeks' worth of patches. Four percent of respondents did not use any of the patches from quit cards they received and redeemed.

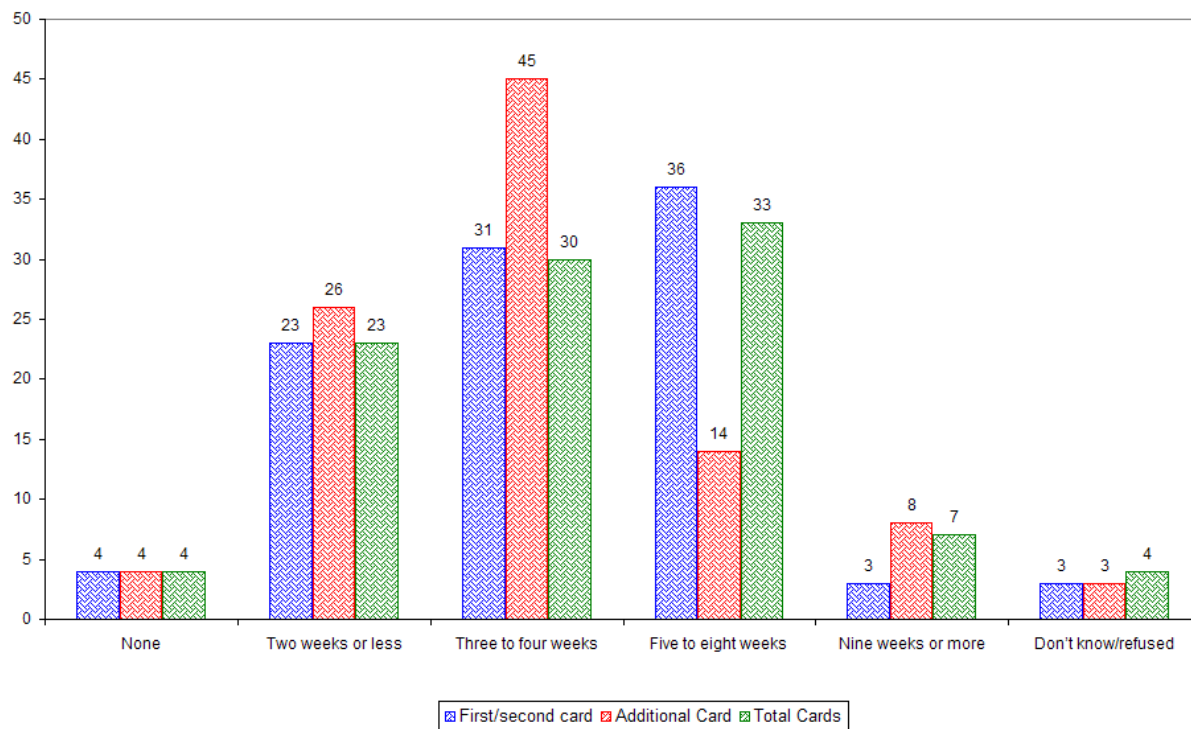
Pacific respondents were significantly more likely (11%) to have not used any of the patches than both Māori and non-Māori/non-Pacific respondents (4% each).

Few significant differences were reported in the amount of patches used between age, gender, or between those of different SES Groups.

Results show that those respondents who had used more patches were more likely to be quit (using the Seven Day Point Prevalance Quit Rate) at the six-month follow-up survey (those who were quit were over-represented among those who had used six (9%) or eight (25%) weeks' worth of patches, compared with 5% and 16% of those who were not quit respectively). (See Table 7.11 in Appendix).

The greatest single share of respondents (36%) reported using the patches they received from their first/second quit card for between five and eight weeks. In contrast, among those who received at least one additional card, the greatest share (45%) used three to four weeks' worth of patches from this/their card(s). However, for both first/second and additional cards, the median amount of patches used from the cards received and redeemed was three to four weeks. (See Table 7.12 (First/second cards) and 7.13 (Additional cards) in Appendix).

Figure 7.5: Total Amount of Patches Used (All Cards)



Base: First/Second cards n=1,705; Additional cards n=102; Total cards n=1,709

(All respondents who received first/second and/or additional quit cards for patches and redeemed them)

Frequency of Use Of Patches From All Cards

The majority of respondents (90%) reported that they used one patch per day. Two percent used more than one patch per day. Three percent reported using patches most days of the week, while 2% used patches half the week.

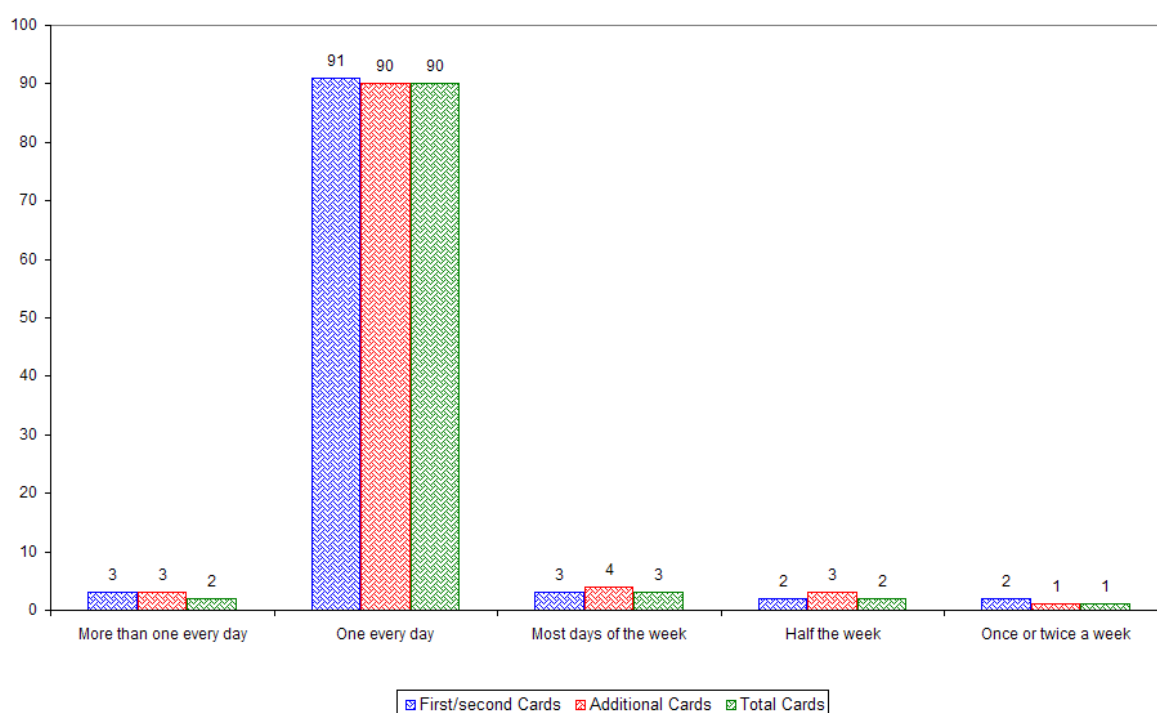
Māori (5%) and Pacific (5%) respondents were significantly more likely than non-Māori/non-Pacific respondents (1%) to use more than one patch per day, while non-Māori/non-Pacific respondents were more likely to use one patch per day (91%) than both Pacific (88%) and Māori respondents (85%). Maori and Pacific respondents were significantly more likely to use patches once or twice per week (5%)

Youth respondents (those aged younger than 18 years) were significantly more likely to use more than one patch per day (9%) than those aged between 25 and 44 years (2%), between 45 and 64 years (2%) and those aged 65 years or older (1%). No notable difference in frequency of use of patches was reported between male and female respondents, and few were reported between those in different SES groups.

Those who were quit were significantly more likely than those who were not quit to have used one patch per day (91% and 89% respectively). (See Table 7.14 in Appendix).

There were no notable differences in frequency of use of patches between first/second and additional cards. (See Table 7.15 (First/second cards) and 7.16 (Additional cards) in Appendix).

Figure 7.6: Frequency of Patches Used from All Cards (%)



Base: First/second cards n=1,610; Additional cards n=98; Total cards n=1,729
 (All respondents who received and redeemed first/second and/or additional cards for patches and used at least some)

Nature of Use of Patches from All Cards

Just over four in five respondents (81%) reported that they replaced smoking totally with the patches they redeemed. Twelve percent used the patches while cutting back on smoking, while 4% used patches to temporarily quit only.

Non-Māori/non-Pacific respondents (83%) were significantly more likely to replace smoking totally with the patches than Māori respondents (77%).

Those aged between 25 and 44 years (83%), 45 to 64 years (81%) or respondents aged 65 years or older (85%) were significantly more likely to replace smoking totally with the patches than those aged younger than 18 years (69%) or 18 to 24 years (71%). In contrast, those aged younger than 18 years (6%) and those between 18 and 24 years (4%) were significantly more likely than those aged between 25 and 64 years (1%) to report that they used the patches while continuing to smoke as normal.

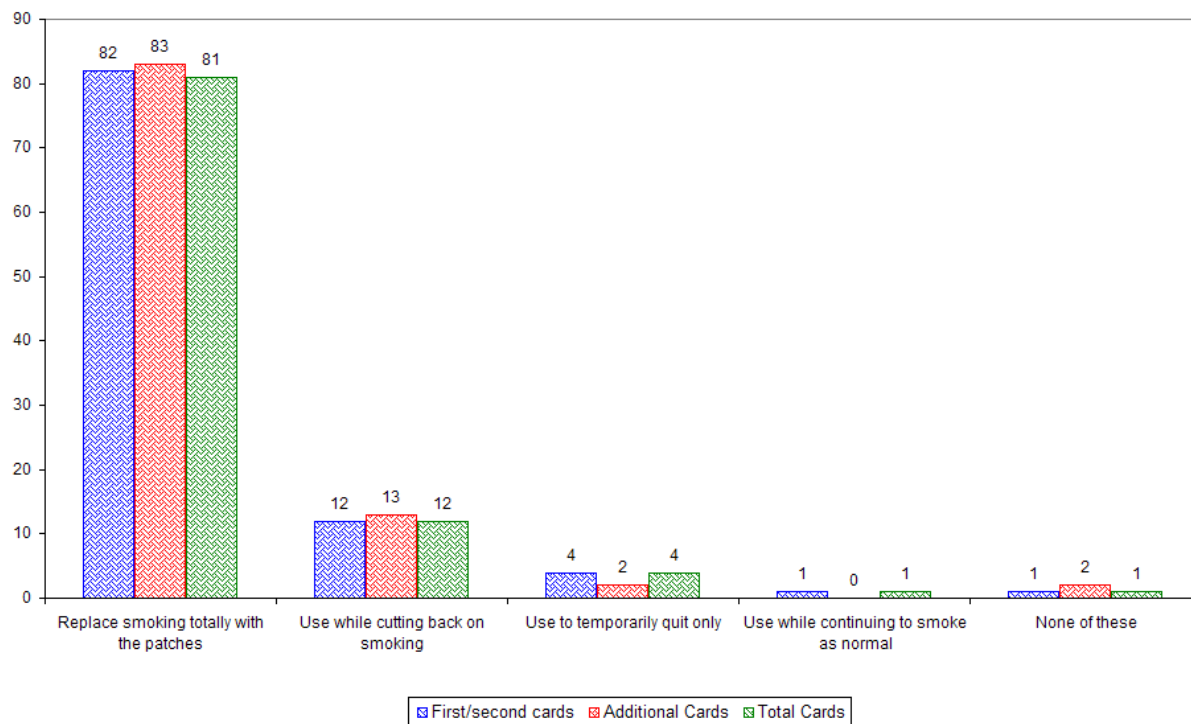
Female respondents were significantly more likely than male respondents to replace smoking totally with the patches (82% and 80% respectively).

Few significant differences were reported between those in different SES groups.

Those who were quit at the six-month follow-up were significantly more likely to have replaced smoking totally with the patches (93%, compared with 75% of those who had not quit). In contrast, those who were not quit were over-represented among those who had used the patches while cutting back (16%, compared with 4% of those who were quit) and those who had used patches to quit temporarily only (6%, compared with 1% of those who were quit). (See Table 7.17 in Appendix).

There were no notable differences in nature of use of patches between first/second and additional cards. (See Table 7.18 (First/second cards) and Table 7.19 (Additional cards) in Appendix).

Figure 7.7: Nature of Use of Patches from All Card(s) (%)



Base: First/second cards n=1,610; Additional cards n=98; Total cards n=1,729

(All respondents who received and redeemed first/second and/or additional card for patches and used at least some)

Sharing of Patches

Most respondents had not shared the patches from their quit cards with anyone else (89%). Ten percent reported that they had shared their patches.

Pacific (17%) and Māori (14%) respondents were significantly more likely to have shared their patches than non-Māori/non-Pacific respondents (8%).

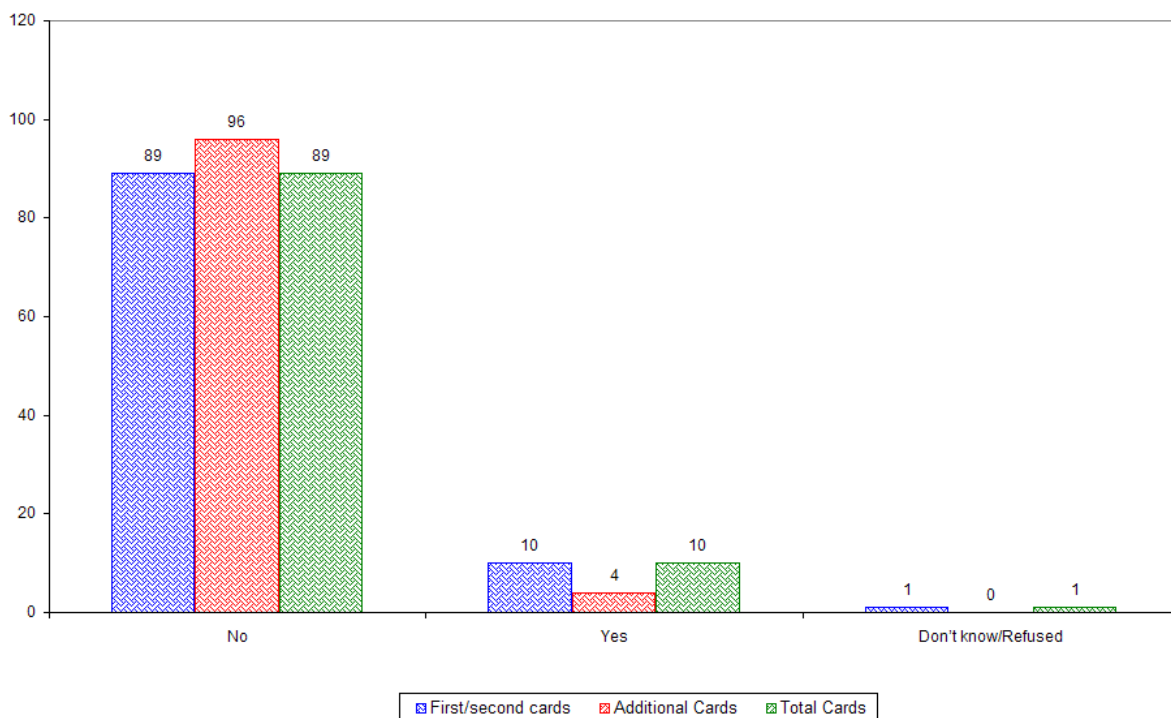
Respondents aged younger than 25 years (16%) or between 25 and 44 years (12%) were significantly more likely to report having shared their patches than those aged between 45 and 64 years (5%) or 65 years or older (3%).

No significant differences were reported in the sharing of patches between males and females, or between those of different SES groups.

Those who were quit at the six-month follow-up survey (12%) were significantly more likely to have shared their patches with others than those who were not (9%). (See Table 7.20 in Appendix).

Patches from additional cards (4%) were slightly less likely to be shared than patches from first/second cards (10%). (See Table 7.21 (First/second cards) and Table 7.22 (Additional cards) in Appendix).

Figure 7.8: Sharing of Patches from All Cards (%)



Base: First/second card n=1,705; Additional cards n=102; Total cards n=1,807
 (Respondents who received first/second and/or additional card for patches, irrespective of whether they personally used them or not)

Alternative Uses of Patches

Ninety-five percent of respondents did not do anything else with their patches. Of those who did something else with their patches, alternative uses included:

- gave them away (n=34);
- saved them up (n=14); and
- destroyed them/threw them away (n=12).

(See Table 7.23 in Appendix).

Reasons for Stopping Using Patches

When asked why they stopped using the patches they received via quit cards from the Quitline (or why they didn't use them at all), the greatest single share of respondents (32%) reported that they were quit now/thought they had used enough to stay quit/had achieved what they wanted. In contrast, 30% had given up trying to quit/had started smoking. Fourteen percent reported that the patches gave them a rash/they had a reaction to the patches, 8% mentioned that the patches made them feel unwell, while a further 8% reported that the patches didn't work and made them crave tobacco more.

There were no notable differences in reasons given for stopping using patches/not using them at all by ethnic group.

Youth respondents were over-represented among those citing negative physical reactions to the patches as reasons for discontinuing their use. Thirty percent of those younger than 18 years who had not used all of the patches they received stated that this was because the patches gave them a rash/itchy skin. This compares with 13% of those aged 25 to 44 years and 14% of respondents aged 45 to 64 years stopping using patches for the same reason. Similarly, youth (19%) were significantly more likely to state that they discontinued using the patches because they made them feel unwell than those aged between 45 and 64 years (6%), and were also significantly more likely to state that the patches made sleeping difficult/gave them nightmares (8%, compared with 2% of those aged 25 to 64 years, and no respondents aged 65 years or older).

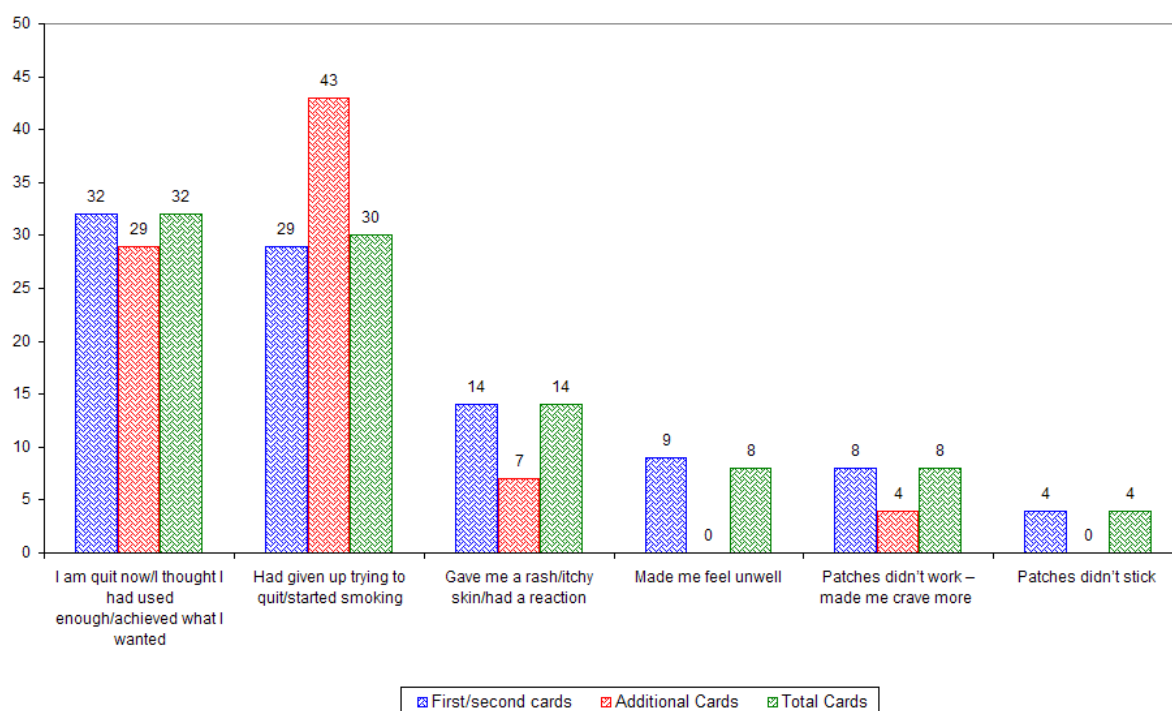
Male respondents were over-represented among those who stopped using the patches because they were quit/thought they had used enough to stay quit/had achieved what they wanted (36%, compared to 29% of females).

There were no notable differences in reasons given for stopping using patches/not using them at all by SES group.

Respondents who were not quit (using Seven Day Point Prevalance Quit Rate) were over-represented among those who reported that the patches gave them a rash/that they had had a reaction to the patches (16%, compared with 9% of those who were quit) and that the patches didn't work/made them crave more (9%, compared with 4% of those who were quit). (See Table 7.24 in Appendix).

Reasons for stopping use of patches were similar for first/second cards (see Table 7.25 in Appendix) and for additional cards (see Table 7.26 in Appendix).

Figure 7.9: Reasons for Stopping Using Patches from All Cards (%)



Base: First/second card n=1,015; Additional cards n=43; Total cards n=1,041

(All respondents who received first/second and/or additional cards for patches and didn't use any/all of them)

Graph shows six most common reasons

Multiple responses permitted. Consequently graph may total more than 100%.

Uses for Un-used Patches

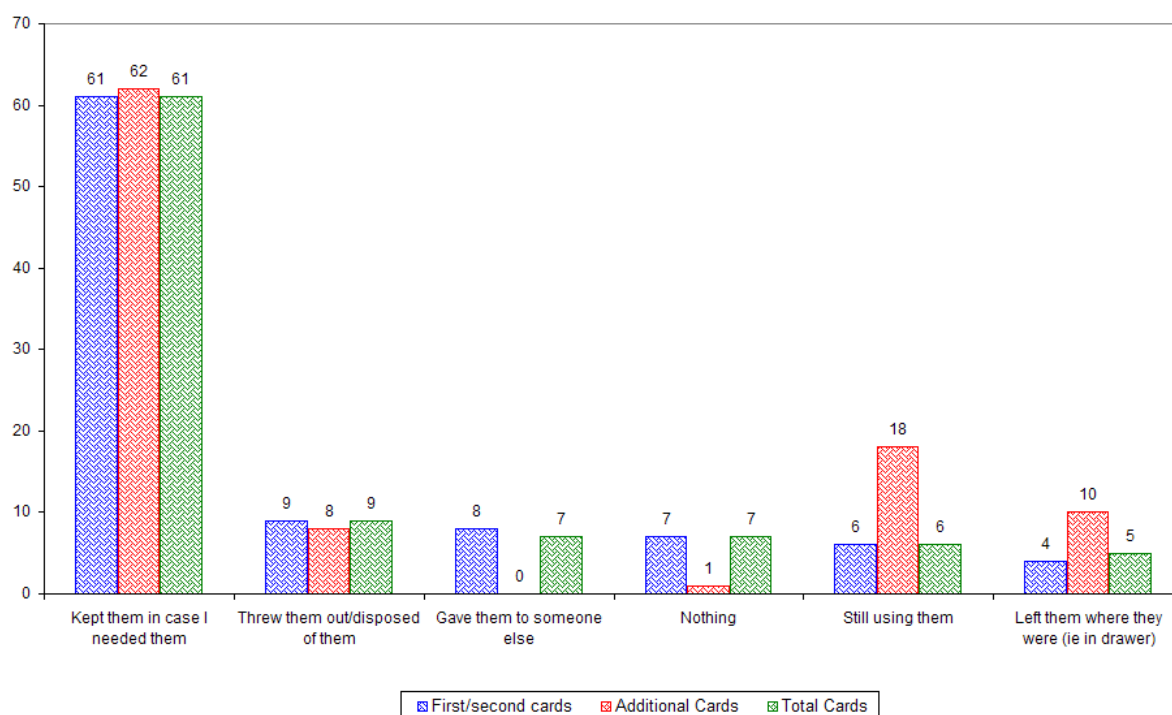
Sixty-one percent of respondents who had not used all the patches they received via quit cards from the Quitline reported that they kept the patches in case they needed them later. Nine percent threw them out/disposed of them, while 7% gave them to someone else. Other common responses included doing nothing with the patches (7%), and continuing to use them (6%).

No significant differences of note were reported by respondents in different ethnic or age groups, or between males and females and different SES groups.

Those who were not quit were over-represented among those who kept the patches for future use (67%, compared with 48% of those who were quit). In contrast, those who were quit were more likely to have thrown out/disposed of the patches (19%, compared with 5% of those who were not quit) and/or given them to someone else (15%, compared with 4% of those who were not quit). (See Table 7.27 in Appendix).

Those who had received additional cards for patches (18%) were more likely to still be using them than those who had received a first/second card only (6%). (See Table 7.28 (First/second cards) and Table 7.29 (Additional cards) in Appendix).

Figure 7.10: Uses for Un-used Patches from All Cards (%)



Base: First/second cards n=1,125; Additional cards n=57; Total cards n=1,196

(Respondents who received first/second and/or additional cards for patches but did not use any/all of them)

Graph shows those reasons mentioned by 5% or more of respondents

Multiple responses permitted. Consequently graph may total more than 100%.

7.4 Gum

Total Amount of Gum Used from all Cards (First, Second and Additional Cards)

Twenty-eight percent of respondents who received and redeemed at least one quit card for gum used between one and two weeks' worth, while 24% used three to four weeks' worth of gum. One in five respondents (19%) used more than a month's worth of gum from the NRT cards they received, with 15% using between five and eight weeks' worth. Twelve percent used less than one weeks' worth of gum, while one in ten respondents (10%) did not use any of the gum they received from any of their NRT quit cards.

There were no notable differences in the amount of gum used by ethnic group.

Those respondents aged between 18 and 24 years were significantly more likely to have used one weeks' worth of gum (22%) than those aged between 25 and 44 years (10%) or those aged between 45 and 64 years (9%). In contrast, those respondents aged between 45 and 64 years were significantly more likely to have used four weeks' worth of gum (18%) than those aged between 18 and 24 years (4%) or those aged between 25 and 44 years (10%).

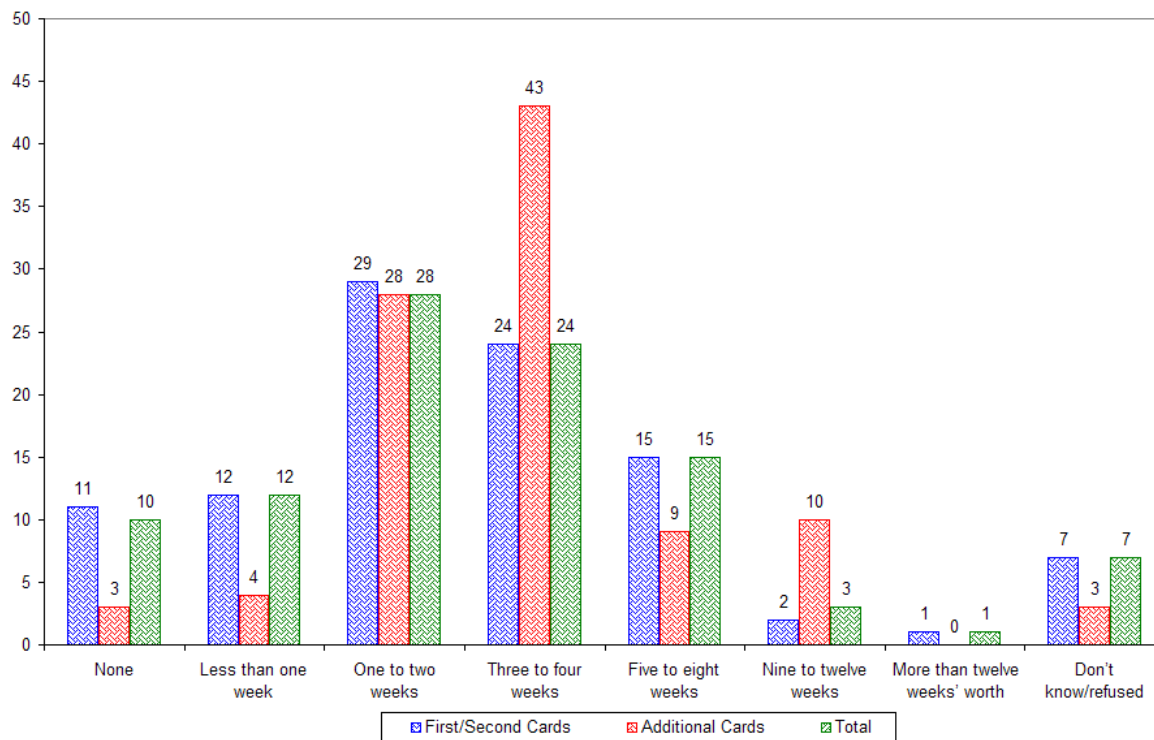
Female respondents were over-represented among those who had used less than one weeks' worth of gum (15%, compared with 9% of their male counterparts).

There were no notable differences in the amount of gum used by SES Group.

Those who were not quit at the six-month follow-up were significantly more likely to have used one weeks' worth of gum (13%) than those who were quit (7%). (See Table 7.30 in Appendix).

For first/second cards redeemed for gum, the median amount of gum used was one to two weeks. This compares with a median of three to four weeks worth of gum used for additional cards. (See Table 7.31 (First/second cards) and Table 7.32 (Additional cards) in Appendix).

Figure 7.11: Total Amount of Gum Used (All Cards)



Base: First/second cards n=422, Additional cards n=20; Total cards n=427

(All respondents at the six month follow-up survey who received at least one quit card for gum and redeemed it)

Frequency of Use of Gum

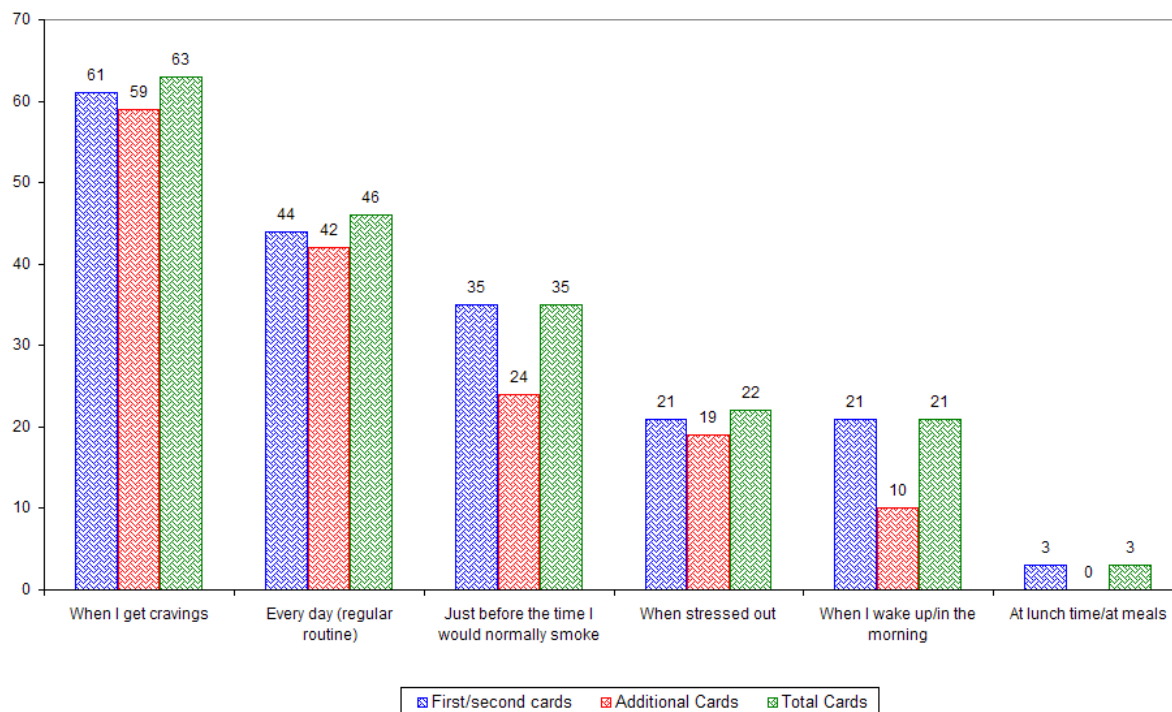
Three in five respondents (63%) reported using the gum when they got cravings, while 46% reported that they used the gum routinely every day (for example, at the same time every day). A third of respondents (35%) who received and redeemed cards for gum reported using the gum just before the time that they would normally smoke. One in five (22%) used the gum when they were stressed, while 21% reported using it when they woke up each morning.

Few or no significant differences were reported between those of different ethnic categories, different age groups, between male and female respondents or by quit status at the six-month follow-up.

Those in SES Group 6 were the most likely to use the gum just before the time they would normally smoke (52%), significantly higher than those in Groups 4 (32%) and 5 (29%). (See Table 7.33 in Appendix).

Frequency of use of gum was similar for first/second cards (see Table 7.34 in Appendix) and additional cards (see Table 7.35 in Appendix).

Figure 7.12: Frequency of Use of Gum from all Card(s) (%)



Base: First/second cards n=369; Additional n=19; Total cards n=374

(All respondents who received and redeemed first/second and/or additional cards for gum and used at least some of it)

Graph shows six most common frequencies

Note: Multiple responses to this question permitted. Consequently the graph may total more than 100%

Nature of Use of Gum

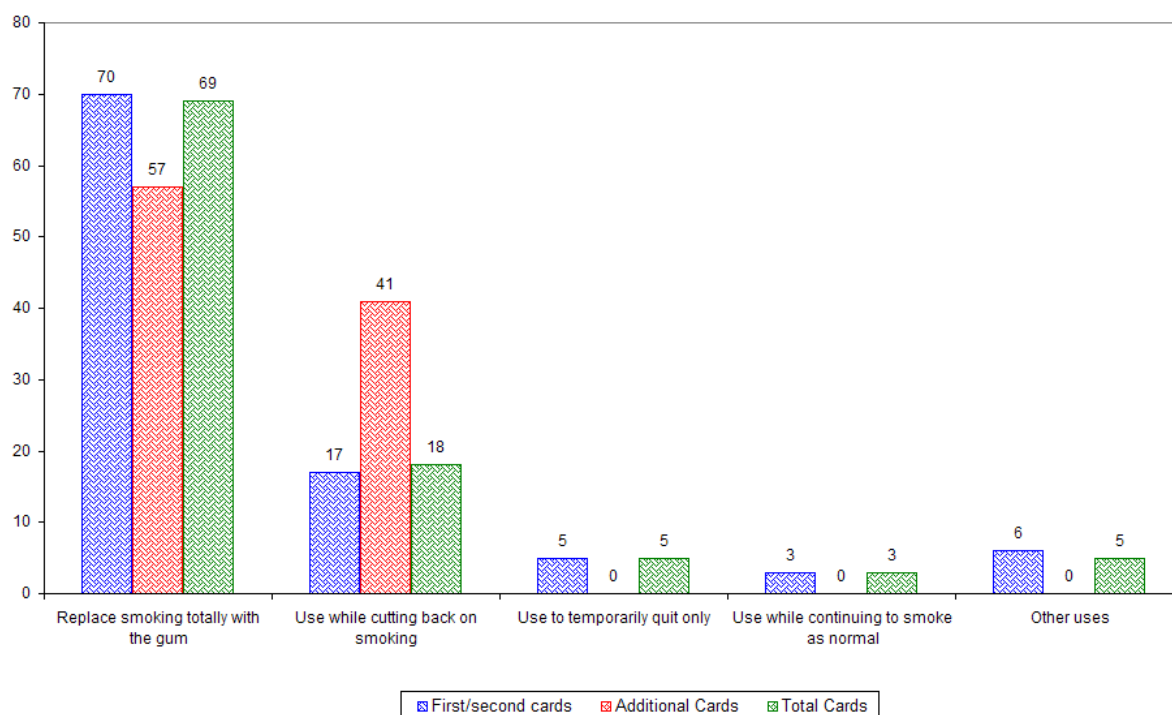
Over two-thirds (69%) of those using the gum replaced smoking totally with the gum. Eighteen percent used the gum while cutting down on smoking, while 5% used the gum to quit temporarily. Three percent used the gum while continuing to smoke as normal.

Non-Māori/non-Pacific respondents (72%) were significantly more likely than Māori respondents (58%) to replace smoking totally with the gum. In contrast, Māori respondents were significantly more likely than non-Māori/non-Pacific respondents to use the gum while cutting back on smoking (25% of Māori, compared with 16% of non-Māori/non-Pacific) and to use the gum to quit temporarily (10% of Māori, compared with 4% of non-Māori/non-Pacific). Few significant differences were reported in nature of use of the gum between those of different ages, between male and female respondents and between those in different SES groups.

Those who were quit were over-represented among those who replaced smoking totally with the gum (82%, compared with 63% of those who were not), while those who were not quit (23%) were significantly more likely than those who were quit (8%) to use the gum while cutting back on smoking. (See Table 7.36 in Appendix).

Nature of use of gum was similar for first/second cards (see Table 7.37 in Appendix) and additional cards (see Table 7.38 in Appendix).

Figure 7.13: Nature of Use of Gum from all Card(s) (%)



Base: First/second cards n=369; Additional n=19; Total cards n=374

(All respondents who received and redeemed first/second and/or additional cards for gum and used at least some of it);

Note: Multiple responses to this question permitted

Sharing of Gum

Approximately four in five respondents (79%) did not share the gum from their card(s) with anyone else. Nineteen percent reported that they had shared their gum.

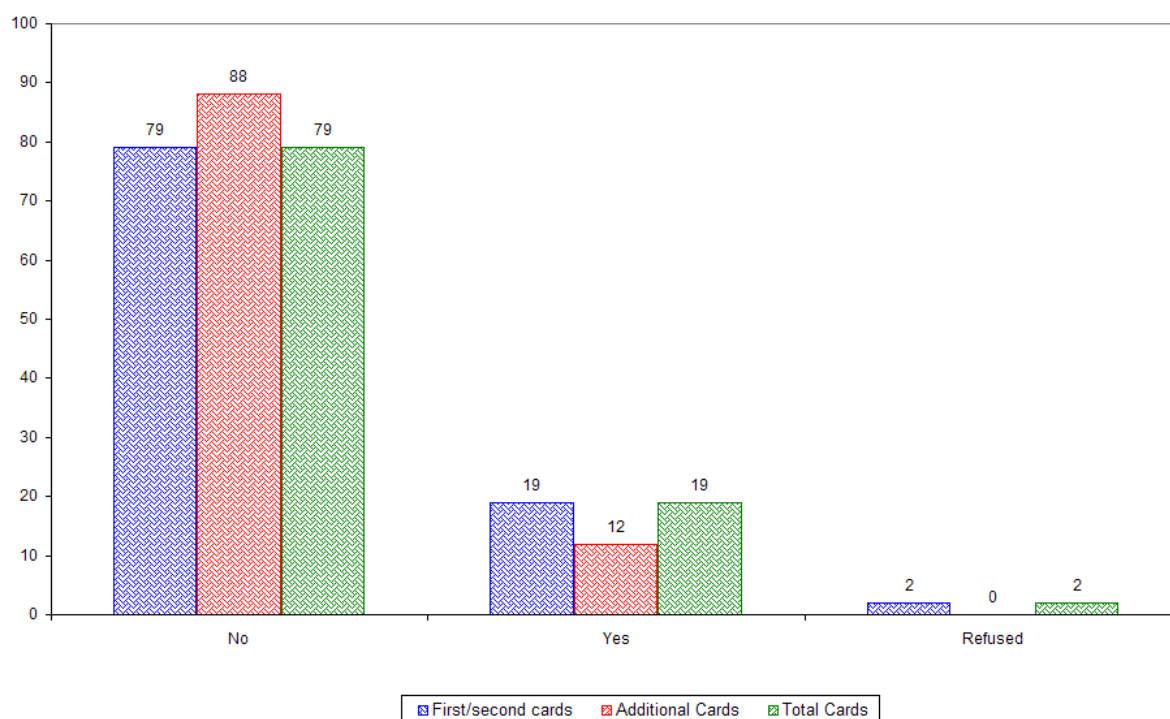
Māori respondents (25%) were significantly more likely than non-Māori/non-Pacific respondents (17%) to have shared their gum.

There were no notable differences in sharing of gum by age group, gender or SES group.

Those who were quit were significantly more likely (25%) to have shared their gum than those who were not quit (16%). (See Table 7.39 in Appendix).

Gum from additional cards (12%) was slightly less likely to be shared than gum from first/second cards (19%). (See Table 7.40 (First/second cards) and Table 7.41 (Additional cards) in Appendix).

Figure 7.14: Sharing of Gum from All Card(s) (%)



Base: First/second cards n=422; Additional n=20; Total cards n=427

(All respondents who received and redeemed first/second and/or additional cards for gum irrespective of whether they used any or not)

Alternative Uses of Gum

Ninety-three percent of respondents did not do anything else with the gum they received. Of those who did something else with the gum alternative uses included:

- gave it away (n=8);
- destroyed it/threw it away (n=6); and
- saving it up (n=3).

(See Table 7.42 in Appendix).

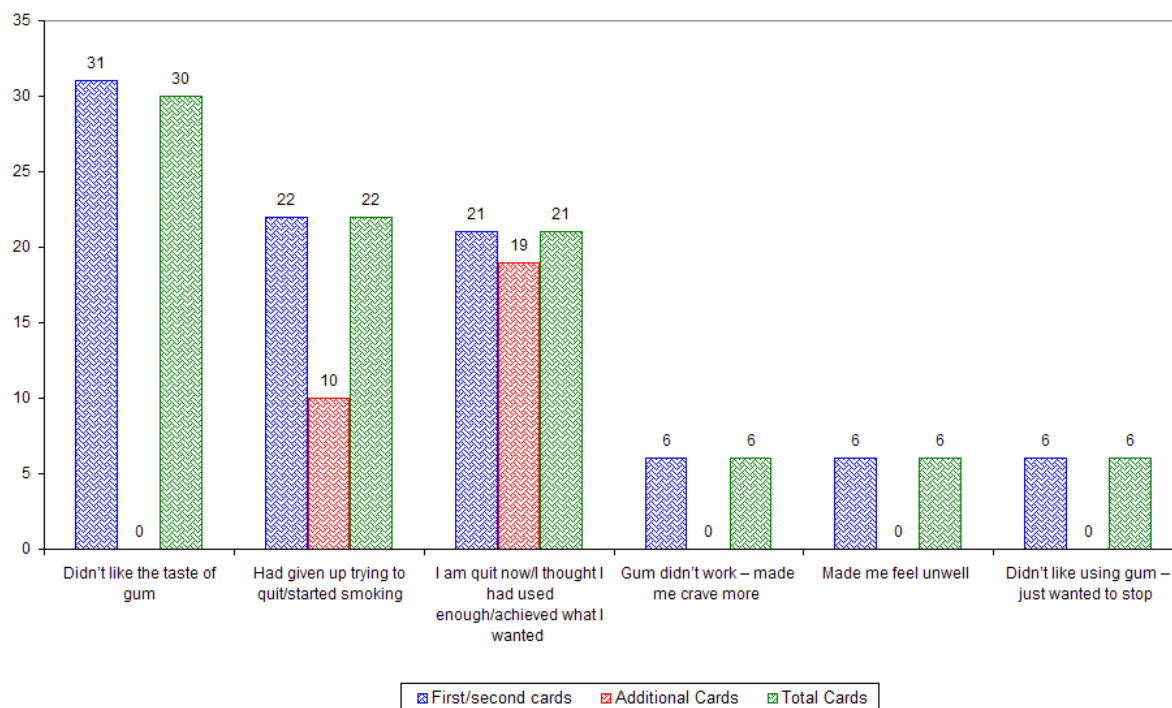
Reasons for Stopping Using Gum

When asked why they stopped using the gum (or why they didn't use any of it), just less than a third of respondents (30%) reported that they didn't like the taste. A further 22% had given up trying to quit/had started smoking again, while 21% reported that they were quit, thought they had used enough to stay quit or had achieved what they wanted. Other common responses included a perception that the gum didn't work and made them crave tobacco more, that the gum made them feel unwell, and/or that they didn't like using the gum (each mentioned by 6% of respondents).

There were no notable differences by demographic groups. (See Table 7.43 in Appendix)

Note: As the sample size for additional cards is small (n=8), only overall results are presented in the Appendix. No cross-tabulated results by demographics are provided. See Table 7.44 (First/second cards) and Table 7.45 (Additional cards) in Appendix.

Figure 7.15: Reasons for Stopping Using Gum from First and/or Second Card(s) (%)



Base: First/second card n=277; Additional cards n=8; Total cards n=282 (All respondents who received first/second and/or additional cards for gum and didn't use any/all of it)

Graph shows six most common reasons

Multiple responses permitted. Consequently graph may total more than 100%.

Uses for Un-used Gum

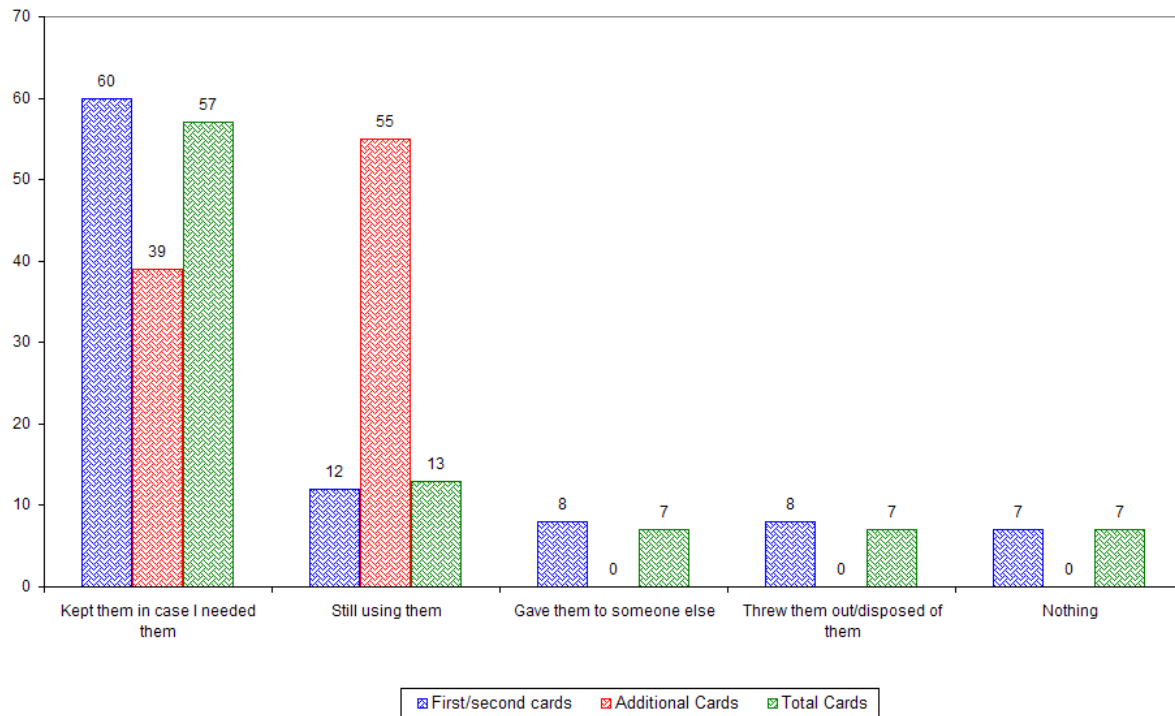
Fifty-seven percent of respondents who had not used all the gum from their quit card(s) reported that they kept the gum in case they needed it in the future. Thirteen percent reported that they were still using the gum. Seven percent gave the gum to someone else, while a further 7% threw the gum out/disposed of it. Seven percent reported that they did nothing else with the un-used gum.

Few significant differences were reported by respondents of different ethnicities, age or SES groups, or between males and females.

Those who were not quit were over-represented among those who kept the gum for future use (63%, compared with 44% of those who were quit). In contrast, those who were quit were more likely to have given the gum to someone else (19%, compared with 2% of those who were not quit). (See Table 7.46 in Appendix).

Those who had received additional cards for gum (55%) were more likely to still be using them than those who had received a first/second card only (12%). (See Table 7.47 (First/second cards) and Table 7.48 (Additional cards) in Appendix).

Figure 7.16: Uses for Un-used Gum from All Cards (%)



Base: First/second cards n=343; Additional cards n=13; Total n=366
 (Respondents who received first/second and/or additional cards for gum but did not use any/all of it)
 Graph shows those reasons mentioned by 5% or more of respondents
 Multiple responses permitted. Consequently graph may total more than 100%.

7.5 Perceived Effectiveness of NRT

Perceived Effectiveness of Nicotine Patches

Perceptions of the effectiveness of nicotine patches was positive, with four out of five respondents (80%) in the six-month follow-up survey stating that they agreed to some extent that nicotine patches increased the chances of quitting. This included 34% who strongly agreed. In contrast, a notably smaller share of respondents disagreed (11%) or strongly disagreed (2%) that nicotine patches were an effective smoking cessation aid.

Of the three ethnic groups, non-Māori/non-Pacific respondents (82%) were most likely to perceive nicotine patches to be an effective cessation aid. This share is significantly higher than for Māori respondents (76%). Pacific (10%) and Māori (7%) respondents were over-represented among those unsure as to whether nicotine patches increased the chances of quitting or not (compared with 4% of non-Māori/non-Pacific respondents).

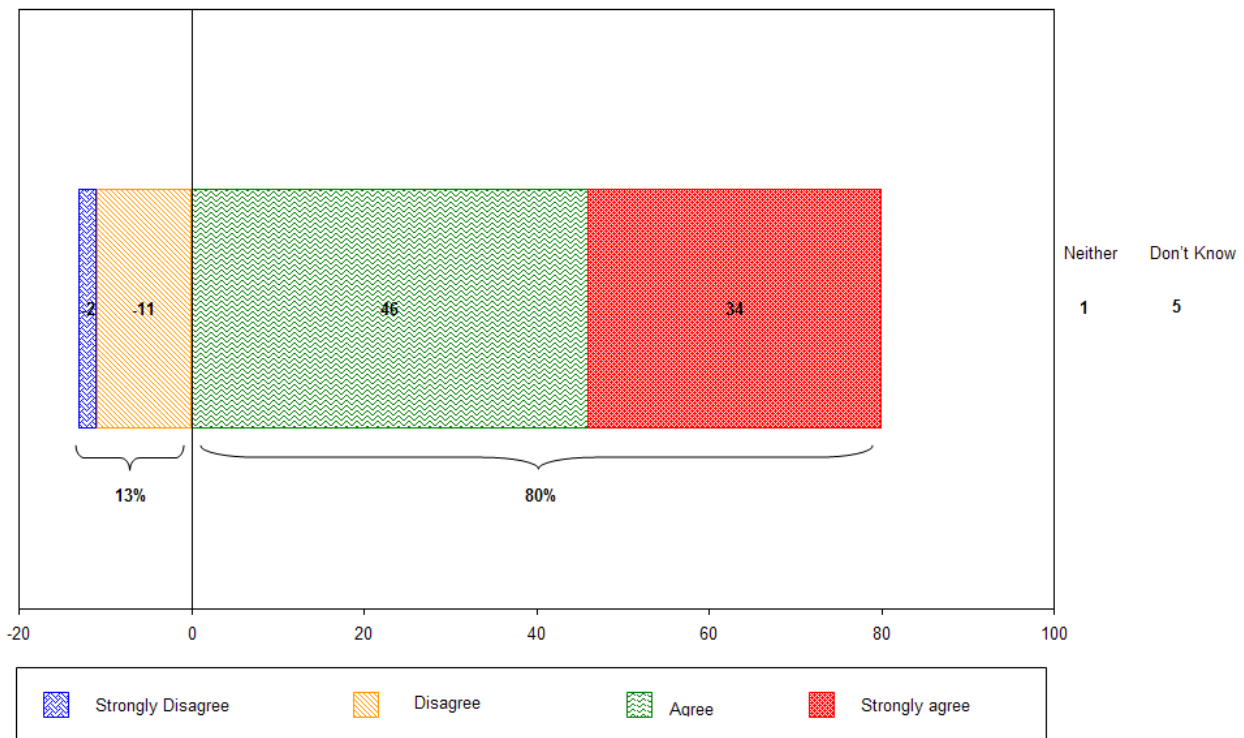
Positive perceptions of the effectiveness of nicotine patches increased with age, with 83% of those aged 65 years or older agreeing to some extent that nicotine patches increased the chance of quitting, compared with 60% of those aged younger than 18 years. Just over a third (34%) of youth (aged younger than 18 years) disagreed/strongly disagreed that nicotine patches increased the chances of quitting. This was significantly higher than all other age groups.

There were no significant differences in perceptions of effectiveness by gender or SES group.

Respondents who were quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up (84%) were significantly more likely to agree/strongly agree that nicotine patches increased the chance of quitting than those not quit (79%).

Personal experience with nicotine patches clearly influences perceptions of effectiveness, with 86% of respondents who, according to Quitline records, were sent quit cards for patches, and 88% of those who reported using patches as part of their quit attempt, agreeing/strongly agreeing that nicotine patches increased the chances of quitting. This compares with 64% of those who were not sent patches and 68% of those who did not use patches. (See Table 7.49 in Appendix).

Figure 7.17: Perceived Effectiveness of Nicotine Patches (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

Perceived Effectiveness of Nicotine Gum

Positive perceptions of the effectiveness of nicotine gum were lower than for patches, with half (51%) of all respondents in the six-month survey agreeing to some extent that nicotine gum increased the chance of quitting. This compares with 80% who considered patches to be effective. Twelve percent of respondents strongly agreed that nicotine gum was an effective smoking cessation aid (compared with 34% for patches). Twenty-six percent disagreed to some extent that nicotine gum increased the chances of quitting. Just less than a quarter of respondents (23%) acknowledged that they were unsure as to the effectiveness of nicotine gum.

Māori (7%) and non-Māori/non-Pacific (6%) respondents were significantly more likely to strongly disagree that nicotine gum is effective than their Pacific counterparts (2%).

Perceived effectiveness of gum was significantly higher among those aged 25 to 44 years (55% agreeing/strongly agreeing) than respondents aged younger than 18 years (42% agreeing/strongly agreeing), 45 to 64 years (46%) or 65 years and older (45%). Uncertainty as to the perceived effectiveness of nicotine gum was particularly evident among older respondents, a quarter of all respondents aged 25 years or older – including 32% of those aged 65 years or older – stating that they didn’t know if nicotine gum increased the chances of quitting. In contrast, respondents aged younger than 18 years were significantly more likely to disagree overall that gum was effective (49%) when compared with those aged 18 to 24 years (32%), 25 to 44 years (23%), 45 to 64 years (23%) or 65 years and older (24%).

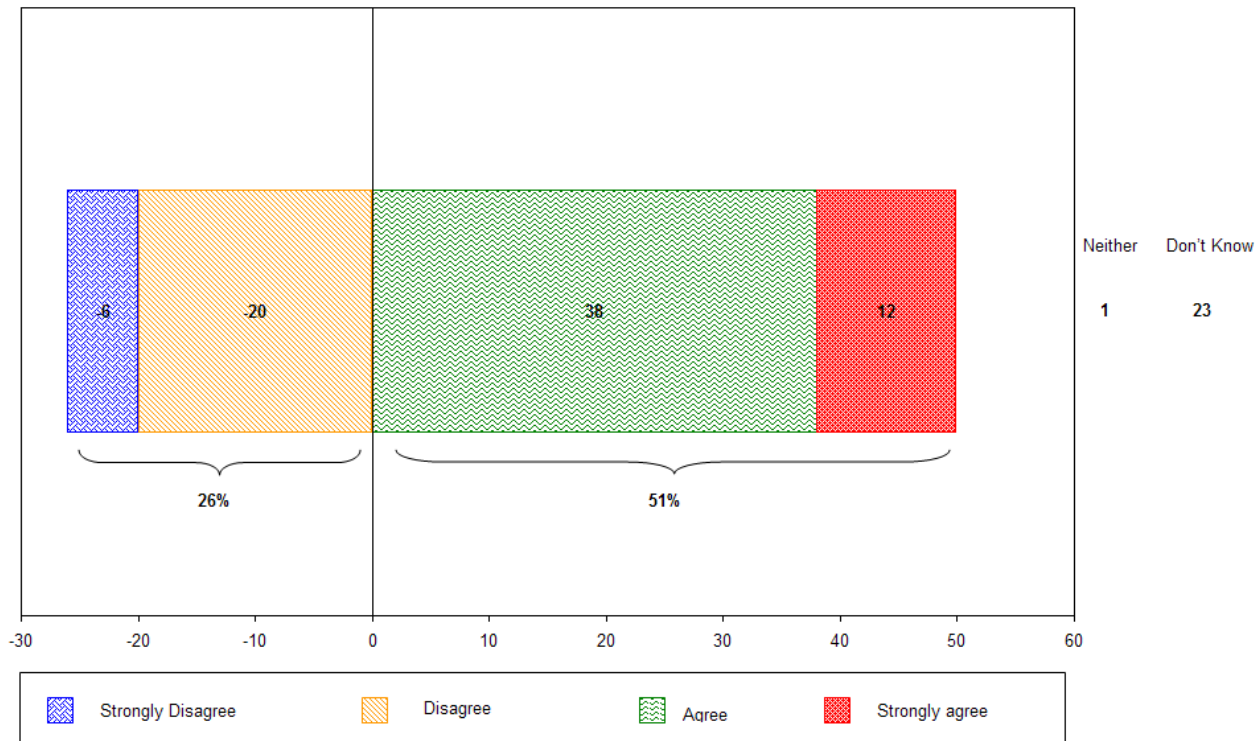
Males (55%) were significantly more likely to perceive nicotine gum as an effective smoking cessation aid than females (47%).

Few significant differences were reported in effectiveness of gum between respondents in different SES groups.

Respondents who were not quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up (28%) were significantly more likely to disagree/strongly disagree that nicotine gum increased the chance of quitting than those who had quit (20%). Twenty-six percent of those who were quit reported that they don't know whether nicotine gum increased the chance of quitting, significantly higher than 22% of those who were not quit.

Personal experience with nicotine gum clearly influences perceptions of effectiveness, with 69% of respondents who, according to Quitline records, were sent quit cards for gum, and 77% of those who reported having used gum as part of their quit attempt, agreeing/strongly agreeing that nicotine gum increased the chances of quitting. This compares with 46% of those who were not sent gum and 46% of those who did not use gum. (See Table 7.50 in Appendix).

Figure 7.18: Perceived Effectiveness of Nicotine Gum (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

7.6 Perceived Safety of NRT

Perceived Safety of Nicotine Patches

Perceptions of the safety of nicotine patches was high, with four out of five respondents (80%) in the six-month follow-up survey stating that they agreed to some extent that nicotine patches were safe to use. This included 24% who strongly agreed with this statement. In contrast, 9% of respondents disagreed (8%) or strongly disagreed (1%) that nicotine patches were safe.

Of the three ethnic groups, non-Māori/non-Pacific respondents (81%) were most likely to perceive nicotine patches to be safe, this share significantly higher than for Māori respondents (77%).

Of the five age groups, those younger than 18 years (17%) or 18 to 24 years (12%) were significantly more likely to disagree overall that patches were safe than those aged 45 to 64 years (9%) or 65 years and older (3%).

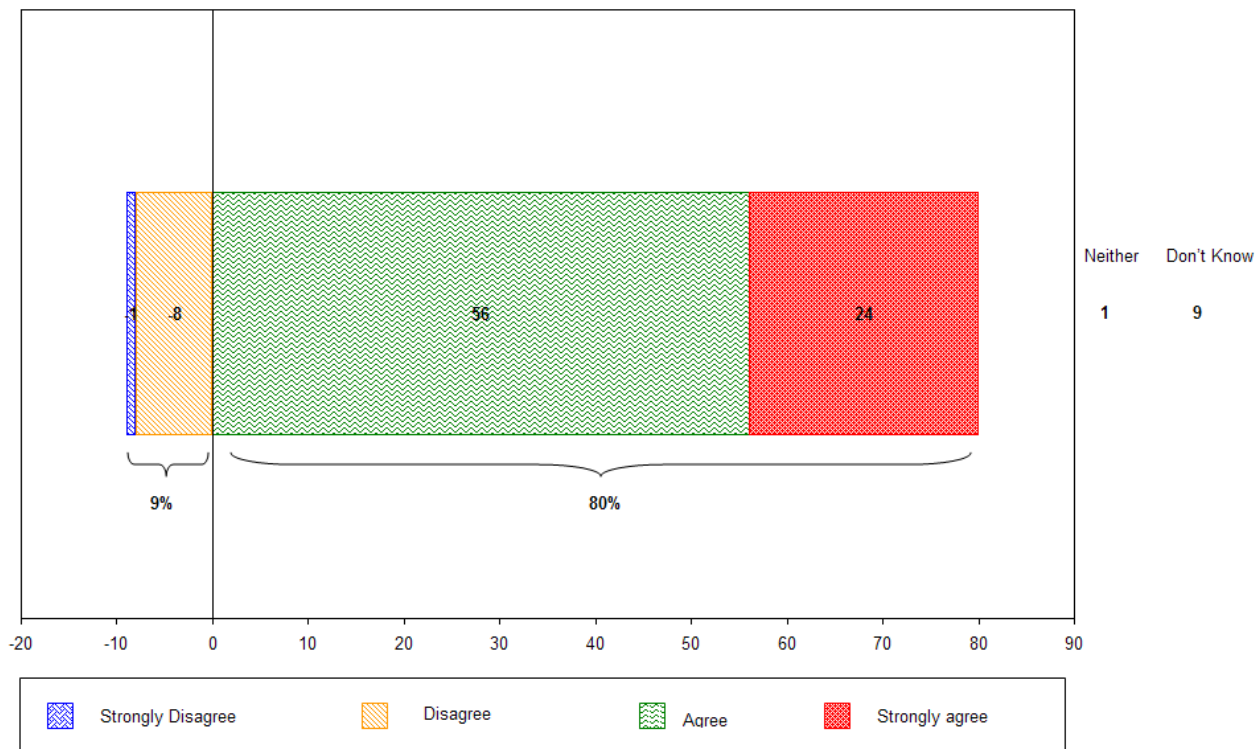
Males (83%) were significantly more likely to perceive nicotine patches to be safe than females (77%).

Few significant differences were reported between those of different SES groups.

Respondents who were quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up (83%) were significantly more likely to agree/strongly agree that nicotine patches were safe than those not quit (78%).

Personal experience with nicotine patches clearly influences perceptions of safety, with 85% of respondents who, according to Quitline records, were sent quit cards for patches, and 88% of those who reported using patches as part of their quitting, agreeing/strongly agreeing that nicotine patches were safe. This compares with 66% of non-patch recipients and 68% of those who did not use patches. (See Table 7.51 in Appendix).

Figure 7.19: Perceived Safety of Nicotine Patches (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

Perceived Safety of Nicotine Gum

Perceptions of the safety of nicotine gum were lower than for patches, with just less than three in five (59%) of all respondents in the six-month survey agreeing to some extent that nicotine gum was safe. This compares with 80% who considered patches to be safe. Eleven percent of respondents strongly agreed that nicotine gum was safe (compared with 24% for patches). Thirteen percent disagreed to some extent that nicotine gum was safe. Perhaps illustrative of a lack of knowledge about nicotine gum, more than a quarter of respondents (27%) were unsure as to the gum’s safety.

As with the safety of nicotine patches, of the three ethnic groups, non-Māori/non-Pacific respondents (60%) were most likely to perceive nicotine gum to be safe, this share significantly higher than Māori (55%) respondents.

Perceived safety of gum was significantly higher among younger respondents, with 69% of those aged younger than 18 years, and 68% of those aged between 18 and 24 years agreeing/strongly agreeing that nicotine gum is safe. This compared with 59% of respondents aged 25 to 44 years, 54% of those aged 45 to 64 years and 55% of those aged 65 years or older. A lack of knowledge around the safety of nicotine gum was clearly evident among older respondents, with those aged 25 to 44 years (26%), 45 to 64 years (35%) or 65 years and older (39%) significantly more likely to give a ‘don’t know’ response when asked if nicotine gum is safe than those aged younger than 18 years (13%) or 18 to 24 years (15%).

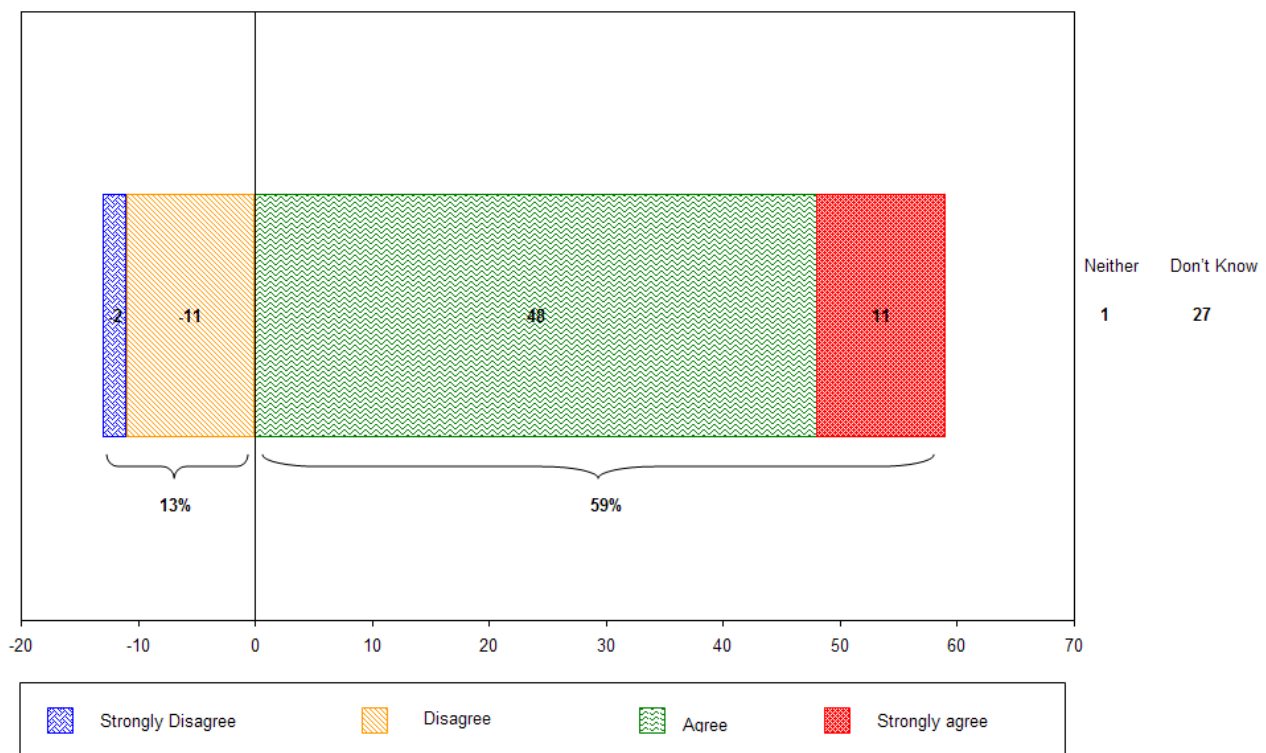
Males (63%) were significantly more likely to perceive nicotine gum to be safe than females (56%).

Respondents in SES Group 1 (31%) were significantly more likely than those in all other SES groups, particularly Groups 4 and 6 (10%) to strongly agree that nicotine gum was safe.

Those who were not quit (14%) were significantly more likely than those who were quit (11%) to disagree/strongly disagree that nicotine gum is safe.

As with patches, personal experience with nicotine gum clearly influences perceptions of safety, with 76% of respondents who, according to Quitline records, were sent quit cards for gum, and 84% of those who reported using gum as part of their quitting, agreeing/strongly agreeing that nicotine gum was safe. This compares with 55% of non-gum recipients and 55% of those who did not use gum. (See Table 7.52 in Appendix).

Figure 7.20: Perceived Safety of Nicotine Gum (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

8. Quit Attempts

Key Points

- At the three-week survey, 78% of respondents had made at least one prior attempt to quit smoking. A quarter (24%) had made one attempt, while 21% had made two attempts, and 33% had made three or more. One in five (20%) had made no previous attempts to quit.
- Eighty-three percent of respondents at the six-month follow-up who were not quit reported having made one or more quit attempts during the study period. Thirty-one percent made at least one other quit attempt during the study period, in addition to the quit attempt they made when they first called the Quitline.

8.1 Quit Attempts Made Prior To Study Period

When asked if they had ever made any serious or planned attempts to stop smoking prior to registering with the Quitline, more than three-quarters of all respondents contacted for the three-week survey (78%) reported having done so. A quarter (24%) had made one attempt, while a further 21% had made two previous attempts. A third of respondents (33%) had previously made three or more attempts. One in five respondents (20%) reported having made no previous serious or planned attempts to stop smoking.

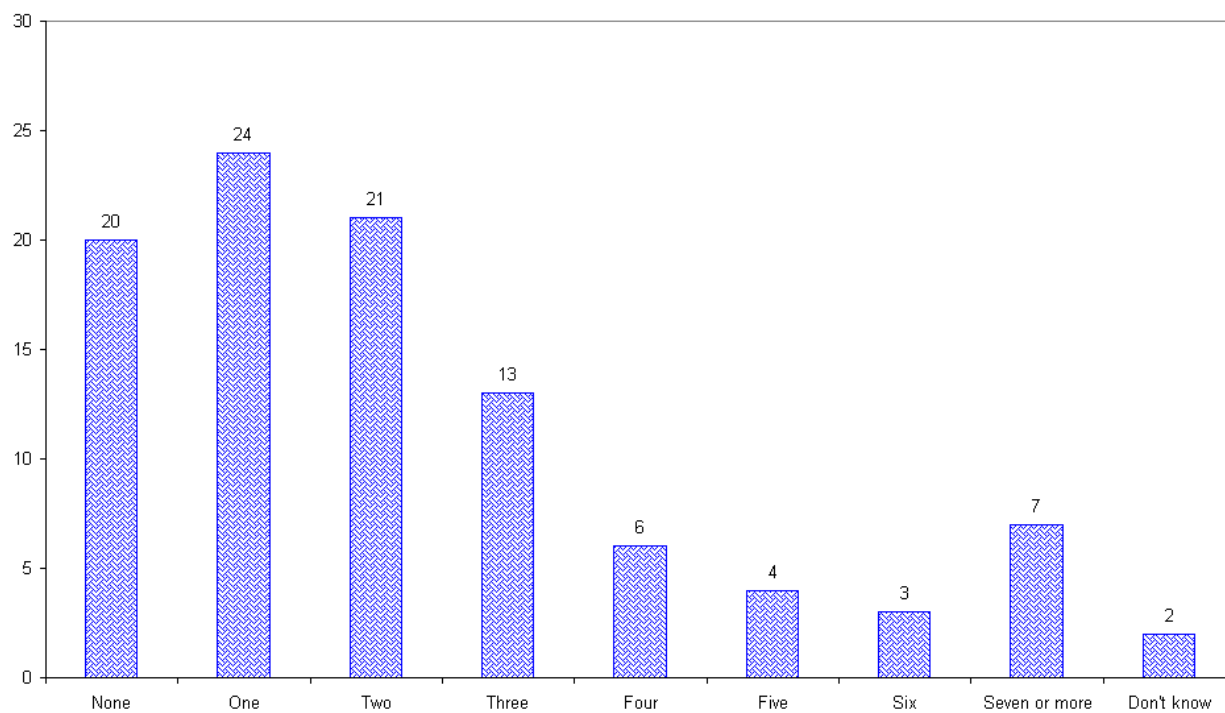
Pacific (30%) and Māori (24%) respondents were significantly more likely than non-Māori/non-Pacific respondents (18%) to report that they had never made any serious or planned attempts to stop smoking previously.

Those aged younger than 18 years (23%), between 18 and 24 years (26%) or between 25 and 44 years (20%) were significantly more likely to have made no previous attempts to quit smoking than those aged 65 years or older (13%).

No significant differences in the number of serious or planned attempts to stop smoking were reported between male and female respondents.

Those in SES Group 1 (17%) were significantly more likely than those in all other groups (6% of those in Group 2, 8% of Group 3, 7% of Groups 4 and 5, and 5% of Group 6) to report having made seven or more attempts to stop smoking.

No significant differences in the number of previous attempts to quit smoking were reported between respondents who had managed to quit and those who had not at the six-month follow-up (using the Seven Day Point Prevalence Quit Rate). (See Table 8.1 in Appendix).

Figure 8.1: Number of Serious or Planned Attempts to Stop Smoking Ever Made (%)

Base: $n=3,969$ (All respondents in the three-week follow-up survey)

8.2 Quit Attempts Made During Study Period

Respondents at the six-month follow-up who were not quit were asked how many quit attempts they had made during the entire study period (including the original quit attempt at the three-week survey). In response, the greatest single share of respondents (53%) reported having made one quit attempt. Twelve percent of respondents reported having made two attempts to quit during the study period while 19% had made three or more quit attempts. Fourteen percent of respondents had made no attempts to quit smoking since calling Quitline just prior to the three-week survey.

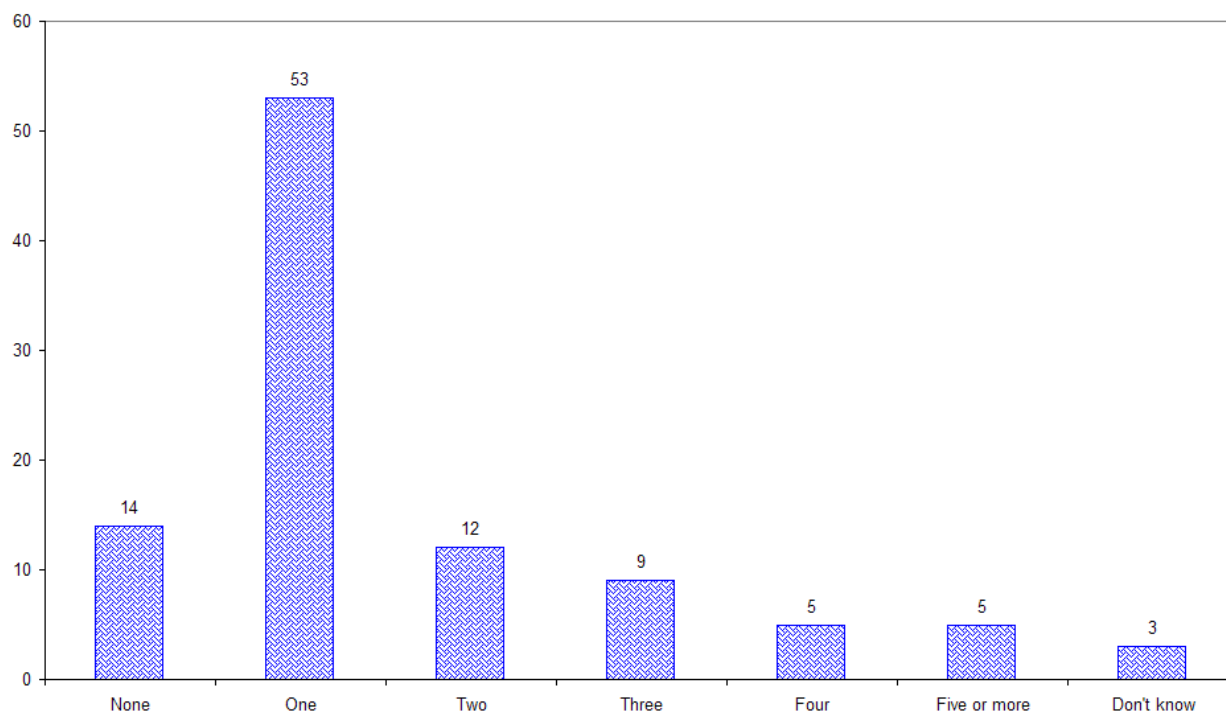
No significant difference was reported in the number of quit attempts between those of different ethnic groups.

Respondents aged 65 years or older (30%) were significantly more likely than all other age groups (17% of those aged younger than 18 years, 10% of those aged 18 to 24 years, 14% of those aged 25 to 44 years and 12% of those aged 45 to 64 years) to have made no attempt to quit during the study period. In contrast, respondents younger than 18 years old were significantly more likely to have made four or more attempts to quit (24%) than those aged 18 to 24 years (8%), 25 to 44 years or 45 to 64 years (both 9%).

Female respondents (16%) were significantly more likely than males (11%) to have not made any quit attempts during the study period. In contrast, males were over-represented among those who reported having made five or more attempts to quit (6%, compared with 3% of female respondents).

No major significant differences were reported in the number of quit attempts made by those in different SES groups.

Respondents who were not quit (using Seven Day Point Prevalence Quit Rate) at the six-month follow-up were significantly more likely to report having made one (53%) or no (15%) quit attempt during the study period (including the original quit attempt at the three-week survey) than those who were quit (43% and 1% respectively). In contrast, those who were quit (28%) were almost three times more likely to have made two quit attempts than those not quit (11%) (See Table 8.2 in Appendix).

Figure 8.2: Quit Attempts Made During Study Period (%)

Base: $n=1,860$ (All respondents not quit at the six-month follow-up survey)

9. Behaviour Change

Key Points

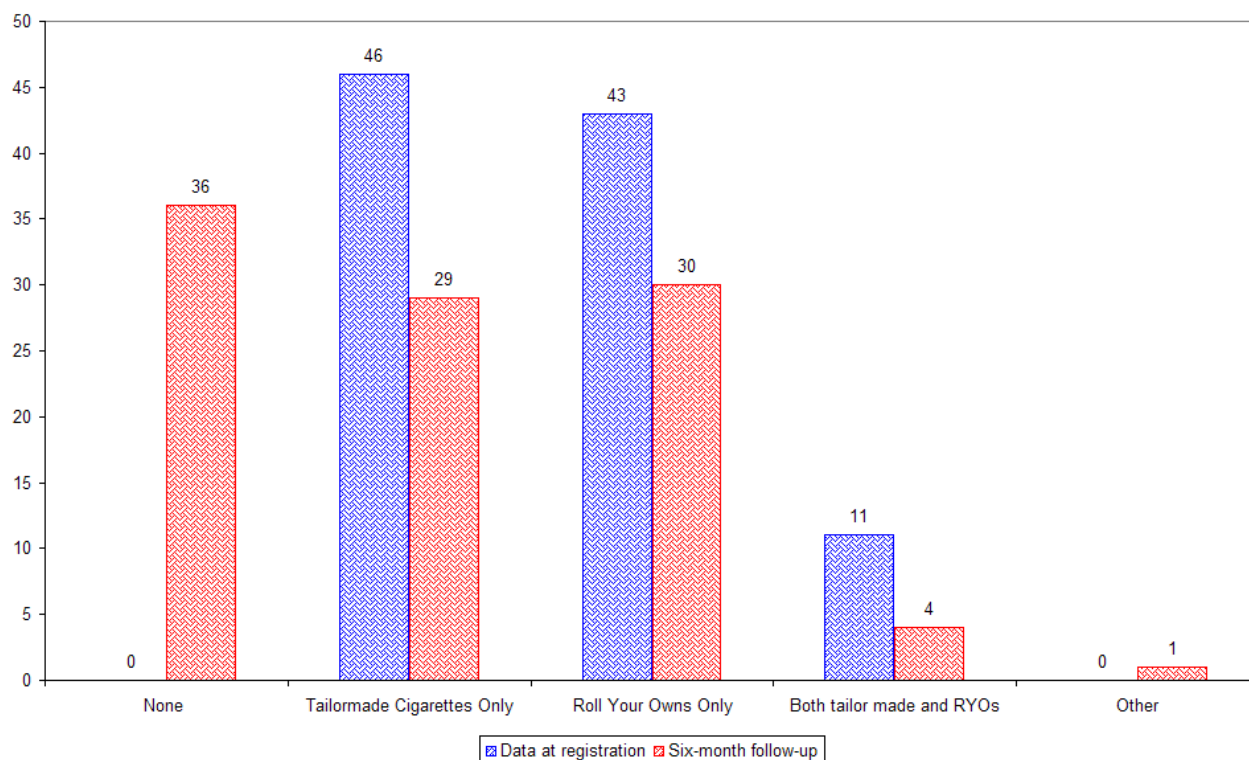
- Overall, 74% of respondents reported having reduced their tobacco consumption over the course of the study period. At the six-month survey, one in five (21%) were smoking about the same amount of tobacco as they had been at the three-week survey. Only 5% of respondents had increased their tobacco consumption over the course of the study period.
- Among respondents who reported smoking tailor-made cigarettes at registration, over the study period more than three-quarters (79%) had reduced the amount they smoked, including 43% who reported being quit at the six-month follow-up survey. Of those respondents who reported smoking roll-your-own cigarettes at registration, over the study period more than two-thirds (69%) had reduced the amount they smoked, including 37% who reported being quit at the six-month follow-up survey.
- At the six-month survey, over four in five respondents (82%) did not allow smoking anywhere indoors (compared with 79% at the three-week survey). Nine percent allowed smoking in set areas only, while 9% allowed smoking anywhere indoors. Over the study period, 7% of respondents reported placing greater restrictions on where they allowed smoking around the home.
- At the six-month survey, four in five respondents (81%) allowed smoking anywhere outdoors around their property. Fifteen percent allowed smoking in set areas outdoors only, while 4% did not allow smoking anywhere outdoors. These results are unchanged from the three-week survey. Over the study period, 4% of respondents reported placing greater restrictions on where they allowed smoking around their property.

9.1 Change in Tobacco Consumption

Type of Tobacco Consumed at Registration and the Six-Month Survey

At the time of the six-month follow-up survey, 36% of respondents reported that they were not currently smoking/that they were quit¹⁷. Thirty percent of respondents reported only smoking roll-your-owns (compared with 43% at registration (Quitline database)) while 29% were smoking tailor-made cigarettes (compared with 46% at registration (Quitline database)). Four percent reported smoking both ‘rollies’ and tailor-mades at the six-month survey. (See Table 9.1 in Appendix).

Figure 9.1: Type of Tobacco Consumed at Registration and the Six-Month Survey (%)



Base: n=2,636 (All respondents at the six-month follow-up survey, excluding those who did not answer this question in the six-month survey)

¹⁷ Note: This figure is higher than that reported in Section Five (Quit Rates) as it includes those who self-identified as being quit at the time of the six-month follow-up survey despite having smoked more than five cigarettes over the study period and/or having smoked at least once in the seven days prior to the survey (as per the calculations in Section Five).

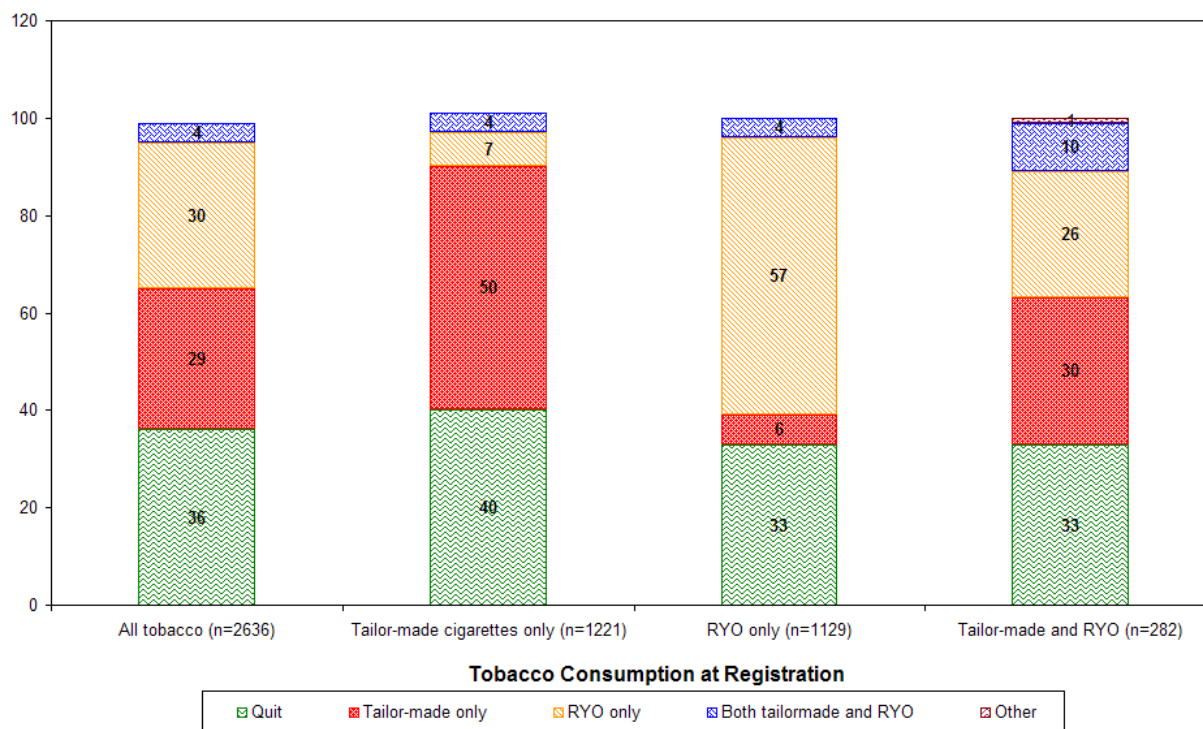
Change in Types of Tobacco Consumed

Of those who smoked tailor-made cigarettes only at registration, at the six-month survey, half (50%) reported still smoking only tailor-made cigarettes. Eleven percent reported now smoking ‘rollies’, including 7% smoking exclusively roll-your-owns and 4% smoking ‘rollies’ in combination with tailor-made cigarettes. Forty percent of those smoking only tailor-made cigarettes at registration considered themselves to be quit at the six-month survey, this share higher than for those smoking exclusively roll-your-own cigarettes at registration (33%).

In contrast, 57% of roll-your-own smokers reported still smoking this form of tobacco exclusively at the six-month survey (this share not changing the type of tobacco they smoke significantly higher than for those smoking tailor-made cigarettes (50%) or both tailor-mades and ‘rollies’ (10%)). At the six-month survey, 6% of those who were previously roll-your-own smokers were smoking exclusively tailor-made cigarettes, while a further 4% were smoking both ‘rollies’ and tailor-made cigarettes.

Among those smoking both tailor-made and roll-your-own cigarettes at registration, at the six-month survey, the share continuing to smoke both forms of tobacco had declined notably, only 10% reporting continuing to smoke both. At the six-month survey, 30% reported that they only smoked tailor-made cigarettes, while 26% reported smoking exclusively ‘rollies’. Thirty-three percent of those smoking both tailor-made and roll-your-own cigarettes at registration considered themselves to be quit at the six-month survey. (See Table 9.1 in Appendix).

Figure 9.2: Changes in Types of Tobacco Smoked (%)



Base: All respondents at the six-month follow-up survey, excluding those who did not answer this question in the six-month survey.

Table 9.1: Changes in Types of Tobacco Smoked (%)

Tobacco Consumption at Six-Month Follow-Up	Tobacco Consumption at Registration		
	Tailor-Made Cigarettes Only <i>(n=1221)</i> A	Roll-Your-Own Cigarettes <i>(n=1129)</i> B	Both Tailor-Made and Roll-Your-Own Cigarettes <i>(n=282)</i> C
Quit	40 B	33	33
No change in type of tobacco consumed	50 C	57 AC	10
Switch to tailor-made/'rollies'	7	6	56
Switch to both forms of tobacco	4	4	-

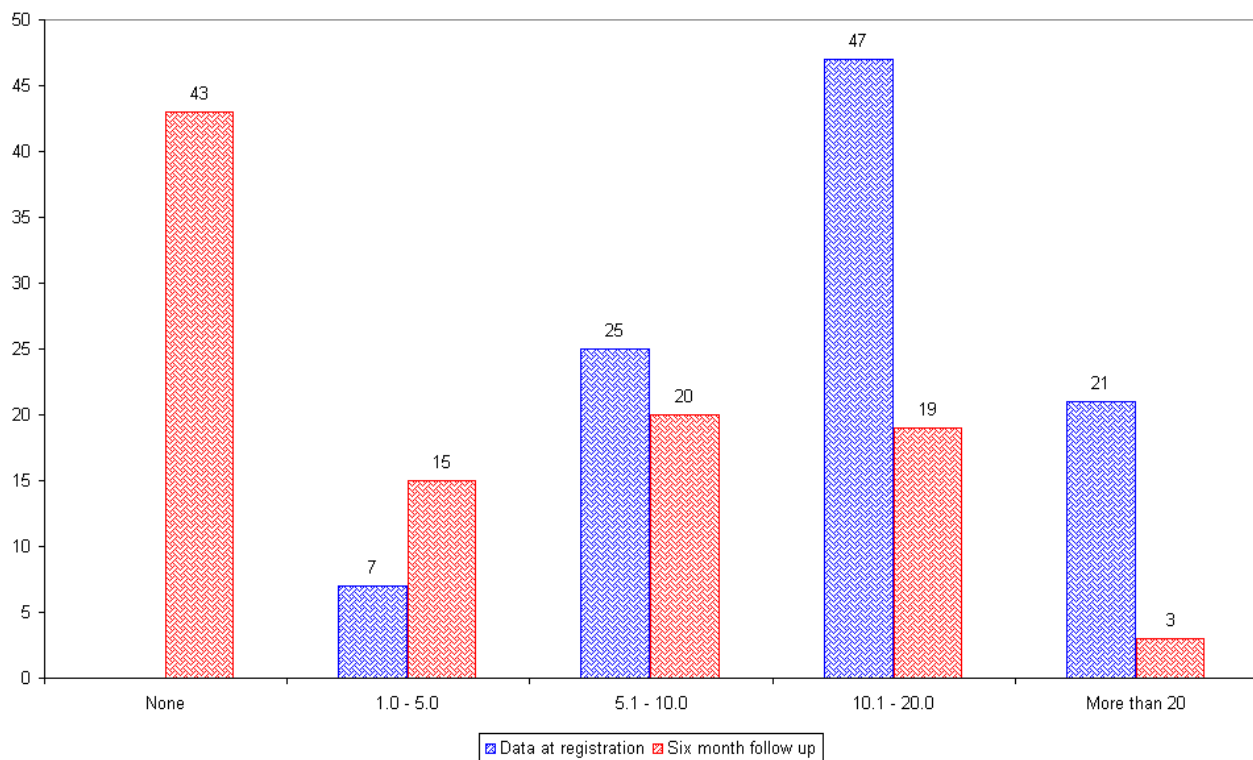
Base: *n=2,636* (All respondents at the six-month follow-up survey, excluding those who did not answer this question in the six-month survey)

Note: Letter notation denotes all cross tabulated categories that this result is significantly higher than

Change in Amount of Tailor-Made Cigarettes Smoked Each Day

At the six-month survey, 43% of respondents who had noted that they smoked tailor-made cigarettes when registering with the Quitline and who reported in the six-month survey how much they currently smoked, reported that they no longer smoked any tailor-made cigarettes because they considered themselves to be quit. At the six-month survey, 15% of respondents smoked between one and five cigarettes per day (up from 7% at registration), while one-fifth (20%) smoked between 5.1 cigarettes and 10 (down slightly from 25% at registration). A further 19% smoked between 10.1 cigarettes and 20 cigarettes, this share having declined notably from registration (down from 47%). The proportion of respondents smoking more than 20 cigarettes per day also decreased notably - from 21% at registration to 3% at the six-month follow-up. (See Table 9.2 in Appendix).

Figure 9.3: Change in Amount of Tailor-Made Cigarettes Smoked Each Day (%)



Base: n=1318 (All respondents registered as smoking tailor-made cigarettes – in some cases in addition to other types of tobacco - who disclosed how much they currently smoke)

Of those respondents who reported smoking tailor-made cigarettes at registration, over the study period more than three-quarters (79%) had reduced the amount they smoked, including 43% who reported being quit at the six-month follow-up survey. In contrast, 4% reported that, over the study period, they increased the amount of tailor-made cigarettes they smoked.

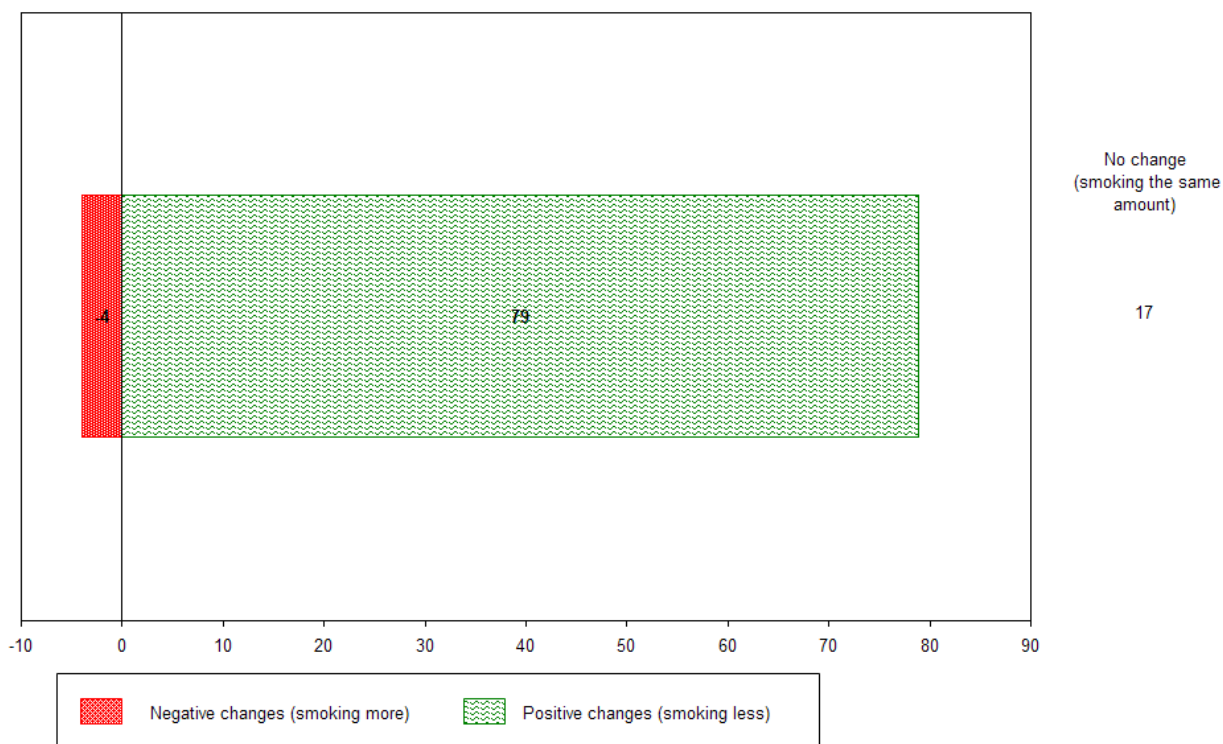
There were no significant differences in the change in amount of tailor-made cigarettes smoked by ethnic group, 82% of Pacific, 81% of Māori and 79% of non-Māori/non-Pacific respondents reporting smoking fewer tailor-made cigarettes at the six-month follow-up than at registration.

Of the five age groups, those aged between 25 and 44 years (82%), 45 and 64 years (80%) and 65 years and older (82%) were the most likely to report having reduced the amount of tailor-made cigarettes smoked over the study period, this share significantly higher than for those aged between 18 and 24 years (69%).

Male respondents (82%) were significantly more likely than females (77%) to report having reduced the amount of tailor-made cigarettes smoked over the study period.

There were no notable differences in changes in tailor-made cigarette consumption by SES group. (See Table 9.3 in Appendix).

Figure 9.4: Overall Change in Amount of Tailor-Made Cigarettes Smoked Each Day (%)

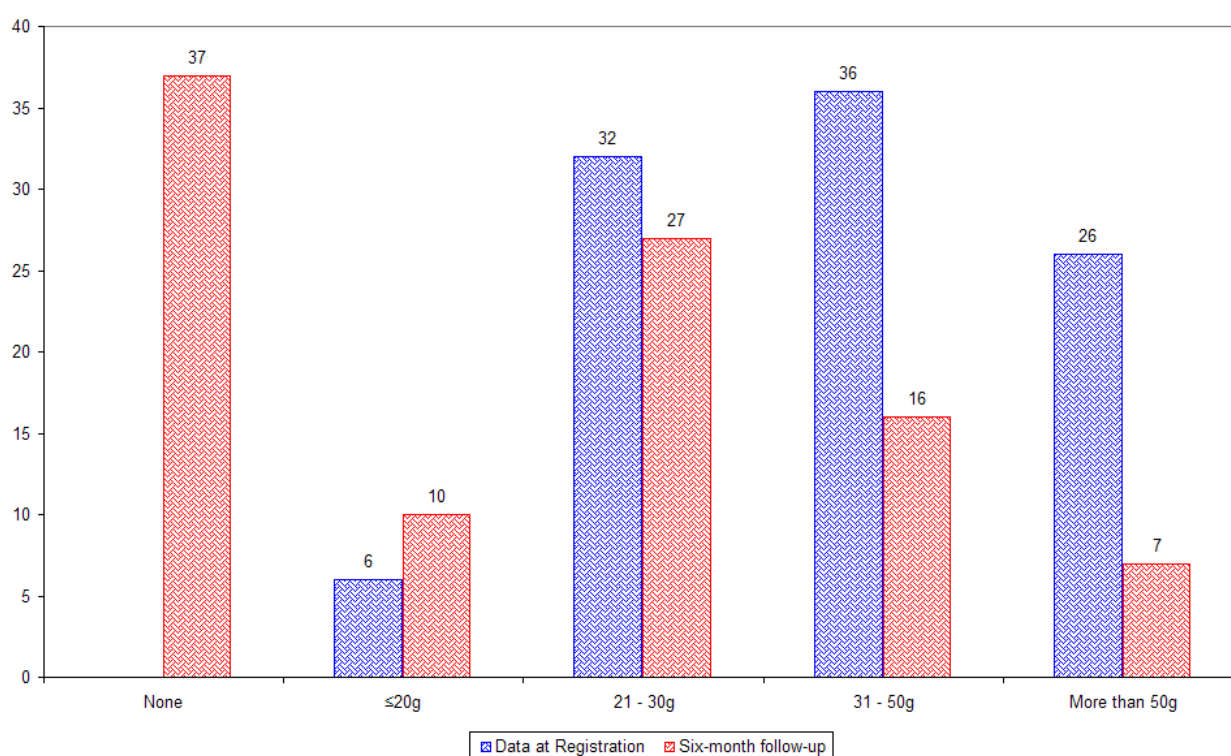


Base: n=1318 (All respondents registered as smoking tailor-made cigarettes – in some cases in addition to other types of tobacco - who disclosed how much they currently smoke)

Change in Amount of Packet Tobacco Smoked Each Week

At the six-month survey, 37% of respondents who had noted that they smoked packet tobacco when registering with the Quitline and who reported in the six-month survey how much they smoked, reported that they did not smoke any packet tobacco because they considered themselves to be quit. Ten percent of respondents used 20g per day or less (up from 6% at registration), while 27% of respondents used between 21g and 30g of tobacco per day (down from 32%). The proportion of respondents using more than 50g of tobacco per day decreased notably over the study period - from 26% at registration, to 7% at the six-month follow-up. (See Table 9.4 in Appendix).

Figure 9.5: Change in Amount of Packet Tobacco Smoked Each Week (%)



Base: n=1219 (All respondents registered as smoking roll-your-own tobacco – in some cases in addition to other types of tobacco - and who disclosed how much they currently smoke).

Of those respondents who reported smoking roll-your-own cigarettes at registration, over the study period more than two-thirds (69%) had reduced the amount they smoked, including 37% who reported being quit at the six-month follow-up survey. In contrast, 6% reported that, over the study period, they increased the amount of packet tobacco they smoked each week.

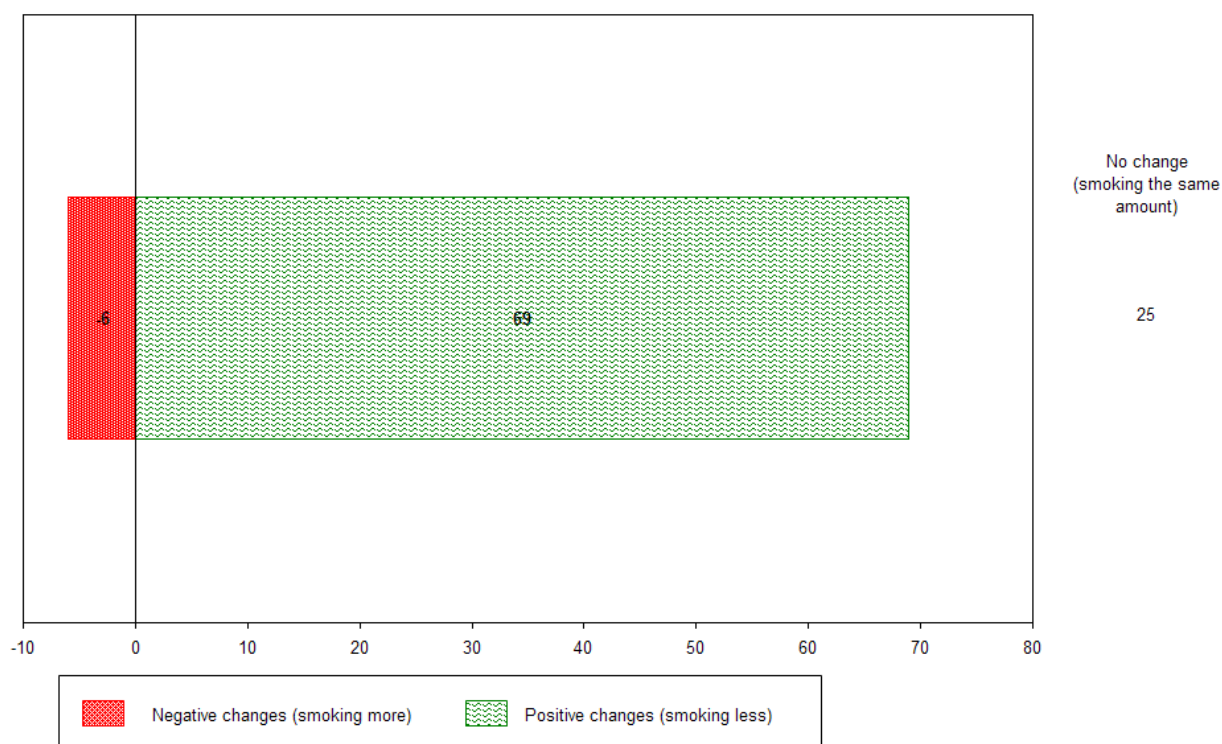
There were no significant differences in the positive change in amount of packet tobacco smoked by ethnic group, with 70% of non-Māori/non-Pacific respondents, 68% of Māori and 65% of Pacific respondents reporting smoking less packet tobacco at the six-month follow-up than at registration. However, Pacific respondents (12%) were significantly more likely to report smoking more packet tobacco at the six-month survey than at registration than their non-Māori/non-Pacific counterparts (5%).

Of the five age groups, those aged 45 to 64 years (75%) were the most likely to report having reduced their packet tobacco consumption over the study period, this share being significantly higher than for those aged younger than 18 years (46%) or between 18 and 24 years (66%). In contrast, youth respondents (those aged younger than 18 years) were over-represented among those who reported having increased their packet tobacco consumption over the study period (19%, compared with 9% of those aged 18 to 24 years, 5% of those aged 25 to 44 years, 3% of those aged 45-64 years and 2% of respondents aged 65 years or older).

Males (28%) were significantly more likely than females (23%) to have not changed the amount of packet tobacco they smoked over the study period.

There were no notable differences in changes in packet tobacco consumption by SES group. (See Table 9.5 in Appendix).

Figure 9.6: Overall Change in Amount of Packet Tobacco Smoked Each Week (%)



Base: n=1219 (All respondents registered as smoking roll-your-own tobacco – in some cases in addition to other types of tobacco - and who disclosed how much they currently smoke).

Change in Amount of Tobacco Consumed

While the methods used to calculate tobacco consumption differed for those smoking tailor-made cigarettes (number of cigarettes smoked per day) and roll-your-owns (amount of packet tobacco smoked each week), it is possible to assess the overall change in tobacco consumption across all respondents – that is, whether consumption at the six-month survey has increased, decreased or remained the same as that recorded at registration¹⁸.

Overall, three-quarters of respondents (74%) reported having reduced their tobacco consumption over the course of the study period. At the six-month survey, one in five (21%) were smoking about the same amount of tobacco as they had been at the three-week survey. Only 5% of respondents had increased their tobacco consumption over the course of the study period.

Whilst the share of respondents who had reduced their tobacco consumption was similar across the ethnic groups (77% of Pacific, 75% of non-Māori/non-Pacific and 73% of Māori respondents), Māori were significantly more likely to report having increased their tobacco consumption over the study period (6%) than their non-Māori/non-Pacific counterparts (4%).

Whilst more than half of respondents from each of the five age groups had reduced their tobacco consumption, youth (52%) were significantly less likely to have done so (compared with 65% of those aged 18 to 24 years, 76% of those aged 25 to 44 years, 78% of those aged 45 to 64 years and 75% of respondents aged 65 years or older). Of the five age groups, youth were over-represented among those who had increased their tobacco consumption over the study period (15%, compared with 6% of those aged 18 to 24 years, 4% of those aged 25 to 64 years, and 3% of respondents aged 65 years or older).

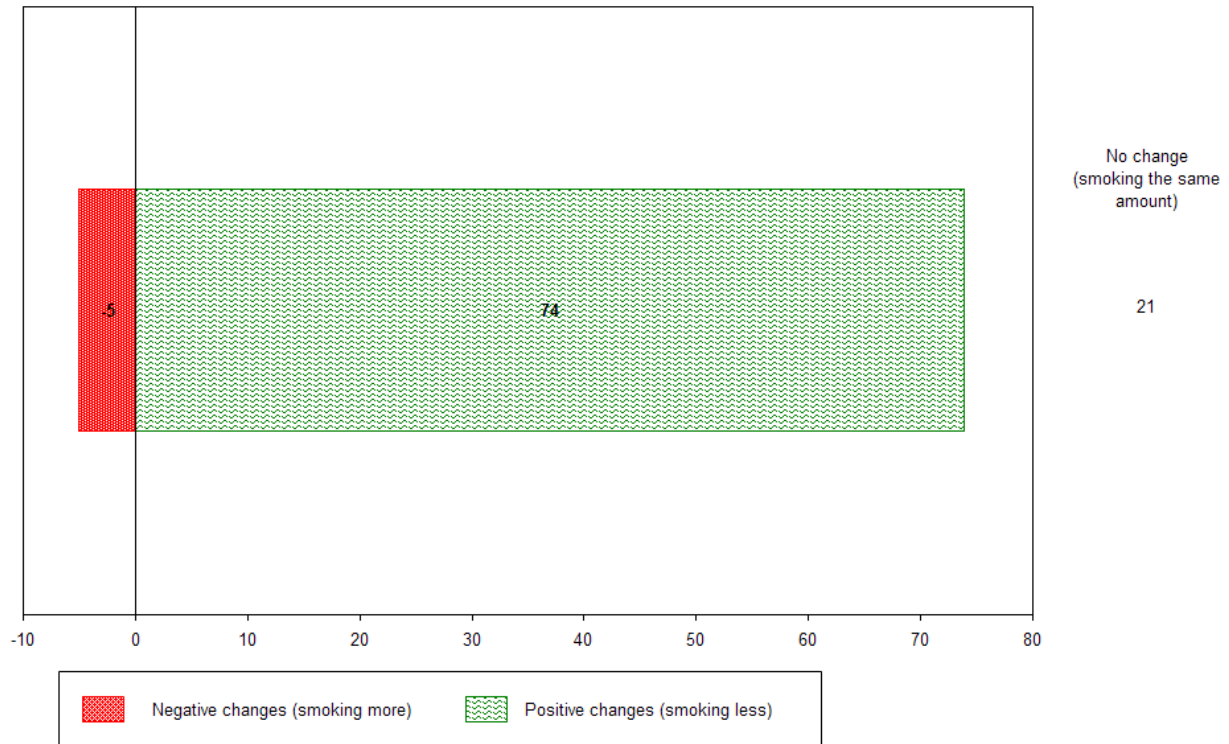
There were no significant differences in changes in tobacco consumption by gender, and no notable differences by SES group. (See Table 9.6 in Appendix).

Note: This analysis only provides an indication of whether consumption has increased, decreased or remained unchanged. The analysis does not give an indication of the extent of the change.

¹⁸ Where respondents reported smoking multiple forms of tobacco, the following rules were applied in calculating overall change in consumption:

- Decline in consumption of one form of tobacco and increase in another = 'unchanged'
- Decline in consumption of one form of tobacco and unchanged in another = 'decline'
- Increase in consumption of one form of tobacco and unchanged in another = 'increase'

Figure 9.7: Change in Amount of Tobacco Consumed Over Study Period (%)



Base: n=2,388 (All respondents at the six-month follow-up survey, excluding those who did not answer this question in the six-month survey)

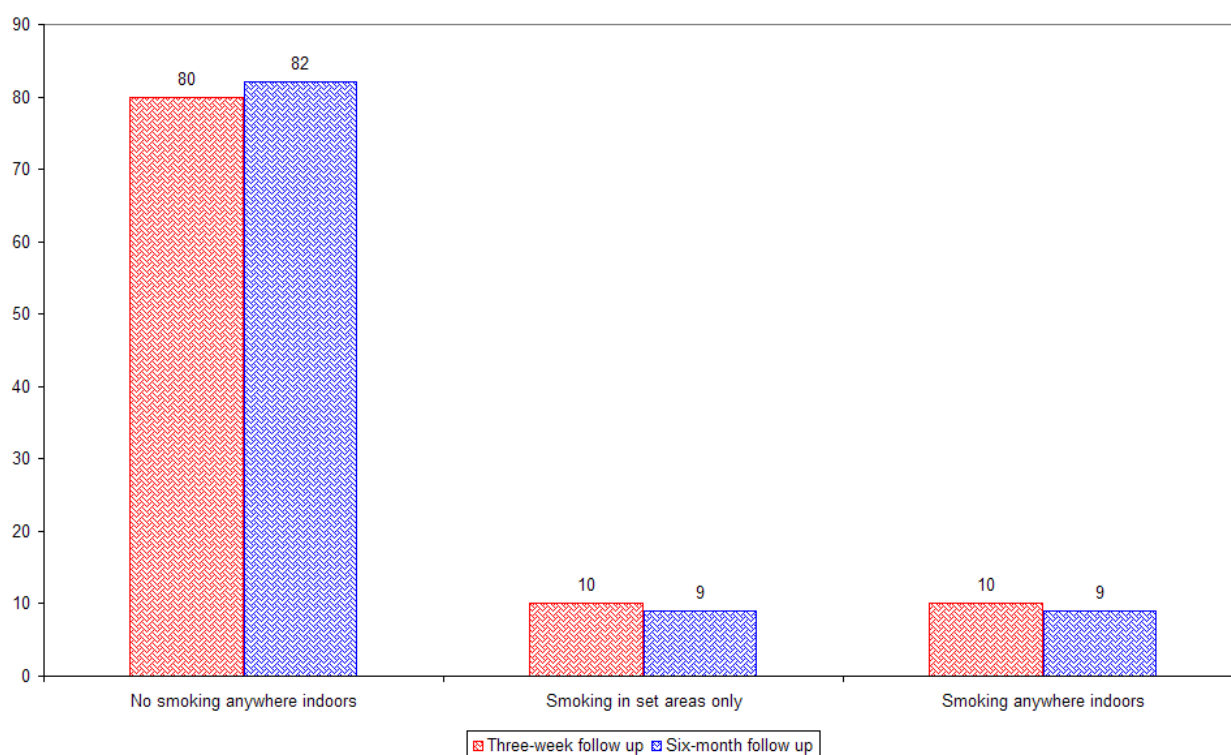
9.2 Changes in Smokefree Environments Around the Home

Smokefree Environments Around the Home

At the six-month survey, over four in five respondents (82%) did not allow smoking anywhere indoors. This compares with 80% of respondents at the three-week survey – a significant increase. Nine percent allowed smoking in set areas only, while another 9% allowed smoking anywhere indoors.

Note: Readers should keep in mind that respondents may not necessarily create or enforce the smoking rules that apply to their household.

Figure 9.8: Changes in Smokefree Environments Around the Home (%)



Base: Three-week follow-up survey n=3,969; Six-month follow-up survey n=2,716 (All respondents).

Most respondents (89%) had made no changes between the two surveys in where they allowed smoking in their homes. However, almost all of these (86% of those who had made no changes) were respondents who did not allow smoking anywhere in their home at both surveys.

In contrast, just over one in ten respondents (12%) had made changes to where they allowed smoking around their home between the three-week and six-month surveys (represented by the blue and dark grey shaded cells in Table 9.2 below). Seven percent of respondents reported having made positive changes in where they allowed smoking around the home - that is, prohibiting smoking anywhere indoors if they had previously allowed smoking in set areas (4%) or anywhere indoors (2%), or restricting smoking to set areas indoors if they had previously allowed smoking anywhere (1%). Five percent of respondents had made negative changes to where they allowed smoking indoors over the study period.

Table 9.2: Changes in Smokefree Environments Around the Home (%)

Six-Month Follow-up	Three-Week Follow-up			
	Anywhere indoors (n=267)	In set areas indoors only (n=264)	Nowhere indoors (n=2182)	Total (n=2,716)
Anywhere indoors (including the garage)	7	0	2	9
In set areas indoors only (including the garage)	1	6	3	9
Nowhere indoors	2	4	76	82
Total¹⁹	10	10	80	100

Base: n=2,716 (All respondents in the six-month follow-up survey)

Note: Blue highlighting denotes respondents who have made a positive change, dark grey highlighting denotes respondents who have made a negative change, while light grey highlighting denotes respondents who have made no change in where they allow smoking in their home.

The rates of positive change in smokefree environments around the home over the study period were similar across the three ethnic groups, with 7% of Māori and non-Māori/non-Pacific respondents and 5% of Pacific respondents reporting at the six-month survey that they allowed smoking in fewer places around the home than they did at the three-week survey.

Respondents aged younger than 18 years (10%), between 18 and 24 years (9%) and between 45 and 64 years (7%) were significantly more likely to report that they allowed smoking in fewer places around the home than those respondents aged between 25 and 44 years (5%). However, youth respondents (12%) were also significantly more likely than respondents aged 18 to 24 years (2%), 25 to 44 years (4%) and 45 to 64 years (5%) to report that they now allowed smoking in more places around the home than they did at the three-week survey.

No significant differences in changes to smokefree environments around the home were reported between male and female respondents.

Respondents in SES Groups 4 (5%), 5 (6%) and 6 (5%) were significantly more likely than those in Group 3 (2%) to have made negative changes to where they allow smoking around the home.

Of those who were not quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey, 5% reported that they now allowed smoking in more areas of their home than they did at the three-week survey, compared with 3% of those who had quit. (See Table 9.7 in Appendix).

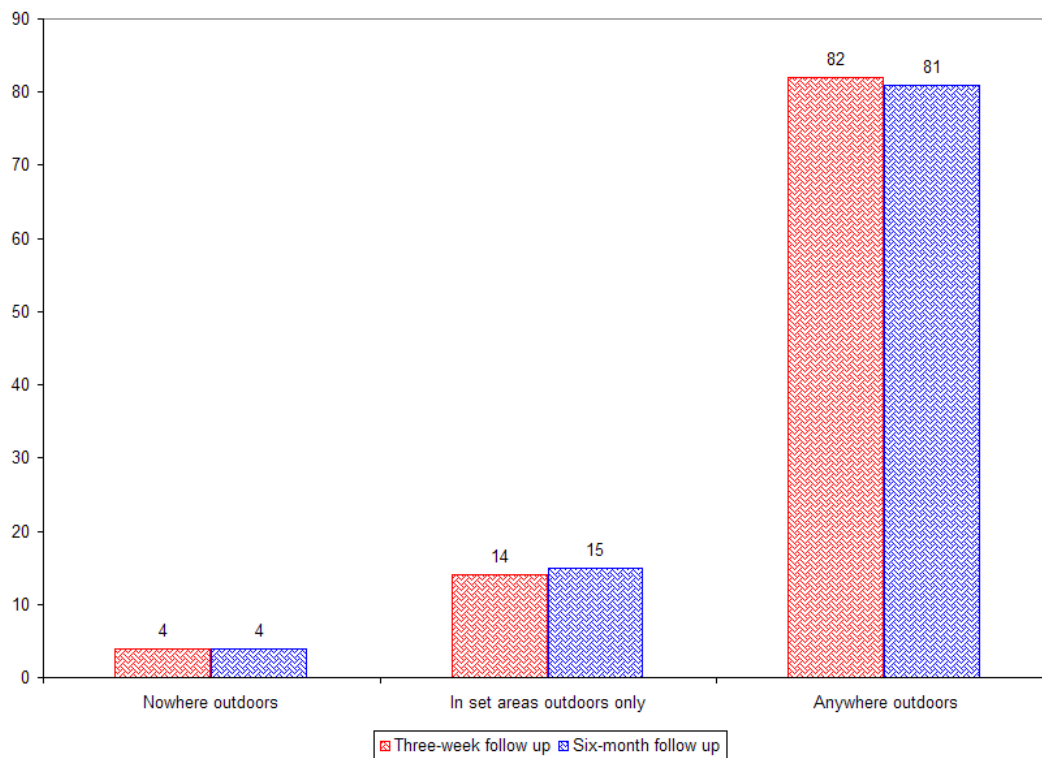
¹⁹ Note: These total figures are based on the three-week survey responses of those who also participated in the six-month survey. Consequently, they differ slightly from those presented in Figure 9.8 which includes responses from all three-week survey participants, irrespective of whether they participated in the six-month follow-up survey or not.

Changes in Smokefree Environments Around the Property

At the six-month survey, four in five respondents (81%) allowed smoking anywhere outdoors around their property. Fifteen percent allowed smoking in set areas outdoors only, while 4% did not allow smoking anywhere outdoors. These results are consistent with results from the three-week survey.

Note: Readers should keep in mind that respondents may not necessarily create or enforce the smoking rules that apply to their household.

Figure 9.9: Changes in Smokefree Environments Around the Property (%)



Base: Three week follow-up survey n=3,969; Six-month follow-up survey n=2,716 (All respondents).

Most respondents (93%) had made no changes in where they allowed smoking around their property between the two surveys, the greatest single share of respondents (78%) allowing smoking anywhere around their property at both surveys.

In contrast, 7% of respondents had made changes to where they allowed smoking around their property between the three-week and six-month surveys (represented by the blue and dark grey shaded cells in Table 9.3 below). Four percent of respondents reported having made positive changes, including 2% who had previously allowed smoking anywhere around their property restricting smoking to set areas outdoors only, and a further 2% prohibiting smoking anywhere around the property. In contrast, 3% of respondents had made negative changes to where they allowed smoking around their property over the study period.

Table 9.3: Changes in Smokefree Environments Around the Property (%)

Six-Month Follow-up	Three-Week Follow-up			
	Anywhere outdoors (n=2222)	In set areas outdoors only (n=391)	Nowhere outdoors (n=99)	Total (n=2,716)
Anywhere outdoors	78	2	1	81
In set areas outdoors only	2	12	0	15
Nowhere outdoors	2	0	2	4
Total²⁰	82	14	4	100

Base: n=2,716 (All respondents in the six-month follow-up survey)

Note: Blue highlighting denotes respondents who have made a positive change, dark grey highlighting denotes respondents who have made a negative change, while light grey highlighting denotes respondents who have made no change in where they allow smoking around their property.

Pacific respondents were significantly more likely (6%) than non-Māori/non-Pacific respondents (4%) to have made positive changes by allowing smoking on fewer areas of their property.

Younger respondents (7% of those aged younger than 18 years and 5% of those aged 18 to 24 years) were significantly more likely than those respondents aged between 45 and 64 years (3%) to have made positive changes in smokefree environments around their property.

No significant differences in changes to smokefree environments around the property were reported between male and female respondents.

Those respondents in the lowest SES Group (SES Group 6 – 6%) were significantly more likely to have made positive changes than those respondents in SES Groups 3, 4 and 5 (all 3%).

No significant differences in changes to smokefree environments around the property were reported between those who were quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey and those who were not quit. (See Table 9.8 in Appendix).

²⁰ Note: These total figures are based on the three-week survey responses of those who also participated in the six-month survey. Consequently, they differ slightly from those presented in Figure 9.9 which includes responses from all three-week survey participants, irrespective of whether they participated in the six-month follow-up survey or not.

10. Attitudes to the Quitline

Key Points

- Just less than half of all respondents (46%) had spoken to a Quit Advisor once (18%) or twice (28%) following registration. A third (32%) had spoken to a Quit Advisor on at least three occasions. One in six respondents (17%) reported that they had not spoken to a Quit Advisor since their registration call.
- Callers' satisfaction with the Quitline service was clearly evident. Ninety-eight percent of those quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up survey stated that they would recommend the service to friends and family wanting to quit, while 85% of all callers not quit reported being likely to re-use the service again in future.
- Satisfaction was further evidenced by the fact that more than half of callers (54%) stated that no improvements to Quitline were needed.
- A desire for more frequent and/or regular contact with Quit Advisors was the most frequently mentioned suggestion for improvement to the service (cited by 18% of respondents, including 23% of those not quit (using Seven Day Point Prevalance Quit Rate) at the six-month survey).

10.1 Number of Times Spoken with Quit Advisor

Excluding the call they made when they registered with the Quitline, just less than half (46%) of all respondents had spoken to a Quit Advisor either once (18%) or twice (28%) by the six-month survey. A third (32%) had spoken to a Quit Advisor on at least three occasions, including 7% who had spoken to an Advisor five or more times. One in six respondents (17%) reported that they had not spoken to a Quit Advisor other than when calling to register.

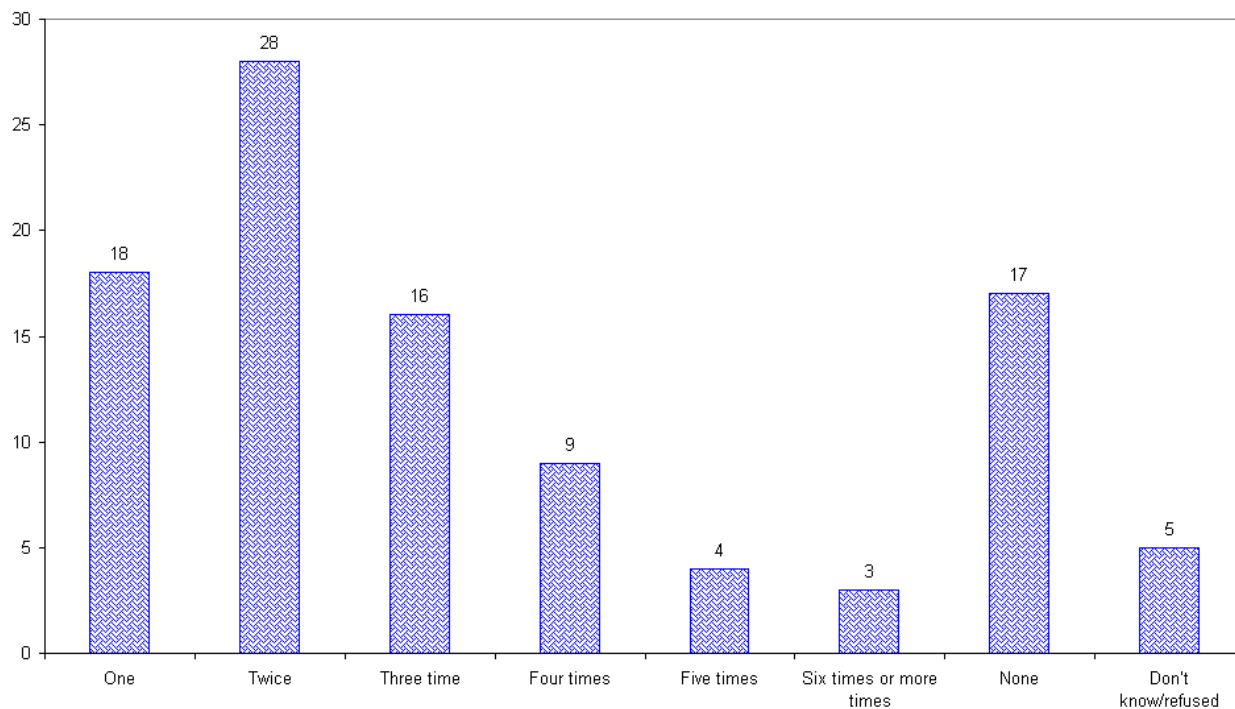
Pacific respondents were significantly more likely to have spoken to a Quit Advisor just once (25%) than both non-Māori/non-Pacific (18%) and Māori (17%) respondents. In contrast, Māori respondents were the most likely to have spoken to an Advisor on five or more occasions (10%, compared with 6% of non-Māori/non-Pacific respondents).

Those aged between 18 and 24 years were the most likely to have not spoken to a Quit Advisor since registration (23%), significantly higher than those aged younger than 18 years (11%), between 25 and 44 years (16%) or between 45 and 64 years (15%). Those aged younger than 18 years were the most likely to have spoken to a Quit Advisor five or more times (11%) compared to those aged between 18 and 24 years (3%), 25 to 44 years (4%) and 45 to 64 years (3%).

No significant differences were reported in the number of times respondents had spoken to a Quit Advisor between male and female respondents or by SES group.

There is not a strong relationship between number of times spoken with a Quit Advisor and quit status, although those who were quit (using Seven Day Point Prevalance Quit Rate) were over-represented among those who spoke to a Quit Advisor five times (5%, compared with 3% of those who were not quit). (See Table 10.1 in Appendix).

Figure 10.1: Number of Times Spoke to a Quit Advisor (%)



Base: n=2,716 (All respondents at the six-month survey)

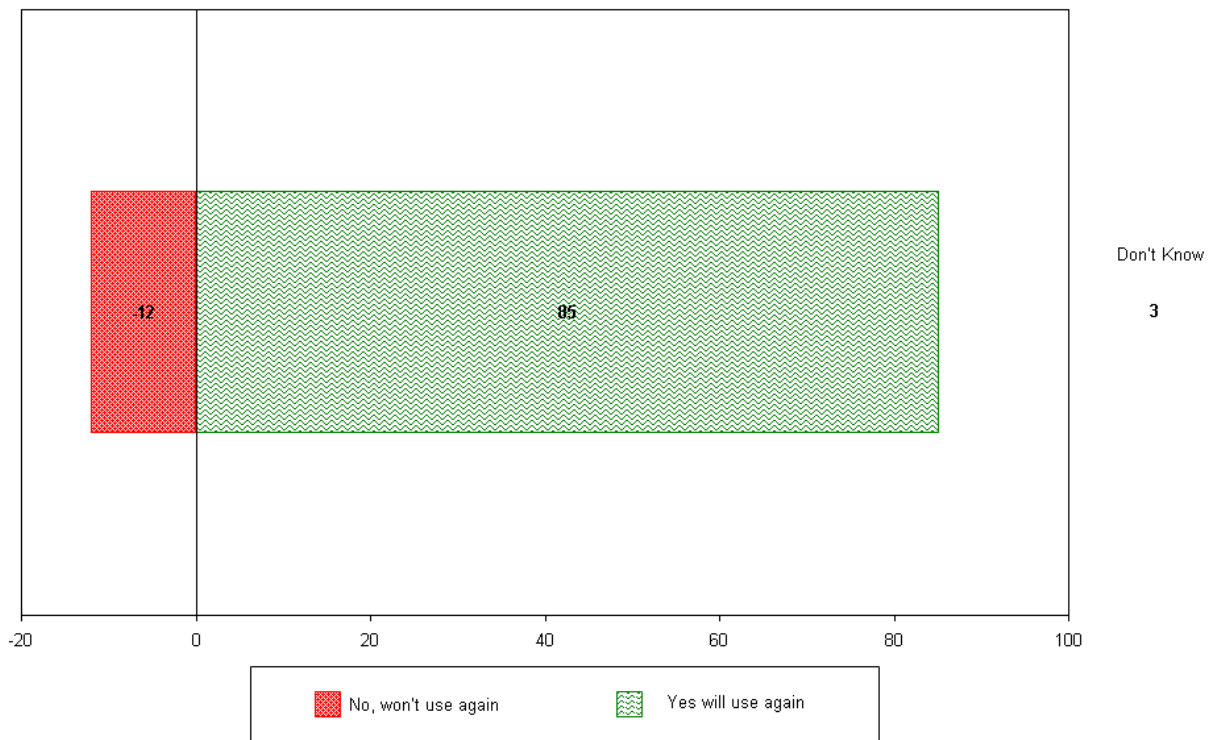
10.2 Likely Future Use of the Quitline

Respondents who were not quit (using Seven Day Point Prevalance Quit Rate) at the six-month follow-up survey were asked whether they would consider using the Quitline again in the future. In response, the majority (85%) stated that they would consider re-using the service. Twelve percent reported that they probably wouldn't use the Quitline again.

While there were no significant differences in likely future use by ethnicity or gender, younger callers (those aged younger than 25 years - 19%) were significantly more likely to state that they wouldn't use the Quitline again compared to smokers aged 25 years and older (10% of those aged 25 to 44 years, 12% of those aged 45 to 64 years and 9% of those aged 65 years or older).

There were no significant differences reported by gender or those of different SES groups. (See Table 10.2 in Appendix).

Figure 10.2: Likely Future Use of the Quitline (%)



Base: n=1,860 (All respondents not quit at the six-month follow-up survey)

Reasons for Being Unlikely To Use Quitline Again (n=228)

The most frequently cited reasons for those who had not quit being unlikely to use the Quitline again were a perception that the nature of the Quitline service (telephone support and the provision of NRT and written material) wasn't the right approach to quitting for the respondent (18%), dissatisfaction that the service didn't work (18%), and dissatisfaction with a lack of follow-up and support from the Quit Advisor (18%). Fifteen percent of those unlikely to re-use the service felt that they could quit on their own, while 10% reported a preference for using other smoking cessation aids and support as part of future quit attempts. Eight percent of respondents unlikely to use the Quitline again mentioned that the patches/gum didn't work.

Results by ethnicity show that non-Māori/non-Pacific respondents (22%) were significantly more likely than their Māori counterparts (9%) to cite a dissatisfaction with the fact that the service did not help them. In contrast, Māori were significantly more likely to report being frustrated at having tried the Quitline programme multiple times before (9%) than non-Māori/non-Pacific callers (2%).

Few significant differences were reported in reasons for being unlikely to use the Quitline again between respondents of different ages.

Males (21%) were significantly more likely to state that they were unlikely to use the Quitline again as they felt they could quit on their own (compared with 11% of females). Females unlikely to re-use the Quitline were significantly more likely to state that they would try alternative smoking cessation aids and support in future (14%, compared with 5% of males).

Few significant differences were reported between those in different SES groups. (See Table 10.3 in Appendix).

Table 10.1: Reasons For Being Unlikely To Use Quitline Again (%)

	Share of Sample (n=228)
Just didn't work for me/not the right method	18
Didn't help me/didn't do what I needed	18
No follow-up or feedback/lack of support from QA	18
I can quit by myself – willpower/cold turkey	15
Prefer different methods of quitting/ended up quitting using other methods	10
Patches/gum didn't work	8
Individual needs to make a choice – only so much Quitline can do	6
Didn't like using patches/gum	5
Poor service/didn't like the way I was treated	5
Already tried Quitline multiple times	5
Not personalised enough – QA too impersonal/scripted	5
Had a bad reaction to patches/gum	4
Never sent the Quit Pack/quit cards	4
Would rather have support of family/friends	3
Lack of alternatives available – if their way doesn't work, they can't help you	3
Don't want to use nicotine-based products	3
Don't want to waste their time or mine	2
Can get patches/gum without Quitline	2
Wanted/needed face-to-face support; telephone calls not enough	2
Prefer to seek help from doctor	2
Don't intend to quit smoking/won't try quitting again	2
Won't need to – quit for good this time	2

Base: n=288 (All respondents not quit in the six-month follow-up survey and who were unlikely to use the Quitline for future quit attempts)

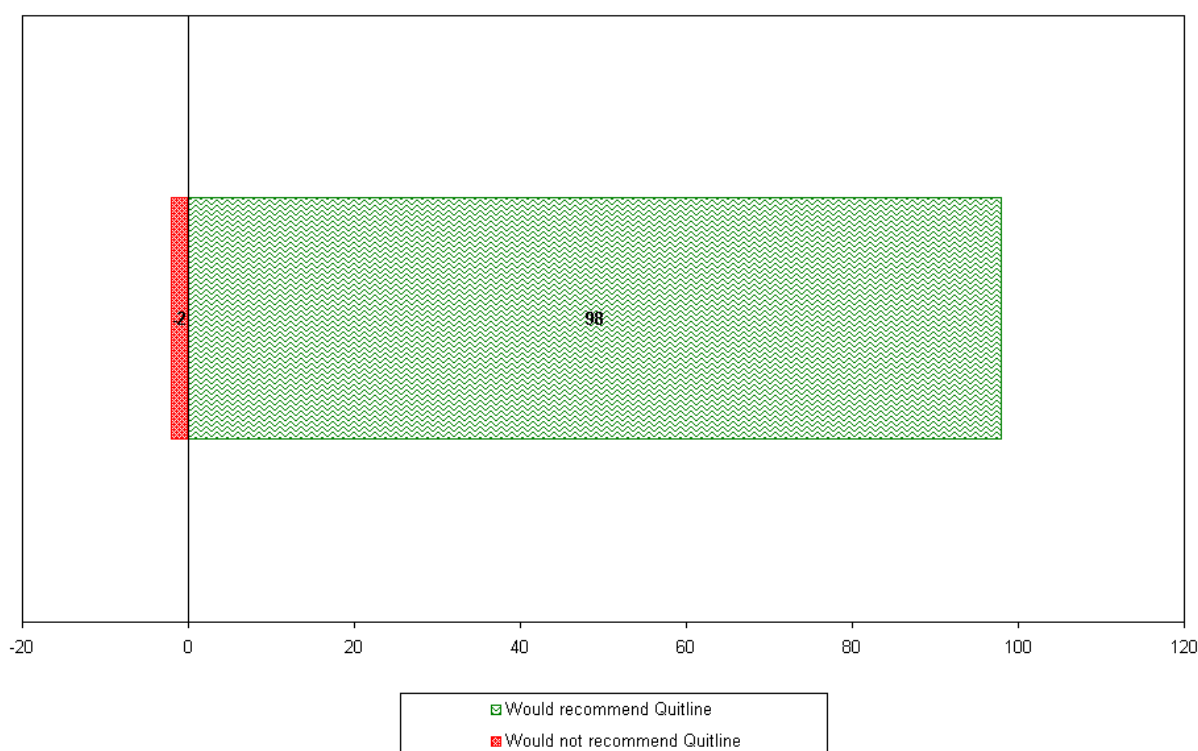
Table lists those reasons for being unlikely to re-use mentioned by 2% or more of respondents. Multiple responses to this question permitted. Consequently, table may total more than 100%

10.3 Likelihood of Recommending Quitline to Others

Of those who were quit at the six-month follow-up, almost all (98%) stated that they would recommend the Quitline to a friend or family member considering quitting smoking.

While highly rated among all ethnic groups, non-Māori/non-Pacific respondents (99%) were significantly more likely to recommend the Quitline than those of Pacific descent (93%). There were no other significant differences in likelihood of recommending by demographic characteristics. (See Table 10.4 in Appendix).

Figure 10.3: Likelihood of Recommending Quitline to Others (%)



Base: n=856 (All respondents who were quit at the six-month follow-up survey)

10.4 Suggestions for Improvement to the Quitline Service

Having Quit Advisors make more frequent and/or regular contact with callers was the most frequently cited suggestion for improvement to the Quitline service, being mentioned by 18% of respondents. Three percent of respondents suggested more advertising of the Quitline service, and in particular promoting the nature of the support offered such as the number of support calls provided. Other possible improvements (each mentioned by 2% of respondents) included:

- make it easier to get through to the Quitline/no limit on the number of calls that can be made;
- send out Quit Packs/quit cards more quickly;
- more personalised/individual service rather than having one service for all;
- offer alternative forms of smoking cessation medication; and
- more genuine support from Quit Advisors/Quit Advisors need to be less judgemental/more interested in callers.

More than half of all respondents (54%) specifically stated that no improvements to the Quitline service were needed.

Few suggestions were more likely to be mentioned by respondents of different ethnic groups, by those of different ages, between males and females or between those in particular SES groups.

Those who were not quit were significantly more likely to suggest:

- more frequent and/or regular contact with callers (23%, compared with 11% of those who were quit);
- more support from Quit Advisors (3%, compared with <1% of those who were quit); and
- send out packs more quickly/get the card sooner (3%, compared with 1% of those who were quit).

In contrast, those who were quit (63%) were significantly more likely to state that no improvements to the Quitline service were needed than those who had not quit (49%).

A comparison of results from the three-week and six-month surveys shows that the desire for more frequent and/or regular contact from Quit Advisors was the most frequently cited suggestion for enhancement to the Quitline service across both time periods. However, it was significantly more likely to be cited in the six-month survey (18%) than in the three-week follow-up (6%). Respondents were significantly more likely at the three-week survey to state that no improvements were needed (65%) than at the six-month follow-up (55%). (See Table 10.5 in Appendix).

Table 10.2: Suggestions for Improvement to the Quitline Service (%)

	Share of Sample (n=3172)
More frequent contact from Quit Advisors/more regular contact	18
More advertising of Quitline/nature of support offered	3
Make it easier to get through to Quitline/no limit on calls	2
Send out Quit Packs more quickly/receive quit cards more quickly	2
More personalised service/customer-focused rather than one way for all	2
Offer pills/other medications to stop smoking	2
More genuine support from Quit Advisors/less judgemental	2
More understanding Quit Advisors/someone who has quit themselves	1
More advice/information on how to use patches/gum	1
Get sent two cards together/more flexibility with giving out NRT	1
Other stronger/alternative NRT/fund other products	1
Option of personal visits from Quit Advisors	1
Offer a list of support groups/provide support groups	1
Better tasting gum/NRT that doesn't make you sick	1
Longer opening hours/open 24-7/open on Saturdays	1
More training for Quit Advisors/more knowledgeable/more professional	1
Send/provide more information e.g. brochures, DVDs on quitting	1
Don't put calls on hold/have better phone answering system	1
Less expensive NRT	1
Do what they say they will/follow through on promises	1
Allow younger people to use the Quitline	1
Keep clients on file so they don't have to re-register	1
Get sent NRT directly (rather than quit card)	1
Incorporate Allan Carr's quit book	1
Be able to speak to the same Quit Advisor each time you call	1
Text message and email contact with Quitline/Able to get Packs via email	1
Reduce length of registration process	1
No improvements needed	54
Don't know	10

Base: n=3,172 (Random selection of respondents asked this question in the three-week follow up survey/All respondents in the six-month survey).

Table lists those suggestions for improvement mentioned by 1% or more of respondents.

Multiple responses to this question permitted. Consequently, table may total more than 100%

11. Relapse

Key Points

- A third of respondents who had relapsed after their first call to the Quitline (33%) reported stress/a stressful situation/anxiety as the main reason they started smoking again. Being tempted by other people smoking around them (11%) and a difficult personal or family life event (10%) were also frequently mentioned as were not being ready to quit (9%) and giving into cravings (8%).
- Most respondents (86%) who had stopped smoking but had relapsed during the study period had not called Quitline again since relapsing.
- Of those who decided to call the Quitline again when they relapsed, the greatest single share (35%) rang because they wanted to attempt to quit again. Two in five (39%) rang because they wanted access to cheap (26%) or more (13%) NRT, while 38% rang back because they liked the support offered (19%), wanted the guidance/help offered by Quitline (11%) or wanted the information/brochures available through Quitline (8%).
- Of those who had not called Quitline back when they started smoking again, 17% reported that they did not do so because they were too embarrassed to admit that they hadn't quit/felt like a failure/felt guilty. Fifteen percent were not ready to quit, didn't want to quit or lacked motivation. Being too busy to re-contact (13%) and a perception of being able to quit without Quitline's support (13%) were also frequently mentioned.

11.1 Reasons for Relapse

Main Reason for Relapse after First Call to Quitline

Those who were still smoking were asked for the main reason they started smoking again after calling Quitline just prior to the three-week follow-up survey. In response, 33% reported stress/a stressful situation/anxiety as the main reason they started smoking again. Eleven percent mentioned that they were tempted by other people smoking around them while 10% reported starting smoking again after a difficult personal or family life event. Not being ready to quit (9%) and giving in to cravings (8%) were also frequently mentioned.

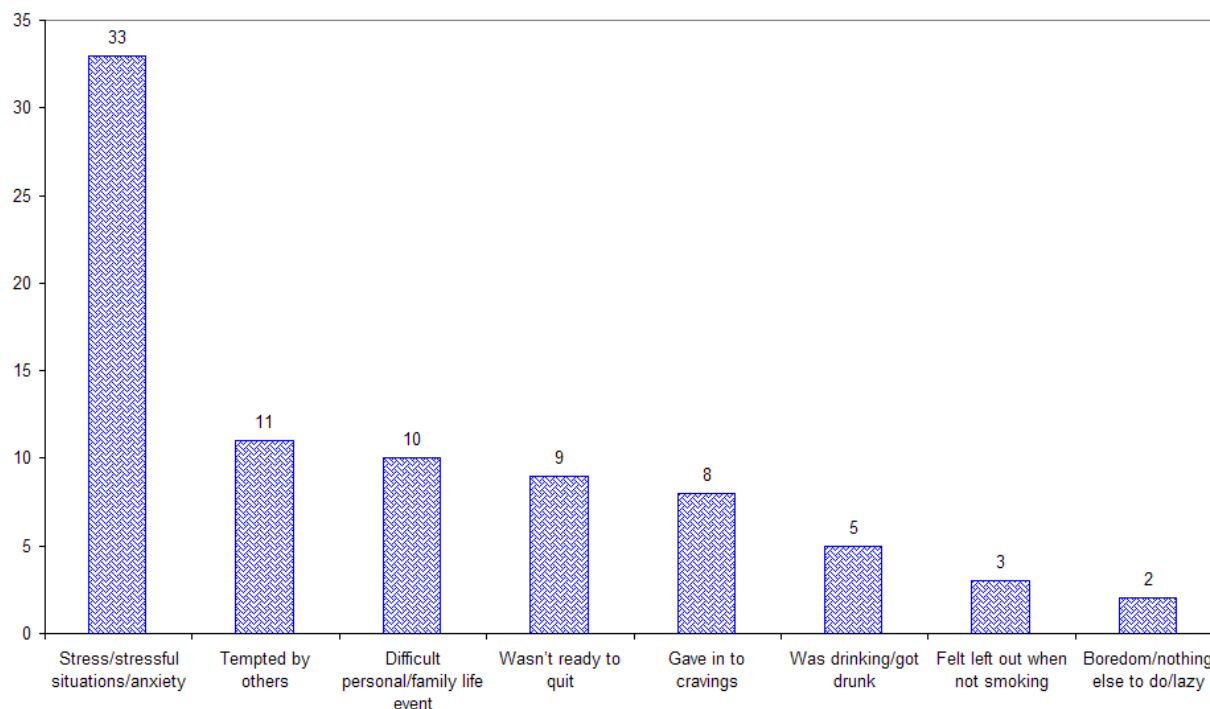
Pacific respondents (11%) were significantly more likely to cite drinking/getting drunk as their main reason for relapse than Māori and non-Māori/non-Pacific respondents (5%). In contrast, non-Māori/non-Pacific respondents (10%) were significantly more likely to attribute their relapse to not being ready to quit (compared with 6% of Māori respondents).

Those aged between 45 and 64 years (29%) were significantly less likely to report stress/a stressful situation/anxiety as the main reason for relapse than those aged between 18 and 24 years (36%) or 25 and 44 years (35%). In contrast, those aged younger than 18 years (25%) were over-represented among respondents citing being tempted by other smokers as the main reason for relapse (compared with 10% of those aged 18 to 24 years, 9% of those aged 25 to 44 years, 12% of those aged 45 to 64 years and 8% of respondents aged 65 years or older).

No significant differences were reported in the main reason for starting to smoke again between males and females or between SES groups.

Note: Responses represent a combination of those made during the three-week and six-month follow-up surveys when asked for reasons for relapse after the first call to Quitline.

Figure 11.1: Main Reason for Relapse After First Call to Quitline (%)



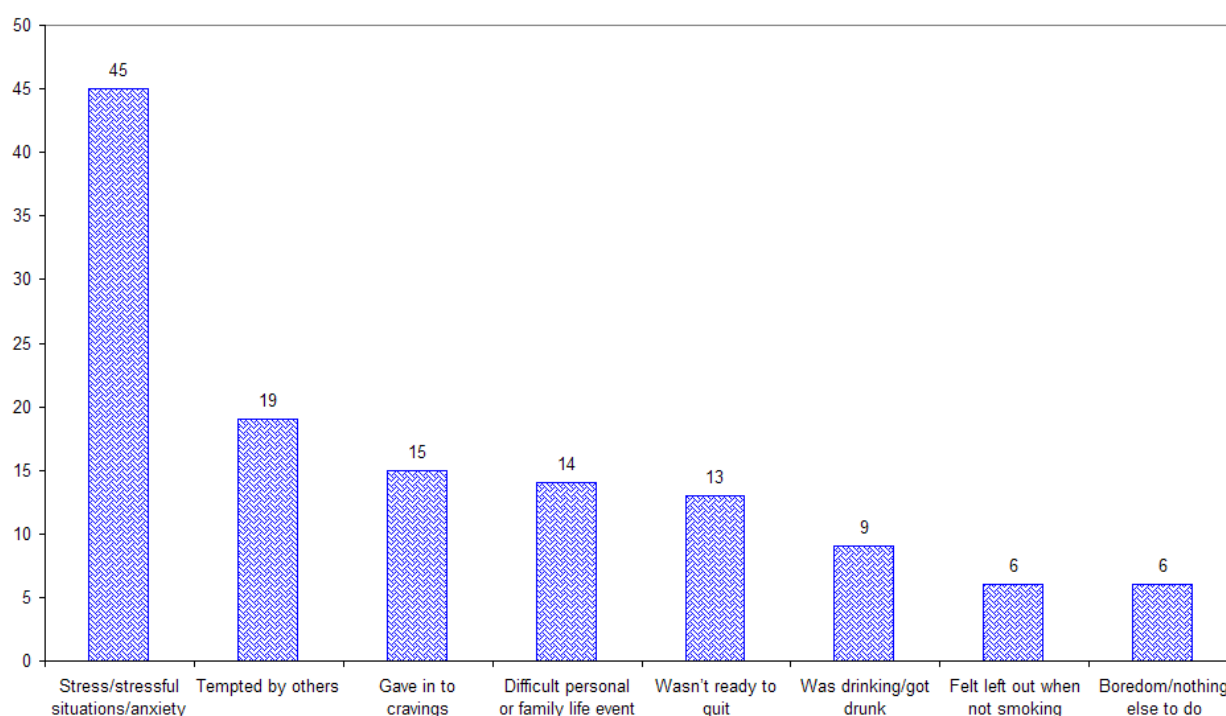
*Base: n=1,910 (Respondents who had quit but had started smoking again after the first call to Quitline)
Graph shows the eight most common reasons given.*

All Reasons for Relapse after First Call to Quitline

When asked for all the reasons for starting to smoke again after the first call to Quitline, two in five respondents (45%) mentioned that one of the reasons for relapse was stress/a stressful situation/anxiety. Nineteen percent reported being tempted by other people smoking around them, while 15% stated that they gave in to cravings. A difficult personal or family life event (14%) and not being ready to quit (13%) were also frequently mentioned as contributors to relapse.

(See Tables 11.3 (All reasons for relapse at the three-week follow-up) and 11.4 (All reasons for relapse after first call to Quitline – six-month follow-up) in Appendix).

Figure 11.2: All Reasons for Relapse After First Call to Quitline (%)



Base: n=1,910 (Respondents who had quit but had started smoking again after the first call to Quitline)

Graph shows the eight most common reasons given.

Multiple responses to this question permitted. Consequently the graph may total more than 100%

Reasons for Subsequent Relapses

The reasons for subsequent relapses during the study period were similar to those for the first relapse after calling the Quitline. Main reasons for relapse after the longest quit attempt during the study period (other than the first) included stress/a stressful situation/anxiety (36%), being tempted by other people (10%), giving in to cravings (8%) and experiencing a difficult personal or family life event (8%) (See Table 11.5 in Appendix).

Stress/a stressful situation/anxiety (24% citing this as their main reason for relapse; a further 9% identifying it as a contributing factor), being tempted by other people (11% main; 7% contributing factor), and giving in to cravings (11% main; 5% contributing factor) were also the most frequently mentioned reasons for starting to smoke again on other occasions (other than the first and/or longest quit attempt). (See Tables 11.6 (Main reason) and 11.7 (All reasons) in Appendix).

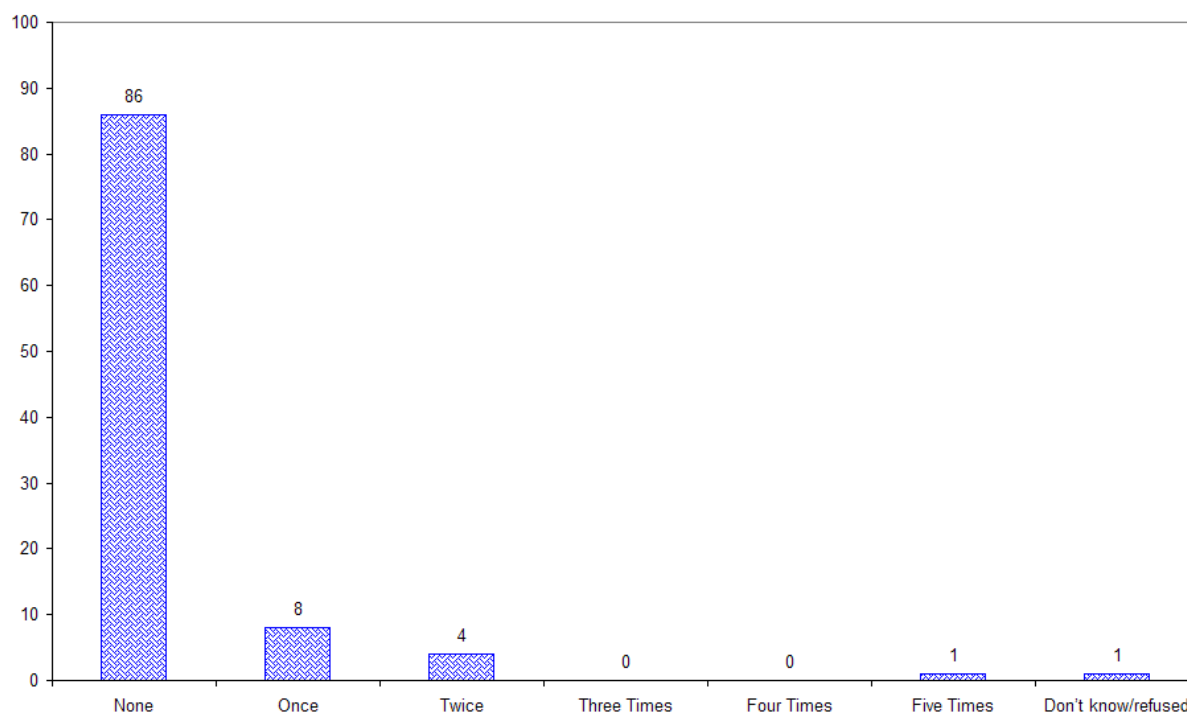
11.2 Frequency of Use of the Quitline When Relapsed

The majority of respondents (86%) who had relapsed during the study period had not called Quitline again since relapsing. Eight percent of those who had relapsed had called back Quitline once, while 5% had called back on two or more occasions since relapsing.

While there were no significant differences in results by ethnicity, those aged between 18 and 24 years (87%), between 25 and 44 years (86%) and between 45 and 64 years (90%) were significantly more likely to have not called the Quitline again after relapsing than respondents aged younger than 18 years (58%). This includes 9% of those aged younger than 18 years who called Quitline five times (compared with 0% of all other respondents).

There were no significant differences in frequency of use of the Quitline when relapsed by gender or SES group. (See Table 11.8 in Appendix).

Figure 11.3: Number of Times Called Back Quitline In Study Period (%)



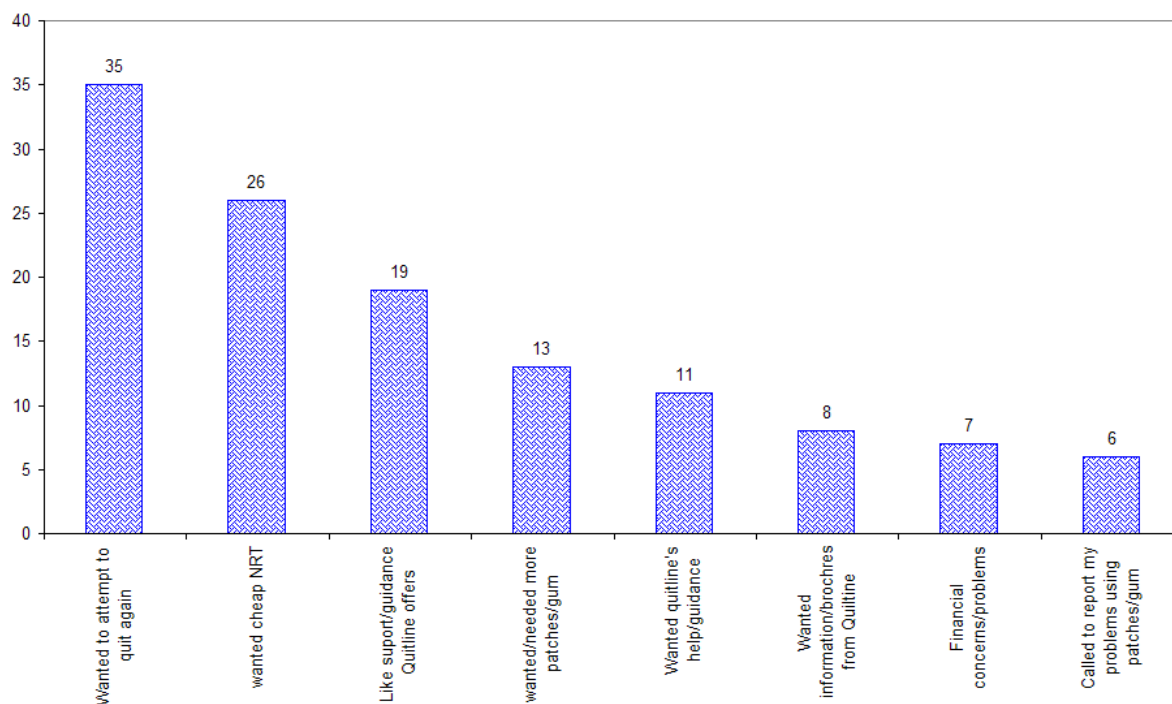
Base: n=573 (All respondents in the six-month follow-up survey who had stopped smoking but had relapsed during the study period)

11.3 Reasons for Deciding to Re-Contact the Quitline When Relapsed

Of those who decided to call the Quitline again when they relapsed (n=82), the greatest single share (35%) mentioned they rang because they wanted to attempt to quit again. Two in five respondents (39%) mentioned they wanted to access the NRT products provided by Quitline – 26% ringing because they wanted to access cheap NRT, and 13% calling to get additional quit cards sent. Thirty-nine percent mentioned they called for Quitline’s support and guidance – 19% calling because they liked the support offered, 11% wanting Quitline’s help/guidance, and 8% calling for the information/brochures provided by the Quitline.

No significant differences of note were evident by the demographic characteristics of respondents. (See Table 11.9 in Appendix).

Figure 11.4: Reasons For Deciding To Re-Contact Quitline When Relapsed (%)



Base: n=82 (All respondents in the six-month follow up survey who had relapsed during the study period and had called Quitline again)
 Graph shows eight most common reasons
 Multiple responses to this question permitted. Consequently the graph may total more than 100%

11.4 Reasons for Not Re-Contacting the Quitline When Relapsed

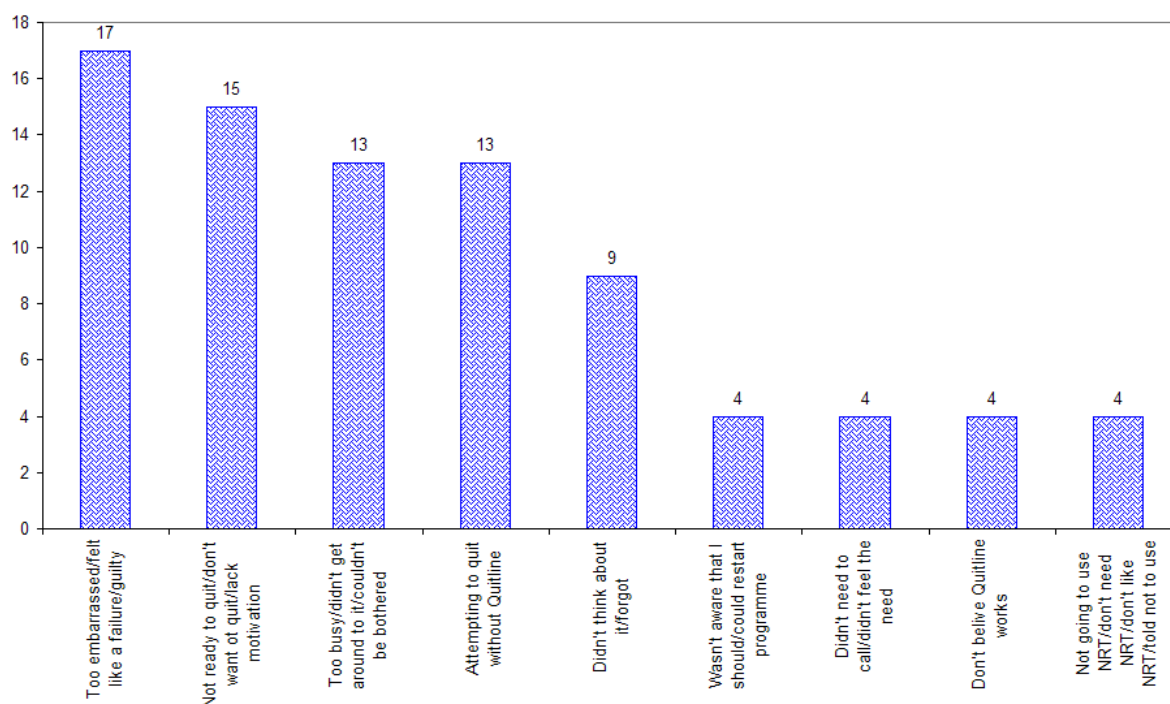
Of those who had not called Quitline back when they started smoking again (n=491), 17% reported that they did not do so because they were too embarrassed to admit that they hadn't quit/they felt like a failure/felt guilty. Fifteen percent mentioned they were not ready to quit, didn't want to quit or lacked motivation to stop. Thirteen percent were attempting to quit without Quitline, while a further 13% were too busy, hadn't gotten around to it or couldn't be bothered. One in six respondents (17%) said they did not know why they had not called Quitline again, while an additional 9% said they hadn't thought about it or that they had forgotten. Four percent of respondents reported that they didn't know they could use Quitline again.

No significant differences in reasons for not calling Quitline again were reported between those of different ethnic or age groups.

Females (7%) were significantly more likely than males (2%) to mention that they weren't aware they could restart the programme. One-fifth of males (21%) reported that they didn't know why they had not called back the Quitline, compared with 13% of females.

Few significant differences were reported in reasons for not calling back the Quitline between those of different SES groups. (See Table 11.10 in Appendix).

Figure 11.5: Reasons for Not Re-Contacting Quitline When Relapsed (%)



Base: n=491 (All respondents in the six-month follow up survey who had relapsed during the study period and had not called Quitline again)

Graph shows the nine most common reasons given

Multiple responses to this question permitted. Consequently the graph may total more than 100%

12. Use of Other Cessation Medication and Services

Key Points

- During the study period, almost all respondents (95%) reported not using any stop-smoking medication other than those provided by the Quitline.
- Two in five of the 136 respondents who used non Quitline-provided medications (40%) had accessed them over-the-counter or off-the-shelf. Twenty-eight percent had obtained their medications from the Quitline, while 22% had done so by prescription.
- Most respondents (98%) reported that they had not used any cessation services other than the Quitline during the study period. One percent used the services of a health worker (eg doctor, nurse, dentist).

12.1 Use of Other Cessation Medication During Study Period

Respondents were asked if they had taken any other smoking cessation medication during the study period. In response, almost all respondents in the six-month follow-up (95%) reported not having used any non Quitline-provided stop-smoking medication. Four percent reported using nicotine replacement medication, including 2% who used patches and 2% who used gum not obtained from Quitline. Other non Quitline-provided cessation medication used included:

- Champix (n=12);
- Zyban/bupropion (n=11);
- Nicobrevin (n=6);
- Nortriptyline (n=3); and
- E-cigarettes (n=2).

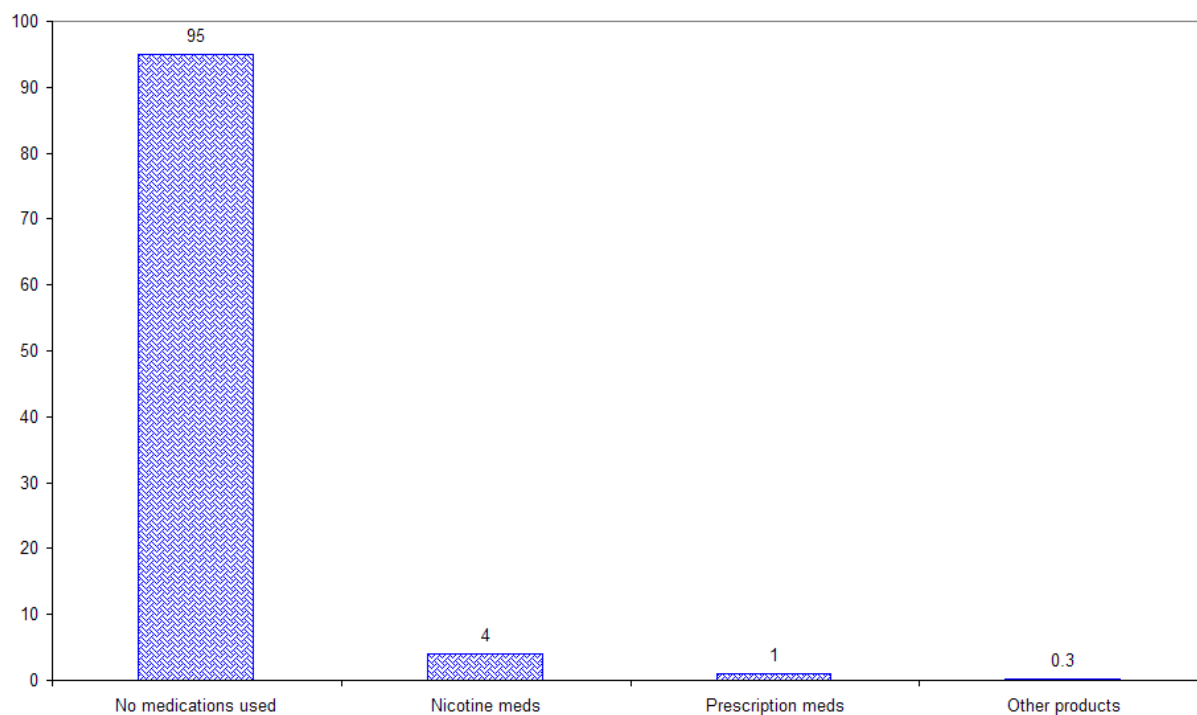
No significant differences were reported in the use of non Quitline-provided stop-smoking medication between those of different ethnic or gender groups.

Use of stop-smoking medication increased with age, with 98% of those aged younger than 18 years reporting that they had not used any stop-smoking medication, along with 96% of those aged between 18 and 24 years or between 25 and 44 years. In contrast, those aged 65 years or older were over-represented among those using Zyban (3%, compared with 0% of all other respondents).

Respondents in SES Group 1 were significantly more likely to have used non Quitline-provided medication during the study period (12%, compared with 1% of respondents in all other SES Groups), and, in particular, Zyban (12%, compared with 0% of all other respondents).

No differences were reported in the proportion of respondents who had used non Quitline-provided stop-smoking medication between those who were quit at the six-month follow-up and those who were not (each with 5%). (See Table 12.1 in Appendix).

Figure 12.1: Use of Other Cessation Medication During Study Period (%)



Base: $n=2,716$ (All respondents in the six-month follow-up survey)

Note: Some respondents using other cessation medication during the study period used more than one product. Consequently the graph totals more than 100%

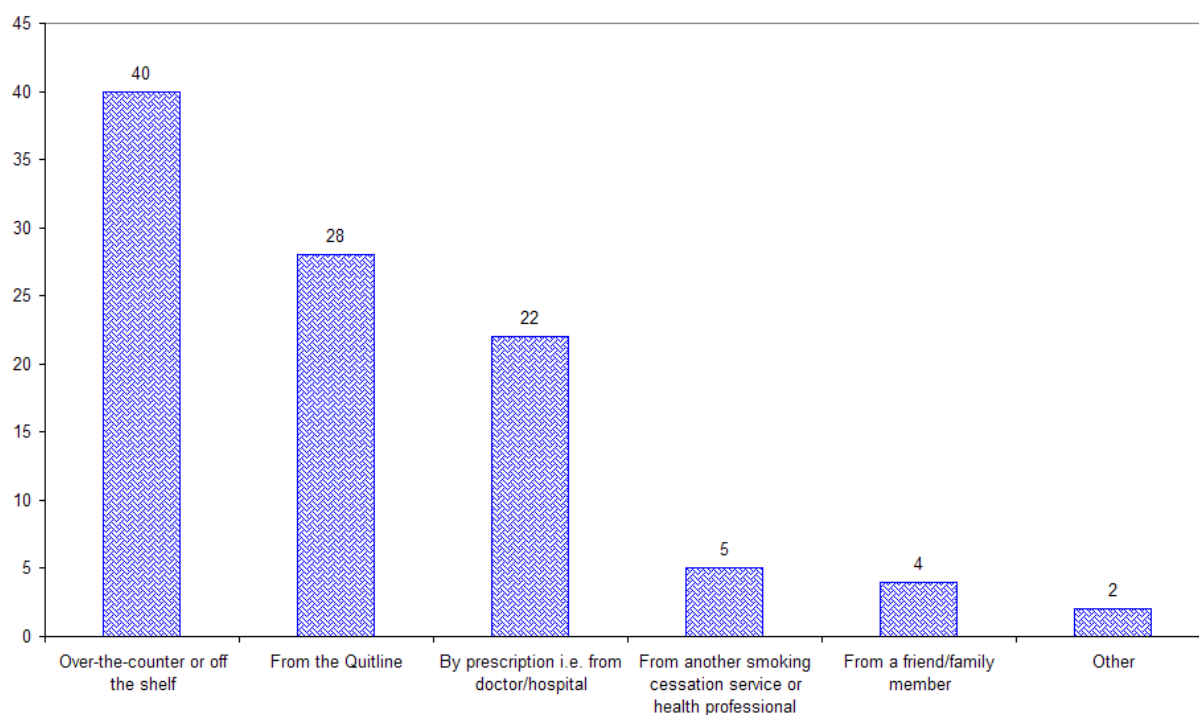
Source of Other Cessation Medication

Respondents who had used other cessation products (n=136) were asked how they got the stop-smoking medications. Two in five respondents (40%) had accessed the medication over-the-counter or off-the-shelf. Twenty-eight percent reported obtaining their medication from the Quitline²¹, while 22% had received a prescription from a doctor. Five percent of respondents had accessed the medication from another smoking cessation service or a health professional other than a doctor, while 4% had gotten the medication from a family member or friend. Other sources included:

- purchased overseas (n=1);
- purchased online (n=1); and
- purchased from a supermarket (n=1).

(See Table 12.2 in Appendix).

Figure 12.2: Where Medications Obtained (%)



Base: n=136 (All respondents in the six-month follow-up survey who had used stop-smoking medications)

Multiple responses to this question permitted. Consequently, graph may total more than 100%.

²¹ Respondents were not asked to clarify what access channel they used to obtain the medication from the Quitline (eg online, telephone)

12.2 Use of Other Cessation Services During Study Period

When asked if they had used any stop-smoking service other than Quitline since registering, almost all respondents (98%) reported that they had not. Stop-smoking services used by two or more respondents in the last six months included:

- health worker (e.g. doctor, dentist, nurse, etc) (n=16);
- pharmacist (n=8);
- Alan Carr's quit smoking book (n=8);
- quit smoking service through a marae/Māori support, Pacific trust/other service (n=8); and/or
- hypnosis (n=5).

No notable differences were observed in the use of stop-smoking services between those of different ethnic categories, age groups, genders, different SES groups or between those who had managed to quit and those who had not. (See Table 12.3 in Appendix).

13. Attitudes to Point of Sale Displays

Key Points

- Views on the impact of cigarette point of sale displays on quitting were mixed, with half of all respondents (49%) agreeing that seeing cigarette and tobacco displays makes it more difficult to quit or to stay quit. In contrast, 48% disagreed with this statement to some extent. Levels of agreement were significantly higher for youth (68%), Pacific (63%), and Māori (54%) respondents, and those in lower SES groups (53% of those in Group 5 and 54% of those in Group 6).
- Similarly, half of all respondents (50%) agreed that banning point of sale displays would make it easier to quit or to stay quit. Pacific (58%) and Māori (54%) respondents were again significantly more likely to agree with this statement than their non-Māori/non-Pacific counterparts (48%). Those aged younger than 45 years were also significantly more likely to agree – particularly youth (57%).
- Fifty-seven percent of all respondents would support a ban on cigarette and tobacco point of sale displays, including 61% of Pacific respondents and 59% of Māori respondents. Those aged between 25 and 44 years were the most likely to support a ban (61%).

13.1 Perceived Impact of Point of Sale Displays on Quitting Behaviour

“Seeing cigarette and tobacco displays in dairies, petrol stations, supermarkets and convenience stores makes it more difficult for smokers to quit smoking or to stay quit.”

Half of all respondents (49%) agreed that seeing cigarette and tobacco displays in dairies, petrol stations, supermarkets and convenience stores made it more difficult for smokers to quit smoking or stay quit. This included 20% of respondents who strongly agreed. However, a similar proportion of respondents (48%) disagreed (36%), or strongly disagreed (12%) with this statement.

Pacific (63%) and Māori (54%) respondents were significantly more likely to agree/strongly agree that seeing cigarette and tobacco displays made it more difficult to quit smoking or to stay quit than non-Māori/non-Pacific respondents (45%). In contrast, non-Māori/non-Pacific respondents (52%) were significantly more likely to disagree/strongly disagree than Māori (41%) and Pacific (35%) respondents.

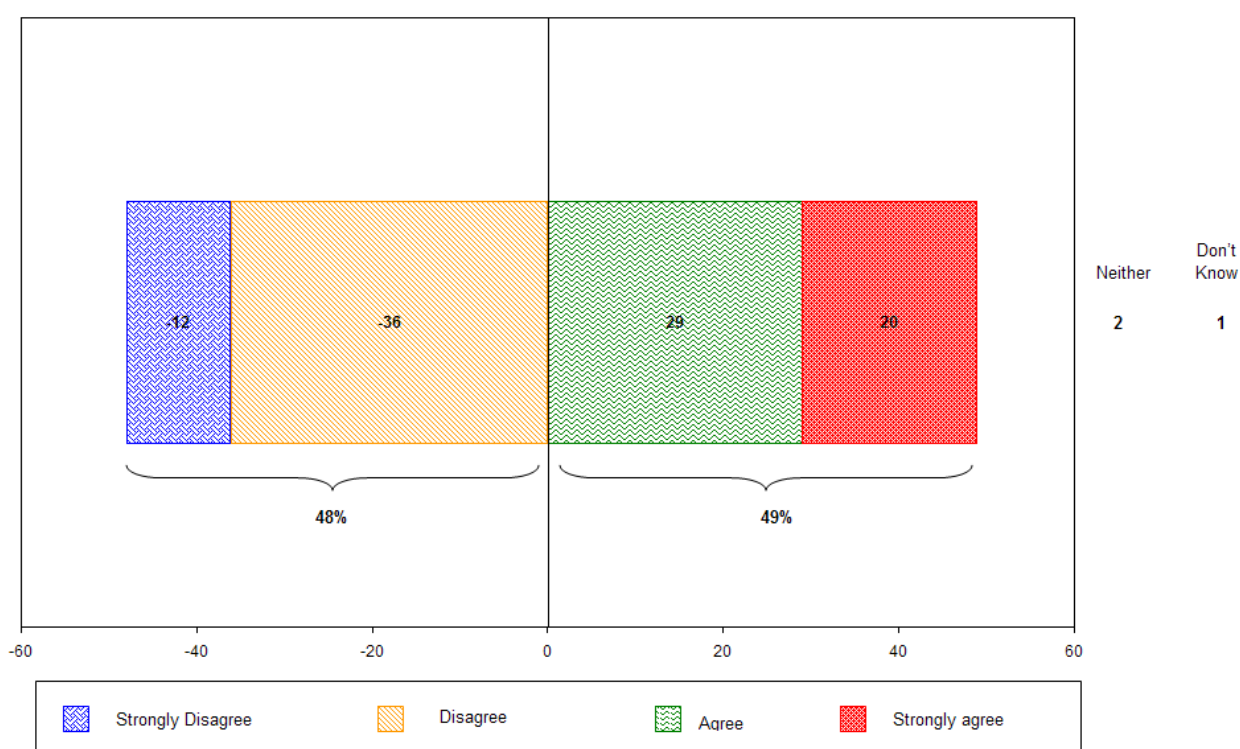
The proportion agreeing that seeing cigarette and tobacco displays made it more difficult to quit smoking or stay quit decreased with age. Levels of agreement were highest among those aged younger than 18 years (68%), and fell to 32% among those aged 65 or older.

No significant difference in total agreement was reported between females (49%) and males (48%).

The perceived impact of point of sale displays on quitting behaviour shows a clear pattern across the SES groups, with those in the lower SES groups - Groups 5 (53%) and 6 (54%) - significantly more likely to agree that seeing cigarette and tobacco displays makes it more difficult to quit smoking or stay quit than those respondents in Groups 1 (35%), 2 (43%) and 3 (43%).

Respondents who had not managed to quit smoking (using Seven Day Point Prevalence Quit Rate) were over-represented among those who strongly disagreed with this statement (13%, compared with 10% of those who had quit smoking). (See Table 13.1 in Appendix).

Figure 13.1: Seeing Point of Sale Displays Makes It More Difficult for Smokers to Quit and Stay Quit (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

13.2 Likely Impact of Banning Point of Sale Displays on Quitting Behaviour

“Banning cigarette and tobacco displays in dairies, petrol stations, supermarkets and convenience stores would make it easier for smokers to quit smoking or to stay quit.”

Views were also mixed on the likely impact on quitting of banning cigarette displays. Half of all respondents (50%) agreed that banning cigarette displays in dairies, petrol stations, supermarkets and convenience stores would make it easier for smokers to quit smoking or to stay quit. This included 20% of respondents who strongly agreed. In contrast, 47% of respondents disagreed (35%) or strongly disagreed (12%) with this statement.

In line with their beliefs that seeing cigarette and tobacco displays makes it more difficult to quit or stay quit, Pacific (58%) and Māori (54%) respondents were significantly more likely to agree that banning cigarette displays would make it easier for smokers to give up smoking or stay quit than non-Māori/non-Pacific respondents (48%).

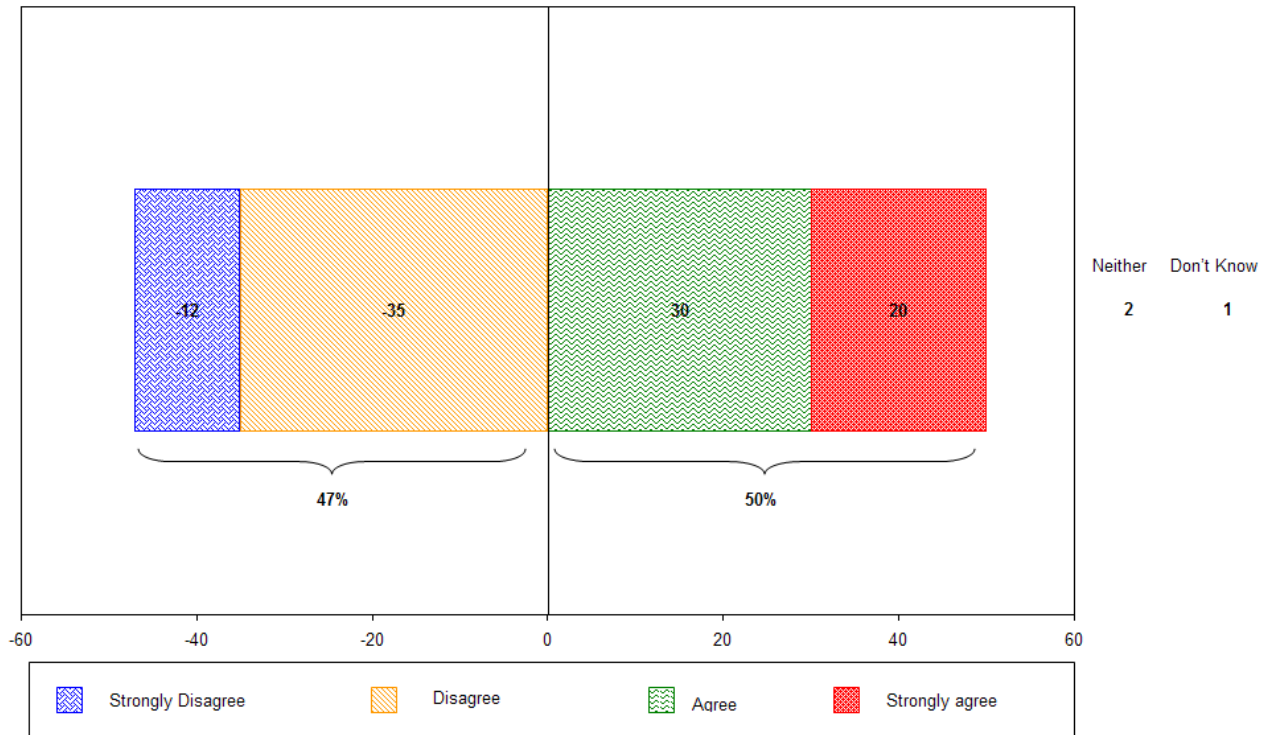
Illustrative of the decreasing influence cigarette and tobacco displays seem to have on older respondents' ability to quit or stay quit, the proportion of those agreeing that the removal of these displays would make it easier to quit also decreased with age. The proportion of those agreeing that banning cigarette and tobacco displays would make it easier to quit or stay quit decreased significantly for each age group, starting from 57% among those younger than 18 years old to 36% among respondents aged 65 years or older.

No significant difference in total agreement was reported between male (51%) and female (50%) respondents.

Those in SES Group 1 were significantly more likely to strongly disagree that banning cigarette displays would make it easier to quit or stay quit (31%) than those in all other SES groups, particularly those in SES Groups 5 (10%) and 6 (11%). In contrast, those in SES Group 6 (56%) were significantly more likely to agree overall with the statement than those in Groups 2 (46%) 3 (44%) or 4 (50%).

Those who had not managed to quit smoking (using Seven Day Point Prevalance Quit Rate) were over-represented among those who strongly disagreed that banning cigarette and tobacco displays would make it easier to quit or stay quit (14%, compared with 9% of those who had quit smoking). (See Table 13.2 in Appendix).

Figure 13.2: Banning Point of Sale Displays Would Make It Easier for Smokers to Quit and Stay Quit (%)



Base: n=2,716 (All respondents in the six-month follow-up survey)

13.3 Level of Support for Ban on Point of Sale Displays

“I would support a ban on cigarettes and tobacco displays in dairies, petrol stations, supermarkets and convenience stores.”

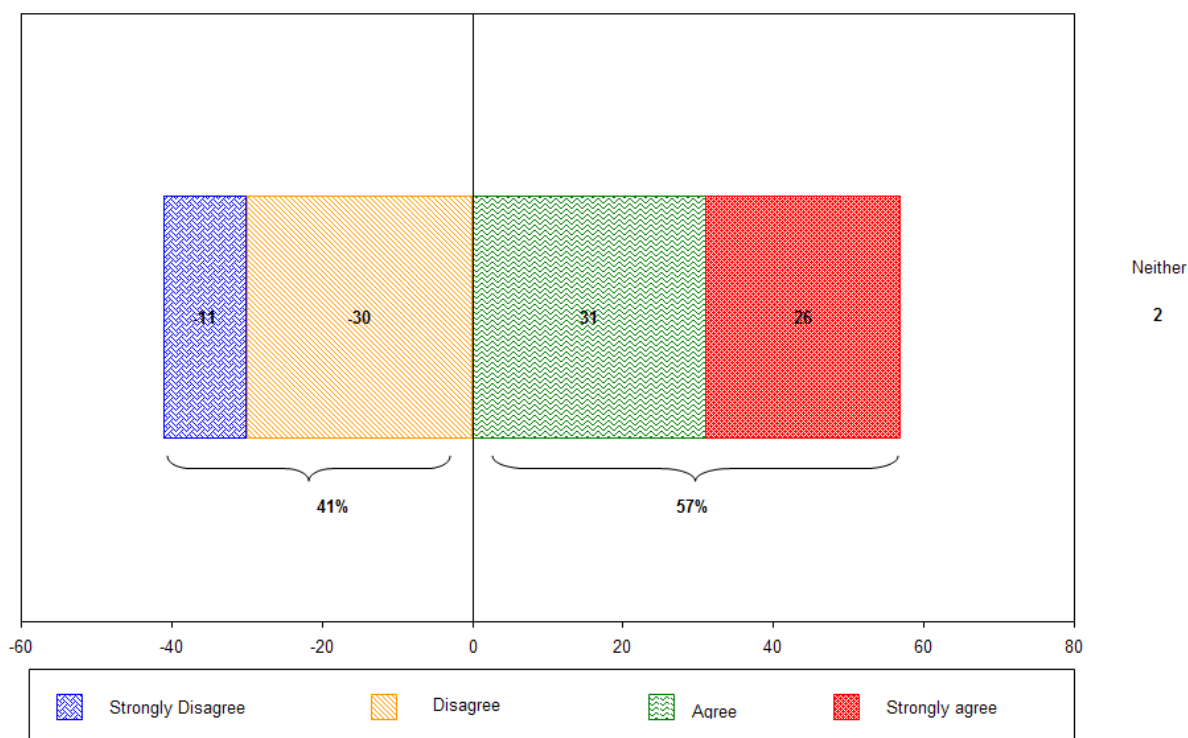
More than half of all respondents in the six-month follow-up survey (57%) would support a ban on cigarette and tobacco displays in dairies, petrol stations, supermarkets and convenience stores. This included 26% of respondents who strongly agreed that they would support a ban. In contrast, 41% of respondents would not support a ban on such displays (30% disagreeing, 11% strongly disagreeing).

While there were no significant differences in results by ethnicity, those aged between 25 and 44 years were significantly more likely than all other age groups to support a ban (61%), particularly when compared with those younger than 18 years (48%) or 65 years or older (47%).

No significant difference in total agreement was found between females (57%) and males (56%) or SES.

No significant differences were reported between those who were quit and those who were not (using Seven Day Point Prevalance Quit Rate). (See Table 13.3 in Appendix).

Figure 13.3: Support for Ban of Point of Sale Displays (%)



Base: n=2716 (All respondents in the six-month follow-up survey)

14. Awareness and Effectiveness of Tobacco Packet Warning Labels

Key Points

- More than two in five respondents (42%) reported that they noticed tobacco packet warning labels all the time. In contrast, just over one-quarter (27%) rarely or never noticed the labels.
- Māori (51%), female respondents (45%) and those not quit (59%) were the most likely to notice warning labels all the time.
- Two in five (40%) of those who reported having noticed the warning labels stated that it made them think about the health risks of smoking a lot. A further 36% found the labels made them think about the health risk a little.
- Of the three ethnic groups, warning labels seem to be most effective for Pacific and Māori smokers, with 48% of Pacific and 46% of Māori noting that the labels made them think a lot about the health risks associated with smoking (compared with 37% of non-Māori/non-Pacific respondents).

14.1 Awareness of Tobacco Packet Warning Labels

When asked how often in the last month²² they had noticed the warning labels on tobacco packs, the greatest share of respondents (42%) reported noticing the labels all the time. A further 14% often noticed the labels while 18% noticed them sometimes. In contrast, just over a quarter of respondents stated that they rarely (13%) or never (14%) noticed the warning labels.

Māori respondents (51%) were significantly more likely to notice warning labels on tobacco packs all the time than their non-Māori/non-Pacific counterparts (39%). In contrast, non-Māori/non-Pacific respondents (34%) were significantly more likely to rarely or sometimes notice the labels than Māori (23%).

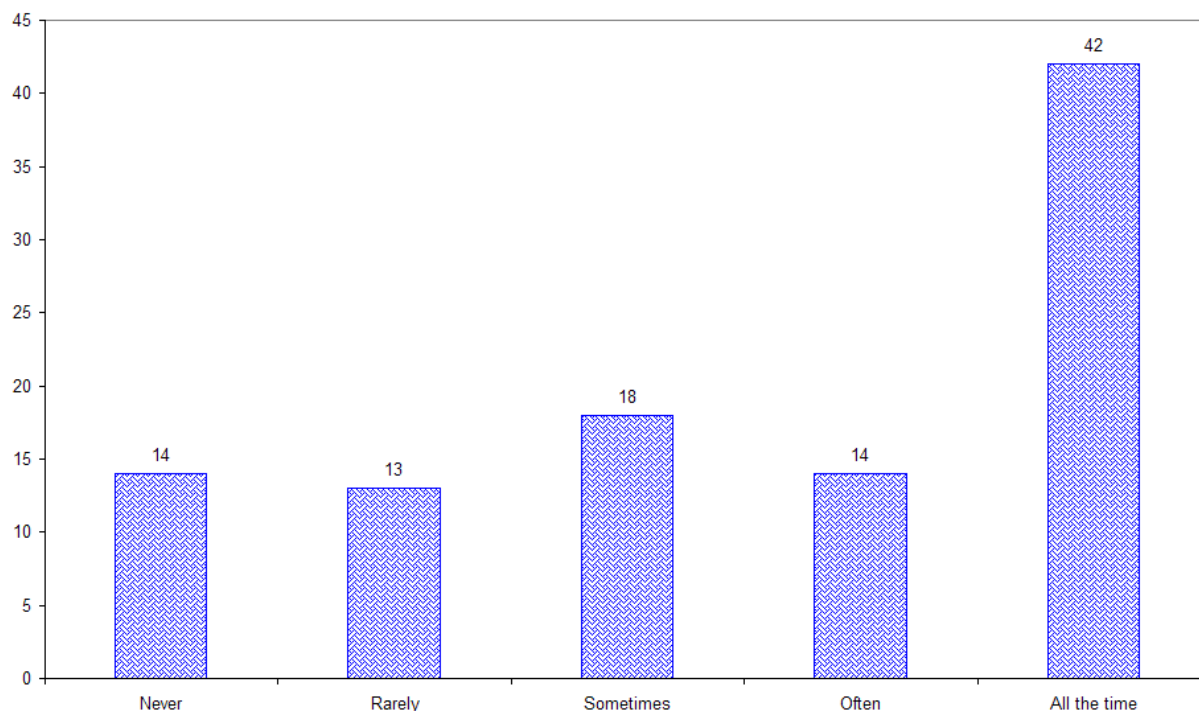
Those aged 65 years or older were significantly more likely to never notice the labels (22%) compared with all other respondents – including only 7% of those aged younger than 18 years. Of the five age groups, those aged younger than 18 years were the most likely to report regularly noticing the warning labels (65% stating often or all the time).

Females (45%) were significantly more likely than males (39%) to report noticing tobacco packet warning labels all the time.

Few significant differences were reported between SES groups with respect to the frequency of noticing warning labels.

Those who were not quit at the time of the six-month survey (59%) were significantly more likely to report being aware of warning labels often or all the time than those who were quit (49%). Despite being asked to comment on the month prior to their quitting, those who were quit (33%) were significantly more likely to rarely or never notice warning labels than those who were still smoking (24% rarely or never). (See Table 14.1 in Appendix).

Figure 14.1: Awareness of Warning Labels on Tobacco Packets (%)



Base: $n=2716$ (All respondents in the six-month follow-up survey)

²² Note: Respondents who were quit at the six-month survey were asked how often they had noticed tobacco warning labels in the month prior to them quitting.

14.2 Effectiveness of Tobacco Packet Warning Labels

When asked to what extent the tobacco packet warning labels had made them think about the health risks of smoking, two in five (40%) of those who reported having noticed the warning labels stated that it made them think about the health risks a lot. A further 36% stated that the labels made them think a little about the risks of smoking. In contrast, the warning labels had no impact at all on just less than a quarter (24%) of those who had noticed them.

Of the three ethnic groups, warning labels seemed to be most effective for Pacific and Māori smokers, 48% of Pacific and 46% of Māori noting that the labels made them think a lot about the health risks associated with smoking (compared with 37% of non-Māori/non-Pacific respondents).

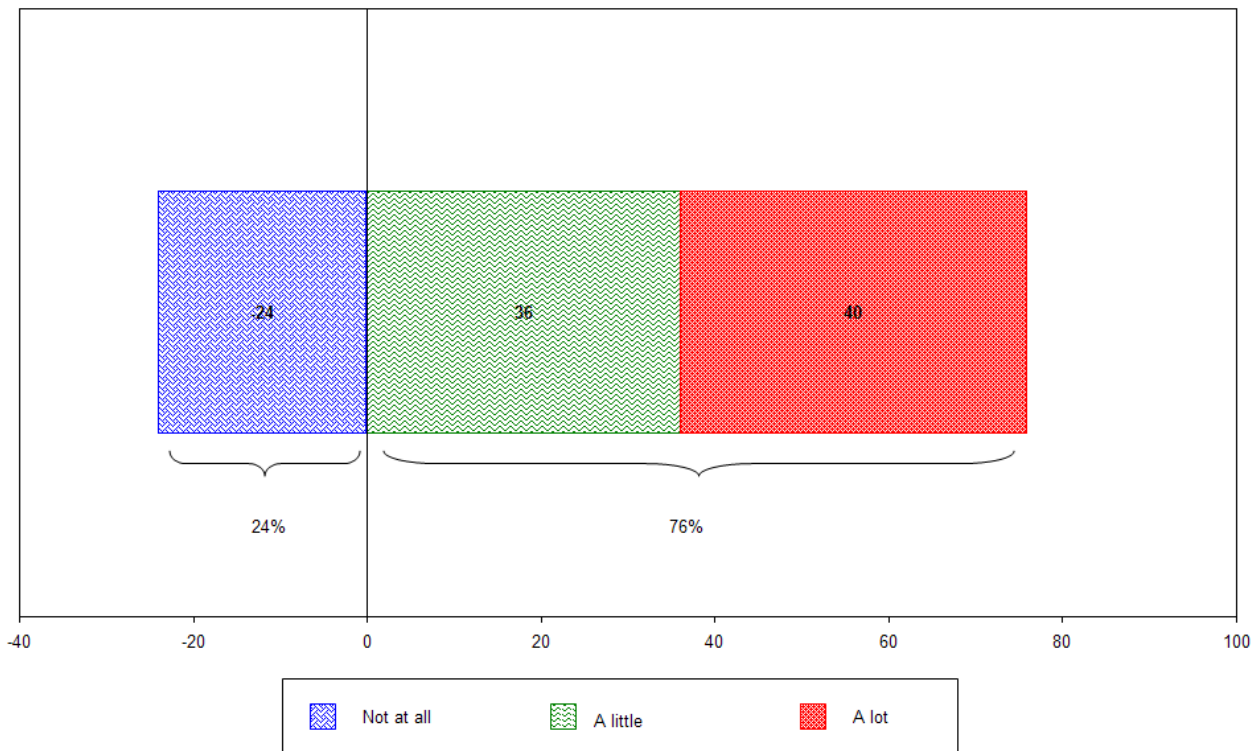
Findings show that warning labels are most effective on middle-aged smokers, with those aged 25 to 44 years (42%) or 45 to 64 years (41%) significantly more likely to report that the labels made them think a lot about smoking than those aged 18 to 24 years (32%). Those aged 45 to 64 years (28%) or 65 years or older (39%) were the most likely to state that the labels had no impact on them at all.

Females (44%) were significantly more likely to report that warning labels made them think a lot about the health risks of smoking than males (35%).

Few significant differences were reported between respondents in different SES groups.

Results by six-month quit status (using Seven Day Point Prevalance Quit Rate) show that those not quit at the six-month follow-up (42%) were significantly more likely to report that warning labels made them think a lot about the health risks of smoking than those who were quit (34%). Conversely, those who were quit at six-months (33%) were significantly more likely to consider that the warning labels had no impact on them at all than those who were still smoking (21%). (See Table 14.2 in Appendix)

Figure 14.2: Effectiveness of Warning Labels in Encouraging Thinking about Health Risks (%)



Base: n=2,345 (Respondents in the six-month follow-up survey who noticed tobacco warning labels at least rarely)

15. Conclusions and Recommendations

15.1 Assessment of Outcomes

Overall, outcomes from the New Quitline Service have been positive.

Quit Rate

At the six-month follow-up survey, just less than a third of respondents had not smoked at all in the seven days prior to the survey being undertaken. Of those contacted at the three-week follow-up, just over one in five had not smoked at all in the seven days prior to the six-month follow-up survey (conservatively assuming those unable to be contacted at six months were still smoking). Further, at the six-month follow-up, a quarter of respondents reported having smoked less than five cigarettes over the study period.

Quit Attempts

Even where callers have not quit smoking at the six-month follow-up survey, positive outcomes are evident, with almost all respondents who were not quit (using Seven Day Point Prevalance Quit Rate) reporting having made one or more quit attempts during the study period. One third had made at least one other quit attempt during the study period, in addition to the quit attempt they made when they first called the Quitline.

Behaviour Change

Irrespective of their quit status at the six-month follow-up survey, most respondents reported having reduced their tobacco consumption over the course of the study period. Results also show some respondents placing greater restrictions on where they allowed smoking both around the home and around their property.

15.2 Effectiveness of Support

Nicotine Replacement Therapies

The evaluation has found that the likelihood of quitting and staying quit is increased when:

- two or more quit cards are received;
- NRT quit cards received are redeemed;
- callers use the NRT for the recommended length of time. (For example, among patch users who were quit, 33% reported having used the patches for eight weeks or more. This compares with 22% of those not quit using patches for eight weeks or more); and
- NRT is used to replace smoking completely rather than to assist with cutting back or as a temporary aid.

Nicotine patches are generally perceived by callers as an effective and safe smoking cessation aid. However, perceptions of the effectiveness and safety of gum is more mixed, particularly among those who have not used this form of NRT. Results also suggest a lack of knowledge among callers as to the effectiveness and safety of gum. This low awareness and understanding may be a contributor to the lower rates of redemption of cards for gum and the shorter length of time with which gum is used compared with patches.

Support from Quit Advisor

Despite Quit Advisors being almost universally perceived as friendly, understanding, supportive and accessible, there is not a strong relationship between the number of times spoken with a Quit Advisor and quit status. Just less than half of both those quit and not quit reported speaking to a Quit Advisor once or twice, and the share who reported not having spoken with a Quit Advisor since registration was also similar for both groups.

The share of callers who re-contacted the Quitline when they relapsed was low. However, results suggest a positive relationship between re-contact after relapse and being quit by the end of the study period.

Quit Pack

Results from the three-week survey show that those who were quit were significantly more likely to have received a Quit Pack and to have read all of it than those still smoking. Respondents who were quit at the three-week follow-up were also over-represented among those who had received their Quit Pack within five working days of their registration call and who reported reading all of the Pack.

Quitline Service Overall

Callers' satisfaction with the Quitline service is clearly evident with almost all callers likely to either re-use the service again in future or to recommend the service to friends and family wanting to quit. Satisfaction is further evidenced by the fact that more than half of callers (irrespective of their quit status) stated that no improvements to the Quitline service were needed.

15.3 Recommendations

Drawing from the results of the evaluation, a number of suggestions can be made to further enhance the effectiveness of the Quitline. These, in turn, should further enhance the service's positive outcomes for callers.

General

- Increase/enhance advertising of the Quitline service with a view to increasing callers' and potential callers' awareness of the nature of the support offered such as the number of support calls provided, the number of subsequent calls to the Quitline allowed, and the fact that heavily-subsidised NRT is available.
- Consider offering a more targeted service for groups of smokers with particular needs/barriers. Examples include youth, Māori and Pacific smokers, those who have used the service multiple times without success, and those for whom NRT is not suitable.
- Ensure Quit Packs and quit cards are sent out as quickly as possible.
- Increase the number of quit attempts made by further reinforcing with callers the importance of them re-contacting the Quitline if they relapse. (Suggestions for achieving this are outlined below).
- Conduct further analysis to comprehensively understand the relationship between the number of quit attempts ever made/the number of quit attempts made during the study period, and quit status at the six-month follow-up.

Note: Developments to the Quitline programme over the course of the Longitudinal Survey include NRT online, introduction of lozenges, and Txt2Quit.

Enhancing the Effectiveness of NRT

- Given the success of NRT (particularly patches) in assisting smokers to quit and the positive relationship between card redemption and quit rates, more could be done to enhance the redemption rate of quit cards (currently more than a third of callers who are sent cards for patches and almost half of those sent cards for gum don't redeem all of them). Redemption could be encouraged through:
 - Further reinforcing the effectiveness and safety of NRT (particularly gum) with callers to enhance acceptance of this form of cessation support. This could be done as part of the registration and follow-up support calls, and through clear information provided in the Quit Pack as well as being backed up by information provided by pharmacists, the Quitline website and perhaps as part of the Quitline TVCs:
 - Placing emphasis on addressing callers' concerns about NRT in the registration phone call;

- Ensuring callers understand and use the NRT with the correct frequency (the fact that one in five respondents who didn't redeem all cards stated that they hadn't finished the previous lot of NRT they had suggests that they hadn't been using it as frequently as recommended);
- Reminder calls from Quit Advisors to check cards have been redeemed (which would also provide a further opportunity to address caller concerns in relation to redemption and/or NRT use);and
- Further subsidising the cost of NRT (cost being a barrier for some Māori and Pacific callers in particular).
- Results suggest that callers do not use NRT for as long as is recommended. Only a quarter of patch users reported using patches for eight weeks or more. More could be done to encourage callers to use NRT for the recommended length of time. This may include:
 - Informing callers of the recommended frequency of use of NRT as part of the registration phone call;
 - Having the recommended frequency of use reinforced by pharmacists (when quit cards are redeemed) and clearly depicted on the packaging; and
 - Having Quit Advisors reinforce the recommended frequency as part of any follow-up calls made.
- The poor taste of the gum accounts for almost a third of gum users who stop using this form of NRT before they had used it all. Consider:
 - Identifying whether more pleasant-tasting gum is available; and
 - Setting callers' expectations in relation to the taste of the gum as part of the registration interview (anecdotal evidence suggests that some callers expect that the gum will taste like standard chewing gum).

Note: The Quitline now offer lozenges as an additional form of NRT. These are used in a similar way to gum.

Enhancing the Telephone Support

- Have Quit Advisors make more frequent and/or regular contact with callers – particularly for youth (see below).
- Ensure callers are aware that there is no limit on the number of calls that they can make to the Quitline.
- Further reinforce with callers the importance of them re-contacting the Quitline if they relapse. This could be achieved through:
 - Further enhancing perceptions of Quit Advisors as being non-judgemental, thereby minimising callers' feeling of embarrassment/concerns about being judged if they have not having managed to quit;
 - Ensuring at registration and during follow-up calls that callers are made aware that they are able to (and should) re-contact the Quitline if they relapse; and
 - Making more regular follow-up calls, thereby enabling Quit Advisors to identify (and assist) callers who have relapsed but haven't re-contacted the Quitline.

Enhancing the Service for Māori and Pacific Callers

Across the range of methods used to calculate quit rates, Māori were significantly less likely to be quit at the six-month follow-up survey than Pacific and non-Māori/non-Pacific callers. Māori were also significantly more likely to report having increased their tobacco consumption over the study period (6%) than their non-Māori/non-Pacific counterparts (4%). Māori and Pacific respondents were significantly more likely to approach quitting by cutting down gradually rather than stopping completely, a strategy identified by the evaluation as being less successful in quitting and staying quit.

While stress, being tempted by others, and a difficult life event are common triggers for relapse among all callers, boredom (Māori) and drinking/getting drunk (Pacific) are also frequently mentioned triggers for relapse for these groups.

The evaluation has found that those who receive quit cards for NRT are significantly more likely to be quit at six months. However, Māori and Pacific callers are significantly less likely to receive quit cards from the Quitline, and also significantly less likely to redeem those they do receive than non-Māori/non-Pacific callers. This apparent lack of commitment to the use of NRT or lack of willingness to use could be, in part, attributed to these groups' lack of understanding of the effectiveness of NRT and a perception that NRT is unsafe. Cost of NRT is also a particular barrier to redemption of quit cards for Māori and Pacific callers.

Results also show that, prior to contacting the Quitline, Māori and Pacific callers were significantly less likely to have ever made a serious or planned attempt to quit smoking. In addition, Māori and Pacific callers were significantly more likely to report having made a 'spur-of-the-moment' decision to contact the Quitline and were over-represented among those who started their quit attempt on the day they called the Quitline. This could suggest that Māori and Pacific callers are less aware of, and less well prepared for, the difficulties associated with quitting (dealing with cravings, resisting being tempted by others smoking around them etc.) than other callers.

Recommendations for enhancing the Quitline service for Māori and Pacific callers, and ensuring that they have similar quit outcomes to non-Māori/non-Pacific callers, include:

- Ensure Māori and Pacific callers (particularly those who have not attempted to quit before) are made well aware of the difficulties associated with quitting in advance of their quit attempt, and are given appropriate strategies to handle these.
- Where appropriate, encourage Māori and Pacific callers to make preparations for quitting prior to starting their quit attempt (for example, get rid of tobacco from the house, work out strategies for dealing with cravings etc).

- Given that quitting can often be a ‘spur-of-the-moment’ decision, it is important to maintain this momentum by ensuring the Quit Pack and quit cards are sent out promptly and the caller followed up to encourage them to redeem (and start using) the NRT.
- Provide more information to all callers, including Māori and Pacific, about how NRT works (including emphasising its effectiveness and safety) and how it should be used to maximise its effectiveness. This could be done as part of the registration and follow-up support calls, and through clear information provided in the Quit Pack as well as being backed up by information provided by pharmacists, on the Quitline website and perhaps as part of the Quitline TVCs.
- Ensure that callers (and potential callers) are aware that NRT available through the Quitline is heavily subsidised. This could be done as part of the registration and follow-up support calls, as well as being backed up by Quitline advertising and the website.
- Consider further subsidising the cost of NRT to encourage redemption of quit cards.
- Discourage callers from sharing their patches/gum with others by emphasising the importance of using NRT for the recommended length of time.
- Provide strategies for Māori callers to stay quit by keeping busy (reducing boredom).
- Provide strategies for Pacific callers in particular to cope with staying quit when drinking alcohol.

Enhancing the Service for Youth Callers

Across the range of methods used to calculate quit rates, youth were significantly less likely to be quit at the six-month follow-up survey than those aged 25 years or older. Of the five age groups, youth were over-represented among those who had increased their tobacco consumption over the study period. Youth respondents were also significantly more likely to approach quitting by cutting down gradually rather than stopping completely, a strategy identified by the evaluation as being less successful in quitting and staying quit. However, youth were over-represented among those who had made four or more attempts to quit during the study period. These results suggest that youth have the motivation to quit, but perhaps lack the strategies and appropriate support to stay quit.

Youth had the highest share of those not quit at the three-week survey, but quit at the six-month follow-up. This result suggests that youth may take longer to prepare to quit than older respondents.

Whilst receipt of quit cards for NRT has been found to have a positive impact on likelihood of quitting, compared to callers aged 25 years or older, youth are significantly less likely to:

- receive quit cards from the Quitline;
- receive cards for patches (the more effective of the two NRT options offered by Quitline); and
- redeem the cards they receive.

The lower use of NRT among this group could be attributed to a perception, most strongly held by this age group, that patches and gum are not effective in increasing the chances of quitting smoking and are not safe to use.

Youth are over-represented among those who would not use the Quitline again. While youth are over-represented among those who had regular contact with the Quitline (one in ten having spoken to a Quit Advisor five or more times over the study period and youth being the age group most likely to make contact with Quitline again after relapse), their main criticism of the Quitline service was a perceived lack of support, follow-up and/or feedback from Quit Advisors. Youth were also over-represented among those disagreeing that:

- the Quit Advisor they spoke with most recently was available to talk to if they really needed the support;
- the information provided by the Quitline was relevant to them; and
- the Quitline service overall was convenient for them.

Recommendations for enhancing the Quitline service for youth callers include:

- Improved 'selling' of the benefits of the Quitline service to youth – via Quit Advisors, the Quitline website, TVCs, through the Quit Pack etc. Of the five age groups, youth are the most likely to believe that they can quit on their own/without support and therefore are likely to resist to interventions.
- Enhance redemption of quit cards received through reminder calls from Quit Advisors (as youth are over-represented among those who forgot/hadn't gotten around to redeeming their cards).
- Address the self-reported negative physical reactions youth have to nicotine patches (rashes, nightmares and general unwellness) with a view to encouraging and prolonging NRT use. There may also be value in providing youth with information (both written and provided verbally by Quit Advisors during registration and follow-up calls) to allow them to distinguish between the side-effects of NRT and nicotine withdrawal.
- Ensure Quit Packs and quit cards are sent out as quickly as possible.
- Enhance the relevance of the information provided in the Quit Packs for younger people. (Whilst targeted research with this group is recommended to identify exact information and presentation needs, anecdotal evidence suggests a desire for less text on written material and greater depiction of younger people. Youth also suggest alternative forms of information provision (DVDs etc.)).
- Provide more regular follow-up phone calls for youth and ensure that they are aware that they can contact the Quitline as often as they need.
- Given that youth are over-represented among those who 'don't get around to re-contacting Quitline' after relapsing, a more proactive approach is needed to identify and assist these callers. More regular follow-up phone calls for youth would be a useful first step.
- Consider making specialist Quit Advisors available to youth callers, experienced in building rapport with younger people and with knowledge of strategies for helping younger people quit – and stay quit. In particular, youth need strategies to cope with being tempted to smoke by being around other smokers, and dealing with feeling left out when others are smoking.

Note: The introduction of Txt2Quit, and its appeal to youth callers, is currently being evaluated.