

Research and Evaluation Unit

2006 HSC Year 10 In-depth Survey

Report of Top-line Results

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Summary

The cost of tobacco use to the health system and New Zealand society has resulted in the Minister of Health naming smoking reduction as a national health priority (Minister of Health, 2005a). Most adults who smoke started using tobacco during adolescence. Young people, therefore, are a key target group for tobacco control strategies and health promotion in New Zealand.

This report presents the top-line findings from the 2006 Year 10 In-depth Survey (YIS). The YIS is part of the New Zealand Youth Tobacco Monitor (NZYTM), a national survey of 14 and 15 year-olds' behaviours, and risk and protective factors associated with smoking uptake.

This report presents top-line findings from the 2006 YIS, covering the following topics:

- Part 1: Current tobacco smoking behaviour.
- Part 2: Attitudes and beliefs related to smoking.
- Part 3: Smoking cessation experience ('current smokers' only).
- Part 4: Exposure to others' smoking.
- Part 5: Smoking-related health promotion messages.
- Part 6: Youth culture.
- Part 7: Connectedness parents and school.
- Part 8: Awareness of, and attitudes towards, the tobacco industry.

One-half of participating students had never smoked a cigarette, not even just a few puffs. Almost nine out of ten students do not think they would be smoking five years from the time of the survey. Overall, a greater proportion of students who had never smoked a cigarette reported anti-tobacco and anti-smoking attitudes, compared with 'current smokers'.

Two-thirds of Year 10 students reported that someone had smoked around them in places other than in the home on at least one of the seven days prior to the survey. A greater proportion of students who had never smoked a cigarette reported that none of their friends or family/whānau smoke, compared with 'current smokers'. 'Current smokers' were more likely to say that their favourite musician or actor/actress smokes, compared with those who did not smoke. Young people who live and socialise within networks where smoking is common are likely to require targeted messages to counteract the norms of behaviour around them. Nine out of ten students reported that they had seen advertisements or messages on television and in print media about <u>not</u> smoking *a lot* or *sometimes* in the month prior to the survey.

Reducing the harm from tobacco is one of nine of the Ministry of Health's health sector targets (Minister of Health, 2007), and efforts to build capacity in the public health sector reflect this commitment. Public policy in New Zealand has an important role in reinforcing the message that youth uptake of smoking is unacceptable. Surveys that capture detailed information about individuals can guide public health and policy direction, as well as measure the success of existing interventions. The YIS will be repeated as part of the NZYTM in 2008 to collect information on successes and areas for improvement in reducing smoking initiation among youth in New Zealand. With understanding and adequate resources, the tobacco control community will be better equipped to achieve a primary prevention approach to smoking among youth.

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- Dr Sue Walker, Chair from July 2007 to current (Manager, Research and Evaluation Unit, Health Sponsorship Council)
- Kate Garland, Chair from November 2006 to July 2007 (Project Manager, NZYTM, Health Sponsorship Council).
- Anaru Waa, Chair from March 2006 to November 2006 (formerly Senior Researcher, Research and Evaluation Unit, Health Sponsorship Council; currently Senior Research Associate with Quigley and Watts Limited).

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Survey fieldwork and dataset preparation for the 2006 YIS were carried out by TNS New Zealand Limited and Research Solutions Limited. The sampling framework for the YIS followed a two-stage cluster design used by the Global Youth Tobacco Survey (GYTS), and school selection was conducted with input from the Centers for Disease Control and Prevention (CDC) Global Tobacco Surveillance System team.

Special thanks are due to the authors of the Report to the Scientific Advisory Committee on Youth Smoking Surveys in New Zealand (Reeder, Waa & Scragg, 2000), with particular gratitude to Anaru Waa for his early involvement and past work with the NZYTM implementation and the HSC Youth Lifestyle Surveys.

Thanks to all school staff and students who participated in the YIS and the NZYTM. While we cannot name respondents, we are indebted to them for their time and contribution to this research, and building our understanding of New Zealand young people's attitudes towards, and experiences of, smoking behaviour, and lifestyles in general.

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List of abbreviations

ASH (NZ) Action on Smoking and Health (New Zealand)

CDC Centers for Disease Control and Prevention

GYTS Global Youth Tobacco Survey

HSC Health Sponsorship Council

NZYTM New Zealand Youth Tobacco Monitor (combines three national youth smoking

surveys and includes the Year 10 In-depth Survey)

RCG Research Coordinating Group

SES Socioeconomic status

SHS Second-hand smoke

WHO World Health Organization

YIS Year 10 In-depth Survey

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Introduction and aims

This report presents the top-line findings from the 2006 YIS and includes information about youth smoking behaviour, and some of the risk and protective factors associated with smoking uptake.

The report describes the aims and methods of the research, and top-line findings (with analysis by young people's gender, ethnicity, socioeconomic status (SES), and smoking status where applicable), and briefly discusses the findings in the context of previous research and tobacco control in New Zealand.

The burden of tobacco use and youth uptake in New Zealand

Tobacco use is the leading preventable cause of premature death in New Zealand. Around five thousand deaths a year are attributable to tobacco-related illness, in a population of just over four million (Minister of Health, 2005b). The cost of tobacco use to the health system and New Zealand society has resulted in the Minister of Health naming smoking reduction as a national health priority (Minister of Health, 2005a; 2007).

Most adults who smoke take up the behaviour in their youth, before reaching the age of 18 years (Centers for Disease Control and Prevention, 1994). Young people, therefore, are a focus of tobacco control strategies and health promotion in New Zealand. The New Zealand Reducing Smoking Initiation framework has identified a range of interventions requiring action from the health, education and social sectors (Health Sponsorship Council, 2005).

Monitoring youth tobacco use

National adult smoking prevalence data are routinely collected in New Zealand through the Tobacco Use Survey (Ministry of Health, 2006c) and the Census of Population and Dwellings, with in-depth information about tobacco-related attitudes and exposure contributed by the Smokefree/Auahi Kore Adult Monitor (Health Sponsorship Council, 2006b).

Understanding how and why some young people start smoking is a key driver for research and evaluation in New Zealand and abroad. Youth tobacco use in New Zealand has been monitored for over a decade, both regionally (Reeder, Williams, McGee et al., 1999) and nationwide (Scragg, 2007). The ASH Year 10 cross-sectional survey achieves high student participation nationwide, and latest figures show that 14% of 14 and 15-year-old school students reported that they smoke at least daily, weekly or monthly (Scragg, 2007). Female students reported higher prevalence of smoking at least monthly than males (18% and 11%, respectively).

New Zealand Youth Tobacco Monitor

Information on youth smoking and tobacco control has traditionally been collected and managed by a range of agencies in New Zealand. In 2006, the NZYTM was established to bring three youth surveys together under one partnership: the Ministry of Health's contribution to the GYTS, the Action on Smoking and Health (ASH) Year 10 Snapshot, and HSC's In-depth Survey. The HSC's In-depth Survey (formerly known as the Youth Lifestyle Survey) has been conducted with students from a range of age groups for several years. The 2006 YIS uses many of the same questions, collecting data on a wider range of youth culture, lifestyle, and risk and protective factors related to smoking uptake. The YIS informs the HSC's Smokefree programme, and commitment to encouraging New Zealanders to adopt and maintain healthy lifestyles.

Research aims

The YIS was developed to improve the understanding of students' behaviour and circumstances, such as prevalent attitudes and beliefs related to smoking, exposure to role models who smoke, and second-hand smoke. Students were asked about their own experience with smoking behaviour, and this report includes detailed information on smoking frequency, along with access to tobacco and settings for smoking behaviour. The survey also aims to build understanding of the social environment of young people in New Zealand, particularly youth 'culture', sport and extra-curricular activities, media use and social connectedness.

The YIS collects prevalence data on the following topics:

- current tobacco smoking behaviour
- attitudes and beliefs related to smoking
- smoking cessation experience ('current smokers' only)
- exposure to others' smoking
- smoking-related health promotion messages
- youth culture
- connectedness parents and school
- awareness of, and attitudes towards, the tobacco industry.

This report provides an overview of the top-line results from the extensive data collected by the YIS. Additional analysis and reporting for a range of audiences will follow this report. Data tables and the 2006 YIS questionnaire are available for review on the HSC website.

Methodology

Questionnaire development

The YIS questionnaire was developed to collect high-quality, in-depth information using validated questions. It was also important to maintain comparability with previous surveys, such as the Youth Lifestyle Survey, and the GYTS. Participants select responses using a self-administered paper questionnaire booklet. No identifying information was collected from participants to ensure anonymity, however each questionnaire had a unique serial number for tracking during survey administration and data preparation.

Sample size and selection

Year 10 students (14 to 15-year-olds) represent a critical age group when smoking behaviour increases rapidly, and this group has been treated as the standard population to monitor youth smoking in New Zealand (Reeder et. al., 2000). All schools (state and private) with Year 10 students are eligible to participate in the YIS. Correspondence schools and those with fewer than 40 students enrolled in Years 9, 10 and 11 combined were excluded from the survey, primarily to maintain student anonymity. Previous Youth Lifestyle Survey sampling involved a two-stage cluster procedure to select classes. The 2006 YIS also employed a two-stage cluster sample design, with random selection of participating classes. This method was consistent with the GYTS sample selection procedure, and produced a nationally representative sample of Year 10 students:

Stage One – School sample selection with probability proportional to school enrolment size A list of all eligible schools with Year 10 students and their total Year 10 enrolments was sent to the CDC in the United States. The CDC selected a sample of schools with probability of selection proportional to roll size, using software developed to work with school-based samples.

Stage Two – Class selection as a systematic equal probability sample with a random start. The YIS surveys one Year 10 class from every sampled school that has consented to participate in the survey. All Year 10 classes from the sampled school are included in a list, from which one class is selected to participate using a random start. Classes were required to be mutually exclusive, so each eligible student has only one chance to participate and an equal opportunity of selection. All students in a selected Year 10 class were eligible to participate.

Recruiting schools

All 515 eligible schools in New Zealand were informed of the upcoming NZYTM through a letter sent to school principals. Those schools selected for the YIS sample list were sent a second letter and principals, or a nominated member of staff, were contacted by phone to explain the survey, its purpose and objectives. Consent forms were sent to schools to be completed and returned by facsimile. Schools that participated were given two 'Smokefree' sports balls as a small token of appreciation.

Survey administration

The 2006 YIS was administered in schools during the third term of the school year (between 14 August and 22 September 2006) by experienced research fieldworkers from TNS New Zealand Limited.

Several regional training sessions were held for fieldworkers, using discussion and role-plays to build understanding of the survey administration guidelines. Fieldworkers managed the distribution and collection of questionnaires at their allocated schools. Responsibilities when administering the survey included:

- Ensuring adequate student attendance for the survey.
- Explaining the purpose, anonymity and voluntary nature of the survey to students.
- Establishing 'test' conditions in the classroom, and asking students to refrain from talking or interacting while completing the survey (including interaction with the teacher).
- Collecting completed surveys from students, and returning surveys to the research company.

Data analysis

Completed questionnaires for the YIS were sent to a research company (Research Solutions Limited) for collation, data entry and dataset production. Electronic datasets were submitted to a series of range and consistency checks, and 10% of the data entered by each operator were checked for accuracy.

Data were weighted to adjust for sample selection (school and class-level), non-response (school, class and student-level), and post-stratification of the sample population relative to the gender and ethnicity distribution of Year 10 students in New Zealand (Ministry of Education Information Officer, 2006).

The YIS weighting factor (W) uses the following formula:

W = W1 * W2 * f1 * f2 * f3 * f4

Where:

W1the inverse of the probability of selection for each school

the inverse of the probability of selection of each classroom within each W2 =

selected school

f1 a school-level, non-response adjustment calculated by school enrolment size

category (small, medium, large); school non-response is calculated with each

tertile

f2 a class-level, non-response adjustment factor calculated by each school

a student-level, non-response adjustment factor calculated by each class f3

f4 a post-stratification factor to adjust sample gender and ethnicity distribution

to national Year 10 student population.

Analysis for the 2006 YIS was performed using the Intercooled STATA 9.2 statistical analysis package (StataCorp LP, 2006). Weighted proportion estimates, standard error and 95% confidence intervals were produced for each survey question and response category.

The following demographic variables were used to create sample sub-groups:

Gender Female, Male. Self-identified by students in the questionnaire.

Ethnicity

Self-identified by students using a list from which they could select more than one ethnic group. Selections were then categorised using two methods:

1. Prioritisation: Classifying students into one of five ethnic groups:

Māori; Pacific; Asian; Other; New Zealand European/Pākehā.

2. Māori and non-Māori: Comparison using the Ministry of Health method.

(Ministry of Health, 2006b).

Status (SES)

Socioeconomic The age of respondents meant it was not appropriate to ask about household income to establish SES. School decile was used as a proxy measure of each student's SES, with the decile scale reclassified as follows:

> School decile 1 to 4 = 'low' SES School decile 5 to 7 = 'mid' SES School decile 8 to 10, 99 (private) = 'high' SES

Smoking status Where applicable, analyses were performed by reported smoking status, using two categories:

> 'Never' Students who had never smoked a cigarette, even

> > just a few puffs.

Students who smoke at least daily, weekly or 'Current'

monthly.

This report describes the results for all respondents, and compares responses by gender, ethnicity and socioeconomic group to further understand priority and high-risk groups for smoking uptake.

Results

Response rate

Of the 186 schools in the sample list, 145 participated in the 2006 YIS. One Year 10 class at each school participated in the survey, and 83.7% of students in the sample completed questionnaires for the survey (Table A). The YIS uses a response rate formula that estimates and accounts for non-response due to student absenteeism, and students who refuse to participate. Overall, the 2006 YIS achieved a 65.3% response rate.

Table A: Response rate - school, student and overall, YIS 2006

	School		Student		_
	Participation Sample (n)	Response rate (%)	Participation Sample (n)	Response rate (%)	Overall response rate (%)
2006 YIS response rate	<u>145</u> 186	78.0	3200 3821	83.7	65.3

Sample characteristics

The survey collected information from 3,200 students. As shown in Table B below, the sample characteristics closely resemble those of the Year 10 student population in New Zealand.

Table B: Characteristics of 2006 YIS sample population

	2006 sample p	2006 National Year 10 population*	
Demographic group	Number (n)	Prevalence (%)	Prevalence (%)
Total	3200		
Gender			
Female	1619	50.6	48.5
Male	1575	49.2	51.5
No response	6	0.2	-
Age			
13 years	24	0.8	
14 years	2053	64.2	
15 years	1086	33.9	
16 years or older	35	1.1	
Ethnicity (prioritised)			
Māori	666	20.8	21.4
Pacific	276	8.6	8.4
Asian	262	8.2	7.7
Other	223	7.0	5.6
New Zealand European/Pākehā	1762	55.1	55.6

^{*} Source: Information Officer, Data Management and Analysis Division, NZ Ministry of Education, April 2007.

The remainder of this section describes the YIS results in eight parts:

- Part 1: Current tobacco smoking behaviour.
- Part 2: Attitudes and beliefs related to smoking.
- Part 3: Smoking cessation experience ('current smokers' only).
- Part 4: Exposure to others' smoking.
- Part 5: Smoking-related health promotion messages.
- Part 6: Youth culture.
- Part 7: Connectedness parents and school.
- Part 8: Awareness of, and attitudes towards, the tobacco industry.

The prevalence of responses for each survey question is reported using weighted proportions, with charts to visually depict results and key comparisons. The sample denominator for each sub-group is included in charts, along with 95% confidence interval bars. Differences between groups are deemed statistically significant when the 95% confidence intervals do not overlap, and only significant differences are described in the text.

Part 1: Current tobacco smoking behaviour

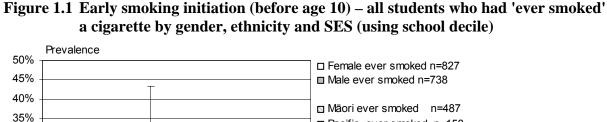
A key indicator of tobacco smoking uptake is experience of smoking – whether or not students had ever smoked a cigarette, even 'just one or two puffs'. Early smoking initiation (smoking/trying first cigarette before the age of 10) is a predictor of risk for tobacco use later in life. This section describes the prevalence of students who had 'ever smoked', those who initiated tobacco smoking before the age of 10, and 'current smokers'. Further analyses were conducted using the sub-sample of students who smoke at least daily, weekly or monthly ('current smokers') to explore specific smoking behaviours related to settings, preferred type of cigarettes and tobacco access and supply.

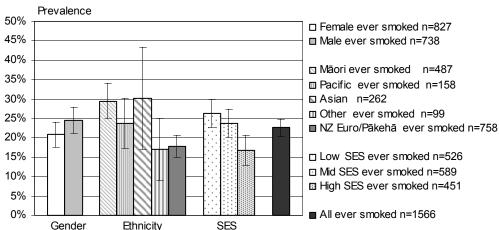
'Ever smoked' a cigarette, even just a few puffs

One-half of participating students had 'ever smoked' a cigarette, 'even just one or two puffs' (49.7%). A greater proportion of Māori students had 'ever smoked' (74.4%) compared with Pacific (59.4%) and New Zealand European/Pākehā students (43.0%). Students from low decile schools (low SES) were more likely to have 'ever smoked' a cigarette (60.9%) than students from mid (49.9%) or high decile schools (40.6%).

Age of smoking initiation

Overall, one in ten students tried their first cigarette around 13 (10.5%) or 12 years of age (8.7%). Over one in five students who had ever smoked a cigarette had their first cigarette before 10 years of age (22.6%). Māori students were more likely to report having tried their first cigarette before the age of 10 than non-Māori students (29.5% and 19.3%, respectively). Fewer students from high decile schools (high SES) had initiated smoking before the age of 10, compared with students from low decile schools (16.7% and 26.3%, respectively).





Frequency of smoking behaviour at time of survey

When asked how often they smoked at the time of the survey, most students said they had never smoked a cigarette or did not smoke 'now' (78.9%, Figure 1.2). Smoking *at least once a week* was reported by 2.9% of students, and 7.4% reported that they smoke *less often* than once a month. Just over one in ten students were classified as 'current smokers' (13.8%), reporting that they smoke at least *once a day, once a week*, or *once a month*. Over one-quarter of Māori students said that they currently smoke (28.0%), as did over one in ten Pacific students (13.7%).

Fewer than one in ten students indicated that they smoke *at least once a day* (8.7%), with higher prevalence of daily smoking among female students (11.0%) than male students (6.5%). One in five Māori students said they smoke *at least once a day* (20.6%), compared with 9.4% of Pacific and 5.2% of New Zealand European/Pākehā students.

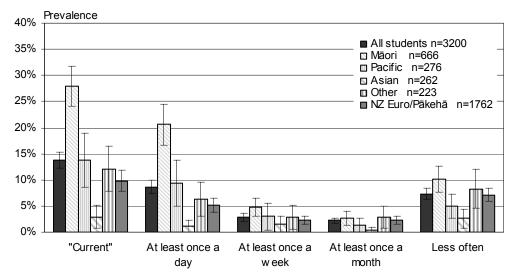


Figure 1.2 Frequency of smoking behaviour at time of survey – all students by ethnicity

'Current smokers' – students who reported that they smoke at least daily, weekly, or monthly Chart excludes students who reported that they had never smoked a cigarette, or were not smokers at the time of the survey (78.9%)

Behaviour of 'current smokers'

The remainder of Part 1 describes additional findings for 'current smokers' (students who reported that they smoke at least daily, weekly or monthly; n=433). Due to the small denominator for sub-group analyses such as ethnicity, confidence intervals are often large and significant differences cannot be established. These findings, therefore, should be interpreted with caution.

Setting for smoking behaviour

Overall, most 'current smokers' usually smoked *at home* (32.8%), *at public places* (17.1%), *at social events* (13.8%), or *at school* (14.0%, Figure 1.3). Māori students were less likely to report that they usually smoke *at social events* (7.6%), compared with New Zealand European/Pākehā students (20.0%). Analysis by school decile group showed that as SES increased, the prevalence of smoking *at home* decreased (low 39.6% compared with high 15.2%), and the prevalence of smoking *at social events* increased (low 4.8%, mid 14.4%, high 28.4%).

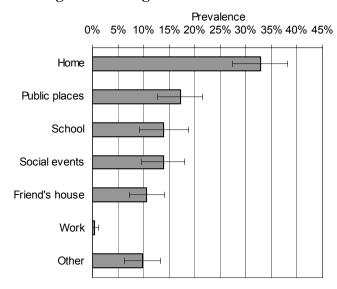


Figure 1.3 'Usual' setting for smoking behaviour – all 'current smokers' (n=433)

Usual cigarette type

Students were asked to indicate the type of cigarette that they usually smoke. Over one-half of students who reported that they currently smoke usually smoked *roll-your-own* cigarettes (59.5%), and one-third usually smoked *ready-made* cigarettes (37.1%). However, over one-half of Pacific students usually smoked *ready-made* cigarettes (56.2%), compared with only a quarter of Māori students (28.6%). Students from low decile schools (low SES) were more likely to report that they usually smoke *roll-your-own* cigarettes (67.5%) compared with students from high decile schools (high SES, 42.7%).

Preferred tobacco type

Students were asked to indicate what type of tobacco they *prefer* to smoke, and could select as many types as applied to them. Six out of ten 'current smokers' prefer *regular* tobacco (62.3%). Almost one in five prefer *menthol* (19.2%), and a similar proportion preferred *light*, *low tar or mild* tobacco (18.1%). Females were more likely than males to prefer smoking *menthol* tobacco (26.2% and 7.8%, respectively).

The use of any form of tobacco products other than cigarettes (eg, chewing tobacco, snuff, dip cigars, cigarillos, little cigars, a pipe) in the month prior to the survey was rare among participating students (6.8%), although one in five 'current smokers' had used other tobacco products in the month prior to the survey (23.4%).

Tobacco access and supply

In New Zealand, the sale of tobacco to anyone younger than 18 years of age is restricted by legislation. Asking students about their usual source of cigarettes gives an indication of the level of compliance with restrictions on tobacco sales, since participants in this survey (14 to 15-year-olds) are well below the legal age of purchase in New Zealand. In addition, building understanding of social supply from adults and peers is important for strategies to reduce young people's access to tobacco.

Usual source of cigarettes

Students were asked to indicate where they usually got their own cigarettes in the month prior to the survey. 'Current smokers' said that they usually got their cigarettes *from friends* (33.1%, Figure 1.4), *someone else bought them* (21.5%), or they *bought them from a shop* themselves (13.6%). Fewer than one in ten students reported that they usually got their cigarettes from *parents* (9.8%), and a similar proportion indicated their *brother/sister* (3.5%) was their usual source of cigarettes.

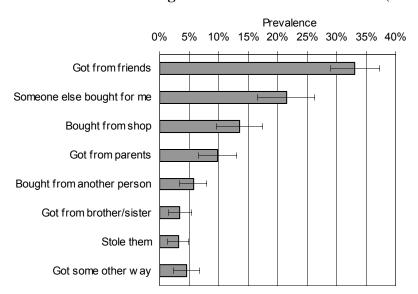


Figure 1.4 'Usual' source of cigarettes – all 'current smokers' (n=433)

Access through retail sale

Responses to the previous question show that one in ten 'current smokers' usually obtained their cigarettes through retail purchase. Students were asked to indicate which places they bought cigarettes from in the month prior to the survey, and how often they had done so for each retail outlet type.

Just over one-half of 'current smokers' reported that they bought cigarettes from a dairy in the month prior to the survey – either *four times or more* (20.0%), *two to three times* (19.0%), or *once* (16.1%). Seven percent of students (7.3%) had bought cigarettes from a service station *four times or more* in the month prior to the survey; 9.2% had done so *two to three times* and 13.8% had bought cigarettes *once* from a service station in the month prior to the survey.

Most 'current smokers' had <u>never</u> bought cigarettes from a liquor store/hotel (86.0%), supermarket (82.2%), takeaway shop (91.6%), or vending machine (90.6%) in the month prior to the survey.

Although the average age of students in this survey was four years below the legal age of purchase for tobacco, almost one-third of 'current smokers' reported that they had <u>not</u> been refused tobacco by a retailer because of their age in the month prior to the survey (31.4%). One in ten students said a retailer had refused them tobacco in the month prior to the survey (13.0%). Over one-half of 'current smokers' reported that they had not attempted to buy tobacco in the month prior to the survey (55.6%). However, almost one in three reported that they had <u>not</u> been asked for identification or proof of age in the month prior to the survey (30.7%), compared with 11.0% who had been asked for identification.

Part 2: Attitudes and beliefs related to smoking

This section describes the prevalence of smoking-related attitudes and beliefs among Year 10 students. The survey included questions about the likelihood of individuals' own smoking behaviour in the future, beliefs about smoking-related harm to health, and general attitudes about smoking and people who smoke. An important factor in reducing smoking uptake among youth is reinforcing anti-tobacco attitudes and building personal skills to refuse tobacco use (Health Sponsorship Council, 2005). Students who show a commitment not to smoke are likely to have reduced susceptibility to smoke in the future.

Likelihood of smoking in the future

Students were asked whether or not they would be likely to smoke:

- if offered a cigarette by a best friend,
- in the next 12 months, and
- 5 years from now.

Smoking in the short-term

When asked if they would smoke a cigarette if one of their best friends offered one, over one-half of participating students said *definitely not* (55.9%, Figure 2.1), and fewer than one in ten said *definitely yes* (7.0%). Almost one-quarter of students said they would *probably not* smoke if offered a cigarette from a best friend (23.4%). Male students were more likely to say they would *definitely not* smoke a cigarette if offered one by a best friend (61.0%) than female students (50.4%).

When asked if they thought they would smoke a cigarette at any time *during the next year* (12 *months*), one-half of students said *definitely not* (52.8%, Figure 2.1). One in ten students said *definitely yes* (10.3%). One-quarter said they would *probably not* smoke at any time in the year following the survey (23.0%). More male students reported that they would *definitely not* smoke at any time in the year following the survey (58.6%) than female students (46.5%).

Three times as many female students who identified as Māori said they would *definitely* smoke a cigarette if offered one by their best friend (16.9%), compared with New Zealand European/Pākehā females (5.4%). Overall, three times as many Māori than non-Māori students reported that they would *definitely* smoke in the year following the survey (19.4% and 7.7%, respectively).

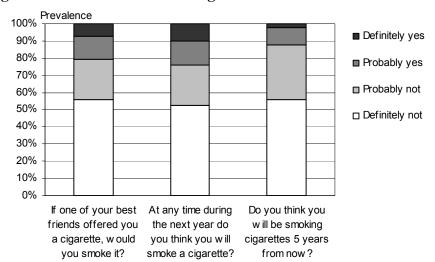


Figure 2.1 Likelihood of smoking in the future – all students

Susceptibility to smoke

Responses to the preceding two questions were combined for those students who had never smoked a cigarette to indicate the proportion that is susceptible to start smoking within one year of the survey. Students who are 'susceptible' are those who <u>did not</u> answer *definitely not* to both of the following questions: *If one of your best friends offered you a cigarette, would you smoke it?*, and *At any time during the next year do you think you will smoke a cigarette?*

Almost one-quarter of participating students who had never smoked a cigarette were susceptible to smoking initiation in the year following the survey (23.9%). The remaining three-quarters of students who had never smoked a cigarette were non-susceptible to smoking within one year of the survey as they expressed strong commitment not to smoke in the near future (76.1%).

Likelihood of smoking five years from the time of the survey

When asked if they thought they would be *smoking cigarettes five years from now*, more than four out of five students said *definitely not* (55.7%, Figure 2.1), or *probably not* (32.0%). Just two percent thought they would *definitely* be smoking five years from the time of the survey (2.0%).

Fewer Māori students thought they would *definitely not* be smoking five years from the time of the survey (40.7%), compared with non-Māori students (59.9%). One in four Māori female students said they would *probably* be smoking five years from the time of the survey (25.2%), compared with one in ten New Zealand European/Pākehā female students (10.2%).

Analysis by smoking status revealed that around two out of five 'current smokers' thought they would <u>not</u> be smoking five years from the survey (41.1%), either *definitely* (8.8%) or *probably not* (33.2%). However, almost one-half of 'current smokers' (47.2%) thought that they *probably* would be smoking five years from the time of the survey, and one in ten through they *definitely* would be (10.8%). In comparison, three-quarters of students who had never smoked a cigarette said they would *definitely not* be smoking five years from the time of the survey (76.7%), and one in five (21.4%) thought *probably not*. Around two percent of students who had never smoked a cigarette thought they *probably* or *definitely* would be smoking five years from the time of the survey.

Beliefs about smoking harm

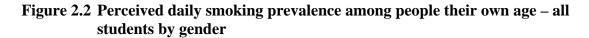
When asked if they thought *cigarette smoking is harmful* to their health, over four out of five students said *definitely yes* (86.5%), and a further 8.7% thought it *probably* is. One in ten Pacific students thought that smoking is *definitely not* harmful to health (10.0%), compared with fewer Māori (3.4%) and New Zealand European/Pākehā students (1.9%). Students from low decile (low SES) schools were more likely to report that they thought smoking is *definitely not* harmful to their health (6.4%), compared with students from mid and high decile (mid and high SES) schools (2.3% and 2.9%, respectively).

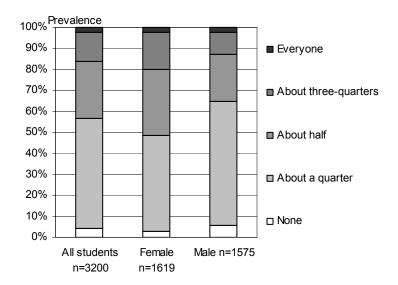
Current smokers were more likely to think that smoking is *probably* harmful to their health (23.5%), compared with students who had never smoked a cigarette (4.8%). Similarly, students who had never smoked a cigarette were more likely to say smoking is *definitely* harmful to health (90.9%), compared with 'current smokers' (69.2%).

Perceived daily smoking prevalence among people their own age

Students' beliefs about smoking prevalence among their peers is an important indicator of perceived social norms (Wiium, Torsheim & Wold, 2006), and is likely to influence individual smoking behaviour (Botvin, Botvin, Baker et al., 1992). In the YIS questionnaire students were asked *Out of 100 people your age, how many to do you think smoke cigarettes at least once a day?* Response categories were *None, About a quarter, About half, About three-quarters,* or *Everyone*.

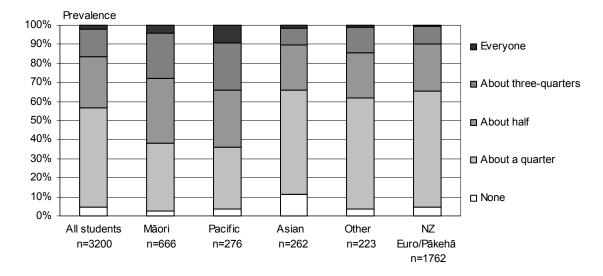
Most students in this survey thought that *about a quarter* of people their own age smoked at least daily (52.4%, Figure 2.2). Female students were more likely to think that a greater proportion of people their age smoked: 31.4% thought that *about* half of people their age smoked daily (compared with 22.6% of male students), and 17.6% thought that *about three-quarters* did (compared with 10.5% of male students).





Māori students were most likely to think that *about a quarter* (35.7%) or *about half* (33.9%) of people their age smoked daily (Figure 2.3). More New Zealand European/Pākehā students thought that *about one-quarter* of people their age smoked daily (61.1%). Close to one in ten Pacific students thought that *everyone* their age smoked at least daily (9.1%).

Figure 2.3 Perceived daily smoking prevalence among people their own age – all students by ethnicity



The perceived prevalence of smoking for people their own age was lower among students from high decile schools (high SES), compared with students from mid and low decile schools (Figure 2.4). Two-thirds of all students from high decile schools (high SES) thought that *one quarter* of their peers smoke daily (66.2%), compared with one-half of students from mid decile schools (mid SES, 52.6%) and one-third of students from low decile schools (low SES) (34.8%). Students from low decile schools (low SES) were more likely to think that *about three-quarters* of people their age smoke daily (23.8%), compared with students from mid (14.4%) and high decile schools (5.7%).

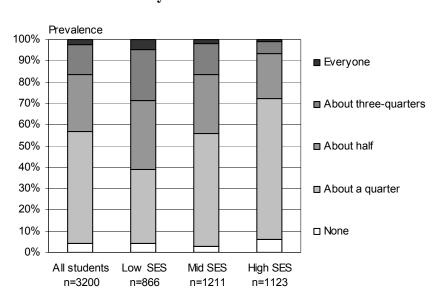


Figure 2.4 Perceived daily smoking prevalence among people their own age – all students by SES

Among 'current smokers', 27.9% believed that *about three-quarters* of people their own age smoked at least daily. In comparison, among students who had never smoked a cigarette, 8.6% believed that *about three-quarters* of people their own age smoked at least daily. Students who had never smoked a cigarette were more likely to think that *none* of the people their own age smoke at least daily, compared with 'current smokers' (6.2% and 2.1%, respectively).

Attitudes towards smoking behaviour and people who smoke

Students were asked to respond to a range of statements related to smoking and people who smoke. Students were asked whether they *agree*, *disagree* or *don't know* for each statement. The smoking-related statements and response findings have been grouped into five areas of interest for this analysis: acceptance and belonging; attractiveness and popularity; independence and uniqueness; the emotional state of people who smoke; and sensory and physiological effects of smoking.

Overall, students who had never smoked a cigarette were far more likely to display antitobacco and anti-smoking attitudes than students who reported that they were 'current smokers'.

Acceptance and belonging

Overall, some students considered smoking as a favourable factor contributing to social acceptance and belonging. One in ten of all students agreed with the statement that *smokers* are more popular (11.0%, Figure 2.5). Over one-quarter of all students agreed with the statement that *smoking helps people feel more comfortable at parties* (28.4%), and one in ten agreed that *smoking helps people meet and talk to other people* (12.9%). However, almost two-thirds agreed with the statement that *non-smokers dislike being around people who are smoking* (61.4%). More students who had never smoked a cigarette agreed with the statement that *non-smokers dislike being around people who are smoking* (70.1%), compared with 'current smokers' (51.7%).

Attractiveness and popularity

When asked to respond to the statement *smokers find it hard to get dates*, most students did not know (44.0%) or disagreed (34.7%). One-half of participating students agreed that *seeing someone smoking turns me off* (53.9%, Figure 2.5), and 4.0% agreed with the statement that *smoking makes people look sexy*. More students who had never smoked a cigarette agreed with the statement that *seeing someone smoking turns me off* than 'current smokers' (69.8% and 11.3%, respectively). Furthermore, more 'current smokers' agreed with the statement that *smoking makes people look sexy* (13.0%), compared with students who had never smoked a cigarette (1.7%).

Prevalence 0% 10% 20% 30% 40% 50% 60% 70% 80% ■ Current smokers n=433 Smokers are more popular ■ Never smokers n=1603 ■ All students n=3200 Non-smokers dislike being around people who are smoking Smoking helps people feel more comfortable at parties Smoking helps people meet and talk to other people Smokers find it hard to get dates Seeing someone smoking turns me off

Figure 2.5 Attitudes towards smoking: Acceptance and belonging, attractiveness and popularity – all students by smoking status

Bars indicate the prevalence of students who agreed with statement

Independence and uniqueness

Smoking makes people look sexy

Around one in ten students agreed with the statement that that smoking shows people you can do what you want (11.1%, Figure 2.6), and one-quarter agreed with the statement that smoking is something you need to try before deciding to do it or not (25.9%). Fewer than one in ten students agreed with the statement that smokers are more confident (7.4%), and 13.6% of students agreed that *smoking makes people look more grown up*. More 'current smokers' agreed with the statements relating smoking behaviour to independence and uniqueness, compared with students who had never smoked a cigarette (Figure 2.6).

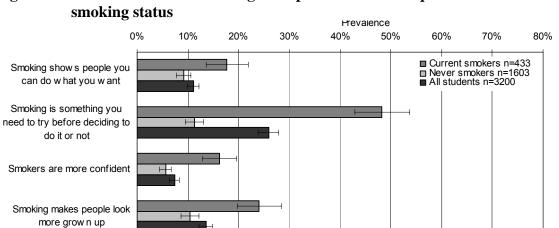


Figure 2.6 Attitudes towards smoking: Independence and uniqueness – all students by

Bars indicate the prevalence of students who agreed with statement

Emotional state of people who smoke

Fewer than one in twenty students agreed with the statement that *smokers are tough* (3.7%, Figure 2.7). Between one-third and one-half of students agreed with the statements that *smokers often get angry* (39.4%), *smokers are often stressed* (47.3%), and *smokers are often depressed* (30.4%). More students who had never smoked a cigarette agreed with the statement that *smokers are often depressed* (33.1%), compared with 'current smokers' (24.9%).

Smokers are often depressed

Prevalence

0% 10% 20% 30% 40% 50% 60% 70% 80%

Current smokers n=433

Never smokers n=1603

All students n=3200

Smokers are often depressed

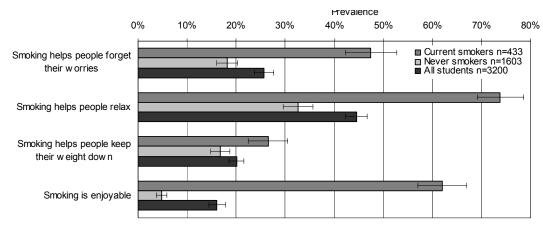
Figure 2.7 Attitudes towards smoking: Emotional state of people who smoke – all students by smoking status

Bars indicate the prevalence of students who agreed with statement

Sensory and physiological effects

One-quarter of participating students agreed with the statement that *smoking helps people forget their worries* (25.7%, Figure 2.8). Almost one-half of all students (44.5%) agreed that *smoking helps people relax*, and almost three-quarters of 'current smokers' agreed with this statement (73.8%), compared with one-third of those students who had never smoked a cigarette (32.6%). Overall, 16.1% of students agreed with the statement that *smoking is enjoyable*, and one out of five students agreed with the statement that *smoking helps people keep their weight down* (20.0%).

Figure 2.8 Attitudes towards smoking: Sensory and physiological effects— all students by smoking status



Bars indicate the prevalence of students who agreed with statement

Part 3: Smoking cessation experience ('current smokers' only)

In addition to smoking uptake data, collecting information about youth cessation contributes to our understanding of how best to promote and support quit attempts for young people who smoke. This section describes the cessation experiences and beliefs of participants who reported that they currently smoke. Due to the small denominator for some sub-group analyses (such as ethnicity), wide confidence intervals mean that significant differences cannot be established. As such, the findings in this section should be interpreted with caution.

Smoking dependence

Students were asked to indicate whether they ever had or felt like having a cigarette first thing in the morning. One-fifth of 'current smokers' said they always do (20.6%). Over one-third sometimes have or feel like having a cigarette first thing in the morning (40.2%) and most of the remaining 'current smokers' do not have or feel like having a cigarette first thing in the morning (36.0%).

Cessation-related attitudes and experience

When asked if they wanted to *stop smoking now*, almost one-half of 'current smokers' said *yes* (47.0%, Figure 3.1). However, an equal number did not want to stop smoking at the time of the survey (46.4%). Over one-half of 'current smokers' had tried to stop smoking in the year prior to the survey (61.9%). Almost three-quarters of all 'current smokers' believed they would be able to stop smoking if they wanted to (73.4%). One in five 'current smokers' did not believe they would be able to stop smoking if they wanted to (21.1%).

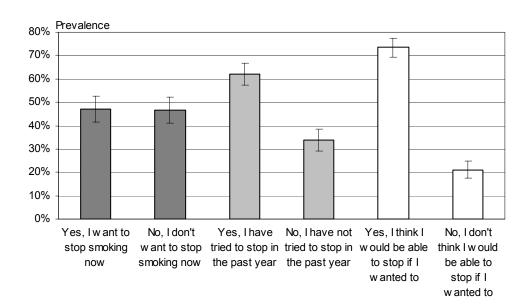


Figure 3.1 Cessation-related attitudes – all 'current smokers' (n=433)

Cessation support

A list of possible cessation support options was included in the questionnaire, and students were asked to select any that they had utilised in the year leading up to the survey. Most 'current smokers' reported that they had not used any of the forms of cessation support listed (64.6%). Almost one out of five had received help to stop smoking *from a friend* (19.9%), and a similar proportion received help from *a family member* (14.7%). One in ten 'current smokers' had *called the Quitline* (9.0%), and similar proportion reported that they had *attended a school programme to stop smoking* (7.4%). Very few 'current smokers' had *used nicotine replacement therapy* in the year prior to the survey (6.0%).

Part 4: Exposure to others' smoking

Frequent exposure to second-hand smoke has been identified as a direct health risk (World Health Organization, 2007), and is a risk factor for youth smoking uptake through the role modelling of smoking behaviour from adults and peers (Scragg, Laugesen & Robinson, 2003; Taylor, Conard, Koetting O'Byrne et al., 2004). A high visibility of smoking behaviour also influences perceived social norms and prevalence of smoking (Alesci, Forster & Blaine, 2003; Botvin et al., 1992), along with the influence of parental behaviour in establishing a reference point for young people's own actions. This section describes the prevalence of students who were exposed to others' smoking behaviour, the settings where students were exposed to second-hand smoke (SHS), role models who smoke, and depictions of smoking or tobacco in the media.

Significant others (family/whānau, friends) who smoke

Students were provided with a list of significant people such as family/whānau members and friends, and asked to identify who on the list smoked. One-quarter of participating students reported that *none* of the people on the list smoked (27.5%, Figure 4.1). In contrast, one-fifth of all Year 10 students reported that their *best friend* smoked (22.3%), and one-half said they had *other close friends* who smoked (47.2%). Fewer than one in five participants reported that their elder siblings smoked (*older brother(s)* 16.0%, *older sister(s)* 14.9%).

One-quarter of students reported that their *father* smoked (27.1%), and 25.7% reported that their *mother* smoked. One-fifth of students reported that they had *grandparents* who smoke (20.5%) and one in ten students had *other caregivers* who smoke (9.9%). More Māori students than non-Māori reported that friends and members of whānau smoke for every response option in this question (Figure 4.1).

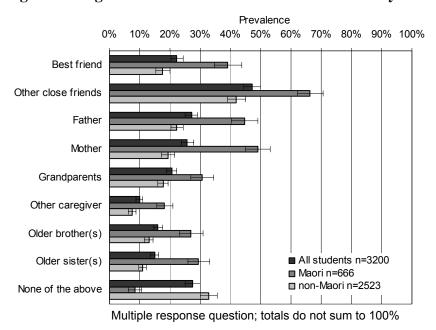


Figure 4.1 Significant others who smoke – all students by ethnicity

Three-quarters of 'current smokers' reported that their *best friend* smoked (75.5%), compared with just 6.4% of students who had never smoked a cigarette (Figure 4.2). In addition, most 'current smokers' reported that *other close friends* smoked (87.5%), compared with just one-quarter of students who had never smoked a cigarette (26.6%). Almost half of 'current smokers' reported that their *mother* (47.6%) or *father* smoked (47.3%). Students who had never smoked a cigarette were far more likely to that *none* of the people on the list smoked (45.5%), compared with just 1.4% of 'current smokers'.

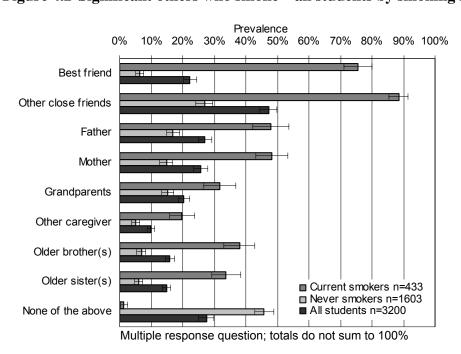


Figure 4.2 Significant others who smoke – all students by smoking status

Exposure to others' smoking in the home

Students were asked to indicate how many days people had smoked around them in their home in the week prior to the survey, on a scale from zero to seven. Two-thirds of Year 10 students in this survey reported no days when other people had smoked around them in their home in the week prior to the survey (66.6%, Figure 4.3). The remaining one-third of students reported at least one day when someone had smoked around them in their home in the week prior to the survey (33.1%). One in ten students reported that someone had smoked around them in their home on all of the seven days prior to the survey (11.5%).

Less than one-half of Māori students reported no exposure to others' smoking in their home in the week prior to the survey (49.2%), and this was lower than that reported by any other ethnic group (Pacific 59.6%, New Zealand European/Pākehā 71.6%). More 'current smokers' reported others' smoking in their home in the week prior to the survey than those students who had never smoked a cigarette (68.7% and 18.5%, respectively). Almost one-third of 'current smokers' were reported others' smoking around them in their home on all seven days of the week prior to the survey (31.6%), compared with fewer than one in twenty students who had never smoked a cigarette (4.5%).

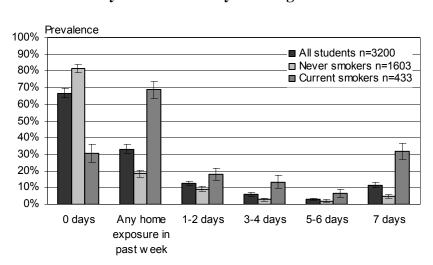


Figure 4.3 Days of exposure to others' smoking in the home in the week prior to the survey – all students by smoking status

Who smoked in the home in the 7 days prior to the survey

Students were asked to indicate who had smoked around them in their home in the seven days prior to the survey, from a list presented in the questionnaire. Analysis for this question was limited to those students who said that someone had smoked around them in their home on at least one of the seven days prior to the survey.

Of these students, it was most likely to be their *mother* (46.9%) or *father* (38.6%) who had smoked around them in their home in the week prior to the survey. Friends were also reported by one-third of students, either *best friend* (14.0%) or *other close friends* (21.9%). A much higher proportion of 'current smokers' said that their *best friend* had smoked around them in their home in the week prior to the survey (34.9%), compared with students who had never smoked a cigarette (2.0%).

Rules about smoking in and outside the home

Rules about smoking inside and outside domestic settings (such as the home) are a predictor of SHS exposure (Clark, Schooley, Pierce et al., 2006; Wakefield, Chaloupka, Kaufman et al., 2000).

Students were asked to indicate whether smoking was allowed *anywhere*, *in set areas* or *nowhere* inside and outside their home. Most students reported that smoking was allowed *nowhere inside* their home (80.0%). Almost one in ten students (9.3%) reported that smoking was allowed *anywhere inside* their home, and more Māori students reported that smoking was allowed *in set areas inside* (16.8%), compared with New Zealand European/Pākehā students (8.9%). 'Current smokers' were more likely to report that smoking was allowed *anywhere inside* their home (20.5%), compared with students who had never smoked a cigarette (5.6%).

For outside areas of the home setting, 60.6% of students reported that smoking was allowed *anywhere outside* their home, or *in set areas outside* (11.6%). More Pacific students than Māori reported that smoking is allowed *nowhere outside* their home (24.4% and 13.2%, respectively).

Exposure to others' smoking in cars or vans

One-quarter of students reported that someone had smoked in their presence while travelling in cars or vans in the seven days prior to the survey (26.9%). More Māori and Pacific students reported that someone smoked around them in cars or vans in the seven days prior to the survey (43.1% and 38.5%, respectively), compared with New Zealand European/Pākehā students (21.6%). Students from low decile schools had the highest prevalence of reporting that someone had smoked around them in cars or vans (37.2%), compared with students from mid (29.2%) and high decile schools (16.3%).

Exposure to people smoking in places other than in the home

Along with domestic settings, such as homes and cars or vans, students were asked about exposure to people smoking around in their presence *in places other than in their home* in the week prior to the survey. Almost two-thirds of students reported that people had smoked around them in places other than in their home on at least one day of the week prior to the survey (62.5%, Figure 4.4). Just over one-third of students reported no smoking around them in places other than in the home (36.9%). Over one in ten students reported that people smoked around them in places other than in the home on <u>all</u> of the seven days prior to the survey (13.9%).

More male students reported no exposure to others' smoking around them in places other than in the home in the week prior to the survey, compared with female students (41.3% and 32.2%, respectively). One-half of students who had never smoked a cigarette reported no exposure to others' smoking around them in places other than in the home (50.7%), compared with fewer than one in ten 'current smokers' (6.8%). A higher proportion of 'current smokers' reported exposure to others' smoking around them in places other than in their home on all seven days of the week prior to the survey, compared with students who had never smoked a cigarette (45.1% and 5.0%, respectively).

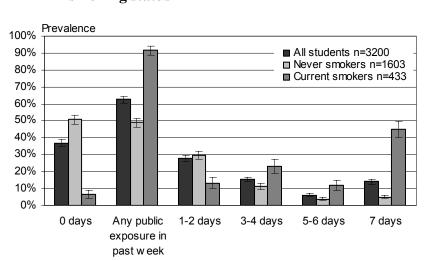


Figure 4.4 Exposure to others smoking in places other than in the home – all students by smoking status

Celebrity role models who smoke

Participants were asked if *any of [their] favourite musicians smoked*, and were asked the same question for whether *any of [their] favourite actor/actresses smoked*. They could answer *yes*, *no* or *don't know* for each question. Over one-third of participating students answered *yes* to the question about smoking for their favourite musicians (36.2%), and one-quarter (27.1%) reported that their favourite actor/actresses smoked. Over one-half of students said that they did not know if their favourite musician or actor/actress smokes (57.9% and 67.4%, respectively).

One in twenty students knew for certain that none of their favourite musicians or actor/actresses smoked (5.9% and 5.5%, respectively). A greater proportion of 'current smokers' reported that their favourite musician smoked (47.0%), compared with students who had never smoked a cigarette (27.9%). This trend also applied to knowledge of favourite actor/actresses' smoking status.

Depictions of smoking in the media

For this question, students were asked how often in the month prior to the survey they had seen *people smoking cigarettes or cigarette brands* on television, and how often they had seen *pictures or read about people smoking cigarettes in newspapers or magazines*. Response categories were *a lot*, *sometimes*, or *never*, with a category to opt out if they had not used the particular form of media in the month prior to the survey.

One out of five students reported seeing people smoking or cigarette brands on television *a lot* in the month prior to the survey (21.3%, Figure 4.5). Over one-half (60.3%) reported seeing people smoking or cigarette brands on television *sometimes*. Around one-sixth of all students (16.5%) reported *never* seeing smoking depictions on television in the month prior to the survey.

More Māori and Pacific students reported seeing people smoking or cigarette brands on television *a lot* in the month prior to the survey (32.3% and 33.6%, respectively), compared with New Zealand European/Pākehā students (16.2%). In addition, a greater proportion of students from low and mid decile (SES) schools reported seeing people smoking or cigarette brands on television *a lot* in the week prior to the survey (29.7% and 20.4%, respectively), compared with students from high decile schools (high SES, 15.7%).

For print media, fewer than one in ten students reported seeing or reading about people smoking in newspapers or magazines *a lot* in the month prior to the survey (8.4%, Figure 4.5). One-half of participating students said they had *sometimes* seen pictures or read about smoking in newspapers or magazines in the month prior to the survey (51.6%). One-quarter of students reported that they *never* saw or read about people smoking in newspapers or magazines (24.7%).

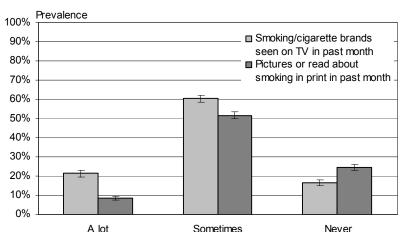


Figure 4.5 Depictions of smoking in the media seen in the month prior to the survey – all students

Part 5: Smoking-related health promotion messages

Tobacco-related education in school is a common health promotion strategy to reduce smoking initiation among young people. The school setting is an effective way to reach a large proportion of the youth population. Education can include topics on tobacco-related harm to health, and raising awareness of why young people take up smoking. In New Zealand, all schools must deliver education about tobacco-related harm as part of the drug education component of the Health and Physical Activity Curriculum (Ministry of Youth Development, 2004). The Amendments to the Smoke-free Environments Act 1990 prohibit smoking in school buildings and on all school grounds at any time (Ministry of Health, 2005).

This section describes the prevalence of students reporting that they were taught in any of their classes during that school year *about the dangers of smoking tobacco*, and whether or not they discussed in any of their classes *the reasons why people their age smoke*.

Tobacco smoking-related education in school

Two-thirds of students said they had been taught in class during the 2006 school year about the dangers of smoking tobacco (67.1%, Figure 5.1). When asked if they had discussed in class the reasons why people their age smoke, almost one-half of participating students said they had in the 2006 school year (46.1%). One-quarter of all students said they had not (27.4%), and one-quarter were not sure (26.6%).

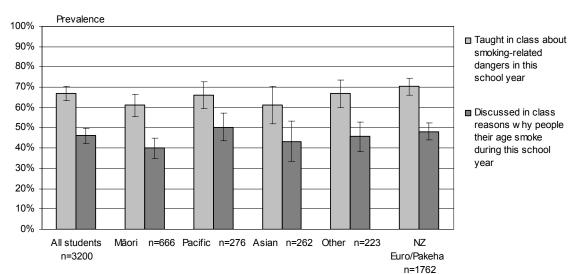


Figure 5.1 Education and discussion in school about the harms and uptake of smoking tobacco – all students by ethnicity

Smokefree messages

In addition to depictions of smoking and cigarettes, students were asked how often they had seen advertisements or messages on television about <u>not</u> smoking in the month prior to the survey. Almost one-third of participating students said they had seen advertisements or messages on television about not smoking *a lot* during the month prior to the survey (31.9%). Over one-half had seen them *sometimes* (58.7%), and fewer than one in ten had *never* seen advertisements or messages of this nature in the month prior to the survey (7.3%). More males than females reported that they had *never* seen advertisements or messages on television about not smoking in the month prior to the survey (9.4% and 5.2%, respectively).

There were differences between Māori and non-Māori students' responses to this question; more Māori students reported that they saw advertisements or messages on television about not smoking *a lot* in the month prior to the survey (43.2%), compared with non-Māori students (28.8%). A greater proportion of students who reported being 'current smokers' said that they had seen advertisements or messages on television about not smoking *a lot* in the month prior to the survey (46.9%), compared with students who had never smoked a cigarette (24.3%).

Smokefree events

Students were presented with a list of smoking-related health promotion campaigns and events, and were asked to select those that they had heard of, and/or attended or taken part in. Almost all students had heard of the brand Smokefree (96.1%). Three out of ten of all students had heard of Auahi Kore (31.2%), while over six out of ten Māori students had heard of the brand Auahi Kore (63.2%).

One in five of all students had attended or taken part in a 'Smokefree Rockquest' event (21.6%, Figure 5.2); one-quarter of Māori students had done so (26.7%). A greater proportion of Pacific students had attended or taken part in Smokefree Pacifica Beats (28.4%) than students of other ethnicities.

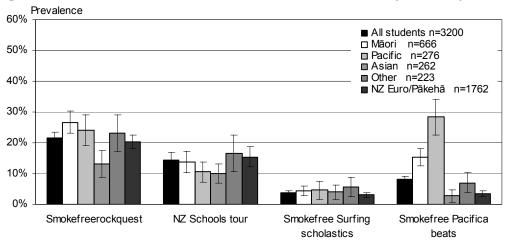


Figure 5.2 Attendance at Smokefree events – all students by ethnicity

Part 6: Youth culture

This section explores elements of youth culture, such as participants' sport and extracurricular activities, music preferences, and use of media and technology. This report gives an overview of key findings, and these topics have been analysed in greater detail (ie, by ethnicity, SES, and smoking status) for publication in a subsequent HSC report – 'Youth Culture and Trends'.

Interest in sports

Students were asked to select all the sports they were interested in from a list of over twenty options. 'Interest' was defined as *including watching on television, and reading about in newspapers or magazines*. The top five sports that female students were interested in were netball, swimming, basketball, volleyball, and tennis (Table 6.1). Male students were most interested in rugby union, basketball, extreme sports, soccer, and rugby league. Very few students reported no interest in any sports (1.9%).

Table 6.1 Top five sports: Interest – all students by gender

Prevalence %						
All students (n=3200)		Female students (n=1619)		Male students (n=1575)		
Basketball	45.5%	Netball	59.4%	Rugby union	52.3%	
Rugby union	40.3%	Swimming	49.5%	Basketball	47.5%	
Soccer	39.2%	Basketball	43.3%	Extreme sports	44.2%	
Swimming	38.0%	Volleyball	39.0%	Soccer	41.5%	
Touch rugby	36.6%	Tennis	37.0%	Rugby league	41.3%	
Not interested in any sports	1.9%		1.6%		2.1%	

Multiple response question; totals do not sum to 100%

Participation in sports

In addition to being asked about their interest in sports, students were asked to select the sports that they like to participate in from the same list of over twenty options. The top five sports that female students participated in were netball, swimming, basketball, volleyball, and tennis (Table 6.2). The five sports that male students most commonly participated in were basketball, rugby union, soccer, touch rugby, and athletics. Fewer than one in twenty students said they did not participate in any sports (3.6%). For female students the same five sports are in the lists of those that they are most interested in, and participate in, while for male students these two lists are different.

Table 6.2 Top five sports: Participation – all students by gender

		Prevaler %	nce		
All students (n=3200)		Female str (n=161		Male stud (n=157	
Basketball	42.0%	Netball	55.5%	Basketball	44.1%
Soccer	36.4%	Swimming	42.4%	Rugby union	41.1%
Swimming	34.4%	Basketball	39.6%	Soccer	39.4%
Touch rugby	33.7%	Volleyball	36.3%	Touch rugby	37.8%
Athletics	30.3%	Tennis	33.9%	Athletics	31.5%
Do not participate in					
any sports	3.6%		3.8%		3.3%

Multiple response question; totals do not sum to 100%

Interest in extra-curricular activities

Further to the questions on interest and participation in sports, students were asked to identify interest and participation in a variety of extra-curricular activities from a list of twelve options. The top five extra-curricular activities that female students were interested in were dance, photography, drama or theatre, painting, drawing or sculpture, and graphics or design (Table 6.3). Male students were interested in graphics or design, graffiti/tag art, break dancing, painting, drawing or sculpture, and drama or theatre. Almost one-quarter of students said they were not interested in any of the activities listed (23.4%), and this differed for males (35.5%) and females (10.3%).

Table 6.3 Top five extra-curricular activities: Interest – all students by gender

Prevalence %						
All students (n=3200)		Female students (n=1619)		Male students (n=1575)		
		Dance (e.g. ballet,				
Photography	30.4%	salsa, modern)	49.2%	Graphics or design	28.7%	
Graphics or design	20.1%	Photography	45.5%	Graffiti/tag art	23.7%	
Dance (e.g. ballet, salsa,						
modern)	28.3%	Drama or theatre	38.5%	Break dancing	22.6%	
Drama or theatre	27.4%	Paint/drawing, sculpture	36.8%	Paint/drawing, sculpture	17.1%	
Paint/drawing, sculpture	26.6%	Graphics or design	31.7%	Drama or theatre	17.0%	
Not interested in						
activities listed	23.4%		10.3%		35.5%	

Multiple response question; totals do not sum to 100%

Participation in extra-curricular activities

When asked about participation in extra-curricular activities, the top five activities for female students were dance, painting, drawing or sculpture, drama or theatre, graphics or design, or photography (Table 6.4). Male students most commonly reported participation in graphics or design, painting, drawing or sculpture, drama or theatre, graffiti/tag art, and break dancing. Almost one-half of all males said they do not participate in any of the activities listed (49.2%), compared with around one-quarter of female students (26.8%).

Table 6.4 Top five extra-curricular activities: Participation – all students by gender

Prevalence %						
All students (n=3200)		Female students (n=1619)		Male students (n=1575)		
Graphics or design	20.4%	Dance (e.g. ballet, salsa, modern)	27.2%	Graphics or design	21.3%	
Paint/drawing, sculpture	19.9%	Paint/drawing, sculpture	27.2%	Paint/drawing, sculpture	13.0%	
Drama or theatre	18.6%	Drama or theatre	25.3%	Drama or theatre	12.2%	
Dance (e.g. ballet, salsa, modern)	16.3%	Graphics or design	19.3%	Graffiti/tag art	11.9%	
Photography	10.4%	Photography	13.4%	Break dancing	8.0%	
Do not participate in any of the activities listed	38.4%		26.8%		49.2%	

Multiple response question; totals do not sum to 100%

Music preferences

The five types of music that most students reported listening to were pop/rock (72.4%), hip hop/urban Pacifica/rap (68.2%), rhythm and blues (RnB) (36.2%), heavy metal (33.8%), and reggae/ska/dub (29.9%).

Table 6.5 Top five types of music – all students

Prevalence %	
All students (n=3200)	
Pop/Rock	72.4%
Hip Hop/Urban	
Pacifica/Rap	68.2%
Rhythm & Blues (R&B)	36.2%
Heavy metal	33.8%
Reggae/Ska/Dub	29.9%
Not interested in any of	
these	2.0%

Multiple response question; totals do not sum to 100%

Television watching

Students were asked to indicate how many hours they spent watching television on an average weekday, using a scale from *up to 1 hour* to *more than 4 hours*. Students most commonly watched *up to two hours* of television (22.6%) or *up to three hours* of television (21.6%) on an average weekday (Figure 6.6). One-fifth of students watched *more than 4 hours* of television on an average weekday (20.4%), and fewer than one in ten said they *do not watch television on an average weekday* (6.7%).

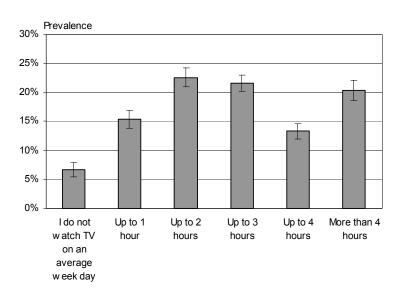


Figure 6.6 Hours of television watching on an average weekday – all students

A further question about television watching asked students which types of programme they had watched during the week prior to the survey. Students could select as many options as applied to them. *Music* (70.3%), *cartoons* (59.0%), *soap operas* (58.4%), *comedy shows* (58.4%) and *current affairs* (54.3%) were the most commonly selected programme types.

<u>Internet use</u>

Students were asked a series of questions about Internet use, including frequency, setting and purpose. One-half of participating students reported that they use the Internet *at least once a day* (51.1%, Figure 6.7), and one-third use *it at least once a week* (31.2%). Very few students reported that they *never* used the Internet (2.7%).

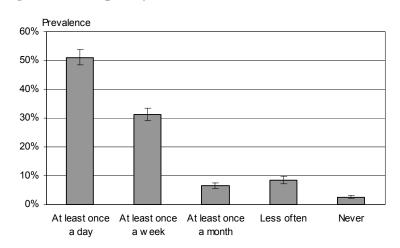


Figure 6.7 Frequency of Internet use – all students

Reasons for Internet use

Students were asked what they had used the Internet for in the month prior to the survey, and could select as many options as were applicable from a list. The most common reasons for using the Internet in the month prior to the survey were *looking for information* (69.1%), *e-mail* (67.6%), *downloading music* (53.9%), and *instant messaging* (48.2%, Figure 6.8).

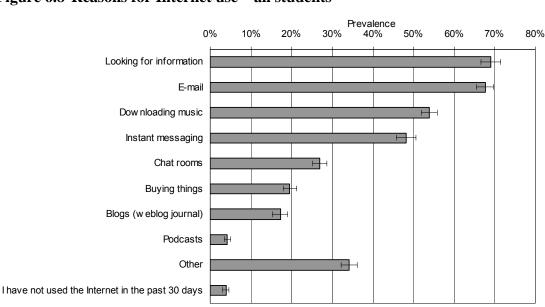


Figure 6.8 Reasons for Internet use – all students

Multiple response question; totals do not sum to 100%

Settings for Internet use

Most students used the Internet *at home* (86.2%) or *at school* (63.1%, Figure 6.9). One-third of students reported that they used the Internet *at a friend's house* (33.4%). Public settings for Internet use were also reported, such as *at a library* (19.4%) or *cyber/Internet café* (9.3%).

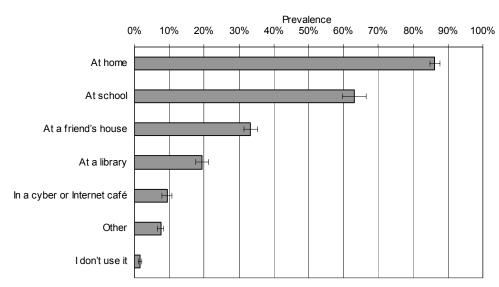


Figure 6.9 Settings for Internet use – all students

Multiple response question; totals do not sum to 100%

Cell-phone use

Most students reported owning a cell-phone (89.4%), with ownership by females exceeding that reported by males (91.8% and 87.1%, respectively). One-quarter of all students reported sending *100 or more* text messages on an average weekday (27.0%).

Part 7: Connectedness – parents and school

Social connectedness has been identified as a protective factor for a range of positive youth health outcomes (Adolescent Health Research Group, 2004; Minister of Youth Affairs, 2002; Resnick, 2000), including reduced smoking uptake (Atkins, Oman, Vesely et al., 2002; Health Sponsorship Council, 2005). This section reports the findings from several questions measuring participants' sense of connection with parents and school. The style of parenting that young people report is one commonly used indicator of connectedness. Measures of parenting style in the YIS included a series of questions asking about parents' and caregivers' smoking-specific rules, monitoring and awareness of students' school and social life, and rule setting (Adolescent Health Research Group, 2003; Tobacco Information and Prevention Service; Centers for Disease Control and Prevention, 2005). School connectedness was measured by asking students when they plan to leave school, and by asking them to rank their own academic performance relative to an 'average student' at school.

Parenting style - Smoking-specific

Over one-half of students reported that their parents or caregivers *had set rules about not smoking cigarettes/tobacco* (56.4%) and over three-quarters reported that their parents or caregivers *would be upset if they [the student] were caught smoking cigarettes/tobacco* (78.7%). Differences by ethnicity were detected, and fewer Māori students reported that their parents or caregivers *would be upset if they were caught smoking cigarettes/tobacco* (66.6%) compared with non-Māori students (82.1%).

Parenting style – Awareness and monitoring

Over three-quarters of all students in Year 10 reported that their parents or caregivers *expect* [them] to put time aside to do homework (80.0%) and know about [their] school life (eg, teachers, grades) (75.8%). Almost two-thirds of all students reported that their parents or caregivers generally know that [they] spend pocket money on (62.7%). Over one in ten students reported that their parents or caregivers often have no idea where [they are] when away from home (14.3%). Parental monitoring tended to be higher for female than male students – more male students reported that their parents or caregivers often have no idea where [they are] when away from home (16.5%), compared with female students (11.9%).

Parenting style – Rules and consequences

One-half of students reported that their parents or caregivers have rules about when [they] can go out with friends (55.4%), and almost two-thirds of all students reported that they always get into trouble if [they] break any important rules [their] parents or caregivers have set (66.1%). More female students reported that their parents or caregivers have rules about when [they] can go out with friends (59.4%), compared with male students (51.7%).

When responses to these questions were analysed by smoking status, those students who were 'current smokers' reported consistently lower levels of parental connectedness for all indicators used in this survey, compared with students who had never smoked a cigarette (Figure 7.1).

80% 10% 20% 30% 60% 70% 90% 100% 50% Parents have set rules about not smoking Parents would be upset if I was caught smoking Parents expect me to put time aside to do homew ork Parents know about my school life Parents know what I am spending money on Parents often have no idea w here I am ■ Current smokers n=433 Parents have rules about going ■ Never smokers n=1603 out with friends ■ All students n=3200 If I break rules my parents have set I always get into trouble Bars indicate the prevalence of students who agreed with statement

Figure 7.1 Parenting style: Smoking-specific, awareness, and rules – all students by smoking status

School-leaving plans

Students were asked when they plan to leave school, and most said Year 13, the final year of secondary schooling in New Zealand (62.5%, Figure 7.2). However, almost one-quarter of participating students said they were not sure when they would leave school (23.0%).

In comparison with students who had never smoked a cigarette, a greater proportion of 'current smokers' reported that they plan to leave school earlier than Year 13. One in ten 'current smokers' planned to leave school in Year 12 (14.0%), compared with 5.0% of students who had never smoked a cigarette. A similar proportion of 'current smokers' planned to leave school in Year 11 (11.4%), compared with 2.4% of students who had never smoked a cigarette.

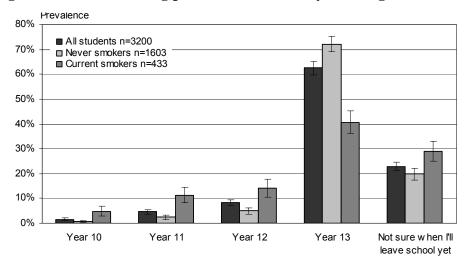


Figure 7.2 School-leaving plans – all students by smoking status

Self-rated school performance

Students were asked to rate their own *performance in school subjects compared with the average student in [their] school year*, using a scale from *much better than average* to *much below average*. For students who had never smoked a cigarette, almost one-half rated their performance at school as *better than average* (42.6%, Figure 7.3), compared with one-fifth of 'current smokers' (21.5%). 'Current smokers' were more likely to rate their performance as *average* (58.2%), compared with students who had never smoked a cigarette (40.5%).

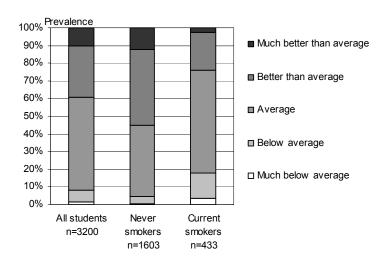


Figure 7.3 Self-rated school performance – all students by smoking status

Part 8: Awareness of, and attitudes towards, the tobacco industry

Innovative campaigns have been launched internationally to counteract tobacco industry marketing of tobacco products, and address attitude-related risk factors for smoking uptake. The truthTM campaign in the United States was developed using youth-oriented advocacy messages in an attempt to build anti-tobacco and anti-industry attitudes (Hicks, 2001). At the time of the YIS, this type of campaign was being considered in New Zealand. A series of questions was included in the survey to provide a baseline measure of students' perceptions about tobacco companies (if any). Specifically, students were asked about whether they thought tobacco companies were legitimate businesses, trustworthy, and responsible for people smoking. Students were asked to indicate whether they *agree* or *disagree* with six statements; there also was a *don't know* response category.

Legitimacy of the tobacco industry

Almost one-half of students said they *support government laws that control what tobacco companies do* (47.9%, Figure 8.1). Opinion was split over whether *tobacco companies should have the same right to sell cigarettes as other companies have to sell their products* (29.2% said they *agree*, 39.9% said they *disagree*, and 30.9% didn't know).

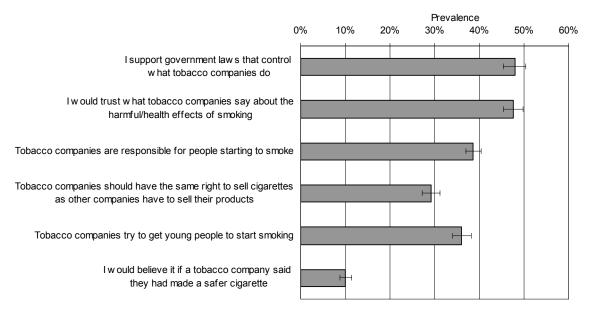
Trust in the tobacco industry

Almost one-half of students said that they would trust what tobacco companies say about the harmful/health effects of smoking (47.6%), however only one in ten students said they would believe it if a tobacco company said they had made a safer cigarette (10.1%).

<u>Industry responsibility for people smoking and starting to smoke</u>

Over one-third of students agreed with the statement that tobacco companies are responsible for people starting to smoke (38.7%), and a similar proportion agreed with the statement that tobacco companies try to get young people to start smoking (36.1%). More male than female students agreed with the statement that tobacco companies are responsible for people starting to smoke (42.2%, compared with 34.9%), and that tobacco companies try to get young people to start smoking (43.3%, compared with 28.4%).

Figure 8.1 Awareness of, and attitudes towards, the tobacco industry – all students



Bars indicate the prevalence of students who agreed with statement

Discussion

Key findings

The Year 10 In-depth Survey provides comprehensive information on many of the factors involved in reducing smoking initiation among young people in New Zealand. This report has explored several key areas of interest, with top-line analysis by gender, ethnicity, SES, and smoking status where applicable. This discussion will not attempt to explore each of these in detail; instead, survey findings are briefly discussed in the context of existing literature to promote dialogue among appropriate specialists in areas such as Māori health and well-being and tobacco control policy.

Smoking behaviour

The smoking prevalence for YIS participants mirrors the national prevalence reported in the ASH Year 10 Snapshot Survey (Scragg, 2007). The ASH data are used to monitor trends and regional health targets for youth smoking, while the YIS data provide information on smoking-related attitudes and behaviours of Year 10 students, and the factors that put young people at risk of, and protect them from, starting to smoke.

Almost one-quarter of students who said they currently smoked usually did so at home. A greater proportion of Māori students reported that they usually smoked at home, compared with students of other ethnicities. Past research has shown that restrictions on smoking in the home environment protects against youth smoking initiation (Clark et al., 2006; Wakefield et al., 2000). The findings from the YIS, therefore, could be a signpost to one of the determinants of youth smoking and an indicator of the behavioural norms that contribute to the higher prevalence of smoking for Māori youth, particularly females. These results warrant further exploration of smoking behaviour in the home environment, the extent of parental monitoring, and the social acceptability of young people smoking in certain settings.

Most Year 10 students who smoke report using roll-your-own tobacco, and Māori and low SES students were particularly high users of roll-your-own, rather than ready-made, cigarettes. The increase in roll-your-own tobacco consumption has been highlighted in existing commentary in New Zealand and may be due to smokers' ability to control how much tobacco is used in each cigarette, and the lower cost of roll-your-own tobacco (Ministry of Health, 2006a). Youth are one of the population groups found to be highly sensitive to price increases of tobacco (Wilson & Thomson, 2005) and this survey finding highlights the need to address the price discrepancy between roll-your-own and ready-made cigarettes as a measure to reduce youth access to tobacco.

Access

Along with reinforcing anti-tobacco attitudes and reducing smoking behaviour in general, a comprehensive tobacco control strategy is enhanced by reducing the availability of tobacco to young people. The results from this survey indicate that one in ten Year 10 students (14 and 15-year-olds) who currently smoke 'usually' get their tobacco from a store, even though it is illegal to sell cigarettes to anyone under 18 years of age in New Zealand (Ministry of Health, 2005). This research, therefore, supports earlier research that also highlighted a lack of compliance with, and enforcement of, legislation for the retail sale of tobacco to minors (Darling, Reeder, McGee et al., 2005). Successfully restricting access relies on consistent enforcement and prosecution for those found breaching the legislation.

Another key determinant of youth access to tobacco is supply from other people, whether intentional or not (Forster, Chen, Blaine et al., 2003; Scragg et al., 2003). Despite the complexity of preventing social supply, findings from this survey suggest that Year 10 students who smoke more commonly use peers as a source for cigarettes than retail purchase by someone else, or their own purchase. International research with students of a similar age to the Year 10 sample found that over one-half of those who smoke obtained their most recent cigarette from a friend (Forster et al., 2003), and highlighted the strong presence of a 'peer market' for cigarettes in schools (Croghan, Aveyard, Griffin et al., 2003). Efforts to reduce social exchange of cigarettes should not focus solely on adults, but also extend to reducing 'teen-on-teen' supply (Forster et al., 2003), as well as preventing the sourcing of cigarettes through retail sale.

The small number of 'current smokers' in the YIS precludes analysis of usual source of cigarettes by ethnic and socioeconomic sub-groups. Further research into the issue of retail purchase and social supply by these sub-groups may inform strategies to reduce the availability of tobacco for young people most at risk of beginning or continuing to smoke.

Prevalent attitudes and beliefs

The complexities of smoking uptake create challenges for health promotion action (Gervais, O'Loughlin, Meshefedjian et al., 2006; Van Den Bree, Whitmer & Pickworth, 2004). As this survey reveals, Year 10 students in New Zealand are aware of the health impact of smoking and most express a commitment not to smoke in the future. Young people's beliefs about their own likelihood of smoking in the future are one way to gauge commitment or intentions to remain 'smokefree' for the transition into adulthood. In addition, measuring student beliefs about smoking prevalence among peers (and having friends, family and whānau who smoke) can reveal clusters of young people who are susceptible to smoking behaviour (Abel, Plumridge & Graham, 2002).

The results reported here show that 'current smokers' were more likely to believe they would be smoking in five years, compared with students who had never smoked a cigarette. It is to be expected that current smoking behaviour will influence an individual's perception of whether or not they will smoke in the future, especially if they had experienced difficulty with cessation attempts.

The responses from students in the this survey indicate that Year 10 students tend to ascribe negative values to smoking and people who smoke, and that smoking is not seen as a sociable or attractive behaviour. However, findings show that many young people associate smoking behaviour with stress reduction and mental health. Almost one-half of all students thought that smoking helped with relaxation, implying that smoking behaviour was seen was a 'normal' or appropriate response to stress. Attitudes differ between 'current smokers' and those students who had never smoked a cigarette. These differences may shed light on the messages that will resonate with youth, along with the findings about awareness of, and attitudes towards, the tobacco industry. Evaluation of the existing truthTM campaign has shown high awareness, recall and message uptake with a youth audience in the United States (Farrelly, Davis, Yarsevich et al., 2002), and this kind of intervention might be successful in reducing the appeal of smoking, and smoking uptake, for youth in New Zealand.

Cessation

Exploration of the pathway from smoking initiation to regular use and dependence in adolescence suggests that it is more complex than a linear pathway (Wellman, Difranza, Savageau et al., 2004). Among 'current smokers' in this survey, one-half would like to stop smoking. An even greater proportion reported that they had tried to stop smoking during the year prior to the survey, implying that relapse had occurred following a quit attempt.

'Current smokers' who did not think that they would smoke in the future may have beliefs about the ease of quitting, or have already made a commitment to stop smoking. Existing adult-oriented management of addiction and cessation may not be successful or cost-effective for young people who smoke (Rodgers, Corbett, Bramley et al., 2005; Stanton & Smith, 2002). Innovative approaches (such as text-message cessation support using mobile phones) are being explored with young people in New Zealand (Rodgers et al., 2005), and further research about smoking cessation for youth is underway.

Exposure to smoking among others

In New Zealand, extensive public health and awareness campaigns in the past decade have promoted the dangers of, and need to reduce, second-hand smoke exposure – particularly around children (Health Sponsorship Council, 2006a). 'Smokefree' health promotion messages are being extended to highlight the effect of role-modelling non-smoking behaviour, in addition to promoting the direct harm from second-hand smoke. This survey adds to

evidence that students who currently smoke are more likely to report exposure to role models who smoke (Taylor et al., 2004), and exposure to others' smoking around them in public and in the home. This finding is consistent with previous research into youth smoking in New Zealand, which linked parental smoking and daily smoking among youth (Scragg et al., 2003). Furthermore, a positive correlation has been reported between the number of days of exposure to others' smoking in the home in the week prior to interview and students' likelihood (odds ratio) of being a daily smoker (Darling & Reeder, 2003).

Other research has found correlations between smoking-specific rules in the home and reduced smoking uptake among youth who live there (Clark et al., 2006; Wakefield et al., 2000). Similarly, having a favourite 'movie star' who smokes has previously been associated with a higher chance of smoking uptake among youth (Tickle, Sargent, Dalton et al., 2001), and YIS findings show that 'current smokers' were more likely than students who had never smoked a cigarette to say that their favourite musicians or actor/actresses smoke. The prevalence of these risk factors, namely exposure to role models who smoke and smoking in public places, emphasises the need for sustained action to de-normalise smoking behaviour.

A recent adult survey demonstrated a reduction in the proportion of parents and caregivers reporting exposure to second-hand smoke in the home over recent years (Health Sponsorship Council, 2006b). The prevalence of exposure to others' smoking in the home in the previous week reported by students in the YIS (33.1%) is higher than that reported by parents and caregivers in an adult survey (9.5%). In the absence of biochemical indicators of exposure, self-reported information cannot be validated, and so it is difficult to establish the reason for this inconsistency, and what level of reported exposure is accurate. Recent attention to the harms of smoking around others in the home may have contributed to adults (in particular) moderating their reported exposure to give a more socially desirable response.

Health promotion messages

Almost two-thirds of the students who participated in the YIS said that they had been taught in class in the school year before the survey about the dangers of smoking tobacco. Fewer students had participated in class-based discussion about reasons why people their age smoke, indicating that smoking-related health promotion in schools could be extended to enhance critical awareness among young people about smoking behaviour.

Year 10 students reported high awareness and recall of national 'Smokefree' mass media campaigns and, although this is likely to include campaigns targeted toward adult audiences (such as parents and caregivers, it is hoped that there is some level of resonance and message uptake by young people. A youth-specific 'Smoking – Not our future' campaign was launched recently using 'Smokefree' celebrity role models in visual and advertising media. This campaign will be evaluated during 2008 for effectiveness in building anti-tobacco attitudes among youth.

Youth culture

This top-line report includes the overall prevalence of findings for a range of 'daily life' factors that contribute to youth culture, such as sport and extra-curricular activities, music, and media use. Highlights from this section include high frequency of Internet use, with over 80% of Year 10 students reporting that they used the Internet in their home. These results can be used to guide health promotion message placement, as well as giving a general idea of 'where young people are at' and what is relevant to them. Further analysis of these findings is planned and will be published in a separate report.

Social connections

Several indicators in this survey were included to explore students' level of connectedness. A Ministry of Social Development measure has described the desired outcome for social connectedness:

'People enjoy constructive relationships with others in their families, whānau, communities, iwi and workplaces. Families support and nurture those in need of care. New Zealand is an inclusive society where people are able to access information and support.' (Minister of Social Development, 2006 p.112)

Social connectedness is typically measured using a range of indicators such as contact with social networks, trust in others, and access to modes of communication (Minister of Social Development, 2006). This survey did not attempt to capture all these indicators; however, students were asked about their connection to parents and school – two key social linkages for most young people. Previous research with secondary school students in New Zealand found that 'more than 90% of all students reported that at least one of their parents or someone who acts as their parent cares about them a lot' (Adolescent Health Research Group, 2003 p.23).

Overall, students in this survey who had never smoked a cigarette gave more positive responses about parental monitoring and expectations than students who reported that they currently smoke. Improvement in certain aspects of parenting (such as communication, role modelling, rule enforcement and quality relationships) have been the focus of a recent campaign to reduce youth smoking uptake in the United States (Tobacco Information and Prevention Service; Centers for Disease Control and Prevention, 2005).

The findings from this survey show a strong link between parental disapproval of smoking and students' smoking status. Students who had never smoked a cigarette were almost twice as likely to report that their parents or caregivers 'would be upset' if they were caught smoking, compared with 'current smokers'. Longitudinal research has demonstrated a strong relationship between perceived parental disapproval of smoking – those youth who reported that their parents would strongly disapprove of their smoking were less likely to smoke, while youth who reported more 'lenient' parental attitudes towards smoking were more likely to become established smokers (Sargent & Dalton, 2001).

Further analysis of the YIS data should be performed to explore parental smoking as a factor in this relationship, as it has been reported that parental connectedness becomes less protective against smoking uptake if a parent smokes (Tilson, McBride, Lipkus et al., 2004).

Limitations

The YIS was conducted with a sample of school students. School-based surveys have a common limitation in not representing all young people in an area or country, and the findings for students in Year 10 cannot be generalised to all 14 and 15-year-olds in New Zealand. This limitation is especially challenging for health-related surveys where those young people with high health needs are more likely to be absent from school on any given day. However, the advantage of reaching a large number of young people, and the logistical benefits of administering surveys in a school setting, has led to most youth surveys using this approach.

Large-scale health and social research is common in New Zealand, and schools are often recruited for surveys with young people. The YIS achieved an overall response rate of around 60%, due to a relatively low school response rate compared with the student-level response rate. This may be because decision-makers in schools feel they are over-burdened by requests to participate in surveys. Information on the importance of this survey as an ongoing monitoring initiative was provided to schools and will be highlighted further in future surveys to improve response rates.

Students' self-reported smoking behaviour was not validated against an observational or scientific measure. Again, this limitation is present in almost all smoking-related surveys. It is often inappropriate, impractical or cost-prohibitive to perform validation of health behaviours, although studies have been conducted with young people using chemical testing for cotinine. Assurances of confidentiality and anonymity were made during survey administration to manage this limitation and encourage honest responses to questions.

Concluding comments

The YIS provides a vital opportunity to reflect on the wide-ranging factors that contribute to youth smoking initiation in New Zealand. Existing time-series data for 14 and 15-year-old students show an encouraging decline in youth smoking prevalence over the past six years (Scragg, 2007). Reducing smoking initiation requires a focussed, audience-specific approach – evidence suggests that once young people have initiated smoking their receptiveness to tobacco prevention messages is reduced (Jackson, 1998). Furthermore, young people who live and socialise within networks where smoking is common (Abel et al., 2002) are likely to require targeted messages to counteract the norms of behaviour around them.

Reducing the harm from tobacco is one of nine of the Ministry of Health's health sector targets (Minister of Health, 2007), and efforts to build capacity in the public health sector reflect this commitment. Public policy in New Zealand has an important role in reinforcing the message that youth uptake of smoking is unacceptable. Individual behaviour change is more likely to be successful when the surrounding environment supports good health. School-based education is an important vehicle for instilling personal skills to resist tobacco use, and develop critical awareness of smoking behaviour and the tobacco industry. Improving the quality of tobacco-related education in schools will maximise the impact of measures to reduce smoking uptake.

Legislation restricting tobacco advertising and access, along with national awareness campaigns, support the 'smokefree' message. Support for the tobacco control workforce and programme delivery is vital to achieve success in reducing smoking uptake among youth. A multi-level approach to address risk and protective factors is most likely to have success in building a 'smokefree' future for young people in New Zealand. The youth population in New Zealand is diverse – past comparisons of research findings by gender and ethnicity have been instrumental in developing targeted responses to population groups at greatest risk of smoking uptake. Furthering our knowledge of the behaviour, attitudes and social environment for different groups of young people will help to reinforce both inherent and expressed 'smokefree' attitudes and, ultimately, behaviour.

Surveys that capture detailed information about individuals can guide public health and policy direction, as well as measure the success of existing interventions. The HSC has made a commitment to contribute to information needs and monitoring for youth, with further reporting on trends in youth culture and other social environments planned using 2006 YIS data. This work also tracks key outcome indicators for health promotion programme planning and the Reducing Smoking Initiation framework.

Opportunities for collaboration with tobacco control stakeholders and researchers to further analyse the YIS data have been identified by the HSC and its advisors. The YIS will be repeated as part of the NZYTM in 2008 to collect information on successes and areas for improvement in reducing smoking initiation among youth in New Zealand.

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