

## Public support for more action on smoking

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### Abstract

An online survey of 414 smokers and 414 non-smokers found strong support among New Zealanders for more tobacco control interventions. In particular, support for interventions that will protect children—smokefree playgrounds and smokefree cars when children are in them—was very high among both smokers and non-smokers. Predictably, non-smokers were more likely than smokers to support other tobacco control interventions including extending outdoor smokefree areas and restricting the availability of tobacco. Nevertheless, there was widespread support for the tobacco ‘end game’ goal of reducing smoking prevalence from around 20% to 5% or less by 2025. These results are consistent with growing evidence of public support for stronger tobacco control interventions and confirm that preventive health measures have broad public appeal.

In November 2011, Wilson, Thomson, and Edwards concluded that, while some progress had been made towards achieving the goal of reducing smoking prevalence and tobacco availability in New Zealand, “gaps remain which need to be addressed if substantive progress towards the smokefree nation goal is to be achieved”<sup>1</sup>.

Since then, tobacco has been removed from open display in retail stores, above-inflation tobacco tax increases have been introduced, and the Ministry of Health has consulted over the implementation of plain packaging. While these evidence-based measures represent important progress, the government’s ‘end game’ goal, of smoking prevalence below 5% by 2025, will require more comprehensive interventions.

Recent studies suggest New Zealanders agree the government should do more to tackle the harm caused by smoking,<sup>2-4</sup> but we know less about which measures they believe the government should implement. To address this question, we surveyed 828 adult New Zealanders to estimate support for additional tobacco control interventions.

### Method

We conducted an online survey of 414 smokers and 414 non-smokers sampled from a commercial Internet panel in March 2012. An Internet panel is a pre-recruited group of individuals who have agreed to participate in on-line research studies in return for some sort of incentive or compensation (usually ‘points’ that can be exchanged for products or other rewards).

The panel we used is managed by ResearchNow and comprises more than 70,000 New Zealanders, recruited via email and through on-line and off-line marketing. Samples representative of the New Zealand population can be drawn from the ResearchNow panel. However, because we required equal numbers of smokers and non-smokers in our sample (to enhance comparisons between the two groups), we weighted our data so the age, gender, ethnicity, and smoking status of respondents matched that of the New Zealand population according to the 2006 census (the most recent census).

The survey initially used screening questions to identify respondents’ smoking status (thus enabling management of sampling quotas). The questionnaire then comprised two main sections; the first of these used an 11-point scale ranging from 0 = ‘No support at all’ to 10 = ‘Full support’ to estimate

support for tobacco control interventions concerned with smokefree outdoor areas, smoking in cars, and retailing of tobacco products.

The second section used 5-point agree-disagree scales to explore opinions on these measures as well as the tobacco control 'end game'. Finally, we collected details of respondents' demographic attributes. We analysed the effects of age, gender, ethnicity and smoking status using linear regression and logistic regression, with policy support and support for 'end game' outcomes as the dependent variables and the independent variables entered as a series of dummy variables.

Table 1 shows the smoking prevalence among different age, sex, and ethnic groups in the weighted study sample.

**Table 1. Sample smoking prevalence by gender, age and ethnicity**

Variables	Smokers % ( <i>n</i> =158)	Non-smokers % ( <i>n</i> =670)
<b>Gender</b>		
Male ( <i>n</i> =401)	20.0	80.0
Female ( <i>n</i> =427)	18.2	81.8
<b>Ethnicity</b>		
NZ European/Other ( <i>n</i> =639)	16.6	83.4
Māori & Pacific ( <i>n</i> =125)	36.0	64.0
Asian ( <i>n</i> =64)	10.9	89.1
<b>Age group</b>		
15 to 24 ( <i>n</i> =151)	21.9	78.1
25 to 44 ( <i>n</i> =300)	23.7	76.3
45 to 64 ( <i>n</i> =254)	17.7	82.3
65+ ( <i>n</i> =123)	7.3	92.7

## Results

Overall, there was strong support for most of the tobacco control intervention measures examined. In particular, most respondents strongly supported extending smokefree outdoor areas to include children's playgrounds, sports grounds and areas outside building entrances and doorways. The mean level of support was over 60% for smokefree patrolled beaches, footpaths in shopping areas, parks and reserves, and 56% for smokefree outdoor areas of pubs, bars and cafes.

Support was close to 90% for restricting smoking in cars when children were present, and more than 65% when any non-smoker was present. Support for restricting the number of tobacco retail outlets and not allowing tobacco sales within one kilometre of schools was also around 65%.

Although non-smokers supported removing tobacco products from duty free stores and providing smokers with quit advice when they bought tobacco products, smokers opposed these measures, and overall support for these initiatives was just below 50% (see Table 2).

**Table 2. Support for tobacco control intervention measures**

Variables	Mean level of support <sup>*#</sup>		
	All participants (N=828) %	Smokers (n=158) %	Non-smokers (n=670) %
<b>Smokefree Outdoor Areas</b>			
Children's playgrounds	82	75	83
Sports grounds	68	56	71
Outside building entrances and doorways	65	48	69
Patrolled beaches	62	44	66
Footpaths in shopping areas	61	40	66
Town or city parks and reserves	61	42	66
Outdoor areas of pubs, bars and cafes	56	30	62
<b>Smoking in Cars</b>			
When children are in the car	88	78	91
When non-smokers are in the car	67	49	71
In all cars regardless of who is in them	45	27	49
<b>Retailing of Tobacco Products</b>			
No store within one kilometre of a school allowed to sell tobacco products	67	40	73
Only a small number of stores licensed to sell tobacco	63	29	70
Duty free stores in New Zealand not allowed to sell tobacco products	47	18	53
Smokers given quitting advice each time they buy tobacco products	47	23	52

\* Mean response on an 11-point support scale converted to a percentage.

# Responses weighted by age, gender, smoking status and ethnicity

As Table 2 shows, support for the measures tested was, predictably, lower among smokers than non-smokers; nevertheless, mean support among smokers for smokefree cars when children were present was 78%, and 75% for smokefree children's playgrounds.

Respondents' opinions on tobacco intervention measures were generally consistent with their support for these measures (see Table 3); 90% agreed or strongly agreed that people should not be able to smoke in cars with children in them and that outside areas where children go should be smokefree.

Most respondents (77%) agreed that stores selling tobacco products should also sell cessation products, that these stores should be licensed (70%), and that their number should be reduced (63%). More agreed than disagreed with the proposition that local communities should have input into the number of outlets selling tobacco in their area, but neither smokers nor non-smokers supported a proposal that people who sell tobacco products should be trained to offer quit advice.

There was some ambivalence about the efficacy of some of the tobacco control interventions suggested. For example, 85% of those interviewed felt smokers would smoke in their homes or cars if unable to smoke in public areas, while just over half thought most smokers would ignore smokefree signs in outdoor areas and that smokefree outdoor areas would be impractical to enforce. However, nearly half of respondents thought smokefree outdoor areas would help smokers who were trying to quit and 41% thought smokefree signs would discourage smoking in outdoor public spaces.

**Table 3. Opinions on tobacco intervention measures**

Intervention	Opinions on tobacco control interventions*					
	All Participants		Smokers		Non-Smokers	
	Agree %	Disagree %	Agree %	Disagree %	Agree %	Disagree %
<b>Outdoor Smokefree Areas</b>						
Outside areas where children go should be smokefree	90	4	76	8	93	3
If smokers cannot smoke in public areas, they will smoke in their cars or in their homes	85	5	82	6	85	5
When people smoke outdoors they affect non-smokers' right to a smokefree environment	64	17	26	45	73	11
Most smokers will ignore smokefree signs in outdoor areas	53	23	46	30	54	21
Smokefree outdoor areas are impractical because they are too hard to enforce	53	23	67	15	50	28
Smokefree outdoor areas would help smokers who are trying to quit	49	26	39	38	51	23
Smokefree signs will discourage people from smoking in outdoor public areas	41	42	41	42	42	42
<b>Smoking in Cars</b>						
People should not be allowed to smoke in cars with children in them	91	4	78	9	93	3
People should be allowed to smoke in cars if they want to	46	30	70	13	41	34
<b>Retailing Tobacco Products</b>						
If stores sell tobacco products, they should also sell products that help smokers to quit	77	8	68	13	80	7
Stores should have to have a licence to sell tobacco products	70	19	40	43	77	13
Fewer places should be allowed to sell cigarettes and tobacco	63	17	23	51	73	9
Local communities should help to decide how many stores sell tobacco products in their area	47	31	20	56	53	25
Only people qualified to give quitting advice should be allowed to sell tobacco products	22	46	15	66	24	42

\*Responses weighted by age, gender, smoking status and ethnicity. 'Strongly agree' and 'agree' combined and 'strongly disagree' and 'disagree' combined.

'Don't knows' excluded but 'neither agree nor disagree' included.

## The tobacco control ‘end game’

Respondents strongly supported the 2025 smokefree goal of reducing smoking prevalence to 5% or less (nearly 80% agreement) and more than two-thirds agreed they wanted to live in a country where hardly anyone smokes (see Table 4).

Half agreed that they did not want to see tobacco sold in New Zealand in ten years’ time (twice as many as opposed this proposition), and 70% thought more of the money from tobacco taxes should be spent on helping smokers to quit.

A majority of non-smokers agreed with all of these propositions. By contrast, while more smokers agreed than disagreed with the goal of reducing smoking prevalence to 5% by 2025 and spending more money from tobacco taxes on helping smokers to quit, the opposite was true for wanting to live in a country where hardly anyone smokes and that cigarettes and tobacco should not be sold in New Zealand in 10 years’ time.

**Table 4. Opinions on the tobacco control ‘end game’**

‘End game’ outcome	Opinions on ‘end game’ outcomes*					
	All Participants		Smokers		Non-Smokers	
	Agree %	Disagree %	Agree %	Disagree %	Agree %	Disagree %
I support the goal of reducing smoking from around 20% of the population to 5% or less by 2025	79	6	50	24	86	2
I want to live in a country where hardly anyone smokes	71	11	29	39	81	4
More of the money from tobacco taxes should be spent on helping smokers to quit	71	12	62	14	73	11
Cigarettes and tobacco should not be sold in New Zealand in ten years' time	50	25	18	58	58	17

\*Responses weighted by age, gender, smoking status and ethnicity. ‘Strongly agree’ and ‘agree’ combined and ‘strongly disagree’ and ‘disagree’ combined. ‘Don’t knows’ excluded but ‘neither agree nor disagree’ included.

## Determinants of support for tobacco control and the ‘end game’

To examine the factors associated with policy support, we developed indices of support for smokefree outdoor areas, smokefree cars and smokefree retail interventions by summing the individual support scores for each item associated with these topics and then dividing by the number of items involved. This created an average ‘support score’ for each respondent for each of the three areas of tobacco control intervention. These variables were regressed on dummy variables representing age, gender, ethnicity, and smoking status using multivariate OLS regression.

For ‘end game’ support we created a dichotomous variable which had a value of 1 if the respondent agreed or strongly agreed with all the three of the end game outcomes: “I support the goal of reducing smoking from around 20% of the population to 5% or less by 2025”; “I want to live in a country where hardly anyone smokes”; and

“Cigarettes and tobacco should not be sold in New Zealand in ten years' time”, and zero otherwise.

Over the whole sample, 48% of respondents supported the ‘end game’ according to this measure. Logistic regression was used to determine the independent effects of age, gender, ethnicity, and smoking status on this variable.

The results of both analyses are shown in Table 5.

Smoking status had the greatest effect on support for the tobacco control interventions and tobacco ‘end game’ outcomes examined; smokers were significantly less likely than non-smokers to support all of these measures. Similarly, men were less likely than women to support the measures, though not significantly so for smokefree outdoor areas.

Māori and Pacific people were less likely than other ethnic groups to support smokefree outdoor areas, smokefree cars, smokefree retail interventions and the ‘end game’. (Not all of the relevant coefficients are statistically significant but they are all negative or have an odds ratio less than 1.0.) However, lower support among Māori and Pacific people overall disguises differences between Māori and Pacific smokers and non-smokers.

Though these results are not shown in Table 5, Māori and Pacific smokers were more likely than Asian or Europeans smokers to support tobacco control interventions in the four areas considered, whereas Māori and Pacific non-smokers were less likely. (This is consistent with analyses of data from the International Tobacco Control (ITC) study, which reported stronger support for tobacco control interventions among Māori and Pacific smokers.<sup>6,7</sup>) However, the numbers of Māori and Pacific people (and Asians) in the sample were relatively small; consequently, these conclusions about ethnicity effects need to be treated with caution.

Overall, age appears to have relatively little or no effect on support for the interventions examined, though those over 65 tended to be more supportive of tobacco control interventions than those under 25.

**Table 5. Regression analyses of support for tobacco control interventions and the ‘end game’**

Variables	Support for smokefree outdoor areas Adj R <sup>2</sup> = .09		Support for smokefree cars Adj R <sup>2</sup> = .11		Support for smokefree retail interventions Adj R <sup>2</sup> = .24		Support for end game outcomes	
	Mean values	B (Sig)	Mean values	B (Sig)	Mean Values	B (Sig)	Agree %	Odds Ratio (Sig)
<b>Total</b>	<b>6.5</b>		<b>6.7</b>		<b>5.6</b>		<b>48</b>	
<b>Smoker status</b>								
Non-smoker	6.9	0.00	7.0	0.00	6.2	0.00	53	1.00
Smoker	4.8	-2.02***	5.1	-1.71***	2.7	-3.25***	24	0.29***
<b>Gender</b>								
Female	6.7	0.00	7.0	0.00	5.9	0.00	52	1.00
Male	6.3	-0.27	6.4	-0.55**	5.2	-0.70***	44	0.73**
<b>Ethnicity</b>								
European/Other	6.8	0.00	6.7	0.00	5.6	0.00	49	1.00
Māori/Pacific	5.5	-0.93	6.0	-0.17	4.3	-0.52*	35	0.65**
Asian	5.9	-1.02**	7.8	1.20**	7.8	2.07***	55	1.10
<b>Age Group</b>								
Under 25	6.3	0.00	6.4	0.00	5.4	0.00	49	1.00
25 to 44	6.5	0.19	6.5	0.11	5.5	0.20	50	1.05
45 to 64	6.4	-0.16	6.6	0.19	5.3	-0.14	43	0.73
65 and over	7.0	0.14	7.6	1.06***	6.4	0.68*	52	0.83

\* Coefficient significant at p<.10

\*\*Coefficient significant at p<.05

\*\*\*Coefficient significant at p<.001

## Discussion and Conclusions

Achieving a smokefree Aotearoa/New Zealand by 2025 will need more than simply a continuation of current tobacco control policies. Additional interventions will be required and, while a public mandate is not a prerequisite for policy implementation, interventions with high levels of public support are more likely to be viewed favourably by policy makers and the government of the day.

Among those surveyed, support for tobacco control interventions that will protect children is very high and similar for both smokers and non-smokers. Support for other tobacco control interventions is primarily determined by smoking status – predictably, non-smokers are significantly more likely to support tobacco control interventions than smokers. However, most respondents, including 50% of smokers, supported the goal of reducing smoking from around 20% of the population to 5% or less by 2025.

Furthermore, most want to live in a country where hardly anyone smokes and half agree that cigarettes and tobacco should not be sold in New Zealand in ten years' time.

These findings extend earlier New Zealand studies, conducted before the 2025 goal was publicised, and suggest a growing momentum in support for a smokefree society. Support for smokefree cars when children are present has increased since earlier studies<sup>5</sup>, as has support for other smokefree areas, particularly children's playgrounds<sup>6</sup>, reducing the number of retail outlets selling tobacco<sup>7</sup>, and eliminating sales of tobacco in 10 years' time.<sup>8</sup>

Our findings on support for smokefree cars when children are present are similar to those reported in international studies.<sup>9</sup> However, support for smokefree outdoor areas was lower in our study than in a survey of New South Wales adults.<sup>10</sup>

Similarly, a recent paper reporting on two studies of Victorian adults and smokers respectively revealed stronger support for 'endgame' policies in Australia than estimated in our survey.<sup>11</sup> These differences may reflect Australia's more progressive policy environment and the Gillard government's determination to reduce smoking prevalence.

Nevertheless, given the Australian evidence and our own experience of increased support for smokefree bars and restaurants after this policy was introduced<sup>12</sup>, it seems logical that, as smoking prevalence declines, support for interventions to lower it further will inevitably increase.

However, there is a degree of ambivalence about the efficacy of some of the proposed interventions we tested, including the practicality and effectiveness of smokefree signs in discouraging people from smoking in outdoor public areas. Furthermore, the lack of support among smokers for some measures suggests there is potential for such measures to alienate smokers, a possibility alluded to in previous research.<sup>13</sup> This possibility highlights the need to explore why smokers oppose these interventions and whether some policies could potentially harden attitudes among some smokers. More fundamentally, it suggests that comprehensive cessation support is pivotal to achieving the 2025 goal.

Most smokers regret having started smoking<sup>14</sup> and have been prompted by excise tax increases and other interventions to think seriously about quitting. Smokers strongly



support the increased use of tobacco tax on cessation support, thus enhancing this support should help to mollify smokers and increase the success rate of quit attempts.

Overall, our findings add to the growing evidence base documenting public support for more progressive tobacco control measures, particularly those concerned with smokefree outdoor places, smokefree cars and increased retail restrictions. The results provide clear direction to policy makers and again illustrate that preventive health measures have broad public appeal.

**Competing interests:** Nil.

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