

Support for and potential impacts of key Smokefree 2025 strategies on Māori who smoke

Andrew Waa, Ellie Johnson, James Stanley, Bridget Robson, Anania Kerehoma Cook, Erana Peita, Anne CK Quah, Geoffrey T Fong, Richard Edwards

ABSTRACT

AIM: The recently passed *Smokefree Environments and Regulated Products (Smoked Tobacco) Amendment Act* has the potential to profoundly reduce smoking prevalence and related health inequities experienced among Māori. This study examined support for, and potential impacts of, key measures included within the legislation.

METHOD: Data came from Wave 1 (2017–2019) of the Te Ara Auahi Kore longitudinal study, which was conducted in partnership with five primary health organisations serving Māori communities. Participants were 701 Māori who smoked. Analysis included both descriptive analysis and logistic regression.

RESULTS: More Māori participants supported than did not support the Smokefree 2025 (SF2025) goal of reducing smoking prevalence to below 5%, and the key associated measures. Support was greatest for mandating very low nicotine cigarettes (VLNCs). Participants also believed VLNCs would prompt high rates of quitting. Participants who had made more quit attempts or reported less control over their life were more likely to support VLNCs.

CONCLUSION: There was support for the SF2025 goal and for key measures that could achieve it. In particular, VLNCs may have significant potential to reduce smoking prevalence among Māori. As part of developing and implementing these measures it will be important to engage with Māori who smoke and their communities.

Despite ongoing declines in smoking prevalence in Aotearoa (New Zealand), particularly among Māori, marked disparities persist between Māori and non-Māori. In 2020/2021, 26% of Māori adults smoked at least monthly, almost three times greater than people of European descent (9%).¹ Smoking is a significant modifiable risk factor that continues to contribute to health inequities and lower life expectancy for Māori.²

Recognising the harm caused by tobacco, Māori leaders first advocated for a Tupeka Kore (Tobacco Free) goal for Aotearoa in the mid-2000s. This goal sought to end tobacco use in Aotearoa (a tobacco endgame) and by so doing also eliminate smoking-related inequities.³ Following a Māori Affairs Select Committee inquiry in 2011, the Government committed to achieving “an essentially Smokefree Aotearoa by 2025”^{4,5} (the SF2025 goal).

However, over the decade that followed, Aotearoa’s tobacco control programme continued to be delivered in a largely business-as-usual (BAU) approach. The most substantive changes in tobacco control activity during this period

were an increased focus on smoking cessation services, annual increases in tobacco tax, prohibiting retail displays of tobacco products and introducing standardised tobacco packaging.^{6,7} This period also saw the proliferation of electronic cigarettes in Aotearoa that may have encouraged some people who smoked to switch to less harmful alternatives.

Individual-focussed BAU tobacco control interventions—such as smoking cessation services—often advantage those individuals with better support in their local networks (e.g., money, time, social support) and personal agency to quit.⁸ This support and agency can be inequitably distributed across population groups. This means that BAU interventions may benefit some sectors of society more than others, thus contributing to the persistence or even widening of disparities in smoking. Tobacco tax has been a key element of Aotearoa’s BAU approach. Studies suggest this can be an effective measure for reducing smoking prevalence.^{9,10} However, there has been ongoing debate about the potentially regressive nature of tobacco tax for Māori.^{11,12}

Modelling of Aotearoa’s BAU tobacco control

programme (as it stood in 2014) showed little hope of achieving the SF2025 goal (<5% smoking prevalence) by 2025, particularly for Māori.¹³ This suggested a need to move beyond traditional BAU approaches and consider measures that had the potential to bring about precipitous reductions in smoking prevalence, do so equitably across the whole population and within a relatively short timeframe.

In December 2021, the Government released a *Smokefree Action Plan*¹⁴ and in December 2022 passed the *Smokefree Environments and Regulated Products (Smoked Tobacco) Amendment Bill*. Key measures in the legislation are: mandating very low nicotine cigarettes (VLNCs); markedly reducing the number of places where tobacco can be bought; and creating a “Smokefree Generation” by annually raising by 1 year the age at which people could be legally sold tobacco. While no countries have implemented these measures to date, recent modelling of their potential impacts for Māori predicted they could greatly contribute to achieving the SF2025 goal, in particular mandated VLNCs.¹⁵ An international review reported that while the evidence base for VLNCs was still developing, they have the potential to reduce tobacco use among populations described by the authors as “vulnerable” with little to no negative indirect consequences.¹⁶ The legislation also notes Crown obligations under Te Tiriti o Waitangi and actions it will take to meet these obligations (e.g., engaging with Māori in developing tobacco retail regulations).

An important feature of the key measures included in the *Act* is that they do not rely on individual resources to achieve the desired changes. Instead, they focus on reducing supply and changing the nature of smoked tobacco products so that they are minimally addictive and less appealing. All people who smoke would be similarly exposed to these strategies (e.g., only being able to purchase cigarettes containing very low nicotine) and their impact on smoking would be much less dependent on individual agency. As such these types of population-level interventions have great potential for eliminating smoking disparities.⁸ However, some have raised concerns that these measures may be unfair and lead to undesirable indirect impacts.¹⁷

Māori who smoke were identified as a priority group in the *Action Plan* and subsequent legislation. It is therefore important to understand their views and experiences so they are taken into account in the implementation of the legislation. The aims of

this study were to assess the perspectives of Māori who smoke on: 1) support for the SF2025 goal and key strategies identified in the Government's *Smokefree Action Plan*; 2) the perceived impact, if any, these strategies could have on their smoking behaviour; and 3) associated factors that may influence support for the SF2025 goal and VLNCs.

Methods

Sample

Data were sourced from the Wave 1 of the Te Ara Auahi Kore (TAKe) longitudinal study, which was conducted from late 2017 to early 2019. The Wave 1 sampling frame drew from clients enrolled with six Māori health organisations who were research partners for this project. These organisations delivered primary healthcare (and social) services to Māori communities in five North Island regions: Te Tai Tokerau (Northland), Tāmaki Makaurau (Auckland), Te Moana a Toi (Bay of Plenty), Tairāwhiti (Gisborne) and Te Whanganui ā Tara (Wellington). Eligibility criteria for the study were: participants identified as Māori; smoked tobacco at least daily; and were aged 18 and older.

Out of 5,995 people invited to participate in the study, 701 completed interviews were included in this study after data cleaning, yielding an overall response rate of 12%. This is likely an underestimate since some potential participants who were invited to participate but were not interviewed may have been ineligible (e.g., they were not smokers). The characteristics of the final sample are presented in Appendix Table 1.

Research tools

Interviews were conducted over the phone and responses were uploaded to a secure online storage facility. The survey consisted of about 200 items and took about 1 hour to complete. Items were drawn from the International Tobacco Control (ITC) Policy Evaluation Survey (New Zealand arm),¹⁸ the New Zealand Health Survey,¹⁹ the Australian “Talking about the smokes” study²⁰ and Statistics New Zealand's Te Kupenga survey.²¹ Additional items were developed specifically to meet TAKE project aims. Although the survey pre-dated the release of the *2025 Action Plan* and the associated *Smokefree Bill* we had pre-emptively selected potential strategies that would likely be included in a tobacco endgame based on earlier work.²²

Measures relevant to the *Action Plan* and *Act* in the survey included support/opposition to the overall SF2025 goal and for key strategies; smoke-

free generation; mandated VLNCs; and markedly reducing retail access to tobacco (Appendix Table 2). “Support” was defined as either a “strongly support” or “support” response and “opposition” as either “oppose” or “strongly oppose”.

We asked participants what they would do if mandated VLNCs or marked reductions in tobacco retailer strategies were introduced. For VLNCs, response options were continuing to smoke VLNCs, using both VLNCs and e-cigarettes, switching completely to e-cigarettes and quitting completely. For reduced tobacco retail, the response options were giving up smoking, no change in smoking, and smoke less. Switching to e-cigarettes was not offered as an option for this question as it focussed on settings rather than products and adding an e-cigarette option would have made the question overly complex. We were particularly interested in variables associated with support for or anticipated impacts of VLNCs, as modelling studies have suggested this measure is likely to have the most substantial impact on reducing smoking prevalence.¹⁵ We did not assess anticipated changes in smoking behaviours if a smokefree generation policy was introduced as we expected this would have limited impact on behaviours of existing smokers aged 18 and older.

Variables used to explore associations with support for the SF2025 goal or VLNCs were: age (18–24, 25+), sex (male, female), quit attempts in the past year (0, 1–2, 3+), confidence in being able to quit in the next 6 months (not at all sure, slight/moderate, very/extremely), perceived control over life (0 = no control, 10 = complete control), and trust in government (0 = never trusted, 10 = always trusted) (Appendix Table 2). Perceived smoking-related discrimination may have been a barrier to supporting SF2025 goal measures.²³ We measured this through agreement on a five-point scale (from strongly agree to strongly disagree) to the statements: “*smokers are second class citizens*”; “*people look down on you when they know you are a smoker*”; and “*you feel ashamed when people see you smoking*” as having been exposed to smoking-related discrimination. We then created a dichotomous derived variable for reported experiences of smoking-related discrimination. For this we counted people who indicated they agreed or strongly agreed with any of the smoking-related discrimination measures (second class citizens, people look down on you and feeling ashamed) as having been exposed to anti-smoking discrimination. All others (neither/disagree/strongly disagree) were counted as not being exposed. To

maximise sample size, only participants who indicated “refused” or “don’t know” for two or more of the smoking-related discrimination statements were excluded from the analysis.

Procedure

The study was approved by the New Zealand Multi-Regional Health and Disability Ethics Committee (reference: 17/NTB/136/AM04). In addition, Māori health providers who were partner organisations for this study engaged in internal consultation for approval to take part in the study.

Interviewers followed a strict recruitment protocol that included guidelines for sample list selection from research partner databases, how participants should be contacted from sample lists, number of contact attempts before being counted as a “non-contact”, ensuring participants were able to give informed consent to participate and sending out gift vouchers following interviews.

Data were analysed using R 4.0²⁴ (R Institute, Vienna, Austria). Initial weightings for people who smoked daily by age and sex were applied according to the Māori population characteristics derived from 2013 New Zealand Census data²⁵ for the district health board regions corresponding to each participating location. The samples were then combined to provide a cross-location data set. The location weightings were retained for the combined dataset and no further weighting adjustments were made.

Weighted descriptive data were calculated with 95% confidence intervals using the survey package in R²⁶ to account for post-stratification weighting and stratification by participating location. We also conducted logistic regression analysis to identify factors that may be associated with overall support for the SF2025 goal and VLNCs. Each factor in the model was adjusted for age, sex and the other variables included in the model. Participants with missing data for any adjustment variables were excluded from the regression analyses (SF2025 analysis n=543; VLNC analysis n=526) to ensure consistency between adjusted and unadjusted models. For interval variables with more than three response categories (age, life control, trust in government), we analysed the distribution of responses and used the median value to create a dichotomous variable.

Results

Unless otherwise stated, levels of support between males and females were similar for all

variables included in our results. Most (80%) had heard of the SF2025 goal. After being informed about the SF2025 goal (reducing the number of people smoking tobacco to less than 5% by 2025) just over two fifths (42%) supported this goal (Figure 1). However, a third (33%) did not support the goal and a fifth (20%) were ambivalent (Figure 1).

Of the three key strategies set out in the *Smoke-free Plan* (creating a smokefree generation, only allowing VLNCs to be sold, and reducing access to tobacco retail outlets by 95%) support was greatest for VLNCs (59%) and lowest for markedly reducing retail access to tobacco (42%). Across the three strategies, support was more common than opposition: major retail reduction 42% support compared to 34% oppose; smokefree generation 49% support compared to 26% oppose; and for VLNC 59% support compared to 17% oppose.

Participants were asked what they would do if VLNCs were the only available smoked tobacco product (Table 1). Findings indicated two fifths of the sample would quit smoking altogether and a further 14% would switch to using e-cigarettes only. Together this equates to over half (54%) of

the sample reporting they would stop smoking cigarettes compared to under a third (30%) who said they would continue to smoke (16%) or smoke as well as use e-cigarettes (14%). Under a fifth (16%) reported they were unsure what they would do if VLNCs were introduced.

One in five reported they would give up smoking if tobacco retail access was substantially reduced (Table 1), while over a third said they would smoke less (36%) or make no changes to their smoking behaviour (37%).

We explored whether demographic factors (age, sex), smoking experiences (quit attempts, experience of smoking-related discrimination, quitting confidence), or agency and trust (control over life, trust in government) were associated with support of the SF2025 goal and for the introduction of mandated VLNCs (Tables 2 and 3). Making at least one quit attempt in the past year was associated with higher odds of support for the SF2025 goal (1–2 quit attempts aOR 1.60; CI, 3+ quit attempts aOR 3.33; $p < 0.001$). Making 1–2 quit attempts in the past year (aOR 1.82), having greater trust in government (aOR 1.83)

Figure 1: Support for Smokefree 2025 goal and key strategies.

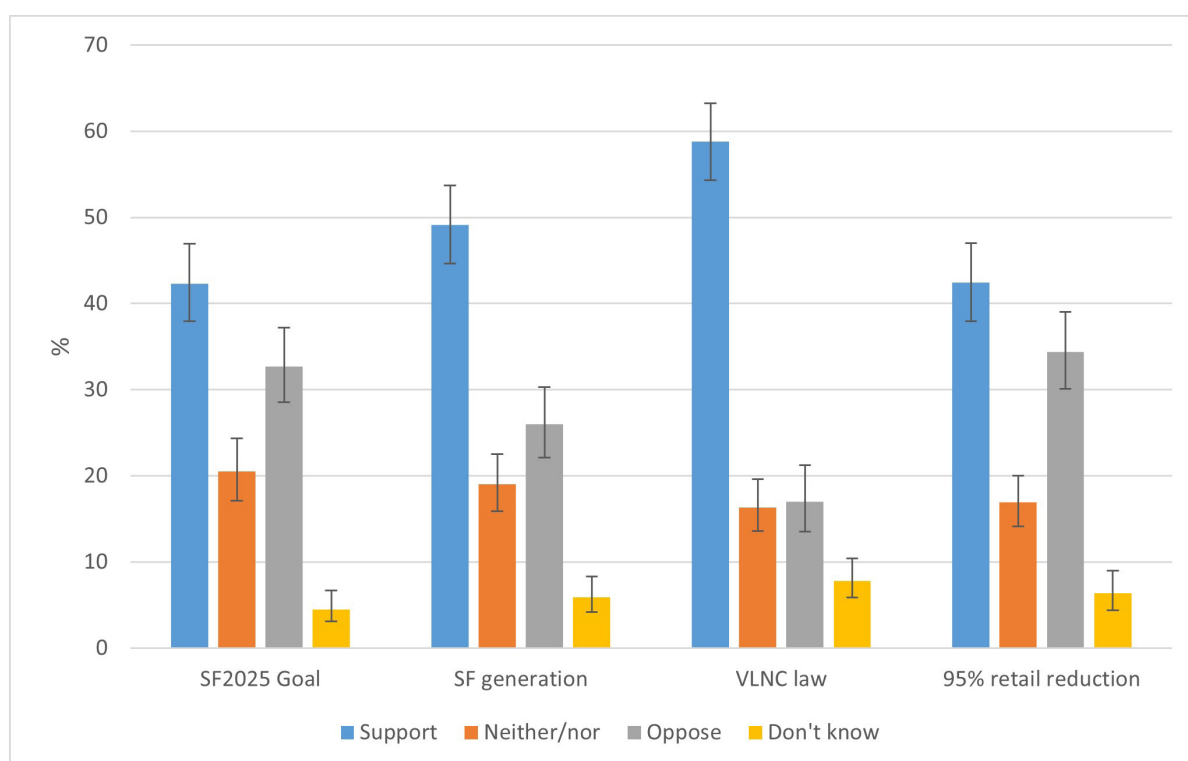


Table 1: Responses to endgame strategies.

Strategy	Response	N	%	CI (95%)
Only VLNCs available	Only smoke VLNCs	108	16.1	(13.0–19.8)
	Smoke both VLNCs and e-cigarettes/vapes	96	14.3	(11.4–17.7)
	Swap to only e-cigarettes/vapes	76	13.6	(10.5–17.5)
	Quit smoking or vaping	262	40.2	(35.7–44.8)
	Don't know	107	15.8	(12.8–19.3)
Tobacco retail outlets reduced by 95%	Give up smoking	131	18.5	(15.4–22.2)
	No change	222	36.6	(32.1–41.4)
	Smoke less	230	36.4	(32.1–40.9)
	Don't know	63	8.4	(6.6–10.7)

Table 2: Factors associated with support support for the Smokefree 2025 goal.

			Unadjusted			Adjusted*		
Variable	Level	N	OR	P-value	CI (95%)	aOR	P-value	CI (95%)
Age	18–24	52	1.00	0.863	(Reference)	1.00	0.681	(Reference)
	25+	491	1.07		(0.52–2.21)	1.16		(0.58–2.37)
Sex	Male	162	1.00	0.630	(Reference)	1.00	0.504	(Reference)
	Female	381	1.11		(0.72–1.73)	1.16		(0.75–1.81)
Quit attempts	None	277	1.00	<0.001	(Reference)	1.00	<0.001	(Reference)
	1–2	180	1.67**		(1.05–2.65)	1.60**		(1.01–2.55)
	3+	86	3.36**		(1.86–6.22)	3.33**		(1.84–6.17)
Smoking discrimination	None	123	1.00	0.615	(Reference)	1.00	0.841	(Reference)
	At least one agree	420	1.14		(0.69–1.90)	0.95		(0.58–1.57)
Confidence can quit	Not at all sure	204	1.00	0.193	(Reference)	1.00	0.329	(Reference)
	Slight/moderate	247	1.50		(0.96–2.37)	1.40		(0.88–2.24)
	Very/extremely	92	1.41		(0.76–2.63)	1.35		(0.73–2.50)
Life control	Higher control (8+)	330	1.00	0.523	(Reference)	1.00	0.461	(Reference)
	Lower control (0–7)	213	1.15		(0.75–1.75)	1.17		(0.77–1.80)
Trust in government	Lower trust (0–4)	277	1.00	0.208	(Reference)	1.00	0.218	(Reference)
	Higher trust (5+)	266	1.30		(0.86–1.96)	1.29		(0.86–1.95)

Table 3: Factors associated with support support for very low nicotine content tobacco.

			Unadjusted			Adjusted*		
Variable	Level	N	OR	P-value	CI (95%)	aOR	P-value	CI (95%)
Age	18–24	50	1.00	0.702	(Reference)	1.00	0.434	(Reference)
	25+	476	1.16		(0.53–2.43)	1.34		(0.63–2.80)
Sex	Male	158	1.00	0.149	(Reference)	1.00	0.151	(Reference)
	Female	368	1.40		(0.88–2.22)	1.41		(0.88–2.25)
Quit attempts	None	266	1.00	0.073	(Reference)	1.00	0.042	(Reference)
	1–2	176	1.66**		(1.01–2.77)	1.82**		(1.10–3.05)
	3+	84	1.67		(0.92–3.12)	1.64		(0.89–3.11)
Smoking discrimination	None	116	1.00	0.078	(Reference)	1.00	0.242	(Reference)
	At least one agree	410	1.60		(0.94–2.71)	1.36		(0.81–2.29)
Confidence can quit	Not at all sure	192	1.00	0.325	(Reference)	1.00	0.439	(Reference)
	Slight/moderate	242	1.18		(0.73–1.90)	1.06		(0.65–1.72)
	Very/extremely	92	0.73		(0.38–1.41)	0.71		(0.37–1.36)
Life control	Higher control (8+)	319	1.00	0.015	(Reference)	1.00	0.009	(Reference)
	Lower control (0–7)	207	1.77**		(1.12–2.84)	1.86**		(1.17–2.99)
Trust in government	Lower trust (0–4)	268	1.00	0.013	(Reference)	1.00	0.006	(Reference)
	Higher trust (5+)	258	1.76**		(1.13–2.75)	1.83**		(1.19–2.84)

and having a lower sense of control over your life (aOR 1.86) were all associated with higher odds of supporting the introduction of VLNCs.

Discussion

There was high prompted awareness of the SF2025 goal, and more study participants supported the goal than opposed it. We found support for the goal was associated with having made quit attempts in the past year. This suggests an association between motivation to quit and support for tobacco endgames. Employing strategies such as raising awareness of the importance of ending tobacco or increasing motivation to quit among those who

are ambivalent or opposed to the SF2025 goal could increase overall support for the goal and the related measures.

Over half of the participants reported that if VLNCs were mandated they would either quit using nicotine-containing products altogether or switch to vaping products. Fewer study participants reported they would give up smoking if retail access was reduced by 95%. However, in absolute terms our findings suggest the potential impact of these measures combined could still represent a large number of smokers quitting or switching to less harmful alternatives. In particular, mandated VLNCs may have a profound impact on smoking prevalence among Māori who

smoke. Caution should be taken when interpreting these results as at the time of the study the introduction of reduced tobacco retail access and mandated VLNC policies were hypothetical and had not been widely discussed. Participants may not have been fully aware of the implications of these policies for them and hence may have overestimated or underestimated their impact on behaviour. However, we note that our findings are consistent with other studies on the potential impacts of these measures on smoking behaviour within the New Zealand population.^{15,27}

Understanding the factors associated with support or opposition to the SF2025 goal and associated strategies will provide critical insights into how support for the goal can be increased. It will also help ensure the needs and expectations of those who do support the goal are addressed. This reduces the potential for marginalising people who smoke and are unable or not motivated to quit. Of the variables included in our study, only an increased number of quit attempts was associated with greater odds of supporting both the SF2025 goal and the introduction of VLNCs. Those who thought they had less control over how their life turned out or who had higher trust in government were associated with greater odds of supporting VLNCs only.

The association between more quit attempts or lower control over life and support for VLNCs may reflect a greater willingness of these participants to have government intervene on their behalf to help them to quit smoking. This may be particularly so for those who do not feel they have sufficient resources to quit on their own. Lower trust in government may reflect personal experiences or political ideologies about the role of government in health policy. Communicating a balanced representation of evidence and ensuring that endgame policies are directly linked to endgame goals that are in turn seen as relevant and meaningful may help overcome these barriers.²⁸ In the case of Māori, trust in government may reflect a general distrust as a result of their ongoing experiences of colonisation and consequent marginalisation from political, health and social systems in Aotearoa.²⁹ The SF2025 *Plan* and *Act* highlights the importance of Māori governance in its development and implementation. To this end, a Māori taskforce has been established to oversee the development and implementation of the *Plan* and *Act*. Ongoing transparent communication from this taskforce and associated groups that reflect Māori

community needs and values is likely to help build trust in the Government's action towards achieving the SF2025 goal.

Cross-sectional studies are useful for understanding the extent of support for an issue but are limited in being able to determine cause and effect. For many of the potential determinants used in our regression analysis, there is a plausible rationale for their preceding outcomes of interest (e.g., perceived control over life preceding support for VLNCs). However, reverse causality may be present for some factors that we have suggested as potential determinants. For example, it is possible that support for the SF2025 goal may have influenced people to make more quit attempts. Longitudinal studies would help to better understand the direction of causality of any associations.

The sample for this study was one of the largest to date exploring the experiences and perceptions of tobacco control policies among Māori who smoke. Nevertheless, our ability to use more complex weighting procedures, conduct more detailed analysis and the precision of some of our estimates could be improved with a larger sample. The modest response rate may have also introduced selection bias to the study. Edwards et al.³⁰ measured support for the Smokefree goal, 95% retail reduction and VLNCs among a sample of people who smoke or who had recently quit (recruited based on earlier participation in the New Zealand Health Survey). Estimates for these variables in our study were lower, for example 59% Maori who smoked supported VLNCs in our study compared to 70% in Edwards et al. Part of this difference may be attributed to the different recruitment methods in the two studies. Participants who were recent quitters in Edwards et al.'s study may have been more favourably predisposed towards tobacco endgame measures compared to the present study.

Conclusions

Understanding barriers and enablers for supporting the SF2025 goal among Māori who smoke will help develop strategies that ensure they are engaged with the goal and prevent them from becoming marginalised. Our study found higher support than opposition for the SF2025 goal and key measures that could achieve it. Our study also supported findings from previous research that mandated VLNCs have significant potential to reduce smoking prevalence among Māori.

COMPETING INTERESTS

Geoffrey T Fong has served as an expert witness or a consultant for governments defending their country's policies or regulations in litigation. All other authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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AUTHOR INFORMATION

Andrew Waa: Te Rōpū Rangahau Hauora a Eru Pōmare, Department of Public Health University of Otago, New Zealand.

Ellie Johnson: Department of Public Health, University of Otago, New Zealand.

James Stanley: Department of Public, Health University of Otago, Wellington, New Zealand.

Bridget Robson: Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago, Wellington, New Zealand.

Anania Kerehoma Cook: Researcher Independent, New Zealand.

Erana Peita: Whānau Engagement & Innovation Partner, Mahitahi Hauora, New Zealand.

Anne CK Quah: Department of Psychology, University of Waterloo, Canada.

Geoffrey T Fong: Department of Psychology, University of Waterloo, Canada.

Richard Edwards: Public Health, University of Otago Wellington, New Zealand.

CORRESPONDING AUTHOR

Andrew Waa: Te Rōpū Rangahau Hauora a Eru Pōmare, Department of Public Health University of Otago, New Zealand. E: andrew.waa@otago.ac.nz

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Appendices

Appendix Table 1: Sample characteristics.

Variable	Category	N (%)
Age (n=701)	18–24	79 (11%)
	25+	622 (89%)
Sex (n=701)	Male	213 (30%)
	Female	488 (70%)
Quit attempts (n=660)	None	341 (52%)
	1–2	221 (33%)
	3+	98 (15%)
Anti-smoker discrimination (n=657)	None	155 (24%)
	At least one agree	502 (76%)
Confidence can quit (n=677)	Not at all sure	255 (38%)
	Slight/moderate	302 (45%)
	Very/extremely	120 (18%)
Life control (n=633)	8+	374 (59%)
	0–7	259 (41%)
Trust in government (n=634)	0–4	339 (53%)
	5+	295 (47%)

Appendix Table 2: *Smokefree Action Plan*-related items included in the TAKE survey.

Question	Response options
<p>Awareness of the Smokefree 2025 Goal</p> <p>Have you heard that the Government of New Zealand has a goal of becoming a smokefree country by 2025?</p>	<p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Prompted support for Smokefree 2025 Goal</p> <p>The aim of the 2025 goal has been described as reducing the number of people smoking tobacco to fewer than 5% by December 2025. This goal would only apply to smoked tobacco but not alternatives such as e-cigarettes. Do you support or oppose this Smokefree 2025 policy goal?</p>	<p><input type="radio"/> Strongly support</p> <p><input type="radio"/> Support</p> <p><input type="radio"/> Neither support or oppose</p> <p><input type="radio"/> Oppose</p> <p><input type="radio"/> Strongly oppose</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Support for smokefree generation policy</p> <p>Would you support or oppose a law that effectively means only people over 18 who smoke now would be allowed to continue purchasing cigarettes or tobacco?</p>	<p><input type="radio"/> Strongly support</p> <p><input type="radio"/> Support</p> <p><input type="radio"/> Neither support or oppose</p> <p><input type="radio"/> Oppose</p> <p><input type="radio"/> Strongly oppose</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Support for very low nicotine cigarettes</p> <p>With the availability of alternative nicotine products such as e-cigarettes and vapes, would you support or oppose a law that reduces the amount of nicotine in cigarettes and tobacco, to make them less addictive?</p>	<p><input type="radio"/> Strongly support</p> <p><input type="radio"/> Support</p> <p><input type="radio"/> Neither support or oppose</p> <p><input type="radio"/> Oppose</p> <p><input type="radio"/> Strongly oppose</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Support for marked reductions in tobacco retail outlets</p> <p>Would you support or oppose a law that reduced the number of places allowed to sell tobacco products by 95%?</p>	<p><input type="radio"/> Strongly support</p> <p><input type="radio"/> Support</p> <p><input type="radio"/> Neither support or oppose</p> <p><input type="radio"/> Oppose</p> <p><input type="radio"/> Strongly oppose</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>

Appendix Table 2 (continued): *Smokefree Action Plan*-related items included in the TAKE survey.

<p>Predicted impact of very low nicotine cigarettes on smoking behaviour</p> <p>If the only options you could buy were virtually nicotine-free tobacco and e-cigarettes or vaping devices that could contain nicotine, would you:</p>	<ul style="list-style-type: none"> <input type="radio"/> Only smoke virtually nicotine-free tobacco <input type="radio"/> Smoke both virtually nicotine-free tobacco and use some e-cigarettes or vaping devices <input type="radio"/> Swap to only using one using e-cigarettes or vaping devices <input type="radio"/> Not use either option and quit smoking altogether <input type="radio"/> Refused <input type="radio"/> Don't know
<p>Predicted impact of marked reductions in tobacco retail outlets on smoking behaviour</p> <p>Currently there are almost 6,000 places you can buy tobacco in New Zealand. If the number of places that could sell tobacco was reduced by 95%, that is, only one out of every 20 shops now selling tobacco in your community could continue selling tobacco, would you:</p>	<ul style="list-style-type: none"> <input type="radio"/> Give up smoking <input type="radio"/> Not change how much you smoke <input type="radio"/> Smoke less <input type="radio"/> Refused <input type="radio"/> Don't know

Appendix Table 3: Items included in multivariable analysis.

Question	Response options
<p>Questions used to assess experiences of smoking related discrimination:</p> <p>Smokefree policies have turned smokers into second class citizens</p> <p>Some people look down on you when they know you are a smoker</p> <p>Sometimes you feel ashamed when people see you smoking</p>	<p><input type="radio"/> Strongly disagree</p> <p><input type="radio"/> Disagree</p> <p><input type="radio"/> Neither disagree nor agree</p> <p><input type="radio"/> Agree</p> <p><input type="radio"/> Strongly agree</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Confidence in being able to quit</p> <p>If you decided to give up smoking completely in the next 6 months, how sure are you that you would succeed?</p>	<p><input type="radio"/> Not at all sure</p> <p><input type="radio"/> Slightly sure</p> <p><input type="radio"/> Moderately sure</p> <p><input type="radio"/> Very sure</p> <p><input type="radio"/> Extremely sure</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Perceived control over life</p> <p>Some people feel that they have complete control over their lives, while other people feel that what they do has no real effect on what happens to them.</p> <p>Where zero is “no control at all” and 10 is “complete control”, how much control do you feel you have over the way your life turns out?</p>	<p><input type="radio"/> [Enter number 0–10]</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>
<p>Trust in government</p> <p>Where 0 is the public institution can never be trusted, and 10 is the public institution can always be trusted...</p> <p>How much do you trust the system of government to treat people fairly?</p>	<p><input type="radio"/> [Enter number 0–10]</p> <p><input type="radio"/> Refused</p> <p><input type="radio"/> Don't know</p>