Submission form

Your details

This submission was completed by: <i>(name)</i>			ASPIRE 2025 Centre, University of Otago	
Ema	ii:		Janet.hoek@otago.ac.nz (On behalf of ASPIRE 2025)	
Phone number:			(03) 479 7692 or 021 150 6934	
Org	anisation (if applicable):		Click or tap here to enter text.	
Organisation address: (street/box number)		nber)	Click or tap here to enter text.	
	(town)	city)	Click or tap here to enter text.	
Role	e (if applicable):		Click or tap here to enter text.	
Additional organisation information I am, or I represent an organisation that is, based in: New Zealand				
I am, or I represent, a: (tick all that apply)				
	Personal submission		Healthcare provider eg Primary Care provider, stop smoking provider	
	Community or advocacy organisation		Professional organisation	
	lwi/Hāpu affiliated, and/or Māori organisation		Tobacco manufacturer, importer or distributor	
	Pacific community or organisation		Retailer – small, for example a dairy or convenience store	
	Government organisation		Retailer – medium or large, for example supermarket chain or petrol station	
	Research or academic organisation – eg university, research institute Other (please specify):		Vaping or smokeless tobacco product retail, distribution or manufacture	
	Click or tap here to enter text.			

Additional statistical information

	e questions are not mandatory. We are asking for information, including age and ethnicity mation solely for the purposes of helping us to analyse submissions.
	Under 18
	18 - 34
	35 - 44
	45 - 54
	55 - 64
	65 +
\boxtimes	Not applicable / prefer not to say
Ethni	city/Ethnicities I identify with: New Zealand European
	Māori
	Pacific Peoples
	Asian
	Other European
	Other Ethnicity (please specify):
	Click or tap here to enter text.
\boxtimes	Not applicable / prefer not to say
you g indiv	cy ntend to publish the submissions from this consultation, but we will only publish your submission in give permission. We will remove personal details such as contact details and the names of iduals. I do not want your submission published on the Ministry's website, please tick this box:
Your	Do not publish this submission. submission will be subject to requests made under the Official Information Act (even if it hasn't published). If you want your personal details removed from your submission, please tick this box:
\boxtimes	Remove my personal details from responses to Official Information Act requests.
	mercial interests ou have any commercial interests?
	I have a commercial interest in tobacco products
	I have a commercial interest in vaping products
	I have commercial interests in tobacco and vaping products
\boxtimes	I do not have any commercial interests in tobacco or vaping products

Commercially sensitive information

We will redact commercially sensitive information before publishing submissions or releasing them under the Official Information Act. If your submission contains commercially sensitive information, please tick this box:

 \square This submission contains commercially sensitive information.

If so, please let us know where.

Click or tap here to enter text.

Protection from commercial and other vested interests of the tobacco industry

New Zealand has an obligation under Article 5.3 of the World Health Organisation Framework Convention on Tobacco Control (FCTC) when 'setting and implementing public health policies with respect to tobacco control ... to protect these policies from the commercial and other vested interests of the tobacco industry'.

The internationally agreed Guidelines for Implementation of Article 5.3 recommend that parties to the treaty 'should interact with the tobacco industry only when and to the extent strictly necessary to enable them to effectively regulate the tobacco industry and tobacco products'.

The proposals in this discussion document are relevant to the tobacco industry and we expect to receive feedback from companies in this industry. We will consider all feedback when analysing submissions. To help us meet our obligations under the FCTC and ensure transparency, all respondents are asked to disclose whether they have any direct or indirect links to, or receive funding from, the tobacco industry.

Please provide details of any tobacco company links or vested interests below.

Click or tap here to enter text.

Please return this form:

By email to: smokefree2025@health.govt.nz

By post to: Smokefree 2025 Consultation, Ministry of Health, PO Box 5013, Wellington 6140.

ASPIRE 2025 submission on the Smokefree 2025 Action Plan Discussion Document

Introduction

University of Otago members of the ASPIRE 2025 Research Centre wish to submit on the questions set out in the Smokefree 2025 Action Plan Discussion Document (APDD). ASPIRE 2025 is one of the University of Otago's Research Centres, a designation that recognises national leadership and international recognition for excellence; sustained and on-going contributions to research, and receipt of significant external research income. The ASPIRE Centre's overall goal is to conduct policy-relevant research that informs the Government's goal of a smoke-free Aotearoa / New Zealand by 2025.

ASPIRE members have expertise in several of the proposals set out in the APDD and have undertaken research and published several papers examining measures that could more effectively regulate the appeal, affordability, availability and addictiveness of tobacco products.

We warmly welcome the publication of the APDD and broadly support the approach outlined and the measures included. We believe that a clear and comprehensive plan is essential if the Smokefree 2025 goal is to be achieved and achieved equitably. We note that the Māori Affairs Select Committee Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori, which recommended the adoption of a smokefree goal, also recommended the development of an action plan. We believe that the APDD aligns well with the spirit and detailed recommendations of the Māori Affairs Select Committee report and could significantly contribute to achieving the Tupeka Kore vision.

Specific features of the APDD that we strongly support include:

- The focus on eliminating disparities in smoking and commitment to strengthening Māori governance in tobacco control.
- The acknowledged need for measures that change the broader environment in which people live to make it easier for young people to stay smokefree and for smokers to quit.
- The comprehensive nature of the plan, including interventions in previously unaddressed areas, notably reductions in the supply of smoked tobacco products and regulation of tobacco product design and constituents.
- The focus on both protecting future generations by minimising smoking initiation and uptake, and enhancing quitting among existing smokers.
- The inclusion of bold measures (mandated denicotinised smoked tobacco products, large reductions in the retail availability of smoked tobacco products, and the smokefree generation proposal) that are likely to have a profound impact on rapidly reducing smoking prevalence by reducing smoking uptake and increasing quitting in all population groups.
- The commitment to risk proportionate regulation with an appropriate focus in the APDD on more robust regulation and population level policies for smoked tobacco products (noting that the 2020 Smokefree Environments and Regulated Products (Vaping) Amendment Bill provides an equivalent regulatory framework for alternative nicotine delivery products).

The APDD builds on New Zealand's reputation for taking robust and effective action to protect the health of all New Zealanders, which was so clearly demonstrated during the COVID-19 pandemic. It aligns clearly with realising New Zealand's international commitments under the Framework Convention for Tobacco Control, the UN Declaration on Rights of Indigenous Peoples, and the UN Declaration on Rights of the Child.

We believe that the APDD sets out a realistic pathway to achieve the Smokefree 2025 goal for all peoples in Aotearoa, and hence is a landmark in positive public health policy in New Zealand. It also sets a benchmark for best practice in tackling the smoking epidemic internationally, and has already been widely acclaimed on that basis.²

Conflicts of interest statement

We have received funding for smokefree research from the Health Research Council of New Zealand, the Cancer Society, Heart Foundation, Lottery Health, and the Royal Society Marsden Fund. We have also received funding from the University of Otago via an internal research grant and a grant to the ASPIRE Centre. We have never received any funding from the tobacco industry or organisations associated with it and have no conflicts of interest to report.

The arguments we set out below represent our expert opinions but are not an official position held by the University of Otago.

This document has been prepared by the following members of ASPIRE2025:

Andrew Waa, Senior Research Fellow, Department of Public Health, University of Otago, Wellington George Thomson, Associate Professor, Department of Public Health, University of Otago, Wellington Janet Hoek, Professor, Department of Public Health, University of Otago, Wellington Jude Ball, Research Fellow, Department of Public Health, University of Otago, Wellington Lindsay Robertson, Senior Research Fellow, Department of Preventive and Social Medicine Nick Wilson, Professor, Department of Public Health, University of Otago, Wellington Richard Edwards, Professor, Department of Public Health, University of Otago, Wellington

The submission is supported by the following members of ASPIRE2025 at the University of Otago:

Philip Gendall, Emeritus Professor and Senior Research Fellow, Department of Public Health, University of Otago, Wellington

Louise Delany, Senior Research Fellow, Department of Public Health, University of Otago, Wellington Mei-Ling Blank, Research Fellow, Department of Preventive and Social Medicine, University of Otago, Dunedin

James Stanley, Associate Professor, University of Otago, Wellington

Lee Thompson, Associate Professor, Department of Population Health, University of Otago, Christchurch Ellie Johnson, Assistant Research Fellow, Department of Public Health, University of Otago, Wellington Lani Teddy, Kaiwhakahaere ASPIRE 2025, Department of Public Health, University of Otago, Wellington

This submission is also supported by the Heads of Departments and members of the following departments at the University of Otago:

- Department of Public Health, University of Otago, Wellington,
- Department of Population Health, University of Otago, Christchurch,
- Department of Preventive and Social Medicine, University of Otago, Dunedin

Louise Signal, Head of the Department of Public Health, University of Otago, Wellington Gillian Abel, Head of the Department of Population Health, University of Otago, Christchurch Bob Hancox, Head of the Department of Preventive and Social Medicine, University of Otago, Dunedin

Anna Ferguson, Assistant Research Fellow, Department of Public Health, University of Otago, Wellington Lucy Telfar Barnard, Senior Research Fellow, Department of Public Health, University of Otago, Wellington

Michael Baker, Professor of Public Health, Department of Public Health, University of Otago, Wellington Julie Bennett, Senior Research Fellow, University of Otago, Wellington, University of Otago, Wellington Jason Gurney, Director of the Cancer and Chronic Conditions (C3) Research Group, Department of Public Health, University of Otago, Wellington

Jennifer Summers, Senior Research Fellow, Department of Public Health, University of Otago, Wellington Libby Grant, He Kāinga Oranga, Department of Public Health, University of Otago, Wellington

Frederieke Sanne Petrovic-van der Deen, Research Fellow, Department of Public Health, University of Otago, Wellington

Saera Chun, He Kāinga Oranga, University of Otago, Wellington

Sarah Derrett, Professor, Department of Preventive and Social Medicine, University of Otago, Dunedin Lianne Parkin, Associate Professor, Department of Preventive and Social Medicine, University of Otago, Dunedin

Tony Reeder, Honorary Associate Professor, Social and Behavioural Research Unit, Department of Preventive and Social Medicine, University of Otago, Dunedin

Richard Egan, Senior Research Fellow, Social and Behavioural Research Unit, Department of Preventive and Social Medicine, University of Otago, Dunedin

Bronwen McNoe, Senior Research Fellow, Social and Behavioural Research Unit, Department of Preventive and Social Medicine, University of Otago, Dunedin

Louise Marsh, Senior Research Fellow, Social and Behavioural Research Unit, University of Otago, Dunedin

Jerram Bateman, Research Fellow, Social and Behavioural Research Unit, Department of Preventive and Social Medicine, University of Otago, Dunedin

1. Strengthening the tobacco control system

- In line with our Treaty obligations, we strongly support strengthening Māori governance of the tobacco control programme. This will require Māori governance that is independent of mainstream governance.
- We support the development of a comprehensive community action Smokefree 2025 engagement
 and support programme, and suggest consultation should be undertaken with communities and
 their leaders, Iwi, Pasifika organisations, and grass roots smokefree practitioners to identify the
 most effective and appropriate way to facilitate, foster and support community action for
 Smokefree 2025.
- We welcome the APDD's recognition that monitoring and evaluation must be a core component of all new measures implemented and endorse the clear commitment to invest in research, evaluation and monitoring.
- We recommend developing and implementing a robust, prospective, and adequately resourced evaluation and monitoring plan based on a sound logic model that identifies key outcomes and how these will be achieved. The plan should include actions to identify gaps in current monitoring, outline additional monitoring and research that is required, and detail comprehensive and timely reporting mechanisms. We further recommend that the evaluation plan should assess progress towards achieving an equitable smokefree Aotearoa and eliminating the disparities in smoking and its adverse health effects, which predominantly affect Māori and Pasifika populations.
- We note potential non-compliance and possible growth in illicit trade in smoked tobacco products will require additional investment in monitoring and surveillance. We believe any risks can easily be addressed by thorough planning and implementation of enforcement measures to minimise non-compliance and prevent growth in illicit trade. We note that the tobacco industry has a well-documented interest in exaggerating the risk of illicit trade and using this to argue against the introduction of effective population-based measures to reduce smoking prevalence.

(a) Strengthen Māori governance of the tobacco control programme

What would effective Māori governance of the tobacco control programme look like? Please give reasons.

In line with our Treaty obligations, we strongly support strengthening Māori governance of the tobacco control programme. Key strategies proposed in the APDD will require national level policies likely to make a significant impact on smoking disparities. Given higher smoking rates among Māori compared to non-Māori, these policies will disproportionately affect Māori who smoke and their whanau. Therefore, it is essential that Māori play leading roles in designing, implementing and evaluating tobacco control measures to ensure these are relevant, appropriate and have ownership within Māori communities.

Toki noted the importance of culture in underpinning Māori governance principles.³ She noted these principles include taonga tuku iho (decision making with a long-term perspective on Māori well-being), tikanga (correct procedures and values grounded in Māori worldviews) and kawa (protocols).³

To ensure these governance principles are upheld requires Māori governance that is independent of mainstream governance. This perspective has been outlined earlier; for example, it was supported by the 2003 Māori Tobacco Control Strategy,⁴ which highlighted the importance of enabling Māori governance and independent leadership. The 2003 Strategy outlined expectations for Māori working in governance roles and clearly viewed these as going beyond western medical models of health and working towards a holistic vision of Māori health (e.g. including physical, spiritual and cultural dimensions).⁴

Because many measures in the APDD will require government endorsement (e.g., regulating nicotine content) and have implications for the whole population, consideration will need to be given to how Māori and mainstream governance systems are organized and function. In addition to the APDD's commitment to strengthening the tobacco control system, our Treaty obligations mean we must not only strengthen Māori governance but enhance Māori participation in all aspects of tobacco control, including greater Māori participation in planning, delivery and evaluation. Further, because policy measures are likely to be implemented at local, regional, national and even international levels, Māori governance must exist within these levels.

We note that strengthening Māori governance is consistent with the Government's commitment to establishing a Māori Health Authority and suggest the latter organization may have a role in developing, implementing and evaluating tobacco control measures.

(b) Support community action for a Smokefree 2025

What action are you aware of in your community that supports Smokefree 2025?

What is needed to strengthen community action for a Smokefree 2025? Please give reasons.

We strongly support the commitment to strengthen community action to achieve the Smokefree 2025 goal. There are numerous examples of local and community-level initiatives supporting the Smokefree 2025 goal. ⁵ These initiatives have been led by local and regional coalitions, Iwi and Pasifika groups, Councils (e.g. Smokefree Auckland), DHBs and PHUs, NGOs, health care providers, and other community groups. These groups' work has resulted in local Smokefree Action plans, smokefree events and policies designating smokefree areas, including marae, parks, playgrounds, and outdoor dining areas. ⁶ Other activities have included innovative community-based cessation interventions and campaigns, environmental clean-ups to remove tobacco-related litter, and a smokefree retailers network, among many others. ⁷

This activity has occurred despite a lack of coordination, and dedicated funding and support, particularly during the last five years. For example, the 2015 realignment of tobacco control services saw funding and support cut for initiatives such as those outlined above and defunding in 2016 of the Smokefree Coalition, an organisation dedicated to coordinating and supporting exactly these initiatives.⁸ Further, a \$5million/p.a. Pathways to Smokefree NZ Innovations fund ran from 2012-2016, but was then discontinued. These continuing reductions in community resourcing means the potential for community-action to support the Smokefree 2025 goal is largely unrealised. We thus strongly support strengthening community-based interventions by increasing resourcing and reinstating a central organising unit, such as the former Smokefree Coalition.

International examples illustrate the effectiveness of civil society initiatives to support public health goals. For example, the 2034 smokefree goal in Scotland is supported by a Tobacco Free Generation Charter, signed by 380 organisations from across the country (see https://www.ashscotland.org.uk/what-you-can- do/scotlands-charter-for-a-tobacco-free-generation/). One of the few examples in New Zealand of a nonhealth organisation pro-actively supporting the Smokefree 2025 goal was the New Zealand Defence Force's 2017 announcement that it aimed be smokefree 2020 (see https://blogs.bmj.com/tc/2017/05/31/new-zealand-to-have-worlds-first-smoke-free-military-by-2020/). We are not aware of any efforts to encourage or support similar initiatives that would engage with or broader community and civil society support for the Smokefree 2025 goal.

We believe local and community based initiatives have enormous potential to facilitate the achievement of the Smokefree 2025 goal; community-level activities can increase the feasibility of implementing initiatives at a national level. For example, such community activities could increase understanding of the Smokefree goal, and thus engagement with the aims. Work undertaken locally can prompt and support

smoking cessation in local communities, whānau, and workplaces, and support implementation of local policy measures and other interventions (e.g., smokefree events and smokefree outdoors policies). These initiatives can change social norms about smoking and stimulate debate, understanding and support for key measures included in the APDD, including removing nicotine from tobacco products and reducing the widespread retail availability of smoked tobacco. In short, promoting greater understanding of the Smokefree 2025 goal could dispel widespread misperceptions and increase support for measures needed to realise the goal.⁹⁻¹¹

We strongly support engagement with communities and their leaders, Iwi and Pasifika organisations, and other key stakeholders such as frontline health promotion and smokefree practitioners, to identify the most effective and appropriate way to facilitate, foster and support community action for Smokefree 2025. These discussions should be followed by the development and implementation of Smokefree 2025 community action support programmes, designed with specific communities in mind. These programmes are likely to include some or all of the following:

- Active efforts to engage with local communities, lwi, Pasifika organisations, employers, NGOs to
 encourage their contribution to the development and implementation of measures included in the
 action plan, and to support local interventions and activities.
- Support for capacity-building that enable local smokefree activities and contributions.
- Sustained, accessible and flexible funding sources to promote and support community-based activities and innovation.
- Regular knowledge-sharing activities such as regional and national hui, webinars, and newsletters. to promote the sharing of innovation and best practice across the sector.

(c) Increase research, evaluation, monitoring and reporting

What do you think the priorities are for research, evaluation, monitoring and reporting? Please give reasons.

We strongly support the commitment to increase research, evaluation, monitoring and reporting in the APDD.

Government funded evaluation of recent tobacco control interventions in Aotearoa has been at best sporadic and often totally absent. While the Ministry of Health/Government commissioned evaluations of the 2004 Smokefree Environments Amendment Act (SEAA)¹² ¹³ and the recent series of tax increases,¹⁴ other measures have not been evaluated. For example, the ban on point-of-sale retail displays and introduction of standardised packs with enhanced health warnings were not subject to any Government-resourced evaluation. Instead, evaluations were conducted by ASPIRE 2025 researchers using independent funding.¹⁵ ¹⁶ Even the evaluations of the SEAA and tobacco tax increases were conducted largely retrospectively, which introduced limitations to the data available, and the design and methods.

We believe that a key priority is developing and implementing a robust, prospectively developed and adequately resourced, evaluation and monitoring plan (henceforth 'evaluation plan') for the Smokefree 2025 action plan. This evaluation plan should assess progress towards achieving an equitable smokefree Aotearoa by eliminating disparities in smoking prevalence and the adverse health effects that predominantly affect Māori and Pasifika populations. One component of strengthening the Māori governance of the tobacco control system should be a commitment to full Māori participation in the evaluation plan development, and Māori leadership of all Māori-focused evaluation and monitoring. As part of the evaluation plan we recommend a systems evaluation is carried out including assessment of:

- Capability: Expertise in health promotion and protection, smoking cessation support, legislation, monitoring, evaluation and research
- Capacity: Resources that are or that should be available within the system to carry out recommended actions
- The degree to which different stakeholders in the system are able to communicate and work together
- External factors affecting the Aotearoa New Zealand tobacco control system, such as international trade agreements.
- Where the tobacco control system can be strengthened to ensure that the action plan is implemented effectively.

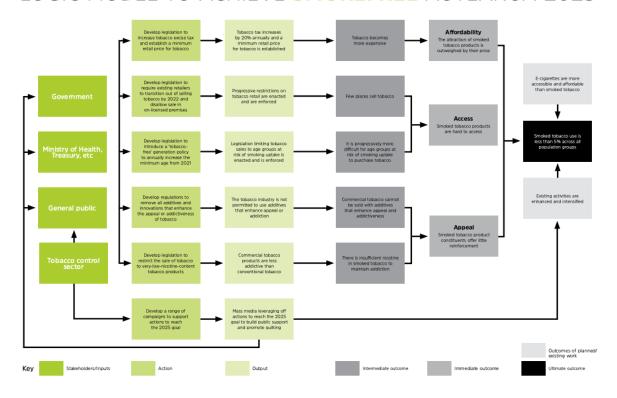
Enacting a comprehensive evaluation plan will generate ongoing evidence about the implementation process and the plan's impacts on different population groups (intended and unintended, positive and negative). This process will allow interventions and implementation strategies to be refined or enhanced as necessary. It will also provide evidence about the impact of individual measures, synergies between different measures, and will assess the plan's overall impact. This evidence will inform the public and key stakeholders within NZ and will have global relevance as other members of the international smokefree community formulate plans to eliminate smoked tobacco product use.

The overall action plan should be built around a sound logic model that identifies key outcomes and represents how these outcomes will be achieved. This logic model would be a key reference point for framing and prioritising evaluation activities. Evaluation and monitoring plans should identify data sources, studies and monitoring tools that are available (or that would need to be commissioned) to provide information and monitoring of key process and outcome measures.

An example of a robust and prospectively designed evaluation strategy is the one developed to evaluate the impact of smokefree legislation in Scotland; this strategy resulted in multple publications outlining robust evidence on aspects of the implementation and outcomes that followed.¹⁷

We led the development of a proposed action plan for the Smokefree 2025 goal in 2017 (Achieving Smokefree Aotearoa by 2025 plan [ASAP]); this plan included an extensive section on the evaluation, monitoring and research that would be required. As an example, the logic model for this evaluation plan is reproduced below:

LOGIC MODEL TO ACHIEVE SMOKEFREE AOTEAROA 2025



Assessing quantitative outcomes, such as increased quitting and reduced smoking prevalence, will be important; however, to obtain timely data on impact and assess implementation fidelity, compliance etc., it will also be important to ensure that data are available on intermediate and process measures, including information derived from qualitative studies.

Key potential sources of data for monitoring include:

- the Ministry of Health's New Zealand Health Survey and periodic Tobacco Module;
- the Health Promotion Agency (HPA) adult smoking surveys, notably the Health and Lifestyle Survey;
- the Action on Smoking and Health (ASH) Year 10 Snapshot surveys and the Youth 2000 Surveys led by the University of Auckland, and
- the New Zealand arm of the International Tobacco Control Project (NZ ITC) led by ASPIRE 2025.

However, there are some important gaps in the current survey data that will need to be addressed; these include:

- the lack of in-depth monitoring of smoked tobacco product use among adolescents and young adults, where smoking uptake is increasingly concentrated;¹⁹
- the lack of monitoring of smoking related behaviours in people living with mental illness, and
- the lack of in-depth/qualitative studies to investigate the attitudes, experiences and behaviours and the impacts of smokefree interventions among people who smoke (particularly in high priority populations).

In addition to analysing existing and newly commissioned monitoring processes, bespoke evaluation and research studies should be conducted to provide evidence on priority evaluation and research questions identified prospectively or that emerge during implementation. Research could also provide process-related quantitative and qualitative data on intervention implementation and compliance, industry responses, and any emerging unintended impacts (adverse or positive). Further details of these points are set out in the evaluation plan developed for the 2017 ASAP strategy.¹⁸

Finally, there will need to be a timely and comprehensive reporting process to ensure progress towards Smokefree 2025 goal is transparent, allows appropriate scrutiny, and ensures accountability. These attributes will recognise the FCTC reporting requirements and provide the international community with intelligence about the impact of the action plan, thus providing a platform on which other countries may build their own programmes.

(d) Strengthen compliance and enforcement activity

What else do you think is needed to strengthen New Zealand's tobacco control system? Please give reasons.

We support strengthening compliance and enforcement activity to support the implementation of the measures included in the APDD.

Some measures proposed in the APDD could potentially be undermined by lack of compliance. These include:

- Restriction of sales to a limited number of licensed stores and specific store types (e.g. through possible sales by unlicensed stores or distributors, or 'under the counter' sale of illicit products)
- Smokefree generation policy restrictions on legal age of sales (through possible sales by stores to underage people or distribution and sale of illicit products)
- Reductions in nicotine levels in smoked tobacco products (through distribution and sale of illicit products)

These potential risks mean the action plan will require adjunct measures and additional investment to ensure high compliance with regulations and legislation, and to prevent any growth in the illicit market for smoked tobacco products. However, we believe these risks can be addressed by thorough planning and a short-term increase in resource allocation to measures that enhance and enforce compliance, and minimise the illicit market. An effective monitoring strategy would be prudent to monitor the impact of compliance and enforcement measures and to detect any emerging non-compliance issues – for example to identify if an illicit trade market through the expansion of locally grown and sold products.

Underage sales or sales from unlicensed stores will require a comprehensive and adequately resourced compliance monitoring and enforcement infrastructure, and appropriate penalties (and their application) to address identified non-compliance. It is therefore imperative that resources are made available to establish or enhance current systems; these resources could come from the more than \$2 billion in tobacco-related excise revenue, of which around \$60m (approx. 3%) is currently invested in supporting efforts to achieve the smokefree goal.

Compliance should be maximised and the need for additional enforcement minimised if measures included in the plan are accompanied by appropriate communication strategies that ensure public and stakeholder understanding of the measures, their rationale and how they will be implemented and enforced. Experience with measures like the 2003 Smokefree Environments Amendment Act suggest that where smokefree legislative and policy measures are well-communicated and initial enforcement is robust, they attract widespread and growing public support and sustained high levels of public and stakeholder compliance. Non-compliance will also naturally decline as the Action Plan takes effect and smoking prevalence and hence demand for smoked tobacco products dramatically falls over time.

While there is a theoretical risk that measures outlined in the APDD could increase the illicit (smuggled or counterfeit) market for smoked tobacco products, we believe that risk is greatly exaggerated by tobacco

companies, can be addressed through rigorous planning and preventive measures, and will rapidly diminish in importance over time.

Claims of massive increases in illicit tobacco trade generally come from the tobacco industry and its affiliates who have a vested interest in making exaggerated statements as they try to impede the introduction of evidence-based tobacco control policies.²⁰ We note that spokespeople for the tobacco industry have already begun pursuing this line of argument ²¹ since the release of the APDD. However, independent research suggests such claims are generally unfounded or grossly exaggerated, as was the case when plain packs were introduced in Australia.²²⁻²⁴ Furthermore there is strong evidence to suggest that the tobacco industry facilitates and promotes illicit trade when it suits its purpose to do so. ²⁰

There are limited data available on the illicit market in New Zealand, partly because of the inherent difficulties of measuring the size of markets for illegal products. Studies funded by the tobacco industry generally report a large and growing illicit market. For example, an annual tobacco industry-funded study on illicit tobacco produced by KPMG, estimated the market share of illicit tobacco increased from 9.2% in 2017, to 10.2% in 2018, and 11.5% in 2019. ²⁵ However, these and similar studies have been widely criticised because of their flawed or opaque methodologies. ^{26 27}

Independent research generally produces much lower prevalence estimates. For example, pack collection studies in NZ estimated the proportion of foreign packs at 3.2% in 2009 and 5.8% in 2012/13. ^{28 29} Many of these packs may have been discarded by tourists, and thus these figures are likely to overestimate the extent of smuggled packs. An ASH NZ study estimated illicit tobacco consumption to be between 1.8 and 3.9% of NZ's total tobacco consumption in 2014. ³⁰ Most recently, the NZ ITC study found that <1% in 2017-18 and 1.1% in 2020 of current smokers reported that their last purchase of cigarettes or tobacco was potentially illicit (i.e. bought from someone selling cigarettes independently and/or illegally or from a friend or relative). ³¹

Although theoretically possible that rigorous tobacco control policies such as those proposed in the APDD could stimulate a market for illicit tobacco products, there are several good reasons to believe this outcome is unlikely to occur in NZ and we note that similar arguments have been made in other settings. ^{32 33} First, the major influence on illicit tobacco market size is not the level of tobacco tax or strength of tobacco control polices, but other factors, such as the strength of the regulatory framework and measures to combat illicit trade, the extent of government corruption, social and governmental tolerance of contraband markets, the availability of informal distribution networks, and the degree of organised criminal infrastructure. ^{34 35} New Zealand has relatively rigorous border controls and low levels of corruption which, together with our geographical isolation, will help minimise opportunities for smuggling illicit tobacco products. The current low level of use of illicit tobacco in NZ, despite the high cost of tobacco products, suggests these factors are effectively constraining the size of the illicit market.

In addition, some measures included in the APDD such as retail licensing (provided that involvement in the illicit market can result in forfeiture of the tobacco retailing license) should also reduce potential illicit tobacco trade. ³⁶ Furthermore, the impact of APDD measures will reduce smoking prevalence and demand for smoked tobacco products, and thus the potential market for illicit products. Alternative nicotine delivery products, such as e-cigarettes, are now widely available and much cheaper than smoking. As a result, people who smoke and who cannot or do not want to cease using nicotine products are able to switch to e-cigarettes, which will is likely to be more appealing and easier to access than illicit tobacco.

We therefore believe that the industry's doomsday scenario of a rapid increase in illicit trade is very unlikely to eventuate and, over time, the illicit market will decline as smoking prevalence falls to progressively lower levels. The spurious threat of illicit market growth should not threaten implementation of any measures included in the APDD.

Nonetheless, we suggest reviewing and, where necessary, enhancing existing regulatory controls. Possible measures could include: enhanced border surveillance and enforcement actions by Customs and Excise;

licensing and rigorous monitoring of all importers and distributors of any tobacco products for evidence of involvement in the illicit market – with rigorous enforcement action if required. We also recommend ratification of the FCTC Protocol to Eliminate Trade in Tobacco Products and participation in the global tobacco track and trace system; and collection of credible data on the extent of the illicit market as part of the enhanced research, evaluation, monitoring and reporting described above.

2. Make smoked tobacco products less available

- We welcome the APDD's recognition that reducing tobacco supply is a crucial component of NZ's endgame strategy.
- We strongly support the introduction of a licensing scheme for all retailers of any tobacco product though we note that this measure will only provide a route to reduce tobacco supply and must be accompanied by other measures.
- We strongly support substantially reducing the number of retail outlets where smoked tobacco
 products are sold and restricting the stores permitted to sell such products. Research shows this
 measure is a key intervention required to achieve rapid and sustained reductions in smoking
 prevalence.
- We support an amortisation approach to reducing retailer numbers, with careful consideration given to equity and recommend that tobacco products are only available from specialist R18 stores that sell no other products than tobacco.
- We recommend developing implementation support that assists small retailers to transition from tobacco to other products.
- We support the introduction of a tobacco free generation policy.

(a) License all retailers of tobacco and vaping products

Do you support the establishment of a licensing system for all retailers of tobacco and vaping products (in addition to specialist vape retailers)?

- Yes
- No

Please give reasons.

We strongly support the establishment of a licensing system for all retailers of tobacco and vaping products (in addition to specialist vape retailers). New Zealand has fallen behind other countries and states (e.g., US, Finland and Australia), some of which have required all sellers of tobacco products to be licensed for some time. Introducing this measure would align NZ with international best practice.

Retailer licensing is a pre-requisite for reducing tobacco retail availability and provides a tool to manage retailer numbers (e.g., licences could specify operating conditions and numbers of licences granted could be fixed). Licensing would also enhance compliance with other measures, such as the Smoke Free Generation and support measures to prevent sales of illicit tobacco products. Evidence suggests that most NZ retailers will apply for a licence and continue selling tobacco, in the event that licences become mandatory;³⁷ the main outlets that stop selling tobacco are hospitality venues (e.g. restaurants, bars, clubs) where tobacco sales are relatively minor.^{38 39}

Therefore, while licensing provides a tool to manage retailer numbers, this measure will not, in and of itself, reduce retailer numbers to a significant extent. Further, the reduction in retailer numbers required to influence smoking prevalence is substantial; modelling evidence shows a reduction of around 90% to 95% of retailers is required to drive up the 'full cost' of tobacco (i.e., the time and resources needed to obtain the product). 40-43 In short, the Government must introduce additional measures to reduce the widespread availability of tobacco products.

(b) Significantly reduce the number of smoked tobacco product retailers based on population size and density

Do you support reducing the retail availability of smoked tobacco products by significantly reducing the number of retailers based on population size and density?

- Yes
- No

Please give reasons.

We strongly support substantially reducing the retail availability of smoked tobacco products by significantly reducing the number of retailers based on population size and density as this measure could greatly decrease retailer numbers. Introducing a cap of one tobacco retailer in an area of 10,000 residents, as opposed to the status quo of one outlet per 800 residents, ⁴⁴ would help substantially reduce New Zealanders' exposure to tobacco outlets. In turn, reducing exposure to tobacco products would reduce smoking uptake and support people trying to quit; it would also clearly reframe tobacco as a product that is very different to the everyday consumer items it is currently sold alongside.

This approach would need to account for differences in baseline numbers of tobacco retailers across different districts, to ensure that tobacco retailer density is reduced sufficiently (i.e., to the point where it affects behaviour) in the most socially deprived communities, where those most at risk for smoking-related harm reside. We recommend focusing tobacco retailer reductions in urban and suburban areas and focusing increasing smoking cessation support in rural areas (e.g. through targeted Quitline advertising and local support). Alternatively, work could be undertaken with pharmacies in small towns to assess their willingness to sell tobacco alongside providing cessation support, as a measure that would aim to reduce smoking in smaller communities within the short to medium term. These options could mitigate potential inequities in access that blanket implementation of the policy could bring.

(c) Restrict sales of smoked tobacco products to a limited number of specific store types

Do you support reducing the retail availability of tobacco products by restricting sales to a limited number of specific store types (eq. specialist R18 stores and/or pharmacies)?

- Yes
- No

Please give reasons.

We strongly support reducing the retail availability of tobacco products by restricting sales to a limited number of specific store types (eg, specialist R18 stores and/or pharmacies). This measure is our preferred option. We believe that restricting tobacco sales to a limited number of specific outlets, such as specialist R18 ('adult only') stores, or pharmacies would support cessation and, importantly, deter smoking uptake among young people.

Modelling studies from the BODE³ Programme (University of Otago) indicate that restricting tobacco sales to pharmacies only could gain an estimated 42,700 quality-adjusted life-years (QALYs) and \$741 million in savings to the health system over the lifetime of the New Zealand population. ⁴¹ Most of the projected health gains would result from smoking cessation counselling provided by pharmacists to people purchasing tobacco, rather from than reductions in retailer numbers. The potential to increase cessation advice and support available to people who smoke is an important advantage of limiting sales to pharmacies.

We note that not all pharmacists may support moves to sell tobacco in pharmacies; further consultation is required to explain this measure and explore whether pharmacists are more willing to sell tobacco if this measure is clearly signalled as a time-limited contribution to the Smokefree 2025 goal. Presenting the measure in this way will create an opportunity for pharmacists to provide smokers with cessation consultations, support and products; this work would fulfil, rather than contradict, their health professional role. It has a professional special to other specialist adultancy outlets are that sales to people aged under 18 years would be highly unlikely; as highly trained health professionals, pharmacists would be likely to regard under-age sales as completely unethical. Further, pharmacies have sound security measures at their premises (given prescription drug storage requirements).

Other modelling work focussed on assessing the impact of interventions due solely to the reduction in the number of tobacco retail outlets (i.e., without providing cessation support at the point of purchase as included in the pharmacy modelling work). Findings from this study suggested limiting tobacco sales to 50% of existing alcohol outlets and not allowing sales in other outlets would most effectively reduce smoking prevalence and bring future health and cost gains.⁴² A survey of NZ smokers that compared hypothetical retail reduction policies found two policies: selling tobacco at only 50% of the existing liquor stores or only at pharmacies, were rated most likely to prevent youth smoking initiation and help smokers quit.⁴⁸

Both of these measures - restricting sales of tobacco products to 50% of existing alcohol outlets or to pharmacies only - would avoid frequent adolescent exposure to tobacco sales (adolescents tend to visit convenience stores frequently and would be less likely to be exposed to tobacco sold from R18 alcohol outlets or from pharmacies).⁴⁹ These measures would thus help prevent smoking uptake among young people.^{50 51}

These measures would also remove cigarettes from outlets where people who smoke usually purchase tobacco and thus could help quitters avoid cues known to trigger impulse buys and relapse. ⁵² ⁵³ An advantage of limiting tobacco sales to 50% of existing liquor stores is that these are already R18 licensed outlets. However, because smoking and alcohol consumption are strongly paired, ⁵⁴ selling both products at the same outlet risks reinforcing these associations and for that reason, we recommend creating R18 tobacco-only outlets. Restricting sales to a similar number of specialist tobacco R18 stores would likely have a similar or greater effect as the 50% of liquor stores option.

We note there are now international policy precedents where communities and governments have implemented measures to reduce the number of tobacco retailers.⁵⁵ The NZ Government's proposals to reduce tobacco availability will create environments that reduce smoking uptake and support quitting, and are thus likely to improve population health and decrease health inequities.

(d) Introduce a smokefree generation policy

Do you support introducing a smokefree generation policy?

- Yes
- No

Please give reasons.

We support the APDD's proposal to introduce a Smokefree Generation Policy and the plan's emphasis on minimising smoking uptake among future generations, alongside measures to promote and support quitting among people who smoke.

Most people who smoke start smoking in adolescence or early adulthood.¹⁹ Even people who start to smoke after turning 18 years do so without making an informed choice as they lack full knowledge and understanding of the addictiveness and health risks of smoking and often initiate smoking in situations where they experience peer pressure or are influenced by alcohol.⁵⁶ Nicotine is highly addictive and many people who start smoking will continue for many years and may become lifelong smokers; they are thus at very high risk of suffering from smoking-related diseases. The importance of initiating the next generation into smoking in order to sustain tobacco sales has long been recognised by the tobacco industry, as revealed in this quote from a confidential tobacco industry document:

"Younger adult smokers are the only source of replacement smokers... If younger adults turn away from smoking, the industry must decline, just as a population which does not give birth will eventually dwindle." ⁵⁷

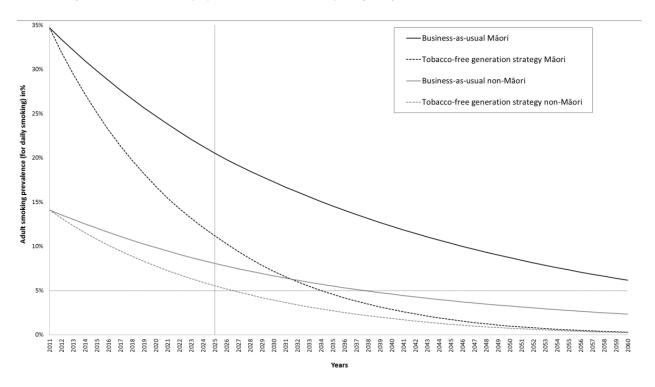
Measures to reduce smoking initiation are generally accorded a very high priority by the public and decision-makers, and will be pivotal to achieving the Smokefree 2025 goal and sustaining minimal prevalence once it is achieved.⁵⁸ We therefore welcome the APDD's prioritisation of measures to reduce the uptake of smoking by future generations (alongside measures to prompt and support people who smoke to quit).

Minimum age of sale/purchase laws for smoked tobacco products are often used to reduce youth smoking uptake and NZ prohibits sales of tobacco products to people aged under 18 years. However, minimum-age sales laws are not always completely effective in restricting youth access to tobacco. Fixed age laws for tobacco product sales may have unintended adverse consequences and could potentially promote smoking uptake by young people above and below the age cut off. For example, young people above the age cut-off point may be more likely to take up smoking if the law sends a misleading message that there is a 'safe age' for smoking (indeed, smoking uptake in NZ is increasingly occurring in those aged 18-24). ¹⁹ By contrast, young people below the age cut-point could be encouraged to start smoking if the law inadvertently positions smoking as a 'forbidden fruit' and a badge of coming of age as an adult.

The smokefree generation (SFG) proposal, also known as tobacco free generation,⁶⁰ included in the APDD overcomes many of the problems associated with the current minimum age of sale law. It is likely to have a much more profound impact on reducing smoking uptake, and hence smoking prevalence in the longer term, because it will gradually eliminate the availability for sale of smoked tobacco products.

The specific advantages of the SFG policy include:

- Misleading messaging about smoking safety and coming of age/forbidden fruit effects will not occur
 because young people born after the watershed date will never legally be able to purchase smoked
 tobacco products;
- Modelling data suggests that the SFG policy will have a substantial impact in reducing smoking prevalence and will be strongly pro-equity,⁶¹ with the biggest reductions in prevalence occurring among Māori and Pasifika populations due to their younger age structure.



Impact of Tobacco Free Generation strategy Source: van der Deen (2017) 61

- The SFG may have an additional impact on smoking prevalence as it will further denormalise smoking and trigger quit attempts.
- There is evidence of strong public support for the SFG policy, which increases the feasibility of implementation. For example, a 2017 survey of adult smokers and recent quitters in NZ found that 78% supported SFG, including 70% of 18-24 year olds.¹⁰

We therefore strongly support implementation of the SFG intervention as part of a comprehensive action plan to achieve the Smokefree Aotearoa goal. However, we note that mandating reductions in nicotine to non-addictive levels, together with substantial decrease in retailer numbers, are likely to have the most rapid impact on reducing smoking prevalence.

Retailer compliance with the SFG policy is likely to be greatly enhanced by other measures included in the APDD, such as reductions in retailer numbers and retailer licensing. Compliance by future generations is likely to be greatly increased by other measures in the APDD that will reduce experimentation and uptake of smoking. For example, removing nicotine and additives from smoked tobacco products, will greatly reduce tobacco products' addictiveness and appeal.

Low smoking uptake and falling smoking prevalence among young people means that SFG could be implemented as a youth-led initiative that reflects the next generation's rejection of smoking. A communications strategy could be co-designed with young people position the SFG as ensuring freedom from addiction and smoking-related harms among future generations. This messaging would vary markedly from the youth control messaging that minimum smoking age laws may signal, and could be an important way to elicit support from young people and foster implementation. Engagement and co-creation with

youth (especially Māori and Pacific communities) will help to ensure the policy is framed and implemented successfully. Conversely, poor communication of SFG, and lack of community and youth buy-in, may limit its success.

Social supply (e.g. from older friends, siblings and other family members) of smoked tobacco products to young people could pose a threat to the SFG proposal and undermine the pro-equity effects of the policy, although this should reduce over time as overall smoking prevalence declines and for youth and young adults as the age gap between themand people who can still obtain smoked tobacco products progressively increases. Mass media and community-based initiatives that explain the SFG policy and its rationale, further denormalise smoking, and discourage social supply, will play important roles in shaping the success of an SFG proposal.

Are you a small business that sells smoked tobacco products?

- Yes
- No

Please explain any impacts that making tobacco less available would have on your business that other questions have not captured. Please be specific.

We are not a small business that sells smoked tobacco products but wish to offer comments on likely business impacts, should the Government decide to reduce the number of outlets selling smoked tobacco products.

We believe it will be crucial to implement a retailer reduction strategy in a way that will not unfairly advantage some existing retailers over others.³⁷ One approach that treats all retailers in a similar way is restricting tobacco sales to specialist R18 stores or pharmacies. Although small retailers (and tobacco companies) may support a 'grandfathering' approach that exempts existing retailers from the policy changes (i.e., the new measures would only apply to new retail outlets),⁶² we do not believe this approach would support the Smokefree 2025 goal. Grandfathering would see outlet numbers decrease very slowly as numbers would reduce only when a retailer closed or sold her/his business; this approach would not bring meaningful reductions in tobacco availability (and thus declines in smoking prevalence) by 2025.⁶³

We recommend an amortization strategy, where existing tobacco retailers are given a reasonable amount of time to phase out their existing stock and cease selling tobacco products, as this approach would bring faster change.^{62 64} We recommend a transition period of six months once legislation is enacted (effectively 12 months, given the measure will be signalled when legislation is introduced). During this period, small independent retailers could be given practical assistance; for example, the Beverley Hills Chamber of Commerce used its Small Business Association to offer retailers advice on how to transition to a tobaccofree retail environment.⁶⁵ As an amortization policy may affect some small retailers be more than others,⁶⁶ temporary measures could also include transitional payments to assist retailers as they replace tobacco products with other grocery lines.⁶⁴¹

We believe it is imperative to review critically arguments that oppose reducing the number of retailers permitted to sell tobacco products. For example, there is little evidence for arguments that the policy would drive large numbers of small retailers out of business because claims that tobacco sales account for

¹ Financial and other support for small retailers is favoured by a majority, though not all, authors of this Submission.

a high proportion of overall turnover and that foot traffic generated by people purchasing tobacco products leads to substantial purchases of higher margin products do not withstand scrutiny.

Independent research evidence does not support these claims. Most transactions made at small retail outlets do not involve tobacco and tobacco purchases are most commonly single-item transactions (i.e., tobacco is not purchased in conjunction with additional items). ⁶⁶⁻⁶⁹ An intercept survey of customers exiting convenience stores in Dunedin found that only 14% of transactions contained tobacco, and most tobacco purchasers bought only tobacco; only 5% of all transactions included tobacco and an additional non-tobacco item. ⁶⁶ A larger replication of this study undertaken in Wellington and Auckland produced very similar findings: 14% of transactions contained tobacco, and just 6% of all transactions included both tobacco and non-tobacco. ⁶⁸ These data suggest that while some people who buy tobacco from a dairy might also buy snacks or grocery items, this purchase pattern is uncommon, and these purchases account for only a small proportion of total purchases. Research conducted outside convenience stores in the U.S. and Australia supports these NZ findings. ⁶⁷ ⁶⁹

Arguments about the importance of tobacco to small retailers rarely acknowledge the **very low profit margins** associated with tobacco products.^{70 71} Estimates suggest that the margin on tobacco products is around 6% compared to an average of 24% for the other convenience products.⁷² A UK estimate suggests the average weekly profit made by small retailers on tobacco products is 1.6% of total sales income for these products (whereas profit from non-tobacco products is 17.6% of sales income).⁷² Re-allocating the physical retail space used for tobacco products to suppliers of higher profit products, could result in **greater** profitability for retailers.³⁷ As well as providing low returns, tobacco is an expensive product to stock and imposes costs not associated with other products.⁷² For example, concerns about crime have led some retailers to install surveillance and security systems, and have increased the insurance premiums some pay, all of which increase the costs of selling tobacco.

We note that removing tobacco from convenience stores could alleviate the risk of crime. Media reports of tobacco thefts from convenience stores, including some with life-threatening violence, have created a widely-held perception that these crimes have increased in recent years (although actual data on crimes from the police is difficult to obtain). Retailer associations have attributed the claimed rise in retail thefts to increases in tobacco taxation.⁷³ If these claims are correct, removing tobacco from convenience stores would reduce crime, improve retailers' safety, and reduce both personal and economic costs of selling this product. Retailers therefore stand to benefit financially and personally from policies that limit the sale of smoked tobacco products to pharmacies or R18 outlets.

We also note that opposition to proposals that, if adopted, would reduce the retail availability of tobacco products often comes from groups that include tobacco companies among their members. For example, the NZ Association of Convenience Stores (NZACS) is an industry group that represents Imperial Tobacco and British American Tobacco (BAT), which have been "premier members" since 2007. An Imperial Tobacco representative appears to have been a governance team member since the NZACS's establishment, e.g. To Total Tobacco representative appears to have been a governance team member since the NZACS's establishment, e.g. To Total Tobacco representative appears to have been a governance team member of NZACS's establishment, e.g. To Total Tobacco representative appears to have been a governance team member since the NZACS's establishment, e.g. To Total Tobacco representative appears to have been a governance team member of NZACS is the NZACS that we have built up to Ministers, government departments, those that make the laws that control our actions with our customers, and the media" and that "most of our effort in past years has been towards tobacco". Overall, evidence concerning NZACS' membership, governance and activities suggests that lobbying against tobacco control policies has been a core function of the group.

Furthermore, the NZACS membership does not include independent small retailers; rather it represents service stations and chain convenience stores in addition to its corporate members. ⁸¹ Rather than represent a unified sector voice, the NZACS's opposition to tobacco control policies is at odds with findings from research conducted with independent small retailers. These studies suggest many independent small retailers would prefer not to sell tobacco and would accept a policy that removed tobacco from their stores, so long as the policy was implemented equitably across all retailers. ³⁷ 70 71

3. Make smoked tobacco products less addictive and less appealing

- We strongly support measures that make tobacco products less addictive and less appealing.
- There is convincing evidence that reducing nicotine in smoked tobacco products to very low levels is an essential measure that will be required to achieve the rapid and sustained reduction in smoking prevalence that is needed to achieve the Smokefree 2025 goal.
- We endorse the APDD's suggestion that filters should be removed from cigarettes and note that many people who smoke view filters as a harm reduction tool even though research shows filters have no material effect on the harm they face.
- We note that filters also pose a major environmental hazard and despoil public amenities and city spaces.
- We strongly support measures that would reduce the appeal of tobacco products, including disallowing capsules and other flavour innovations, and introducing dissuasive cigarette sticks; we believe these measures would reduce smoking experimentation and uptake among young people.

(a) Reduce nicotine in smoked tobacco products to very low levels

Do you support reducing the nicotine in smoked tobacco products to very low levels?

- Yes
- No

Please give reasons.

We strongly support the introduction of a policy to restrict nicotine in smoked tobacco products to very low levels. We believe this is a crucial measure in order to achieve rapid and sustained reductions in smoking prevalence needed to reach the Smokefree 2025 goal.

Researchers and the tobacco industry have long known that nicotine is the main cause of the addictiveness of smoking, and that people who smoke do so mainly to obtain nicotine. ^{83 84} This knowledge is encapsulated in the quotation below where, more than 60 years ago, tobacco industry members expressed concerns over the impact lowering nicotine levels in tobacco products could have on their sales.

"To lower nicotine too much might end up destroying the nicotine habit in a large number of consumers and prevent it from ever being acquired by new smokers."

Quote from British American Tobacco Company internal document, June 1959 85

Indeed, the tobacco industry is known to have developed very high nicotine strains of tobacco plants and to have carried out extensive research and design modifications to cigarettes to enhance their nicotine delivery for example through the manipulation of the pH of cigarette smoke by adding chemicals such as ammonia and urea. 86-88

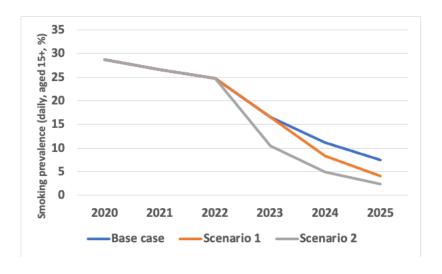
Drawing on this evidence, Benowitz and Henningfield suggested in the 1990s that greatly reducing the nicotine content of cigarettes would be an effective tobacco control measure. ⁸⁹ Since then numerous studies have been conducted which have generally found that people who smoke who are provided with

very low nicotine cigarettes (VLNCs) with 0.4 mg or less nicotine per gram tobacco smoke fewer cigarettes, have similar or lower biomarkers of exposure to toxins, experience fewer withdrawal effects, make more quit attempts and are more likely to quit. 90-115 Some, 104 though not all, 116 studies have found that immediate reductions in nicotine content have greater positive effects than a gradual reduction in nicotine levels, so an abrupt one-off reduction in nicotine levels is likely to be the preferred method of introducing the policy. These studies likely underestimate the impact of mandating VLNCs as the only available product, as participants usually still had access to non-VLNCs, and there is evidence of substantial non-compliance. 117-119

Similar impacts of VLNCs have been found in marginalised groups with higher smoking prevalence, such as people with mental health conditions. For example, a large New Zealand trial which investigated the impact of adding VLNCs to Quitline smoking cessation support found no difference in impact on quitting between Māori and non-Māori participants. Preliminary analyses of participants in the TAKe study, a cohort study of Māori people who smoke, found over half said they would quit smoking (40%) or switch to e-cigarettes (14%) if VLNCs were the only available smoked tobacco product. Private suggesting substantial impacts of VLNCs and a VLNC policy in diverse population groups suggests these interventions could reduce disparities in smoking prevalence and associated health inequities.

Modelling studies suggest that a mandated VLNC policy would result in substantial reductions in smoking prevalence and population health gains. A historical modelling study estimated that had the tobacco industry introduced VLNCs when the health effects of smoking were established in the 1960s, millions of lives would have been saved. A recent preliminary modelling study of the impact in the New Zealand population found that a law to mandate VLNCs would likely achieve, or come close to achieving, the New Zealand Government's Smokefree 2025 Goal under a range of assumptions for both Māori (predicted prevalence 2.4%-7.4% 2025) and non-Māori (0.8-2.7%).

Estimated daily smoking prevalence among Māori for the base case model and two scenario analyses under a law mandating VLNCs (source ¹²⁵)



As a result of this evidence leading experts in tobacco control and nicotine science, including New Zealand-based researchers, have argued that mandating VLNCs could profoundly reduce smoking prevalence by prompting and supporting people who smoke to quit, decreasing relapse among people who have quit smoking, and reducing experimentation with smoking and the risk of subsequent addiction and long term use of smoked tobacco products among young people. 91-93 97 The policy also aligns with the 2010 Māori Affairs Select Committee inquiry which recommended reducing the additives and nicotine in tobacco as one of the measures to help achieve the proposed Smokefree 2025 goal. 1

International interest in this policy measure is increasing and the US FDA recently announced its intention to introduce a risk-proportionate regulatory framework for nicotine products ⁹⁴ and issued an Advanced Notice of Proposed Rulemaking that recommends developing a tobacco product standard for minimal or non-addictive nicotine levels in cigarettes. ¹²⁶ Recent press reports suggest introducing a mandated reduced nicotine policy for cigarettes is currently under active consideration by the US Administration.

The feasibility of a VLNC policy is enhanced by evidence of its high acceptability among people who smoke. For example, in the NZ ITC study 80% of people who smoke and recent quitters expressed support for mandated VLNCs, provided alternative nicotine products are available. There is similar evidence of very strong support for this policy in international studies. The manufacture of VLNCs is technically feasible through extraction of nicotine from tobacco or use of genetically-engineered low-nicotine tobacco plants as evidenced by the tobacco industry's history of developing reduced nicotine products like *Quest* and *Next* and the availability of current research VLNC products (e.g. manufactured by 22nd Century Group). Si

The feasibility and impact of a mandated VLNC law is also likely to be enhanced by the relatively easy access to alternative nicotine-delivery products, such as e-cigarettes, and pharmaceutical grade products (gum, patches etc). Policies ensuring the availability of these alternative nicotine products could act synergistically with a VLNC policy to reduce smoking prevalence. For example, VLNCs' impact as a cessation trigger is likely to be greater where people who smoke can switch to alternative products if they cannot quit nicotine use completely. Concerns e-cigarettes will act as a 'gateway' to smoking among young people would diminish if cigarettes were rendered unappealing because they no longer deliver comparable doses of nicotine to vaping products.

Critics have advanced three main arguments against a mandated VLNC policy. We believe that all of these arguments are fallacious.

One concern is that lowering the nicotine content of smoked tobacco products may result in "compensatory" smoking, where people smoke more cigarettes or puff more intensely to obtain an adequate nicotine dose. However, numerous studies have found that VLNCs, at worst, elicited limited "compensatory" smoking for a few days, after which people who continued smoking typically showed a sustained <u>reduction</u> in the number of cigarettes smoked. Hose findings are highly plausible as obtaining an effective dose of nicotine with VLNCs through compensatory smoking is impossible due to the very low level of nicotine in VLNCs (around 25 times lower than in a standard cigarette).

Second, some commentators have argued that removing the nicotine from cigarettes amounts to prohibition and infringes excessively on smokers' autonomy. Such arguments are misplaced in a context like New Zealand, where harm-reduced alternative nicotine products like e-cigarettes are easily available. Rather, as over 80% of people who smoke express regret that they ever started to smoke, state they intend to quit and have tried to quit in the past, 134 removing the addiction that is the major barrier to quitting will increase rather than compromise their autonomy.

Third, some suggest the proposed policies in the action plan, including mandated VLNCs, will increase the illicit and smuggled cigarette market. The reasons why this concern is likely greatly exaggerated and how it could be addressed have been outlined earlier in this submission.

Like other measures proposed in the APDD, a mandated VLNC policy will require careful planning with clearly determined processes and timelines, so that the necessary legislation, and systems for monitoring compliance and enforcement, can be introduced and implemented. Effective communication about the policy will be needed to explain its rationale and dispel any misunderstandings about the nature of VLNCs. For example, many people who smoke believe nicotine is highly toxic and hence may mistakenly perceive VLNCs as less harmful than their usual cigarettes, or that alternative products like e-cigarettes are more harmful than VLNCs. ¹²⁷ ¹³⁵⁻¹³⁷ These misperceptions could deter quitting or switching to alternative, less harmful, nicotine sources. ¹³⁷ To address this concern prior to and during implementation, mass and social media campaigns should explain the rationale for introducing VLNCs is that they are non-addictive; further,

these campaigns should explain that VLNCs are just as harmful as regular, non-VLNC, cigarettes, and advise people who smoke that nicotine is not the primary toxic constituent of tobacco products. In addition, robust monitoring and evaluation will be critical to assess the policy's impact and ensure people who smoke are supported to guit or switch to other nicotine sources.

(b) Prohibit filters in smoked tobacco products

Do you support prohibiting filters in smoked tobacco products?

- Yes
- No

Please give reasons.

We strongly support prohibiting filters in smoked tobacco products for two key reasons: filters perpetuate a consumer fraud and mislead people who smoke into believing they reduce the harms of smoking, and filters are a major source of environmental litter.

The popularity of filters increased as the harms of smoking became well-established and tobacco companies marketed filtered cigarettes as potential "reduced risk" options for people who did not want to quit smoking. 138 139 Research examining tobacco industry documents suggest that, while tobacco companies may have researched filters as an effort to manage risk, their internal research studies found filters had no material effect on eliminating toxins from smoke. 140

Claude Teague, a scientist working on filters for the tobacco company RJ Reynolds, found that changing the pH of filters led these to discolour after smoking, thus creating the misleading impression that filters removed toxins and thus rendered smoking safe. He wrote: "The cigarette smoking public attaches great significance to visual examination of the filter material in filter tip cigarettes after smoking the cigarettes. A before and after smoking visual comparison is usually made and if the filter tip material, after smoking, is darkened, the tip is automatically judged to be effective. While the use of such colour change material would probably have little or no effect on the actual efficiency of the filter tip material, the advertising and sales advantages are obvious." ¹⁴¹

A report on Vantage cigarettes conducted for RJ Reynolds revealed how successfully filters reassured smokers: "Vantage smokers believe that the filter itself is strong enough to catch these impurities and that the whole structure is such that they will not see so much of the resulting discoloration. These ideas make them think the end product is a milder and more 'healthful' smoke." Despite knowing filters did not reduce the risks people who smoke face, tobacco companies perpetuated the belief that filters were a harm-reduction attribute. This deception reassured smokers and dissuaded them from quitting. In the NZ ITC study, only half (52%) of people who smoked stated correctly that filters did not reduce the harmfulness of cigarettes (34% believed they did and 14% did not know). International studies have shown that young people and adults perceive cigarettes with filters or packaging referring to 'advanced filtration' as less harmful. As a suppose the people who smoked they did and the process of cigarettes with filters or packaging referring to 'advanced filtration' as less harmful.

As well as misleading smokers and attracting non-smokers, filters cause major environmental harm. Each year, around four trillion cigarette butts are discarded globally, making tobacco product waste the most commonly littered item in the world. A recent NZ National Litter Audit also reported that cigarette butts were the most frequently identified litter item. Item.

Because cigarette butts predominantly comprise a poorly biodegradable cellulose acetate filter (a form of plastic), this waste contains chemical toxins from tobacco and contributes to microplastic contamination in the environment. Tobacco waste deposited on beaches and in urban environments eventually enters

rivers, lakes and streams, and moves out to sea, where it contributes to accumulating plastic mountains. ¹⁴⁶⁻¹⁴⁹ This environmental contamination has particular salience to New Zealand, which has drawn heavily on its natural environment to market itself as a global tourism destination. ¹⁵⁰

Tobacco companies have suggested alternative responses to the problems caused by discarded filters, including education and greater provision of litter receptacles. These suggestions relocate responsibility from the industry that creates a defective product to the people who use that product, thus shifting attention away from tobacco companies' role in creating a product they know is harmful to human health as well as the environment. This focus on individuals, or down-stream actors and voluntary groups, suits the tobacco industry's interests and ignores evidence that up-stream interventions, such as changes in tobacco product design, will be more effective in reducing the environmental burden of tobacco product waste. The problems caused by discarded filters, including education and greater provision of litter receptacles. These suggestions relocate responsibility from the industry that creates a defective product the people who use that product, thus shifting attention away from tobacco companies' role in creating a product they know is harmful to human health as well as the environment. This focus on individuals, or down-stream actors and voluntary groups, suits the tobacco industry's interests and ignores evidence that up-stream interventions, such as changes in tobacco product design, will be more effective in reducing the environmental burden of tobacco product waste.

We believe the NZ Government's proposal to remove filters will finally acknowledge the harms these cigarette components cause; adopting this proposal would align with international initiatives. For example, members of the New York state legislature have proposed a statute banning the sale of single use filters (and e-cigarettes). The (European Union EU) Directive 2019/904, which aims to reduce the impact certain plastic products have on the environment, also addresses tobacco product waste, though the directive proposes developing biodegradable alternatives rather than banning all filters. The international initiatives are example, members of the New York state legislature have proposed a statute banning the sale of single use filters (and e-cigarettes). The international initiatives in the sale of single use filters (and e-cigarettes).

Designing filters from alternative, less environmentally harmful, components may seem an appropriate compromise. However, developing a more biodegradable filter has proved difficult, and even if this were possible, this measure would likely further mislead smokers. For example, it would encourage them to view discarded butts as harmless, even though toxic chemicals would still be leached into the environment. Further, biodegradable filters would leave unaddressed the decades-long consumer fraud that tobacco companies have perpetuated in creating the mistaken belief that filters make cigarettes less harmful and provide a vehicle for innovations, such as capsules, to recruit "replacement smokers". Only removing filters completely will eliminate a significant portion of tobacco product waste, address consumer deception, protect young people, and encourage smoking cessation. Recent commentaries suggest treating filters as additives could allow bans to be introduced using existing regulations and would simplify the introduction of this measure.¹⁵³

(c) Prohibit innovations aimed at increasing the appeal and addictiveness of smoked tobacco products

Do you support allowing the Government to prohibit tobacco product innovations through regulations?

- Yes
- No

Please give reasons

We strongly support allowing the Government to prohibit tobacco product innovations through regulations. As well as creating the deceptive impression they reduce harm, filters have become a vehicle for product innovation. For at least the last decade, filters have carried flavour beads, or capsules, which can be crushed whilst smoking to flavour the smoke that is inhaled and customise the smoking experience. While most capsule variants offer menthol or mint flavours, fruit flavours are increasingly common, as are cigarettes with two differently flavoured capsules in the same filter.

Tobacco companies have claimed that their marketing innovations attempt to increase the market share of particular brands and do not represent efforts to attract new smokers. However, established adult smokers often cite taste as a main reason why they select the brand of cigarettes they typically smoke, which makes a product innovation that alters taste surprising. A recent NZ study found that flavour-capsule cigarettes appealed more to susceptible young adult non-smokers than to young adult smokers. This finding is consistent with smokers avoiding cigarettes that alter the taste of their preferred brand and suggests the growth in capsule sales observed internationally is more likely to reflect recruitment of new, predominantly young "replacement smokers" than it is to stimulate brand switching among existing smokers. 159-161

We note that, while the legislation mandating standardised packaging restricts the use of tobacco sticks for promotional purposes (i.e., allows only specific colours and markings) it did not use the opportunity to require all tobacco products to use dissuasive colours or feature warnings. Evidence from NZ and elsewhere shows that dissuasive cigarette sticks featuring unappealing colours or warning messages are likely to deter smoking experimentation among young people. We strongly recommend that, as well as removing features likely to appeal to young people the APDD also require use of features in smoked tobacco products that will deter experimentation among youth.

4. Make tobacco products less affordable

 We support introducing a minimum price for tobacco, though only if accompanied by greater investment in stop smoking services, community based interventions, and mass and social media campaigns to support quitting.

(a) Set a minimum price for tobacco

Do you support setting a minimum price for all tobacco products?

- Yes
- No

Please give reasons.

We support setting a minimum price for all tobacco products, which could counter the current 'race to the bottom' strategy NZ tobacco companies have used with retail tobacco prices. However, we see this policy as a lower priority than other measures included in the APDD. To help prevent potential adverse effects of a minimum price policy, such a policy must be accompanied by much greater investment in stop smoking services, community-based interventions and in mass and social media campaigns to support quitting. Other measures to support people who smoke, such as introducing financial incentives to quit, should also be considered.¹⁶⁷

As elsewhere, NZ tobacco companies have created different market partitions differentiated by price (e.g., premium, everyday, budget and super budget). A NZ study shows tobacco companies have used budget price brands to reduce the effect tobacco tax increases would otherwise have on people who smoke; this strategy may explain findings that excise tax increases have had diminishing impacts. Known as "price-shifting", this strategy involves disproportionately larger increases to the price of premium brands and correspondingly smaller increases to budget and super budget brands. The strategy assumes purchasers of premium brands will find it easier to manage price increases and aims to maintain the affordability of brands more likely to be bought by people on lower incomes.

A minimum retail price would reduce the impact of price shifting and thus close a route tobacco companies have used to maintain brand affordability (contrary to the goal of excise tax increases). These policies are in place in about half of US States.¹⁷⁰ The UK introduced a minimum price policy (minimum excise tax) in 2017; the introduction of this policy "coincided with the end of sales growth in [budget] brands that had previously been cheapest."¹⁷¹ A minimum price policy could also improve health equity by stimulating increased quitting among people on lower incomes (where smoking prevalence is higher) and youth.¹⁷²

Tobacco companies' efforts to circumvent the impact of excise tax increases and minimum price laws means that, to be effective, these laws must include bans on all discounting strategies (e.g., for meeting specified sales targets or holding specified stock); these laws also require rigorous enforcement.¹⁷⁰ ¹⁷³

A minimum price policy could also be introduced in conjunction with a levy on the tobacco industry, which would help counter the possibility of any windfall profits arising from the policy as budget brand prices increased. A levy would be most effective if used alongside a **maximum price policy or price cap**, which would prevent tobacco companies from passing on increased costs to people who smoke.¹⁷⁴⁻¹⁷⁶

Given the tobacco industry's long history of manipulating product prices to circumvent policy impacts, we strongly recommend ongoing price monitoring, including monitoring the retail price per weight of tobacco,

to detect tactics used to disguise price manipulations. We also recommend monitoring the impact of tobacco retail prices have on smoking prevalence and tobacco consumption, and on other measures of well-being, such as food expenditure displacement, to monitor concerns that price-related measures may increase hardship for disadvantaged people who smoke.¹⁴ ¹⁷⁷

5. Enhance existing initiatives

- We welcome the APDD's recognition that mass and social media campaigns could greatly support
 cessation and deter youth smoking uptake; we strongly support increased investment in these
 activities.
- We believe these campaigns could also expose tobacco industry practices, support new smokefree
 norms that in turn create more supportive smokefree environments, and open opportunities for
 greater community engagement and leadership.
- We recommend greater consideration of industry denormalisation campaigns and strongly advise that all social and mass media activities are accompanied by robust evaluations.
- We strongly support increased investment in stop smoking services to prompt and assist quitting in priority populations.

(a) Increase investment in mass and social media campaigns

We strongly support enhancing existing initiatives by increasing investment in mass and social media campaigns. We believe these campaigns can fulfil several important roles. First, they may deter people from unhealthy behaviours, such as smoking, by promoting alternative new behaviours, such as becoming smokefree or, if that is not possible, switching to alternative sources of nicotine. As these new behaviours become established, they embed new social norms, which in turn reinforce the behaviour change. Second, mass and social media campaigns may create knowledge by exposing industry practices, such as how tobacco companies first deceived and then blamed people who smoke for the harms they experienced; this reframing may increase support for policy measures. Third, in line with the Ottawa Charter on Health Promotion, these campaigns can build supportive environments that support behaviour change. 152 178 Fourth, these campaigns create opportunities to work more effectively with communities affected by unhealthy products, such as tobacco. Ironically, despite the potential contribution to public health outcomes that mass and social media campaigns may play, NZ's expenditure on these measures actually declined following the Smokefree 2025 goal's announcement.¹⁷⁹ We welcome news from the 2021 Budget that expenditure on mass and social media campaigns will increase and believe this funding will support the Smokefree 2025 goal. While the budget allocation details are general, we strongly support this funding being allocated across national and community initiatives to ensure national reach supports community activity and impact.

Supporting and reinforcing behaviour change. Many social marketing campaigns aim to encourage and support compliance with policy changes by fostering understanding of the changes. For example, the current smokefree cars campaigns increases understanding of the health risk that smoking in cars poses to others and uses this knowledge to challenge beliefs about hazardous behaviours and presents an alternative action: keeping cars smokefree. The campaign also offers behavioural tips, such as putting cigarettes out of sight or focussing on alternative stimuli, such as music and supports behaviour change by showing how it might occur. In addition, the campaign website provides information about the very high public support for the law change and thus uses prevailing social norms to reinforce the new policy.

Reframing the acceptability of smoking and legitimacy of tobacco companies. NZ has been slow to adopt explicit industry denormalisation approaches, such as those used in the US Truth™ campaign, and has used softer themes. To date, the only campaign to take a denormalisation approach was led by Te Reo Marama, which created the Māori Killers campaign. People from affected populations led and mobilised these campaigns, which added to message credibility and authenticity. Arguments against NZ adopting a comprehensive denormalisation approach have noted the challenges of 'importing' overseas ideas without first engaging with affected populations, the sustained investment required, and the NZ tobacco industry's media profile, which is lower than that of major US tobacco companies. However, recent evidence suggests the tobacco industry uses both overt and covert approaches to influence policy making; ¹⁸⁰ 181 allowing

these companies to operate in obscurity reduces their public accountability and may slow policy progress. It is timely to consider whether these approaches could help foster support for policy measures and create an environment that reduces youth smoking uptake.

Creating new role models and norms. Mass and social media campaigns can reinforce behaviour, such as quitting and remaining smokefree, by presenting these as normative behaviours practised by role models. NZ has previously run a most powerful social norms campaign: the *Smoking: Not OUR Future* campaign. This campaign used quotes from youth role models to reframe smoking as socially unappealing. Instead of providing connections with others, speakers presented smoking as a "put off"; argued that finding the strength to quit brought mana, and talked of looking forward to a country without smoking.

Evaluating mass and social media campaigns is important and should be an integral component of all activity. US evidence shows these campaigns can be highly effective; for example, young people who had high exposure to the US Real Cost advertisements were less likely to report having smoked relative to young people who had lower exposure to the campaign.¹83 ¹84 Further, researchers estimated that campaign exposure was associated with several hundred thousand US young people not starting smoking.¹83 ¹84 Analysis of the Truth™ campaign found it achieved similar results;¹85 ¹86 economic analyses have also found mass and social media campaigns to be highly cost-effective and successful.¹87 ¹88

Evaluations of NZ smokefree campaigns also show their impact and suggest approaches that could be used successfully in the future, for example, a "by Māori, for Māori" campaign. NZ studies also show well planned, evidence-based and theory driven campaigns bring cost-savings to the health system, 191 particularly when integrated with other strategies, such as promoting calls to the Quitline. 192 There is also international evidence that these campaigns may reduce the risk of relapse 193 and potentially decrease inequities. Nonetheless, careful planning is required to avoid the risk that campaigns privilege population groups with greater access to resources while disadvantaging priority groups (e.g. Māori or Pacific) that may have fewer resources and less support.

We suggest key roles for mass and social media campaigns could include communicating the goal's meaning and rationale, particularly given evidence people from population groups with higher smoking prevalence are confused about the goal's implications. ¹⁹⁴ Campaigns could also explain core policy measures and build support for these. For example, if the Action Plan introduces very low nicotine cigarettes campaigns could increase knowledge by explaining how VLNCs will support switching to other nicotine sources, such as NRT (e.g. patches or gum) or vaping products, or to quit nicotine use altogether. Integrated campaigns could intensify quitting support available from health workers, ensure alternative products were accessible from expert retailers who could assist switching, and provide on-going support to assist people to quit nicotine use when they felt confident they would not relapse to smoking. Campaigns could also address misperceptions that may impede use of alternative products, such as confusion between nicotine, which causes addiction, and combustion products, which cause harm. Finally, campaigns could counter potential tobacco industry activity, and reduce any resulting confusion.

We noted that successful campaigns require a strategic and integrated approach; campaigns must follow best practice guidelines, particularly with respect to campaign reach, frequency and duration, if they are to have a strong impact. 195-197 They must also reflect the needs, priorities and voices of core communities, particularly Māori, whose leaders first proposed a Smokefree Goal in 2010, and be designed to eliminate smoking disparities. Finally, campaigns require careful evaluation at multiple points, to ensure message salience and appropriateness, assess understanding, monitor unintended consequences, and estimate behaviour change.

(b) Increase investment in stop smoking services for priority populations

We strongly support increased investment in stop smoking services to assist quitting for people who smoke, particularly in priority populations.

Investment in cessation support is important from an ethical and social justice perspective, particularly if interventions introduced in the Action Plan create inconvenience (e.g. greatly reduced retail availability) or have adverse economic impacts (e.g. minimum price). Monitoring impacts on people who continue to smoke, particularly people living with disadvantage, is crucial as is ensuring people who smoke have access to appropriate, sustained cessation support. We believe greater support of stop smoking services is crucial, given currently only a tiny proportion of the additional revenue from tobacco excise tax, all of which comes from people who smoke, is reinvested in supporting those people to quit.

Enhanced cessation support will act as an adjunct intervention that further increases the impact of Action Plan measures, such as reducing the nicotine content of smoked tobacco products and decreasing the number of retail outlets selling these products. However, enhanced smoking cessation services are very unlikely on their own to have a significant impact in reducing smoking prevalence and hence should be viewed as a supporting intervention. Although we support increased investment in these services, we expect increased investment would be a temporary measure, and the required resources and funding would diminish as prevalence declines rapidly following full implementation of the Action Plan.

Research undertaken by ASPIRE 2025 members focuses on population-based policy measures, so we have not commented in detail on how enhanced smoking cessation support should be delivered. However, we suggest the following should be considered:

- A review of existing services (e.g., specialist cessation support including Aukati Kai Paipa, the Quitline, and hospital and primary health care cessation support) to evaluate their effectiveness and cost-effectiveness. The review should assess how best to support people from priority populations to quit (e.g. Māori, Pacific, low SES communities, people living with mental illness); it should also identify local best practice that could be implemented in other settings;
- Interventions to increase the integration between interventions and services delivered in different settings e.g., to enhance coordination between hospital-based and primary care/community based services after hospital discharge or between the Quitline services and other cessation services.
- Development, piloting and evaluation of cessation services in new settings e.g., in high prevalence
 occupational settings, during post-release follow-up for prisoners, for people living in temporary and
 hostel accommodation, people receiving community-based mental health services support, for young
 people in schools, further/tertiary education and occupational settings, for people using specialist vape
 stores.
- An innovation fund to investigate new methods of providing smoking cessation support e.g. financial incentives, Smartphone-app assisted cessation, use of vaping products in cessation.
- Implementation of service contracts and reporting requirements that encourage and support holistic
 and whānau centred delivery of smoking cessation support (previously contracts and reporting
 arrangements have discouraged such approaches).

Of all the issues raised in this discussion document, what would you prioritise to include in the action plan? Please give reasons.

Do you have any other comments on this discussion document?

Based on the available evidence from intervention and modelling studies, we support the following priority interventions, which we believe will achieve rapid, profound and sustained reductions in smoking prevalence:

- Greatly reducing the nicotine content of smoked tobacco products
- Substantially reducing the number of retail outlets where smoked tobacco products are sold

The following measures are essential supporting interventions to help achieve rapid reductions in smoking prevalence:

- Retailer licensing
- Enhanced mass and social media campaigns
- Enhanced stop smoking services, particularly for priority populations
- Increased support for community actions to support the Smokefree 2025 goal

Other measures are essential for the effective and equitable implementation of a comprehensive action plan:

- Strengthened Māori governance of the tobacco control programme
- Strengthened compliance and enforcement, including actions to reduce the risk of significant illicit trade
- A comprehensive evaluation, monitoring and research plan with appropriate reporting arrangements so that progress can be assessed

Other measures are a lower priority, though we support each of these as they would support the plan and strengthen the likelihood the 2025 goal will be achieved and some have additional potential benefits:

- A Smokefree Generation policy will augment other measures to minimise smoking uptake and ensure that, once achieved, minimal smoking prevalence is sustained and smoked tobacco product sales are eventually eliminated (as demand falls to zero)
- A ban on product design innovations will prevent tobacco companies from creating new smoked tobacco products with attributes that appeal to young people
- A ban on filters in smoked tobacco products will provide a further stimulus to people who smoke to quit and will greatly reduce the adverse environmental impacts of smoked tobacco products
- A minimum price intervention will reduce tobacco companies' practice of undermining the impact of tobacco excise tax increases by using differential pricing and through the proliferation of budget brands.

Other measures could also be considered, though only **in addition to** and not instead of the measures described above:

- National legislation to introduce smokefree outdoors restrictions such as smokefree parks, playgrounds and outdoor dining to further denormalise smoking (we have added an appendix to discuss this proposal in more detail)
- A levy on the tobacco industry profits and/or a maximum price for smoked tobacco products to prevent any windfall profits from a minimum price intervention.

Finally, we strongly recommend that the final Action Plan is as comprehensive as possible; this approach would maximise the synergies possible and minimise the likelihood tobacco companies could disrupt the Smokefree 2025 goal. We suggest urgent attention is given to establishing a detailed implementation process and timeline (including the legislative timelines, where legislation is required), and developing a communications strategy to explain the adopted action plan and its key components to the public, people who smoke and key stakeholders such as retailers and health care providers.

Appendix

Smoking denormalisation and smokefree outdoor areas

In addition to the key measures included in the APDD we recommend that consideration is given to new legislation to help denormalise smoking through mandated smokefree outdoor areas. However, such a measure should be **in addition to** and not instead of the priority measures that we have identified in the APDD, as this measure in itself is likely to have a less profound impact in reducing smoking prevalence.

Why denormalise smoking?

Half a million smokers, many or most of whom will want to quit in the next five years, need places where being smokefree is normal. There is NZ evidence that seeing smoking around you at the neighbourhood level increases the chance of starting smoking or not being able to quit.¹⁹⁹ International evidence indicates that smokefree outdoor hospitality areas increase quitting attempts and reduce relapses.²⁰⁰ ²⁰¹

Smokers trying to quit need smokefree outdoor public areas and to be able to have a drink outside a bar without reminders about smoking. The outside areas of bars and cafés in NZ remain one of the most risky places for prompting relapse for someone quitting.

Legally required smokefree outdoor areas are far from normal for NZ. While many local authorities have tried to fill the void left by central government, existing local smokefree outdoor policies are largely unenforceable, with only a few areas on public land covered by council licence arrangements in some cities. ²⁰² Local Government New Zealand has been asking for national legislation for smokefree outdoor hospitality areas since 2015.

Protecting people from tobacco smoke pollution

Smokefree outdoor areas also help protect people from tobacco smoke pollution. Workers and others inside buildings are affected by tobacco smoke drifting in from outside, a problem in NZ.⁸⁻¹⁰ Government continues to have difficulties in trying to enforce the current unpractical guidance on what inside and outside hospitality areas are, resulting in costly court cases.¹¹

Public support for change

There has been majority public support for a number of policies for years. Even in 2010, 59% of those surveyed by the Health Sponsorship Council wanted smokefree outdoor music or community events and activities.²⁰³ A 2013 Auckland City survey found 64% support for outdoor town centres, 65% support for smokefree footpaths outside local shops, 84% support for smokefree building entrances, and 73% support for smokefree outdoor dining.²⁰⁴

Surveys indicate that Māori and Pasifika were more likely than others in Aotearoa to give 'setting an example to children' for wanting to quit or stay quit.²⁰⁵ Māori, Pasifika and Asian smokers were more likely to support new smokefree outdoor areas than other ethnic groups.²⁰⁶

Recommendations

We recommend that:

- 1. Current NZ local authority best practice outdoor policies be a matter of law for all Aotearoa, so all citizens can benefit. This should include buffer zones, such as the areas within '10 metres of children's play equipment in outdoor public places' law in all Australian states and territories.²⁰⁷
- 2. All government funded, or publicly owned organisations, should be smokefree for all their grounds: This includes tertiary education and health facility campuses and grounds, railway stations, and airports.
- 3. Smokefree areas should be mandated within 10 metres of doorways, windows, and air intakes of buildings that the public use, and from outdoor public seating.

- 4. Public land within 100 metres of school and pre-school entrances should be smokefree (ie, there would be a smokefree zone on roads and other public areas for 100m).
- 5. Effective signage for smokefree outdoor areas should be mandated, as is currently required for school grounds. ²⁰⁸ Wellington surveys indicate that less than a half of both smokers and the wider public were aware of current voluntary smokefree areas. ²⁰⁹

References

- New Zealand Parliament. Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori. Report of the Māori Affairs Select Committee. Wellington: New Zealand Parliament 2010.
- 2. Daube M, Maddox R. Impossible until implemented: New Zealand shows the way. *Tob Control* 2021:tobaccocontrol-2021-056776. doi: 10.1136/tobaccocontrol-2021-056776
- 3. Toki V. Culture the foundation of Maori Governance. NZ Lawyer 2013;201(24)
- 4. Apārangi Tautoko Auahi Kore (ATAK) Māori Smokefree Coalition. Maori Tobacco Control Strategy. Wellington: ATAK, 2003.
- 5. Thomson G, Edwards R. The race to be the first place in Aotearoa to be smokefree. Public Health Expert. Wellington: University of Otago, Wellington, 2015.
- 6. Health Promotion Agency. Maps of NZ Councils' Smokefree Outdoor Policies and Spaces [Available from: https://www.smokefree.org.nz/smokefree-resources/maps-of-nz-councils-smokefree-outdoor-policies-and-spaces.
- 7. Health Promotion Agency. Tobacco-free retailers' toolkit [Available from: https://www.smokefree.org.nz/smokefree-resources/tobacco-free-retailers-toolkit.
- 8. Edwards R, Hoek J, Beaglehole R, et al. Realignment of tobacco control services—will it be sufficient to achieve the nation's Smokefree 2025 Goal? *New Zealand Medical Journal* 2015;128(1413):84-87.
- 9. Gendall P, Hoek J, Maubach N, et al. Public support for more action on smoking *New Zealand Medical Journal* 2013;126:85-94.
- 10. ITC Project. Awareness and support for New Zealand's Smokefree 2025 goal and key measures to achieve it: Evidence from the 2016 and 2018 International Tobacco Control (ITC) New Zealand and ITC Crosscountry findings Wellington: University of Otago and University of Waterloo, 2020.
- 11. Gendall P, Hoek J, Edwards RWDtGMttNZP. What Does the 2025 Goal Mean to the New Zealand Public? New Zealand Medical Journal 2014;127:1406.
- 12. Edwards R, Thomson G, Wilson N, et al. After the smoke has cleared: evaluation of the impact of a new national smoke-free law in New Zealand. *Tob Control* 2008;17(1)
- 13. Edwards R, Gifford H, Waa A, et al. Beneficial impacts of a national smokefree environments law on an indigenous population: a multifaceted evaluation. *Int J Equity Health* 2009;8:12. doi: 1475-9276-8-12 [pii]
- 10.1186/1475-9276-8-12 [published Online First: 2009/05/02]
- 14. Ernst and Young. Evaluation of the tobacco excise increases Final Report 27 November 2018. Wellington: Ministry of Health 2018.
- 15. Edwards R, Ajmal A, Healey B, et al. Impact of removing point-of-sale tobacco displays: data from a New Zealand youth survey. *Tob Control* 2017;26(4):392-98. doi: 10.1136/tobaccocontrol-2015-052764 [published Online First: 2016/07/06]
- 16. ITC Project. Standardised Packaging for Tobacco Products in New Zealand: Evidence of Policy Impact from the International Tobacco Control Policy Evaluation Project. Wellington: University of Otago and University of Waterloo, 2020.
- 17. Haw SJ, Gruer L, Amos A, et al. Legislation on smoking in enclosed public places in Scotland: how will we evaluate the impact? *Journal of Public Health* 2006;28(1):24.
- 18. Waa A, Edwards R, Thornley L, et al. Achieving Smokefree Aotearoa 2025: monitoring and evaluation plan. Wellington, 2017.
- 19. Edwards R, Peace J, Carter K, et al. An examination of smoking initiation rates by age: results from a large longitudinal study in New Zealand. *Aus NZ J Public Health* 2013;37(6):516-19.
- 20. Rowell A, Evans-Reeves K, Gilmore AB. Tobacco industry manipulation of data on and press coverage of the illicit tobacco trade in the UK. *Tob Control* 2014;23(e1):e35-43. doi: 10.1136/tobaccocontrol-2013-051397 [published Online First: 2014/03/13]
- 21. Johnsen M. Smokefree group says cigarette purchase age would not dent smoking rates. Wellington: Radio NZ; April 15 2021 [Available from: https://www.rnz.co.nz/news/national/440560/smokefree-group-says-cigarette-purchase-age-would-not-dent-smoking-rates, accessed May 24 2021].
- 22. Scollo M, Bayly M, Wakefield M. Availability of illicit tobacco in small retail outlets before and after the implementation of Australian plain packaging legislation. *Tob Control* 2015;24(e1):e45-51. doi: 10.1136/tobaccocontrol-2013-051353 [published Online First: 2014/04/12]

- 23. Scollo M, Zacher M, Durkin S, et al. Early evidence about the predicted unintended consequences of standardised packaging of tobacco products in Australia: a cross-sectional study of the place of purchase, regular brands and use of illicit tobacco. *BMJ Open* 2014;4(8):e005873. doi: 10.1136/bmjopen-2014-005873 [published Online First: 2014/08/30]
- 24. Australian Government Department of Health. Post-Implementation Review Tobacco Plain Packaging. Canberra: Australian Government 2016.
- 25. KPMG. Illicit tobacco in New Zealand 2018: Full Year Report2019.
- 26. Smith J, Thompson S, Lee K. 'Both Sides of the Argument'? A critical review of existing evidence on the illicit trade in tobacco products in Canada. *Tob Control* 2019;28(e2):e141-e47. doi: 10.1136/tobaccocontrol-2018-054687 [published Online First: 2019/02/17]
- 27. Gallagher AWA, Evans-Reeves KA, Hatchard JL, et al. Tobacco industry data on illicit tobacco trade: a systematic review of existing assessments. *Tob Control* 2019;28(3):334-45. doi: 10.1136/tobaccocontrol-2018-054295 [published Online First: 2018/08/24]
- 28. Marshall A, Edwards R, Wilson N, et al. Missed tobacco tax revenue from 'foreign' packs in New Zealand: results from a discarded pack collection study. *The New Zealand medical journal* 2013;126(1386):124-6.
- 29. Wilson N, Thomson G, Edwards R, et al. Estimating missed government tax revenue from foreign tobacco: survey of discarded cigarette packs. *Tob Control* 2009;18(5):416-8. doi: tc.2009.031278 [pii]
- 10.1136/tc.2009.031278 [published Online First: 2009/08/04]
- 30. Ajmal A, Veng Ian U. Tobacco tax and the illicit trade in tobacco products in New Zealand. *Aust New Zealand J Public Health* 2015;39(2):116-20. doi: 10.1111/1753-6405.12389
- 31. Edwards R, Johnson E. Personal communication: Unpublished preliminary analysis of ITC data, 2021.
- 32. Lindblom EN. Illicit Trade Poses No Threat to an FDA Rule to Minimize Nicotine in Smoked Tobacco Products. *Am J Public Health* 2019;109(7):960-61. doi: 10.2105/AJPH.2019.305138 [published Online First: 2019/06/06]
- 33. Ribisl KM, Hatsukami DK, Huang J, et al. Strategies to Reduce Illicit Trade of Regular Nicotine Tobacco Products After Introduction of a Low-Nicotine Tobacco Product Standard. *Am J Public Health* 2019;109(7):1007-14. doi: 10.2105/AJPH.2019.305067 [published Online First: 2019/06/06]
- 34. Joossens L, Raw M. From cigarette smuggling to illicit tobacco trade. *Tob Control* 2012;21(2):230-4. doi: 10.1136/tobaccocontrol-2011-050205 [published Online First: 2012/02/22]
- 35. World Bank Group. Confronting illicit tobacco: a global review of country experiences: World Bank Group; 2019 [Available from: http://documents1.worldbank.org/curated/en/677451548260528135/pdf/133959-REPL-PUBLIC-6-2-2019-19-59-24-WBGTobaccolllicitTradeFINALvweb.pdf.
- 36. Joossens L, Raw M. Progress in combating cigarette smuggling: controlling the supply chain. *Tob Control* 2008;17(6):399. doi: 10.1136/tc.2008.026567
- 37. Robertson L, Marsh L, Hoek J, et al. Regulating the sale of tobacco in New Zealand: A qualitative analysis of retailers' views and implications for advocacy. *International Journal of Drug Policy* 2015;26(12):1222-30.
- 38. Bowden JA, Dono J, John DL, et al. What happens when the price of a tobacco retailer licence increases? *Tob Control* 2014;23(2):178-80.
- 39. Halonen JI, Kivimäki M, Kouvonen A, et al. Proximity to a tobacco store and smoking cessation: a cohort study. *Tob Control* 2014;23(2):146-51.
- 40. Luke DA, Hammond RA, Combs T, et al. Tobacco town: computational modeling of policy options to reduce tobacco retailer density. *American journal of public health* 2017;107(5):740-46.
- 41. Petrović-van der Deen FS, Blakely T, Kvizhinadze G, et al. Restricting tobacco sales to only pharmacies combined with cessation advice: a modelling study of the future smoking prevalence, health and cost impacts. *Tob Control* 2019;28(6):643-50.
- 42. Pearson AL, Cleghorn CL, van der Deen FS, et al. Tobacco retail outlet restrictions: health and cost impacts from multistate life-table modelling in a national population. *Tob Control* 2017;26(5):579-85.
- 43. van der Deen FS, Wilson N, Cleghorn CL, et al. Impact of five tobacco endgame strategies on future smoking prevalence, population health and health system costs: two modelling studies to inform the tobacco endgame. *Tob Control* 2018;27(3):278-86.
- 44. Marsh L, Doscher C, Cameron C, et al. How would the tobacco retail landscape change if tobacco was only sold through liquor stores, petrol stations or pharmacies? *Aust New Zealand J Public Health* 2020;44(1):34-39.

- 45. Caryl FM, Pearce J, Reid G, et al. Simulating the density reduction and equity impact of potential tobacco retail control policies. *Tob Control* 2020;doi:10.1136/tobaccocontrol-2020-05600
- 46. Longley M. Cigarettes in pharmacy is a smoking hot issue. Pharmacy Today, 2017.
- 47. van der Deen FS, Pearson AL, Wilson N. Ending the Sale of Cigarettes at US Pharmacies. *Journal of American Medical Association* 2014;312(5):559.
- 48. Robertson L, Gendall P, Hoek J, et al. Smokers' perceptions of the relative effectiveness of five tobacco retail reduction policies. *Nicotine & Tobacco Research* 2017;19(2):245-52.
- 49. Paynter J, Edwards R, Schluter PJ, et al. Point of sale tobacco displays and smoking among 14–15 year olds in New Zealand: a cross-sectional study. *Tob Control* 2009;18(4):268-74.
- 50. Finan LJ, Lipperman-Kreda S, Abadi M, et al. Tobacco outlet density and adolescents' cigarette smoking: a meta-analysis. *Tob Control* 2019;28(1):27-33. doi: 10.1136/tobaccocontrol-2017-054065
- 51. Cantrell J, Pearson JL, Anesetti-Rothermel A, et al. Tobacco Retail Outlet Density and Young Adult Tobacco Initiation. *Nicotine & Tobacco Research* 2015;18(2):130-37. doi: 10.1093/ntr/ntv036
- 52. Burton S, Hoek J, Nesbit P, et al. "Smoking is bad, it's not cool... yet I'm still doing it": Cues for tobacco consumption in a 'dark' market. *Journal of Business Research* 2015;68(10):2067-74.
- 53. Hoek J, Gifford H, Pirikahu G, et al. How do tobacco retail displays affect cessation attempts? Findings from a qualitative study. *Tob Control* 2010;19(4):334-37. doi: 10.1136/tc.2009.031203
- 54. Brillinger J, Marsh L, Hoek J. Bar Atmospherics and Smoking: A Qualitative Analysis of New Zealand Young Adult Smokers. *Nicotine & Tobacco Research* 2020;23(4):724-31. doi: 10.1093/ntr/ntaa227
- 55. Robertson L, Marsh L, Edwards R, et al. Regulating tobacco retail in New Zealand: what can we learn from overseas. *NZ Med J* 2016;129(1432):74-9.
- 56. Gray R. Do young adults make informed choices about smoking? University of Otago, 2016.
- 57. RJ Reynolds 1984. Young Adult Smokers: Strategies and Opportunities. RJ Reynolds document, Bates No. 501928462-8550. .
- 58. Gartner CE, Barendregt JJ, Hall WD. Predicting the future prevalence of cigarette smoking in Australia: how low can we go and by when? *Tob Control* 2009;18(3):183. doi: 10.1136/tc.2008.027615
- 59. Nuyts PAW, Kuijpers TG, Willemsen MC, et al. How can a ban on tobacco sales to minors be effective in changing smoking behaviour among youth? A realist review. *Prev Med* 2018;115:61-67. doi: 10.1016/j.ypmed.2018.08.013 [published Online First: 2018/08/26]
- 60. Berrick AJ. The tobacco-free generation proposal. *Tob Control* 2013;22 Suppl 1:i22-6. doi: 10.1136/tobaccocontrol-2012-050865
- 61. van der Deen FS, Wilson N, Cleghorn CL, et al. Impact of five tobacco endgame strategies on future smoking prevalence, population health and health system costs: two modelling studies to inform the tobacco endgame. *Tob Control* 2018;27:278-86. doi: 10.1136/tobaccocontrol-2016-053585 [published Online First: Published Online First: 24 June 2017]
- 62. Myers AE, Hall MG, Isgett LF, et al. A comparison of three policy approaches for tobacco retailer reduction. *Preventive medicine* 2015;74:67-73.
- 63. Robertson L, Marsh L. Estimating the effect of a potential policy to restrict tobacco retail availability in New Zealand. *Tob Control* 2019;28(4):466-68.
- 64. Ackerman A, Etow A, Bartel S, et al. Reducing the density and number of tobacco retailers: policy solutions and legal issues. *Nicotine & Tobacco Research* 2017;19(2):133-40.
- 65. Owens C. Email exchange. In: Bostic C, ed. United States, 2021.
- 66. Robertson L, Cameron C, Hoek JA, et al. Prevalence and characteristics of tobacco purchases in convenience stores: results of a postpurchase intercept survey in Dunedin, New Zealand. *Tob Control* 2019;28(6):696-700.
- 67. Lawman HG, Dolatshahi J, Mallya G, et al. Characteristics of tobacco purchases in urban corner stores. *Tob Control* 2018;27(5):592-95.
- 68. Marsh L, Cameron C, Quigg R, et al. Is the tobacco 'footfall'argument justified for tobacco purchases in New Zealand convenience stores? *Tob Control* 2020; http://dx.doi.org/10.1136/tobaccocontrol-2020-056032
- 69. Wood L, Gazey A. Tobacco mythbusting—tobacco is not a major driver of foot traffic in low socio-economic small retail stores. *Tob Control* 2021; doi:10.1136/tobaccocontrol-2020-05631
- 70. Jaine R, Russell M, Edwards R, et al. New Zealand tobacco retailers' attitudes to selling tobacco, point-of-sale display bans and other tobacco control measures: a qualitative analysis. *The New Zealand Medical Journal (Online)* 2014;127(1396)
- 71. Badu E, Fowler E. "If government can't stop the smokes, no way we can stop selling them": why retailers want Government to act. *The New Zealand medical journal* 2018;131(1482):89-91.

- 72. ASH UK. Counter Arguments How important is tobacco to small retailers? : ASH UK; 2016 [Available from: https://ash.org.uk/information-and-resources/reports-submissions/reports/counter-arguments-how-important-is-tobacco-to-small-retailers/ accessed 29 April 2021.
- 73. Kirkness M. Tobacco tax shares blame for dairy crime The New Zealand Herald 2017 2 June 2017.
- 74. New Zealand Association of Convenience Stores. NZACS Premier Members: NZACS; 2007 [Available from: https://web.archive.org/web/20071228022232/http://nzacs.com/nzacs_premier_members accessed 29 April 2021.
- 75. New Zealand Association of Convenience Stores. NZACS Board: NZACS; 2007 [Available from: https://web.archive.org/web/20071228022227/http://nzacs.com/nzacs_board accessed 29 April 2021.
- 76. New Zealand Association of Convenience Stores. NZACS Board: NZACS; 2021 [Available from: http://web.archive.org/save/https://www.nzacs.com/nzacs-board/ accessed 29 April 2021.
- 77. New Zealand Association of Convenience Stores. NZACS Board: NZACS; 2012 [Available from: https://web.archive.org/web/20120317090739/http://www.nzacs.com/nzacs-board/ accessed 29 April 2021.
- 78. New Zealand Association of Convenience Stores. Peter Jowett Scholarship and Industry Awards Event: NZACS; 2013 [Available from: https://web.archive.org/save/https://www.nzacs.com/peter-jowett-scholarship-and-industry-awards-event-2/ accessed 29 April 2021.
- 79. New Zealand Association of Convenience Stores. Peter Jowett Scholarship and Industry Awards Event: NZACS; 2018 [Available from: http://web.archive.org/save/https://www.nzacs.com/2018-peter-jowett-industry-awards-12-july/ accessed 29 April 2021.
- 80. Bull R. NZACS Chairman's Annual Report 2016: NCACS; 2016 [Available from: http://web.archive.org/save/https://www.nzacs.com/wp-content/uploads/2016/08/NZACS-Chairman-Report-2016.pdf accessed 29 April 2021.
- 81. Manch T. Violence cost of ciggie tax Waikato Times 2018 15 March 2018.
- 82. Edmunds S. Proof shops are coining it. *Herald on Sunday* 2013 3 March 2013.
- 83. Bozinoff N, Le Foll B. Understanding the implications of the biobehavioral basis of nicotine addiction and its impact on the efficacy of treatment. *Expert Rev Respir Med* 2018;12(9):793-804. doi: 10.1080/17476348.2018.1507736 [published Online First: 2018/08/11]
- 84. Prochaska JJ, Benowitz N, L. Current advances in research in treatment and recovery: Nicotine addiction. *Science Advances* 2019;5:eaay8763.
- 85. Wakefield M, Germain D, Durkin S. How does increasingly plainer cigarette packaging influence adult smokers' perceptions about brand image? An experimental study. *Tob Control* 2008;17(6):416-21. doi: 10.1136/tc.2008.026732
- 86. Kessler DA. The control and manipulation of nicotine in cigarettes Tob Control 1994;3:362-69.
- 87. Proctor RN. Golden Holocaust: Origins of the Cigarette Catastrophe and the Case for Abolition. Berkley, California: University of California Press 2011.
- 88. Wayne GF, Carpenter CM. Tobacco Industry Manipulation of Nicotine Dosing. In: Henningfield JE, London ED, Pogun S, eds. Nicotine Psychopharmacology. Berlin, Heidelberg: Springer Berlin Heidelberg 2009:457-85.
- 89. Benowitz NL, Henningfield JE. Establishing a nicotine threshold for addiction. The implications for tobacco regulation. *The New England journal of medicine* 1994;331(2):123-5. doi: 10.1056/NEJM199407143310212
- 90. Benowitz NL, Donny EC, Hatsukami DK. Reduced nicotine content cigarettes, e-cigarettes and the cigarette end game. *Addiction* 2017;112(1):6-7. doi: 10.1111/add.13534
- 91. Benowitz NL, Henningfield JE. Reducing the nicotine content to make cigarettes less addictive. *Tob Control* 2013;22 Suppl 1:i14-7. doi: http://dx.doi.org/10.1136/tobaccocontrol-2012-050860
- 92. Benowitz NL, Henningfield JE. Nicotine Reduction Strategy: State of the science and challenges to tobacco control policy and FDA tobacco product regulation. *Prev Med* 2018;117:5-7. doi: 10.1016/j.ypmed.2018.06.012 [published Online First: 2018/06/27]
- 93. Donny EC, Walker N, Hatsukami D, et al. Reducing the nicotine content of combusted tobacco products sold in New Zealand. *Tob Control* 2017(26):e37-e42. doi: 10.1136/tobaccocontrol-2016-053186
- 94. Gottleib S, Zeller M. A nicotine-focused framework for public health. *The New England journal of medicine* 2017;377(12):1111-14. doi: 10.1056/NEJMp1707409 [published Online First: 2017/09/21]
- 95. Hatsukam DK, Kotlyar1 M, Hertsgaard LA, et al. Reduced nicotine content cigarettes: effects on toxicant exposure, dependence and cessation. *Addiction* 2010;105:343-55. doi: 10.1111/j.1360-0443.2009.02780.x

- 96. Hatsukami DK, Perkins KA, Lesage MG, et al. Nicotine reduction revisited: science and future directions. *Tob Control* 2010;19(5):e1-10. doi: 10.1136/tc.2009.035584 [published Online First: 2010/09/30]
- 97. World Health Organization Study Group on Tobacco Regulaton. Report on the scientific basis of tobacco product regulation. Seventh report of a WHO Study Group. Geneva: World Health Organization 2019.
- 98. Benowitz NL, Dains KM, Hall SM, et al. Smoking behavior and exposure to tobacco toxicants during 6 months of smoking progressively reduced nicotine content cigarettes. *Cancer Epidemiol Biomarkers Prev* 2012;21(5):761-9. doi: 10.1158/1055-9965.EPI-11-0644
- 99. Benowitz NL, Hall SM, Stewart S, et al. Nicotine and carcinogen exposure with smoking of progressively reduced nicotine content cigarette. *Cancer Epidemiol Biomarkers Prev* 2007;16(11):2479-85. doi: 10.1158/1055-9965.EPI-07-0393 [published Online First: 2007/11/17]
- 100. Dermody SS, Donny EC, Hertsgaard LA, et al. Greater reductions in nicotine exposure while smoking very low nicotine content cigarettes predict smoking cessation. *Tob Control* 2015;24(6):536-9. doi: 10.1136/tobaccocontrol-2014-051797 [published Online First: 2014/09/07]
- 101. Ding YS, Ward J, Hammond D, et al. Mouth-level intake of benzo[a]pyrene from reduced nicotine cigarettes. *Int J Environ Res Public Health* 2014;11(11):11898-914. doi: 10.3390/ijerph111111898 [published Online First: 2014/11/21]
- 102. Donny EC, Denlinger RL, Tidey JW, et al. Randomized Trial of Reduced-Nicotine Standards for Cigarettes. *The New England journal of medicine* 2015;373(14):1340-9.
- 103. Donny EC, Jones M. Prolonged exposure to denicotinized cigarettes with or without transdermal nicotine. *Drug Alcohol Depend* 2009;104(1-2):23-33. doi: 10.1016/j.drugalcdep.2009.01.021 [published Online First: 2009/05/19]
- 104. Hatsukami D.K., Luo X., Jensen J.A., et al. Effect of Immediate vs Gradual Reduction in Nicotine Content of Cigarettes on Biomarkers of Smoke Exposure: A Randomized Clinical Trial. *JAMA* 2018;320(880-891) doi: 10.1001/jama.2018.11473
- 105. Hatsukami DK, Kotlyar M, Hertsgaard LA, et al. Reduced nicotine content cigarettes: effects on toxicant exposure, dependence and cessation. *Addiction* 2010;105(2):343-55. doi: 10.1111/j.1360-0443.2009.02780.x
- 106. Hatsukami DK, Luo X, Dick L, et al. Reduced nicotine content cigarettes and use of alternative nicotine products: exploratory trial. *Addiction* 2017;112(1):156-67. doi: 10.1111/add.13603
- 107. McRobbie H, Przulj D, Smith KM, et al. Complementing the Standard Multicomponent Treatment for Smokers With Denicotinized Cigarettes: A Randomized Trial. *Nicotine & Tobacco Research* 2015;18(5):1134-41. doi: 10.1093/ntr/ntv122
- 108. Smith TT, Koopmeiners JS, White CM, et al. The Impact of Exclusive Use of Very Low Nicotine Cigarettes on Compensatory Smoking: An Inpatient Crossover Clinical Trial. *Cancer Epidemiol Biomarkers Prev* 2020;29(4):880-86. doi: 10.1158/1055-9965.EPI-19-0963 [published Online First: 2020/02/28]
- 109. Walker N, Fraser T, Howe C, et al. Abrupt nicotine reduction as an endgame policy: a randomised trial. *Tob Control* 2014 doi: 10.1136/tobaccocontrol-2014-051801
- 110. Walker N, Howe C, Bullen C, et al. The combined effect of very low nicotine content cigarettes, used as an adjunct to usual Quitline care (nicotine replacement therapy and behavioural support), on smoking cessation: a randomized controlled trial. *Addiction* 2012;107(10):1857-67. doi: 10.1111/j.1360-0443.2012.03906.x
- 111. Hammond D, O'Connor RJ. Reduced nicotine cigarettes: smoking behavior and biomarkers of exposure among smokers not intending to quit. *Cancer Epidemiol Biomarkers Prev* 2014;23(10):2032-40.
- 112. Benowitz NL, Jacob P, 3rd, Herrera B. Nicotine intake and dose response when smoking reduced-nicotine content cigarettes. *Clin Pharmacol Ther* 2006;80(6):703-14. doi: 10.1016/j.clpt.2006.09.007 [published Online First: 2006/12/21]
- 113. Benowitz NL, Nardone N, Dains KM, et al. Effect of reducing the nicotine content of cigarettes on cigarette smoking behavior and tobacco smoke toxicant exposure: 2-year follow up. *Addiction* 2015;110(10):1667-75. doi: 10.1111/add.12978 [published Online First: 2015/07/23]
- 114. Mercincavage M, Souprountchouk V, Tang KZ, et al. A Randomized Controlled Trial of Progressively Reduced Nicotine Content Cigarettes on Smoking Behaviors, Biomarkers of Exposure, and Subjective Ratings. *Cancer Epidemiol Biomarkers Prev* 2016;25(7):1125-33. doi: 10.1158/1055-9965.EPI-15-1088 [published Online First: 2016/05/20]
- 115. Smith TT, Koopmeiners JS, Tessier KM, et al. Randomized Trial of Low-Nicotine Cigarettes and Transdermal Nicotine. *Am J Prev Med* 2019;57(4):515-24. doi: 10.1016/j.amepre.2019.05.010 [published Online First: 2019/09/23]

- 116. Hatsukami DK, Donny EC, Koopmeiners JS, et al. Compensatory smoking from gradual and immediate reduction in cigarette nicotine content. *Cancer Epidemiology, Biomarkers & Prevention* 2015;24(2):472–76.
- 117. Foulds J, Hobkirk A, Wasserman E, et al. Estimation of compliance with exclusive smoking of very low nicotine content cigarettes using plasma cotinine. *Prev Med* 2018;117:24-29. doi: 10.1016/j.ypmed.2018.04.011 [published Online First: 2018/04/08]
- 118. Benowitz NL, Nardone N, Hatsukami DK, et al. Biochemical estimation of noncompliance with smoking of very low nicotine content cigarettes. *Cancer Epidemiol Biomarkers Prev* 2015;24(2):331-5. doi: 10.1158/1055-9965.EPI-14-1040
- 119. Nardone N, Donny EC, Hatsukami DK, et al. Estimations and predictors of non-compliance in switchers to reduced nicotine content cigarettes. *Addiction* 2016;111(12):2208-16. doi: 10.1111/add.13519
- 120. Tidey JW, Davis DR, Miller ME, et al. Modeling nicotine regulation: A review of studies in smokers with mental health conditions. *Prev Med* 2018;117:30-37. doi: 10.1016/j.ypmed.2018.07.003 [published Online First: 2018/10/23]
- 121. Waa A, E. J. Unpublished prelimnary analysis from TAKe study. 2021
- 122. Apelberg BJ, Feirman SP, Salazar E, et al. Potential Public Health Effects of Reducing Nicotine Levels in Cigarettes in the United States. *New England Journal of Medicine* 2018;378:1725-33. doi: 10.1056/NEJMsr1714617
- 123. Tengs TO, Ahmad S, Savage JM, et al. The AMA proposal to mandate nicotine reduction in cigarettes: a simulation of the population health impacts. *Prev Med* 2005;40(2):170-80. doi: 10.1016/j.ypmed.2004.05.017 [published Online First: 2004/11/10]
- 124. Levy DT, Cummings KM, Heckman BW, et al. The Public Health Gains Had Cigarette Companies Chosen to Sell Very Low Nicotine Cigarettes. *Nicotine Tob Res* 2021;23(3):438-46. doi: 10.1093/ntr/ntaa128 [published Online First: 2020/07/28]
- 125. Wilson N, Hoek J, Nghiem N, et al. Some Preliminary High-Level Modelling Estimates of Possible Impacts of Tobacco Denicotinisation in New Zealand. Wellington: Department of Public Health, University of Otago Wellington, 2021.
- 126. Food and Drug Administration. Tobacco Product Standard for Nicotine Level of Combusted Cigarettes 2018. Available at: https://www.federalregister.gov/documents/2018/03/16/2018-05345/tobacco-productstandard-for-nicotine-level-of-combusted-cigarettes.
- 127. McKiernan A, Stanley J, Waa AM, et al. Beliefs among Adult Smokers and Quitters about Nicotine and Denicotinized Cigarettes in the 2016-17 ITC New Zealand Survey. *Tobacco Regulatory Science* 2019;5(5):400-09. doi: 10.18001/trs.5.5.1
- 128. Chung-Hall J, Fong GT, Driezen P, et al. Smokers' support for tobacco endgame measures in Canada: findings from the 2016 International Tobacco Control Smoking and Vaping Survey. *CMAJ Open* 2018;6(3):E412-E22. doi: 10.9778/cmajo.20180025 [published Online First: 2018/09/30]
- 129. Bolcic-Jankovic D, Biener L. Public opinion about FDA regulation of menthol and nicotine. *Tob Control* 2015;24(e4):e241-5. doi: 10.1136/tobaccocontrol-2013-051392 [published Online First: 2014/03/19]
- 130. Smith TT, Hatsukami DK, Benowitz NL, et al. Whether to push or pull? Nicotine reduction and non-combusted alternatives Two strategies for reducing smoking and improving public health. *Prev Med* 2018;117:8-14. doi: 10.1016/j.ypmed.2018.03.021 [published Online First: 2018/04/01]
- 131. Bates C. Taking the nicotine out of cigarettes: why it is a bad idea / Clive Bates. Bulletin of the World Health Organization: the International Journal of Public Health 2000; 78(7): 944 2000
- 132. Benowitz NL, Donny EC, Edwards KC, et al. The Role of Compensation in Nicotine Reduction. *Nicotine Tob Res* 2019;21(Suppl 1):S16-S18. doi: 10.1093/ntr/ntz120 [published Online First: 2019/12/24]
- 133. Smith TT, Koopmeiners JS, Hatsukami DK, et al. Mouth-Level Nicotine Intake Estimates from Discarded Filter Butts to Examine Compensatory Smoking in Low Nicotine Cigarettes. *Cancer Epidemiol Biomarkers Prev* 2020;29(3):643-49. doi: 10.1158/1055-9965.EPI-19-0905 [published Online First: 2020/02/28]
- 134. Webster JL, Dunford EK, Huxley R, et al. The development of a national salt reduction strategy for Australia. *Asia Pacific Journal of Clinical Nutrition* 2009;18(3):303-09.
- 135. Byron MJ, Hall MG, King JL, et al. Reducing Nicotine Without Misleading the Public: Descriptions of Cigarette Nicotine Level and Accuracy of Perceptions About Nicotine Content, Addictiveness, and Risk. Nicotine Tob Res 2019;21(Suppl 1):S101-S07. doi: 10.1093/ntr/ntz161 [published Online First: 2019/12/24]
- 136. Denlinger-Apte RL, Cassidy RN, Colby SM, et al. Effects of Cigarette Nicotine Content and Menthol Preference on Perceived Health Risks, Subjective Ratings, and Carbon Monoxide Exposure Among

- Adolescent Smokers. *Nicotine Tob Res* 2019;21(Suppl 1):S56-S62. doi: 10.1093/ntr/ntz127 [published Online First: 2019/12/24]
- 137. Pacek LR, Joseph McClernon F, Denlinger-Apte RL, et al. Perceived nicotine content of reduced nicotine content cigarettes is a correlate of perceived health risks. *Tob Control* 2018;27(4):420-26. doi: 10.1136/tobaccocontrol-2017-053689 [published Online First: 2017/07/25]
- 138. Doll R, Hill A. Smoking and carcinoma of the lung; preliminary report. *British Medical Journal* 1950;4682:739-48. doi: 10.1136/bmj.2.4682.739
- 139. Doll R, Peto R, Boreham J, et al. Mortality in relation to smoking: 50 years' observations on male British doctors. *British Medical Journal* 2004;328:1=9. doi: 10.1136/bmj.38142.554479.AE
- 140. Harris B. The intractable cigarette 'filter problem'. *Tob Control* 2011;20(Suppl 1):i10-i16. doi: 10.1136/tc.2010.040113
- 141. van Schalkwyk MC, Novotny TE, McKee M. No more butts. *BMJ* 2019;367(5890):1-2. doi: 10.1136/bmj.l5890
- 142. Health UDo, Services H. National Cancer Institute: Risks associated with smoking cigarettes with low machine-measured yields of tar and nicotine. *Bethesda, MD, National Institutes of Health* 2001
- 143. Hammond D, Parkinson C. The impact of cigarette package design on perceptions of risk. *J Public Health* (Oxf) 2009;31(3):345-53. doi: 10.1093/pubmed/fdp066 [published Online First: 2009/07/29]
- 144. World Health Organization. Tobacco and its environmental impact: an overview. In: Organization WH, ed. Geneva, 2017.
- 145. Keep New Zealand Beautiful. National Litter Audit 2019 2019 [Available from: https://www.knzb.org.nz/resources/research/national-litter-audit/2021.
- 146. Moerman JW, Potts GE. Analysis of metals leached from smoked cigarette litter. *Tob Control* 2011;20(Suppl 1):i30-i35. doi: 10.1136/tc.2010.040196
- 147. Lee W, Lee CC. Developmental toxicity of cigarette butts An underdeveloped issue. *Ecotoxicology and Environmental Safety* 2015;113(Mar.):362-68. doi: http://dx.doi.org/10.1016/j.ecoenv.2014.12.018 [published Online First: 2014/12/23]
- 148. Slaughter E, Gersberg RM, Watanabe K, et al. Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. *Tob Control* 2011;20(Suppl 1):i25-i29.
- 149. Novotny TE, Slaughter E. Tobacco product waste: an environmental approach to reduce tobacco consumption. *Current environmental health reports* 2014;1(3):208-16.
- 150. Morgan N, Pritchard A, Piggott R. New Zealand, 100% pure. The creation of a powerful niche destination brand. *Journal of brand management* 2002;9(4):335-54.
- 151. Smith EA, Novotny TE. Whose butt is it? tobacco industry research about smokers and cigarette butt waste. *Tob Control* 2011;20(Suppl 1):i2-i9. doi: 10.1136/tc.2010.040105
- 152. Hoek J, Jones SC. Regulation, public health and social marketing: A behaviour change trinity. *Journal of Social Marketing* 2011;1(1):32-44. doi: 10.1108/20426761111104419
- 153. Novotny TE. Environmental accountability for tobacco product waste. *Tob Control* 2020;29(2):138-39. doi: 10.1136/tobaccocontrol-2019-055023
- 154. TrackBill. New York S7259 Enacts the tobacco product waste reduction act 2021 [Available from: https://trackbill.com/bill/new-york-senate-bill-7259-enacts-the-tobacco-product-waste-reduction-act/1833292/2021.
- 155. European Parliament. DIRECTIVE (EU) 2019/904 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 2019 [Available from: https://eur-lex.europa.eu/eli/dir/2019/904/oj.
- 156. Pollay RW. Targeting youth and concerned smokers: evidence from Canadian tobacco industry documents. *Tob Control* 2000;9(2):136-47. doi: 10.1136/tc.9.2.136
- 157. Cowie GA, Swift E, Borland R, et al. Cigarette brand loyalty in Australia: findings from the ITC Four Country Survey. *Tob Control* 2014;23(suppl 1):i73-i79. doi: 10.1136/tobaccocontrol-2013-051071
- 158. Hoek J, Gendall P, Eckert C, et al. Young Adult Susceptible Non-Smokers' and Smokers' Responses to Capsule Cigarettes *Tob Control* 2018 doi: doi:10.1136/tobaccocontrol-2018-054470
- 159. Haggart K, Hoek J, Blank M-L. Flavor Capsule Variants' Performance in a "Dark Market": Implications for Standardized Packaging. *Nicotine & Tobacco Research* 2018;22(5):853-56. doi: 10.1093/ntr/nty158
- 160. Abad-Vivero EN, Thrasher JF, Arillo-Santillan E, et al. Recall, appeal and willingness to try cigarettes with flavour capsules: assessing the impact of a tobacco product innovation among early adolescents. *Tob Control* 2016;25(e2):e113-e19. doi: 10.1136/tobaccocontrol-2015-052805 [published Online First: 2016/04/10]
- 161. Thrasher JF, Islam F, Barnoya J, et al. Market share for flavour capsule cigarettes is quickly growing, especially in Latin America. *Tob Control* 2016:tobaccocontrol-2016-053030.

- 162. Hassan LM, Shiu E. No place to hide: two pilot studies assessing the effectiveness of adding a health warning to the cigarette stick. *Tob Control* 2013:tobaccocontrol-2013-051238.
- 163. Hoek J, Gendall P, Eckert C, et al. Dissuasive cigarette sticks: the next step in standardised ('plain') packaging? *Tob Control* 2015;25(6):699-705. doi: 10.1136/tobaccocontrol-2015-052533
- 164. Hoek J, Robertson C. How do young adult female smokers interpret dissuasive cigarette sticks? A qualitative analysis. *Journal of Social Marketing* 2015;5(1):21-39.
- 165. C Smith K, Washington C, Welding K, et al. Cigarette stick as valuable communicative real estate: a content analysis of cigarettes from 14 low-income and middle-income countries. *Tob Control* 2016 doi: 10.1136/tobaccocontrol-2016-053148
- 166. Moodie C, Gendall P, Hoek J, et al. The Response of Young Adult Smokers and Nonsmokers in the United Kingdom to Dissuasive Cigarettes: An Online Survey. *Nicotine & Tobacco Research* 2017:ntx261-ntx61. doi: 10.1093/ntr/ntx261
- 167. Hoek J, Edwards R, Thomson G, et al. Tobacco Excise Taxes and the Smokefree 2025 Goal: Some Ways Forward. Public Health Expert. Wellington: University of Otago, 2020.
- 168. Marsh L, Cameron C, Quigg R, et al. The impact of an increase in excise tax on the retail price of tobacco in New Zealand. *Tob Control* 2015;25(4):458-63. doi: 10.1136/tobaccocontrol-2015-052259 [published Online First: 2015/07/04]
- 169. Li J, Newcombe R, Guiney H, et al. Impact on smoking behavior of the New Zealand annual increase in tobacco tax: data for the fifth and sixth year of increases. *Nicotine & Tobacco Research* 2017;19(12):1491-98.
- 170. Apollonio DE, Glantz S. Tobacco manufacturer lobbying to undercut minimum price laws: an analysis of internal industry documents. *Tob Control* 2020;29(e1):e10-e17.
- 171. Hiscock R, Augustin NH, Branston JR, et al. Longitudinal evaluation of the impact of standardised packaging and minimum excise tax on tobacco sales and industry revenue in the UK. *Tob Control* 2020 doi: 10.1136/tobaccocontrol-2019-055387 [published Online First: 2020/07/29]
- 172. Golden SD, Kim K, Kong AY, et al. Simulating the impact of a cigarette minimum floor price law on adult smoking prevalence in California. *Nicotine and Tobacco Research* 2020;22(10):1842-50.
- 173. McLaughlin I, Pearson A, Laird-Metke E, et al. Reducing tobacco use and access through strengthened minimum price laws. *American journal of public health* 2014;104(10):1844-50.
- 174. Thomson G, Delany L, Edwards R, et al. Standardised tobacco retail pricing. IUHPE Conference. Rotorua, New Zealand, April 8, 2019.
- 175. Gilmore AB, Branston JR, Sweanor D. The case for OFSMOKE: how tobacco price regulation is needed to promote the health of markets, government revenue and the public. *Tob Control* 2010;19(5):423-30.
- 176. Branston JR, Gilmore AB. The case for Ofsmoke: the potential for price cap regulation of tobacco to raise£ 500 million per year in the UK. *Tob Control* 2014;23(1):45-50.
- 177. Hoek J, Edwards R, Thomson GW, et al. Tobacco excise taxes: a health and social justice measure? *Tob Control* 2020 doi: 10.1136/tobaccocontrol-2019-055735 [published Online First: 2020/06/25]
- 178. Hastings G. Public health and the value of disobedience. *Public Health* 2015;129(8):1046-54. doi: https://doi.org/10.1016/j.puhe.2015.03.010
- 179. Edwards R, Hoek J, van der Deen F. Smokefree 2025 use of mass media in New Zealand lacks alignment with evidence and needs. *Aust New Zealand J Public Health* 2014:n/a-n/a. doi: 10.1111/1753-6405.12246
- 180. Waa AM, Hoek J, Edwards R, et al. Analysis of the logic and framing of a tobacco industry campaign opposing standardised packaging legislation in New Zealand. *Tob Control* 2016;26(6):tobaccocontrol-2016-053146. doi: 10.1136/tobaccocontrol-2016-053146 [published Online First: 2016/10/04]
- 181. Ulucanlar S, Fooks GJ, Gilmore AB. The policy dystopia model: an interpretive analysis of tobacco industry political activity. *PLoS Medicine* 2016;13(9):e1002125.
- 182. Burchell K, Rettie R, Patel K. Marketing social norms: social marketing and the 'social norm approach'. Journal of Consumer Behaviour 2013;12(1):1-9.
- 183. Duke JC, MacMonegle AJ, Nonnemaker JM, et al. Impact of The Real Cost Media Campaign on Youth Smoking Initiation. *American journal of preventive medicine* 2019;57(5):645-51. doi: 10.1016/j.amepre.2019.06.011 [published Online First: 2019/08/25]
- 184. Farrelly MC, Duke JC, Nonnemaker J, et al. Association Between The Real Cost Media Campaign and Smoking Initiation Among Youths United States, 2014-2016. *MMWR Morb Mortal Wkly Rep* 2017;66(2):47-50. doi: 10.15585/mmwr.mm6602a2

- 185. Farrelly MC, Nonnemaker J, Davis KC, et al. The Influence of the National truth® Campaign on Smoking Initiation. *American journal of preventive medicine* 2009;36(5):379-84. doi: https://doi.org/10.1016/j.amepre.2009.01.019
- 186. Vallone D, Cantrell J, Bennett M, et al. Evidence of the Impact of the Truth FinishIt Campaign. *Nicotine & Tobacco Research* 2017;20(5):543-51. doi: 10.1093/ntr/ntx119
- 187. Holtgrave DR, Wunderink KA, Vallone DM, et al. Cost–Utility Analysis of the National truth® Campaign to Prevent Youth Smoking. *American journal of preventive medicine* 2009;36(5):385-88. doi: https://doi.org/10.1016/j.amepre.2009.01.020
- 188. Murphy-Hoefer R, Davis KC, Beistle D, et al. Impact of the Tips From Former Smokers Campaign on Population-Level Smoking Cessation, 2012-2015. *Prev Chronic Dis* 2018;15:E71-E71. doi: 10.5888/pcd15.180051
- 189. Grigg M, Waa A, Bradbrook SK. Response to an indigenous smoking cessation media campaign it's about whanau. *Aust New Zealand J Public Health* 2008;32(6):559-64.
- 190. Wilson N, Grigg M, Graham L, et al. The effectiveness of television advertising campaigns on generating calls to a national Quitline by Maori. *Tob Control* 2005;14(4):284-6. doi: 14/4/284 [pii]
- 10.1136/tc.2004.010009 [published Online First: 2005/07/28]
- 191. Waa A, Milne K. The theory behind the Smokefree Homes campaign. Social Marketing Downunder Conference. Wellington: Health Sponsorship Council, 2005.
- 192. Nghiem N, Cleghorn CL, Leung W, et al. A national quitline service and its promotion in the mass media: modelling the health gain, health equity and cost-utility. *Tob Control* 2018;27:434–41. doi: 10.1136/tobaccocontrol-2017-053660
- 193. Wakefield MA, Bowe SJ, Durkin SJ, et al. Does Tobacco-Control Mass Media Campaign Exposure Prevent Relapse Among Recent Quitters? *Nicotine & Tobacco Research* 2012;15(2):385-92. doi: 10.1093/ntr/nts134
- 194. Hoek J, Barbalich I, Edwards R, et al. A qualitative analysis of how people who smoke and manage lower incomes perceive the Smokefree 2025 goal. *New Zealand Medical Journal* 2021;134 (1535):70-74.
- 195. Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: an integrative review. *Tob Control* 2012;21(2):127-38. doi: 10.1136/tobaccocontrol-2011-050345
- 196. Dunlop S, Cotter T, Perez D, et al. Televised antismoking advertising: effects of level and duration of exposure. *American Journal of Public Health* 2013;103(8):e66-e73.
- 197. White VM, Durkin SJ, Coomber K, et al. What is the role of tobacco control advertising intensity and duration in reducing adolescent smoking prevalence? Findings from 16 years of tobacco control mass media advertising in Australia. *Tob Control* 2015;24(2):198-204.
- 198. Wilson N, Petrovic-van der Deen F, Edwards R, et al. Modelling the number of quitters needed to achieve New Zealand's Smokefree 2025 goal for Maori and non-Maori. *New Zealand Medical Journal* 2018;131(1487):30-37.
- 199. Ivory V, Blakely T, Richardson K, et al. Do changes in neighbourhood and household levels of smoking and deprivation result in changes in individual smoking behavior? A large-scale longitudinal study of New Zealand adults. *American Journal of Epidemiology* 2015;182(5):431-40. doi: 10.1093/aje/kwv097.
- 200. Zablocki RW, Edland SD, Myers MG, et al. Smoking ban policies and their influence on smoking behaviors among current California smokers: a population-based study. *Prev Med* 2014;59:73-8. doi: 10.1016/j.ypmed.2013.11.018
- 201. Chaiton M, Diemert L, Zhang B, et al. Exposure to smoking on patios and quitting: a population representative longitudinal cohort study. *Tob Control* 2016;25(1):83-8. doi: 10.1136/tobaccocontrol-2014-051761
- 202. Thomson G, Wilson N. Local and regional smokefree and tobacco-free action in New Zealand: highlights and directions. *The New Zealand medical journal* 2017;130(1462):89-101.
- 203. Trappitt R, Li J, Peck R, et al. Acceptability of smoking in public places Health and Lifestyles Surveys 2008-2010 [In Fact]. Wellington: Health Sponsorship Council, 2011.
- 204. Wyllie A. Public support for tobacco control policies in the Auckland Council region [full version]. Auckland: Cancer Society Auckland Division, 2013.
- 205. Thomson G, Wilson N, Weerasekera D, et al. Strong smoker interest in 'setting example to children' by quitting: national survey data. *Aust NZ J Public Health* 2010;35(1):81-4. doi: doi: 10.1111/j.1753-6405.2010.00638.x
- 206. Wilson N, Blakely T, Edwards R, et al. Support by New Zealand smokers for new types of smokefree areas: national survey data. *The New Zealand medical journal* 2009;122(1303)(1303):80-9. [published Online First: 2009/10/24]

- 207. Grace C. Legislation to ban smoking in public spaces. In Scollo, MM and Winstanley, MH [editors]. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria, 2019.
- 208. Wilson N, Oliver J, Thomson G. Ten years of a national law covering smoke-free school grounds: a brief review. *Tob Control* 2016;25(1):122. doi: 10.1136/tobaccocontrol-2014-052127
- 209. Wellington City Council Research and Evaluation team. Attitudes towards smoking in Wellington: Report on the 2015 smoke-free survey. Wellington: Wellington City Council, 2015.