



Five Strategic Approaches to Achieving the Smokefree Aotearoa 2025 Goal

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The new NZ Government is to be congratulated for working on an Action Plan towards achieving the Smokefree Aotearoa 2025 Goal. To inform this process, we briefly set out five potential strategies for achieving this important health and

equity goal and discuss their implementation.

Smokefree Aotearoa 2025 has been described as "a world-leading, bold 'endgame' goal" [1]. The goal's origins were in Māori led advocacy to address the harms that tobacco smoking and the tobacco industry cause Māori, led by Māori leaders including Shane Bradbrook of Te Reo Marama and Māori Party MP, Hone Harawira. The immediate trigger was a recommendation to adopt a 2025 smokefree goal by the 2010 Māori Affairs Select Committee [2]; in 2011, the then National-led Government adopted the goal, which set a national target of achieving minimal smoking prevalence (widely defined as less than five percent and as close to zero percent as possible) and minimal availability by 2025 [3]. Several other high-income country governments have also adopted similar smokefree goals e.g. Canada, Scotland, Ireland, Sweden and Finland.

In recognition of its origins, equity considerations and ensuring minimal smoking prevalence is reached for all major population groups have been at the heart of the goal. Hence interventions should prioritise increasing quitting and minimising uptake of smoking in high prevalence populations such as Māori and Pacific peoples.

NZ's recently elected majority Labour Government is currently developing an Action Plan to mapping out how the Smokefree Aotearoa 2025 goal will be achieved; taking stock to identify strategies with the greatest potential for reaching a Smokefree Aotearoa is therefore particularly timely. Realising the Smokefree Aotearoa 2025 goal would also support other Government priorities, such as reducing child poverty (to which tobacco use contributes) and eliminating health inequalities (tobacco use remains a major cause of poorer health among Māori, Pasifika and low-income New Zealanders).

There is consistent evidence that among every social group detailed in the NZ Health Survey, tobacco use is not declining quickly enough to realise the 2025 goal [4], and that stark disparities in smoking prevalence persist. An innovative and bold Action Plan is therefore essential to reach a Smokefree Aotearoa.

Aotearoa's internationally lauded response to the COVID-19 pandemic [5], has shown the Government's willingness and ability to take bold, logic- and evidenced-based actions to address public health crises. Just as these innovative and rigorous approaches have currently eliminated COVID-19, so too could a similar approach achieve the Smokefree Aotearoa 2025 goal.

Five major strategic packages to achieve the Smokefree Aotearoa 2025 goal

We outline below five potential strategies that could contribute to achieving the Smokefree Aotearoa goal. The strategies are largely derived from interventions recommend in the ASAP Report, which was prepared by a broad-based collaborative group and informed by wide-ranging consultation across the NZ tobacco control sector [1].

We have divided the strategies into two major structural interventions, one or both of which must be implemented in order to reach a Smokefree Aotearoa. We also set out two supporting intervention packages, including intensifying efforts to reduce smoking uptake and 'business as usual' tobacco control interventions. The supporting interventions will complement the structural interventions, but will not be sufficient to achieve the smokefree goal. Finally, we add one further structural intervention that could be implemented, once very low prevalence has been achieved, post 2025. We argue that structural interventions, strategy A (to make smoked tobacco products harder to access) and strategy B (to make smoked tobacco products non-addictive) are pivotal if we are to achieve the Smokefree goal and eliminate disparities in smoking.

We have not included policy and regulation measures for electronic nicotine delivery systems (ENDS) or vaping as these have been addressed in a comprehensive regulatory framework recently introduced through the Smokefree Environments and Regulated Products (Vaping) Amendment Bill [6]. We note that the recently passed vaping regulations has the potential to create helpful policy and regulatory synergies with new smokefree measures. However, we also note that the impacts of this Bill on smoking prevalence require monitoring and in the longer term (post 2025) there will need to be a debate about whether and how the goal of a society free of nicotine addiction should be pursued.

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Major structural interventions

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Strategy A: Greatly reduce the availability of smoked tobacco products through a new law to restrict tobacco sales to a very limited number of outlets This intervention would address the current perverse situation, where a highly addictive and deadly product is available from almost every dairy, supermarket and service station, and help achieve minimal availability of tobacco products, as set out in the Government's goal. We suggest reducing retailer numbers to around 300, with their locations controlled to ensure people who smoke and live in more remote areas have reasonable access to tobacco products. Sales restrictions could designate specialist R18 tobacconists or government-operated R18 stores as the only suppliers of tobacco products. These could be R21 stores if a T21 law was enacted (as below). Another possibility would be to supply tobacco products on a temporary basis through pharmacies until the smokefree goal is achieved. Other interventions could include a ban or restrictions on internet sales of tobacco products.

This approach would stimulate quitting (or switching to ENDS), reduce relapse to smoking among quitters, and could particularly help minimise youth access (by facilitating enforcement around underage sales). Reducing outlet numbers is likely to help reduce disparities as tobacco retailers are often concentrated in disadvantaged areas [7]. There is some NZ modelling support for this limited outlet approach [8-10]. Some support for pharmacy-only sales has been voiced by NZ pharmacists [11], but more discussions with pharmacists and their organisations would be required to assess the feasibility of this option.

There are precedents for implementing laws markedly reducing the number of tobacco retail outlets. For example, in Europe, Hungary reduced tobacco outlet density by 83% in 2013, by only allowing tobacco sales at 7000 new government-owned stores [12]. Phased reductions in availability have been introduced in the Netherlands - with sales in supermarkets and gas stations due to be phased out by 2022 [13]. Licensing with fee increases has also achieved outlet reduction in South Australia [14]. Even a zero-fee licence would be very useful by providing information about the number of tobacco retailers and facilitating enforcement of existing laws. After an initial zero-fee, licence fees could be introduced and then increased at regular intervals or combined with an auction system to reduce retailer numbers to the required level. Annual licence fees reported for various jurisdictions include: South Australia (\$A200), Western Australia (\$A204), New York (US\$300), Indiana (US\$200), and Singapore (SGD 360).

Major structural interventions

Strategy B: Make smoked tobacco products nonaddictive through a new law to reduce nicotine levels in smoked tobacco to a negligible level. There is currently no regulation of the design or constituents of smoked tobacco products. As a result, the tobacco industry has ensured that cigarettes are highly addictive due to their high nicotine content, and highly palatable and appealing, through the addition of various additives and flavourings. The addictiveness and palatability of tobacco products reduces the motivation and ability of smokers to quit and stay quit, and also means young people's experimentation rapidly progressing to regular smoking during smoking initiation.

There is growing evidence [15] and some modelling support [16] that mandating minimal or no nicotine in tobacco products is likely to reduce uptake, support quitting and lower smoking prevalence. Also of note is that in the USA, the FDA has released an Advanced Notice of Proposed Rulemaking in 2018 to explore the development of a tobacco product standard for nicotine levels in cigarettes, which would focus on making them minimally or non-addictive [17].

This strategy has also become more feasible over time, given that NZ smokers can now access ENDS products easily and the argument that this intervention represents *de facto* prohibition can no longer be sustained. Furthermore, surveys have repeatedly found very strong public support for this measure, including among NZ smokers [18], and a recent study reported majority support from US smokers involved in a 20 week trial of very low nicotine cigarettes [19].

This new law could also prohibit flavours and additives and ban design innovations (such as capsule cigarettes) [20]. These measures would reduce smoking's appeal and palatability and thus reduce smoking uptake by young people, as well as potentially increasing the motivation to quit among people who smoke. Another possible option would be prohibiting roll-yourown tobacco, which is disproportionately used by Māori and young people [21, 22].

To maximise success, the Ministry of Health may need increased toxicological expertise and a surveillance programme to ensure products meet the new legal requirements (albeit the testing could be done in overseas laboratories).

Supporting interventions

Strategies Comments Major structural interventions

Supporting interventions

Strategy C: Implement additional measures to reduce youth access to tobacco products	Despite a downward trend, relatively high smoking prevalence among 18-24 year olds remains a substantial barrier to achieving and maintaining the Smokefree 2025 goal [4]. Minimising smoking uptake will ensure that the goal is maintained, once achieved. It is also strongly pro-equity due to higher smoking prevalence among Māori and Pacific young adults, and the much younger age structure of these populations.
	Both strategies A and B, and some of the interventions included in strategy D, will help reduce uptake among young people. An additional intervention could reduce accessibility of tobacco products by raising the legal age of purchase of tobacco products. Increasing the legal age of purchase to 21 years ('T21 laws') or higher [23] has been used increasingly, particularly in the USA, with Federal legislation recently introduced. This measure has also recently been proposed in Tasmania [24]. Evidence that favours the impact of T21 laws is now emerging [25, 26]. Alternatively, raising the legal age of purchase by one year
	every year would create a generation that will never be legally able to purchase tobacco products. This approach has been modelled for NZ as the "smokefree generation" [9] and was reported to be effective and highly pro-equity. It can also be argued that it is highly unethical to allow sales to new cohorts of

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Strategy D: Greatly intensify <i>existing</i> tobacco control actions currently used in NZ,*	Strategy D can be characterised as a 'business as usual' approach. This has been the default approach in NZ in recent years and is the most common strategy used in other countries, including those that have set smokefree goals [27]. This strategy would support the more innovative structural strategies (A and B), and would include responding to increased demand for cessation services, particularly for priority groups. However, smoking cessation support services alone should not be seen as a sufficient strategy for achieving the Smokefree goal [28].
	There is strong evidence favouring regular above-inflation tobacco tax increases in NZ [29-31], but we acknowledge concerns about potential increased financial hardship for those low-income smokers who are unable to quit or switch completely to ENDS to lower the cost of nicotine product use. We suggest reinstating the annual above inflation tax increases combined with introducing a minimum price policy to prevent the proliferation of budget brands and differential price increases currently undertaken by tobacco companies [32]. Alternatively, annual levies on tobacco industry profits could be introduced. To maximise the impact of tax increases or levies on reducing smoking prevalence, the additional revenue raised should be used to support low-income smokers to quit; for example, by providing enhanced cessation support, subsidised quitting aids or incentives to quit.

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Supporting interventions

Post-2025 intervention

Strategy E: Achieve minimal availability of smoked tobacco products through a new law to apply a "sinking lid" on tobacco imports to NZ This very innovative strategy is supported by logic [34, 35] and modelling evidence [31], and has been adopted by Tokelau (along with high tobacco taxes) with some preliminary evidence of success. The "sinking lid" could reduce tobacco product availability to a level that would ensure minimal smoking prevalence is achieved and maintained in all ethnic and social groups post 2025.

This strategy has become more feasible over time, given NZ smokers can now readily access vaping products. NZ modelling work suggests that this "sinking lid" strategy has the greatest potential health gain and greatest cost savings of the modelled strategies (i.e., an extra 1.2 billion quality-adjusted life-years (QALYs) in the current NZ population over their remaining lifetimes and health system cost savings of \$17.1 billion over the same period [31]. However, the strategy may not be feasible until very low smoking prevalence (<5%) has been achieved, and hence may be best implemented after 2025.

* Major current tobacco control interventions include: relatively high tobacco tax (with annual inflation adjustments), widespread smokefree indoor environments (but relatively few outdoor areas), bans on marketing and sponsorship; point-of-sale display bans, pictorial warnings on packs, smoking cessation support (e.g., the Quitline and subsidised pharmacotherapies); and occasional mass media campaigns (albeit at low funding levels).

Suggested next steps

We propose that legislation to implement strategies A and B should be introduced as soon as possible. Strategies C and D are unlikely to be sufficient to achieve the Smokefree Aotearoa 2025 goal on their own. However, a comprehensive approach that combines intensification of current approaches (Strategies C and D) and strategies (A &/or B) is likely to be sufficient. All these strategies are more feasible now that existing smokers who cannot, or do not wish to, stop using nicotine products, can access much cheaper nicotine via vaping products.

The Smokefree Action Plan should be informed by wide-ranging consultation. In an ideal world, experts and the wider public would have extensive input into NZ's approach, using surveys and citizen juries. However, as there is limited time ahead of 2025, we suggest consultation occurs via the Health Select Committee, which would receive public and stakeholder feedback on its recommendations ahead of determining measures that could be then passed into law before the end of 2021.

Finally, we note that recent interventions in New Zealand such as the 2012 point-of-sale retail display ban and standardised packaging in 2018 have had no Government-funded monitoring or evaluation of impact. The strategies described above should be implemented together with robust and comprehensive evaluation, including assessing impact on high prevalence populations such as Māori and Pacific peoples, to ensure that strategies can be adapted or changed as required, and are on track to ensure realisation of the 2025 goal benefits all population groups.

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