# Ending Tobacco Use: Learning from six countries with tobacco endgame goals: findings from experiences to the end of 2018



## from the INSPIRED collaboration

**Authors:** Louise Thornley, Richard Edwards (University of Otago, Wellington, Aotearoa/New Zealand), Robert Schwartz (University of Toronto, Ontario, Canada); Mervi Hara (ASH Finland, Helsinki, Finland); Luke Clancy (Tobacco Free Research Institute Ireland, Ireland), David Evans (Health Service Executive, Ireland); Sheila Duffy (ASH Scotland, Edinburgh, Scotland, UK); Hans Gilljam (Karolinska Institute, Stockholm, Sweden).

**Suggestion citation:** Thornley L, Edwards R, Schwartz R, Hara M, Clancy L, Evans D, Duffy S, Gilljam H *Ending Tobacco Use: Learning from six countries with tobacco endgame goals*. Report from the INSPIRED collaboration. 2022.

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## **Acknowledgements**

The authors wish to thank all participants in the INSPIRED collaboration for their willingness to be involved and for reading and commenting on earlier drafts for the project.

In addition to the co-authors named above, the following participants provided input and/or additional material: Rob Cunningham (Canada), Meri Paavola and Otto Ruokolainen (Finland), Siobháin Brophy and Fenton Howell (Ireland), Andrew Waa, George Thomson and Jane Chambers (Aotearoa/New Zealand), Alan Dalziel, Morris Fraser and Amanda Amos (Scotland) and Göran Boëthius (Sweden). The full list of participants is listed in Appendix One.

Janine Nip carried out final editing of the report.

## **Abbreviations**

ASAP Achieving Smokefree Aotearoa Action Plan

ASH Action on Smoking and Health

EU European Union

FCTC Framework Convention on Tobacco Control

HSE Health Services Executive

ITC International Tobacco Control Evaluation Project

LT Louise Thornley

MPOWER Internationally-agreed tobacco control interventions developed by the WHO

[M: monitor tobacco use and prevention policies; P: protect people from tobacco smoke;

O: offer help to quit tobacco smoking; W: warn about the dangers of tobacco; E: enforce bans on tobacco advertising, promotion and sponsorship; and R: raise taxes on tobacco.]

NGO Non-Governmental Organisation

NHS National Health Service

NRT Nicotine replacement therapy

NZ Aotearoa/New Zealand

RE Richard Edwards

RYO Roll your own

UK United Kingdom

WHO World Health Organisation

## **Summary**

This report synthesises the early findings from a collaborative project (INSPIRED) across six countries with government-endorsed endgame goals for smoking: Canada, Finland, Ireland, Aotearoa/New Zealand (NZ), Scotland and Sweden. The project documented insights from and progress in the endgame goals to the end of 2018.

**Context:** Tobacco use is a major threat to global public health. Each year it kills more than 8 million people worldwide, and is a major contributor to health inequalities. Some governments have adopted 'endgame' goals to essentially end smoking by a specified date. This involves a new way of thinking about the tobacco epidemic: shifting from aiming to gradually reducing tobacco use (with no clear end goal) to striving to virtually eliminate smoking over a defined time period. Sharing the experiences of early adopters of this approach will potentially be useful for other countries contemplating endgame goals.

**Aim:** The INSPIRED project aims to provide insights on tobacco endgame goals within and between countries, by collating information on progress and lessons from the initial countries with government-endorsed endgame goals.

Specific objectives are to:

- 1. Document and disseminate information on the progress and status of tobacco endgame goals.
- 2. Share experiences, ideas, lessons learnt and best practice.
- 3. Disseminate findings to other countries who may be considering adopting endgame goals.

**Methods:** We carried out case studies of the first six countries with national-level government endgame goals for smoking (specified to be achieved by 2040 or earlier). We describe findings for the individual countries and synthesised evidence from the collective experience across the six countries.

We used a template to collect data on the context, approach, progress and experiences to date with the endgame goal. The investigators in Aotearoa/New Zealand (LT and RE) completed the template using available documentary evidence. This was shared with the investigators within each of the participating countries. We then followed an iterative process in which data collection and completion of the template was refined by the Aotearoa/New Zealand investigators in collaboration with the incountry investigators who provided comments on successive drafts of the template, consulted with additional experts within their country and provided further documentary sources.

The Aotearoa/New Zealand investigators summarised findings for each country and prepared a synthesis of key themes on the contexts, experiences, key lessons learnt and enablers and barriers from the initial five countries. They also summarised the degree to which core FCTC MPOWER and more transformative 'endgame' interventions (e.g. supply focused and product modification interventions) had been considered or implemented in each country, drawing on data from templates, WHO reports and the Tobacco Control Scale (for European Countries). We estimated Tobacco Control Scale scores for Aotearoa/New Zealand and Canada from the information provided in the templates.

The report findings were revised and finalised after consultation with in-country investigators.

**Results:** The six countries share common contextual features, including most or all of the following:

- A relatively low and/or rapidly declining prevalence of smoking at the time of setting an endgame goal.
- A high level of public and political support for reducing smoking prevalence and for enacting effective measures to reduce and fundamentally eliminate tobacco.

- A history of enacting strong tobacco control policies, including all or most core 'MPOWER'\* tobacco control measures.
- The presence of political champions to provide leadership and advocacy for the endgame goal.
- Social justice concerns as a key driver in national tobacco control strategies and a strong focus on reducing disparities in smoking.
- Strong, united non-governmental organisation (NGO)/civil society and tobacco control sectors.

The six countries' endgame goals all encompassed achieving a very low (generally 5% or less) prevalence of smoking (Finland also includes a nicotine-free goal), with the target dates for achievement set between 2025 and 2034. All of the countries except Aotearoa/New Zealand had a government strategy for achieving the goal, although these varied in their scope and degree of detail. None included proposals to implement any of the more radical endgame policy options (e.g., mandated removal of nicotine from tobacco products or substantial reductions in retail availability) that have been proposed for helping to achieve tobacco endgames.

Reported experiences with tobacco endgame goals were largely positive. Identified benefits of adopting the goals included a strengthened focus on tackling tobacco through evidence-based tobacco control approaches, and increased political support and resourcing for tobacco control.

Enablers to progress towards achieving the tobacco endgame identified included strong political support, having a national tobacco control or endgame strategy, a strong social justice approach, implementing a comprehensive range of core tobacco control measures, and strong cross-sectoral structures and public support.

Key barriers to progress identified included insufficient political priority, lack of resources and capacity for tobacco control, lack of unity in the tobacco control sector, tobacco industry opposition, slow progress in reducing socioeconomic and ethnic disparities in smoking, and limited application of leading-edge tobacco control measures.

Participants from all six countries noted that tackling the persisting disparities in smoking (i.e., socioeconomic, ethnic and educational inequity) remains a major challenge. Participants emphasised the need to achieve endgame goals for all population groups, not only the total population. Yet limited progress on this front was a universal theme.

**Discussion:** As well as some commonalities, there were also variations in the context, nature, approach to and experience of endgame goals in these six early-adopter countries. For instance, these countries differed in the extent to which a tobacco 'harm reduction' approach has been adopted in efforts to achieve the endgame goal. This suggests there is no 'one size fits all' solution; diverse approaches are appropriate and countries should be encouraged to design strategies to suit their distinct social, cultural and political contexts.

The contextual factors listed above may form critical 'readiness' factors, most or all of which need to be present for an endgame goal to be effectively adopted in other countries.

The outcome of the endgame goals in the six INSPIRED countries is not yet known, but these preliminary findings suggest that likely critical success factors for achieving the endgame goal by the agreed date will include:

- Defined, agreed nature of the endgame goal.
- Strong and sustained political leadership.
- Cross-party political support for the endgame goal.

<sup>\*</sup> See the Methods section below for detail of the World Health Organization's MPOWER measures

- Sustained strategic Government commitment and adequate resource allocation for achievement of the endgame goal.
- A comprehensive national tobacco control strategy/action plan with consideration of defined intermediate targets and appropriate resources supporting implementation infrastructure.
- A dedicated and adequately resourced monitoring and research infrastructure responsible for identification and recommendations of improvements and useful innovations, as well as comprehensive monitoring, review, and evaluation of the endgame plan.
- Implementation of a full range of evidence-based tobacco control measures, ideally including one or more 'endgame' interventions.
- A well lead and united tobacco control sector with broad consensus about the goal and the priority measures needed to achieve the goal.
- An evidence-based focus on identifying and addressing socioeconomic and ethnic disparities in smoking.
- Ongoing efforts to support and engage with and/or evidence of engagement and leadership among population groups most affected by tobacco smoking, including Indigenous communities.
- Ongoing efforts to engage and mobilise the public in support of the endgame goal and measures to achieve it.
- Robust actions to prevent the tobacco industry from acting as a barrier to the introduction of measures to achieve the endgame goal.

Some 'best practice' features aligned with these critical success factors were identified in each of the INSPIRE countries.

A limitation of this study is that it focused on country-specific goals in Western high-income nations. More experience and research is needed on the feasibility and usefulness of setting endgame goals in low- or middle-income countries. Further research is also needed to explore the experiences and learning from regional endgame goals, such as the Tobacco-free Pacific 2025 goal, and from state and local level endgame goals.

**Conclusion:** Adopting national endgame goals for eliminating or virtually eliminating smoking are an emerging approach in tobacco control practice. The experience of these six countries offers useful insights and may inspire and assist other countries in developing similar approaches. The findings suggest that a diversity of approaches to endgame goals should be embraced to suit differing contexts. Overall, this work suggests endgame goals can strengthen political commitment and facilitate the execution of full, evidence-based tobacco control programmes. Hence such goals may have an important role to play in hastening the end of the global tobacco epidemic.

## Introduction

Endgame goals for smoking aim to virtually eliminate tobacco use by a set date. INSPIRED (International Network to Share Insights on Tobacco Endgames) is a collaborative project to share insights and learning from countries that have adopted endgame goals. At present, the project covers six countries with government-endorsed endgame goals to progressively end smoking: Canada, Finland, Ireland, Aotearoa/New Zealand, Scotland, and Sweden.

This report presents the project's findings. Our analysis draws on published data and information collected from INSPIRED participants located within each of the six countries.

The results are presented in two sections.

The first reports on commonalities and differences in the context, nature and experiences of the six countries with endgame goals to the end of 2018. It includes an appraisal of the perceived advantages and disadvantages, and potential enablers and barriers to setting and progressing endgame goals.

The second section includes more detailed profiles on each of the six countries. These describe each country's endgame goal - its context and current status including planning to achieve the goal, a summary of tobacco control interventions currently in place or proposed, approaches to harm reduction, and structures to support achievement of the goal.

In the discussion section, we summarise the key findings and outline possible implications for other countries considering adopting endgame goals.

## **Background**

## International context for tobacco endgames

Despite many notable successes in tobacco control, tobacco use remains a major cause of preventable early death globally, with the total number of deaths continuing to rise.<sup>4</sup> Tobacco use therefore represents an ongoing global public health crisis, largely created and maintained by national and multinational tobacco industries who manufacture, distribute and market the great majority of tobacco products that are consumed. Smoking prevalence is declining in many countries, particularly in more developed countries. However, due to population growth and an increasing focus of the tobacco industry on populous lower- and middle-income countries, the number of smokers worldwide continues to grow.<sup>5</sup>

In recent years, a new set of tobacco control ideas has emerged, commonly referred to as 'endgame' thinking. Proponents of the tobacco endgame approach suggest that reducing tobacco product use to very low levels over relatively short timescales is achievable and should be the aim of tobacco control efforts. Such endgame ideas represent a paradigm shift from previous, more incremental approaches. However, the exact nature of the endgame is not agreed. A key publication for advancing endgame ideas was the 2013 *Tobacco Control* supplement on the tobacco endgame. This contained 20 articles discussing various aspects of endgame thinking and approaches; and expanded the endgame conversation by engaging the broader tobacco control community.<sup>6</sup> Some of the key questions that have been debated include:

- An endgame for what: all tobacco product use, smoked tobacco use, nicotine use, or tobacco-related diseases?
- What level of tobacco product use constitutes an endgame? For example, if smoking prevalence is the key metric is the endgame 0%, 5%, or something else?
- How soon should the endgame be achieved 2025, 2030, 2040?

- Should the endgame include an equity perspective: for example, achieving minimal smoking prevalence among priority population groups?
- Should the endgame include a focus on adolescents and young adults: for example, evidence of minimal smoking uptake?
- Should the endgame stipulate structural changes such as an end to commercial sales of tobacco products and of the tobacco industry?
- What interventions and strategies will be required to achieve the endgame?

A single response to each of these questions is likely to be elusive, and may be inappropriate given variation in contexts and political and cultural norms. However, some common core features of endgame thinking are identifiable. These include a rejection of the status quo and of incremental progress, methods and goals; and explicitly envisioning a tobacco-free future and hence an <u>end</u> to the tobacco-caused epidemic. Furthermore, this future must be achieved within a reasonably short timeframe. As Ruth Malone put it in 2010, endgame thinking represents a bold vision that involves rejecting conventional approaches and "imagining things otherwise".<sup>7</sup>

Endgame thinking has also encouraged the development of novel ideas for radical 'endgame' interventions that could help end rapidly the tobacco epidemic.<sup>28</sup> Examples include:

- Restructuring the tobacco market to exclude or control the commercial tobacco industry.<sup>9-</sup>
- Regulating tobacco product design to render cigarettes and tobacco non-addictive and nonappealing – for example by removing additives and flavours, or removing or reducing nicotine content.<sup>12 13</sup>
- Dramatically reducing tobacco availability (or supply).<sup>14-16</sup>
- Establishing a 'tobacco-free generation' through regular increases in the legal age of purchase of tobacco products.<sup>17</sup>

Endgame thinking was adopted to a greater extent within some countries with strong traditions in tobacco control. Individuals and civil society groups in these countries began to call for the adoption of endgame goals. In Aotearoa/New Zealand for example, in response to persisting high prevalence of smoking and smoking-related diseases among Māori (the Indigenous people of Aotearoa/New Zealand), Māori advocates developed the Tupeka Kore ('Tobacco free') vision. This envisaged a tobacco-free Aotearoa/New Zealand by 2020, where "future generations of New Zealand children will be free from exposure to tobacco and will enjoy smokefree lives". <sup>18</sup>

A landmark event occurred in 2010 when Finland through its Tobacco Act became the first country in the world to adopt a government-endorsed endgame goal. This set out the aim to end the use of tobacco products by 2040 (with a target of below 2% of the adult population using tobacco products).<sup>19</sup> In 2011, the Aotearoa/New Zealand Government adopted Smokefree Aotearoa 2025 in its response to the Māori Affairs Select Committee report that called for such a goal.<sup>20 21</sup>

Subsequently, Scotland and Ireland (2013), Sweden (2016) and Canada (2018) also adopted official endgame goals. In 2016, Finland brought forward its target date to 2030, added to its goal ending the use of other nicotine products, and shifted the target to less than 5% of adults using nicotine or tobacco products.

## **INSPIRED** project

The INSPIRED project grew out of a symposium in Stockholm, Sweden, in September 2016, where Sweden's endgame goal was launched. This brought together tobacco control researchers, practitioners, advocates and policymakers from Sweden, Finland, Ireland and Aotearoa/New Zealand together with international tobacco control leaders and endgame thinkers. The idea of strengthening

communication and collaboration between researchers and practitioners in the endgame countries was raised at this symposium and was the immediate genesis of the INSPIRED project.

In late 2017, Aotearoa/New Zealand researchers at the University of Otago (Louise Thornley [LT] and Richard Edwards [RE]) initiated the INSPIRED collaboration together with colleagues from four other countries (Ireland, Finland, Scotland and Sweden) with endgame goals, and were joined in 2018 by Canadian colleagues.

In March 2018, an inaugural meeting was held in Cape Town during the World Conference on Tobacco or Health. The meeting was attended by more than 20 people, including participants from all six countries and several international endgame experts. At the meeting the aim and objectives for INSPIRED were agreed.

#### Aim

The INSPIRED project aims to share insights on tobacco endgames within and between countries, by collating information on progress and lessons from countries with government-endorsed endgame goals.

Specific objectives are to:

- 1. Document and disseminate information on the progress and status of tobacco endgames.
- 2. Share experiences, ideas, lessons learnt and best practice.
- 3. Disseminate findings to other countries who may be considering adopting endgame goals.

#### **Future activities**

As well as ongoing monitoring and synthesis of experience from the six countries with endgame goals, future work could include adding other countries and exploring their experiences as they set endgame goals. Also, we will explore the feasibility of expanding our focus to describe and monitor progress from endgame goals adopted at state, province or regional levels, such as the Pacific region's goal to work towards a Tobacco-free Pacific by 2025, set by Pacific health ministers in 2013 at the Pacific Health Minister's Meeting in Apia, Samoa.<sup>22</sup> Innovative local-level goals may also be of interest, such as phase-out of the sale of tobacco products introduced in Beverly Hills and Manhattan Beach, California in 2021.<sup>23</sup>

## **Methods**

The project's design involved case studies of six countries with national-level government endgame goals. Ethical approval was obtained from the University of Otago (reference number: D22/331).

## Selection criteria

The criteria used to select the six countries were:

- A stated, quantifiable endgame target for complete, or virtually complete, elimination of smoked tobacco product use that fits with the endgame concept, e.g. one or more of: minimal adult smoking prevalence (5% or less), minimal uptake of smoking (<2% adolescent smoking), no/minimal supply and sale of smoked tobacco.
- A clear time period by which the goal has to be met, and which is before 2040.
- Endorsement of the endgame goal by government at a national level.

## **Data collection**

Researchers from Aotearoa/New Zealand's University of Otago (Louise Thornley [LT] and Richard Edwards [RE]) contacted key experts in four other countries, initially, to propose developing closer links between researchers, advocates, policymakers and practitioners in countries working towards endgame goals for smoking, and to invite participation in a project to review progress and learning from countries with endgame goals. Participants from Canada joined the project several months after the other countries, as Canada's endgame goal was formalised later in May 2018.

We asked the collaborators and contact people in each country to complete a data collection template providing information about the context, approach, progress and experiences with the endgame goal. Specifically, the template assessed the nature of the endgame goal, key aspects of the country's context, current smoking prevalence and recent trends, a summary of key tobacco control interventions in place or planned (adapted from the European region's Tobacco Control Scale)<sup>24</sup> and key lessons learned to date including the main enablers and barriers to progressing the national tobacco control strategy. The template is available in Appendix Two.

In each case a collaborative, iterative process was used to fill out the template. To save time, the template was initially partially completed by LT using available online information and key documents. It was then shared with the in-country informants; one person in each country coordinated a combined response from various participants (e.g. tobacco control experts, researchers, advocates and policy-makers) identified by the in-country coordinator. The in-country coordinators and key informants consulted in each country are listed in Appendix One. A total of 36 participants took part from the six countries.

We also gathered information from key documents provided by the in-country teams or identified by RE/LT.

The initial process of data collection was completed by February 2018, with the exception of Canada, which provided information in July 2018, with further information added iteratively subsequently through queries to the in-country collaborators or as additional key documents were identified.

## **Analysis**

A synthesis of key themes on the contexts, experiences, key lessons learnt and enablers and barriers from the initial five countries was completed by LT with additional input from RE. The initial synthesis was shared with all participants and discussed at the Cape Town meeting. Additional data from Canadian contacts was added subsequently. Successive drafts of the report were shared with incountry collaborators for further comment and amendments made as necessary.

We assessed the degree to which core internationally-agreed (MPOWER) tobacco control interventions were in place, along with other items in the Tobacco Control Scale and some extra measures that are increasingly proposed or implemented. The World Health Organization (WHO) introduced the MPOWER measures to encourage implementation of the Framework Convention on Tobacco Control (FCTC). The MPOWER interventions are detailed below, together with some important additional measures that have been implemented in many jurisdictions:

- Monitoring tobacco use prevalence and tobacco control policies including regular (ideally annual) nationally representative prevalence surveys with data on smoking prevalence among key demographic groups.
- **Protection from second-hand smoke (SHS)** including comprehensive bans on smoking in indoor workplaces and other public places. Additional measures address restricting smoking in other settings and include legislation for smokefree cars.

- Offering advice to quit (cessation support) including cessation support through primary health-care services, easily accessible and free quit lines and access to low-cost cessation medicines.
- Warn people about tobacco including pictorial health warnings and paid media and social
  media campaigns about the health effects of tobacco. Additional measures can include
  warnings and campaigns to prompt and support quitting, other methods of implementation
  such as pack inserts, and broader campaigns to denormalise smoking and/or the tobacco
  industry.
- Enforce a total ban on direct and indirect advertising, promotion and sponsorship additional measures can include point-of-sale retail display bans and standardised packaging.
- Raise the price of tobacco taxes increased regularly to correct for inflation and consumer purchasing power. Additional measures include allocating tax revenues for tobacco control and other important health and social programmes.

We also assessed the degree to which various leading-edge, potentially more transformative interventions were in place. These included:

- Larger price rises large increases in taxes, along with price controls (e.g. minimum price or standard price policies), so as to greatly reduce the affordability of tobacco products.
- Supply-focused measures such as registers or licensing of retailers selling tobacco products, restrictions in the location, number or density of tobacco retailers, and a 'sinking lid' – gradually decreasing quotas on supply of tobacco products by the tobacco industry.
- **Product modification interventions** these include restrictions on additives and flavours (e.g. menthol), mandated reductions in tobacco product nicotine content, and restrictions on the design of tobacco product (e.g. filter ventilation).
- Changes to legal age of purchase/use these include raising the legal age of purchase/use (e.g. to 21 years) or the bold 'Tobacco Free Generation' approach, with sale or purchase made illegal for people born after a specified date.

We drew on the 2016 Tobacco Control Scale results to compare the extent to which the four European countries (Finland, Ireland, Scotland, Sweden) had implemented the MPOWER tobacco control measures as of 2015-2016 (see Table 2, in the results section below). The Tobacco Control Scale provides a way of systematically quantifying European countries in their application of MPOWER-based policies. Initiated by the European Network for Smoking Prevention in 2004, regular editions of the Tobacco Control Scale results continue to be published by the Association of European Cancer Leagues (see <a href="https://www.tobaccocontrolscale.org/">https://www.tobaccocontrolscale.org/</a>).

For Canada and Aotearoa/New Zealand, the two countries outside of Europe, the Aotearoa/New Zealand researchers applied the Tobacco Control Scale assessment process, based on the publicly-available information on methods and scoring (e.g. <a href="https://www.tobaccocontrolscale.org/">https://www.tobaccocontrolscale.org/</a>). From this an estimate for Canada and Aotearoa/New Zealand was produced, with additional input from the Canada-based participants (see Table 2 below). These estimates are not directly comparable with the European estimates, as the full detail on methods and scoring was not available. Nonetheless, they provide a way to broadly compare and contrast the six countries.

The assessment based on the 2016 Tobacco Control Scale assessment had several limitations, including the following:

The assessment is calculated as of 2015-2016, so any subsequent developments were missed.

The Tobacco Control Scale only addresses certain key areas (i.e. a defined list of MPOWER-related measures), so will not give credit for additional measures within these categories if they are not in the scale (e.g. pack inserts in Canada), nor for measures additional to the MPOWER measures (e.g. regulations on e-cigarettes, removal of additives etc.).

 Only limited information on methods and scoring was provided in the 2016 Tobacco Control Scale report and website, so the scoring for Canada and Aotearoa/New Zealand is approximate only.

A more recent comparison of progress across the six countries was also carried out using WHO data.<sup>1</sup> In Table 3 below (Results section), we present a synthesis of the WHO's assessment of countries' progress in implementing the MPOWER measures in 2018, adapted from a report on progress with addressing the global tobacco epidemic.<sup>1</sup>

# **Results Part One: Themes across countries**

This section reports on commonalities and differences in the context and nature of the six endgame goals; appraisal of their advantages and disadvantages; and potential enablers and barriers to setting and progressing endgame goals. We have identified these from the summary information on the six countries' endgame goals, and from participants' suggestions for enablers and barriers in their own countries. Part Two of the Results presents a detailed description of each of the six countries' endgame contexts and goals and an assessment of progress toward the goal.

This section is divided into four sub-sections describing: (i) the nature of the endgame goals adopted (ii) commonalities in the contexts of the six countries that adopted endgame goals; (iii) enablers and; (iv) barriers to progress in achieving the endgame goal.

## Nature of the endgame goals

In analysing the endgame goals, some clear common and diverse themes emerged about the nature of the goals across these six countries at the end of 2018.

**Common themes:** First, all of the endgame goals focused on achieving very low adult smoking prevalence (generally defined as <5%) with end-dates varying between 2025 and 2035.

Second, all six countries have a focus on addressing disparities in smoking (e.g., disparities by ethnicity, socioeconomic status, education, and gender). Aotearoa/New Zealand and Scotland specified interim targets for high prevalence population groups (e.g., Māori and Pacific populations in Aotearoa/New Zealand and deprivation-focused targets in Scotland). Respondents stressed the need to reach the endgame goal for all socioeconomic and ethnic groups, not only for the total population. Yet all countries show only limited progress in reducing these disparities in practice (see the barriers section below).

Third, all countries except Aotearoa/New Zealand had a government-endorsed national tobacco control strategy, or action plan, to guide progress. The breadth and scope of these strategies varied. The plans in several countries, such as Scotland, Ireland and Finland, specified new population-based measures with clear implementation plans and timelines.

**Diverse themes:** As well as achieving a very low smoking prevalence. Some countries had additional facets to their goal. For example, Scotland included the achievement of a 'tobacco-free generation' and in Aotearoa/New Zealand the goal includes reducing the availability of tobacco to minimal levels.

However, perhaps the most obvious way in which the countries vary in their approach to the endgame goal is in their adoption of 'harm reduction' and abstinence approaches.

At one end of the spectrum, Finland's goal is to end the use of all tobacco and nicotine products (including e-cigarettes) by 2030, and the 2014 roadmap for achieving this goal explicitly rejects the use of harm reduction approaches. The 2018 working group proposals to develop a national tobacco and nicotine policy to ensure the achievement of the 2030 goal also clearly states that the objective

of Finnish policy will not be achieved through a harm reduction approach.<sup>27</sup> Participants argued that there is a broad consensus in Finland that a harm reduction strategy is not a suitable basis for national tobacco-control policy, and that Finland has been able to reduce smoking to date without replacing cigarettes with other nicotine products.

Sweden's endgame goal excludes snus, a commonly (and traditionally) used smokeless tobacco product, particularly among Swedish men. The Swedish Government lacks a stated position on snus use, though a harm reduction approach to reducing smoking is implied through the absence of a target for reducing snus use and the relatively high prevalence of snus use among men. Participants noted that the role of snus as a means to help achieve the endgame and whether it should be included in the endgame goal has been a topic of much debate in Sweden.

Ireland and Scotland were in the process of developing formal government positions on harm reduction, but in practice alternative nicotine products were widely available in both countries, and their endgame goals specify ending tobacco smoking rather than all nicotine use. Ireland's 2013 Tobacco Free Ireland Report and 2017 National Health Service (NHS) Health Scotland E-cigarettes consensus statement both acknowledged that alternative, less harmful forms of nicotine were of interest in terms of their possible use in facilitating smoking cessation.<sup>28</sup> Canada and Aotearoa/New Zealand had each recently moved to introduce regulatory frameworks for nicotine-containing e-cigarettes and other harm-reduced products. Access to these products has generally been enhanced (though in both cases e-cigarettes in practice were already broadly available). Canada's 2018 Tobacco Strategy specifically acknowledged the use of a harm reduction approach.<sup>29</sup>

## Common contexts for adopting endgame goals

There were some contextual features which are common to most or all of the six countries which were early-adopters of government endgame goals. These include:

Relatively low and declining smoking prevalence.

- 1. Relatively advanced core FCTC tobacco control interventions with a long history of tobacco control activity.
- 2. Strong tobacco control sector and research.
- 3. One or more effective political champion(s).
- 4. Adoption of endgame thinking within the tobacco control sector and by advocates.

## 1. Relatively low and declining smoking prevalence

Table 1 compares current estimates and recent trends in smoking prevalence in the six countries. The left-hand column shows data from the most recent population-based survey available at the end of 2018. In all six countries adult daily smoking prevalence was 18% or less. Sweden  $(7\%)^{30}$  had the lowest prevalence. Canada (11%), Finland (12%), and Aotearoa/New Zealand  $(13\%)^{33}$  were intermediate and Scotland (19%, current smoking<sup>†</sup>)<sup>34</sup> and Ireland (17%) <sup>35</sup> had the highest smoking prevalence. The figures may not be fully comparable due to differences in sampling approaches and age-ranges of participants included in the surveys.

The middle column presents WHO estimates of age-standardised daily smoking prevalence in 2017 for adults aged 15 years or more extrapolating from available survey data using a standardised methodology. Canada and Sweden had the lowest prevalence (10%), with Aotearoa/New Zealand (14%) and Finland (15%) intermediate and the United Kingdom (UK) (17%) and Ireland (20%) the highest.

<sup>&</sup>lt;sup>†</sup> In Scotland daily smoking prevalence was not available, so current smoking prevalence is reported.

The right-hand column presents WHO estimates of recent trends in current tobacco smoking prevalence from 2005-2015 (annual percentage reductions) using a standardised methodology based on available survey data. Sweden, Canada, Aotearoa/New Zealand and Ireland all had similar average annual prevalence reductions (between -0.76 and -0.84% per year), whilst the UK (-0.69%) and Finland (-0.58%) had a slightly lower rate of decline. The rate of decline in all six countries was much higher than the average for all countries combined (-0.41% per year), and was substantially higher than the average for all high-income countries (-0.55% per year) except Finland.

Table 1: Comparison of current and recent trends in adult daily smoking prevalence

Country	Daily adult tobacco smoking prevalence and year – most recent population survey #	Age-standardised daily tobacco smoking prevalence in 2017 (WHO) *	Annual rate of decline in current smoking prevalence among adults 2005-2015 (WHO)
Canada	11% (2018) [16% current †]	10%	-0.78%
Finland	12% (2018)	15%	-0.58%
Ireland	17% (2018)	20%	-0.84%
Aotearoa/New Zealand	13% (2017/18)	14%	-0.79%
Scotland	19% current + (2018)	17% (UK) **	-0.69% (UK)**
Sweden	7% (2018)	10%	-0.76%

<sup>#</sup> As reported in 2018 (or 2017, if 2018 not available) population-based survey

# 2. Relatively advanced core FCTC tobacco control interventions with a long history of tobacco control activity

Tables 2 and 3 are summary tables comparing the six countries in terms of Tobacco Control Scale scores (Table 2) assessed at January 1 2017 (July 2016 for tobacco price) and a 2019 WHO assessment of the extent of implementation of MPOWER core tobacco control measures (Table 3).<sup>1</sup>

The Tobacco Control Scale assesses countries in relation to the MPOWER measures of price of cigarettes, extent of policies/legislation for smokefree workplaces and other public places, spending on public information campaigns about smoking, extent of restrictions on tobacco advertising and promotion, strength of pack health warnings, and provision of services to support smokers to quit.

16

<sup>\*</sup> Predictions from World Health Organization estimates using standardised methodologies 14

<sup>†</sup> Current and daily smoking estimates are provided for Canada (because some in-country informants expressed doubts regarding the validity of the daily smoking prevalence (since it is so much lower than current smoking prevalence) and because current smoking prevalence is more widely cited in Canada) and Scotland (no daily smoking prevalence data available)

<sup>\*\*</sup> Prevalence was reported for the whole of the UK, separate figures for Scotland were not provided

<sup>&</sup>lt;sup>‡</sup> Data was not available for Scotland, so the figure for the UK was used.

See Appendix Four, Table A2 for further detail on the Tobacco Control Scale criteria and each of the countries assessments.

Table 2 shows the 2016 Tobacco Control Scale scores for the four European countries, along with scores estimated for this project for Canada and Aotearoa/New Zealand.§ The scores are based on legislation in force on 1 January 2017 and price data from 1 July 2016. On the original scale among the 35 participating European countries, Scotland (scored as per the UK) was ranked 1st, Ireland 2nd, Finland 6th and Sweden 9th equal. We estimate that if they had both been included Aotearoa/New Zealand would have been ranked 1st and Canada 4th equal.

These figures suggest that Aotearoa/New Zealand, Scotland, Ireland and Canada were among the leading countries for the implementation of core tobacco control interventions among high-income countries in 2016; and Finland and Sweden would be in the top third.

**Table 2: Tobacco Control Scale scores** 

Country	2016 Tobacco Control Scale score – out of 100	Score assessed for European TCS report or estimated?		
Aotearoa/New Zealand	83	Estimated		
Scotland (UK)	81	Assessed – as part of UK		
Ireland	70	Assessed		
Canada	69.5	Estimated		
Finland	60	Assessed		
Sweden	53	Assessed		

The second comparison table (Table 3 below) uses data from a recent WHO global monitoring report on the state of global progress on tobacco control in 2018, and summarises the extent to which the six countries had implemented MPOWER measures in 2018. The key below the table explains the shading coding used to assess the countries against the MPOWER measures.

Ireland, Aotearoa/New Zealand and Scotland (UK) had the strongest implementation of MPOWER measures in 2018, with strong implementation of several measures also in Canada, Finland and Sweden.

Although mass media public education campaigns were generally underway in some form, campaigns in most countries, participants observed these were relatively weakly implemented, with insufficient resources to enable the most effective campaigns and this was the weakest scoring section overall of the Tobacco Control Scale.

In contrast to the other five countries, Sweden has several gaps in its adoption of the core MPOWER measures (e.g., inadequate tobacco tax increases and provision of smokefree policies). Despite this, smoking prevalence in Sweden is the lowest of the six INSPIRED countries. Sweden has had a lower prevalence of tobacco smoking historically compared with the other countries in this project. Other

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<sup>§</sup> The assessment for New Zealand and Canada is based on applying the Tobacco Control Scale indicator methods to the New Zealand and Canadian contexts. However, we acknowledge that our assessment may have differed somewhat in approach to that applied in the Tobacco Control Scale report.

possible explanations may include the common use of snus, and Sweden's relatively egalitarian society where societal support for people stopping smoking may be stronger.

Neither the Tobacco Control Scale or the WHO report give a comprehensive overview of the status of tobacco control policy or the broader context relevant to assessing the status of the endgame goals within the participating countries. For example, both approaches address progress on a limited set of core tobacco control interventions and policy measures, and neither include any assessment of whether more radical 'endgame' interventions have been implemented or are under consideration.

A summary of extra interventions that one or more of the six INSPIRED countries have implemented (or proposed), which are not included in the Tobacco Control Scale, is provided in Appendix Four, Table A3. These additional interventions include restricting additives, introducing standardised (plain) packaging, mandating retailer licensing/registration, reducing retail availability, and increasing the minimum purchase age.

Table 3: Summary of MPOWER measures in 2018 (adapted from World Health Organization report, 2019)<sup>1</sup>

Country	Adult daily smoking	smoking	smoking	М	Р		0	W		Е		R	
	prevalence (2017) Monitoring of		nitoring Smokefree policies: smoking bans		Cessation	Health Warnings		Advertising bans		Price			
		prevalence data	Policies	Compliance with bans		Health warnings	Mass media*	Ban	Compliance with bans	Tax share of retail price	Cigarettes less affordable since 2008		
Canada	10%	1	1	9	1	1	4	2	10	64.3%	YES		
Finland	15%	1	4	10	2	1	3	2	10	87.4%	YES		
Ireland	20%	1	1	10	1	1	1	2	9	78.4%	NO CHANGE		
Aotearoa /New Zealand	14%	1	1	10	1	1	1	2	10	82.2%	YES		
UK**	17%	1	1	10	2	1	1	2	NR	79.4%	YES		
Sweden	10%	1	4	NR	1	1	4	2	NR	68.4%	YES		

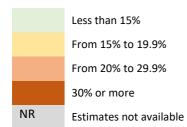
NR: Not Reported.

<sup>\*</sup> The Government of Canada did not implement a nationwide mass media campaign during the reporting period. However, mass media campaigns were implemented in three of Canada's provinces.

<sup>\*\*</sup> Scotland is reported as part of the United Kingdom of Great Britain and Northern Ireland.

## **Key to Table 3**

Adult daily smoking prevalence: Age-standardised prevalence rates for adult daily smokers of tobacco (both sexes combined), 2017



### Monitoring: prevalence data

1	Recent, representative and periodic data for both adults and youth
2	Recent and representative data for both adults and youth
3	Recent and representative data for either adults or youth
4	No known data or no recent data or data that are not both recent and representative

### **Smokefree policies: Smoking bans**

1	All public places completely smokefree (or at least 90% of the population covered by complete subnational smokefree legislation)
2	Six to seven public places completely smokefree
3	Three to five public places completely smokefree
4	Complete absence of ban, or up to two public places completely smokefree
NR	Data not reported/not categorised

## Cessation programmes: treatment of tobacco dependence

1	National quit line, and both Nicotine Replacement Therapy (NRT) and some cessation services cost-covered
2	NRT and/or some cessation services (at least one of which is cost-covered)
3	NRT and/or some cessation services (neither cost-covered)
4	None
NR	Data not reported

### Health warnings: Health warnings on cigarette packages

1	Large warnings with all appropriate characteristics
2	Medium size warnings with all appropriate characteristics OR large warnings missing some appropriate characteristics
3	Medium size warnings missing some or many appropriate characteristics OR large warnings missing many appropriate characteristics
4	No warnings or small warnings
NR	Data not reported

#### Mass media: Anti-tobacco campaigns

1	National campaign conducted with at least seven appropriate characteristics including airing on television and/or radio
2	National campaign conducted with five to six appropriate characteristics, or with seven characteristics excluding airing on television and/or radio
3	National campaign conducted with one to four appropriate characteristics
4	No national campaign conducted between July 2016 and June 2018 with duration of at least three weeks
NR	Data not reported

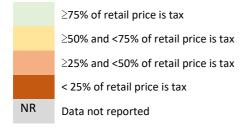
#### Advertising bans: Bans on advertising, promotion and sponsorship

1	Ban on all forms of direct and indirect advertising (or at least 90% of the population covered by subnational legislation completely banning tobacco advertising, promotion and sponsorship)
2	Ban on national television, radio and print media as well as on some but not all other forms of direct and/or indirect advertising
3	Ban on national television, radio and print media only
4	Complete absence of ban, or ban that does not cover national television, radio and print media
NR	Data not reported

#### Compliance with bans on advertising, promotion and sponsorship, and adherence to smokefree laws

10 9 8	High compliance (8/10 to 10/10)
7 6 5 4 3	Moderate compliance (3/10 to 7/10)
2	Minimal compliance (0/10 to 2/10)
NR	Estimates not available

#### Taxation: Share of total taxes in the retail price of the most widely sold brand of cigarettes



#### Affordability of cigarettes

YES Cigarettes less affordable - per capita GDP needed to buy 2000 cigarettes of the most sold brand increased on average between 2008 and 2018

NO Cigarettes more affordable - per capita GDP needed to buy 2000 cigarettes of the most sold brand

declined on average between 2008 and 2018

NO CHANGE No trend change in affordability of cigarettes since 2008

... Insufficient data to conduct a trend analysis

## 3. Strong tobacco control sector and research

All six countries had **strong and active tobacco control advocacy sectors**, often with coordinating structures and leadership from key NGOs of other civil society organisations. This is described in more detail in the 'cross-sectoral collaborative structures' sub-section in the section on enablers for the endgame goals.

A vibrant tobacco control research sector can also help inform policy debate and priorities for action to advance tobacco control. Tobacco control researchers and programmes were present in all of the countries, and reportedly had influenced policy change. In Ireland, for example, the evaluation of its 2004 smokefree laws informed the adoption of smokefree legislation in many EU countries. Also, the research demonstrating the success of this law was reported to have provided support for further tobacco control measures in Ireland, such as the point-of-sale ban on advertising, smokefree cars and plain packaging.

## 4. One or more effective political champion(s)

Most of the six countries had one or more identifiable political champions who had helped drive the idea of adopting an endgame goal for tobacco smoking. For example, in Aotearoa/New Zealand champions include Māori leaders like MPs Hone Harawira and Tariana Turia, and the leader of Te Reo Marama (a national Māori tobacco Advocacy group) Shane Bradbrook. In Finland a key political leader was the Speaker of Parliament (Paavo Lipponen) who was influential alongside other leaders and activists. In Ireland, the Minister for Health from 2011-2014, James Reilly, played a key role in ensuring both the strategy and the endgame target were agreed by government. In addition, an earlier Health Minister (Michael Martin) committed to smokefree workplaces in 2004, which was a significant driver for tobacco control in Ireland. In Scotland, a key leader was Michael Matheson, Minister for Public Health, Scottish Government. In Sweden, the Minister of Health and Social Welfare Gabriel Wikström declared governmental support for the endgame goal in February 2016.

## 5. Adoption of endgame thinking by tobacco control sector and advocates

Alongside the leadership from political champions in each of these countries, there was evidence of adoption of endgame thinking within the tobacco control community.

The introduction of a government-endorsed endgame goal was generally preceded by debate and discussion about endgame goals and ideas within the country, and often the adoption by the tobacco control sector of an endgame goal as a forerunner to the official government goal.

For example, some of the early thinking about endgame goals and radical endgame interventions was led by Canadian advocates and academics. <sup>10 36 37</sup> The adoption of the government goal was preceded by a 2011 report advocating for an endgame goal for Canada from the Canadian Public Health Association, <sup>38</sup> and by an agenda-setting workshop in 2016 organised by a steering group of key players from the advocacy, academic and practitioner sectors. <sup>39</sup>

## Perceived advantages and disadvantages of endgame goals

Participants identified key benefits and advantages of tobacco endgame goals. These included:

- 1. Enhancing clarity of purpose for the tobacco control sector.
- 2. Increasing political priority and societal and public support for tobacco control actions.
- 3. Facilitating the generation of political pressure for change, for example the endgame goal can be a 'hook' for parliamentary questions.
- 4. Enabling the introduction of tobacco control measures and increased resource allocations for tobacco control activities.
- 5. Providing tobacco control stakeholders with an anchor for generating new ideas and advocacy for stronger tobacco control measures, resources and/or calls for further research.

As an example of some of these benefits, Scottish participants noted that NGOs had worked successfully across different political parties to gain support for the Tobacco Free Generation goal, suggesting that whoever is in power can be influenced to work towards achieving endgame goals. They reported that the national endgame vision had helped keep the resourcing of tobacco reduction on the political agenda, and the goal could be used as a reference point for NGO advocacy, such as when contributing to parliamentary processes and consultations.

Potential drawbacks with tobacco endgame approaches were also raised. One possible disadvantage was that a focus on setting or debating endgame goals could distract from achieving implementation of key tobacco control interventions.

Concerns were raised about the potential impact of failure to achieve endgame goals. Such a failure has not yet occurred, but some participants noted that if a country did not achieve its goal, this could reduce motivation and increase pessimism about tobacco control efforts within the country, and perhaps more widely among other countries.

Irish participants noted that managing expectations about the tobacco control strategy was an ongoing challenge, along with ensuring the public understand that greater effort is needed to achieve the endgame goal. They also reported that other health agendas (e.g. obesity, exercise and other drugs) may be prioritised over tobacco control, because many policymakers view tobacco control as 'done'.

Participants in Scotland observed that a long-term vision may be seen as abstract and hence easily overlooked. A suggested solution to this was their use of the Tobacco-Free Charter initiative to collect case studies, encourage practical actions towards achieving the vision, recruit champions in various sectors and celebrate achievements through awards. Details on the Charter initiative are included in the section on enablers below (Cross-sectoral collaborative structures).

## **Enablers and barriers to endgame progress**

Across the six countries, the key informants highlighted some common factors that helped - or hindered - progress towards the endgame goal and some ongoing challenges (Table 4).

Table 4 Enablers and barriers to endgame goal progress

ENABLERS TO PROGRESS	BARRIERS TO PROGRESS AND CHALLENGES	
Strong political support for the endgame goal and actions – ideally Ministerial, cross-party and multilevel support and at national, regional and local levels.	<b>Insufficient political priority</b> for the endgame goal. Challenges include sustaining political will over time, and competing government priorities.	
National tobacco control strategy (or endgame strategy) endorsed by government, with specific evidence-based actions, timeframes, interim targets, monitoring and review mechanisms – supported by robust research.	Lack of capacity and resources for the endgame goal and the interventions needed to make progress towards the goal, and insufficient long-term funding for planned interventions and supportive NGOs.	
A social justice approach with a focus on reducing disparities in smoking prevalence.	<b>Insufficient progress on reducing disparities</b> in smoking prevalence.	
<b>Robust tobacco control measures</b> including implementation of core MPOWER interventions in most countries.	Lack of innovative, leading-edge tobacco control measures such as reducing supply and restricting nicotine content of tobacco products.	
Cross-sectoral collaborative structures for coordination and collaboration (e.g., networks, charters, Ministerial working groups) — including partnerships to better integrate the work of NGOs and government. A strong NGO sector is seen as a key strength across countries.	<b>Tobacco industry</b> influence and actions, including legal action and lack of compliance with Article 5.2 of the FCTC.	
<b>Public support</b> for the endgame goal and key interventions.	Lack of unity among stakeholders (e.g., internal division and disagreement in the tobacco control community over the role of alternative nicotine products; disunity between politicians, government agencies and NGOs).	

## **Enablers**

## **Political support**

Participants in all six countries agreed political commitment is required to set and progress endgame goals for tobacco products. They identified key aspects that helped drive progress, including: sustained political commitment over time; backing from civil society and the public to help maintain political commitment; and identifying and supporting political champions (key political figures with strong leadership and influence in tobacco endgame advocacy).

## Government strategy, interim targets, review mechanisms and research

According to participants, having a government strategy / action plan for tobacco control (or more specifically to achieve the endgame goal) helped countries to set and progress endgame goals. All countries, except Aotearoa/New Zealand, had a national tobacco control strategy in place at the end of 2018.

The strategies in Finland, Ireland, Scotland and Sweden are accompanied by action plans that set out specific actions to move towards the tobacco-free target. An action plan to accompany Canada's Federal Tobacco Control Strategy had not yet been released at the end of 2018.

Setting **interim targets** specifying required reductions in smoking prevalence in the years leading up towards the endgame goal were seen as useful to ensure that progress is measured and to help incentivise action. Without interim targets, especially if the endgame has a long timeline, participants thought that governments can potentially ignore the endgame goal during their tenure.

Such targets, either mid-term or annual, were specified in some countries but not all. Scotland and Aotearoa/New Zealand also have interim targets specified by socioeconomic or ethnic group, respectively.

**Robust monitoring and review mechanisms** were viewed as helpful to prompt regular reporting on progress towards the endgame goal. Such review processes could help facilitate the implementation of new actions where monitoring shows progress is inadequate.

Scotland, Ireland, Finland and Canada reported especially strong monitoring and review mechanisms. Scotland and Ireland, for example, annually monitor progress with the endgame goal. – Finland regularly reviews and updates its strategy (e.g. a Ministerial Working Group has released a set of recommended proposals for a planned new strategy). Finland's plan states that continuous monitoring of prevalence and the plan's implementation should be used to inform proposals for future action. In Canada, a National Endgame Cabinet (NGOs and academics) has been established, which is committed to regular monitoring. Its first Endgame Report Card was published in 2019.

By contrast, Aotearoa/New Zealand has no regular formal review process in place. The Ministry of Health reported back to the Māori Affairs Select Committee in 2015,<sup>40</sup> presenting prevalence data to show that Aotearoa/New Zealand was not on track to achieve their goal. However, the government did not make any change in approach or implement new initiatives as a result of this review.

## Focus on reducing disparities in smoking prevalence

Given the presence of large socioeconomic, and/or ethnic, disparities in smoking in each of the six countries, participants agreed that a **focus on reducing disparities** is an important enabler for achieving endgame goals. There was therefore a strong social justice aspect to the case for tobacco control and the endgame goal. Each of the six countries included a stated focus on reducing smoking rates in disadvantaged population groups in government strategies, or other documents relating to the endgame goal.

Examples of an equity focus included:

- Scotland's 2013 tobacco control strategy included a commitment to carry out a Health Inequalities Impact Assessment to inform the strategy's implementation.<sup>41</sup> This has been completed and recommendations given to all stakeholders implementing the strategy. The 2018 action plan had a strong focus on deprivation, with specified targets by deprivation group.<sup>42</sup>
- In Sweden, the 2016 national strategy for tobacco (along with alcohol and other drugs) states that equity (socioeconomic, gender, children) must be systematically taken into account in the strategy's implementation.<sup>43</sup>

- Though Aotearoa/New Zealand lacks a government tobacco control strategy, the endgame goal includes specific interim targets to reduce the smoking prevalence of Māori and Pacific peoples.
- Ireland's 2013 tobacco control strategy states that smoking is the largest contributor to health inequalities between the richest and poorest sections of society, and that smoking is also a key factor in gender-based mortality differences.<sup>44</sup> The 2015 action plan includes targeting of smoking cessation support to people with lower socioeconomic status.<sup>45</sup>
- In Finland, the working group that is planning the development of tobacco and nicotine policy proposes that cessation of tobacco and other nicotine products use among particular groups of heavy smokers should be enhanced in primary and specialised health services. <sup>27</sup> In addition, it has proposed that health care staff should do everything possible to reduce smoking and the use of other nicotine products among people recovering from mental health problems and many other specific groups.

## Implementing robust tobacco control measures

Participants agreed that a full mix of rigorous tobacco control measures was needed to achieve endgame goals. In general, these countries have introduced most of the core MPOWER tobacco control measures (Tables 2 and 3)). Sweden's implementation of the MPOWER measures appears to be less complete than the other five countries.

**Measures beyond MPOWER:** Some of the countries have introduced, or are considering, measures that go beyond the core Tobacco Control Scale/MPOWER interventions (see Appendix Four, Table A3). In Scotland and Finland this is through proposals included in government strategy and discussion documents, while in Canada and Aotearoa/New Zealand proposals for a range of bold options have been put forward in documents/strategies prepared by the tobacco control sector and researchers.<sup>46</sup>

Common examples include retail display bans, smokefree cars legislation and standardised packaging. Standardised packaging has been implemented in Aotearoa/New Zealand, Ireland and Scotland, and is due to be introduced in Canada in 2019. It was under discussion, but not yet committed to, in Finland.

Other measures either implemented, or being actively considered, by governments include:

- Restriction of additives and flavours in cigarettes and/or all tobacco products. Canada has
  been a global leader in banning flavours in tobacco products, with a federal ban already in
  place on all flavours including menthol. A ban was proposed in the EU countries (Sweden,
  Finland, Ireland, Scotland) through implementation of the EU Tobacco Products Directive
  (see Appendix Three), and extending the ban on flavours to all tobacco and nicotine
  products (Finland).
- Raising the minimum age for sale, import and possession of tobacco products to 20 years (Finland) or 19 years (some provinces in Canada).
- Mandatory licensing (Finland, proposed in Ireland; in place in most Canadian provinces) or registration (Scotland, Sweden) of tobacco retailers.
- Initiation of legal action against the tobacco industry to claim health care costs associated with tobacco products (Canada).
- Removal of public funding investment in tobacco and nicotine industry (Finland).
- Smokefree prisons (Aotearoa/New Zealand, Canada, Scotland, Sweden).

## Strong cross-sectoral collaborative structures

Five of the six countries had formal organisational structures in place to support the achievement of the endgame goal. National cross-sector collaborations and formal partnerships between NGOs and government agencies were present in Canada, Finland, Ireland, Scotland and Sweden. These were thought by participants to facilitate progress and monitoring of work towards the endgame goal. Some collaborative structures were led by government; others were led by NGOs.

#### **Examples of cross-sector collaboration**

#### Government-led structures:

- Finland's 'health in all policies' approach, with a Ministerial working group that monitors the endgame strategy, and cross-sector implementation of the endgame actions.
- Ireland's national tobacco control strategy is part of a whole-of-government partnership programme, and links with the wider Healthy Ireland Framework. Cross-sector examples include a Cross-Department Tax Strategy Group and Healthy Ireland funding for tobacco control activities in Local Community Developmental Committees.

#### NGO-led structures:

- Canada's National Tobacco Endgame Cabinet is an NGO/academic collaboration with representatives of the Canadian Cancer Society, Heart and Stroke Foundation, the Canadian Lung Association, Canadian Medical Association, Physicians for Smoke-Free Canada, and three universities. Its mandate is to advocate for endgame measures across Canada and to monitor progress towards achieving endgame goals.
- An awareness-raising strategy by Sweden's think-tank Tobaksfakta had resulted in over 200 organisations, companies and authorities (across sectors) pledging their support for a government action plan for the endgame goal (as at June 2019, see <a href="http://www.tobaksfakta.se/tobacco-endgame/">http://www.tobaksfakta.se/tobacco-endgame/</a> for the list of organisations).
- Scotland's Charter for a Tobacco-Free Generation is supported by wide-ranging agencies
  and organisations including government, the NHS, NGOs, and educational organisations.
  Pledges of support had been received from more than 300 organisations by February 2019
  (<a href="https://www.ashscotland.org.uk/what-you-can-do/scotlands-charter-for-a-tobacco-free-generation/">https://www.ashscotland.org.uk/what-you-can-do/scotlands-charter-for-a-tobacco-free-generation/</a>). Additionally, the Scottish Coalition on Tobacco (SCOT) helped to bring
  together high-level discussions about evidence and messaging with a view to advocacy for
  action and direction.
- Finland's Tobacco-free Finland 2030 network works to promote a non-tobacco, nicotine-free lifestyle. The network's operations were launched in 2008 and, as at February 2019, it included 19 members, all of which also promote a tobacco-free lifestyle through their own operations in various ways.

Some participants gave advice about how to maximise the effectiveness of cross-sector collaboration. For example, Swedish participants thought it was important to seek and secure widespread support from a variety of civil sector organisations and the public, not only key stakeholders. They suggested that when building public and cross-sector support, it helped to link the tobacco endgame goal with organisations' own agenda or needs (e.g. to stress "What's in it for you and your group?"). Increasing public awareness about the tobacco industry's tactics was described as another effective strategy.

Despite Canada's national tobacco control strategy stating a commitment to collaborate and coordinate work with non-government partners, <sup>29</sup> there was a lack of government-led collaborative structures (other than a longstanding Tobacco Control Liaison Committee of government representatives at federal, province and territorial levels). The Tobacco Endgame Cabinet, discussed above, is an example of strong collaboration that is led by academic and non-government organisations.

Compared with the other countries, Aotearoa/New Zealand's cross-sector structures are less well developed. A sector-led National Smokefree Working Group was in place from 2011-2016, before being disbanded. Aotearoa/New Zealand now has various informal collaborative networks in place, such as the Health Coalition Aotearoa Smokefree Expert Advisory Group, but no formal partnerships

exist between the government and NGOs, or between government agencies. National coordination and advocacy structures have been weakened by previous government restructuring and funding cuts, <sup>48</sup> including the loss of the Smokefree Coalition, which had a specific role to coordinate NGO tobacco control activities.

## **Public support**

The six countries have evidence of strong public support for the endgame goal and/or key tobacco endgame interventions – for example these survey findings from Canada,<sup>49</sup> Finland,<sup>50 51</sup> Ireland, <sup>51</sup> Aotearoa/New Zealand,<sup>52</sup> Scotland (UK),<sup>51 53</sup> and Sweden.<sup>51 54</sup>

Aside from Ireland and Scotland, all countries have evidence indicating strong public support for the endgame goal. In Canada, Finland and Sweden there is evidence that more than half of people who smoke also support the endgame goal or a staged policy to ban cigarettes. Ireland and Scotland have evidence of strong public support for key interventions.

#### Examples of this research include:

- A 2018 survey by Finland's Action on Smoking and Health (ASH) reported that 80% of Finnish adults expressed support for the endgame goal.<sup>50</sup> Another 2018 survey of adults in Finland reported public support for tightening tobacco control and workplace smoking bans, but societal (government-funded) support for people to quit smoking was supported to a lesser extent.<sup>55</sup>
- One Aotearoa/New Zealand survey found nearly 80% of the public agreed with the statement 'I support the goal of reducing smoking from around 20% of the population to around 5% or less by 2025', and about 70% said they wanted to live in a country where hardly anyone smokes.<sup>52</sup>
- National surveys in Sweden have found strong public support for a national smokefree goal, for example in 2016, 69% of the public supported a national political decision on a smokefree society (when the survey question was preceded by brief information explaining what the goal meant).<sup>54</sup>

Examples of evidence of support among people who smoke include:

- In Canada, data from the International Tobacco Control Evaluation Project (ITC) Survey suggests that more than half of smokers would support a complete ban on cigarettes within 10 years, if the government provided assistance to quit.<sup>49</sup>
- A 2018 opinion poll found that 53% of Finnish smokers approved the aim for tobacco- and nicotine-free Finland.<sup>50</sup>
- In Sweden 60% of smokers supported a national political decision on a smokefree society (when the survey question was preceded by brief information explaining what the goal meant).<sup>54</sup>

## **Barriers**

## Insufficient priority for the endgame goal

Participants in most countries (Canada, Scotland, Sweden and Aotearoa/New Zealand) reported that despite stated government support, in practice the level of government commitment was variable and often less than for other competing priorities — especially at times of squeezed or limited resources. A common reality is that the endgame goal has to compete with other priorities in politics, legislation and/or resource allocation. Swedish participants, for instance, reported insufficient

collaboration between government, health agencies and NGOs to implement the tobacco control strategy.

In Aotearoa/New Zealand, a key barrier was the absence of a government-endorsed strategy or action plan. This was the situation at the beginning of 2019, eight years after the Smokefree 2025 goal was adopted in 2011, despite numerous calls for a plan from tobacco control sector experts. The low political priority of the Smokefree 2025 goal in Aotearoa/New Zealand was further evidenced by research showing most Ministers of Health rarely mentioned the goal in political speeches and press releases.<sup>56</sup>

Finland and Ireland appear to be the exceptions here. In Finland, there is broad political support for tobacco and nicotine-free Finland. Since 1976 tobacco legislation has been consistently developed regardless of fierce opposition from the tobacco industry.

Ireland is a recognised leader in European tobacco control, for example Ireland took a crucial role in advocating to secure the EU Tobacco Products Directive (see Appendix Three) and led the way on laws on smoking in cars and standardised packaging. The WHO has recognised Ireland with international awards since 2014.

Participants in several countries stressed the need for ongoing work to increase and maintain cross-party political support and political priority for the tobacco endgame goal, and actions to achieve the goal. For example, participants from Scotland acknowledged that having a long-term endgame goal and strategy facilitated allocation of the necessary resourcing to achieve it. However, participants in Finland and Scotland both mentioned the challenge of sustaining the priority of endgame work over a long timeframe. They reported that progress can seem slow, and it can be difficult to keep such a long-term vision alive and high up the list of priorities for politicians and the public.

## Lack of capacity and resources for tobacco control

A shortfall in funding and capacity to implement relevant tobacco control actions towards the endgame goals was another barrier identified by participants in the INSPIRED project. Examples included: a lack of government capacity to 'join up' strategies and drive progress (Scotland), insufficient investment in smoking cessation support (Finland) and lack of nationwide communication campaigns (Finland). Participants in Canada said there was insufficient government budgetary investment in tobacco control (at federal, provincial and territorial levels), including for cessation and other initiatives.

Swedish, Aotearoa/New Zealand and Canadian informants also raised the issue of underfunding for tobacco control, and a lack of sufficient long-term funding for NGOs in particular. For example, in Aotearoa/New Zealand, investment in the tobacco control advocacy sector was greatly reduced in 2015.<sup>48</sup> This resulted in reduced funding for national advocacy, loss of sector coordination and cohesiveness, increased fragmentation, and diminished capacity to advocate for tobacco control measures. Likewise, Canadian participants reported a recent significant recent reduction in NGO advocacy capacity.

Spending on public information campaigns was reported by participants as insufficient in all six countries. The four European countries scored relatively low on the Tobacco Control Scale indicator on funding levels for public information campaigns (as did the vast majority of countries in the survey of all European countries). Comparable estimates for Aotearoa/New Zealand and Canada also came out low. See Table A2 in the Appendix for the detail of these scores.

Finland participants said that to move forward in the endgame work, research as well as assessment and monitoring of the implementation methods will be needed. In Finland, tobacco control monitoring and research involves challenges relating to the continuity of population and school surveys, comparability of relevant tobacco indicators, and the responsiveness of data collection instruments to changes in tobacco policy and new tobacco and nicotine products.

## Insufficient progress on reducing disparities in smoking

At the country level, a lack of success in tackling socioeconomic, gender and/or ethnic disparities in smoking prevalence was seen as a major constraint on progress toward endgame goals. Such disparities in smoking were apparent in all six countries.

Indigenous peoples should be prioritised in tobacco control because they experience a very high, disproportionate burden of tobacco-caused harm, often as a direct result of colonisation, as well as suffering other continuing adverse effects of colonisation such as loss of resources and power, eroded social structures and intergenerational connectedness (Box 1).<sup>57</sup>

## Box 1: Progress review of indigenous tobacco control – Canada and Aotearoa/New Zealand

A 2018 review published in *Tobacco Control* found some progress in reducing tobacco harm among Indigenous communities in Australia, Canada and Aotearoa/New Zealand (2007 to 2016).<sup>57</sup> Evidence from systematic reviews suggests increasing readiness and priority-setting to address the high rates of commercial tobacco use in these three countries. The review concluded, though, that countries' FCTC progress on Indigenous tobacco control was hard to determine because of major limitations in reporting. Of concern, smoking prevalence generally remained at least twice as high as respective non-Indigenous populations in these countries. The authors recommend strengthening FCTC reporting instruments to include detailed, standardised Indigenous data.<sup>57</sup>

In Aotearoa/New Zealand, for example, massive social and ethnic disparities in smoking exist, and only limited progress has been made in reducing these disparities over time.

- In the 2017/18 New Zealand Health Survey, 33% of Māori adults reported they were current smokers, compared to 15% current smoking prevalence for all adults in Aotearoa/New Zealand.<sup>33</sup> Māori adult smoking prevalence has reduced from 42% in 2006/07, but is still much higher than smoking prevalence in the whole population, and than among Aotearoa/New Zealand European and Asian adults.
- Māori women were 3.5 times as likely to be current smokers as non-Māori women, and Māori men were 1.9 times more likely to be smokers than non-Māori men.<sup>33</sup>
- Smoking was also higher among Pacific adults, of whom 23% were current smokers, and there has been little change in prevalence over more than a decade (Pacific adult current smoking prevalence was 27% in 2006/07).<sup>33</sup> Relatively little attention has been paid to reducing the smoking prevalence of Pacific communities in Aotearoa/New Zealand.
- Adults living in the most socioeconomically deprived areas of Aotearoa/New Zealand were three times as likely to be current smokers as those living in the least deprived areas, after adjusting for age, sex and ethnic differences.<sup>33</sup>

Modelling evidence suggests that Māori and Pacific ethnic groups would reach the endgame goal decades later than other ethnic groups in Aotearoa/New Zealand, assuming current 'business as usual' policy approaches. For example, Māori women would not reach the endgame goal until 2060 or later – 35 years after the endgame target year – if the current 10% annual increases in tobacco excise tax were continued. By contrast, non-Māori women were predicted to reach the goal in 2030, according to this modelling evidence, just five years after the 2025 target year.

To date, Canadian data show a similar picture to Aotearoa/New Zealand. There is very high smoking prevalence among Indigenous peoples in Canada – about 2 to 5 times higher than smoking among non-Indigenous Canadians.<sup>59</sup> For instance, First Nations populations have 40% daily smoking

prevalence among adults aged 18 years and older, and 54% current smoking among people living on reserves and in northern communities in 2015-16.<sup>60</sup>

In Finland, key informants in a qualitative study identified one barrier to achieving the 2030 goal as the way institutional practices contribute to disparities in smoking. For instance, vocational students are more likely to be further disadvantaged in terms of school facilities and health education, compared with students in academic schools.<sup>61</sup>

## Lack of implementation of leading-edge, innovative interventions

To achieve endgame goals, a full set of innovative measures is likely needed. Arguably, these need to go beyond mainstream tobacco control measures and include bold and radical 'endgame' interventions – for example, making tobacco products much less available, mandating the elimination or reduction in nicotine to reduce the addictiveness of cigarettes and tobacco, substantially (i.e. at least doubling) increasing the price to consumers through tax and price control measures, and raising the legal age of purchase (or enacting the tobacco-free generation proposal).<sup>17</sup>

However, by the end of 2018 the six countries in this project had not yet introduced nor proposed to introduce bold, leading-edge' endgame' measures.

Reducing or removing nicotine from tobacco products to make them less addictive had been proposed by the FDA in the United States<sup>62</sup> and Canada was committed to exploring this proposal, but had not signalled any plans to introduce mandated very-low-nicotine cigarettes, nor was it under consideration in by governments of the other five INSPIRED countries.

Interventions to reduce the retail supply of tobacco were very weak across the six countries. Finland was the only country that required retailers to be licensed in order to legally sell tobacco products, and to charge a fee for the licence (though in Canada most provinces license tobacco retailers, and two provinces charge a fee). Ireland, Scotland and Sweden (proposed for 2019) had mandatory registration of tobacco retailers in place or planned, but none of the INSPIRED countries had taken steps to restrict the number of places where tobacco products can be sold, although Scotland planned to initiate policy discussion on this in 2019. Most Canadian provinces had some restrictions on where tobacco products could be sold (e.g. pharmacies, hospitals, university/college campuses, restaurants, bars, vending machines), though the specific locations varied by province.

Most of these countries had not yet introduced legal or fiscal measures to increase tobacco industry accountability for the harms caused by their products. Ireland is an exception. In Ireland the States' Strategic Investment Fund (ISIF) has completed the sale of its remaining investments in tobacco shares and a Bill is before the Oireachtas (Parliament) to prohibit the investment of public monies directly or indirectly in equity or debt securities issued by tobacco companies.

Several other countries were considering moves to strengthen the accountability of the tobacco industry. Finland was considering banning public investment in the tobacco industry, and Canada's strategy proposed future measures to increase industry accountability for tobacco-caused harm. In Scotland, there was advocacy and discussion on a tobacco industry levy at the UK and/or Scottish level.

In Canada and Aotearoa/New Zealand, a broad mix of additional, cutting-edge interventions had been proposed by the tobacco control sector, but were not yet being considered by the government.<sup>46 47</sup>

## Tobacco industry influence and actions

In all six countries, tobacco industry opposition and interference was identified as a key barrier to progress with endgame goals. There were widespread examples of tobacco industry lobbying against

tobacco control measures, as well as lobbying from industry-funded organisations, such as retailer associations, 'think-tanks' or research consultancies.

Participants noted that tobacco industry influence, lobbying and legal challenges had impeded progress with some interventions, such as the introduction of standardised packaging and point-of-sale restrictions in Scotland and Ireland. This is consistent with findings in international reports. For example, the WHO 2018 Global Progress Report, which assessed how countries are implementing the FCTC, reported that interference by the tobacco industry was the most commonly cited barrier to implementing the FCTC.<sup>4</sup>

Box 2 shows some specific examples of tobacco industry interference, particularly in relation to the introduction of standardised packaging.

## Box 2: Examples of tobacco industry interference – opposition to standardised packaging <sup>63</sup>

Scotland – Opposition to standardised packaging. In September 2013, the Scottish Government announced a public consultation on standardised packaging with a view to introducing legislation. The tobacco industry response mirrored earlier tactics in England and Australia, including threats of legal action from Philip Morris International (PMI) and Japan Tobacco International (JTI). In May 2015, three major tobacco companies filed separate lawsuits to challenge the UK Government's legislation to introduce standardised packaging: British American Tobacco (BAT), PMI and JTI. Grounds for objection included: projected loss of income, breach of intellectual property, and violation of UK and European law and World Trade Organisation rules. On 19 May 2016, just one day before the UK legislation was due to come into force, the UK High Court ruled that the legislation could proceed.

**Ireland** – Opposition to standardised packaging. In March 2015, Ireland became the first country in the European Union (EU) to legislate for the standardised packaging of tobacco products. Its introduction faced persistent, consistent opposition. For example, JTI initiated legal action - within a month of the legislation being signed - against the Irish Government to block standardised packing legislation. Two other major tobacco companies (PMI, Imperial Tobacco), represented by some of Ireland's top law firms, threatened to sue the government if it proceeded with the legislation.

**EU** – Tobacco Products Directive (TPD) legal challenges. The TPD was challenged in the European Court of Justice by several companies including PMI and BAT, supported by Imperial Tobacco and JTI. In May 2016, the European Court of Justice ruled that the TPD, which allows Member States to implement standardised packaging, was lawful. In Sweden, the tobacco industry challenged a standardised packaging proposal, citing the Swedish Press Act. The case had been on hold since 2016.

## Lack of unity in tobacco control sector

Participants from Aotearoa/New Zealand and Scotland stated that disagreement among tobacco control experts and key stakeholders over the 'harm reduction' agenda was potentially affecting endgame progress. For example, several Aotearoa/New Zealand tobacco control leaders said the debate over e-cigarettes (and other alternative nicotine-delivery products) had the potential to distract, fragment and weaken the tobacco control sector. A Scotland participant expressed concern that heated tobacco product promotions may undermine messaging about the harmfulness of tobacco products.

# Results Part Two: Overview of each country at the end of 2018

In this section we profile each of the six countries in alphabetical order. The overviews for each country include a brief description of the endgame goal and context, current prevalence and recent trends in smoking and use of other tobacco and nicotine products, any strategic planning to achieve the goal, a summary of tobacco control interventions currently in place or proposed, approaches to harm reduction, structures to support achievement of the goal, and expectations of achieving the endgame goal and an overview of supporting evidence.

## Canada

## **Country context**

According to their 2016 Census, Canada has a population of 35.2 million. Canada's Indigenous population is the First Nations, Inuit and Metis peoples, who comprise less than 3% of the total population. Other major ethnic groups are Canadian, European, Chinese and Indian.

The Canadian government is a parliamentary democracy. The three levels of government are federal, provincial/territorial, and municipal. There are ten provinces and three territories. Federal elections occur within five years (and usually within four years) of the prior federal election. There are also elections for each of the ten provincial and three territorial governments. Legislative abilities differ between the federal, provincial/territorial, and municipal levels. For example, Canada's federal tobacco control strategy was set by the federal Minister of Health. However, smokefree, minimum age, and retail location policies are often introduced by provincial governments which can result in policy variability between Provinces. Both the federal and provincial/territorial levels restrict flavours and have tobacco taxes, allowing measures to go beyond federal measures.

In 2018, the Liberal Party of Canada (considered to be centre to centre-left) was in power at national level, having won the 2015 federal election.

Examples of tobacco control NGOs in Canada include ASH Canada, the Canadian Cancer Society, the Canadian Lung Association, Heart & Stroke, the Physicians for a Smoke-Free Canada, and the new NGO-led Tobacco Endgame Cabinet.

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

Of note, where tobacco is referred to it is in reference to commercial tobacco and not sacred/ceremonial use of tobacco by Indigenous peoples.

## Canada's endgame goal

Canada's endgame goal is to achieve less than 5% adult current tobacco use prevalence by 2035. The goal was set by the Federal Minister of Health in May 2018, when launching a new federal tobacco control strategy.<sup>29</sup> The move followed an earlier proposal at a Tobacco Endgame Summit held in October 2016. There is a long history of endgame thinking among Canadian tobacco control advocates and academics.<sup>10 36 37</sup>

Priority groups in the federal tobacco control strategy (see below) include Indigenous peoples as well as LGBTQ+ and young adults. No interim targets for the endgame goal were set.

## **Current use of tobacco and nicotine products**

Canada has a relatively low smoking prevalence. In 2018 in the Canadian Community Health Survey, for people aged 12 and over, daily smoking prevalence was estimated as 10.8% (9.4% females, 12.3% males). This had decreased from 21.5% in 2000-01. Current (including daily and occasional) smoking prevalence in 2018 was 15.8% (13.0% females, 18.6% males). This estimate is preferred by Canada participants in this project. Current smoking prevalence is more widely cited in Canada, and is considered by some to be a better measure of smoking prevalence than daily smoking given the large difference in daily and current smoking prevalence in the Community Health Survey. Similar figures were reported for over-15 year olds in the biennial Canada Tobacco, Alcohol and Drugs Survey in 2017. Females, 12.3%

Youth current smoking (15-19 years) was 8% in 2017 (3% daily, 5% occasional), and young adult (20-24 years) smoking was 16% (9% daily, 7% occasional).<sup>64</sup> There have been substantial reductions in youth and young adult smoking over the last two decades with current smoking prevalences of around 28% and 35% respectively in 1999.<sup>65</sup>

Smoking prevalence was higher among people with lower socioeconomic status. For example, in 2017 among households in the lowest income quintile, 22% were daily or occasional smokers compared to 12% in households in the highest income quintile.<sup>59</sup>

The most striking disparity in smoking, though, was that smoking prevalence among Indigenous peoples was approximately 2 to 5 times higher than among non-Indigenous Canadians.<sup>59</sup> For example, the First Nations population group had a daily smoking prevalence among adults aged 18 years and older of 40%, and daily and occasional smoking combined of 54%, among First Nations people living on reserves and in northern communities in 2015-16.<sup>60</sup>

Canada has a low prevalence of smokeless tobacco and water pipe use (each were estimated as 1% current use in 2017).<sup>66</sup>

E-cigarette use rose between 2013 and 2015, and then remained similar in 2017.

- Current use increased from 1.8% in 2013 to 3.2% in 2015 and decreased to 2.9% in 2017 (past 30-day use, age 15 years and over). Daily use in 2017 was 0.8%.<sup>66-68</sup>
- E-cigarette use was higher among adolescents and young people, e.g. for 15-19 year olds, current use increased from 2.6% in 2013 to 6.3% in 2015 and in 2017, and for 20-24 year olds, increased from 3.9% in 2013 to 6.3% in 2015, and decreased slightly to 6.0% in 2017.
- Most e-cigarette users were smokers or ex-smokers: among past-30-day e-cigarette users, 65% were current smokers, 20% were former smokers and 15% were never-smokers in 2017.<sup>64</sup>

The vast majority of never-smokers using e-cigarettes were adolescents and young adults. Of the never-smokers, 58% were youth aged 15 to 19 and 33% were young adults aged 20 to 24 (the prevalence of past-30-day e-cigarette use among adult never-smokers aged 25 years and older was not reportable due to small sample size.)<sup>64</sup>

## Reductions in smoking needed to achieve the endgame goal

To achieve the goal of less than 5% prevalence by 2035, Canada needs to reduce daily smoking from 10.8% in 2018 by 5.8% in 17 years – about 0.34% each year (see Table 21 in the Discussion section). In terms of current smoking, an absolute reduction of 10.8% will be required over 17 years (from 15.8% in 2017) – about 0.64% each year. The absolute and annual reduction in daily smoking required to achieve Canada's endgame goal are the second smallest among the six countries, but the annual reductions need to be sustained over the longest period (17 years). Canada's endgame goal is to reduce use of all tobacco products to less than 5% by 2035. Among people who do not smoke cigarettes, there is a combined prevalence of 2.5% for use other tobacco products: cigars including little cigars, water pipe tobacco, pipe tobacco, chewing tobacco, snuff and heated tobacco products. This means that the absolute reduction to achieve the 5% target by 2035 will be more for all tobacco products than for just smoking.

## Planning for achieving the endgame goal

A new Federal Tobacco Control Strategy was introduced in May 2018.<sup>29</sup> This signalled a shift towards a more wide-ranging, integrated approach to tobacco control.

The strategy included proposals to:

- Revamp smoking cessation support.
- Introduce standardised packaging of tobacco products.
- Initiate a new public education campaign targeting at-risk youth and young adults.
- Explore options to further reduce the appeal and addictiveness of tobacco products through taxation, price interventions and regulation of nicotine content.
- Investigate methods to increase industry accountability, including mechanisms through which the industry could make a direct contribution toward the costs of tobacco control activities.

However, these are only general proposals and there was no specific action plan with details or timelines to achieve the target.

The 2018 strategy was accompanied by an increase in funding announced in the 2018 Canadian Budget. This consisted of \$80.5 million (Canadian dollars) in new funding for the strategy to build on existing resources, bringing Canada's total investment to approximately \$330 million over the next five years (2018-2023).

A theme in the Federal strategy is to work with national and regional Indigenous groups to create specific plans for First Nations people, recognising their unique circumstances and seeking to continue and expand existing tobacco projects in Indigenous communities.

A 'Tobacco Endgame Cabinet' was formed by the tobacco control sector to document progress towards the endgame goal, and to advocate for stronger measures. The group comprised leading experts in tobacco control (including health charities, researchers and health professionals). This collaboration produced the 2019 Tobacco Endgame Cabinet report, which highlighted the need for improvements in Canada's tobacco control efforts. The report stated that current measures (see below) won't enable Canada to reach the endgame goal, and there was an urgent need for a more effective approach. The authors also note: "In order to achieve the Endgame goal of less than 5% by 2035, pan-Canadian support is required. While the goal was endorsed by the federal government, individual provinces and territories have not yet provided endorsement." <sup>69</sup>

Proposed new measures advocated in the Tobacco Endgame Cabinet report <sup>69</sup> included:

- A minimum legal age of 21
- Regulating tobacco industry pricing to prevent undermining of tobacco tax
- Aligning tobacco supply with public health goals (noting that the following potential
  measures were raised for discussion at the 2016 Endgame Summit: financial penalties on
  tobacco companies for failing to meet tobacco reduction targets; a non-profit enterprise
  with a public health mandate; an ever declining sinking lid on the volume of tobacco allowed
  to be sold in Canada each year; a cap and trade system; a moratorium on new tobacco
  products).

## **Current interventions and gaps**

As estimated for this project, Canada scored 69.5 points on the Tobacco Control Scale Score in 2016 and was intermediate in ranking alongside Ireland among the six countries included in the project (Table 2, p13). We estimated that Canada if added to the rankings would have ranked 4<sup>th</sup> equal among the 35 European countries and Aotearoa/New Zealand.

Canada was assessed as fully meeting the comprehensive bans on advertising and promotion for the 2016 Tobacco Control Scale [13 out of 13 points]. Canada scored highly for the smokefree areas indicator [21 out of 22]. Canada lost points for the price of cigarettes in 2016 [19 out of 30 points], was similar to most other countries in its implementation of pictorial health warnings [5 out of 10], and partially met the measure for cessation treatment services [5.5 out of 10 points]. We estimate the spending on public information campaigns to be 6 out of 15. See Table A2 in Appendix Four for detail. Estimating a score for Canada was complicated by the Provincial structure as some interventions are implemented federally and others at province level, and there is variation between Provinces.

The 2016 US\$ price for a pack of 20 cigarettes in Canada was \$7.89 – the fourth highest price and the fourth least affordable cigarettes among the six participating countries (see Table A4, Appendix Four).

In 2018 Canada was assessed as having strongly implemented most of the core MPOWER interventions (see Table 3) with moderate implementation only for tobacco taxation and use of mass media, and not recorded for smokefree policies (possibly due to the Provincial structure making assessment difficult). Of note, all provinces and territories did have 100% smoke-free laws for enclosed workplaces and public places that were well enforced. Additionally, there was an increasing number of provinces/territories restricting smoking in outdoor settings and cars.

Table 5 summarises some of the key gaps or weaknesses in the implementation of the core tobacco control interventions in Canada at the end of 2018.

#### Table 5 Gaps and weaknesses in core tobacco control measures in Canada (end of 2018)

#### Core interventions not in place

No sustained mass media campaigns.

Cessation support network did not cover the whole country for free (though there is a toll-free Quitline and free online cessation support). Medications were partially, not fully, reimbursed.

No legal or financial incentives to record smoking status in all medical notes or patient files. Family doctors reimbursed for providing brief advice occurs in some provinces only.

Provincial tobacco tax rates lower in the most populous provinces, Ontario and Quebec, compared to other provinces/territories (there are provincial/territorial tobacco taxes in addition to federal tobacco taxes).

Brand-stretching significantly restricted, but not fully banned; advertising was permitted in direct mail to identified adults; and in places where minors are prohibited by law, e.g. bars (though some provinces are more restrictive).

Canada had not signed or ratified the WHO Protocol to Eliminate Illicit Trade in Tobacco Products.

However, Canada also had in place some significant interventions that go beyond the standard MPOWER measures, and also has some significant proposed or planned interventions. These are detailed in Table 6. Measures in place included smokefree cars laws and increasing restrictions on smoking in outdoor public areas; bans on menthol and other flavours for tobacco products and mandated pack inserts with health advice. Another feature of tobacco control in Canada is legal action against the tobacco industry. Two class action lawsuits have been completed in the province of Quebec on behalf of individual victims of tobacco use. This resulted in a court damage award of \$15.5 billion (in Canadian dollars) in May 2015. An appeal was argued in November 2016 and the outcome was pending. Also, all 10 provinces in Canada have filed medicare cost recovery lawsuits against the industry, together seeking more than C\$120 billion in damages. The first trial was scheduled to begin in the New Brunswick province in November 2019.

#### Table 6 Interventions beyond MPOWER tobacco control measures in Canada (end of 2018)

#### Additional interventions in place

Bans on tobacco sales in specific places, e.g. pharmacies; hospitals; tertiary/University campuses; bars; restaurants; recreational facilities; in vending machines (in some/many provinces).

Federal ban on menthol was extended to all tobacco products Nov. 18, 2018, and cloves were banned in all tobacco products (i.e. kreteks – or clove cigarettes - are thus banned). Seven provinces ban flavours in most or all tobacco products. One province (Quebec) bans flavours in herbal shisha.

Smokefree restrictions outdoors being adopted increasingly (mandatory or voluntary) at provincial and territorial levels including: restaurant/bar patios; hospital grounds; building entrances/exits; sports fields and children's playgrounds; prison grounds; universities/college campuses.

All 10 provinces ban smoking in vehicles with Children (age < 16, 18 or 19, depending on province).

More government-owned subsidized housing is becoming 100% smokefree.

Cigarette packs required to have inserts with health messages e.g. quitting tips.

Legal action against the tobacco industry – see text below for details.

## Proposals and plans for new actions

There are also a range of interventions that are planned or proposed (Table 7).

#### Table 7 Proposed tobacco control interventions in Canada (end of 2018)

#### **Planned or proposed interventions**

Plain and standardised packaging for all tobacco products, to be implemented in 2019. The current proposals will also result in largest health warnings in the world in terms of surface area.

Under the draft plain packaging regulations, cigarette filters must have flat ends, rather than the recessed hole/tube format.

Federal requirement for health warning directly on individual cigarettes being developed (i.e. dissuasive sticks/messaging on cigarette sticks).

Federal regulations regarding e-cigarettes, including further advertising and promotion restrictions, being developed.

Strengthening of federal regulations regarding tobacco industry reporting being developed, including for public disclosure of sales information by brand.

New public education campaign proposed in Federal Tobacco Strategy - targeting at risk youth and young adults.

Proposals to explore a nicotine reduction strategy and applying costs of tobacco control and public health to the tobacco industry in federal tobacco control strategy.

As noted above, the 2018 Canada's Tobacco Strategy (federal) mentions exploring mandatory nicotine content reduction for tobacco products and proposals to make the industry more responsible for the costs of tobacco control.<sup>29</sup> Health Canada and tobacco control researchers have also had meetings to discuss and debate the potential of nicotine reduction strategies, such as mandated low nicotine cigarettes, however, formal work by Health Canada was not underway at the end of 2018.

Earlier proposals from NGOs and academics in the tobacco control sector emerged from a 'Tobacco Endgame Summit' in 2016, the precursor to the development of the Tobacco Endgame Cabinet.<sup>69</sup> A background paper prepared for the Summit outlined a wide variety of potential measures, including retail supply reduction, mandated low nicotine cigarettes, banning all additives and flavours, caps on industry profits, and controls on the tobacco product market.<sup>70</sup>

## Approach to alternative nicotine products

Both federal and provincial legislation regulates e-cigarettes. The Federal Government legalised the sale and purchase by adults of e-cigarettes with nicotine in May 2018, though in practice such products had been widely available beforehand. The Tobacco and Vaping Products Act 2018 reflected the Canadian Government's recognition of the potential of harm reduction approaches to address tobacco smoking, as well as the need to deter young people and non-smokers from using nicotine or tobacco products.

Federal provisions (in the 2018 Act) prohibit sales of e-cigarettes to minors under age 18; prohibit use of e-cigarettes in places where smoking is banned federally; and contain authority to further restrict advertising/promotion on labelling, and to regulate the product itself. The provisions also allow for advertising and promotion, subject to potential further regulation, as long as they are not lifestyle-oriented and do not depict people. In effect this means that advertising and promotion on TV, radio, billboards and point-of-sale has greatly increased. Some provinces have advertising measures that are more restrictive than federal legislation.

Additional legislation has been adopted at the provincial level (7 out of 10 provinces at the end of 2018). This legislation includes prohibiting sales to those aged under 18/19 years; prohibiting use where smoking is banned; prohibiting e-cigarette sales where tobacco sales are banned; and prohibiting retail displays except in specialty vape shops.

## Structures to support achievement of the endgame goal

Robust surveillance, monitoring and review mechanisms are already in place, though the tobacco control strategy aims to further strengthen Canada's science, surveillance and partnerships. This includes more funding for innovative ways to reduce tobacco use in Canada, and to understand the health impacts and use of new nicotine products. Examples of monitoring include:

- Canada has comparatively strong surveillance, including national surveys with provincial breakdowns, and federal reporting requirements for tobacco companies (e.g. sales volumes by product, with provincial breakdowns).
- Under the tobacco control strategy, the Federal Minister of Health must conduct and release a review of the provisions and operations of federal tobacco legislation by May 23, 2022, and every two years thereafter.
- Three provinces/territories have mandatory reviews of legislation to be conducted, with two every 5 years and one annually.

The 2018 national tobacco control strategy includes a statement about the importance of collaborating with a wide range of partners and stakeholders, but it does not specify any dedicated structures for this collaboration. The Tobacco Control Liaison Committee is a longstanding committee comprising federal/provincial/territorial government representatives. Nationally, there is no formal linkage between government and NGOs, but a formal link does exist in a few provinces. Importantly, the new NGO-led Tobacco Endgame Cabinet has emerged to specifically progress and advocate for measures to achieve Canada's endgame goal.

Challenges specific to Canada include:

- NGO advocacy capacity has been significantly reduced in recent years, due to funding cuts
- National legalisation of cannabis, which came into effect from October 2018, may present new challenges for controlling tobacco products
- Contraband, especially associated with unlicensed, illegal factories on some First Nations reserves in the provinces of Ontario and Quebec, has been perceived as impeding tobacco tax increases.<sup>71 72</sup>

## **Expectations for achieving the endgame goal**

Respondents from health organisations in Canada believe that the goal of under 5% tobacco use prevalence by 2035 is achievable for the population as a whole, but not for all population subgroups. However, respondents also stated that in order to achieve the goal, new measures and financial investment in tobacco control will be needed.

A recent simulation (SIMSMOKE) modelling study was carried out by the Ontario Tobacco Research Unit (OTRU). This projected that with the status quo approach to tobacco control, Canada's current smoking prevalence would decrease to 12.9% by 2035 (using an estimated prevalence of 15.5% of the Canadian population in 2018 as a baseline).<sup>69</sup>

The study also simulated the potential impact of various measures: plain packaging, free cessation services, decreased tobacco availability and increased tobacco taxation. Current smoking prevalence was predicted to decline to 8.5% in 2035 if all of these measures were implemented. OTRU concluded there is a need to consider implementing additional endgame interventions to achieve the 2035 target.

## **Finland**

## **Country context**

The Finnish population at Sept 2017 was approximately 5.5 million people. The Sami people are the indigenous population (4,400 people). Eighty-nine percent of the population speaks Finnish. The largest minority group is Swedish-speaking Finns (Finland Swedes, of whom 5.3% speak Swedish).

Finland is a member of the EU and a constitutional republic with representative democracy. A proportional representation system means a range of political parties and there have been many coalition cabinets. Presidential elections are held every six years and parliamentary elections are held every four years. Additionally, Finland holds seats in the European Parliament, for which elections are held every five years.

In 2018, parliament consisted of a coalition between the Centre Party, the Finns Party and the National Coalition Party (this is considered to be a right leaning majority coalition).

Since 2008, there has been a formal partnership between NGOs and Government; the Tobacco-free Finland 2030 Network. Participating NGOs include ASH Finland, Heart Association, Lung Health Association, Cancer Society, Doctors Against Tobacco, and the Finnish Respiratory Society.

Finland shares a border with Sweden where snus sales are allowed. While it is not legal to sell snuff in Finland, private persons may import limited amounts for personal use.

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

## Finland's endgame goal

In 2010, Finland became the first country to set an endgame goal, and to include it in legislation (the Tobacco Act). The Parliament's Speaker (Mr Paavo Lipponen) was a key leader in the goal's emergence.

The endgame goal in Finland is to end the use of all tobacco and nicotine products, including nicotine e-cigarettes, by 2030 (less than 5% prevalence of daily use), excluding medicinal nicotine. <sup>26</sup> Finland is unique in specifying an 'abstinence' endgame goal to eventually eliminate all nicotine products. The initial target date was 2040; then in 2016 the Tobacco Control Act was updated to set the endgame goal date to 2030 and add the intention to phase out other novel nicotine products was included. No interim targets have been set.

## Current use of tobacco and nicotine products

**Tobacco smoking:** In 2018 Finland had a relatively low daily smoking prevalence of 12% among adults aged 20 years and over.<sup>73</sup> Two years before, in 2016, the prevalence was 13.6%.<sup>73</sup>

According to the Adolescent Health and Lifestyle Survey (2017), adolescent smoking is also decreasing rapidly.<sup>74</sup> Daily smoking among 14-18 year olds was 7% in girls and boys in 2017, reduced from 16% in boys and girls in 2011.<sup>74</sup> Regarding young adults, in the years 1979-1982 daily smoking was around 31% among 15-24 year olds and in 2014 this had reduced to 11%.<sup>75</sup>

Smoking has reduced recently in all socioeconomic groups, but wide disparities remain in smoking by education level. In 2018, daily smoking was most common in the lowest educational group, 17.6% reported smoking on a daily basis. The corresponding share for people in middle education was 10.7% and for those in higher education was 5.9%.<sup>73</sup>

**Use of other nicotine and tobacco products:** Finland has low use of both e-cigarettes and snus. In 2018, about 1.4% of men, and 0.3% of women used nicotine-containing e-cigarettes daily.<sup>32</sup> Among adolescents (16-18 years), 2% used e-cigarettes daily. In the 12-18 age-group, about 74% had never tried e-cigarettes.<sup>74</sup>

No data is available on prevalence of e-cigarette use among smokers or recent quitters in Finland.

In 2018, daily snus use was 4.1% among men, while women rarely (0.1%) used snus. $^{32}$  Snus sale is illegal in Finland, but people can privately import restricted amounts from Sweden, or outside the EU, for their personal use. In 2017, among adolescents (14-18 years), 8% used snus daily or occasionally. $^{74}$ 

## Reductions in smoking needed to achieve the endgame goal

To achieve the endgame goal of <5% by 2030, Finland needs to reduce daily smoking from 12% in 2018 by at least 7% in 12 years — approximately 0.58% absolute reduction in prevalence each year (see Table 21 in the Discussion section). This is the 3<sup>rd</sup> lowest annual prevalence reduction required.

## Planning for achieving the endgame goal

The 2014 Roadmap towards a Tobacco-Free Finland included the following key actions:

- 1. Prevent initiation of tobacco use: e.g. children and youth provided with information and skills, and with smoking cessation services, smokefree school action plan (e.g. schools and education institutions, especially vocational, should discourage smoking initiation and support smoking cessation), work to prevent the start of snus use
- 2. Restrict access: Implement Tobacco Products Directive on illicit trade and online sales, ratify the FCTC Protocol to Eliminate Illicit Trade, reduce private importing of snus, prohibit use of tobacco at underage events
- 3. Raise taxes and prices: raise tax regularly, health and finance departments should collaborate on tax, monitor and take part in EU and WHO work on price, review whether e-cigarettes should be taxed in the same way as snus
- 4. Information campaigns: tailored information campaigns for different target groups
- 5. Support quitting: tobacco dependence treatment should be offered to all smokers using health care, workforce development, record smoking in medical record, free easily available cessation services, targeted cessation methods and approaches, cessation medications reimbursed as part of health insurance scheme.

Most of the above has been implemented, with the exception of ongoing work to prevent children/youth from taking up snus, further information campaigns targeted to adults, and work to support quitting (section 5 above).

In 2018, a working group was appointed by the Ministry of Social Affairs and Health, tasked with submitting proposals to support and promote the objective of Finland's Tobacco Act to end the use of tobacco and other nicotine-containing products by 2030. <sup>27</sup> Its main recommendations are described below.

The actions proposed in the report claim to create preconditions to end the use of tobacco and other nicotine products. However, the report notes that to achieve the smokefree goal, further actions must be carried out every few years. The working group proposes that each government until 2030 investigates and assesses the realisation of the objective of the Tobacco Act and propose necessary further actions. The working group stresses that the implementation of such new proposals must always be included in the subsequent government programme.

There has been no recent increase in funding for tobacco control in Finland.

## **Current interventions and gaps**

Finland scored 60 out of 100 points and ranked sixth overall among 35 European countries in the 2016 Tobacco Control Scale and fifth among the six countries included in the project (Table 2, p13).

Finland received full points for comprehensive bans on advertising and promotion. Areas with partial implementation, where marks were lost, included price [16 out of 30 points], smokefree areas [18 out of 22 points], spending on public information campaigns [3 out of 15 points] and smoking cessation support [5 out of 10 points]. Finland's score of 5 out of 10 for pictorial health warnings was the same as all other countries aside from Scotland (UK). See Table A2 in Appendix Four for detail.

The 2016 US\$ price of a pack of 20 cigarettes was \$6.80 – the lowest price and the second most affordable among the six participating countries (see Table A4 in Appendix Four). Finland plans to implement tobacco tax increases twice per year up to 2019. By 2020, after implementing the tax increases of the current government term, the average price of a cigarette pack (of 20 cigarettes) is projected to be about 8.20 Euro, an increase from 5.83 Euro in 2017.<sup>76</sup>

In 2018 Finland was assessed as having strongly implemented most of the core MPOWER interventions (see Table 3) with moderate implementation only for smokefree policies and use of mass media.

Table 8 summarises some of the key gaps or weaknesses in the implementation of the core tobacco control interventions in Finland at the end of 2018.

#### Table 8 Gaps and weaknesses in core tobacco control measures in Finland (end of 2018)

#### Core interventions not in place

Limited mass media campaigns - and no high-intensity media campaigns

Comprehensive smoking cessation support programme are not in place

The WHO Protocol to Eliminate Illicit Trade in Tobacco Products signed, but not yet ratified

Finland has in place some significant interventions that go beyond the standard MPOWER measures. These are summarised in Table 9.

#### Table 9 Interventions beyond MPOWER measures in Finland (end of 2018)

#### Additional interventions in place

Tax increases two times per year (from 2016 to 2019)

Encouraging / Enabling introduction of smokefree balcony policies for private apartments

Ban on smoking or vaping in cars with children (under 15)

Retailers required to have license with a fee to sell tobacco products (and e-cigarettes)

Ban on flavours in all products including e-cigarettes

Current additional measures in place include smokefree (and vapefree) cars laws and twice yearly tobacco tax increases. There are also bans on flavours in tobacco products and vaping products. Finland was the only one of the six countries at the end of 2018 to have a requirement for retailers selling tobacco products to be licensed with a fee (Scotland, Sweden and Ireland have retailer registration schemes, and Ireland has and has proposed introducing licensing in 2019/20).

## Proposals and plans for new actions

In May 2018, the Ministry of Social Affairs and Health released proposals for updating the 2014 Roadmap, designed by a cross-sector Ministerial working group.<sup>77</sup> The proposals are to be considered by the government, but do not yet represent government policy. Key proposals include:

- Continued six-monthly increases in tobacco tax (continue tobacco tax increases designed to
  outstrip consumer purchasing power, with the aim of increasing the average price of a
  cigarette pack to €8.20 by 2020), including on e-liquids, and investigating taxation of other
  new nicotine products.
- Raising the minimum age (for sale, import and possession of tobacco products, nicotinecontaining liquids and nicotine-containing tobacco substitutes) to 20 years.
- Extending the ban on flavours to all tobacco and nicotine products.
- Classifying films, TV shows, games etc. according to tobacco and nicotine product portrayal
- Amending the application of smoking bans to cover the smoking and heating of all products under the Tobacco Act and any other use that releases aerosols deteriorating indoor air quality.

- Banning smoking and use of other tobacco products in premises where minors spend time, such as playgrounds and beaches, public transport stops, platforms and taxi ranks.
- Reimbursing all prescription-only medicines used to treat tobacco and nicotine dependence under health insurance.
- Restricting passenger import of cigarettes and other tobacco products.
- Introducing standardised packaging for all tobacco and (non-medical) nicotine products and the product itself.
- Investigating ways to reduce toxic environmental waste from tobacco and nicotine products.
- Removal of public funding investment in tobacco and nicotine industry.
- Improving the effectiveness of enforcement and monitoring systems.

When drafting the proposals, the working group took into account the need to reduce socioeconomic disparities.

## Approach to alternative nicotine products

E-cigarettes are regulated in a similar way to cigarettes e.g. with sales restrictions, bans on vaping, and display and advertising bans, and retail sale subjected to licence with a fee. Importing of e-cigarettes is restricted and cross-border distance sales of all tobacco and nicotine products is prohibited.

## Structures to support achievement of the endgame goal

Finland takes a cross-sectoral 'health in all policies' approach. For example, the endgame strategy specifies there must be regular monitoring, reviewing and proposing of future actions, and various health and non-health government agencies are responsible for implementing the actions. The 2018 Ministerial working group was chaired by the Confederation of Finnish Industries. Among the members were two members of the Parliament, and representatives of the ministries of health and finance, university, medical society and NGOs.

The Tobacco-free Finland 2030 Network, an organised partnership between NGOs and Government, has been in place since 2008. The network includes NGOs (e.g. ASH Finland, Heart Association, Lung Health Association, Cancer Society), government agencies, health professionals (e.g. Doctors Against Tobacco, Finnish Respiratory Society), local municipalities and a church. Membership indicates commitment to the endgame goal. The network coordinates annual planning and implementing of actions, as well as influencing political decision-making to make progress towards the goal.

## **Expectations for achieving the endgame goal**

A SimSmoke projection, from 2012, based on 1999 prevalence data, suggests the goal of <5% would not be reached by 2040 for men or women.<sup>78</sup> However, Finland participants believe this estimate had many limitations, including not taking into account background information that was available only in the Finnish language.

According to a recent qualitative study with policy advisors and practitioners in 2017-18, key stakeholders believe Finland is on track to reaching its 2030 endgame goal.<sup>61</sup> Factors identified that will assist progress include the explicit intent, low daily smoking prevalence, united tobacco control community with strong leadership, and a tightly-regulated tobacco retail context. The authors of this

study recommend that to achieve the goal using the current conventional (demand-side) approach, Finland will need to: improve coordination between NGOs and the healthcare system, reach agreement about the place of mass media campaigns, and strengthen smoking cessation services.<sup>61</sup>

Finland has experienced tremendous positive social and societal change in the prevalence of and attitudes towards smoking since the 1970s: nowadays, tobacco products are no longer regarded as normal everyday consumer goods. There is also a broad public support for a Tobacco- and Nicotine-free Finland.

In 1978–1982, 26% of the adult population smoked daily, while this proportion had halved in 2017. The decrease in smoking is already reflected in the number of cancers and cardiovascular diseases caused by smoking, among other factors.

Finland participants in the INSPIRED collaboration reported that in order to achieve the objective of the Tobacco Act, the systematic, determined actions carried out to date must be continued and developed, and new actions must be introduced. This should include implementing the proposals put forward by the working group on tobacco and nicotine policy development immediately at the beginning of the next government term. A clear policy is needed to implement the working group's recommended proposals and include them in the next government's programme. Without political support, participants believed the objective will be difficult, or impossible, to achieve.

### **Ireland**

### **Country context**

According to the 2016 Census, the population of Ireland was approximately 4.76 million. The largest ethnic group is White Irish, comprising 84.5% of the population. Other major ethnic groups include Polish, British, Lithuanian, Latvian, Nigerian, and Irish Travellers (indigenous).

The Republic of Ireland is a parliamentary, representative democratic republic and a member state of the European Union. The political landscape has been dominated for decades by Fianna Fáil and Fine Gael, historically opposed and competing centrist parties, with Labour as the third party, which has only ever been in power through coalition governments. In 2018, Fine Gael was in a minority coalition government supported by independent members of parliament (Oireachtas) to implement a Programme for Partnership Government. Elections take place up to every five years. Additionally, residents are able to vote in the European Parliament elections.

Examples of tobacco control NGOs in Ireland includes ASH Ireland, Asthma Society, Irish Cancer Society, Irish Heart Foundation, Tobacco Free Research Institute Ireland, Institute of Public Health in Ireland).

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

## Ireland's endgame goal

In 2013 the Ireland Government set an official endgame goal for smoking in the national tobacco control policy 'Tobacco Free Ireland', <sup>28</sup> and shortly afterwards announced an accompanying high-level plan, the 'Tobacco-free Ireland Action Plan' which sets out a strategy for achieving the goal. <sup>79</sup> The endgame goal is to achieve less than 5% current smoking prevalence of adults by 2025.

## Current use of tobacco and nicotine products

Ireland's daily smoking prevalence was 17% in 2018 (current smoking prevalence 20%).<sup>35</sup> Smoking rates are higher in more deprived areas compared to those living in affluent areas (current smoking prevalence 26% compared with 16%). Ethnic disparities are also an issue, for example, the Traveller population had 53% smoking prevalence in 2010.<sup>80</sup> By age, smoking rates are highest among young adults (28% of 25- to 34-year-olds were current smokers in 2018). Recent decades have seen growth in roll-your- own (RYO) tobacco use.

Regarding teenagers, smoking prevalence has dropped over time from 41% in 1995 to 13% in 2015 in 16-year-olds. 81

The Healthy Ireland Survey 2018 showed 12% of the population had tried e-cigarettes at some point, and 4% were currently using them.<sup>35</sup> It was reported that 40% of current smokers, 10% of ex-smokers, and 2% of never-smokers had used e-cigarettes previously. Additionally, 9% of smokers, 10% of ex-smokers, and less than 1% of never smokers were using them currently.

In 2014, nearly a quarter of 16-17-year-old students had tried e-cigarettes. Concurrent or experimental use of e-cigarettes and tobacco was more common than sole use, while a small number had tried e-cigarettes without having tried tobacco.<sup>82</sup>

## Reductions in smoking needed to achieve the endgame goal

To achieve the endgame goal of <5% by 2025, Ireland needs to reduce current smoking from 17% in 2018 by at least 12% in 7 years – an absolute prevalence reduction of about 1.7% each year (see Table 21 in the Discussion section). Among the six countries, this is the largest estimated annual decline required to achieve the endgame goal.

## Planning for achieving the endgame goal

The Tobacco Free Ireland policy<sup>44</sup> comes under the Healthy Ireland Framework. The goal was also endorsed in the 2016 Programme for Partnership Government (a cross-sectoral, integrated approach – see below). The strategy has two key themes: protecting children and de-normalising smoking, and is based on the MPOWER measures. It states there is a high priority placed on reducing disparities related to smoking, including socioeconomic and ethnic disparities.<sup>80</sup>

In 2015, an action plan with specified timelines was published. <sup>45</sup> Key proposed interventions included: a licensing system for tobacco retailers, annual tax increases, reducing the price differential on RYO tobacco, standardised packaging of all tobacco products, a ban on smoking in cars when children present, introducing the legislative provisions of the EU Tobacco Products Directive, a ring-fenced tobacco industry levy to fund health promotion and tobacco control activities, and increased social marketing campaigns. Funding for smoking cessation campaigns has recently increased. However, there is no provision for an implementation oversight group, or for an interim review of progress.

## **Current interventions and gaps**

Ireland scored 70 out of 100 points and ranked second overall among 35 European countries in the 2016 Tobacco Control Scale and 3rd among the six countries included in the project (Table 2, p13).

Ireland achieved a full score for the smokefree environments indicator and comprehensive ban on advertising and promotion. Ireland was close to achieving the indicator for cessation treatment services [8 out of 10 points]. Like other countries, Ireland received a low score for spending on public information campaigns [2 out of 15 points].\* See Table A2 in Appendix Four for detail.

The 2016 US\$ price of a pack of 20 cigarettes was \$12.00 – the second highest price and the third least affordable among the six countries (see Table A4, Appendix Four).

In 2018 Ireland was assessed as having strongly implemented all of the core MPOWER interventions (see Table 3).

Table 10 summarises some of the key gaps or weaknesses in the implementation of the core tobacco control interventions in Ireland at the end of 2018.

#### Table 10 Gaps and weaknesses in core tobacco control measures in Ireland (end of 2018)

#### Core interventions not in place

There is a full range of smoking cessation support but no legal or financial incentive to record smoking status in medical notes. Family doctors not specifically reimbursed for providing brief advice in primary care, there were plans to address this issue in a new contract for family doctors.

Spending on public information campaigns is still relatively low

The WHO Protocol to Eliminate Illicit Trade in Tobacco Products is signed, but not yet ratified

Although assessed as having some weaknesses in public information campaigns, Ireland has implemented an evidence-based mass media campaign since 2011, with an increasing budget each year, achieving positive evaluations and international awards. Campaign advertisements from Ireland have been aired in Northern Ireland and the US, and used in educational programmes in parts of Australia and Canada. Mass media spend in 2017 was 1.67 million Euros. The 2018 campaign was targeted towards men in disadvantaged communities.

Ireland also has in place some interventions that go beyond the standard MPOWER measures. These are detailed in Table 11.

#### Table 11 Interventions beyond MPOWER measures in Ireland (end of 2018)

#### Additional interventions in place

Tax and price increases include specific increase in RYO tax

Mandatory registration of tobacco retailers

Ban on point-of-sale displays (since 2009)

Standardised packaging (complete implementation by Sept 2018)

Smokefree cars where children are present

-

<sup>\*</sup> The 2016 Tobacco Control Scale (TCS) report may have underestimated the spending on public information campaigns in Ireland. An additional amount of 1.5 million pounds was spent on social marketing in 2015, which was not provided for the 2016 TCS report.

A smokefree cars law, a point-of-sale display ban and standardised packs have been implemented, and there is a mandatory registration programme is in place for tobacco retailers. Retailers are required to register with the National Tobacco Control Office in order to legally sell tobacco products (see: <a href="http://www.tobaccoregister.ie/">http://www.tobaccoregister.ie/</a>).

## Proposals and plans for new actions

A range of additional actions have been proposed or are planned (Table 12).

#### Table 12 Proposed tobacco control interventions in Ireland (end of 2018)

#### Planned or proposed interventions

Enhanced provision of smoking cessation support with targeting of key settings and priority groups

Retailer licensing (planned for 2019/2020)

Ban on menthol and flavours in tobacco products from 2020 (as per EU Tobacco Products Directive, see Appendix Three).

Introduction of "Track and Trace" (EU Tobacco Products Directive) scheme to tackle illicit trade + ratification of WHO FCTC Protocol to Eliminate Illicit Trade

The Health Services Executive Tobacco Free Ireland Programme (2018-2021) includes proposals for: encouraging smokefree policies in health care settings and sportsfields; enhancing smoking cessation support in mental health and maternity settings and through targeting low socioeconomic status groups and people with chronic diseases; the introduction of clinical guidelines and health care worker cessation training; and additional social marketing and mass media campaigns.<sup>83</sup> There are also proposals to introduce retailer licensing, ban menthol and other flavours through implementation of the EU Tobacco Products Directive and the introduction of a 'Track and Trace' scheme to reduce illicit trade in 2019 and planned ratification of the WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products.

### Approach to alternative nicotine products

E-cigarettes are widely available in Ireland – in multiple retail outlets, as well as through cross-border distance sales (via Internet) with 45 registered retailers. Ireland's regulations for e-cigarettes are consistent with the EU Tobacco Products Directive (see Appendix Three), e.g., registration of cross-border sales, mandatory health warnings on e-cigarette packaging and information leaflets, rules on advertising and sponsorship, and mandatory safety and quality requirements.

The Department of Health plans to develop a harm reduction policy position by the end of 2019. The 2013 Tobacco Free Ireland Report includes a section on harm reduction, which acknowledges that access to alternative, less harmful forms of nicotine is needed for people who cannot, or will not, quit smoking.<sup>28</sup>

In Ireland, there is a desire among the tobacco-control stakeholders to have a consistent policy position on e- cigarettes and whether or not they play a role in tobacco control policy. As of early 2019, a policy direction on this was awaited from the Department of Health. The Department has commissioned a review of the harms and benefits of e-cigarettes and intend to seek stakeholders' views before defining the new policy position.

## Structures to support achievement of the endgame goal

Ireland's strategy is part of a cross-sectoral whole-of-government programme. The national tobacco control policy has its own work programme with a dedicated unit in the Health Services Executive (HSE) to progress actions within the health services. The unit sits outside of the Department of Health's tobacco and alcohol control unit.

Examples of cross-sector work in Ireland include: a Cross-Department Tax Strategy Group, the Healthy Ireland Fund (includes funding for tobacco control activities in Local Community Developmental Committees), and engagement between health and appropriate government departments over tobacco industry sponsorship (of International Labour Organization programmes, for example). Engagement in the wider Healthy Ireland Framework also helps to change social norms around smoking.

Ireland's tobacco control strategy includes partnership structures between the government and NGOs (e.g., ASH Ireland, Asthma Society, Irish Cancer Society, Irish Heart Foundation, Tobacco Free Research Institute Ireland, Institute of Public Health in Ireland) to achieve the strategy's aims. A Tobacco Control Partners Group was established by the HSE Tobacco Free Ireland Programme. The group meets regularly with the HSE to discuss and progress actions to help achieve the tobacco control strategy's objectives through partnerships. An example of a supporting strategy/policy document is the Royal College of Physicians policy document.<sup>84</sup>

Annual reports are produced on progress towards the goal and have been published for 2014-17. Additionally, each of the Action Plan recommendations are evaluated in the annual reports. Funding for the tobacco endgame in Ireland has not recently increased.

### Expectations for achieving the endgame goal

Modelling evidence, using the SimSmoke dynamic simulation model, found that Ireland's policies from 1998 to 2016 had "a considerable effect" in reducing smoking – by 42%, from 32.2% in 1998 to 18.7% in 2016.85 However, the modelling projected that the prevalence of smoking will be 15.8% in 2025 – if tobacco control policies remain unchanged from 2016. If stronger MPOWER-compliant policies were implemented, modelling predicts that smoking prevalence could be reduced to 12.4% in 2025. However, the endgame target is not expected to be reached without new, innovative policies that go beyond the conventional MPOWER measures.

While it looks unlikely that the 2025 target will be reached for all of the population, recent trends indicate that targets for smoking in children, among women and among the higher economic groups will be reached before the full population. However, the target of overall smoking prevalence less than 5% remains the government policy.

## Aotearoa/New Zealand

### **Country context**

At the 2013 Census, the Aotearoa/New Zealand population was 4.24 million. Europeans comprised 74% of the population and Māori (the Indigenous population) comprised 15%. Other major ethnic

groups are Asian (12%) and Pacific peoples (this is a diverse group, including people who identify as Samoan, Cook Islands Māori, Tongan, Niuean, Tokelauan and Fijian) (7%).

Te Tiriti o Waitangi (the Treaty of Waitangi) is a Treaty between the then British Crown (now the Aotearoa/New Zealand government) and Māori in 1840. Te Tiriti is a foundational document setting out relationships between Māori and the government (e.g., to provide active protection for Māori) and rights for Māori. This includes rights of partnership and engagement in governance; government responsibilities to protect the interests of Māori; and tino rangatiratanga (self-determination). These obligations and rights are highly relevant to the development and implementation of tobacco control policies and legislation. This is reflected in the Indigenous clauses of the WHO FCTC and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) both of which Aotearoa/New Zealand is a signatory to.

Aotearoa/New Zealand has a constitutional monarchy with a parliamentary system of government. It is a unicameral parliament and there is no state/provincial level of governance. A democratic election is held every three years to form the government. Under the mixed member proportional (MMP) voting system coalition arrangement between political parties are common. In 2018, the government was led by the Labour party in coalition with New Zealand First and the Green Party.

Examples of NGOs in Aotearoa/New Zealand that are active in tobacco control include Hāpai te Hauora (Māori Public Health), the New Zealand Heart Foundation, and the Cancer Society of New Zealand.

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

### Aotearoa/New Zealand's endgame goal

Advocacy from Māori (the indigenous people of Aotearoa/New Zealand) politicians and leaders, and a Māori Parliamentary Inquiry, <sup>20</sup> was instrumental in leading to the government adopting a Smokefree Aotearoa 2025 goal in 2011. <sup>21</sup> The goal is to achieve 5% or lower adult daily smoking prevalence and minimal availability of tobacco products by 2025. Interim, mid-term targets were set for 2018. These are 10% daily smoking prevalence overall, and a halving of smoking prevalence among Māori (to 19%) and Pacific peoples (to 12%). These targets were not achieved (see prevalence information below).

The Aotearoa/New Zealand Government has not yet produced any strategy or action plan detailing how the goal will be achieved. The current government announced in March 2018 that a new tobacco control strategy will be developed for this purpose. However, this had not been developed or published by the end of 2018.

## **Current use of tobacco and nicotine products**

Aotearoa/New Zealand's daily smoking prevalence was 13% in 2017/18 and 12.5% in 2018/19 (for adults aged 15 and over). This has reduced from 16% in 2011/12.87 Large disparities persist in smoking prevalence by ethnicity and socioeconomic status. For example in 2017/18, compared with European/other population's adult daily smoking prevalence of 12% (11% in 2018/19), Māori adult daily smoking prevalence was 31 % (31% in 2018/19).87

Roll-your-own use is common among adult and adolescents who smoke.<sup>88 89</sup> Tobacco use in Aotearoa/New Zealand is almost exclusively smoked tobacco, with negligible use of smokeless tobacco products.

Current use of e-cigarettes is relatively low in the general population. In 2017/18 18.5% of adults had ever tried e-cigarettes (21% in 2018/19), 4% (5% in 2018/19) were current users (used e-cigarettes at least once a month) and 3% (3% in 2018/19) were daily users. Among smokers, in the ITC NZ survey in 2018 78% had tried e-cigarettes and 20% were current (at least monthly) users, and 8% daily users,

whilst of recent quitters (in last 12 months) 79% had tried e-cigarettes, 29% were current users and 23% were daily users. 90

## Reductions in smoking needed to achieve the endgame goal

To achieve the goal of <5% prevalence, Aotearoa/New Zealand needs to reduce current smoking from around 13% by at least 8% in 7 years (from 2018) – an absolute reduction in prevalence of about 1.14% each year (see Table 21 in the Discussion section below). This is the second highest annual reduction required to meet the endgame goal among the six countries.

## Planning for achieving the endgame goal

As stated above, no government strategy exists for achieving Aotearoa/New Zealand's Smokefree 2025 goal. The lack of a strategy has been much criticised.<sup>91</sup> Further, there has been criticism from Māori organisations that the early Māori leadership in smokefree advocacy was not fully integrated into the policies which followed, and that Māori involvement has not been sustained in recent years.<sup>92</sup>

In response to the lack of direction from the government, the Aotearoa/New Zealand tobacco control sector developed its own strategy ('Achieving Smokefree Aotearoa Action Plan' [ASAP]),<sup>47</sup> but this does not have government endorsement. The Māori Affairs Select Committee report also include detailed recommendations for interventions that could help achieve the Smokefree Aotearoa goal. <sup>20</sup> The recently announced intention to develop an action plan to achieve Smokefree Aotearoa is encouraging, and at the end of 2018 the Ministry of Health was carrying out preliminary work with the intent to produce a draft strategy in 2019 (this aim was not realised). Another significant development is the Ministry of Health's intent to introduce a risk-proportionate regulatory framework for all nicotine-delivery products<sup>93</sup> (see below).

## **Current interventions and gaps**

As estimated for this project, Aotearoa/New Zealand scored 83 points on the Tobacco Control Scale score in 2016 and would have been ranked first among the 35 European countries included in the scale and Canada, and was also top ranked among the six countries included in the project (Table 2, p13).

Aotearoa/New Zealand was assessed as fully meeting the indicators for comprehensive bans on advertising and promotion [13 out of 13 points] and for price [30 out of 30 points] for the 2016 Tobacco Control Scale. Aotearoa/New Zealand was close to achieving the standard for cessation treatment services [9 out of 10 points] and smokefree policies [20 out of 22 points]. Similar to other countries, Aotearoa/New Zealand scored poorly for spending on public information campaigns [6 out of 15 points], though it was the highest-scoring among the six countries. Aotearoa/New Zealand achieved 5 points for pictorial health warnings, like most other countries in the project. See Table A2 in Appendix Four for detail.

The 2016 US\$ price of a pack of 20 cigarettes was \$15.36 – the highest price and the least affordable among the six participating countries (see Table A4 in Appendix Four).

In 2018 Aotearoa/New Zealand was assessed as having strongly implemented all of the core MPOWER interventions (see Table 3).

Table 13 summarises two key gaps or weaknesses in the implementation of the core tobacco control interventions in Aotearoa/New Zealand at the end of 2018.

## Table 13 Gaps and weaknesses in core tobacco control measures in Aotearoa/New Zealand (end of 2018)

#### Core interventions not in place

Funding for mass media campaigns and national advocacy and coordination has reduced in recent years

Aotearoa/New Zealand has not signed or ratified the WHO Protocol to Eliminate Illicit Trade in Tobacco Products

Aotearoa/New Zealand had implemented some interventions that go beyond the standard MPOWER measures (Table 14).

#### Table 14 Interventions beyond MPOWER measures in Aotearoa/New Zealand (end of 2018)

#### Additional interventions in place

Standardised packaging (2018)

Smokefree prisons (since 2011)

Local-level interventions to extend smokefree outdoor areas, e.g. parks and playgrounds (though national legislation/leadership is lacking)

Ban on point-of-sale displays (since 2012)

Measures in place include fully smokefree prisons (for staff and inmates), standardised packaging and a point-of-sale display ban. Enhanced and larger pictorial health warnings were introduced at the same time as standardised packaging in 2018.

## Proposals and plans for new actions

Few additional actions have been proposed or are planned (Table 15) other than some long-standing commitments to above-inflation tobacco tax increases and the intention to introduce smokefree cars legislation. No further tobacco control measures focused on smoked tobacco products and smoking were currently proposed by the Aotearoa/New Zealand Government at the end of 2018. Aotearoa/New Zealand is currently behind the other countries in addressing the removal of flavours in tobacco products. It is outside the jurisdiction of the EU Tobacco Products Directive (see Appendix Three) and, unlike Canada and the European countries, is not taking action in this area.

#### Table 15 Proposed tobacco control interventions in Aotearoa/New Zealand (end of 2018)

#### Planned or proposed interventions

Further 10% above-inflation annual tobacco tax increases – legislated for 2019 and 2020 (though unclear if 2020 increase will go ahead)

Smokefree cars legislation planned for 2019/2020

Formal regulatory framework for alternative nicotine delivery products proposed for 2019/2020

A 2018 review of tobacco taxation, commissioned from Ernst and Young (EY) by the Ministry of Health, recommended continuing annual tax excise increases of 10% to and beyond 2020, if positive impacts are shown with stronger monitoring. <sup>94</sup> It also supported the use of complementary measures such as widespread cessation support services, targeted messaging to promote quitting in high prevalence and disadvantaged communities, and a minimum price to reduce the impact of industry undermining of the tax increases. However, at the end of 2018 the government response to this report and whether it would proceed with the previously planned tobacco tax increase scheduled for January 1 2020, or continue annual tobacco tax increases after that date, was unclear.

A comprehensive strategy, the ASAP action plan for achieving the Smokefree Aotearoa goal, was published in 2017.<sup>47</sup> This plan was developed outside of government by a wide range of tobacco control experts and stakeholders. It proposed many new interventions. These included endgame measures such as a dramatic reductions in the retail availability of tobacco products, removal of all additives, mandated reduced nicotine cigarettes and an annual increase in the allowed age of purchase to create a Tobacco Free Generation.<sup>47</sup> The measures advocated in the ASAP action plan were largely mirrored by recommendations in the EY report on tobacco taxation.<sup>94</sup> However, neither the EY report nor the ASAP plan are endorsed by the government.

## Approach to alternative nicotine products

The sale of nicotine-containing e-cigarettes and e-liquid was illegal until March 2018 (aside from importing a quantity for personal use), though vaping products could be imported through online retailers for personal use.

In practice, the law was rarely enforced after the government in 2017 indicated broad support for a harm reduction approach to tobacco control. Since then these products have been widely available for sale, particularly through specialist vaping shops. In 2017 an expert advisory group was established to develop recommendations to regulate nicotine-containing vaping products and devices.<sup>95</sup>

Aotearoa/New Zealand shifted further towards government-endorsed harm reduction, following a legal ruling in March 2018 that vaping products and heated tobacco products could be legally sold. In response, the Ministry of Health issued new advice to stop-smoking services on the potential role of alternative nicotine products in smoking cessation.

The legal status at the end of 2018 was that nicotine-containing e-cigarettes and e-liquids containing nicotine derived from tobacco products could be legally sold but with the same restrictions as smoked tobacco products on advertising, place of use and sales to minors. Non-tobacco derived vaping products faced no such restrictions. However, in practice restrictions were not enforced, as it was unclear which products were derived from tobacco. The result was that during 2018 there was a progressive increase in the availability for sale of vaping products (including increasingly from local stores, petrol/gas stations and supermarkets) and growing advertising, including TV adverts, for these products.

In 2018, the Ministry of Health announced the intention to develop a risk-proportionate regulatory framework for all nicotine and tobacco products.<sup>93</sup> In November 2018, new proposals were agreed by the Aotearoa/New Zealand Cabinet for a regulatory framework for nicotine-containing e-cigarettes which would allow widespread retail availability but introduce regulation of minimum age of purchase, quality standards, place of use, and advertising.<sup>96</sup> The regulations or legislation was scheduled to be introduced to Parliament in 2019/2020.

## Structures to support achievement of the endgame goal

Aotearoa/New Zealand does not have formal structural supports for achieving the Smokefree 2025 goal, and cross-departmental, multi-sectoral approaches are weak. Cross-sectoral activities on tobacco control within government are limited. Exceptions include the smokefree prisons policy, introduced by the Department of Corrections in 2011, and a commitment by the New Zealand Defence Force to become a smokefree military by 2020.

Restructured funding for national advocacy and coordination (with reduced funding) in 2016 has impacted on the sector's cohesion and capacity to advocate. For example, this resulted in less funding for advocacy activities and the loss of the Smokefree Coalition and National Smokefree Working Group, important nation-wide networks.<sup>48</sup> Various NGO- and academic-led networks exist, but there is no coordinated national partnership or charter between NGOs and government, unlike in some of the INSPIRED countries with endgame goals.

Locally, there are *ad hoc* instances of strong local-level coalitions and some local authorities have shown strong support and leadership, such as introducing local policies for smokefree environments. Strong Māori and Pacific leadership in tobacco control also exists, as well as a Māori-led national advocacy organisation.

The previous government set interim targets both overall and for Māori and Pacific populations (see above). Despite this, political support for the Smokefree Aotearoa goal and measures to achieve it has been limited. From 2008 to 2017, progress in tobacco control measures slowed under a conservative administration, with little political will for bolder actions. Political support is still being determined with a relatively new government in place, but recent announcements on the intent to develop a national tobacco control strategy to achieve Smokefree 2025, and the consideration of smokefree cars legislation, are encouraging.

### Expectations for achieving the endgame goal

Evidence from surveys and modelling suggests that Aotearoa/New Zealand is unlikely to reach its endgame goal with current interventions, and it will be missed by a wide margin for Māori and Pacific ethnic groups. None of the interim targets for Māori and Pacific smoking prevalence were achieved in 2018.

For example, Aotearoa/New Zealand modelling predicts that continuation of the current 10% annual increases in tobacco excise tax would mean Māori smoking prevalence wouldn't reach less than 5% until 2060 or later – several decades after the 2025 target year.<sup>58</sup> However, modelling of the impact of endgame interventions like mandated very low nicotine cigarettes, substantial tax increases, reductions in retail supply, and the tobacco-free generation strategy suggest that these would result in the achievement of the smokefree 2025 goal for the whole population and very large reductions in smoking prevalence among Māori. <sup>100</sup> <sup>101</sup>

### **Scotland**

### **Country context**

The latest estimate of Scotland's population (on 30 June 2016) was 5,404,700. The Asian population was the largest minority ethnic group (3% of the total population). Just over 1% of the population recorded their ethnic group as White: Polish.

In Scotland, government elections take place every four or five years. The Scottish Government has devolved legislative powers and reserved matters are dealt with by the UK Government in the UK Parliament (Westminster) which includes 650 elected representatives (MPs), 59 of whom represent constituencies in Scotland. An indication of devolved and reserved powers is at: <a href="https://www.parliament.scot/about/how-parliament-works/devolved-and-reserved-powers">https://www.parliament.scot/about/how-parliament-works/devolved-and-reserved-powers</a>.

The Scottish Government has control over policies on health which includes tobacco advertising and domestic e-cigarette advertising, NHS Scotland, and issues relating to local authorities. However, there are areas where it cannot legislate independently, such as taxation rates, restrictions on supply, and product regulation (for example very low nicotine cigarettes), and business and some consumer regulation.

ASH Scotland is the leading independent organisation working in and for Scotland on both devolved and reserved issues since the mid-1990s. The organisation was originally set up in 1973 as the Scotland office of a UK-wide ASH charity formed in 1971. Independently run ASH organisations now operate in each of the four nations within the UK, with ASH in England maintaining the closest links with the UK Parliament (which covers English-only as well as reserved UK matters). As health matters are largely devolved to the Scottish Parliament (Holyrood), the main focus of work by ASH Scotland is in influencing policies being developed and implemented within Scotland and collaborating, where appropriate, with others to influence relevant policies at UK level.

Other leading NGOs active in supporting the tobacco-free goal include the Medical Royal Colleges and health charities such as the British Heart Foundation, Asthma & Lung UK, Cancer Research UK and the Scottish Thoracic Society.

Scotland has a Charter for a Tobacco-Free Generation which was initiated by ASH Scotland and is supported by a wide range of health, NGO and civil society organisations. Additionally, the Scottish Coalition on Tobacco (SCOT) has had an active role in coordinating tobacco control advocacy and activity of 22 health and NGO organisations.

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

## Scotland's endgame goal

Scotland's endgame goal was set in 2013 by the Scottish Government and published in the strategy Creating a Tobacco-Free Generation.<sup>41</sup>

The strategy set out the goal of achieving 5% or lower smoking prevalence of adults by 2034. The strategy had a five-year timespan, and set the ambition for a tobacco-free generation, where children born in 2013 would form a tobacco-free generation by the age of 21 years. It had a strong focus on reducing inequalities in smoking prevalence, and included specific interim targets for various deprivation groups (see below). Key proposed measures included setting up a register of retailers selling tobacco products, promotion of smokefree homes and cars, prisons, hospitals and mental health institutions, and improved and better-targeted smoking cessation support. It also recommended measures reserved to the Westminster UK Government, such as maintaining high taxes.

A five-year action plan for the Scottish Tobacco Free Generation goal was published in 2018.<sup>42</sup>

## **Current use of tobacco and nicotine products**

In 2016-18 Scotland had a relatively high current smoking prevalence, compared to the other INSPIRED countries. Data from the Scottish Health Survey found current smoking prevalence was 21% in 2016 and 19% in 2018. Smoking has decreased from 28% in 2003.<sup>34</sup> Compared with other countries in the UK, Scotland has shown the largest recent decline in smoking prevalence (by 7 percentage points since 2010),<sup>42</sup> however, the rate of decline since 2013 has been slow (from 21% to 19% between 2013 and 2018).<sup>34</sup>

Prevalence of smoking varies greatly by socioeconomic deprivation: in 2018, 32% of adults living in the most deprived quintile of areas were current smokers, compared with just 9% in the quintile with the least deprived areas. Since 2013 there has been a small reduction in the absolute differences but no change in relative smoking prevalence disparities between the most and least deprived quintiles (37% smoking prevalence most deprived quintile, 10% least deprived).<sup>34</sup>

The use of alternative nicotine delivery products has risen in recent years. In 2018 for example, current e-cigarette use among adults was 7% (and 11% had previously used e-cigarettes).<sup>34</sup> The proportion of current e-cigarette users increased significantly in 2015, but has since plateaued. The highest users of e-cigarettes are adults aged 25-64; there are no gender differences in use.

In 2017, around 14.4% of current smokers currently used e-cigarettes, and half of current e-cigarette users said their main reason for vaping was to aid themselves in quitting smoking. <sup>102</sup>

## Reductions in smoking needed to achieve the endgame goal

To achieve the goal of <5% prevalence, Scotland needs to reduce current smoking from 19% in 2018 by at least 14% in 16 years – an absolute reduction in prevalence of about 0.88% each year (see Table 21 in the Discussion section). Among the six countries, this is the 3<sup>rd</sup> largest estimated annual decline required to achieve the endgame goal, but it is required over a 16 year period (the 2<sup>nd</sup> longest duration).

### Planning for achieving the endgame goal

A Tobacco-Control Action Plan was released in June 2018, to set out the plan for achieving the Tobacco-free Generation goal over the next five years.<sup>42</sup> This has an increased focus on adolescents and young people aged 16-24 years, and includes specific interim prevalence targets for these groups. The Action Plan includes a commitment to hold a conference in 2019 to decide the most effective actions and approaches for this age group.

Other key actions in the 2018 Action Plan include: a focus on national campaigns to encourage quitting and protect children, in particular, from second-hand smoke; increasing service providers' understanding and training on the links between smoking and mental health care; continuing to support ASH Scotland in promoting the Charter for a Tobacco-free Generation; and encouraging Tobacco-free Schools. There is also a commitment to explore options for new regulatory approaches in a variety of areas (see 'proposals for new actions' below).

Scotland's strategy has a very high priority on tackling inequalities in smoking, and includes specific measures (e.g. targeted cessation support) and interim targets for reducing smoking prevalence by deprivation group.

The 2018 Action Plan includes the following interim targets (more detailed targets were also included in the 2013 strategy):

- 2021 <20% smoking prevalence for most deprived quintiles combined.
- 2022 <3% regular smokers among children aged 13-15 years.</li>
- 2023 <20% smoking prevalence among 20-24 year olds.

## **Current interventions and gaps**

Scotland was included in the 2016 Tobacco Control Scale as part of the UK, which scored 81 out of 100 points (Table 2, p13). The UK ranked first among the 35 European countries in the 2016 Tobacco Control Scale, and ranked second, just behind Aotearoa/New Zealand, among the six endgame countries.

The UK achieved a full score for the smokefree environments indicator, and was close to meeting the indicators for comprehensive bans on advertising and promotion [12 out of 13 points], large pictorial health warning labels [9 out of 10 points] and treatment for cessation [9 out of 10 points]. The UK was the leading country on health warnings, with the other countries in this project all scoring only 5 out of 10 in 2016. It lost marks for its low level of spending on public information campaigns [3 out of 15 points], similar to Finland, Ireland and Sweden who also scored low for this indicator. See Table A2 in Appendix Four for detail.

The 2016 US\$ price of a pack of 20 cigarettes in the UK was \$10.94 – the third highest price and the second least affordable among the six participating countries (see Table A4, Appendix Four).

In 2018 Scotland (the UK) was assessed as having strongly implemented all of the core MPOWER interventions except for a moderate score on smoking cessation services (see Table 3). In June 2018 the UK ratified the WHO Protocol to Eliminate Illicit Trade in Tobacco Products. A weakness identified by participants was that recording of smoking status in secondary care and specialist settings is poor, according to data from the British Thoracic Society, though an intervention was being developed to address this.

Scotland has in place some interventions beyond the standard MPOWER measures. These are detailed in Table 16 and included legislation for smokefree vehicles with children present, a point-of-sale display ban, standardised packaging, mandatory retailer registration and some restrictions on flavours in tobacco products.

#### Table 16 Interventions beyond MPOWER measures in Scotland (end of 2018)

#### Additional interventions in place

Standardised packaging (fully implemented May 2017)

Point-of-sale advertising ban (2013 larger stores, 2015 small retailers)

Targets to increase use of stop-smoking services and increase quitting by people in less well-off communities

Smokefree vehicles with under 16 year old(s) present (Dec 2016)

Some flavoured cigarettes and RYO tobacco products are banned: including fruit, spice, herbs, alcohol, candy or vanilla flavours (since May 2017) – see Appendix One

Mandatory registration scheme for tobacco and e-cigarette retailers (free to retailers); retailers must seek proof-of-age for those who look under 25 years

## Proposals and plans for new actions

There were several actions planned for implementation at the end of 2018 (Table 17).

#### Table 17 Proposed tobacco control interventions in Scotland (end of 2018)

#### Planned or proposed interventions

Smokefree prisons (from 1 Dec 2018), with consistent through-care after release

Smokefree hospital grounds – plan to make it an offence to smoke within 15 metres of hospital buildings (expected by end of 2019)

From March 2017 menthol-flavoured cigarettes are being phased out. Total ban on menthol from May 2020. This includes RYO tobacco (EU Tobacco Products Directive - see Appendix One).

Including up-to-date advice on e-cigarettes in the Health and Wellbeing strand of the school curriculum

Explore with local authorities and housing associations the idea of tobacco-free clauses in tenancy agreements and smokefree housing alternatives being offered in social housing

The 2018 Action Plan<sup>42</sup> also includes a commitment to "gather evidence, assess the potential impacts of, and potentially legislate where appropriate, over the next 5 years" on a range of regulatory issues, including:

- Restricting availability of tobacco products (e.g. restricting the number and clustering density of retailers)
- Requiring conditions be met to sell tobacco products
- Considering additional price interventions (e.g. further pricing and tax measures)
- Making cigarettes less attractive (e.g. dissuasive colours/messages, reducing the nicotine level, or restricting flavours)
- Banning flavours and introducing standardised packaging for heated tobacco products (e.g. 'heat-not-burn' tobacco).

## Approach to alternative nicotine products

E-cigarettes are widely available in Scotland and the action plan notes the number of smokers using e-cigarettes as part of a quit attempt is growing.

NHS Health Scotland issued a national consensus statement in 2017 (<a href="http://www.healthscotland.scot/publications/e-cigarettes-consensus-statement">http://www.healthscotland.scot/publications/e-cigarettes-consensus-statement</a>) stating on current (2017) evidence that it is better for smokers to substitute e-cigarettes for cigarette smoking and that e-cigarettes could benefit public health if used by smokers to help them quit, but only if complete abstinence from combustible tobacco is achieved. The statement also noted that health care professionals should encourage use of the most evidence-based cessation products (like nicotine replacement therapy) but should not turn people who smoke away if they are using e-cigarettes to quit.

The action plan states that advice on e-cigarettes should be offered only as one aspect of stop-smoking service support. NHS Health Scotland advice is that e-cigarettes are a second-tier cessation option, expert advice and prescription medicinal products are advised as first line treatment, and e-cigarettes discussed first only if specifically raised by service users. E-cigarettes are not available free from the

NHS in Scotland and no medically-licensed e-cigarette was available in Scotland, UK, (or any other country) at the end of 2018.

Regulation of e-cigarettes includes bans on sales to under-18s, proxy purchasing by adults and vending machine sales. Shops selling e-cigarettes must be registered in Scotland (similar to the tobacco retailers' register). There are voluntary codes in the UK for e-cigarette advertising and promotion and Scotland introduced legislation in 2016 allowing additional regulations to be introduced, with plans to consult on regulations to enact a ban on advertising and marketing of vaping products announced in 2019 by the Scottish Government, with a view to enacting provisions in 2016 legislation.

In 2019, the Scottish Government planned to work with health boards to develop a consensus on whether or not vaping should be allowed on hospital grounds — aiming for a consistent, national approach by the end of 2019. No consistent approach was reached.

## Structures to support achievement of the endgame goal

**Strong emphasis on integration:** The Tobacco Control Action Plan is one of five linked public health strategies and plans released in 2018 (the others include alcohol, substance use, obesity and physical activity). Each of these is part of a new, high-level approach to public health with joint public health priorities across the Scottish Government, health service and local government, and a proposed new public health body to be set up in 2019. Reducing the use and harm from tobacco, alcohol and other drugs is one of the joint public health priorities.

Examples of progress in integrating health and other sectors include:

- Progress in joining up services through Health and Social Care partnerships<sup>42</sup>
- Since 2013, government and NGOs have moved to better integrate action to address tobacco use with alcohol and other drugs: e.g. with Alcohol Focus Scotland, ASH Scotland provides co-secretariat for the Cross-Party Group Improving Scotland's health: 2021 and beyond, which works to 'join up' thinking and approaches to these issues. The group includes MPs across parties, as well as health leaders, academics and NGOs. (See <a href="http://www.parliament.scot/msps/ScotHealth2021.aspx">http://www.parliament.scot/msps/ScotHealth2021.aspx</a> for details.)
- Scotland's Charter for a Tobacco-Free Generation is supported by the Scottish Government, NHS Health Scotland, NGOs, professional and health organisations, schools and colleges etc. ASH Scotland initiated the Charter in 2017 and has secured signed pledges of support from more than 300 organisations as at February 2019 (<a href="https://www.ashscotland.org.uk/what-you-can-do/scotlands-charter-for-a-tobacco-free-generation/">https://www.ashscotland.org.uk/what-you-can-do/scotlands-charter-for-a-tobacco-free-generation/</a>).
- The Scottish Coalition on Tobacco Control (SCOT) coordinates advocacy by NGO, health and civic society groups. It has been active since 2004 in joining up on tobacco policy and messaging and advocating for progress in tobacco control. SCOT members include the Medical Royal Colleges, health charities and NGOs.

Monitoring and evaluation: Since 2013, the Scottish Government has been required to provide an annual progress report on how the strategy is being implemented to a Ministerial Working Group on Tobacco Control (Chaired by Minister of Public Health). This group has subgroups including on youth smoking prevention and research/evaluation. The new Tobacco Control Action Plan is also monitored by this working group, and formally evaluated using an evaluation framework. The government has commissioned two evidence reviews (completed) as part of developing the 2018 action plan, on availability of tobacco (outlet density) and the strengths and limitations of various tax and price strategies.

**Strong tobacco control research infrastructure:** This has been bolstered by the UK Centre for Tobacco and Alcohol Studies, and its predecessor, of which the Universities of Edinburgh and Stirling are partners. While the Centre's 5-year funding ends in 2018, the tobacco research groups at Edinburgh and Stirling will continue. Tobacco control research also takes place at several other Scottish universities.

**Tobacco control funding:** Funding for tobacco control has been maintained but not increased, in recent years. It is estimated that the government's tobacco control team has a budget of around £1.3 million annually, to be used for research, funding to NGOs, meetings etc.

This budget does not include tobacco control allocations within the core budgets of various NHS organisations or Health Boards. The Scottish Government estimates that just under £10 million of the 2018-19 funding for Health Boards is likely to be used for tobacco prevention and cessation, but has no mechanisms to require that Health Boards use any funding for tobacco prevention and cessation work.

## **Expectations for achieving the endgame goal**

According to Scotland's Tobacco Control Action Plan (2018), adult smoking prevalence should have been 17% in 2016 to be on track to meet the 2034 goal, but it was 21% (reducing to 18% in 2017). The Action Plan notes that the number of people seeking to quit smoking through stop-smoking services has dropped by about 40% in recent years. This was considered a key contributor to the decreasing rate of decline in smoking prevalence, and is identified as a priority to address. However, the Action Plan document also noted that there has been a steep drop in smoking among 13-15 year olds, and that if smoking initiation continues to decline sharply, there is a "good chance" that Scotland can get back on track to achieving the 2034 goal. 42

## **Sweden**

## **Country context**

According to Statistics Swede, the total population in 2017 was 10 million people. Swedes are the most common ethnic group is Swedes, with a large ethnic minority of Swedish Finns. The Sami people are an indigenous population group.

Sweden is a member of the European Union. Parliamentary elections held are every four years. The Riksdag is the Swedish Parliament at national level (one chamber), there are 20 county councils at the regional level and 290 municipalities at the local level. The Riksdag has 349 MPs elected by proportional representation. Eight political parties are currently represented. A minority coalition of Social Democrats and Greens came into power in 2014.

The main tobacco control NGOs are members of Tobaksfakta (Tobacco Facts), which has strong public support. Examples of supporting NGOs include Doctors Against Tobacco, Nurses Against Tobacco, the Swedish Cancer Society and the National Heart Lung Association.

See Table A1 in Appendix Four for a comparison of the INSPIRED country contexts.

## Sweden's endgame goal

In 2016 Sweden set a government endgame goal in the 'Alcohol, Narcotics, Doping and Tobacco (ANDT) Strategy 2016-2020', 103 as part of an integrated approach tackling a range of substance abuse

issues. The goal followed a 2013 proposal from NGOs and extensive 'opinion-building' work (see below). The endgame goal is to end tobacco smoking as a public health problem and achieve less than 5% daily smoking prevalence of adults by 2025. No interim targets have been set.

The ANDT strategy prioritises inequalities, particularly relating to gender, socioeconomic and children. For example, the strategy states: "Social and gender equality must be systematically taken into account in implementation and follow-up".

## **Current use of tobacco and nicotine products**

Sweden's adult daily smoking prevalence was 7% in 2018, for both genders.<sup>30</sup> This was a decrease from 9% in 2016, 11% in 2013 and 14% in 2007.

These prevalence figures show a steady decline from an earlier base of low smoking prevalence compared with other countries in this project. For example, both the absolute and relative decreases in smoking prevalence in Sweden have been greater than in Aotearoa/New Zealand since 2007 (Table 18).

Table 18 Comparison of prevalence reductions in Sweden and Aotearoa/New Zealand since 2007

	Daily smoking prevalence		Current smoking prevalence	
	2007	2018	2007	2018
Sweden	14%	7%	24%	13%
Aotearoa/New Zealand	18%	13%	20%	15%

Sweden is also distinct in having very low smoking prevalence among young adults – just 5% daily smoking among young adults aged 18-29 years in 2018.<sup>30</sup> This compares with 16% for Aotearoa/New Zealand young adults aged 18-24 years in 2017/18, for example.<sup>87</sup>

Like other INSPIRED countries, there is evidence of smoking-related inequalities in Sweden. Smoking is not declining in all population groups, such as among people on low incomes, nor older people over 65 years. Overall, socioeconomic inequality in smoking patterns has widened in recent years. And there has been no decline in the proportion of children exposed to second-hand smoke in the home. According to the Public Health Agency's annual survey data for 2018, there are approximately two-to threefold differences in smoking prevalence between people with high and low SES.<sup>30</sup>

#### For example:

- Daily smoking prevalence for people on low incomes was 12% in 2018, compared with just 4% for those on high incomes.<sup>30</sup>
- Daily smoking prevalence in those in 'economic crisis' (defined as having problems with managing basic expenses for food, rent, bills etc. in the past 12 months) was 13%, compared with 6% for people defined as 'not in economic crisis'. A similar pattern was found for people with or without a 'cash margin', defined as having the ability to pay an extra (unanticipated) expense (about \$1100 in US dollars) without borrowing money or asking for help.

• Survey data in 2018 revealed daily smoking rates of just 3% for women among the university-educated population, compared with 10% and 14% among those with less formal education (high-school-educated and less than high-school educated, respectively).<sup>30</sup>

Over time, absolute differences in smoking prevalence by socioeconomic status have decreased, while relative differences increased. While the evidence suggests quite substantial disparities by socioeconomic status in 2018, overall smoking prevalence is very low and approaching 5%.

A particular feature in Sweden is that 'snus', a form of oral, smokeless tobacco in pouches, is widely used by men -18% of men used snus daily in 2018. Women's use of snus was lower, estimated at 4% in  $2018.^{30}$  The endgame goal does not include a goal for reducing snus use.

The government does not monitor smoking patterns among the Indigenous Sami population group — its smoking prevalence is currently unknown. As well as the Indigenous population, Sweden has a significant migrant and refugee population, which is thought to have higher-than-average smoking rates among men.

## Reductions in smoking needed to achieve the endgame goal

To achieve the endgame goal, Sweden needs to reduce daily smoking from 7% in 2018 by at least 2% in 7 years — an absolute reduction of just under 0.3% each year (see Table 21 in the Discussion section below). According to this data, Sweden is the closest country to achieving its endgame goal among these six countries, and requires the smallest annual reduction in smoking prevalence to reach its endgame goal.

## Planning for achieving the endgame goal

The ANDT strategy appoints responsibilities to 14 government agencies including education, crime prevention, police, transport and customs. The Swedish Public Health Agency is tasked with monitoring and reporting on developments towards the objective of smokefree Sweden.

The 2016 ANDT strategy did not include proposals for specific interventions and actions to ensure that the Swedish endgame goal is achieved but rather made broad statements about the need to reduce 'illegal sales' and marketing of tobacco products. However, in December 2018 the Public Health Agency introduced an action plan with several specific measures to advance tobacco control. This will begin from July 1<sup>st</sup> 2019 and includes registration of tobacco retailers, extension of rules for environmental tobacco exposure by, for example, banning smoking in outdoor restaurants and for other outdoor activities. Tracking and tracing of tobacco products will also come into effect from July 1<sup>st</sup> 2019. However, the action plan does not set any interim targets.

## **Current interventions and gaps**

Sweden scored 53 out of 100 points and ranked 9<sup>th</sup> equal alongside the Netherlands, Turkey and Hungary among 35 European countries in the 2016 Tobacco Control Scale, and had the lowest score among the six countries included in the project (Table 2, p13).

Sweden was close to meeting the indicator for comprehensive advertising and promotion bans [11 out of 13 points]. Other core MPOWER tobacco control measures had only partially been implemented. Sweden received the lowest score among the six countries for the price indicator [14 out of 30 points], smokefree policies [15 out of 22 points] and spending on public information

campaigns [1 out of 15 points]. Sweden scored similarly to most of the other countries for pictorial health warning labels [5 points out of 10] and was ranked around the middle for cessation treatment services [7 out of 10 points]. See Table A2 in Appendix Four for detail.

The 2016 the US\$ price of a pack of 20 cigarettes was \$7.34 – the 2<sup>nd</sup> lowest price and the most affordable in the six participating countries (see Table A4, Appendix Four).

In 2018 Sweden was assessed as having strongly implemented most of the core MPOWER interventions (see Table 3) with moderate implementation only for tobacco taxation, use of mass media, and smokefree policies.

As of February 2019, no innovative or additional interventions including those which were present in several of the other five INSPIRED countries (standardised packaging, smokefree cars, point-of-sale display bans) beyond the MPOWER core measures were in place in Sweden. A proposal to introduce a partial point-of-sale ban on the display of tobacco products was rejected in Dec 2018.

Table 19 summarises some of the key gaps or weaknesses in the implementation of the core tobacco control interventions in Sweden at the end of 2018. Participants felt that in the decade before the adoption of the smokefree goal, tobacco control progress had stalled in Sweden, with no major new tobacco control interventions introduced since 2005.

#### Table 19 Gaps and weaknesses in core tobacco control measures in Sweden (end of 2018)

#### Core interventions not in place

Funding for mass media campaigns and national advocacy and coordination has reduced in recent years

Inadequate annual tobacco tax increases

Inadequate public information (mass media) campaigns

Smoking cessation support is available but underused. Nicotine replacement therapy purchase costs are not reimbursed for smokers (varenicline and bupropion are partially reimbursed)

Sweden has not signed or ratified the WHO Protocol to Eliminate Illicit Trade in Tobacco Products (planned 2019)

## Proposals and plans for new actions

As noted above the December 2018 action plan does include proposals for new tobacco control interventions. These are summarised in Table 20.

#### Table 20 Proposed tobacco control interventions in Sweden (end of 2018)

#### Planned or proposed interventions

Ratification of the WHO Protocol to Eliminate Illicit Trade in Tobacco Products (July 2019)

Tracking and tracing of tobacco products (July 2019)

Registration of tobacco retailers from (July 2019)

Increased smokefree outdoor areas, including outdoor restaurants (from July 2019)

Promote cooperation in tobacco control (and alcohol and other drug) activities across Nordic countries

## Approach to alternative nicotine products

Sweden has a long-standing implicit 'harm reduction' approach through the widespread availability and use of snus, but there is no official government position on snus. Snus is excluded from the tobacco control strategy.

Reflecting the endgame goal's focus on smoked tobacco, snus is taxed at a lower rate than smoked tobacco products. However, differences in the bioavailability of nicotine, with reduced and slower nicotine delivery by snus, may diminish the effect of this policy. As a result, a typical daily dose of snus use carries approximately the same cost as smoking cigarettes.

NGOs advocate for reducing the use of snus, waterpipes, e-cigarettes and other new devices, but as a secondary strategy. Nicotine e-cigarettes are available at a limited range of specialist shops and over the Internet. Regulations include licensing/registration of e-cigarette retailers, a minimum purchase age of 18 for e-cigarettes, and requirements for e-cigarette packaging information.

## Structures to support achievement of the endgame goal

The Swedish tobacco endgame goal is consistent with a broader government goal to progressively eliminate health inequities.<sup>43</sup>

There is a strong NGO sector in Sweden led by Tobaksfakta (Tobacco Facts). It advocates for more political commitment nationally, cross-sector collaboration and more funding. There is support for the goal within local and regional political bodies. Extensive opinion-building work by NGOs has helped to increase support across society for a political decision on a detailed action plan for the endgame goal. By June 2019, 200 organisations at national, regional and local levels had pledged their support on a website (<a href="http://www.tobaksfakta.se/tobacco-endgame/">http://www.tobaksfakta.se/tobacco-endgame/</a>), including organisations representing health professionals, teachers, youth, pensioners and women. Most significantly, all politically-governed regional healthcare providers have expressed their support.

Sweden already has a system of state-owned bottle stores, called 'Systembolaget', where a government-owned chain is the only retail store permitted to sell alcohol containing more than 3.5% alcohol by volume. This could act as a precedent and facilitate introducing a similar state-owned retail system for tobacco products.

In May 2018, a 50% increase in funding for tobacco control was agreed, which had to be spent within that year.

### **Expectations for achieving the endgame goal**

Recent modelling data is not available on Sweden's projected prevalence and achievement of the endgame goal. However, as Sweden has the lowest smoking prevalence, with very low levels among young adults in particular, the likelihood of achieving the goal appears high. Indeed the goal has already been met for high socioeconomic groups.

Further, Sweden has achieved a very low prevalence of smoking even though core tobacco control measures have been only partially implemented (e.g. mass media, tax increases, and smoking cessation support could be strengthened). Finally, a precedent exists for introducing strong controls over product supply because of the long-standing government monopoly for the sale of alcoholic beverages (Systembolaget – see above). There is also strong political support for tobacco control at county and regional levels (where health services are provided), and political support is growing at the local (municipal) level.

Given this context, there appears to be strong potential for Sweden achieve the endgame goal, especially if tobacco control measures are strengthened. But strong political commitment and additional measures will likely be required if the goal is to be reached for all population groups.

## **Discussion**

## **Key findings**

### Features of the endgame goals and country contexts

The endgame goals of the INSPIRED countries all focused on achieving very low smoking prevalence (usually <5%) with target years of achieving this goal varying between 2025 and 2035. The Finnish goal differed in that it aimed for end to all nicotine product use (not just smoking), while only the Aotearoa/New Zealand goal specified minimising the availability of smoked tobacco products, not just achieving minimal smoking prevalence. The Canadian goal differed in that it applied to all tobacco products. The Scottish and Aotearoa/New Zealand endgame goals also included specific interim targets for reducing disparities in smoking.

Similarities in the six countries included that all were high income countries with strong track records in the implementation of core tobacco control measures. Four of the countries were English-Speaking and the other two were from Scandanavia.

Current smoking prevalence was low across the six countries. In 2018 the lowest daily smoking prevalence was 7% in Sweden and the highest 17% in Ireland (Scotland had a current smoking prevalence of 19%). Recent (2005-15) average annual absolute reductions in smoking prevalence averaged between 0.58% (Finland) and 0.84% (Ireland), and were substantially higher than the average for all high-income countries over that period (0.55%) in all six countries except Finland.

Table 21 summarises the degree and rate of reduction in smoking prevalence required to achieve a smoking prevalence of 5% or less in the six countries. Sweden has the smallest annual reduction required and appears to be the country most likely to achieve its endgame goal first. Only Sweden, Canada and Finland would achieve their endgame goal by the target date if prevalence continued to decline from 2018 at the same rate as from 2005-2015 (see Table 21).

Table 21 Prevalence reductions required to achieve the INSPIRED country endgame goals

Country	Year of adopting goal	Target year to achieve ≤ 5% prevalence	Absolute reduction in daily smoking prevalence required from 2018 * to achieve 5% prevalence	Annual reduction in daily smoking (%) required to achieve 5% prevalence	Number of years annual reduction required
Canada	2018	2035	5.8% (10.8% for current smoking)**	0.34% (0.64% for current smoking)	17 yrs. (2018- 2035)
Finland	2010	2030	7%	0.58%	12 yrs. (2018- 2030)
Ireland	2013	2025	12%	1.71%	7 yrs. (2018-2025)
Aotearoa /New Zealand	2011	2025	8%	1.14%	7 yrs. (2018-2025)
Scotland (UK)	2013	2034	14%	0.88%	16 yrs. (2018- 2034)
Sweden	2018	2025	2%	0.29%	7 yrs. (2018-2025)

<sup>\*</sup> Baseline year for Aotearoa/New Zealand is 2017/18 survey NZ Health

Five out of six of the countries had an action plan or strategy in place for the endgame goal (Aotearoa/New Zealand was the exception). The countries were all relatively advanced in their implementation of core tobacco control measures, with many having more cutting-edge demand-reduction interventions in place such as relatively high tobacco taxes, point-of-sale tobacco product display bans, and standardised packaging and smokefree interventions such as smokefree cars legislation. Finland and particularly Sweden were least advanced in the implementation of core tobacco control measures. Canada has been a leader over the past decade in product modification interventions - moving to a full ban on additives, including menthol, in tobacco products, and European countries are also moving in this direction (see Tables A2 and A3 in Appendix Four for details) through implementation of the TPD.

The six countries were also similar in the degree to which some types of interventions have <u>not</u> been implemented. For example, other than measures to control sales to minors, the six countries were relatively weak on implementing measures to reduce the availability of smoked tobacco products. These generally did not extend beyond licensing/registration of retailers, with no evidence of substantial interventions in place or planned to control the number, density or location of retailers selling tobacco products (several Canadian provinces banned tobacco sales in some specific locations). There was also a noticeable lack of implementation or proposals to implement any of the other more radical 'endgame' measures such as the tobacco free generation or mandated denicotinisation of tobacco products.

Each country had a relatively strong tobacco control advocacy and NGO sector, which had been influenced by or had adopted endgame thinking. Tobacco control research was also a strong feature in each country. The tobacco control sector and government emphasised the importance of addressing disparities in smoking in each country. This was a particularly strong focus in Scotland

<sup>\*\*</sup> Current smoking estimates are also given in brackets for Canada, due to a lack of certainty with the daily smoking estimate

(socioeconomic disparities) and Aotearoa/New Zealand (ethnicity related disparities). Each country had examples of political champions who had helped advocate for the adoption of an endgame goal.

As well as these notable similarities in contexts there was also some heterogeneity in the approaches taken to achieving the endgame. Thus, the exact mix of measures implemented varied between countries. There were also differing approaches to harm reduction. Most countries have partially or fully adopted a harm reduction approach by widening the availability of alternative nicotine products such as e-cigarettes to varying degrees (e.g., Scotland, Canada, Aotearoa/New Zealand). However, the way it was defined and implemented varied between countries. In contrast, Finland's endgame goal includes minimising use of all nicotine products, and avoids the use of alternative nicotine products as a means to achieve its endgame goal.

## Advantages and disadvantages of adopting endgame goals

Overall, feedback from project participants suggests the endgame experience was largely positive. Participants identified several key benefits and advantages of adopting an endgame goal for smoking. The endgame goals were seen as galvanising the tobacco control sector, politicians and the public and enhancing the clarity of purpose for tobacco control activities by providing a clear vision and aims. Strengthening political commitment, maintaining political priority and public support, facilitating advocacy for tobacco control actions and strategies and helping secure commitment and resources for tobacco control efforts were other reported advantages.

Some possible downsides were also mentioned. These included the possibility that endgame goals could distract from advocacy for and implementation of specific tobacco control measures. There were also challenges in maintaining enthusiasm for endgame goals which were relatively long term, however the use of interim goals may help address this. Finally, there are concerns about possible adverse impacts for tobacco control efforts if goals (interim or endgame) were not achieved – as this could demoralise the tobacco control sector and undermine advocacy.

## Facilitators and barriers to progress towards the endgame goals

Across the six countries, there were marked similarities reported in what had enabled endgame progress to date, and also in the barriers and challenges faced. Factors identified that had facilitated progress across countries included political commitment, the presence of a government-endorsed tobacco control strategy/action plan, structures to encourage cross-sectoral collaboration, and implementing robust tobacco control measures.

The findings reveal some challenges in planning and implementing tobacco endgame goals across the six countries. Specifically, it appears challenging, in the face of competing priorities, in most countries to generate and maintain the political will required to enable more wide-ranging and innovative measures to be implemented.

Endgame researchers generally argue that the tobacco endgame will require the design of new policy innovations that go beyond 'business as usual' demand reduction measures. <sup>79</sup> <sup>104</sup> As noted above, none of the six INSPIRED countries has yet committed to implementing endgame measures such as dramatic reductions in retail availability or supply of tobacco products, or greatly reducing the nicotine content of cigarettes and tobacco. However, it is still early days and this may yet happen.

A central hurdle to overcome, articulated by participants from all these countries, is the need to greatly reduce the wide disparities in smoking prevalence by socioeconomic status and ethnicity, to

ensure endgame goals are achieved for all population groups. Ongoing resistance and interference from the tobacco industry was also a challenge faced in all settings.

#### **Critical readiness factors**

Based on the findings of this project including the common features of the contexts within the six countries that have adopted endgame goals so far and a synthesis of the views of the participants, it is possible to propose some factors that may be critical for the readiness of countries to adopt a credible and feasible endgame goal for smoking:

- A relatively low and/or rapidly declining prevalence of smoking at the time of setting an endgame goal.
- A history of implementing strong tobacco control policy measures, including all or most core MPOWER tobacco control measures (though if prevalence is low enough this may not be essential).
- A high level of public and political support for reducing smoking prevalence and for implementing additional tobacco control measures.
- The presence of political champion(s) to provide leadership and advocacy for the endgame goal
- Social justice concerns as a key driver in national tobacco control strategies and a strong focus on reducing disparities in smoking.
- Where relevant, engagement and leadership in tobacco control and with endgame ideas and the endgame goal among Indigenous population groups.
- Strong, united NGO/civil society and tobacco control/advocacy sectors with strong political networks and engagement with endgame thinking.
- A strong positive health 'frame' and a negative industry/tobacco 'frame' among individuals, groups and society.

## Critical success factors and examples of best practice

We do not yet know the outcome of the endgame goals in the six INSPIRED countries, so identifying critical success factors is somewhat speculative. However, the following are factors that were described as participants as likely to be important to the success of endgame goals by maximising the likelihood that that endgame goal will be realised or at least promote more rapid reductions in smoking prevalence. These findings are generally consistent with academic expert views:<sup>3 104</sup>

- Defined, agreed nature of the endgame goal.
- Strong and sustained political leadership.
- Cross-party political support for the endgame goal.
- Sustained strategic Government commitment and adequate resource allocation for achievement of the endgame goal.
- A comprehensive national tobacco control strategy/action plan with consideration of defined intermediate targets and appropriate resources supporting implementation infrastructure.
- A dedicated and adequately resourced monitoring and research infrastructure responsible for identification and recommendations of improvements and useful innovations, as well as comprehensive monitoring, review, and evaluation of the endgame plan.
- Implementation of a full range of evidence-based tobacco control measures, ideally including one or more 'endgame' interventions.
- A well lead and united tobacco control sector with broad consensus about the goal and the priority measures needed to achieve the goal.

- An evidence-based focus on identifying and addressing socioeconomic and ethnic disparities in smoking.
- Ongoing efforts to support and engage with and/or evidence of engagement and leadership among population groups most affected by tobacco smoking, including Indigenous communities.
- Ongoing efforts to engage and mobilise the public in support of the endgame goal and measures to achieve it.
- Robust actions to prevent the tobacco industry from acting as a barrier to the introduction of measures to achieve the endgame goal.

There are some examples of possible 'best practice' from the INSPIRED countries which align with these proposed critical success factors and which could be considered for implementation by all INSPIRED countries and other countries considering endgame goals. These examples include:

- Canada: a commitment to investigate measures to hold the tobacco industry and a history
  of supporting legal action for damages and cost recovery against the industry.
- Finland: evidence of strong political commitment to the endgame goal including a multifaceted national strategy, formal partnership between government and civil society through the Tobacco-free Finland 2030 Network and adherence to a cross-sectoral health in all policies approach to policy-making.
- Ireland: evidence of strong political commitment and comprehensive supporting infrastructure for the endgame goal including a cross-sectoral whole-of-government approach, formal government and civil society partnership structures, and a national tobacco control strategy with its own work programme and dedicated implementation unit and an annual reporting process.
- Aotearoa/New Zealand: leadership and active participation of Māori leaders and communities in developing and advocating for the Smokefree Aotearoa goal.
- Scotland: strong focus on reducing inequities in smoking, including specific targeted
  measures and interim targets for reducing smoking prevalence among more deprived
  groups; evidence of strong political commitment and comprehensive supporting
  infrastructure for the endgame goal including active efforts to engage and mobilise
  government agencies and civil society through the Charter for a Tobacco-Free Generation,
  a national strategy with annual progress reporting a Ministerial Working Group on Tobacco
  Control
- Sweden: strong NGO network led by Tobaksfaktas (Tobacco Facts) advocating for political commitment, cross-sectoral collaboration and tobacco control interventions and funding.
- Multiple countries implementation of additional tobacco control interventions beyond core MPOWER measures such as standardised packaging, retailer registration/licensing, bans on menthol and other flavouring in tobacco products and extensions to smokefree polices such as smokefree cars laws. However, note no implementation of more radical endgame measures.

# Potential role of alternative nicotine products in achieving tobacco endgames

This comparison of the six countries' endgame experiences raises the question of whether increased availability of alternative nicotine products will contribute to, or hinder, the achievement of endgame goals. As noted, the approaches to alternative nicotine products like e-cigarettes in these countries vary greatly. They range from Finland's nicotine-free goal and restrictive regulations for e-cigarettes, to countries with wider availability of alternative nicotine products (e.g., Scotland, Ireland) or smokeless tobacco (e.g., Sweden).

Sweden has already largely achieved a relatively low prevalence of smoking without widespread availability of e-cigarettes, but the smokeless tobacco product snus is commonly used, particularly among men. Widespread snus use, which is a long-standing phenomenon in Sweden, may have contributed to the comparatively low smoking prevalence. <sup>105-109</sup> Whether smoking prevalence would be greatly affected by introducing such products into other countries that do not have a tradition of their widespread use is unclear.

At this stage it is not established whether alternative nicotine products like e-cigarettes are likely to slow or hasten progress towards endgame goals, or maybe even be required if endgame goals are to be achieved. Commentators are divided on these points and what the current evidence base shows. Some argue that non-combustible products may be harmful or have unintended negative effects, including resulting in widespread uptake (and ongoing nicotine addiction) among new generations of young people and possibly could slowing progress in reducing smoking prevalence through 'gateway' effects to smoking or discouraging stopping smoking through long-term dual use. <sup>110</sup> <sup>111</sup>

However, many other commentators argue that non-combustible alternative products may play a key role in helping to end the tobacco epidemic through: (a) direct impacts on reducing smoking prevalence (e.g. increasing smoking cessation or through smokers fully substituting use of alternative nicotine products for smoking), &/or (b) reducing smoking uptake by alternative products 'displacing' smoking among young people; &/or (c) facilitating the implementation of policies where feasibility might be enhanced by the availability of a credible alternative product. <sup>104</sup> 112-115

More indirectly, regardless of the actual or potential impact of e-cigarettes on smoking prevalence, the debate over e-cigarettes (and other non-combustible tobacco and nicotine products) has provoked disunity among tobacco control practitioners and researchers. <sup>116</sup> Such disunity may reduce the capacity or will of governments to introduce new policy measures to reach endgame goals. This could also create opportunities for commercial actors to exploit. The current tobacco industry narrative of their 'transformation' towards supporting harm reduction goals and producing alternative nicotine products could also help re-establish some credibility and influence industry influence over policy-making and debates, potentially to the detriment of tobacco control efforts. <sup>117</sup>

Hence, analysing progress in INSPIRED countries over the next few years, and investigating the contribution of alternative nicotine products as a facilitator or barrier, should be a key area for enquiry, and the experiences of these six countries could help to inform future regulatory practice towards alternative products in other contexts.

Specific research questions might include:

- To what extent and through what mechanisms does the availability of alternative nicotine products facilitate or delay progress towards endgame goals for smoked tobacco products?
- How do policy responses for tobacco and alternative nicotine products in different countries compare, and what effect do different combinations of regulatory policies for smoked tobacco and non-combusted tobacco or nicotine products have on consumption patterns of smoked tobacco, smokeless tobacco and alternative nicotine products?
- What are the effects of policy responses on the initiation and uptake of smoked tobacco and non-combusted nicotine and tobacco products?
- How does the use of snus in Sweden and Finland relate to the reduction in smoking prevalence and the progress towards an endgame goal focused on smoked tobacco products?
- What are the tactics and strategies of the tobacco industry in countries with endgame goals
  e.g. What is their messaging in response to the goal, measures proposed to achieve it and
  the role of alternative nicotine products? What tactics do they use to support or oppose the
  goal, measures proposed to achieve it and the regulation of alternative nicotine products?

• What role could future (yet to emerge) alternative products play in progress towards endgame goals?

## **Conclusion**

Endgame goals for smoking are an important development in international tobacco control thinking and practice. They represent a paradigm shift in approach, and may help facilitate new and innovative tobacco control actions and more rapid reduction in smoking prevalence. Such goals at a country-level may offer inspiration and guidance for other countries in scoping similar goals and strategies. They may also help to facilitate ambitious regional or global goals that aim to eliminate (not just contain) the tobacco-related epidemic.

Factors that have assisted endgame goal adoption and progress in these countries include the presence of a government strategy/action plan, structures to facilitate cross-sector working, and comprehensive tobacco control measures. Based on the experience of these six countries, we identified potential critical readiness and success factors for adopting endgame goals such as: political and public support; robust strategies and supporting implementation and monitoring infrastructure; strong NGO and research sectors; the involvement of Indigenous leaders where relevant; and comparatively low smoking prevalence.

The experience to date from the INSPIRED countries suggests such goals have a positive impact on tobacco control efforts. However, there was much heterogeneity in the contexts, nature and experiences of endgame goals across the six countries, suggesting that diverse approaches to the endgame are possible and appropriate.

The six countries included in this study are all high-income Western countries. It is not yet clear whether setting tobacco endgame goals in low- or middle-income countries is feasible or helpful or whether a global-level endgame goal, such as the proposed 2040 Tobacco-free goal, will be a useful initiative. The Experience from the Tobacco Free Pacific 2025 goal was not included in our project at this stage, as it is a regional rather than country-specific goal. Still, an important topic for future research is to explore the overall impact of the Tobacco Free Pacific goal, and the activities and impacts of measures taken in small island states like Tokelau, which are implementing innovative tobacco control programmes. Evidence of the outcome of the adoption of state-level or other local goals and endgame strategies will also provide important evidence about how the endgame for smoking can be achieved.

A significant barrier constraining progress towards endgame goals in the INSPIRED countries was a lack of political resources and commitment to enacting the more radical endgame policies which may be required to drive the large reductions in smoking prevalence and disparities in smoking that are required to achieve endgame goals.

The proposed critical readiness and success factors will require further discussion and reflection on how they could be measured and monitored to help identify additional countries where endgame goals may be feasible. Some are easier to measure than others. For instance, many countries already collect information on smoking prevalence and implementation of tobacco control measures. Public support for endgame goals and actions could easily be monitored. Measuring the strength of tobacco control sectors, and the level of political will for tobacco control, may be more difficult and will require further work.

We believe a range of approaches should be encouraged, given the varied social and cultural contexts in countries. It is not yet clear which particular elements of tobacco control will lead to success in achieving endgame goals, but it is unlikely that a 'one size fits all' solution will emerge. Rather, different endgame approaches will be needed to suit individual countries' contexts, taking into

account distinct patterns of product use, cultural issues, political opportunities, and social norms and preferences.

It is early days in the study of the tobacco endgame. The experience of the first six countries that have adopted endgame goals has provided rich data about how to seek to reduce, and eventually end smoking and the harms that it causes. Questions remain about the place of endgame goals and the merit of different approaches and strategies that could be used to achieve them. These can be addressed through ongoing collaborations to monitor the experiences and evaluate the impacts of endgame goals and interventions to achieve them in countries with tobacco endgames. However, our findings to date suggest that endgame goals and strategies could have an important role to play in hastening an end to the global epidemic of tobacco-caused harm.

# **Appendices**

## **Appendix One: List of participants**

**Canada:** Rob Cunningham (Senior Policy Analyst, Canadian Cancer Society), Robert Schwartz (University of Toronto)

Finland: Mervi Hara (Coordinator, ASH Finland), Otto Ruokolainen (Finnish Institute for Health and Welfare/THL), Hanna Ollila (THL), Meri Paavola (Ministry of Social Affairs and Health), Reetta Honkanen (Ministry of Social Affairs and HealthValvira)

Ireland: David Evans (Coordinator, Health Service Executive), Luke Clancy (Tobacco Free Research Institute Ireland), Fenton Howell (Department of Health), Maurice Mulcahy (Health Service Executive), Patrick Doorley (ASH Ireland), Paul Kavanagh (Health Service Executive), Siobháin Brophy (Department of Health), Eoghan Flynn (Department of Health), Yann Chalmers (Department of Health).

Aotearoa/New Zealand: Richard Edwards (Coordinator, University of Otago), Louise Thornley (University of Otago), Andrew Waa (University of Otago), Janet Hoek (University of Otago), George Thomson (University of Otago), Nick Wilson (University of Otago), Robert Beaglehole (University of Auckland/ASH Aotearoa/New Zealand), Shayne Nahu (Cancer Society), Jane Chambers (Ministry of Health), Scarlett Storr (Ministry of Health)

**Scotland:** Sheila Duffy (Chief Executive, ASH Scotland), Amanda Amos (University of Edinburgh), Morris Fraser (Scottish Government), Gerard Hastings (University of Stirling), Alan Dalziel (ASH Scotland)

**Sweden:** Hans Gilljam (Coordinator, Karolinska Institute), Göran Boethius (Tobaksfakta/Tobacco Facts), Margaretha Haglund (Tobaksfakta/Tobacco Facts)

We acknowledge the contribution of Janine Nip who carried out final editing of this report.

# Appendix Two: Assessment template – tobacco endgame goal status

#### 1.1 COUNTRY CONTEXT

Type of government

Population (e.g., ethnicity breakdown)

Origins of endgame goal (including who came up with the idea)

Particular features of tobacco product use (e.g., widespread Snus use in Sweden)

Any other contextual information?

#### 1.2 SMOKING PREVALENCE AND DISPARITIES

Brief summary of adult smoking prevalence, including by gender

Brief summary of young adult smoking prevalence (e.g., 18-24 yrs.), including by gender

Brief summary of adolescent smoking prevalence (e.g., 15-17 yrs.)

Evidence of any disparities in tobacco use (e.g., by ethnicity, socioeconomic status)

Summary of data on use of e-cigarettes and other products such as waterpipe tobacco, smokeless tobacco (e.g., levels of use by adults and youth, concurrent use with tobacco smoking)

Evidence that goal will be met (or not) on current trends

Do you have any other comments on prevalence or disparities?

#### 1.3 ENDGAME GOAL

Date adopted

Title and wording of the goal. Is there a percentage target specified for reducing smoking prevalence?

Specific outcome sought. Does the goal focus on minimising harm or abstinence from nicotine?

Timeline (e.g., interim and final targets)

Author/publisher of goal document

Any other information about the goal?

#### 1.4 NATIONAL STRATEGY OR PLAN

Has a national strategy/plan to achieve the endgame goal been produced? Is this a government plan or another plan (e.g., by civil society/NGOs, advocates or academics)?

If a plan exists, is it a dedicated plan or part of another plan (e.g., on NCDs or combined with alcohol and other drugs)

Briefly list the key actions in the plan

To what extent is the plan being implemented?

How successful are the actions likely to be in progressing towards the goal? (in your view)

Any other comments on the plan?

#### 1.5 COMMITMENT TO REDUCING SOCIAL AND ETHNIC DISPARITIES

Is there specific reference to equity issues in the goal (and/or plan)?

What level of priority is given to reducing disparities in the goal and/or plan? Does the plan include any targeted interventions? (briefly describe)

Any other comments on reducing disparities?

#### 1.6 CURRENT AND PLANNED INTERVENTIONS

Brief summary of current interventions (summary only – further detail is in Part 2 below)

Interventions may be by government, civil society/NGOs, community, etc.

Interventions planned in the next five years

#### 1.7 POLITICAL SUPPORT AND RESOURCING

Evidence of senior-level political support

Evidence of cross-party support

Evidence of commitment of resources – specifically to the endgame goal and to tobacco control overall

Degree of success of advocacy efforts in encouraging government to increase resourcing for the tobacco endgame goal

Evidence of cross-department working (e.g., are some interventions and leadership coming from outside the Health Dept or Ministry?)

Evidence of infrastructure to implement and monitor progress (e.g., national unit, evaluation framework and resources, government funded national monitoring survey/s)

Other evidence of political commitment

#### 1.8 CIVIL SOCIETY SUPPORT

Evidence of civil society support at national level, e.g., national advocacy, civil society coalition or advisory group

Evidence of one or more civil society organisations dedicated to achieving the goal

Evidence of civil society strategy for achieving the goal, e.g., have strategy documents been produced?

Other evidence of civil society support

#### 1.9 PUBLIC SUPPORT

Evidence of public and smoker support for the endgame goal (please specify)

Evidence of public and smoker support for key interventions (brief summary/examples)

Any other information on public support?

#### 1.10 LEARNING FROM COUNTRY EXPERIENCES

What has worked well? What are the main facilitators to progress?

What has not worked? What are the main barriers to progress?

What advice would you give to other countries about endgame goals?

Do you have any other comments to make?

# **Appendix Three: Summary of EU Tobacco Products Directive**

The Tobacco Products Directive has governed the manufacture, display and sale of tobacco and related products since May 2016. It sets out EU-wide rules to regulate all tobacco and nicotine products, given the substantial cross-border trade and the risk of inconsistent national laws. Finland, Sweden, Scotland and Ireland are all subject to the Directive's provisions, which include the following.

The EU Tobacco Products Directive (selected provisions):

- Prohibits cigarettes and RYO tobacco with characterising flavours.
- Requires health warnings on tobacco and related products (e.g. ENDS) cigarettes and RYO tobacco must include combined (pictorial, text, cessation info) warnings that cover at least 65% of the pack's front and back.
- Allows EU countries to prohibit internet sales of tobacco and related products.
- Sets out safety, quality and notification requirements for electronic cigarettes.
- Obliges manufacturers and importers to notify EU countries about novel tobacco products before placing them on the EU market.
- Requires the tobacco industry to report to EU countries on the ingredients used in tobacco products.
- Introduces EU-wide tracking and tracing to combat illicit trade.

# **Appendix Four: Tables of summary information**

### **Table A1: Comparison of country contexts**

This table shows each country's population size, GDP, general ranking of life expectancy, and ethnic groups.

Country	Population size in 2016	GDP per capita ranking (2018)	OECD estimate for male life expectancy at birth (2017)	Major ethnic groups
Canada	36.3 m	18 <sup>th</sup>	79.8 yrs.	First Nations (indigenous), Canadian, European, Chinese, Indian
Finland	5.5 m	16 <sup>th</sup>	78.6 yrs.	Sami people (indigenous), Finnish, Swedish, Roma
Ireland	4.8 m	4 <sup>th</sup>	79.9 yrs.	Irish Travellers (indigenous), Irish, Polish, British, Lithuanian, Latvian, Nigerian
Aotearoa/New Zealand	4.7 m	21 <sup>st</sup>	80.0 yrs.	Māori (indigenous), NZ European, Pacific Islands people, Chinese, Indian, Filipino, Korean
Scotland	5.4 m	23 <sup>rd</sup> (UK)	79.4 yrs. (UK)	White Scottish, White Other British, White Irish, White Gypsy Traveller, White Polish, Asian
Sweden	9.9 m	12 <sup>th</sup>	80.6 yrs.	Sami people (indigenous), Swedish, Sweden Finns, ethnic Finns, Iraqi, Iranian, Lebanese, Syrian

Source for GDP per capita ranking (2018-2023): International Monetary Fund World Economic Outlook (April - 2018)

### Table A2: Detail of interventions in place – Tobacco Control Scale

#### a) Country assessments against the Tobacco Control Scale - Please see the following table for the criteria for each indicator

Interventions in the Tobacco Control Scale (TCS)	Fully met the TCS indicator in 2016 (i.e. full score)	Almost met the TCS indicator in 2016 (i.e. 1-2 points below the full score)	Partially met the TCS indicator in 2016 (i.e. more than 2 points below the full score)
Price of cigarettes – Weighted Average Price for cigarettes in July 2016 Full score: 30 points	Aotearoa/New Zealand*		Scotland (UK) ** [26], Ireland [20], Canada* [19], Finland [16], Sweden [14]
Smokefree work and other public places as at 1 Jan 2017 Full score: 22 points	Ireland, Scotland (UK)	Canada* [21], Aotearoa/New Zealand* [20]	Finland [18], Sweden [15]
Spending on public information campaigns (2015) Full score: 15 points			Aotearoa/New Zealand*[6], Canada [6]*, Finland [3], Scotland (UK) [3], Ireland [2], Sweden [1]
Comprehensive bans on advertising and promotion as at 1 Jan 2017 Full score: 13 points	Finland, Ireland, Aotearoa/New Zealand*, Canada*	Scotland (UK) [12], Sweden [11]	
Large pictorial health warning labels as at 1 Jan 2017 Full score: 10 points		Scotland (UK) [9]	Canada* [5], Finland [5], Ireland [5], Aotearoa/New Zealand* [5], Sweden [5]
Treatment to help smokers stop as at 1 Jan 2017 Full score: 10 points		Aotearoa/New Zealand* [9], Scotland (UK) [9], Ireland [8]	Sweden [7], Canada* [5.5], Finland [5]

<sup>\*</sup>The assessment for Aotearoa/New Zealand and Canada is an estimate only, by the Aotearoa/New Zealand and Canadian researchers/authors. It is based on applying the Tobacco Control Scale indicator methods to the Aotearoa/New Zealand and Canadian contexts. However, we acknowledge that our assessment may have differed somewhat in approach to that applied in the Tobacco Control Scale report.

<sup>\*\*</sup> In the Tobacco Control Scale, Scotland is not assessed separately – the overall UK assessment is used here.

Note that the data used for the 2016 survey refer to legislation in force on the 1 January 2017, price data on 1 July 2016, and the tobacco control budget in 2015. Any legislation, price increases or funding introduced or enforced after those dates are not included.

# b) Criteria for the Tobacco Control Scale indicators (Table 2 in *Tobacco Control Scale 2016* report)

Price of cigarettes	30
The Weighted Average Price for cigarettes in July 2016	
The price of the Weighted Average Price (WAP) for cigarettes in July 2016, taking into account Purchasing Power Standards (PPS). The country with a WAP of €10 a pack and an EU average Purchasing Power Standard receives 30 points. In countries without WAP information the price used is the price of a pack of 20 Marlboro in July 2016 minus 10%, taking into account the PPS.	30
Smoke free work and other public places	22
Workplaces excluding cafes and restaurants – one only of	10
Complete ban without exceptions (no smoking rooms); enforced	10
Complete ban but with closed, ventilated, designated smoking rooms under very strict rules; enforced	8
Complete ban but with closed, ventilated, designated smoking rooms (not areas or places); enforced (at least 75% of the workplaces are smoke free)	6
Meaningful restrictions; enforced (more than 50% of the workplaces are smoke free)	4
Legislative restrictions, but not enforced (less than 50% of the workplaces are smoke free)	2
Cafes and restaurants – one only of	8
Complete ban; enforced	8
Complete ban, but with closed, ventilated, designated smoking rooms (not areas or places); enforced	6
Meaningful restrictions; enforced (50% of bars and restaurants are smoke free)	4
Legislative restrictions, but not enforced (less than 50% of bars and restaurants are smoke free)	2
Public transport and other public places and private cars	4
Complete ban in trains without exceptions	1
Complete ban in other public transport without exceptions	1
Ban in private cars when minors or children are present	1
Complete ban in educational, health, government and cultural places	1
Spending on public information campaigns	15
Tobacco control spending per capita by the government in 2015, expressed in Purchasing Power Standards. A country which spends 2 euro per capita, based on the EU average GDP per capita expressed in PPP receives 15 points	
Comprehensive bans on advertising and promotion	13
Points for each type of ban included - additive	
Complete ban on tobacco advertising on television and radio	2
Complete ban on outdoor advertising (e.g. posters)	2
Complete ban on advertising in print media (e.g. newspapers and magazines)	1.5
Complete ban on indirect advertising (e.g. cigarette-branded clothes, watches etc.)	1
Ban on display of tobacco products at the point-of-sale	2
Ban on point-of-sale advertising	2
Ban on cinema advertising	1
Ban on sponsorship	1

Ban on internet advertising	0.5
Large direct health warning labels	10
Plain packaging (the removal of trademarks, logos, colours and graphic, except for the government health warning, and brand name presented in a standardized typeface) in combination with pictorial health warnings on the front and the back of the tobacco product package	4
Size of warning – one only of	3
50% or less of packet	1
51-79% of packet	2
80% or more of packet	3
Pictorial health warnings – additive	3
Pictorial health warnings on cigarette packs	2
Pictorial health warnings on hand rolling tobacco	1
Treatment to help smokers stop	10
Recording of smoking status in medical notes	1
Legal or financial incentive to record smoking status in all medical notes or patient files	1
Brief advice in primary care	1
Family doctors reimbursed for providing brief advice	1
Quitline	2
National quitline or quitlines in all major regions of country	1
ADDITIONAL POINT FOR:	
Quitline counselors answering at least 30 hours a week (not recorded messages)	1
Network of smoking cessation support and its reimbursement – one only of	4
Cessation support network covering whole country, free	4
Cessation support network but only in selected areas, e.g. major cities, free	3
Cessation support network covering whole country, partially or not free	3
Cessation support network but only in selected areas, e.g. major cities, partially or not free	2
Reimbursement of medications – one only of:	2
Medications totally reimbursed or free to users or	2
Medications partially reimbursed	1

# Table A3: Detail of other interventions in place or planned at end of 2018

Other interventions (not in the TCS)	Implemented in full	Implemented partially or proposed
Restriction of additives and flavours, including menthol, in cigarettes and/or all tobacco products	Canada	Finland, Ireland, Scotland, Sweden
Retail licensing or registration	Finland (licensing) Scotland (registration)	Ireland (licensing, proposed) Sweden (registration, proposed), Canada (some provinces)
Retail availability/supply reduction		Scotland (proposed) – in 2019 exploring retail supply issues, e.g. restricting the number and clustering/ density of retailers Some Canadian provinces have banned sales in some specific locations
Minimum purchase age of 21		Finland (proposed, age 20), Canada (some provinces have a minimum age of 19)
Standardised packaging	Ireland, Aotearoa/New Zealand, Scotland	Finland (proposed) Canada (proposed 2019)
Smokefree cars	Canada, Finland, Ireland, Scotland	Aotearoa/New Zealand (proposed)
Smokefree balconies		Finland
Periodic auditing of FCTC article 5.3 activities within government: to reduce interference from the tobacco industry	Scotland	
Making cigarettes less attractive (e.g. through changes to colour or composition – including reducing nicotine content)		Canada (proposed), Scotland (proposed)
Pack inserts with health information (e.g. quitting tips) required inside the package in addition to outside	Canada	
Dissuasive sticks - Federal requirement for health warning directly on individual cigarettes being developed		Canada (proposed)
Strengthening of federal regulations regarding tobacco industry reporting, including public disclosure of sales information by brand		Canada (proposed)
Provincial government lawsuits against tobacco industry to recover health care costs	Canada	

## **Table A4: Comparison of the price of cigarettes**

Price of a 20-cigarette pack of the most-sold brand – in 2016 (US dollars):<sup>5</sup>

Country	Price in 2016 – US dollars	Affordability in 2016 – % of GDP per capita required to purchase 2000 cigarettes (most popular brand)	Cigarettes less affordable in 2016 than in 2014
Aotearoa/New Zealand	\$15.36	3.93%	Yes
Ireland	\$12.00	1.91%	No
Scotland (UK)	\$10.94	2.81%	Yes
Canada	\$7.89	1.84%	Yes
Sweden	\$7.34	1.44%	No
Finland	\$6.80	1.57%	Yes

Note regarding Sweden affordability: Cigarettes became more expensive between 2012 and 2014 but more affordable between 2014 and 2016.

# References

- 1. World Health Organization. WHO Report on the Global Tobacco Epidemic, 2019: Offer help to quit tobacco use. Geneva: World Health Organization, 2019.
- 2. Malone RE. Tobacco endgames: what they are and are not, issues for tobacco control strategic planning and a possible US scenario. *Tob Control* 2013;22 Suppl 1:i42-4. doi: 10.1136/tobaccocontrol-2012-050820
- 3. Thomson G, Edwards R, Wilson N, et al. What are the elements of the tobacco endgame? *Tobacco Control* 2012;21(2):293-95. doi: 10.1136/tc.2010.040881
- 4. World Health Organization. WHO global report on trends in prevalence of tobacco smoking 2000-2025 (Second edition). Geneva: World Health Organization, 2018.
- World Health Organization. WHO Report on the Global Tobacco Epidemic 2017:
   Monitoring tobacco use and prevention policies. Geneva: World Health Organization, 2017.
- 6. Warner KE. An endgame for tobacco? *Tob Control* 2013;22 Suppl 1:i3-5. doi: 10.1136/tobaccocontrol-2013-050989
- 7. Malone RE. Imagining things otherwise: new endgame ideas for tobacco control. *Tob Control* 2010;19(5):349-50. doi: 10.1136/tc.2010.039727.
- 8. McDaniel PA, Smith EA, Malone RE. The tobacco endgame: a qualitative review and synthesis. *Tobacco control* 2016;25(5):594-604. doi: 10.1136/tobaccocontrol-2015-052356
- 9. Borland R. A strategy for controlling the marketing of tobacco products: a regulated market model. *Tob Control* 2003;12(4):374-82. doi: 10.1136/tc.12.4.374
- 10. Callard C, Thompson D, Collishaw N. Transforming the tobacco market: why the supply of cigarettes should be transferred from for-profit corporations to non-profit enterprises with a public health mandate. *Tob Control* 2005;14(4):278-83. doi: 10.1136/tc.2005.011353
- 11. Callard CD, Collishaw NE. Supply-side options for an endgame for the tobacco industry. *Tob Control* 2013;22(suppl 1):i10-i13. doi: 10.1136/tobaccocontrol-2012-050863
- 12. 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
- 13. Donny EC, Walker N, Hatsukami D, et al. Reducing the nicotine content of combusted tobacco products sold in New Zealand. *Tob Control* 2017; 26(e1):e37-e42. doi: 10.1136/tobaccocontrol-2016-053186
- 14. Smith EA, Malone RE. An argument for phasing out sales of cigarettes. *Tob Control* 2019;29(6):703-08. doi: 10.1136/tobaccocontrol-2019-055079
- 15. Smith EA, McDaniel PA, Hillamo H, et al. Policy coherence, integration, and proportionality in tobacco control: Should tobacco sales be limited to government outlets? *J Public Health Policy* 2017;38(3):345-58. doi: 10.1057/s41271-017-0074-z
- 16. Thomson G, Wilson N, Blakely T, et al. Ending appreciable tobacco use in a nation: using a sinking lid on supply. *Tob Control* 2010;19(5):431-5. doi: 10.1136/tc.2010.036681
- 17. Berrick AJ. The tobacco-free generation proposal. *Tob Control* 2013;22 Suppl 1:i22-6. doi: 10.1136/tobaccocontrol-2012-050865
- 18. Smokefree Coalition. Tupeka kore/Tobacco Free Aotearoa/New Zealand by 2020. Wellington: Smokefree Coalition, 2009.

- 19. Ministry of Social Affairs and Health. The aim of the Tobacco Act is to put an end to smoking in Finland [Finnish government media release]. Helsinki: Ministry of Social Affairs and Health, 2010.
- 20. 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.
- 21. New Zealand Parliament. Government Response to the Report of the Māori Affairs Committee on its Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori (Final Response). Wellington: New Zealand (NZ) Parliament, 2011.
- 22. World Health Organization. Apia outcome: Tenth Pacific Health Ministers Meeting, 2-4 July 2013. Geneva: World Health Organization, 2014.
- 23. PR Newswire/ASH USA. Beverly Hills and Manhattan Beach, California make history for public health, 2021 [Available from: https://www.prnewswire.com/news-releases/beverly-hills-and-manhattan-beach-california-make-history-for-public-health-301200733.html].
- 24. Joossens L, Raw M. The tobacco control scale 2013 in Europe. Brussels: Association of European Cancer Leagues, 2014.
- 25. Joossens L, Raw M. The Tobacco Control Scale: a new scale to measure country activity. *Tobacco Control* 2006;15(3):247-53. doi: 10.1136/tc.2005.015347
- 26. Ministry of Social Affairs and Health. Roadmap to a tobacco-free Finland: action plan on tobacco control. Helsinki: Ministry of Social Affairs and Health, 2014.
- 27. Ministry of Social Affairs and Health. Development of tobacco and nicotine policy. Proposals for action by the working group. Helsinki: Ministry of Social Affairs and Health, 2018.
- 28. Department of Public Health. Tobacco Free Ireland Report of the Tobacco Policy Review Group. Dublin: Department of Public Health, 2013.
- 29. Health Canada. Canada's tobacco strategy (overview). Ottowa: Health Canada 2018.
- 30. Public Health Agency of Sweden. National public health surveys, national and regional results. 2018 [Available from: http://fohm-app.folkhalsomyndigheten.se/Folkhalsodata/pxweb/sv/A\_Folkhalsodata/].
- 31. Statistics Canada. Health Fact Sheets: Smoking, 2018. Ottowa: Health Canada, 2019.
- 32. THL. Finsote-tutkimus 2017-2018. National FinSote survey. (In Finnish only), 2018.
- 33. Ministry of Health. Annual Data Explorer 2017-2018: New Zealand Health Survey. Wellington: Ministry of Health, 2018. [Available from: https://minhealthnz.shinyapps.io/nz-health-survey-2017-18-annual-data-explorer/\_w\_ad39ef48/#!/home].
- 34. Scottish Government National Statistics. The Scottish Health Survey 2018 edition, volume 1: main report. Edinburgh: The Scottish Government, 2020.
- 35. Department of Health. Healthy Ireland Survey: Summary of Findings 2018, 2019.
- 36. Callard C, Thompson D, Collishaw N. Curing the addiction to profits: A supply-side approach to phasing out tobacco. Ottawa: Canadian Centre for Policy Alternatives, 2005.
- 37. Collishaw N. The past is prologue. Ottawa and Montreal: Physicians for a Smoke-free Canada, 2008.
- 38. Canadian Public Health Association. The Winnable Battle. Ending Tobacco Use in Canada. Ottawa: Canadian Public Health Association, 2011.

- 39. Endgame Summit Steering Committee and Action Groups. A Tobacco Endgame for Canada: Summit Background Paper. Canada: Queen's University, 2016.
- 40. Ministry of Health. Smokefree New Zealand 2025: presentation to Māori Affairs Committee. Wellington: Ministry of Health, 2015.
- 41. Scottish Government. Creating a tobacco-free generation: a tobacco control strategy for Scotland. Edinburgh: Scottish Government, 2013.
- 42. Scottish Government. Raising Scotland's Tobacco-free Generation Our Tobacco-Control Action Plan 2018. Edinburgh: Scottish Government, 2018.
- 43. Social Department of Sweden. Regeringens skrivelse 2015/16:86. En samlad strategi för alkohol-, narkotika-, dopnings- och tobakspolitiken 2016 2020 (in Swedish only). Stockholm: Social Department of Sweden, 2016.
- 44. An Roinn Slainte Department of Health. Tobacco Free Ireland: Report of the Tobacco Policy Review Group. Ireland: Department of Health, 2013.
- 45. An Roinn Slainte Department of Health. Tobacco Free Ireland Action Plan. Ireland: An Roinn Slainte Department of Health, 2015.
- 46. Health Canada. Consultation on the Future of Tobacco Control in Canada. What we heard. Ottowa: Health Canada, 2017.
- 47. Thornley L, Edwards R, Waa A, et al. Achieving Smokefree Aotearoa by 2025 (ASAP). Wellington: University of Otago (ASPIRE 2025), 2017.
- 48. 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 Med J* 2015;128(1413):1175-8716.
- 49. 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
- 50. Suomen ASH. The majority of Finns support a tobacco-free and nicotine-free Finland, 2018. [Available from: https://www.sttinfo.fi/tiedote/suomalaisista-valtaosa-kannattaa-tupakatonta-ja-nikotiinitonta-suomea?publisherId=3174&releaseId=69847274].
- 51. European Commission. Special Eurobarometer 458 report; attitudes of Europeans towards tobacco and electronic cigarettes. Brussels: European Commission 2017.
- 52. Gendall P, Hoek J, Maubach N, et al. Public support for more action on smoking. *The New Zealand Med J* 2013;126(1375):85-94.
- 53. YouGov. The new tobacco strategy, 2012 [Available from: https://yougov.co.uk/topics/politics/articles-reports/2012/03/10/changing-tobacco-legislation].
- 54. NOVUS Group International AB. Tobacco fact study: More knowledge increases support for stricter tobacco policy. 2016 [Available from: https://tobaksfakta.se/tobaksfaktastudie-mer-kunskap-okar-stodet-for-skarpt-tobakspolitik/].
- 55. Ruokolainen O, Ollila H, Patja K, et al. Social climate on tobacco control in an advanced tobacco control country: A population-based study in Finland. *Nordic Studies on Alcohol and Drugs* 2018;35(3):152-64. doi: 10.1177/1455072518767750
- 56. Politicians' references to New Zealand's Smokefree 2025 goal: a barometer of political will. [POS2-119] Society for Research on Nicotine and Tobacco Annual Conference; Florence, Italy, 2017

- 57. Maddox R, Waa A, Lee K, et al. Commercial tobacco and indigenous peoples: a stock take on Framework Convention on Tobacco Control progress. *Tob Control* 2018:tobaccocontrol-2018-054508. doi: 10.1136/tobaccocontrol-2018-054508
- 58. van der Deen FS, Wilson N, Blakely T. A continuation of 10% annual tobacco tax increases until 2020: Modelling results for smoking prevalence by sex and ethnicity. *New Zealand Med J* 2016;129(1441):94-97.
- 59. Health Canada. Health Fact Sheets: Smoking, 2017. Ottowa: Health Canada 2018.
- 60. First Nations Information Governance Centre. National Report of the First Nations Regional Health Survey Phase 3: Volume 1. Ottowa, Ontario: First Nations Information Governance Centre 2018.
- 61. Timberlake DS, Laitinen U, Kinnunen JM, et al. Can Finland achieve the goal of its tobacco endgame with effective but conventional measures? . Society for Research on Nicotine and Tobacco (SRNT) Conference. San Francisco, USA, 2019.
- 62. Federal Drug Administration. Tobacco Product Standard for Nicotine Level of Combusted Cigarettes. 2018 [Available from: https://www.federalregister.gov/documents/2018/03/16/2018-05345/tobacco-product-standard-for-nicotine-level-of-combusted-cigarettes accessed September 6 2018].
- 63. Hawkins B, Holden C, Mackinder S. A multi-level, multi-jurisdictional strategy: Transnational tobacco companies' attempts to obstruct tobacco packaging restrictions. *Glob Public Health* 2019;14(4):570-83. doi: 10.1080/17441692.2018.1446997
- 64. Statistics Canada. Canadian Tobacco, Alcohol and Drugs Survey (CTADS): summary of results for 2017. Ottawa: Statistics Canada; 2018 [Available from: https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2017-summary.html].
- 65. Reid JL, Hammond D, Tariq U, et al. Tobacco Use in Canada: Patterns and Trends, 2019 Edition. Waterloo, Ontario: Propel Centre for Population Health Impact, University of Waterloo 2019.
- 66. Statistics Canada. Canadian Tobacco, Alcohol and Drugs Survey (CTADS): 2017 detailed tables Ottowa: Health Canada, 2018 [Available from: https://www.canada.ca/en/health-canada/services/canadian-alcohol-drugs-survey/2017-summary/2017-detailed-tables.html accessed April 5 2022].
- 67. Statistics Canada. Canadian Tobacco Alcohol and Drugs Survey (CTADS): 2013: supplementary tables. Ottowa: Health Canada, 2014 [Available from: Canadian Tobacco Alcohol and Drugs Survey (CTADS): 2013 supplementary tables]
- 68. Statistics Canada. Canadian Tobacco Alcohol and Drugs Suvery (CTADS): 2015 supplementary tables. Ottowa: Health Canada; 2016 [Available from: https://www.canada.ca/en/health-canada/services/canadian-alcohol-drugs-survey/2015-supplementary-tables.html].
- 69. Canadian Lung Association. Getting to less than 5% by 2035 the 2019 Tobacco Endgame Report, 2019.
- 70. Summit Steering Committee and Action Groups. A Tobacco Endgame for Canada: Summit Background Paper: Queen's University, Canada, 2016.
- 71. Schwartz R, Zhang B. Debunking the taxation-contraband tobacco myth. *CMAJ* 2016;188(6):401-02. doi: 10.1503/cmaj.150492

- 72. Schwartz R. Canada: Controlling Illicit Trade. In: Dutta S, ed. Confronting Illicit Trade: A Global Review of Country Experiences. Washington DC: World Bank Group, 2019.
- 73. THL. Sotkanet.fi 2018 [Available from: https://sotkanet.fi/sotkanet/fi/taulukko/].
- 74. Kinnunen JM, Pere L, Raisamo S, et al. Nuorten terveystapatutkimus 2017: Nuorten tupakkatuotteiden ja päihteiden käyttö sekä rahapelaaminen (in Finnish only), Ministry of Social Affairs and Health, 2017.
- 75. National Institute for Health and Welfare (THL). Health Behaviour and Health among the Finnish Adult Population. National Institute for Health and Welfare (THL), 2014.
- 76. World Health Organisation. WHO Global Report on Trends in Prevalence of Tobacco Smoking 2000-2025. Second Edition ed, 2018.
- 77. Ministry of Social Affairs and Health. Development of tobacco and nicotine policy. Proposals for action by the working group. Ministry of Social Affairs and Health, 2018.
- 78. Levy DT, Blackman K, Currie LM, et al. SimSmokeFinn: How far can tobacco control policies move Finland toward tobacco-free 2040 goals? *Scand J Public Health* 2012;40(6):544-52. doi: 10.1177/1403494812456635
- 79. Department of Public Health. Tobacco Free Ireland Action Plan. Dublin: Department of Public Health, 2014.
- 80. All Ireland Traveller Health Study research team. All Ireland Traveller Health Study. Our Geels. Dublin: University College Dublin, 2010.
- 81. Li S, Keogan S, Taylor K, et al. Decline of adolescent smoking in Ireland 1995–2015: trend analysis and associated factors. *BMJ open* 2018;8(4):e020708. doi: 10.1136/bmjopen-2017-020708
- 82. Babineau K, Taylor K, Clancy L. Electronic Cigarette Use among Irish Youth: A Cross Sectional Study of Prevalence and Associated Factors. *PLoS ONE* 2015;10(5):e0126419-e19. doi: 10.1371/journal.pone.0126419
- 83. Health Services Executive. HSE Tobacco Free Ireland Programme: Implementation Plan 2018-2021. Dublin Health Services Executive, 2018.
- 84. Royal College of Physicians of Ireland. Towards a Tobacco Free Society. In: Tobacco RPGo, ed., 2014.
- 85. Li S, Levy D, Clancy L. Tobacco Free Ireland 2025: SimSmoke prediction for the end game. *Tobacco Prevention & Cessation* 2018;4:23. doi: 10.18332/tpc/91427
- 86. Salesa J. World Smokefree Day time to quit. Wellington: Beehive Govt NZ, 2018.
- 87. Ministry of Health. Annual Data Explorer 2018/2019: New Zealand Health Survey.

  Wellington: Ministry of Health, 2019. [Available from:

  https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/accessed October 2 2020]
- 88. Young D, Wilson N, Borland R, et al. Prevalence, Correlates of, and Reasons for Using Roll-Your-Own Tobacco in a High RYO Use Country: Findings from the ITC New Zealand Survey. *Nicotine Tob Res* 2010;12(11):1089-98. doi: 10.1093/ntr/ntq155
- 89. Healey B, Edwards R, Hoek J. Youth Preferences for Roll-Your-Own Versus Factory-Made Cigarettes: Trends and Associations in Repeated National Surveys (2006-2013) and Implications for Policy. *Nicotine Tob Res* 2016;18(5):959-65. doi: 10.1093/ntr/ntv135
- 90. Edwards R, Stanley J, Waa AM, et al. Patterns of Use of Vaping Products Among Smokers: Findings from the 2016–2018 International Tobacco Control (ITC) New Zealand Surveys. *Int J Environ Res Public Health* 2020;17(18):6629. doi: 10.3390/ijerph17186629

- 91. Ball J, Edwards R, Waa A, et al. Is the NZ Government responding adequately to the Māori Affairs Select Committee's 2010 recommendations on tobacco control? A brief review. New Zealand Med J 2016;129(1428):93-7.
- 92. Hapai te Hauora. Smokefree future out of reach for Māori (media release): Hapai te Hauora, 2018.
- 93. Ministry of Health. Ministry to consider risk-proportionate regulation for vaping and heated tobacco products, 2018 (updated May 9 2018). [Available from: https://www.health.govt.nz/news-media/news-items/ministry-consider-risk-proportionate-regulation-vaping-and-heated-tobacco-products].
- 94. Ernst and Young (EY). Evaluation of the tobacco excise increases Final Report. Wellington: Ministry of Health, 2018.
- 95. Ministry of Health. Electronic Cigarette Technical Expert Advisory Group Wellington: Ministry of Health; 2017 [Available from: https://www.health.govt.nz/our-work/preventative-health-wellness/tobacco-control/vaping-smokeless-including-heated-tobacco/electronic-cigarette-technical-expert-advisory-group].
- 96. Salesa J. Cabinet paper: Supporting smokers to switch to significantly less harmful alternatives. Wellington: Office of the Associate Minister of Health, 2018.
- 97. Ball J, Stanley J, Wilson N, et al. Smoking prevalence in New Zealand from 1996-2015: a critical review of national data sources to inform progress toward the Smokefree 2025 goal. *New Zealand Med J* 2016;129(1439):11-22.
- 98. Cobiac LJ, Ikeda T, Nghiem N, et al. Modelling the implications of regular increases in tobacco taxation in the tobacco endgame. *Tob Control* 2015:24(e2):e154-60. doi: 10.1136/tobaccocontrol-2014-051543.
- 99. Ikeda T, Cobiac L, Wilson N, et al. What will it take to get to under 5% smoking prevalence by 2025? Modelling in a country with a smokefree goal. *Tob Control* 2015;24:139-45. doi: 10.1136/tobaccocontrol-2013-051196
- 100. 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
- 101. Wilson N, Hoek J, Nghiem N, et al. Modelling the impacts of tobacco denicotinisation on achieving the Smokefree 2025 goal in Aotearoa New Zealand. *N Z Med J* 2022;135(1548):65-76.
- 102. Office for National Statistics. Adult Smoking Habits in the UK: 2016, 2017.
- 103. Ministry of Health and Social Affairs. A comprehensive strategy for alcohol, narcotics, doping and tobacco policy, 2016–2020. Stockholm: Ministry of Health and Social Affairs, 2016.
- 104. Malone RE. The Race to a Tobacco Endgame. *Tob Control* 2016;25(6):607-08. doi: 10.1136/tobaccocontrol-2016-053466
- 105. Clarke E, Thompson K, Weaver S, et al. Snus: a compelling harm reduction alternative to cigarettes. *Harm Reduct J* 2019;16(1):62. doi: 10.1186/s12954-019-0335-1
- 106. Lund I, Lund KE. How has the availability of snus influenced cigarette smoking in Norway? *Int J Environ Res Public Health* 2014;11(11):11705-17. doi: 10.3390/ijerph111111705
- 107. Lund KE, Scheffels J, McNeill A. The association between use of snus and quit rates for smoking: results from seven Norwegian cross-sectional studies. *Addiction* 2011;106(1):162-7. doi: 10.1111/j.1360-0443.2010.03122.x

- 108. McKee M, Gilmore A. Swedish snus for tobacco harm reduction. *The Lancet* 2007;370(9594):1206. doi: 10.1016/S0140-6736(07)61530-X.
- 109. Ramstrom LM, Foulds J. Role of snus in initiation and cessation of tobacco smoking in Sweden. *Tob Control* 2006;15(3):210-4. doi: 10.1136/tc.2005.014969
- 110. Bhatnagar A, Whitsel LP, Blaha MJ, et al. New and Emerging Tobacco Products and the Nicotine Endgame: The Role of Robust Regulation and Comprehensive Tobacco Control and Prevention: A Presidential Advisory From the American Heart Association. *Circulation* 2019;139(19):e937-e58. doi: 10.1161/CIR.000000000000669
- 111. Glantz SA, Bareham DW. E-Cigarettes: Use, Effects on Smoking, Risks, and Policy Implications. *Annu Rev Public Health* 2018;39(1):215-35. doi: 10.1146/annurev-publhealth-040617-013757
- 112. Abrams DB, Glasser AM, Pearson JL, et al. Harm Minimization and Tobacco Control: Reframing Societal Views of Nicotine Use to Rapidly Save Lives. *Annu Rev Public Health* 2018;39(1):193-213. doi: 10.1146/annurev-publhealth-040617-013849
- 113. Balfour DJK, Benowitz NL, Colby SM, et al. Balancing Consideration of the Risks and Benefits of E-Cigarettes. *Am J Public Health* 2021:e1-e12. doi: 10.2105/AJPH.2021.306416
- 114. Levy DT, Borland R, Lindblom EN, et al. Potential deaths averted in USA by replacing cigarettes with e-cigarettes. *Tob Control* 2018;27(1):18-25. doi: 10.1136/tobaccocontrol-2017-053759
- 115. Warner KE. How to Think-Not Feel-about Tobacco Harm Reduction. *Nicotine Tob Res* 2019;21(10):1299-309. doi: 10.1093/ntr/nty084
- 116. Smith KE, Ikegwuonu T, Weishaar H, et al. Evidence use in E-cigarettes debates: scientific showdowns in a 'wild west' of research. *BMC Public Health* 2021;21(1):362. doi: 10.1186/s12889-021-10396-6
- 117. Edwards R, Hoek J, Karreman N, et al. Evaluating tobacco industry 'transformation': a proposed rubric and analysis. *Tob Control* 2022;31(2):313-21. doi: 10.1136/tobaccocontrol-2021-056687
- 118. Beaglehole R, Bonita R, Yach D, et al. A tobacco-free world: a call to action to phase out the sale of tobacco products by 2040. *Lancet* 2015;385(9972):1011-8. doi: 10.1016/S0140-6736(15)60133-7