



Attitudes Towards Tobacco Harm Reduction Products in New Zealand

**Insights from the New Zealand Public
and Healthcare Professionals**

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Almost 600,000 New Zealanders still smoke, with a significantly higher smoking rate among the Māori and most economically-disadvantaged communities.

In common with most developed countries, over recent years the New Zealand Government has made determined efforts to reduce the national smoking rate. These policies have helped to drive a significant reduction in the incidence of smoking in the country, from around one-third of the population in 1983 to less than 15% in 2017/18.¹ Although methods of measurement differ slightly, the rate in New Zealand parallels Australia (14.9% in 2016),² but is ahead of all but one of the European Union (EU) countries, including the United Kingdom (17% in 2017), Germany (25%), and France (36%).³ Across the Organisation for Economic Co-operation & Development (OECD) countries, New Zealand has one of the lowest rates of daily smokers at 13.8% of the population.⁴

While significant progress continues to be made, it is recognised that more needs to be done. The Government-led Smokefree 2025 goal, launched in 2011, aspires to achieve the stipulated target smoking rate of under 5% of the adult population by 2025. Realising this goal, however, is likely to be challenging based on current trends. Almost 600,000 New Zealanders still smoke, contributing to 5,000 deaths a year from smoking or second-hand smoke exposure. Smoking rates remain disproportionately high among Pacific Islanders, the Māori population (particularly Māori women) and the most economically-disadvantaged New Zealanders. More recent initiatives to accelerate the decline in smoking rates by increasing tobacco prices through excise rates have been widely regarded as ineffective and regressive by parliamentarians and government commissioned review bodies.⁵ These issues play a part in the notably poorer health and financial outcomes in these groups.

While many smokers want to quit the habit, successfully doing so can be difficult, with current approaches such as nicotine replacement therapy (NRT) often ineffective for

many. About 60% of smokers wish to quit, but most find this challenging, making over six unsuccessful attempts on average. Adding to this is the sizeable group of smokers (40%) who are unwilling or unsure about quitting the habit, either because they enjoy smoking or because they recognise they are addicted.⁶

The difficulties many smokers face in quitting and the presence of a cohort of smokers unable or unwilling to try, as well as the significant health risks associated with smoking, are drawing increased attention towards Tobacco Harm Reduction (THR) interventions. THR products provide nicotine in a less harmful way than conventional cigarettes for smokers who are otherwise unable to quit. These include products known as Electronic Nicotine Delivery Systems (ENDS), such as e-cigarettes and heated tobacco products, as well as other THR products such as Swedish Snus. ENDS products provide an experience (often known as vaping) much closer to that of smoking a conventional cigarette and may be effective when other approaches such as NRT have failed. In jurisdictions such as the UK, usage of these products is being supported as a central tenet in tobacco control and tobacco harm reduction policies.

In New Zealand, ENDS products have been in a regulatory grey area for several years. While technically illegal under the Smokefree Environments Act 1990 (SFEA), this law was generally not enforced, meaning these products have in fact been generally available, although unregulated. However, following a recent court ruling (Philip Morris (NZ) Ltd v Ministry of Health [2018] NZDC 4478) which found that a specific ENDS product could be lawfully sold, the Government is moving to place regulations surrounding the sale and use of ENDS products onto a firmer regulatory footing, including introducing regulations about their sale and use. This may drive enhanced awareness and usage of ENDS products in New Zealand.

¹Ministry of Health, Health Survey, accessed from <https://www.health.govt.nz/health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey>

²Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2016

³European Commission, Special Barometer 458, Attitudes of Europeans towards tobacco and electronic cigarettes, 2017

⁴OECD data, Daily Smokers, accessed from <https://data.oecd.org/healthrisk/daily-smokers.htm>

⁵New Zealand Treasury Tax Working Group Interim Report. Page 77: <https://taxworkinggroup.govt.nz/sites/default/files/2018-09/twg-interim-report-sep18.pdf>

⁶Frost & Sullivan, Consumer Survey, November 2018



To gauge the level of understanding of and attitudes towards THR products, in particular ENDS, we surveyed individuals (comprising a representative sample of New Zealanders aged 18 and over, and referred to as “consumers” in this report) and healthcare professionals (HCPs) in New Zealand. We interviewed 535 consumers, representatively split between current, former, and never smokers, as well as 60 HCPs, including 20 GPs, 20 registered medical specialists and emergency room physicians, and 20 other HCPs (including registered nurses, dentists, and pharmacists). Details of the consumer and HCP samples can be found in the Appendix.

Our research highlights a broad consensus among respondents (except among smokers) that smoking is still a major public health issue in New Zealand, and that the Government needs to do more – 90% of HCPs, 78% of never smokers, 64% of former smokers share this view; while only 42% of current smokers agree.⁷ Awareness of ENDS products is reasonably high, especially e-cigarettes, with 90% of HCPs very or somewhat

familiar. There is a widespread view among HCPs that these products are significantly less harmful than conventional cigarettes (on a 10-point scale where 10 equals more harmful and 1 less harmful, the average rating for E-cigarettes is 2.92 and 3.62 for heated tobacco products).⁸ This opinion, however, is not shared by consumers for all ENDS products, with heated tobacco products, in particular, seen as being more harmful than conventional cigarettes (average rating of 5.30).⁹ The finding suggests consumers’ lack of awareness and understanding about the evolving scientific research into other non-combustible alternatives, and probable lack of understanding of the causes of harm from smoking.

HCPs, in general, are highly supportive of the role ENDS can play in reducing tobacco-related harm. Almost two-thirds (65%) surveyed believe that smokers who are unable or unwilling to quit should switch to ENDS products instead of smoking conventional cigarettes.¹⁰ There is also widespread agreement that both HCPs and smokers and their families should be made more aware of these products.

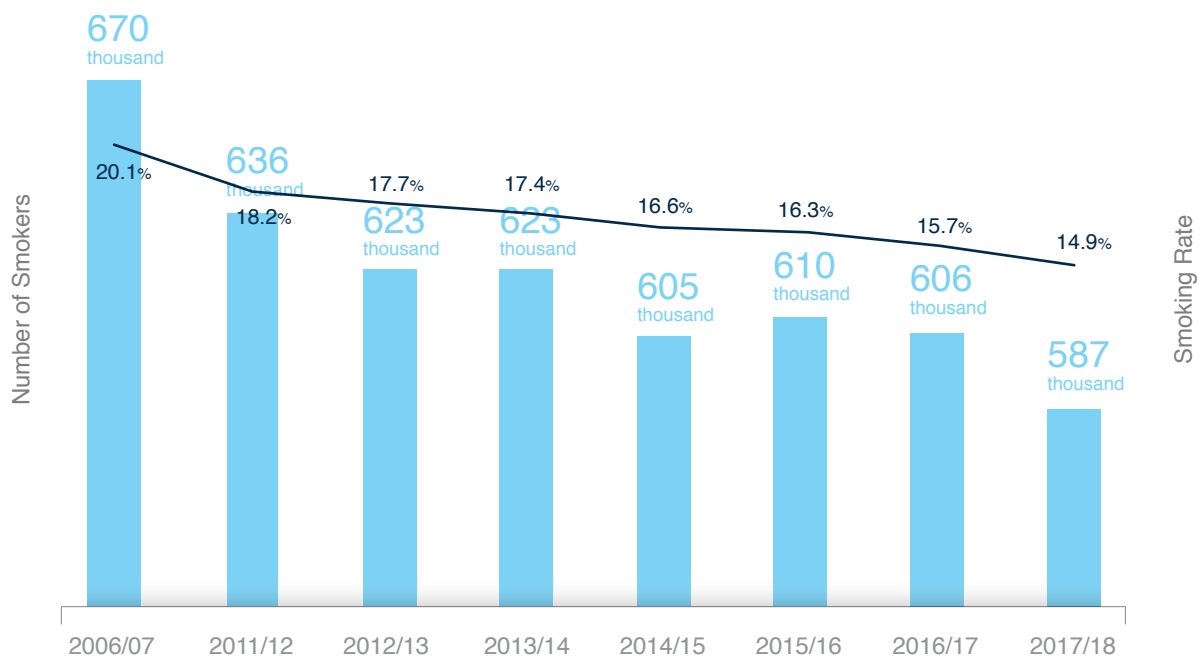
⁷Frost & Sullivan, Consumer Survey, November 2018
⁸Frost & Sullivan, HCP Survey, November 2018
⁹Frost & Sullivan, Consumer Survey, November 2018
¹⁰Frost & Sullivan, HCP & Consumer Survey, November 2018

SMOKING IN NEW ZEALAND

Cigarette smoking is the single most preventable cause of ill-health and death in New Zealand. Each year, around 5,000 New Zealanders (or 13 a day) die because of smoking or second-hand smoke exposure.¹¹ Cessation is recognised as the optimal approach to reducing the harm caused by smoking. The New Zealand Government, like most other developed economies, has progressively introduced a series of measures to reduce smoking prevalence. Efforts include the ban on cigarette advertising on TV and radio from as early as 1963, the launch of health warnings on cigarette packets in 1974, and reinforced in 1987, and the introduction of standardised packaging in 2018.

In March 2011, in response to a Parliamentary enquiry, the Government adopted the Smokefree 2025 goal for New Zealand, which is usually defined as reaching a smoking rate of 5% or less of the adult population (15 years and over; smokers are defined as those who have smoked more than 100 cigarettes in their lifetime and currently smoke at least once a month). Since 1983, the smoking rate has declined from 33% to just under 15% in 2017/18. Recent national statistics indicate a slowdown in smoking decline rates, with almost 600,000 New Zealanders still smoking,¹² suggesting that the Smokefree 2025 goal is unlikely to be achieved by 2025. Recent modelling studies show that on a “business-as-usual” basis, the smoking rate will reduce to 8.1% for non-Māori and 20% for Māori by 2025. Smoking rates in the Māori population are not projected to reach 5% until 2061.¹³

Figure 1: Smoking Rate and Estimated Number of Smokers, 2006/07 to 2017/18



Source: Ministry of Health, NZ Health Survey

¹¹Ministry of Health, Health Effects of Smoking, accessed from <https://www.health.govt.nz/your-health/healthy-living/addictions/smoking/health-effects-smoking>

¹²Ministry of Health, Health Survey, accessed from <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey>

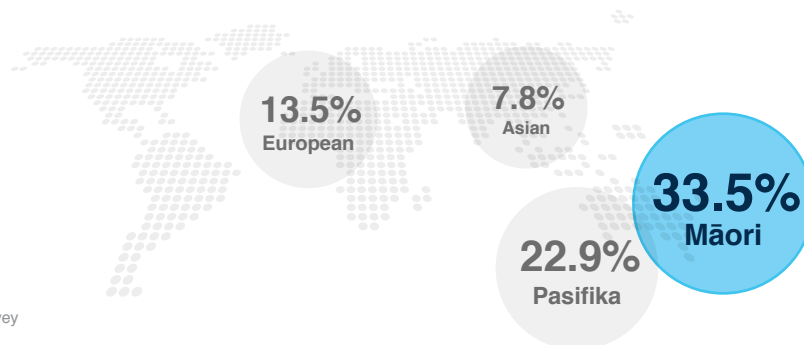
¹³Office of the Associate Minister of Health, Cabinet Paper, Supporting smokers to switch to significantly less harmful alternatives, 2018

Smoking rates are particularly high in the Māori community, with young Māori women especially affected.

The overall smoking rate masks striking variations between population groups. The smoking rate in the Māori population is well over double the national average, with a significantly higher incidence among the Pasifika population as well. Unlike other groups, smoking prevalence among Māori women is higher than for Māori men.¹⁴ Smoking rates among the younger Māori female population are particularly high, with only one in three never smoking by the time they are 24.¹⁵ Smoking rates for the European population are slightly below the overall average. The significantly higher smoking rate among the Māori population links to higher rates of cardiovascular disease (CVD) and cancer, both of which are impacted by smoking.

The prevalence of CVD and respiratory illnesses among the Māori population are more than double that of non-Māori. Smoking prevalence for Māori women while pregnant is extremely high, with 43% smoking at first registration with a maternity carer and 34% still smoking when discharged.¹⁶ Māori children are also more likely to be exposed to second-hand smoke in the home than their non-Māori counterparts.¹⁷ The disconcertingly high smoking rates in the Māori population are likely to signal worsening health outcomes within this group in the future.

Figure 2: Smoking Rate by Population Group, 2017/18



Source: Ministry of Health, NZ Health Survey

As well as impacting heavily on the Māori population, smoking prevalence is especially high among the most disadvantaged communities in New Zealand, indicating the strong correlation between smoking and area-based socioeconomic deprivation. The smoking rate in the most deprived decile of the population is over four times higher than that in the least deprived.¹⁸ Overall, smoking prevalence remains heavily influenced by ethnicity and socio

economic status, with the health impacts of smoking falling disproportionately on both the Māori population and the most socioeconomically-deprived New Zealanders.

The majority of smokers in New Zealand want to quit the habit, mainly to improve overall health or reduce the risk of disease. Our research shows that 60% of smokers overall and 64% of Māori smokers have expressed the desire to quit.¹⁹ The findings are broadly in line with other studies which indicate that 65% of smokers have attempted to quit in the past five years.²⁰ Quitting can, however, be challenging, with current smokers who have tried to quit reporting, on average, over six unsuccessful attempts to do so.²¹ HCPs who manage patients attempting to quit also revealed that, on average, only 34% of smokers manage to do so.²²

60%
of smokers want to quit, but find it challenging, reporting over six attempts to quit on average.

¹⁵Ministry of Health, Maori Women Who Smoke, Technical Report, 2017

¹⁶The New Zealand Medical Journal, Health consequences of tobacco use for Māori – cessation essential for reducing inequalities in health, 2013, Volume 126 Number 1379

¹⁷The New Zealand Medical Journal, Health consequences of tobacco use for Māori – cessation essential for reducing inequalities in health, 2013, Volume 126 Number 1379

¹⁸The New Zealand Medical Journal, Socio-demographic characteristics of New Zealand adult smokers, ex-smokers and non-smokers: Results from the 2013 Census, 2016, Volume 129, Number 1447

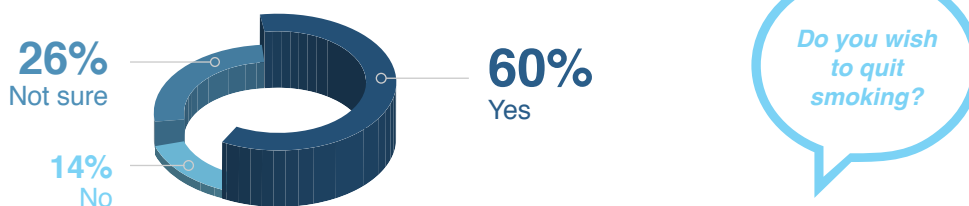
¹⁹Frost & Sullivan, Consumer Survey, November 2018

²⁰Ministry of Health, Targeting Smokers, Better Help for Smokers to Quit, 2011

²¹Frost & Sullivan, Consumer Survey, November 2018

²²Frost & Sullivan, HCP Survey, November 2018

Figure 3: Smokers' Desire to Quit



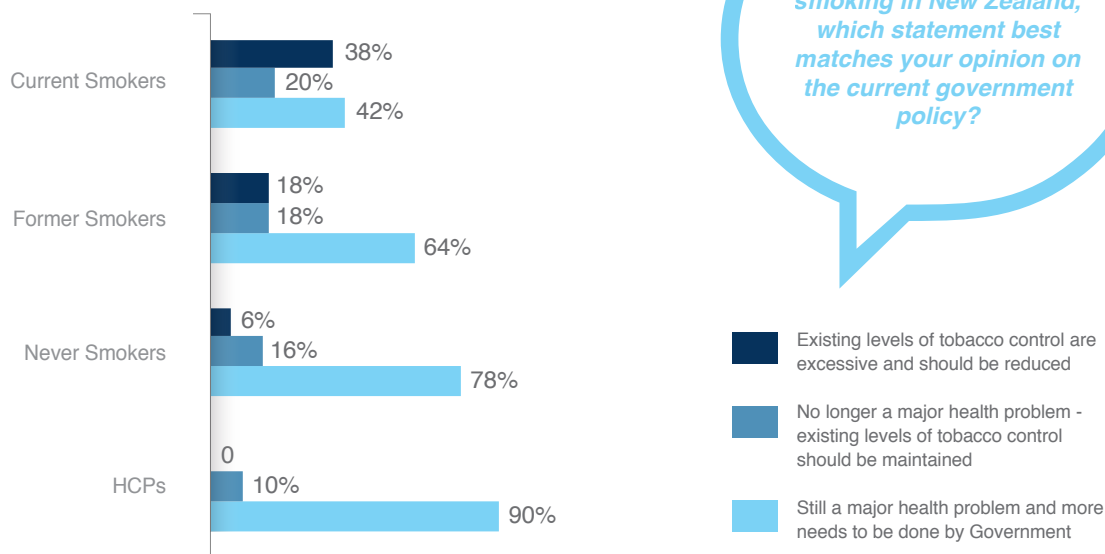
Source: Frost & Sullivan Consumer Survey, 2018
N=66

The main challenges cited by respondents for not stopping smoking include intense cravings for nicotine (71% of smokers who have tried to quit), feeling tense or frustrated (66%), and stress (63%). Most common methods used by smokers trying to quit the habit are NRT, such as gum, patches or inhalers (61% of current smokers), going cold turkey (45%), and e-cigarettes or other non-combustible forms of tobacco (32%).²³

Apart from the majority of smokers who want to quit but are unable to do so (60%), there are 40% who either do not wish to quit or are unsure. The enjoyment of smoking is the main reason reported by smokers who do not want to quit (67%), followed by nicotine addiction (33%).²⁴

Our research indicated broad consensus among respondents, except a majority of smokers, that smoking remains a major public health concern and that the Government needs to do more to address this issue. The view is shared by 90% of HCPs, 78% of never smokers, and 64% of current smokers; conversely, only 42% of current smokers share this view, while 38% believe current levels of tobacco control are excessive and should be reduced.²⁵

Figure 4: Attitudes to Government Smoking Policy



Source: Frost & Sullivan, HCP & Consumer Survey, 2018
N=595

²³Frost & Sullivan, HCP Survey, November 2018

²⁴Ibid

²⁵Frost & Sullivan, HCP & Consumer Survey, November 2018

The slowing decline in smoking rates, the difficulty many smokers face in successfully quitting the habit, and the significant cohort of smokers who do not wish to quit, are generating growing interest in the potential of THR products to reduce the harm caused by smoking. These products, which include e-cigarettes and heated tobacco products*, present less risk of harm than continued smoking.

**In this report, e-cigarettes (sometimes known as personal vaporisers) are defined as containing nicotine. Products not containing nicotine (or containing synthetic nicotine) are currently subject to a different regulatory regime. Heated tobacco products (sometimes known as heat-not-burn products) heat tobacco to release nicotine at a lower temperature than required for combustion. Both e-cigarettes and heated tobacco products have operated in a regulatory grey area in New Zealand.*

A recent UK Parliamentary report on e-cigarettes concluded that “e-cigarettes present an opportunity to significantly accelerate already declining smoking rates, and thereby tackle one of the largest causes of death in the UK today. They are substantially less harmful – by around 95% – than conventional cigarettes” and advocated that there should be greater use and acceptance of e-cigarettes if that serves to reduce smoking rates.²⁶

Similarly, the NZ Ministry of Health has acknowledged the scientific consensus that these products are notably less harmful than smoking, and while it is also likely that they can help smokers to stop smoking, the evidence as an effective stop-smoking tool is still emerging.²⁷

Harm reduction approaches are predicated on the basis that, while nicotine addiction is the primary reason for smoking, the harm arises principally from the combustion of tobacco. Harm reduction policies, therefore, aim to encourage those who continue to smoke to switch to a less hazardous source of nicotine.²⁸ The NZ Ministry of Health has put forward the view that “when used as

intended, vaping products pose no risk of nicotine poisoning to users, but e-liquids should be in child-resistant packaging. Vaping products release negligible levels of nicotine and other toxicants into ambient air with no identified health risks to bystanders”.²⁹

THR products that deliver nicotine are available in several forms (e.g., Swedish Snus, a moist tobacco product that is placed in the upper lip for an extended period), but the most common is ENDS, including e-cigarettes and heated tobacco products.

The legal status of THR products in New Zealand continues to evolve. Under the Smokefree Environments Act 1990 (SFEA), the domestic sale and supply of nicotine-containing e-cigarettes and e-liquids are unregulated. The Act also bans the import of oral tobacco products for sale and distribution, prohibiting “import for sale, sell, pack, or distribute any tobacco product labelled or otherwise described as suitable for chewing, or for any other oral use (other than smoking).” The complexity of the law, lack of routine enforcement, as well as difficulty meeting evidential standards have placed the sale and possession of e-cigarettes and e-liquid in a regulatory grey area. Some retailers have chosen to sell them, judging that their risk of prosecution is low, and users have also been able to personally import them. Moreover, certain products (e.g., synthetic nicotine not manufactured from tobacco and nicotine-free vaping liquids) are excluded from the SFEA scope, meaning that they have not been covered by laws relating to the advertising and sponsorship of tobacco products.

²⁶House of Commons Science and Technology Committee, E-cigarettes, Seventh Report of Session, 2017-19

²⁷Office of the Associate Minister of Health, Cabinet Paper, Supporting smokers to switch to significantly less harmful alternatives, 2018

²⁸Royal College of Physicians, Nicotine Without Smoke, Tobacco Harm Reduction, 2016

²⁹Ministry of Health, vaping and smokeless tobacco, accessed from <https://www.health.govt.nz/our-work/preventative-health-wellness/tobacco-control/vaping-and-smokeless-tobacco>



A recent ruling pertaining to the sale of THR products in New Zealand could help in paving the way towards greater certainty in legislation. In *Philip Morris (NZ) Ltd v Ministry of Health* [2018] NZDC 4478, the Court found that Philip Morris' HEETS tobacco stick can be lawfully sold. Following this judgment and subsequent Crown Law advice, it is likely that all oral tobacco products (other than those that are chewed or "parked" in the mouth), may be lawfully sold subject to largely the same regulatory controls that apply to cigarettes.³⁰

Following public consultation indicating widespread support for the lawful sales of vaping products, provided they are properly regulated, the New Zealand Government is currently proposing to place THR products on a more definitive regulatory footing via amendments to the SFEA. This includes bringing all nicotine and nicotine-free vaping liquid, vaping and heated tobacco product devices and components within the scope of the SFEA. This includes provisions to enable prohibition of flavours and colours that attract children and young people to use vaping and smokeless tobacco products; prohibiting use in designated smokefree areas; allowing product safety regulations to be set; and requiring manufacturers/importers to be registered.³¹

“

“Vaping products can benefit smokers who are able to switch, however, they are not risk-free. In particular, the long-term health impacts are inadequately understood. Appropriate regulation is, therefore, important: products need to comply with safety requirements and access and promotion should be restricted to adults.”

– Associate Minister of Health, 2018

As THR products emerge from an unregulated grey area to one governed by a regulatory framework, they are likely to gain more visibility in New Zealand as a tool to lower the risk of harm to smokers versus continued smoking. HCPs surveyed in New Zealand also indicate broad support for the use of these products to reduce the health impacts of smoking, with 65% of HCPs preferring that smokers otherwise unable to quit, switch instead of continuing to smoke conventional cigarettes.³²

³⁰Office of the Associate Minister of Health, Cabinet Paper, Supporting smokers to switch to significantly less harmful alternatives, 2018

³¹Ibid

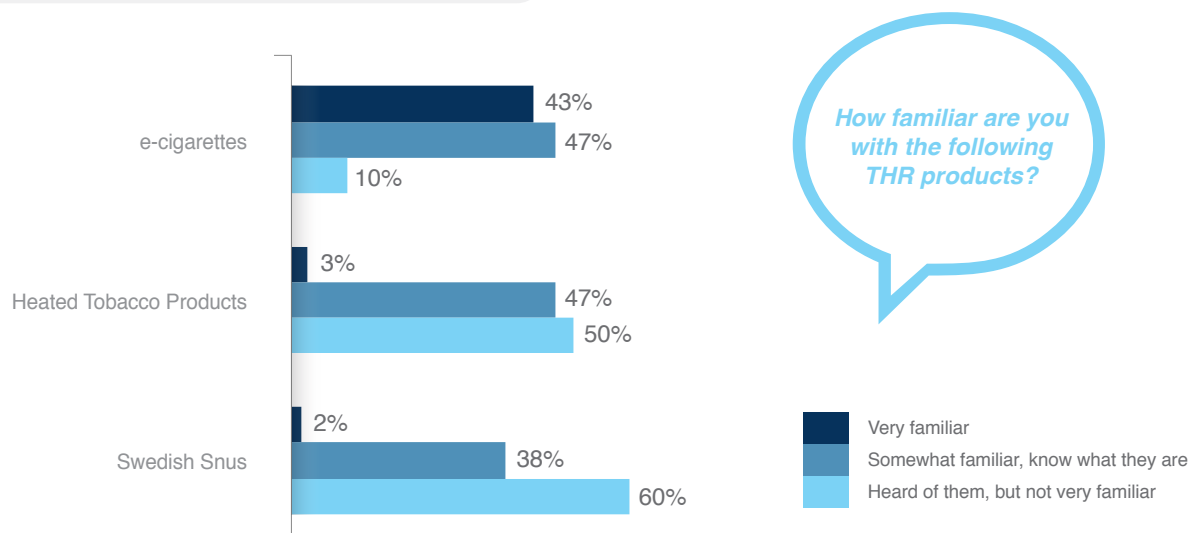
³²Frost & Sullivan, HCP Survey, 2018

THR products include ENDS as well as non-ENDS alternatives such as Swedish Snus. While e-cigarettes are currently the best known, other THR products have played a role in reducing tobacco-related harm in other countries.

Swedish Snus, for example, has existed since the early 18th century and holds a significant place in Swedish culture. Usage of Snus declined for many years before regaining popularity in the mid-1960s as the adverse health effects of cigarettes became more apparent. Sweden is currently the only EU country where Snus is legal, and as a direct result, has the lowest incidence of cigarette smoking in the EU at 7%; 10% less than the next country (the UK at 17%) and almost one-quarter of the EU average (26%).³³

ENDS products such as e-cigarettes and heated tobacco products are more recent THR developments. These products provide an experience which is much closer to smoking a traditional cigarette than other nicotine delivery approaches, such as nicotine patches, gums, and Swedish Snus. ENDS also provides smokers with greater choice – some smokers who would otherwise continue smoking cigarettes may be able to switch completely to ENDS products, reducing the direct risk to their health and exposure to their family members.³⁴

Figure 5: HCPs' Familiarity with THR Products



Source: Frost & Sullivan, HCP Survey, November 2018
N=60

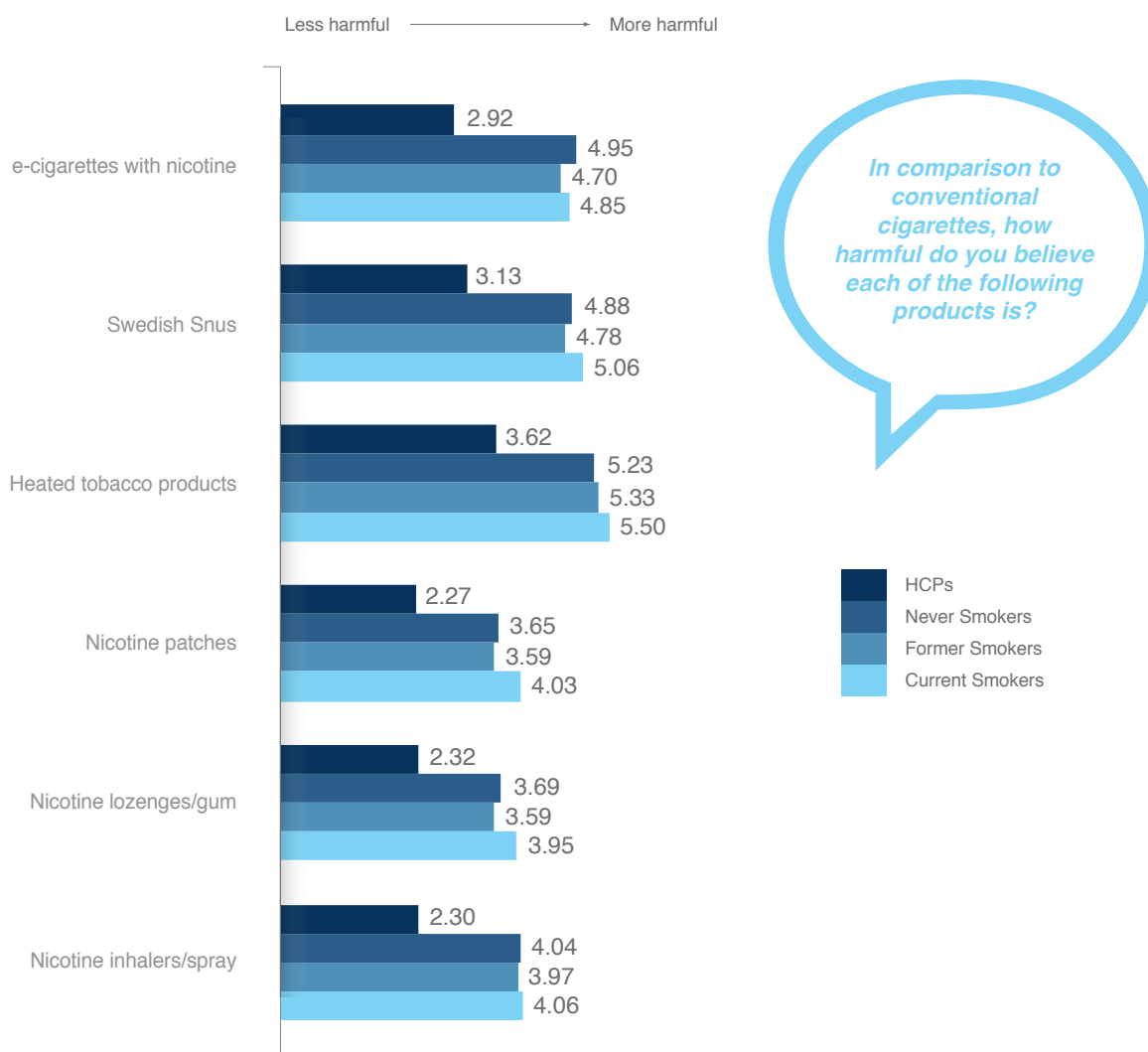
³³European Commission, Special Barometer 458, Attitudes of Europeans towards tobacco and electronic cigarettes, 2017
³⁴Frost & Sullivan, HCP Survey, November 2018

When asked to rate the perceived level of harm from THR products relative to conventional cigarettes, HCPs said that all THR products are less harmful than conventional cigarettes, often significantly so. Consumers, on the other hand, showed less clarity, in some cases ranking THR products as being more harmful than conventional cigarettes.

This likely reflects a conflation in the minds of consumers between the effects of tobacco, nicotine, and smoke/tar, with many failing to recognise that nicotine on its own is a relatively benign substance, although it is the main cause of tobacco addiction. Indeed nicotine is available in various pharmacological products designed to support smoking cessation.

Figure 6: Perceived Level of Harm of THR Products

On a 10-point scale where 1 equals less harmful, 5 equals equally harmful, and 10 equals more harmful

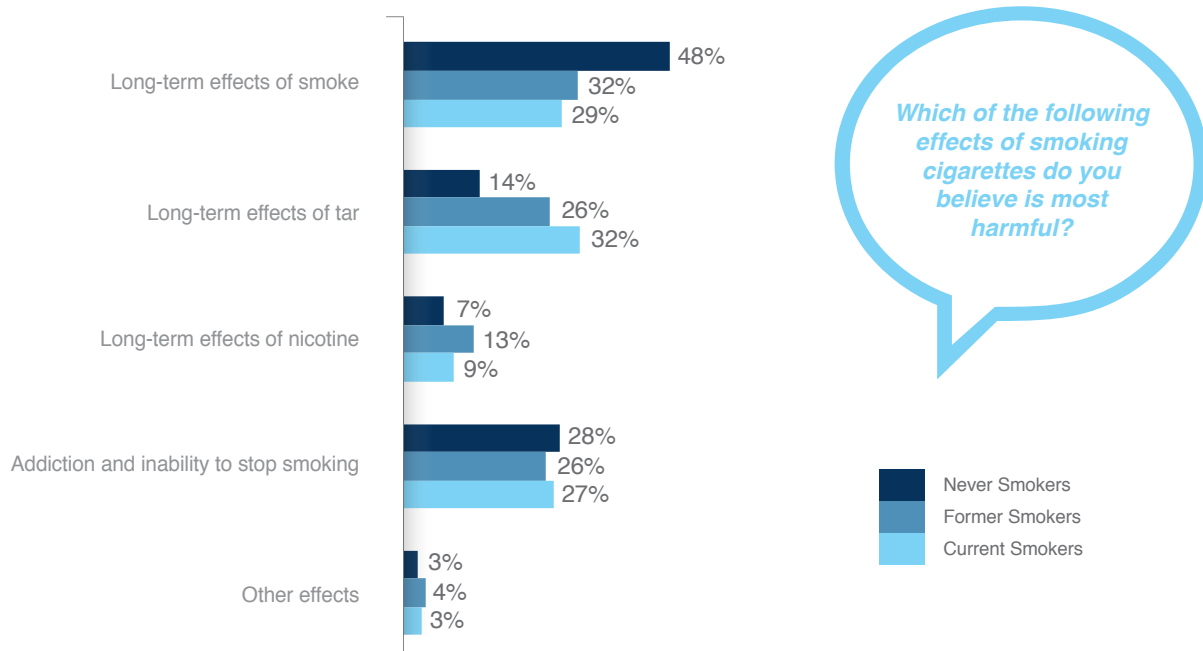


Source: Frost & Sullivan, HCP & Consumer Survey, 2018
N=595

In terms of the most harmful aspects of cigarette smoking, current smokers mainly see the long-term effects of smoke and tar as the most harmful (62%). However, significant numbers of smokers, as well as former and

never smokers, consider the long-term effects of nicotine as well as smoking addiction as the most harmful aspects (36% of current smokers, 39% of former smokers, and 35% of never smokers).³⁵

Figure 7: Perceived Aspects of Harm from Smoking



Source: Frost & Sullivan, Consumer Survey, 2018
N=535

Figure 8: HCP Attitudes to the Legalisation of ENDS

Please indicate your level of agreement with each of the following statements”
(On a 10-point scale where 10 equals totally agree, and 1 equals do not agree at all)



Source: Frost & Sullivan HCP Survey, 2018
N=60

³⁵Frost & Sullivan, Consumer Survey, 2018

Usage of ENDS products to support tobacco harm reduction in New Zealand is still at a fairly low level.

Our research shows that of the smokers who have tried to quit, only 29% have used e-cigarettes or other non-combustible forms of tobacco, compared to 50% who have tried NRT and 44% going cold turkey. That stated, 43% of HCPs pointed out the considerable number of smokers who wish to quit smoking, but are unable to do so because current methods (e.g., nicotine patches or gums) do not work for them. For this group, additional methods are recognised as needed.³⁶

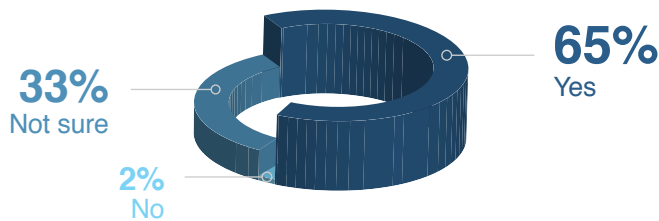
Almost two-thirds of HCPs surveyed agree that they would prefer smokers who are unable or unwilling to quit to try switching to ENDS, instead of smoking traditional cigarettes.



"I think THR products could further help reduce the prevalence of smoking – there's a whole lot of pharmacotherapies available from the government, but THR products could also help. We've yet to find out whether THR products are more accepted compared to pharmacotherapies by smokers who do not want to quit – but my hunch is that THR products would be more accepted."

– Healthcare Professional

Figure 9: HCPs' Attitudes to Smokers Switching to ENDS



If ENDS were legally available in NZ, would you prefer smokers who are unable or unwilling to quit to try switching to these instead of smoking traditional cigarettes?

Source: Frost & Sullivan, HCP Survey, November 2018
N=60

³⁶Frost & Sullivan, HCP & Consumer Survey, November 2018

There is broad consensus among HCPs surveyed that ENDS has the potential to reduce the risk of smoking-related diseases considerably; that ENDS reduces the risk of secondhand exposure posed to non-users, and that

consumption of nicotine is generally low risk when it is delivered via ENDS products. HCPs largely agree that both HCPs and smokers and their families should be made more aware of these products.³⁷

Figure 10: HCPs' Attitudes to Tobacco Harm Reduction

Please indicate your level of agreement with each of the following statements”
(on a 10-point scale where 10 equals totally agree, and 1 equals do not agree at all)



Source: Frost & Sullivan HCP Survey, 2018
N=60

³⁷Ibid



THE LAST WORD

New Zealand has made admirable strides in reducing smoking rates in recent decades, and currently boasts one of the lowest smoking rates in the developed world.³⁸ Today, however, almost 600,000 New Zealanders continue to smoke, with particularly high smoking rates among population groups such as Māori and the most economically-disadvantaged New Zealanders, where the smoking rate is over four times that of the least-disadvantaged. The considerable health and financial burdens placed by smoking in these groups continue to rise, given the rising costs of cigarettes in relation to household incomes. While the Government has set a target of achieving a Smokefree New Zealand by 2025, usually defined as a smoking rate of 5% or less, achieving this goal is likely to be challenging. Smoking is therefore likely to continue to be a significant health and economic challenge for New Zealanders for years to come.

Cessation is the best way to reduce the harm from smoking, but for many smokers quitting remains difficult. Although 60% of current smokers report that they want to quit, on average they make over six unsuccessful attempts to do so.³⁹ Additionally, there is a significant group of smokers who do not wish to quit, either because they enjoy smoking or because they recognise that they are addicted. While treatment options, such as NRT, have long been available to support smoking cessation, for many smokers, these therapies do not work. The new range of THR products such as ENDS provides additional alternatives for smokers. There is a general consensus that these products are considerably less harmful than conventional cigarettes, and in jurisdictions such as the UK, they are being actively supported as a central tenet in tobacco control and in tobacco harm reduction strategies.

For many years, ENDS have operated in a regulatory grey area in New Zealand, technically it has been illegal to sell them but the law has rarely been enforced. This has led to these products being available, but unregulated. However, following a recent court ruling, the Government is taking steps to regulate ENDS and plans to subject them largely to the same regulatory regime that governs conventional cigarettes. This is likely to lead to ENDS becoming more mainstream in New Zealand and widely deployed as a tool in tobacco harm reduction.

Our research indicates that HCPs are supportive of ENDS – a majority prefer that their patients switch to these products as an alternative to cigarettes if they are unable to quit altogether. HCPs also recognise that ENDS are significantly less harmful than conventional cigarettes, and are supportive of more information about ENDS being provided to HCPs and smokers and their families. Consumers, however, are less aware of the relative health benefits of ENDS, with a view that heated tobacco products, in particular, are more harmful than cigarettes. Greater promotion and awareness of the relative benefits of ENDS to smokers is therefore necessary, especially given a situation where the Government wishes to encourage the adoption of ENDS among smokers otherwise unable or unwilling to quit in order to reach the Smokefree 2025 target.

³⁸OECD data, Daily Smokers, accessed from <https://data.oecd.org/healthrisk/daily-smokers.htm>
³⁹Frost & Sullivan, Consumer Survey, 2018

APPENDIX: ABOUT OUR RESEARCH

We surveyed 535 consumers and 60 HCPs via an online survey in November 2018. Respondents were selected to ensure that they are representative of the broader population, including age, geographic location, and smoking status (in the case of consumers).

Table 1: Consumer Sample

Region	Gender	Age Group	Smoking Status
Auckland 25%	Male 49%	21-30 17%	Current smoker 12%
Wellington 23%	Female 51%	31-40 23%	Former smoker 28%
Christchurch 22%		41-50 18%	Never smoker 59%
Hamilton 9%		51-60 22%	
Tauranga 7%		61-70 10%	
Napier-Hastings 7%		Over 70 10%	
Dunedin 7%			

Source: Frost & Sullivan Consumer Survey, 2018
N=535

Table 2: HCP Sample

Region	Profession
Auckland 25%	GP 33%
Wellington 25%	Specialist/ER Physician 33%
Christchurch 17%	Other 34%
Hamilton 8%	
Tauranga 8%	
Napier-Hastings 8%	
Dunedin 5%	
Nelson 3%	

Source: Frost & Sullivan survey of HCPs, 2018
N=60

Auckland	Colombo	London	Paris	Singapore
Bahrain	Detroit	Manhattan	Pune	Sophia Antipolis
Bangkok	Dubai	Mexico City	Rockville Centre	Sydney
Beijing	Frankfurt	Miami	San Antonio	Taipei
Bengaluru	Iskandar, Johor Bahru	Milan	Sao Paulo	Tel Aviv
Bogota	Istanbul	Mumbai	Seoul	Tokyo
Buenos Aires	Jakarta	Moscow	Shanghai	Toronto
Cape Town	Kolkata	New Delhi	Shenzhen	Warsaw
Chennai	Kuala Lumpur	Oxford	Silicon Valley	Washington D.C.

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