



THE SWEDISH EXPERIENCE

A ROADMAP TO A SMOKE FREE SOCIETY



**SMOKE FREE
SWEDEN 2023**

www.smokefreesweden.org



EXECUTIVE SUMMARY

Quitting smoking like Sweden saves lives

Sweden is on the brink of a world first in public health – one that provides a roadmap to save tens of millions of lives across every continent on the globe.

The developed Scandinavian country with a population of just over ten million will, based on current trends, soon become the first nation to give up cigarettes.

Both the European Network for Smoking and Tobacco Prevention (ENSP) and the World Health Organization (WHO) consider countries to be officially smoke free when less than 5% of the adult population smokes tobacco.

The European Union (EU) has tasked all its Member States with becoming 'smoke free' by 2040. Barring a dramatic shift in progress, most will miss this target by some distance.

Sweden, however, will achieve this historic milestone as soon as this year - 2023. That is an incredible 17 years ahead of the EU target date and before every other nation in the bloc is even within sight of the achievement.

The country is already reaping the benefits, with cancer rates and tobacco-related deaths significantly lower than all its peers.

It is how Sweden – which once had 49% of its male population smoking regularly – has achieved this remarkable feat that provides us with a realistic and replicable roadmap to a smoke free world.

Key to Sweden's tobacco control success was embracing harm reduction strategies. Sweden has proactively implemented what the WHO Framework Convention on Tobacco Control (FCTC), Article 1 (d)

suggests: "tobacco control" means a range of supply, demand and harm reduction strategies that aim to improve the health of a population by eliminating or reducing their consumption of tobacco products and exposure to tobacco smoke.

By employing strict tobacco control measures, the consumption of combustible tobacco products was made less attractive for adult smokers, while facilitating the use of less harmful non-combustible forms of tobacco and nicotine. During the last five decades, the Swedes have progressively and systematically made smokeless and less harmful alternatives to



If Swedish tobacco-related mortality rates were replicated in other countries, more than 3.5 million lives could be saved in the EU alone over the next decade

cigarette smoking accessible, affordable, and acceptable to their population. In supporting these smoke free options such as snus and, in recent years, oral nicotine pouches and e-cigarettes (otherwise called vaping products), their pragmatic, enlightened approach has delivered sensational public health gains.

In fact, if Swedish tobacco-related mortality rates were replicated in other countries, more than 3.5 million lives could be saved in the EU alone over the next decade.



Sweden's performance in reducing the burden of tobacco smoking on its society is peerless

- Over the past 15 years, Sweden has slashed its smoking rates from 15% in 2008 to 5.6% today.¹
- The EU's average smoking rate is currently 23%² - almost five times higher than Sweden's. In many EU countries, one in three people still smokes.³
- Just 3% of Swedish people aged between 16-29 years smoke⁴ compared to 29% of other Europeans aged 15-24 years.⁵

As a result:

- Sweden's incidence of cancer is 41% lower than the rest of its European counterparts, corresponding to a 38% lower level of total cancer deaths.⁶
- 24 of the other 27 EU Member States have a tobacco-related mortality rate twice as high or more than Sweden relative to population size.⁷
- Sweden has a 39.6%⁸ lower rate of death of all tobacco-related diseases compared to the EU average.
- Sweden is one of the three countries with the lowest number of deaths attributed to lung cancer.⁹

As mentioned before, over the last five decades Sweden has introduced traditional tobacco control measures roughly in line with the rest of Europe with the goal of reducing smoking. However, there has long been one major difference: apart from the country's openness to allow the sale of smoke free alternatives to cigarettes, it has avoided demonising and restricting these less harmful products.

Swedes have long used snus - a traditional oral tobacco product - as an alternative to cigarettes. This helped reduce Sweden's smoking rate and disease burden below the European average as many adult smokers transitioned.

But the Swedes also transferred this attitude of acceptance to new, more modern, and less harmful tobacco free products which have come on to the market in the last decade. The advent of vapes (e-cigarettes) in 2015 and, more recently, oral nicotine pouches in 2018 has resulted in Swedish smoking rates continuing their rapid descent.

A 2015 Eurobarometer poll found that 7% of Swedes had tried vaping,¹⁰ by 2020 this number had risen to 12%.¹¹ Meanwhile, the smoking rate in the country has more than halved, from 11.4% in 2012 to just 5.6% in 2022.

The Swedish experience of beating smoking and gaining the associated benefits of reducing smoking-related mortality and morbidity, proves conclusively that the best kept secret in tobacco control is to make less harmful alternative products accessible, acceptable, and affordable.

Sweden's experience is a gift to global public health and, potentially, one of the greatest ever breakthroughs in tackling non-communicable diseases (NCDs). If replicated in other countries, it can save tens of millions of lives over the next two decades alone.

With this weight of evidence, the message to the world is: **Quit Like Sweden.**





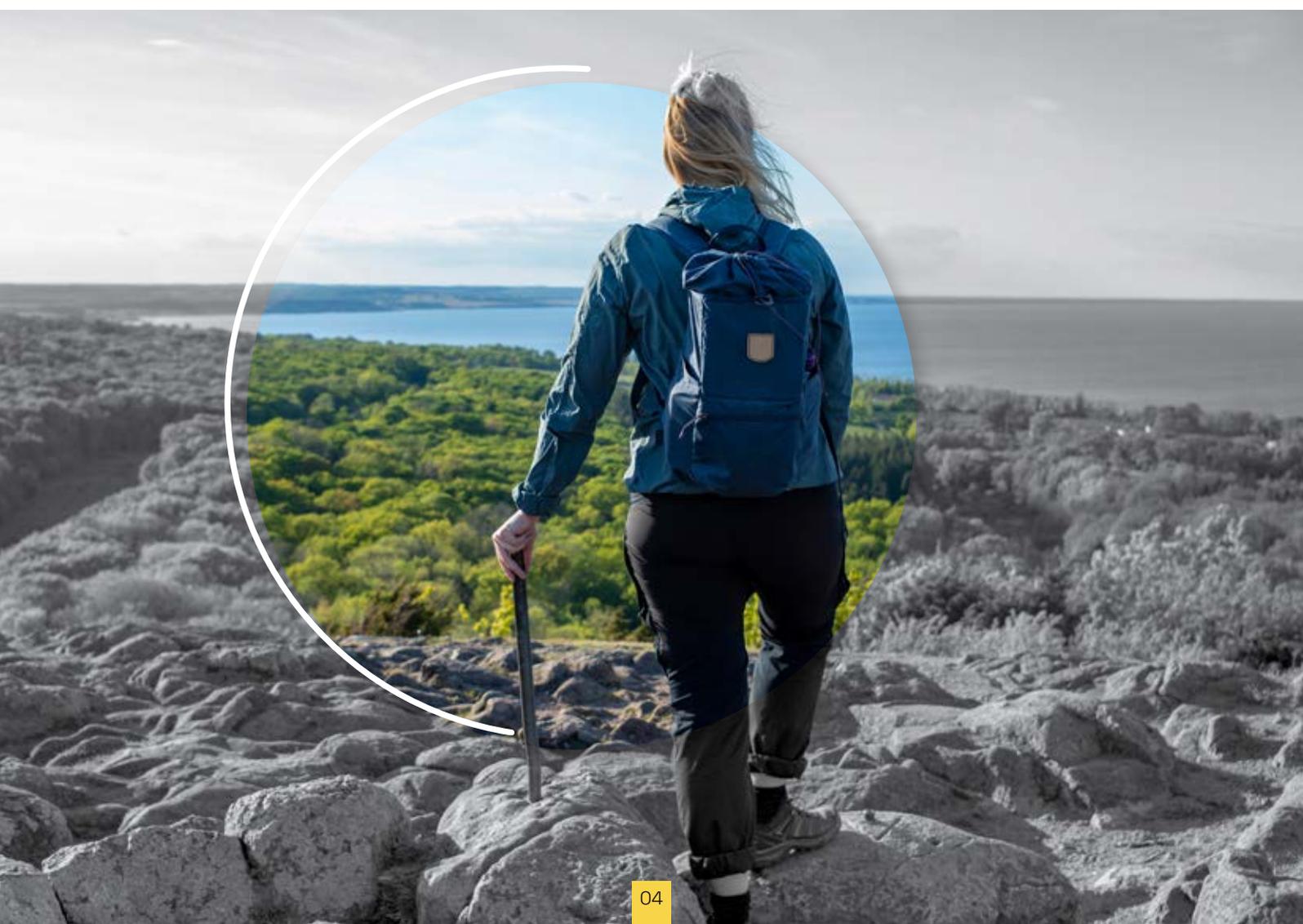
INTRODUCTION

Smoking cigarettes or other combustible tobacco products is the biggest cause of non-communicable deaths in the world. According to the World Health Organization (WHO), eight million deaths were attributable to tobacco in 2017.¹² Yet there remain more than one billion smokers in the world today, despite the health risks of smoking being widely known.

The bulk of tobacco-related illness and death is ultimately caused by the inhalation of toxic smoke from combustible cigarettes into the lungs.¹³ Nicotine, while addictive, does not cause tobacco smoking-related diseases such as lung cancer, stroke, and chronic obstructive pulmonary disease (COPD).¹⁴

The WHO's Framework Convention on Tobacco Control (FCTC) defines tobacco control as a "range of supply, demand and harm reduction strategies that aim to improve the health of a population by eliminating or reducing their consumption of tobacco products and exposure to tobacco smoke."¹⁵

While this policy makes sense, it has fallen short of expectations. Governments around the world have implemented tobacco control measures, yet they have struggled to further reduce stubbornly high smoking rates. In order to make further progress and to achieve a smoke free society, other policies must be considered.



Alternative products must be considered to beat smoking

Using Sweden as a case study, if smokers everywhere had access to alternatives that did not require combustion, were less harmful than smoking and still satisfied their need for nicotine, vital progress could be made towards achieving a smoke free society.

There are several smokeless alternatives to tobacco that have been available and widely used in little over a decade, with positive results: e-cigarettes or vapes; heated tobacco and oral nicotine pouches. Sweden's approach to all of these, together with its long-term widespread use of snus, means it is in the unique position of being almost smoke free.

Moreover, the evidence of how much safer these alternative products are is abundantly clear. For example, the Royal College of Physicians (RCP)¹⁶ states that the health hazards arising from long-term vapour inhalation from e-cigarettes is unlikely to exceed 5% of the harm from smoking tobacco. In other words, e-cigarettes are 95% less harmful than cigarettes. Oral nicotine products, such as nicotine pouches, are even less harmful.

A visualisation of the relative harm of all products available for purchase in Sweden can be found in figure 1, the Oral Nicotine Commission 2020 Report.¹⁷

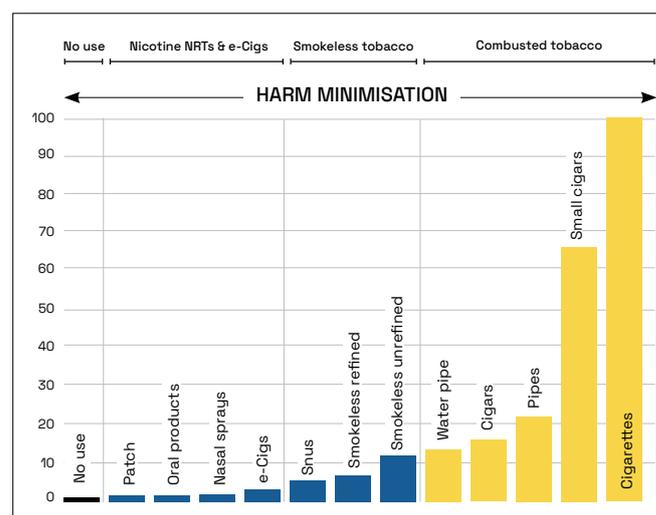
This emerging category of alternative products might be the revolution that public health needs.

Given the clear net health benefits of switching from cigarettes to any of the less harmful products, this trend should be welcomed and accelerated. Indeed, the public should be educated about the relative harms of products that contain nicotine, and their benefits, too. Some studies have shown alternative products, such as vapes, to be as much as twice as effective at helping smokers quit versus traditional quitting aids.¹⁸

When Sweden crosses the 5% threshold and becomes smoke free, it will be the first country in the world to essentially cease the consumption of combustible cigarettes by most of their population.¹⁹

The Swedish government first set a smoke free objective in its 2016-2020 Alcohol Narcotics Doping

Figure 1. Source: Statistics Sweden¹⁷



and Tobacco (ANDT) strategy. In this strategy, first proposed in February 2016,²⁰ the government stated that it wanted to substantially reduce smoking levels so that smoking would no longer be a dominant public health concern.²¹

What it has demonstrated since is that replacing smoking with smoke free alternatives brings impressive health benefits. Its record low levels of tobacco-related mortality and morbidity cannot be matched by any country in Europe. Of the other 26 EU Member States, 24 have a tobacco-related mortality rate twice as high or more than Sweden.²² Quitting smoking, as Sweden has done, saves lives.

Learning from the Swedish success story and replicating its approach of displacing smoking with smoke free alternatives is therefore a critical tool for preventing and controlling tobacco-related health risks, diseases and premature deaths.

It is one of the most significant examples of tobacco harm reduction at national level – and shows tobacco harm reduction to be a unique, effective solution to decimate high smoking rates.

This report examines the Swedish smoke free success story in detail, delivering key lessons for other countries looking to beat smoking and improve public health.



CHAPTER 1

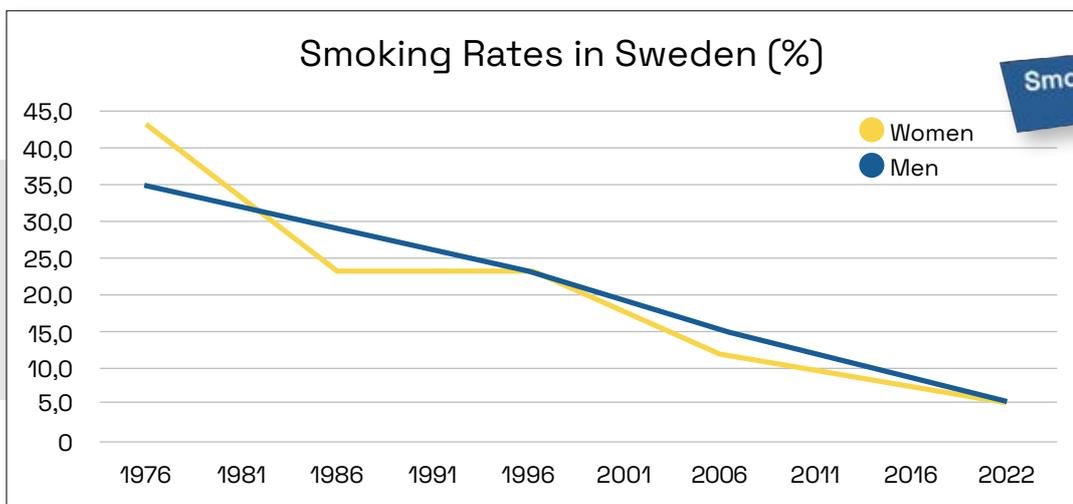
Sweden is on the brink of being smoke free



In November 2022, Swedish authorities confirmed that the current level of smoking had fallen to just 5.6% of people over the age of 16. This puts Sweden on the brink of becoming a smoke free society.

The term smoke free is defined by the Swedish government as when less than 5% of the population smoke.²³ Similarly, the European Network for Smoking and Tobacco Prevention says a 'tobacco-free' society is one where the smoking prevalence is under 5%. These recent figures are a marked decline from a peak of around 36% smoking prevalence in 1963²⁴ at which time as many as 49% of men smoked. As the Swedish population has grown by more than 30% during this same time²⁵ this is equivalent to an 80% reduction in the overall number of smokers.

Figure 2. Source: Statistics Sweden²⁶



Smoke-free is defined as less than

5%

of adults smoking

80%
Fewer smokers

This means that in 2023, Sweden is likely to achieve its smoke free goal, 17 years in advance of the stated EU 2040 target and two years ahead of its own more ambitious target.²⁷



Historically, Sweden has always had lower smoking rates than the rest of Europe, largely due to its longstanding tendency to embrace alternative products. When the country joined the EU in 1995, one of the conditions of its accession was an exemption from the EU’s snus ban.²⁸ This openness to safer alternatives has helped Sweden to get to where it is today. However, in recent years, progress has been aided by the arrival of newer, smoke free alternative products.

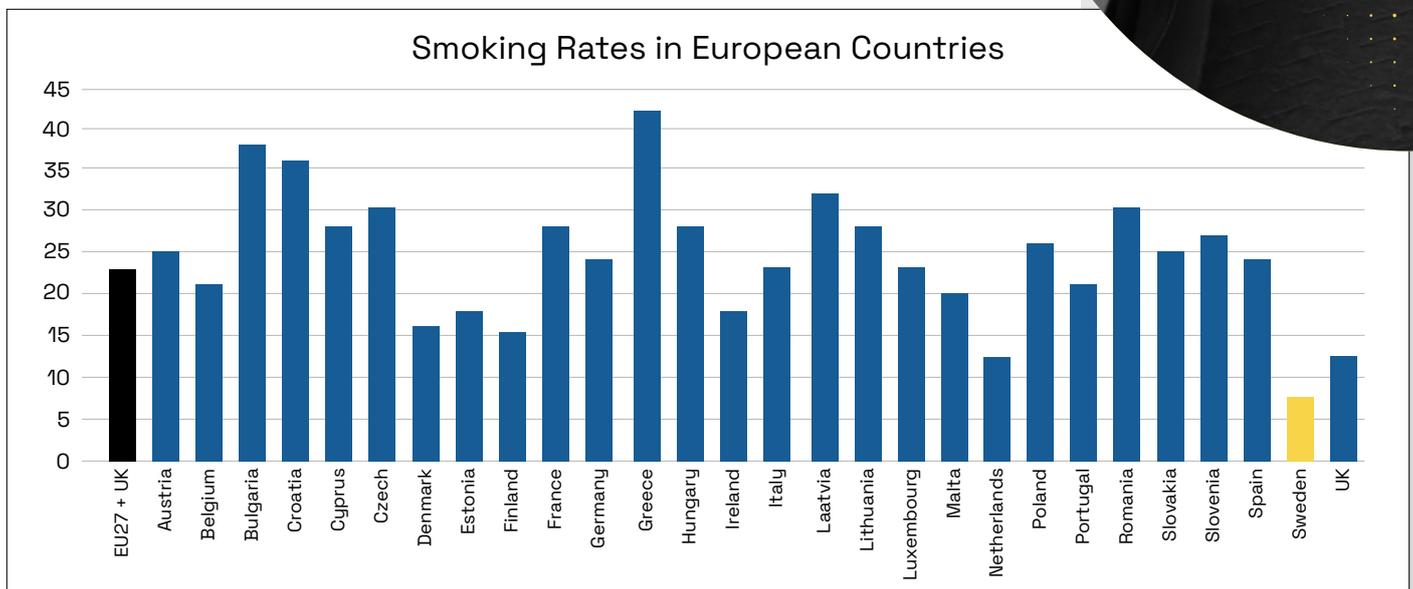
Indeed, the introduction of new smoke free alternative products in the past 15 years has accelerated progress towards achieving a smoke free society. Between 2006 and 2020, Sweden recorded a 60% decrease in smoking rates²⁹ – the biggest reduction of any EU country. In comparison, EU Member States recorded a 25% reduction over this same time.³⁰

Even among those in Sweden who do smoke, the number of cigarettes consumed is far lower than their European counterparts. Daily cigarette consumption in Sweden is the lowest in the EU, at an average of 9.1 cigarettes per person, versus an EU average of 14.2 cigarettes per person.³¹ Sweden is the only European country where the average number of cigarettes smoked per day is fewer than ten. Most notably, the EU’s average smoking rate is currently 23%,³² almost five times higher than Sweden’s.

60%
Reduction in smoking rates, 2006-2020



Figure 3. Source: Eurobarometer 506: Attitudes of Europeans towards tobacco and electronic cigarettes³³



Recent figures from the three most populous EU countries, Germany, France, and Italy, show a smoking prevalence of 23.8%,³⁴ 25.5%³⁵ and 24.2%,³⁶ respectively. This is despite the adoption of EU-wide tobacco control measures and a concerted public health push to beat smoking.

We can therefore conclude that Sweden’s approach – that is, openness to alternative products – is what has brought it to the brink of becoming a smoke free society.

Daily cigarette consumption in Sweden is the lowest in the EU





CHAPTER 2

Sweden is enjoying the health benefits of record-low smoking levels

Numerous reputable studies, including from the Royal College of Physicians,³⁷ have shown that the most harmful effects of smoking stem from inhaling toxicants during combustion: that is, when tobacco is burnt.³⁸

In smokeless nicotine products, the combustion of tobacco does not occur, resulting in significantly less harmful effects. This is reflected in Sweden, where the widespread use of smokeless nicotine products has translated into tangible benefits for the public health of its population.

Sweden has the lowest rate of tobacco-related diseases and deaths in the EU. The WHO has confirmed that in Europe, Sweden has the lowest mortality rate among men across all cancers. In 2020, Swedish men had a mortality rate of 96 per 100,000 for all cancers.

Diving into these numbers more deeply, Sweden has the lowest lung cancer incidence in Europe at only 17.7 per 100,000 across both sexes.³⁹ Furthermore, the rate of deaths in Sweden from lung cancer is just 29.11 per 100,000, compared to an EU average which is more than twice as high, at 66.7 deaths per 100,000.^{40,41}

Figure 4. Source: WHO International Agency for Research on Cancer ⁴²

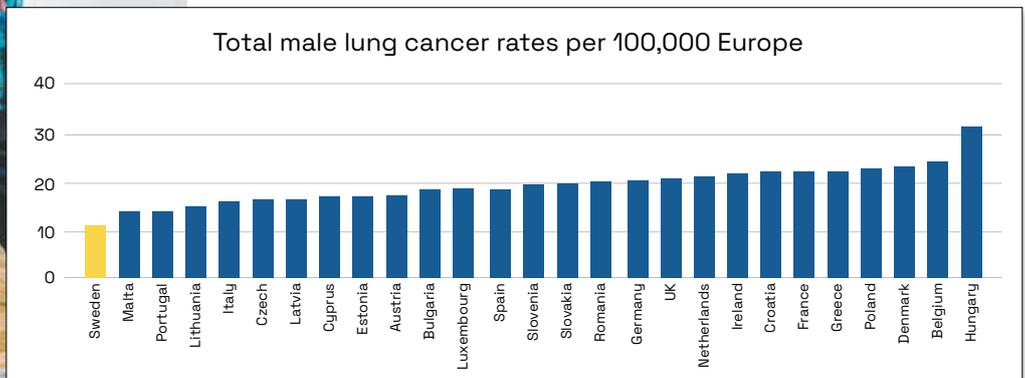
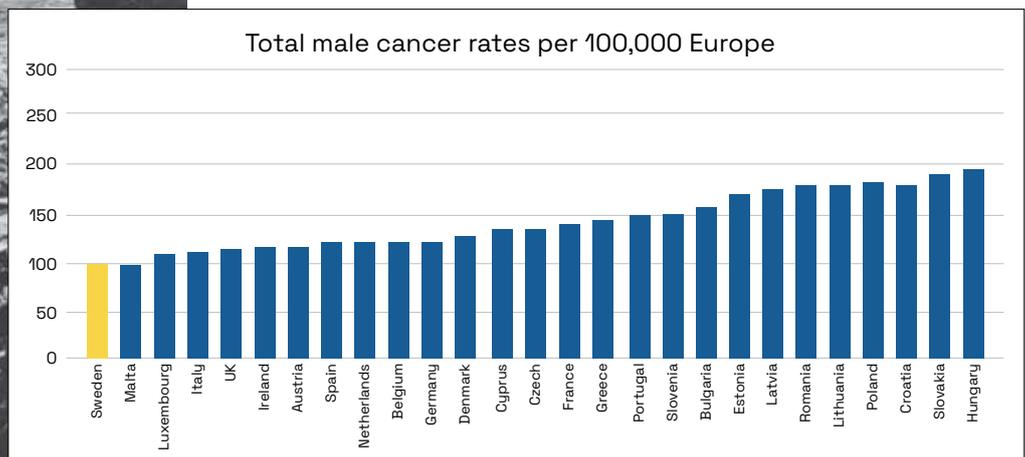


Figure 5. Source: WHO International Agency for Research on Cancer ⁴³

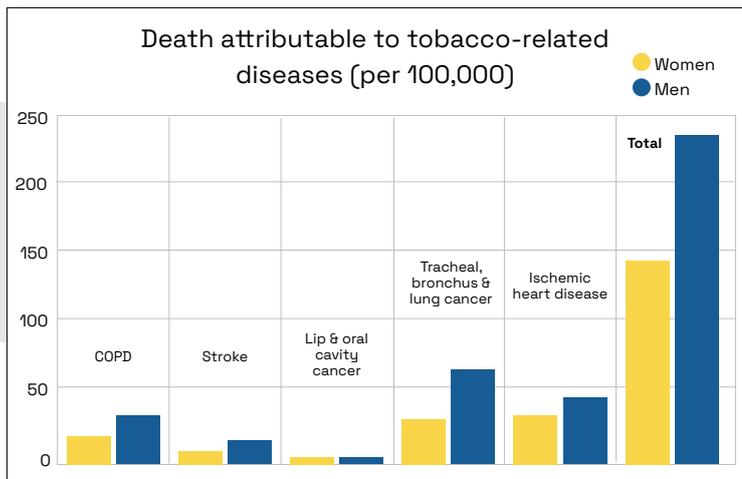




With a smoking level of only 3% in those aged 16-29 years, Sweden boasts the lowest level of youth smoking in Europe



Figure 6. Source: Global Burden of Diseases Survey, 2019 ⁴⁴



When examining deaths attributed to all tobacco-related diseases, in 2019 Swedish men had a 39.6%⁴⁵ lower rate of death than the EU average, with an incidence of 144.75 per 100,000. This compared with an EU average of 239.6 per 100,000⁴⁶ and was the lowest in the EU.

Among men aged 50-69, this difference is even more pronounced. Where Swedish men aged 50-69 have deaths attributable to tobacco-related diseases at 141.1 per 100,000, the next lowest country, Ireland, has a rate of 194.68 per 100,000. These differences can be attributed to Sweden's more commonplace use of less harmful alternatives to smoking over a long period of time.

Not only is Sweden on the brink of achieving a smoke free society but it has already cultivated an entire

Swedish men have the lowest incidences of deaths attributed to tobacco-related diseases in the EU - thanks in part to Sweden's use of less harmful alternatives to smoking

'smoke free' generation. With a smoking level of only 3% in those aged 16-29 years,⁴⁷ Sweden boasts the lowest level of youth smoking in Europe.⁴⁸

This contrasts with Germany and Italy, which have similar tobacco control measures in place, yet have a youth smoking rate of 21.6% and 20%, respectively. The EU average is 18%,⁴⁹ around six times that of Sweden.



CHAPTER 3

Smoke free Sweden - how it happened



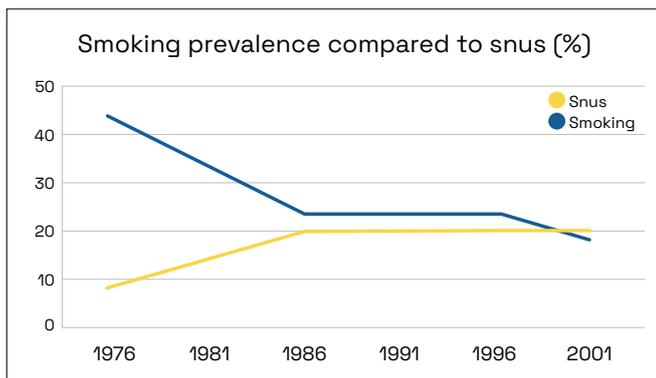
Over the past 50 years, Sweden has introduced traditional tobacco control measures in line with the rest of Europe but with one major difference - an openness to safer alternatives to cigarettes.

Traditionally, Swedish men have used snus in far greater numbers than women. Since snus pouches were first introduced in 1973 in Sweden, smoking rates among men have fallen considerably.

In 1963, the first year for which records are available, Sweden had approximately 1.9 million smokers. By 2012 this had fallen to under 1 million,⁵⁰ while today there are just 580,000.⁵¹

The graph below shows the trend in smoking prevalence and daily snus usage amongst Swedish men.

Figure 7. Source: Figures compiled from Statistics Sweden⁵²





Use of snus and implications for tobacco free nicotine pouches

It is widely accepted that the Swedish smoke free story began with snus. Snus is a moist, pasteurised smokeless oral tobacco product which is placed under the lip to deliver nicotine through the gums. It has been used by (mostly male) consumers in Sweden, since the 1970s in particular.

Long-term epidemiological evidence finds the use of snus comes with a significantly reduced risk of developing diseases.⁵³ This strongly suggests that the use of snus has been a long-term contributor to lower smoking rates in Sweden, as well as to its lower incidence of smoking-related disease and death. In other EU countries, snus is banned.

There is international recognition that snus is safer than smoking. In 2019, the US Food and Drug Administration (FDA)⁵⁴ authorised a company called Swedish Match to use a reduced risk claim in the marketing materials for its 'General' brand of snus products, which stated that "Using General Snus instead of cigarettes puts you at a lower risk of mouth cancer, heart disease, lung cancer, stroke, emphysema, and chronic bronchitis."

Furthermore in 2020, the Health Committee of the Swiss Parliament stated in a report that the "consumption

of snus poses a health risk at least 90 percent lower"⁵⁵ than cigarettes.

Data from Statistics Sweden has shown that since 1980, snus use has risen among men in Sweden, as smoking rates decline. This corresponds to data showing that snus is a popular quit-smoking aid: in 2020, 23% of Swedish smokers and ex-smokers said they had used snus as a quit aid, up from 19% in 2017.⁵⁶

According to a seven-year follow-up study of former smokers conducted by Stockholm University, over 80% of those who had quit smoking had "found snus of great importance to succeed with smoking cessation and half of them continued to use snus on a long-term basis."⁵⁷ The UK's Royal College of Physicians has reported that, "in Sweden, the availability of snus has been estimated to have added around 0.4 percentage point per year to the rate of decline in smoking."⁵⁸

A study by the Swedish Institutet för Tobaksstudier, or Institute for Tobacco Studies, using data from the WHO's 2012 Global Report on Mortality Attributable to Tobacco,⁵⁹ concluded that if other EU countries practiced the same tobacco consumption patterns as Sweden – encouraging smokers to switch from cigarettes to snus, for example – no fewer than 355,000 lives per year could have been saved, most of them men over the age of 30. Similar outcomes could be achieved by more commonplace use of other less harmful alternatives to smoking, such as oral nicotine pouches, vapes or heated tobacco.

If other EU countries practiced the same tobacco consumption patterns as Sweden – encouraging smokers to switch from cigarettes to snus – 355,000 lives per year could have been saved, most of them men over the age of 30





New generation of smoke free alternatives to smoking

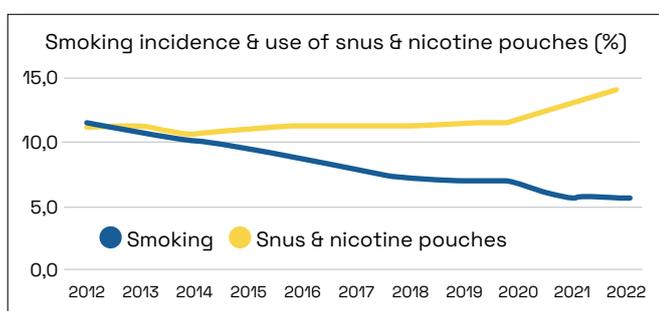
More recently, a new generation of alternative, reduced risk nicotine products, has been made available in Sweden, which has helped to accelerate the decline in smoking rates over the past decade. Vaping was first introduced in 2015, while nicotine pouches became available in 2018.

Similar to snus, the weight of evidence indicates that the use of tobacco free oral nicotine pouches reduces the risk of harm versus continuing to smoke tobacco cigarettes if smokers can be encouraged to switch to them.

Since nicotine pouches first came onto the market in 2018, fewer and fewer Swedes are choosing to smoke cigarettes. This may be due to a familiarity with oral nicotine that is absent in other European countries. However, the lesson that safer alternatives to cigarettes should be encouraged to help smokers quit remains applicable elsewhere.

In 2022, it was estimated that 5% of the Swedish population were users of nicotine pouches. At the same time, the proportion of smokers had almost halved from 11% of the population in 2012 to 5.6% in 2022,⁶⁰ with the decline in smoking rates accelerating as each alternative product became available. This indicates that access to alternative products like nicotine pouches may have helped remaining smokers, who were not users of snus, to quit smoking, aiding Sweden in its quest to becoming smoke free.

Figure 8. Source: Figures from Statistics Sweden⁶¹



Data also suggests that an increased number of former Swedish smokers may have also switched to e-cigarettes, though this is not measured in Swedish national statistics. However, a Eurobarometer poll found that in 2015, 7% of Swedes had tried vaping⁶² and that by 2020 this number had risen to 12%.⁶³ As vaping rates in Sweden increased, those of smoking decreased.



Smoking rates for women have declined by 6.1 percentage points in the past 10 years, just as women's use of snus and nicotine pouches has risen by 3.5 percentage points

In addition, oral nicotine pouches and e-cigarettes have been adopted by previously 'hard to reach' populations of adult smokers who did not use snus as a quitting tool, with their user base growing as smoking rates have continued to decline.

The best example of this can be seen in the case of Swedish women. Smoking rates among Swedish women have been higher than those of Swedish men for several decades. In 2012, 12.4% of Swedish women smoked compared to 10.5% of Swedish men. With the introduction of the new smoke free alternatives, the gender gap in smoking rates has reduced, and in 2022, 6.3% women smoked compared with 5.3% of Swedish men.⁶⁴

This has become more acute with the introduction of new alternative products: smoking rates for women have declined by 6.1 percentage points in the past 10 years, just as women's use of snus and nicotine pouches has risen by 3.5 percentage points. This compares with a 5.8 percentage point decline and 2.5 percentage point rise for men and women overall and has contributed to the halving of smoking rates in the past decade, outlined in Figure 9 on the next page.



Figure 9. Source: Figures from Statistics Sweden⁶⁵

	Men - smoking	Men - using snus and nicotine pouches*	Women - smoking	Women - using snus and nicotine pouches*	All - smoking	All - using snus and nicotine pouches*
2012	10.5%	18.7%	12.4%	3.5%	11.4%	11.2%
2022	5.2%	20.4%	6.0%	7.0%	5.6%	13.7%
Absolute difference	-5.3p.p	+1.7p.p	-6.1p.p	+3.5p.p	-5.8p.p	+2.5p.p



*2022 – data for age group 16+ (data available only for 2021 and 2022); snus and nicotine pouches include categories of 'tobacco snus' and 'nicotine snus'. Nicotine snus means nicotine pouches without tobacco.



In particular, women between the ages of 16-29 have adopted nicotine pouches and e-cigarettes where they previously may have smoked in greater numbers than men. In 2022, 9.7% of this age group used nicotine pouches compared to 5.4% of men.⁶⁶

Figure 10. Source: Figures from Statistics Sweden⁶⁷

	Use of traditional snus in age group 16-84	Use of nicotine pouches in age group 16-84	Use of traditional snus in age group 16-29	Use of nicotine pouches in age group 16-29
Män	4.2%	3.2%	2.5%	9.7%
Kvinnor	18.5%	2.3%	14.2%	5.4%

Also in 2022, Swedish public health authorities estimated that one in 50 Swedes aged 16-84 used e-cigarettes. Among those between the ages of 16-29, 8% of women and 5% of men in this age group used them daily.⁶⁸

The reduced gender gap in Swedish smoking can thus in large part be attributed to the recent uptake of smoke free alternatives by Swedish women.



Sweden’s policy context: Widely available, safer alternatives

A key factor in Sweden’s smoke free success story has been its policy context and approach to safer alternatives to cigarettes.

In a report into Oral Nicotine Delivery Systems, it was noted that, since snus first became popular on the Swedish market in the 1970s, it has been advertised “as a way to enjoy tobacco without disturbing others due to smoke.”⁶⁹

Swedish smokers have easy access to a wide range of products: snus, tobacco free nicotine pouches, e-cigarettes and heated tobacco are all legal and available, so smokers who want to quit have a choice of products and can choose the one that best suits their needs.

In contrast to some other jurisdictions, these safer alternatives are available both online and in stores, and in the case of nicotine pouches, product advertising is permitted. This has resulted in raised awareness of a relatively new product category and has likely contributed to its uptake.

These smoke free alternative products are also available in a wide range of flavours and nicotine concentrations, meaning smokers are more likely to choose them as acceptable alternatives to cigarettes.

This approach has, at times, been challenged. In June 2022, the Swedish Parliament rejected a proposal to ban flavoured e-cigarettes.⁷⁰ On the basis of the available evidence, this is the correct approach and is likely to reduce tobacco-related harms: multiple studies have found that if flavours were banned, almost half of vapers would either find a way to get their preferred – banned – flavour, go back to smoking or take the risk of mixing their own flavours.^{71,72}

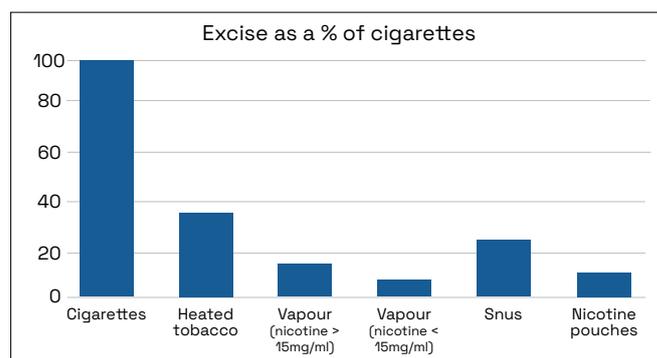
Smoke free alternatives are also more affordable in Sweden than cigarettes. The country’s tobacco taxation strategy is based around proportionate excise that reflects the lower risk associated with safer alternatives to cigarettes. Government ministers have reiterated this: in April 2022, Swedish Finance Minister Mikael Damberg stated that tobacco and nicotine taxes are structured so that “products are generally taxed on the basis of risk,” thus “products that are judged to be more harmful to health have a higher risk.”⁷³ This means that the excise rate for nicotine pouches is considerably lower than that of combustible cigarettes.

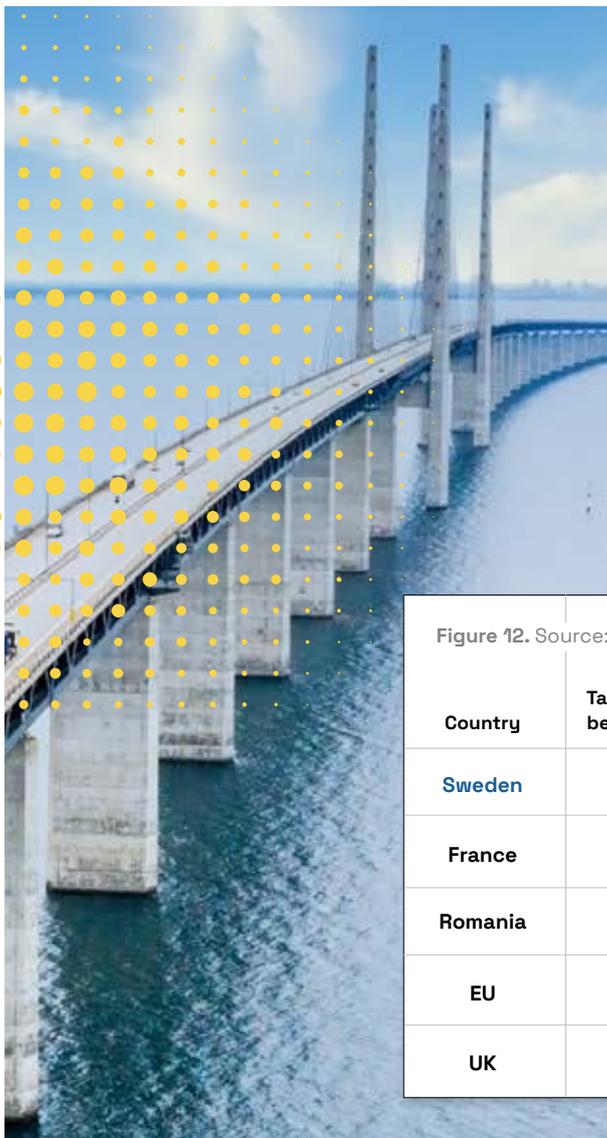
Nicotine pouches have excise rates that are just **8%** of cigarettes

“Studies have found that if flavours were banned, almost half of vapers would either find a way to get their preferred – banned – flavour, go back to smoking or take the risk of mixing their own flavours”

The relative rates of taxation are available in figure 11. As of 1 January 2023, the excise rate of tobacco heated products is just 36% of the rate of excise applied to cigarettes. This is the highest of the smoke free alternatives: the lowest, nicotine pouches, have excise rates that are around 8% of those of cigarettes. Ultimately, what this means is that alternatives to cigarettes are more affordable than cigarettes themselves, meaning smokers cannot be deterred from switching based on cost.

Figure 11. Source: Swedish Tax Table



CHAPTER 4


In 2023, Sweden is expected to become the first country in Europe to become smoke free – two years ahead of its own government’s target and 17 years ahead of the EU’s smoke free 2040 goal.

Several other countries have set their own smoke free targets outside of the overall EU ambition of being smoke free by 2040, yet none of those countries are on track to meet or exceed them like Sweden.⁷⁴

Part Two of this Study Report will include a comparative analysis of efficacy of the Swedish Smoke free model with nations in the other WHO regions of the world. However, it is useful to review Sweden’s remarkable achievement in comparison with selected European countries (below).

Figure 12. Source: Eurobarometer 2012 and Statistics Sweden

Country	Target year to be smoke free	Smoking rate 2012	Smoking rate now	Smoking rate reduction in last 10 years	Is the speed of reduction sufficient to achieve the target?
Sweden	2025	11.4%	5.5 (2022)	-5.8 pp (0.6 pp/year)	Yes
France	2032*	44%	28% (2020)	-16 pp (1.6 pp/year)	No
Romania	2035	30%	30% (2020)	0 pp (0 pp/year)	No
EU	2040	28%	23% (2020)	-5 pp (0.5 pp/year)	No
UK	2030	27%	27% (2020)	-15 pp (0.5 pp/year)	No

*Target to achieve a first generation of non-smoking adults by this date.

Smoke Free Sweden - learnings for the world

This means that we should learn lessons from Sweden’s example, from its history of deploying safer alternatives to cigarettes, and the resulting impact on key health indicators.

The Swedish case study is an example of tobacco harm reduction being practically used to drive down smoking rates and significantly reduce smoking related mortality and morbidity.

If the rest of Europe adopted the ‘Swedish model’ of embracing tobacco harm reduction and encouraging smokers to switch to a range of alternative products, during the next decade, it has been estimated that over 3.5 million early deaths could be prevented: in other words, 3.5 million lives could be saved.⁷⁵ Given over one billion people worldwide continue to smoke, the benefits at a global level would be vastly greater.



The factors which have resulted in Sweden's low smoking rates and mortality can be replicated in other countries. Smoking is a significant public health challenge and with more than one billion smokers worldwide, it is essential that governments use proven tools to reduce smoking.

Science, technology and consumer understanding have been the driving forces of progress for much of our public health advances in the modern age. Sweden has been at the forefront of extraordinary breakthroughs in tobacco control, and it is fair to say that this achievement has been largely under-appreciated by global public health.

Of course, as with any public health revolution, it carries dangers as well as opportunities. The challenge for policymakers is to mitigate the former and fully embrace the latter. However, this requires a deep understanding of what Swedish Tobacco Control did well and then to apply these learnings to fundamentally reorder priorities and application of modern tobacco control.

As a starting point, countries seeking to beat smoking like Sweden did, should be strongly encouraged to embrace harm reduction strategies, such as allowing adult smokers who cannot or will not quit, to switch



Countries seeking to beat smoking like Sweden did should embrace harm reaction strategies, such as allowing adult smokers who cannot or will not quit to switch to smoke free alternatives

to smoke free alternatives. Some countries outside Sweden have already begun to do this. In the United Kingdom, smoking rates have fallen by over 25% in the past decade as the government has proposed vaping as an alternative.

It is also important to note the difference between regulation and policy. There are countries that are still battling to reduce their smoking rates, where regulations are not dissimilar to regulations in Sweden. However, not all these countries are openly supportive of safer alternatives. To be truly successful and catch up with Sweden's long history of openness to smoke free alternative products, these countries should strongly consider adopting harm reduction strategies as part of tobacco control in relevant public health regulatory frameworks.





The International Multi-Stakeholder Study Group on Smoke Free Sweden will be engaging widely to elicit more views and insights to better understand Sweden's success. Nonetheless, Sweden's experience tells us that the following steps are key to driving considerable reductions in smoking prevalence:

- 1. Fundamental differentiation between combustible and non-combustible forms of tobacco and nicotine:** Recognition of the evidence that smoke free alternatives are genuinely less harmful and pose fewer risks than smoking, combined with support and encouragement for smokers, who cannot or will not quit, to switch.
- 2. Risk differentiation between various forms of tobacco and nicotine products:** The Swedish Government has recently requested the recognition and mapping of the "relative risk" of all tobacco and nicotine product categories. This could facilitate the provision of more accurate risk communication to consumers, allowing smokers to better understand the relative risk and more carefully choose the smoke free product that is most effective for them. The gold standard remains, of course, that consumers quit all forms of tobacco and nicotine altogether.
- 3. Access to smoke free alternatives to cigarettes:** Tobacco control measures alone are not sufficient. Access to smoke free alternatives is critically important. In Sweden, snus, oral nicotine pouches, e-cigarettes and heated tobacco are all available, and can be bought both on and offline.
- 4. Educating the public on the smoke free alternatives:** No product is risk-free but being able to achieve a risk reduction of 95% or higher will translate into significant benefits for smokers who quit. Smokers need access to evidence-based information about better alternatives to smoking, especially in view of a spate of misinformation about their safety. For example, a recent survey conducted in the United Kingdom found that two thirds of smokers believed e-cigarettes to be just as harmful as cigarettes, despite evidence showing they are at least 95% less harmful.
- 5. Consumer acceptance:** Smoke free alternatives must also be genuinely acceptable to smokers as a better alternative to cigarettes. For this to be the case, products need to be satisfying and capable of being smokers' first preference – which means ensuring a range of flavours and nicotine concentrations for consumers to buy. In a nutshell, there is a need for clear differentiation between the treatment of cigarettes and alternative products that make it easier for smokers to switch.
- 6. Affordability:** Policy settings should support the adoption of reduced harm, smoke free alternatives by making them more affordable than the most harmful combustible cigarettes. This means low or no excise on smoke free alternatives, which in turn eliminates financial barriers to switching away from cigarettes.

Taken together...

these learnings will help countries struggling to beat smoking. It is our view that if the policies and approach of Sweden are replicated, countries around the world will be able to become smoke free...

just as Sweden has done



About the Authors



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Dr. Delon Human is a physician, published author, international speaker and health care consultant specialising in global health strategy, corporate and product transformation, harm reduction and health communication. He has acted as an adviser to three WHO Directors-General and to the UN Secretary-General on global public health strategies.



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References

1. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022.](#)
2. European Commission, [Special Eurobarometer 506, 2021.](#)
3. European Commission, [Special Eurobarometer 506, 2021.](#)
4. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022.](#)
5. European Commission (2021) [Public Health, Tobacco Overview.](#)
6. Ramström, L. (2020) ["Institute for Tobacco Studies. Death rates per 100,000 attributable to tobacco – Sweden and the rest of the EU in 2019. Compiled from The Global Burden of Disease Study"](#)
7. Snus Commission (2017) [Snus saves lives: A study of snus and tobacco-related mortality in the EU](#)
8. Data extracted from [Global Burden of Disease Database, 2019.](#) Calculations detailed in attached excel (figure 3 sheet).
9. Eurostat, Cancer Statistics - [Specific Cancers, 2019.](#)
10. European Commission, Eurobarometer 82.4 Attitudes of Europeans towards tobacco, 2015.
11. European Commission, [Special Eurobarometer 506, 2021.](#)
12. World Health Organization, [WHO global report on trends in tobacco smoking 2000-2025. third edition, 2019.](#)
13. Harm Minimization and Tobacco Control: [Reframing Societal Views of Nicotine Use to Rapidly Save Lives](#)
14. Benowitz NL, Hukkanen J, Jacob P. (2009) [Nicotine chemistry, metabolism, kinetics and biomarkers. Handb Exp Pharmacology](#)
15. World Health Organization, [Framework convention on tobacco control, 2003.](#)
16. Royal College of Physicians, [Nicotine without smoke: Tobacco harm reduction, 2016.](#)
17. Oral Nicotine Commission (2020) [An introduction to oral nicotine delivery systems](#)
18. Oxford University, [Latest Cochrane Review finds high certainty evidence that nicotine e-cigarettes are more effective than traditional nicotine-replacement therapy \(NRT\) in helping people quit smokin, 2022.](#)
19. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022.](#)
20. The Public Health Agency of Sweden, [Combined follow-up on the Swedish ANDT-strategy 2016-2020, 2020](#)
21. Government proposal 2017/18:156 [New law on tobacco and similar products](#)
22. European Commission, [Special Eurobarometer 506, 2021.](#)
23. Government Offices of Sweden, [ANDT-strategy for 2016-2020, 2016](#)
24. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022.](#)
25. World Bank Population total database, 2022. Available at: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SE>

26. Figures post 2012, The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#) Pre 2012 extracted from [Karl Fagerstrom, the case of snus](#) (starting from 2:40)
27. Government Offices of Sweden, [ANDT-strategy for 2016-2020](#), 2016
28. European Commission, [REPORT FROM THE COMMISSION TO THE COUNCIL on the implementation by the Kingdom of Sweden of the measures necessary to ensure that oral tobacco is not placed on the market in other Member States](#) /* COM/2010/0399 final, 2010.
29. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022](#).
30. European Commission, [Special Eurobarometer 506](#), 2021.
31. European Commission, [Special Eurobarometer 506](#), 2021.
32. European Commission, [Special Eurobarometer 506](#), 2021.
33. European Commission, [Special Eurobarometer 506](#), 2021.
34. German Federal Ministry for Health (2022) [Smoking](#)
35. Santé publique France (2021) [On the occasion of World No Tobacco Day on May 31, 2021, the Ministry of Solidarity and Health welcomes all the actions undertaken to strengthen the fight against tobacco](#)
36. Italian Superior Institute of Health (2022) [Smoking: Italy reports almost 800,000 smokers more than in 2019 and the consumption of heated tobacco products has tripled](#)
37. Royal College of Physicians, [Nicotine without smoke: Tobacco harm reduction](#), 2016.
38. Mary Rezk-Hanna et al., [“Associations of Smokeless Tobacco Use with Cardiovascular Disease Risk: Insights from the Population Assessment of Tobacco and Health Study.”](#) Nicotine & Tobacco Research 24, no. 7 (January 6, 2022): 1063–70
39. WHO International Agency for Research on Cancer, [Estimated age-standardized incidence rates](#) (World) (2022)
40. [Global Burden of Disease Database](#), 2019.
41. Eurostat, [Cancer Statistics - Specific Cancers](#), 2019.
42. WHO International Agency for Research on Cancer, [Estimated age-standardized incidence rates](#) (World) (2022)
43. WHO International Agency for Research on Cancer, [Estimated age-standardized incidence rates](#) (World) (2022)
44. Global [Burden of Disease Database](#), 2019.
45. Data extracted from [Global Burden of Disease Database](#), 2019. Calculations detailed in attached excel (figure 3 sheet).
46. [Global Burden of Disease Database](#), 2019.
47. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year, 2022](#).
48. European Commission, [Special Eurobarometer 506](#), 2021.
49. Eurostat, [Smoking of tobacco products by sex, age and educational attainment level](#), 2022
50. Calculation based on smoking prevalence rates from The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), and population figures from Statistics Sweden [Population by age and sex year 1860-2021 database](#)
51. Calculation based on smoking prevalence rates from The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), and population figures from Statistics Sweden [Population by age and sex year 1860-2021 database](#)

52. Figures compiled from combination of Fagerstrom, K. [The case of snus](#), presented at the 2nd Scientific Summit on Tobacco Harm Reduction May 2019 and The Public Health Agency of Sweden [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
53. Kozlowski LT, Abrams DB. [Obsolete tobacco control themes can be hazardous to public health: The need for updating views on absolute product risks and harm reduction](#). BMC Public Health [Internet]. 2016 May 24; 16 (article 432).
54. U.S. Food & Drug Administration, [FDA grants first-ever modified risk orders to eight smokeless tobacco products](#), 2019.
55. [Rapport de la Commission de la sécurité sociale et de la santé publique](#)
56. David Sundén, Lakeville Economic Consulting, [The potential impact of Swedish snus on smoking-related harm in the EU \(2021\)](#)
57. Sohlberg, T & Wennberg, P. ,”[Snus cessation patterns - a long-term follow-up of snus users in Sweden](#)”, Harm Reduction Journal, 2019.
58. Royal College of Physicians, [Nicotine without smoke: Tobacco harm reduction](#), London: RCP; 2016 April.
59. World Health Organization, WHO Global Report: [Mortality attributable to tobacco](#), Geneva: World Health Organization; 2012. 392.
60. European Commission, [Special Eurobarometer 506](#), 2021.
61. Figures compiled from combination of Fagerstrom, K. [The case of snus](#), presented at the 2nd Scientific Summit on Tobacco Harm Reduction May 2019 and The Public Health Agency of Sweden [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
62. European Commission, [Eurobarometer 82.4 Attitudes of Europeans towards tobacco](#), 2015.
63. European Commission, [Special Eurobarometer 506](#), 2021.
64. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
65. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
66. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
67. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
68. The Public Health Agency of Sweden, [Use of tobacco and nicotine products \(self-reported\) by age, gender and year](#), 2022.
69. Oral Nicotine Commission (2020) [An introduction to oral nicotine delivery systems](#)
70. Swedish Parliament, [Tougher rules for new nicotine products: The Social Committee’s report](#), 2022.
71. <https://pubmed.ncbi.nlm.nih.gov/34695685/>
72. <https://pubmed.ncbi.nlm.nih.gov/31978316/>
73. Swedish Parliament, [Excise taxes on nicotine-containing consumer products after the year 2023](#). Answer to written question 2021/22:1477 answered by Finance Minister Mikael Damberg, 2022.
74. Smoke Free Partnership (2022) [2022 Smokefree Map](#).
75. Snus Commission, [Snus saves lives](#). A study of snus and tobacco-related mortality in the EU, 2017.

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