



Nordic Welfare  
Centre

# **Use of nicotine products among youth in the Nordic and Baltic countries**

# Contents

<b>FOREWORD</b> .....	<b>3</b>
<b>SUMMARY</b> .....	<b>5</b>
<b>INTRODUCTION</b> .....	<b>7</b>
<b>METHODS</b> .....	<b>9</b>
Data .....	9
Methodological considerations .....	10
Presentation of data sources .....	10
<b>DEVELOPMENT IN NICOTINE PRODUCT USE AMONG YOUTH</b> .....	<b>14</b>
Cigarettes .....	14
E-cigarettes .....	17
Oral nicotine products .....	20
<b>REGULATIONS ACROSS THE NORDIC AND BALTIC COUNTRIES</b> .....	<b>23</b>
Common regulations .....	23
Summary of national regulations .....	25
Overall guide to understanding figures on regulations .....	26
Nordic countries .....	27
Baltic countries .....	39
<b>DISCUSSION AND IMPLICATIONS</b> .....	<b>45</b>
Wrapping up the development in new nicotine product use .....	45
Perspectives on regulations across the Nordic and Baltic countries .....	47
<b>ABBREVIATIONS</b> .....	<b>51</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>52</b>
<b>REFERENCES</b> .....	<b>54</b>
<b>ABOUT THE PUBLICATION</b> .....	<b>66</b>

This publication is also available online in a web-accessible version at:

[https://nordicwelfare.org/pub/Use\\_of\\_nicotine\\_products\\_among\\_youth\\_in\\_the\\_Nordic\\_and\\_Baltic\\_countries\\_-\\_An\\_overview/index.html](https://nordicwelfare.org/pub/Use_of_nicotine_products_among_youth_in_the_Nordic_and_Baltic_countries_-_An_overview/index.html)

# FOREWORD



*Image: Alamy*

Nicotine is a toxic and highly addictive substance found in cigarettes and other tobacco products. In recent years, new nicotine products without tobacco, such as e-cigarettes and nicotine pouches, have entered the market, appealing particularly to children and young people.

As children and young people are especially vulnerable to the harmful effects of nicotine, it is critically important to protect them from becoming addicted to nicotine, regardless of the product. Nicotine products pose a threat to both individual health and public health.

This report focuses on the use of nicotine products among children and young people across the Nordic and Baltic countries. Among other aspects, it presents a mapping and analysis of the development in the use of nicotine products among youth in 2018–2024.

The report has gathered Nordic and Baltic information and data to provide a concise account of a constantly evolving issue. We hope that this snapshot of the situation can contribute to creating future preventive initiatives on nicotine products.

The Nordic Welfare Centre extends its sincere thanks to Research Assistant Stine Arp and Senior Researcher Lotus Sofie Bast from the National Institute of Public Health, University of Southern Denmark, for authoring the report.

Gratitude is also extended to the Nordic Tobacco Network and everyone who contributed with relevant knowledge, information, and other assistance to the report from across the Nordic and Baltic countries. Our thanks can be found under [Acknowledgements](#).

The report contributes to the Nordic Council of Ministers' Vision 2030 for a socially sustainable Nordic Region and aligns with goal 2: The Nordic Region must promote good physical and mental health, well-being, and quality of life for all in the co-operation Programme for Health and Social Affairs 2025–2030. Measures must be

taken to prevent unhealthy lifestyle habits, such as the use of nicotine products, with a specific focus on children and young people. This report supports that work and contributes to the Nordic benefit and added value of knowledge sharing and dissemination of measures across borders.

The project, proposed by the Nordic Welfare Centre Advisory Board, is funded through the Nordic Welfare Centre basic funding.

**Eva Franzén**

Director

Nordic Welfare Centre

**Nadja Frederiksen**

Project Manager

Nordic Welfare Centre

# SUMMARY



Image: iStock

This report provides an overview of the trends in nicotine product use among youth, as well as regulatory developments across the Nordic and Baltic countries from 2018 to 2024. Overall, there is a growing use of new nicotine products across countries, and regulative initiatives are still evolving in response to this.

## Increasing use of new nicotine products among youth

While cigarette smoking continues to decline among youth in most countries, daily and occasional use of e-cigarettes and oral nicotine products has increased significantly in nearly all included countries. Since 2021, there has been a rapid increase in most of the included countries in e-cigarette use among youth, likely due to the introduction of disposable e-cigarettes. Similarly, the use of oral nicotine products, i.e. snus and nicotine pouches, is increasing in this region. A notable trend is the growing popularity among girls. In most included countries, girls' use of e-cigarettes has exceeded the use among boys. Oral nicotine products are still most prevalent among boys, although the gap between genders seems to narrow.

## Regulations on new nicotine products across countries

Frameworks such as the Tobacco Product Directive (TPD) and the WHO Framework Convention on Tobacco Control (FCTC) make cigarette regulations relatively uniform across the Nordic and Baltic countries. However, regulations for new nicotine products vary markedly. For e-cigarettes, there are widely differing restrictions across the Nordic and Baltic region in terms of characteristic flavours, taxation, and the plain packaging requirement. Regulations on oral nicotine products are similarly inconsistent. For example, there is a sales ban on snus in all countries, except for Sweden and Norway. Also, nicotine pouches are subject to different regulations regarding taxation, use restrictions, restriction of characteristic flavours, and advertising across the Nordic and Baltic countries.

## Implications of the findings

The findings of the report underline the importance of a continued strategic political focus – both within and between countries. Harmonising regulations across the Nordic and Baltic countries could help secure a more unified and proactive approach in preventing the use of new nicotine products among youth. Regulations on new nicotine products are still developing; hence, concluding on their effectiveness would not be meaningful at present. However, sharing how the Nordic and Baltic countries are working with this extremely important public health challenge can be used to inform and inspire future preventive initiatives.

# INTRODUCTION



Image: iStock

## The market of new nicotine products

In the past decade, the market of tobacco and nicotine products has changed towards new nicotine-containing products. While a global decline in cigarette use has been ongoing for decades (World Health Organization, 2024b), there is now a growing use of other nicotine products marketed by the tobacco industry as less harmful than cigarettes (O'Connor et al., 2022). These new products include e-cigarettes and oral nicotine products often laced with sweet and fruity flavours. Such products have gained popularity among youth (O'Connor et al., 2022). Several Nordic countries have seen an increase in the use of e-cigarettes and oral nicotine products, including snus or nicotine pouches among school children and older youth (Kristjansson et al., 2019; Lund et al., 2024; Tokle & Bakken, 2023; Zetterqvist, 2024). This may be explained by the products' colourful appearance and well-known flavours. Also, their discreet nature implies that the products can be used in places where smoking is normally prohibited, e.g., at school and in public areas (O'Connor et al., 2022).

This report will focus on the use of electronic cigarettes, in short e-cigarettes, and oral nicotine products. Heated tobacco products (HTPs) are not included in this report, as there is a low prevalence of use among youth in the Nordic and Baltic countries. Furthermore, cigarette use will be included as a reference to the newer products. **E-cigarettes**, some of them better known as vapes or disposables, come in many forms and shapes. Overall, they are battery-operated electronic systems where the users inhale aerosols created by heating up e-liquids, typically containing nicotine and other additives (National Institutes of Health; U.S. Department of Health and Human Services, 2020; World Health Organization, 2024a). **Oral nicotine products** are defined as non-combustible nicotine products and are delivered orally. These products are typically placed between the teeth and gum and deliver nicotine through the oral mucosa. This category of products includes snus (powdered tobacco leaves in pouches) and nicotine pouches (pouches containing nicotine salts, cellulose, and other additives but not tobacco) (Robichaud et al., 2020).

Several studies have shed light on the indisputable effect of structural regulations in reducing the use of cigarettes in both adult and young populations (Rod et al., 2024; Vestbo et al., 2018). It is critical to implement national regulations on new nicotine products, as more youth than ever are using the products at a younger age and international regulations have not addressed these products yet.

## Health consequences of nicotine use in childhood and adolescence

Nicotine is a toxic alkaloid originating from the tobacco leaves, where it serves as a defence mechanism against insects and other threats to the tobacco plant. Nicotine is the addictive component in tobacco products and is harmful to the human body (National Center for Chronic Disease Prevention & Health Promotion (US) Office on Smoking and Health, 2014), especially when used in adolescence (Vestbo et al., 2022). First and foremost, nicotine crosses the blood and brain barrier easily, causing neurological and cognitive impairments to the developing brain. This results in negative effects on the maturation of the brain and thus the development of attention, motivation, self-control, and emotional regulation (Jacobsen et al., 2005; Smith et al., 2015; Treur et al., 2015). Additionally, reverse associations between nicotine and mental health have been found, indicating that nicotine might induce symptoms of anxiety and depression (Goodman & Capitman, 2000; Johnson et al., 2000). Nicotine use in adolescence also increases the risk of damage to the oral mucosa and cardiovascular diseases later in life (Miluna-Meldere et al., 2024; National Center for Chronic Disease Prevention & Health Promotion (US) Office on Smoking and Health, 2014; Rungraungrayabkul et al., 2024; Vestbo et al., 2022).

The addiction to nicotine itself also has a negative impact on the everyday life of adolescents, i.e., feeling stuck in their addiction or experiencing that the joy of everyday activities is conditioned by nicotine use (Amato et al., 2021; Mathew et al., 2017; Vestbo et al., 2022). Also, the use of nicotine at a young age increases the risk of lifelong addiction and experimentation with other, potentially more harmful, substances. This is the so-called gateway effect of nicotine use (Yuan et al., 2015).

## Aim

This report explores cross-national trends in the use of new nicotine products among youth from 2018 to 2024 across the Nordic and Baltic countries of Denmark, Finland, Iceland, Norway, Sweden, Estonia, Latvia, and Lithuania.

Furthermore, the report provides illustrations of national regulations, alongside the development of the use of nicotine products (cigarettes, e-cigarettes and oral nicotine products). The report seeks to inform and inspire future tobacco and nicotine prevention efforts at both national and international levels across the Nordic and Baltic countries.



# METHODS



*Image: iStock*

## Data

Data on tobacco and nicotine product use was already collected within each participating country. Representatives from each Nordic and Baltic country provided information about relevant reports, national statistics, and other sources. The representatives were designated by the Nordic Welfare Centre, and came from national organisations, such as ministries, health authorities, or scientific institutes. In addition, supplementary searches were conducted among public health authorities and government websites to complement the information provided by the representatives. Sources were included only if they contained data on the use of nicotine products by youth under 29 years of age, both overall and stratified by gender. Data from the period 2018 to 2024 were requested. At least two data points in this period were required to be included. However, for some countries, data from certain years were unavailable, resulting in variation in periods between countries in the figures. If specific data were unpublished or unavailable, the representatives were contacted for further guidance on where to locate it. In some cases, if data was not publicly available, it was given specifically for the purpose of this report.

Information on the national regulations on nicotine products was gathered through a combination of input from the national representatives and supplementary searches on national legal websites. As part of the process, representatives from each country were given the opportunity to review the presented prevalences and regulations for their own countries. Additionally, representatives were also given the opportunity to provide insights into the results and the observed trends within their countries in order to help qualify the findings.

The content of this report was finalised in mid-December 2024, which therefore served as the cut-off date for the included data, regulations, and other information.

The products included in this report are cigarettes, e-cigarettes, and oral nicotine products (covering snus, nicotine pouches, and/or chewing tobacco – see [table 1](#)). The combined category of oral nicotine products is a response to lack of prevalence data of only nicotine pouches in some of the included countries and the fact that youth don't often distinguish between snus and nicotine pouches (Pedersen et al., 2022a).

The current use of each product in this report is defined as daily and occasional use. Generally, tobacco and nicotine use in youth has a very experimental character, and occasional smoking may turn into daily smoking over time. The use of more than one tobacco or nicotine product or a shift between products is also quite common (Heinly & Walley, 2023; Raitasalo et al., 2022). Further, experimental use at a young age may predict daily use later in life (Jordan & Andersen, 2017; Sargent et al., 2017). Therefore, when it comes to youth, occasional tobacco and nicotine product use gives cause for great concern from a public health preventive perspective.

## Methodological considerations

There are some methodological considerations to be aware of when reading this report. First, the measuring procedures, such as the definition of daily and occasional use and product definition, vary between countries (and even within some countries due to changing measures in the period). An overview of this is presented in [table 1](#). Secondly, the respondents' differing age groups also impacts the direct comparability of the cross-country prevalences and development of use. Therefore, age groups are presented in every graph to secure transparency in the interpretation of results. Lastly, one should be specifically aware of the representability of the studies included. This concerns the number of respondents, data collection in a geographic subgroup or at a national level, and use of weighting or other statistical methods to reduce the risk of bias. Details of the studies are described in the following section.

## Presentation of data sources

### **Denmark: Danish Smoking Habits 2019 + §SMOKE Study 2020–2023**

Data on cigarette, e-cigarette, and oral nicotine product use among Danish youth in 2019 comes from The Danish Smoking Habits study (Danskernes Rygevaner), carried out by the National Institute of Public Health in Denmark for the Danish Health Authority. Information on nicotine product use among youth from 2020 and onwards stems from the §SMOKE study (§RØG-undersøgelsen), also carried out by the National Institute of Public Health (Andersen & Bast, 2021; Jarlstrup et al., 2020; Jarlstrup et al., 2023; Lund et al., 2024; Pedersen et al., 2022b). Due to two

data collections in 2021, the prevalences for this year are an average of the two data collections. As with both surveys, prevalences for subgroups of 15–24-year-olds were calculated specifically for this report.

#### **Finland: Tobacco Statistics 2019–2023**

Data on cigarette, e-cigarette, and oral nicotine product use among youth in Finland was extracted from the Tobacco Statistics (Tupakkatilasto), based on the School Health Survey, a national representative questionnaire-based survey carried out by the Finnish Institute of Health and Welfare (Terveyden ja hyvinvoinnin laitos (THL), 2024). The study is conducted in classrooms among students in grades 8 and 9 of comprehensive school, as well as first- and second-year students in upper secondary schools and vocational institutions, corresponding to youth aged 14 to 20 years. The data is presented as whole (rounded) numbers without decimals. However, in this report, they are presented with a decimal point (.0), which should be taken into account when reading the report. (Terveyden ja hyvinvoinnin laitos (THL), 2024).

#### **Iceland: Public Health Watch 2018–2023**

Data on cigarette, e-cigarette, and oral nicotine product use among Icelandic youth were delivered by the Directorate of Health in Iceland. The data is based on monthly online surveys conducted by Gallup, distributed to a random sample of the Gallup attitude group above 18 years old (Directorate of Health). For this report, prevalences for the 18–24-year-olds were calculated by the Directorate of Health.

#### **Norway: Drug Survey 2018–2024**

Data on cigarette, e-cigarette, and oral nicotine product use among Norwegian youth were extracted from The Drug Survey (Rusundersøkelsen) carried out by Statistics Norway (Statistisk sentralbyrå). The interview-based Drug Survey is conducted among a randomly drawn group of 16–79-year-old Norwegian citizens. However, in 2024 data collection was a combination of web and telephone interviews (Elgesem, 2023; Elgesem & Falnes-Dalheim, 2024; Statistisk sentralbyrå, 2024; Todorovic, 2019; Torsteinsen, 2020, 2021; Torsteinsen & Holmøy, 2022). For this report, only prevalences among 16–24-year-olds were included.

#### **Sweden: National Public Health Survey 2018–2024**

Data on the use of cigarettes, e-cigarettes, and oral nicotine products among Swedish youth from 2018 till 2024 are extracted from the National Public Health Survey carried out by the Public Health Agency of Sweden. The National Public Health Survey is a nationally representative questionnaire-based survey among 16–84-year-old Swedish citizens (Folkhälsomyndigheten, 2023, 2024a, 2024b, 2024c). For this report, only prevalences among 16–24-year-olds were included.

**Estonia: Estonian Adult Population Health Behaviour Study 2018–2022**

Data on the use of cigarettes, e-cigarettes, and oral nicotine products among Estonian youth were obtained from the Health Behaviour Study among Estonian Adult Population from 2018, 2020, and 2022 by The Health Development Institute in Estonia (Reile et al., 2019; Reile & Veideman, 2021, 2023). For this report, only prevalences among 15–24-year-olds were included.

**Latvia: Health Behaviour among Latvian Adult Population 2018–2022**

Data on the use of cigarettes and e-cigarettes among Latvian youths were extracted from the Health Behaviour among Latvian Adult Population Study, carried out in 2018, 2020, and 2022 by the Centre for Disease Prevention and Control and Rīga Stradiņš University (Grinberga et al., 2019, 2021, 2023). Adequate information on the daily or occasional use of e-cigarettes was not available in the 2018 survey. Similarly, adequate prevalences on daily or occasional use of oral nicotine products among Latvian youth were not available. For this report, only prevalences among 16–24-year-olds were included.

**Lithuania: ESPAD 2019+2024**

Data on the use of cigarettes and e-cigarettes among Lithuanian youth are extracted from the European School Survey Project on Alcohol and Other Drugs (ESPAD) in 2019 and 2024, carried out by the Drug, Tobacco and Alcohol Control Department (NTAKD). The data includes 15–16-year-olds, and data collection took place as a random sample of school classes to secure representativeness. Prevalences on daily or occasional use of oral nicotine products among Lithuanian youth were only available for 2024, thus making developing graphs unfeasible (The ESPAD Group, 2020).

**Table 1. Overview over data sources and definitions**

	Study	Population, age	Weighting for non-response	Number of respondents	Definitions og product use		
					Cigarettes	E-cigarettes	Oral nicotine products
Denmark	2019: Danish Smoking Habits (Danskernes Rygevaner)	15–24	Age, gender, educational attainment, region, family income, family type, and SES.	2019: 2,010	Use of cigarettes every day, at least once a week, or less often than every week	Use of electronic cigarettes / vapes every day, at least once a week, or less often than every week	Use of snus and/or chewing tobacco and/or nicotine pouches every day, at least once a week, or less often than every week
	2020–2023: §SMOKE study (§RØG-undersøgelsen)		Age and gender	2020: 9,327; 2021A: 9,198; 2021B: 7,169; 2022: 6,396; 2023: 6,496			
Finland	2019–2023: School Health Survey (Kouluterveyskysely)	14–20	No weighting	2019: 155,290; 2021: 160,796; 2023: 151,224	Daily or occasional use of cigarettes	Daily or occasional use of e-cigarettes	Daily or occasional use of snus <sup>2</sup>
Iceland	2018–2023: Monthly online surveys conducted by Gallup	18–24	Age and gender	2018: 276; 2019: 618; 2020: 631; 2021: 516; 2022: 486; 2023: 369	Use of cigarettes daily or less than daily	Use of e-cigarettes / vapes in the past 30 days	Use of snus and/or nicotine pouches <sup>1</sup> daily or less often than daily
Norway	2018–2024: Drug Survey (Rusundersøkelsen)	16–24	Age, gender, educational attainment, and region	2018: 1,087; 2019: 1,100; 2020: 1,046; 2021: 1,013; 2022: 869; 2023: 866; 2024: 660	Daily and occasional use of cigarettes	Daily and occasional use of e-cigarettes	Daily and occasional use of snus (including nicotine pouches)
Sweden	2018–2024: National Public Health Survey	16–29	Gender, age, education attainment, birth country, marital status, and city size	2018: 2,111; 2020: 2,147; 2021: 2,191; 2022: 1,794; 2024: 1,872	Daily or occasional use of cigarettes	Daily or occasional e-cigarette use	Daily or occasional snus use (both tobacco-free nicotine snus and snus that contains tobacco) <sup>3</sup>
Estonia	2018–2022: Health Behaviour among Estonian Adult Population	15–24	No weighting	2018: 306; 2020: 300; 2022: 263	Use of cigarettes daily or occasionally	Current use of e-cigarettes every day, a few times a week, or a few times a month	Currently using snus and/or nicotine pouches every day, a few times a week, or a few times a month
Latvia	2018–2022: Health Behaviour among Latvian Adult Population	16–24	Age, gender, type of location, region, and nationality	2018: 525 (cigarettes); 2020: 540 (cigarettes) / 178 (e-cigarettes); 2022: 452 (cigarettes) / 242 (e-cigarettes)	Use of cigarettes daily or occasionally	Current use of e-cigarettes every day, a few times a week, or a few times a month	
Lithuania	2019–2024: European School Survey Project on Alcohol and Other Drugs (ESPAD)	15–16	No weighting	2019: N = 2,393; 2024: N = 4,792	Use of cigarettes at any time in the past 30 days	Use of e-cigarettes at any time in the past 30 days	

<sup>1</sup> Nicotine pouches were included from 2021 onwards.

<sup>2</sup> Additionally, nicotine pouches were asked separately in 2023. The prevalence is available only by school type, not for the population aged 14–20.

<sup>3</sup> Nicotine pouches were explicitly included from 2022 onwards. Prior to 2022, the question was: 'Do you snus?'

# DEVELOPMENT IN NICOTINE PRODUCT USE AMONG YOUTH

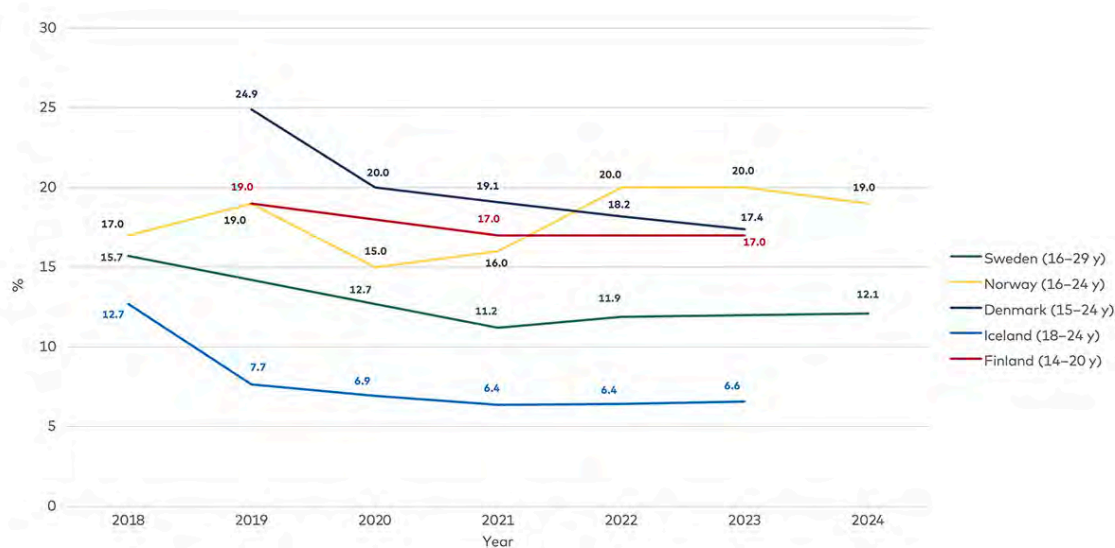


Image: Johnér

## Cigarettes

In general, current cigarette smoking among youth in the Nordic and Baltic countries has been slowly declining from 2018 to 2024. In the following, the development in cigarette use among youth, overall and stratified by gender, is presented separately for the Nordic and Baltic countries. Only Norway, Sweden, and Lithuania had available data for 2024 by mid-December 2024.

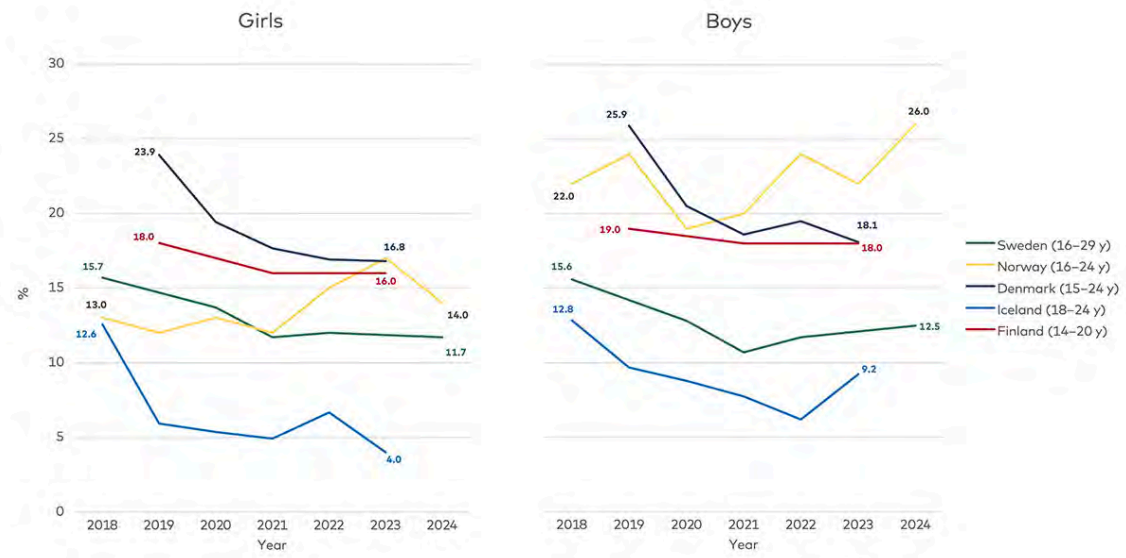
Figure 1.1. Cigarette smoking in the Nordic countries



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 1.1. presents the development in cigarette smoking in the Nordic countries since 2018. Except for Norway, all included countries experienced an overall reduction in youth cigarette use. The latest data indicates that smoking prevalences among youth are highest in Norway (19% in 2024) and lowest in Iceland (6.6% in 2023).

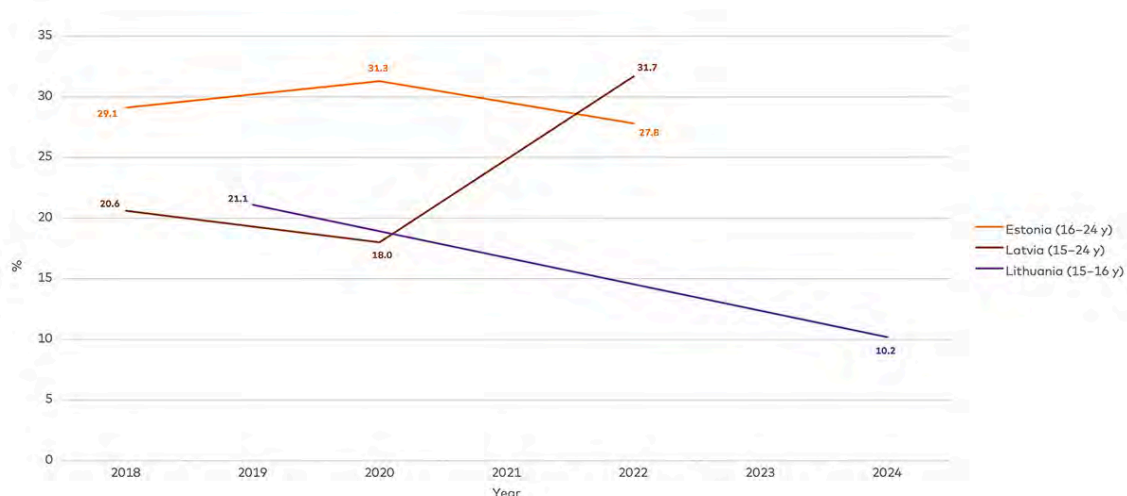
**Figure 1.2. Cigarette smoking in the Nordic countries, by gender**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 1.2. shows the development in prevalences for girls and boys separately in the Nordic region. In all the countries where cigarette use has decreased, the use has declined among both boys and girls. In Norway, the observed increase in cigarette use is most prominent among boys: from 22% in 2018 to 26% in 2024.

**Figure 1.3. Cigarette smoking in the Baltic countries**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 1.3. presents the development in cigarette smoking in the Baltic countries. Smoking prevalences have decreased among Estonian and Lithuanian youth but have increased rapidly among Latvian youth. The most recent data available indicates that cigarette use is highest in Latvia (31.7% in 2022) and lowest in Lithuania (10.2% in 2024). However, this comparison needs to be qualified, as prevalences from 2024 were not yet available in Latvia and Estonia and the Lithuanian respondents (aged 15–16) are not the same age as the respondents (15–24) in Latvia and Estonia.

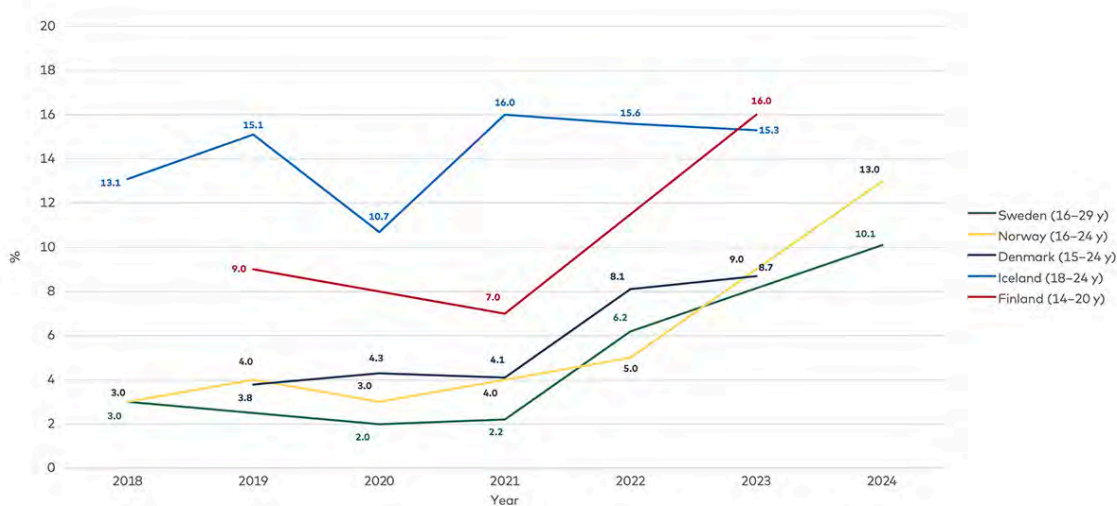
The gender-specific trends in cigarette use vary across the Baltic countries. Among Latvian youth, the increase in cigarette use appears more pronounced among boys than girls. In contrast, in Estonia, cigarette use seems to have risen among girls and declined among boys. In Lithuania, cigarette use is declining similarly among boys and girls (data not shown).



## E-cigarettes

Since 2018, most of the Nordic and Baltic countries have seen a rapid increase in the use of e-cigarettes among youth. Particularly from 2021 and onwards, the prevalences have increased rapidly in most of the countries. In the following, the development in e-cigarette use among youth, overall and stratified on gender, is presented separately for the Nordic and Baltic countries. Only Norway, Sweden, and Lithuania had available data for 2024 by mid-December 2024.

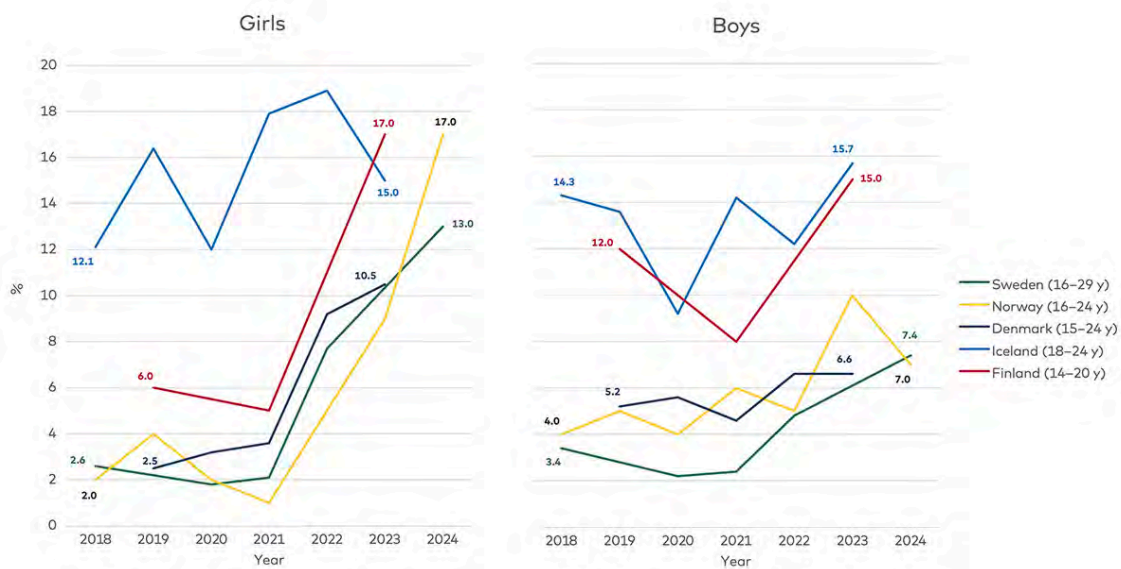
**Figure 2.1. E-cigarette use in the Nordic countries**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 2.1. shows the development in use of e-cigarettes among youth in the Nordic countries. All countries have experienced an increase in the use of e-cigarettes among youth, with a particularly rapid rise from 2021 and onwards. In Iceland, however, the pattern is slightly different, as prevalences have remained relatively consistently high throughout the period, without experiencing a further increase in 2021. The most recent available figures (either 2023 or 2024) show that the use of e-cigarettes is most prevalent among Finnish youth (16.0% in 2023) and least prevalent among Danish youth (8.7% in 2023).

**Figure 2.2. E-cigarette use in the Nordic countries, by gender**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 2.2. presents the development in prevalences separately for girls and boys in the Nordic region. The increase in use among youth in the Nordic countries is markedly more pronounced among girls than among boys. The increase in use from 2021, seen in all countries except for Iceland, is larger among girls than among boys. As a result, girls have now surpassed the boys in terms of use of e-cigarettes in all countries except Iceland. The difference between genders seems especially high in Norway, where the figure is 17% among girls compared to 7% among boys.

**Figure 2.3. E-cigarette use in the Baltic countries**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

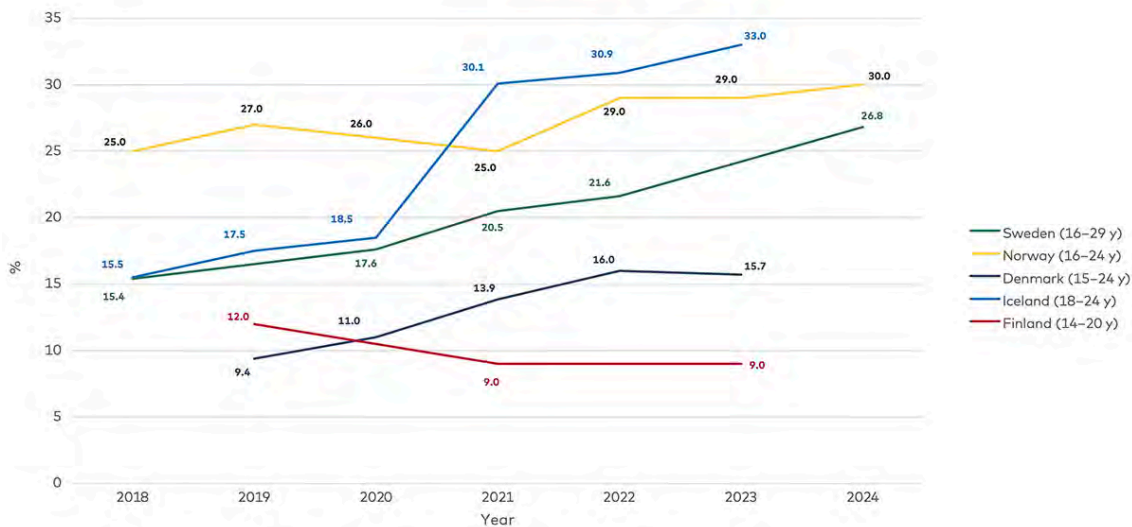
Figure 2.3. shows the development in e-cigarette use in the Baltic countries. The use of e-cigarettes has increased among Latvian and Estonian youth and decreased among Lithuanian youth. In 2022, the use of e-cigarettes was therefore most prevalent among Latvian youth (46.3%) and least prevalent among Lithuanian youth (20.6%). However, it should be noted that respondents in Lithuania were aged 15–16 as opposed to the 15–24-year-old respondents in Latvia and Estonia.

In Estonia, the observed increase in the use of e-cigarettes appears to be more pronounced among girls than boys. In contrast, in Latvia, the increase is more pronounced among boys than girls. In Lithuania, where a decrease in e-cigarette use is observed, the decline is more pronounced among boys than girls (data not shown).

## Oral nicotine products

The use of oral nicotine products among youth has increased in most Nordic countries since 2018. Oral nicotine products cover both snus and nicotine pouches and, in some cases, also chewing tobacco (see [table 1](#)). In the following, the development in oral nicotine product use among youth, overall and stratified by gender, is presented separately for the Nordic and Baltic countries. Only Norway and Sweden had available data for 2024 by mid-December 2024.

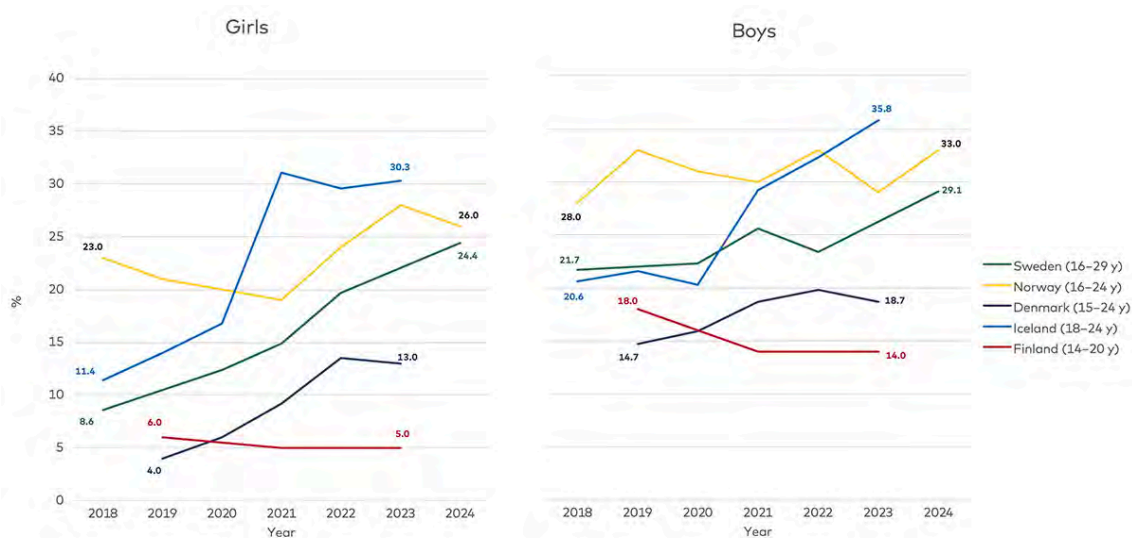
**Figure 3.1. Oral nicotine product use in the Nordic countries**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).  
 Comments: Measures for Finland only included snus. This was also the case for Iceland until 2021, when nicotine pouches were included in the measure, and for Sweden until 2022, when nicotine pouches were explicitly included in the measure.

Figure 3.1. presents the development in the use of oral nicotine products among youth in the Nordic countries. All countries, except for Finland, experienced an increase in the use of oral nicotine products. The most recent prevalences (either 2023 or 2024) indicate that the use of oral nicotine products is most prevalent among Icelandic youth (33.0%) and least prevalent among Finnish youth (9.0%). However, in Finland, this indicator covers only snus. Additionally, it should be noted that the significant increase among Icelandic youth seen from 2020 to 2021 coincides with the inclusion of nicotine pouches in the Icelandic measure of oral nicotine products.

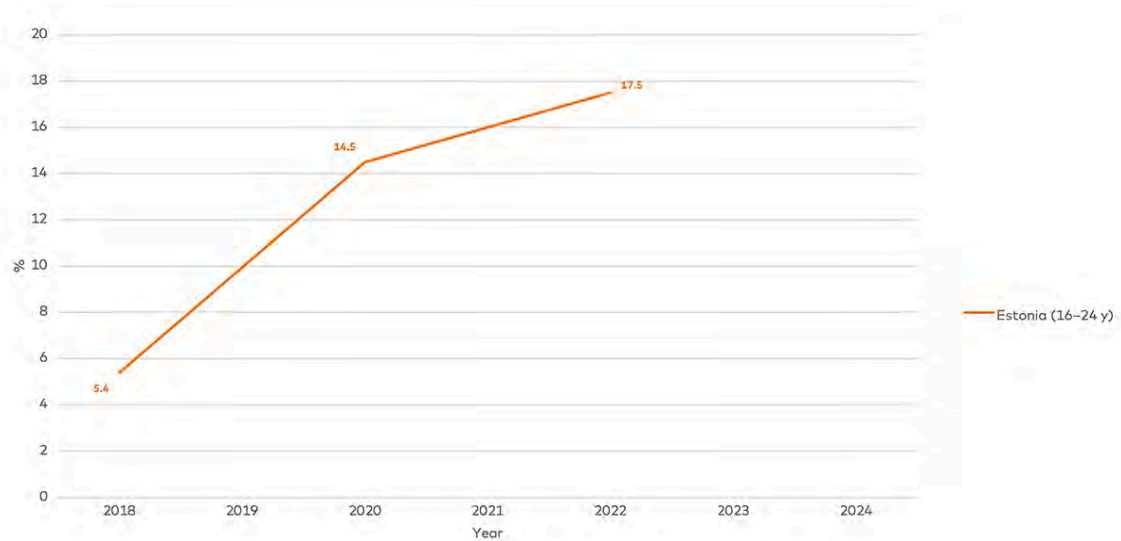
**Figure 3.2. Oral nicotine product use in the Nordic countries, by gender**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).  
 Comments: Measures for Finland only include snus. This was also the case for Iceland until 2021, when nicotine pouches were included in the measure, and for Sweden until 2022, when nicotine pouches were explicitly included in the measure.

Figure 3.2. shows the development in prevalences separately for girls and boys in the Nordic region. Among the countries experiencing an increase in oral nicotine product use in the Nordic countries, the increase is more pronounced among girls than among boys. However, the use of oral nicotine products is still more prevalent among boys than girls in all the included countries.

**Figure 3.3. Oral nicotine product use in the Baltic countries**



Sources: Studies underlying the presented data are described in detail under [Presentation of data sources](#).

Figure 3.3. presents the development in the use of oral nicotine products among youth in Estonia since 2018. Due to lack of adequate data on daily and occasional use of oral nicotine products in Latvia and Lithuania, data on oral nicotine product use is not presented. In Estonia, the use of oral nicotine products has tripled since 2018. This increase is more pronounced among Estonian boys than girls (data not shown).

# REGULATIONS ACROSS THE NORDIC AND BALTIC COUNTRIES



Image: iStock

## Common regulations

The European Union **Tobacco Products Directive (2014/40/EU) (TPD)** was adopted in May 2014 and entered into force in May 2016 (Directive 2014/40), applying to all member states of the EU. Among the Nordic and Baltic countries, it included Denmark, Estonia, Finland, Latvia, Lithuania, and Sweden. This directive takes into account the WHO Framework Convention on Tobacco Control FCTC (described below) and adds several rules on the sale of tobacco products and electronic cigarettes to the previous directive, adopted in 2001. Among the regulations are: **1)** prohibition of cigarettes, roll-your-own, and heated tobacco products with characterising flavourings, **2)** mandatory health warnings on tobacco products, **3)** prohibition of tobacco for oral use (does not apply to Sweden), **4)** nicotine-containing liquid used to refill containers or disposable electronic cigarettes must not exceed a nicotine concentration of 20 mg/ml, **5)** tanks for electronic cigarettes and disposables must not exceed 2ml e-liquid. Refill bottles may not exceed 10 ml e-liquid, **6)** electronic cigarettes must be child- and tamper-proof. As Norway and Iceland are not members of the EU, but belong to the European Economic Area (EEA), there is a separate process for implementing this directive. As a result, the TPD is expected to enter into force in Norway in 2025. However, both countries have already implemented some TPD measures into national laws. Furthermore, Norway (alongside Sweden) is exempt from the TPD ban on oral tobacco products also called 'snus' (Helsedirektoratet, 2023).

Besides the TPD, the global **Framework Convention on Tobacco Control (FCTC)** developed by the World Health Organization has been in force since February 2005. Some of the obligations laid out in the FCTC are: **1)** implementation of tax and price measures to reduce the demand for tobacco products, **2)** provide protection from tobacco smoke exposure in several public places, **3)** ensure that product packaging and labelling must not be misleading and must carry health warnings, **4)** undertake ban on tobacco advertising, promotion, and sponsorship, **5)** prohibit tobacco sales to minors, etc. Further, all parties of the FCTC are obligated to

prevent and reduce nicotine addiction (World Health Organization, 2003). All of the included Nordic and Baltic countries have joined the FCTC (United Nations, 2024).

The current TPD and FCTC do not include tobacco-free nicotine products, except for electronic cigarettes. For example, nicotine pouches are not consistently regulated in the EU or globally. However, all parties of the FCTC are obligated to develop appropriate policies for preventing and reducing nicotine addiction in general.



**Table 2. Summary of national regulations in the Nordic and Baltic countries**

	Sales ban	Plain packaging	Health warnings	Flavour ban	Point of sale ban	Advertising ban	Smoke-/nicotine-free places	Age limit	Taxes* €
<b>Cigarettes</b>									
Denmark	-	✓	✓	✓	✓	✓	✓	18 y	min. 0.26
Finland	-	✓	✓	✓	✓	✓	✓	18 y	0.37
Iceland	-	-	✓	-	✓	✓	✓	18 y	0.261
Norway	-	✓	✓	-	✓	✓	✓	18 y	0.27
Sweden	-	-	✓	✓	(✓)	✓	✓	18 y	min. 0.17
Estonia	-	-	✓	✓	✓	✓	✓	18 y	0.17
Latvia	-	-	✓	✓	✓	✓	✓	20 y <sup>1</sup>	min. 0.16
Lithuania	-	-	✓	✓	-	✓	✓	18 y	min 0.15 <sup>1</sup>
<b>E-cigarettes</b>									
Denmark	-	✓	✓	(✓)	✓	✓	✓	18 y	0.20–0.34
Finland	-	✓	✓	✓	✓	✓	✓	18 y	0.3
Iceland	-	-	✓	-	✓	✓	✓	18 y	0.28–0.41 <sup>1</sup>
Norway	-	-	-	✓	✓	✓	✓	18 y	0.44
Sweden	-	-	✓	-	(✓)	(✓)	✓	18 y	0.36
Estonia	-	-	✓	(✓)	✓	✓	✓	18 y	0.221
Latvia	-	-	✓	✓ <sup>1</sup>	✓	✓	✓	20 y <sup>1</sup>	0.24
Lithuania	-	-	✓	✓	✓ <sup>1</sup>	✓	✓	18 y	0.631
<b>Nicotine pouches</b>									
Denmark	-	-	✓	-	✓	✓	✓	18 y	0.013
Finland	-	-	(✓)	-	✓	✓	-	18 y	min 0.14
Iceland	-	-	✓	-	✓	✓	✓	18 y	0.05–0.14 <sup>1</sup>
Norway	✓								
Sweden	-	-	✓	-	(✓)	(✓)	-	18 y	0.02
Estonia	-	-	✓	-	✓	✓	✓	18 y	0.221
Latvia	-	-	✓	✓ <sup>1</sup>	✓	✓	✓	20 y <sup>1</sup>	0.14
Lithuania	✓								
<b>Snus</b>									
Denmark	✓								
Finland	✓								
Iceland	✓								
Norway	-	✓	✓	-	✓	✓	✓	18 y	0.11
Sweden	-	-	✓	-	(✓)	✓	-	18 y	0.04
Estonia	✓								
Latvia	✓								
Lithuania	✓								

\*Taxes per cigarette, per ml of e-liquid, and per gram of nicotine pouches and snus. In Denmark, the tax for nicotine pouches is per mg of nicotine. In Norway the tax on snus is per gram of the packaging.

<sup>1</sup> Entering into force 1 January 2025.

## Overall guide to understanding figures on regulations

In the following sections, national regulations in the Nordic and Baltic countries are presented alongside with the development in the use of tobacco and nicotine products among the youth, for each country separately.

First, the current status of regulations on cigarettes, e-cigarettes, nicotine pouches, and snus is reported. Both nicotine pouches and snus regulations are covered, as the regulation of these products often differs within the same country. Regulations on packaging, health warnings, flavours, advertising, point of sale (POS) display, smoke-/nicotine-free places, age limits, and taxes are listed, if such regulations exist in the country. However, as cigarettes are primarily included for reference and most regulations for cigarettes are covered by the TPD, only regulations that go beyond the TPD requirements are highlighted, along with the current taxes on cigarettes. Hence, the regulations for cigarettes are not described in full detail. Overall, regulations that have entered into force or were adopted by mid-December 2024 are included. Regulative changes still under consideration at this time are not included here.

Second, a graph illustrates how the prevalence of cigarette, e-cigarette, and oral nicotine product use has evolved in the country. This graph also incorporates most of the above-mentioned regulations (and point of entry into force). It should be noted that some regulations on cigarettes that were not presented in the text may be presented here for explanatory reasons. Only the regulations located – either by search or by the representatives' review – are included in these graphs. They may thus not present a complete picture of the country's regulations.

Regulations are presented in colour-coded boxes attached to the development graph of the corresponding product. For example, in Sweden (Figure 4.5), regulations in dark green boxes are linked to the dark green curve, hence representing cigarette regulations. As oral nicotine products include both snus and nicotine pouches, light green boxes without visible outer lines indicate regulations specific to nicotine pouches, while light green boxes with darker dashed outer lines indicate regulations for snus.

White boxes with black outer lines indicate regulations that apply to all products in the graph, unless otherwise stated below the figure. Boxes on regulation are placed around the time of entry into force and may not precisely align with the timing of prevalence data collection in each country.

## Nordic countries

---



### Denmark

Regulation of tobacco and nicotine products in Denmark is covered by several laws, such as the Law on Tobacco Products (Indenrigs- og Sundhedsministeriet, 2024b), Electronic Cigarettes (Indenrigs- og Sundhedsministeriet, 2021a), and the Law prohibiting the sale of tobacco and alcohol to persons under the age of 18 (Indenrigs- og Sundhedsministeriet, 2024a). The regulatory landscape concerning tobacco and nicotine products has changed markedly over the past five years in Denmark. For example, a political agreement was reached in 2019 to strengthen tobacco controls regarding tobacco and nicotine products among youth (Sundheds- og indenrigsministeriet, 2019), followed by a prevention plan in 2023 aimed at youth (Sundheds- og indenrigsministeriet, 2023).

**Cigarettes** are regulated by the Law on Tobacco Products. Beyond the TPD 2014, Denmark has implemented plain packaging and point-of-sale (POS) display bans for cigarettes. Furthermore, the use of cigarettes is prohibited in school areas and during school hours. Cigarettes are subject to a tax of DKK 1.94 per cigarette + 1% of the retail price, which results in a minimum tax of €0.26 per cigarette, depending on the retail price (Skat, 2020).

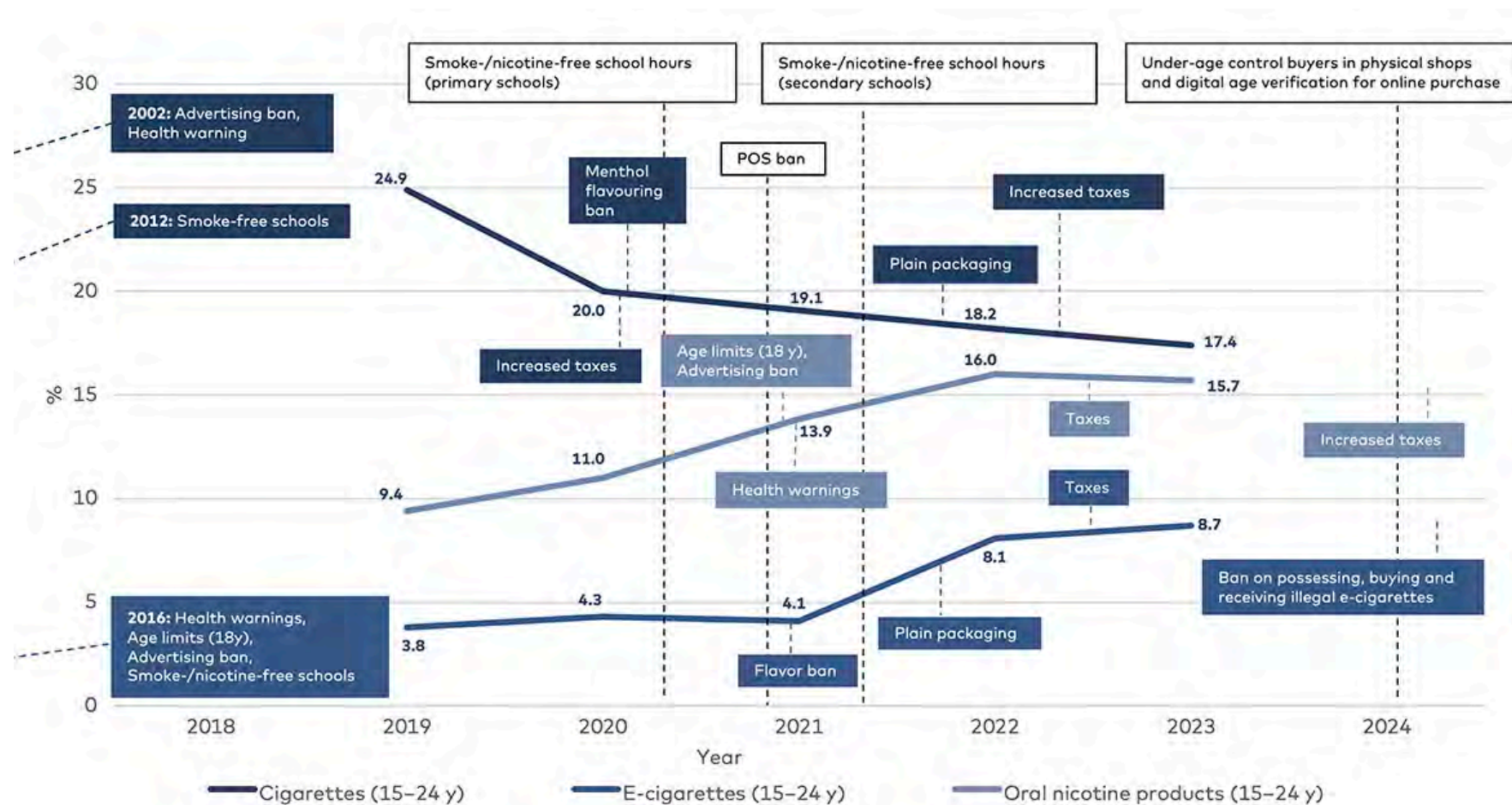
**Electronic cigarettes** are regulated by the Law on Electronic Cigarettes, which covers both battery-driven and disposable e-cigarettes. E-cigarettes must come in plain packaging and carry a health warning. The content of characteristic flavours is restricted to menthol and tobacco. All sorts of advertising, sponsoring, and distribution of e-cigarettes are prohibited, and nicotine pouches may not be visible at POS. The use of e-cigarettes is prohibited in school areas and during school hours. Denmark has also prohibited the sale of e-cigarettes to people under 18 years. E-liquids containing 12 mg nicotine or less are subject to a tax of DKK 1.5 (€0.2) per ml e-liquid. E-liquids containing more than 12 mg nicotine are subject to a tax of DKK 2.5 (€0.34) per ml e-liquid (Folketinget, 2021).

**Nicotine pouches** are regulated as tobacco surrogates in the Law on Tobacco Products. Packaging for nicotine pouches must carry a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. All sorts of advertisement, sponsoring, and distribution of nicotine pouches are prohibited, and nicotine pouches may not be visible at POS. The use of

nicotine pouches is prohibited in school areas and during school hours (Indenrigs- og Sundhedsministeriet, 2021b). It is illegal to sell nicotine pouches to people under 18 years in Denmark. Nicotine pouches are subject to a tax of DKK 0.1 (€0.013) per mg nicotine (Skatteministeriet, 2024).

**Snus** is prohibited in Denmark in accordance with the TPD 2014.

Figure 4.1. Use and regulations of cigarettes, e-cigarettes, and oral nicotine products in Denmark from 2018–2024



Prevalence data: Danish Smoking Habits 2019 + §SMOKE Study 2020–2023.



## Finland

In Finland, nicotine products are regulated by the Tobacco Act (549/2016), which has been amended several times since 2016 (Sosiaali- ja terveystieteiden ministeriö, 2016). In 2022, amendments to this law led to stricter regulations for packaging and smoke-free environments. Until April 2023, nicotine pouches were regulated under the Medicines Act, but have since been regulated by the Tobacco Act and the Chemicals Act (Sosiaali- ja terveystieteiden ministeriö, 2013; Tukes, 2023; Valvira, 2023). Also, stricter regulation was introduced for HTPs in the Tobacco Act in 2023 (Sosiaali- ja terveystieteiden ministeriö, 2016). Most recently, further amendments to the Tobacco Act are to be proposed, mainly regarding nicotine pouches. However, by mid-December 2024, none of these proposals had entered into force. It should be noted that Åland (an autonomous region of Finland) has a tobacco legislation of its own, therefore the following regulations may deviate from those in Åland.

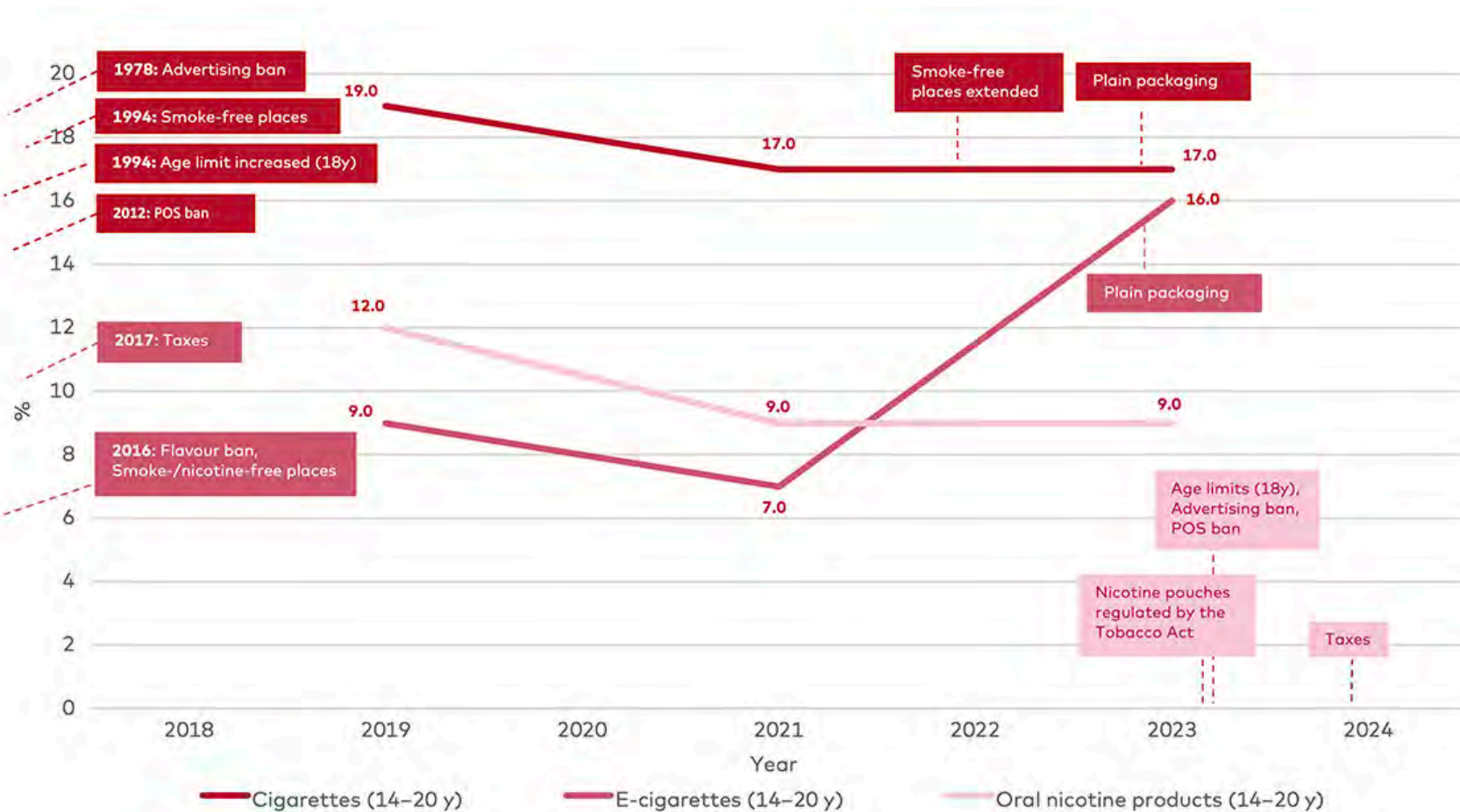
**Cigarettes** are regulated by the Tobacco Act. Beyond the TPD 2014, Finland requires plain packaging and a POS display ban for cigarettes (except in stores only selling such products). Also, public beaches are smoke-free from May to September. Cigarettes are subject to a minimum tax of €0.37 per cigarette (Vero, 2024).

**E-cigarettes** are regulated by the Tobacco Act. E-cigarettes, e-liquids, and refill containers must be in plain packaging and display a health warning. The content of characteristic flavours is prohibited in both nicotine-containing and nicotine-free e-liquids. Advertising is prohibited, and e-cigarettes and related products may not be visible at POS (except in stores only selling such products). The use of e-cigarettes is prohibited in several public places, including daycare and educational institutions. Also, public beaches are smoke-free from May to September. The legal age for buying e-cigarettes and e-liquids in Finland is 18 years. E-liquids, both those that contain nicotine and those that do not, are subject to a tax of €0.3 per ml of liquid (Vero, 2024).

**Nicotine pouches** are defined as a tobacco substitute by the Tobacco Act and are subject to the Chemicals Act. Packaging for nicotine pouches must be labelled as harmful in accordance with the Chemicals Act, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. Advertising is prohibited and nicotine pouches are subject to a POS display ban. The legal age for buying nicotine pouches in Finland is 18 years. Nicotine pouches are subject to a relative tax of 10% of the product price and a tax of €0.1 per gram of product. However, the minimum tax is €0.14 per gram of product (Vero, 2024).

**Snus** is prohibited in Finland in accordance with the TPD 2014.

Figure 4.2. Use and regulations of cigarettes, e-cigarettes, and oral nicotine products in Finland from 2018–2024



Prevalence data: Tobacco Statistics 2019–2023.

Note: Oral nicotine products only include snus. The prevalence of nicotine pouches is therefore not included in this graph.



## Iceland

In Iceland, nicotine products are regulated by the Act on nicotine products, e-cigarettes, and refills for e-cigarettes (Heilbrigðisráðuneyti, 2022). In 2022, nicotine pouches were covered by the law as a result of a concern about the prevalent use among youth (Ministry of Health, 2021). Further, in 2022, a focus on education of the effects of nicotine products and e-cigarettes among youth was adopted by the law. Although Iceland is not a member of the EU, it is part of the EEA and has therefore incorporated certain measures from the TPD into national legislation.

**Cigarettes** are regulated by the Tobacco Control Act. Iceland requires a POS display ban for cigarettes, and from 1 January 2025, cigarettes will be subject to a tax of ISK 758.95 (€5.23) per pack of cigarettes (20 cigarettes) (Alþingi, 2024).

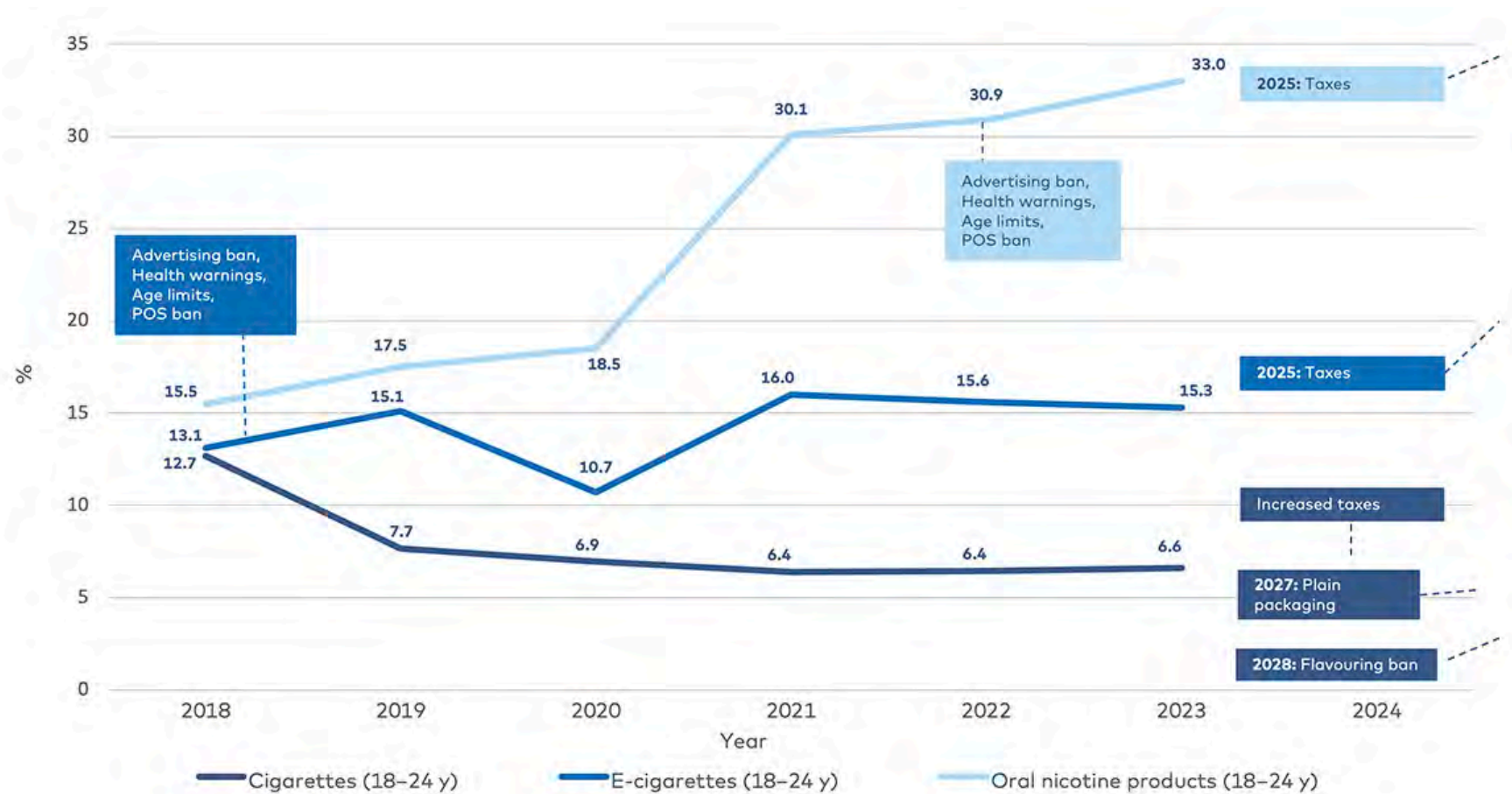
**E-cigarettes** are regulated by the Act on nicotine products, e-cigarettes, and refills for e-cigarettes. Packaging for e-cigarettes must display a health warning, but plain packaging is not required. However, packaging may not appeal to minors. The content of characteristic flavours is not regulated. Advertising in every form is prohibited and e-cigarettes must not be visible at POS (except in stores only selling such products). The use of e-cigarettes is not allowed at places where activities for children and young people take place, e.g. educational institutions. The legal age for buying e-cigarettes in Iceland is 18 years. As of 1 January 2025, e-liquids containing 12 mg nicotine or less are subject to a tax of ISK 40 (€0.28) per ml e-liquid. If the e-liquid contains more than 12 mg nicotine, a tax of ISK 60 (€0.41) per ml e-liquid is applied.

**Nicotine pouches** are regulated as a nicotine product by the Act on nicotine products, e-cigarettes, and refills for e-cigarettes. Packaging for nicotine pouches must provide a health warning, plain packaging is not required, but packaging may not appeal to minors. The content of characteristic flavours is not regulated. Advertising in every form is prohibited, and nicotine pouches must not be visible at POS (except in stores only selling such products). The use of nicotine pouches is not allowed in places where activities for children and young people take place. The legal age for buying nicotine pouches in Iceland is 18 years. As of 1 January 2025, nicotine pouches are subject to differing levels of taxation depending on nicotine content: ISK 8 (€0.05) per gram of product if 1–8 mg nicotine per gram, ISK 12 (€0.08) per gram of product if 8.1–12 mg nicotine per gram, ISK 15 (€0.10) per gram of product if 12.1–16 mg nicotine per gram, and ISK 20 (€0.14) per gram of product if 16.1–20 mg nicotine per gram.

**Snus** is prohibited in Iceland in accordance with the Tobacco Control Act and the EU directive on tobacco products (2024).



Figure 4.3. Use and regulations of cigarettes, e-cigarettes, and oral nicotine products in Iceland from 2018–2024



Prevalence data: Public Health Watch 2018–2023.

Note: Oral nicotine products only included snus until 2021, when nicotine pouches were also included in the measure.



## Norway

In Norway, nicotine products are regulated by the Tobacco Control Act (Helse- og omsorgsdepartementet, 2023). In 1989, Norway adopted a ban on new nicotine and tobacco products, but the ban was replaced in 2021 by an approval scheme largely based on Article 19 of the TPD. Hence, all novel tobacco and nicotine products introduced after May 19, 2014, need approval by the Norwegian Directorate of Health to enter the Norwegian market. There is an additional national requirement that novel products must not be appealing to children or contribute to the initiation or normalisation of tobacco products (Helse- og omsorgsdepartementet, 2021). Implementation of the 2014 tobacco products directive is expected to enter into force in 2025. This means, among other things, that e-cigarettes containing nicotine will be allowed in Norway.

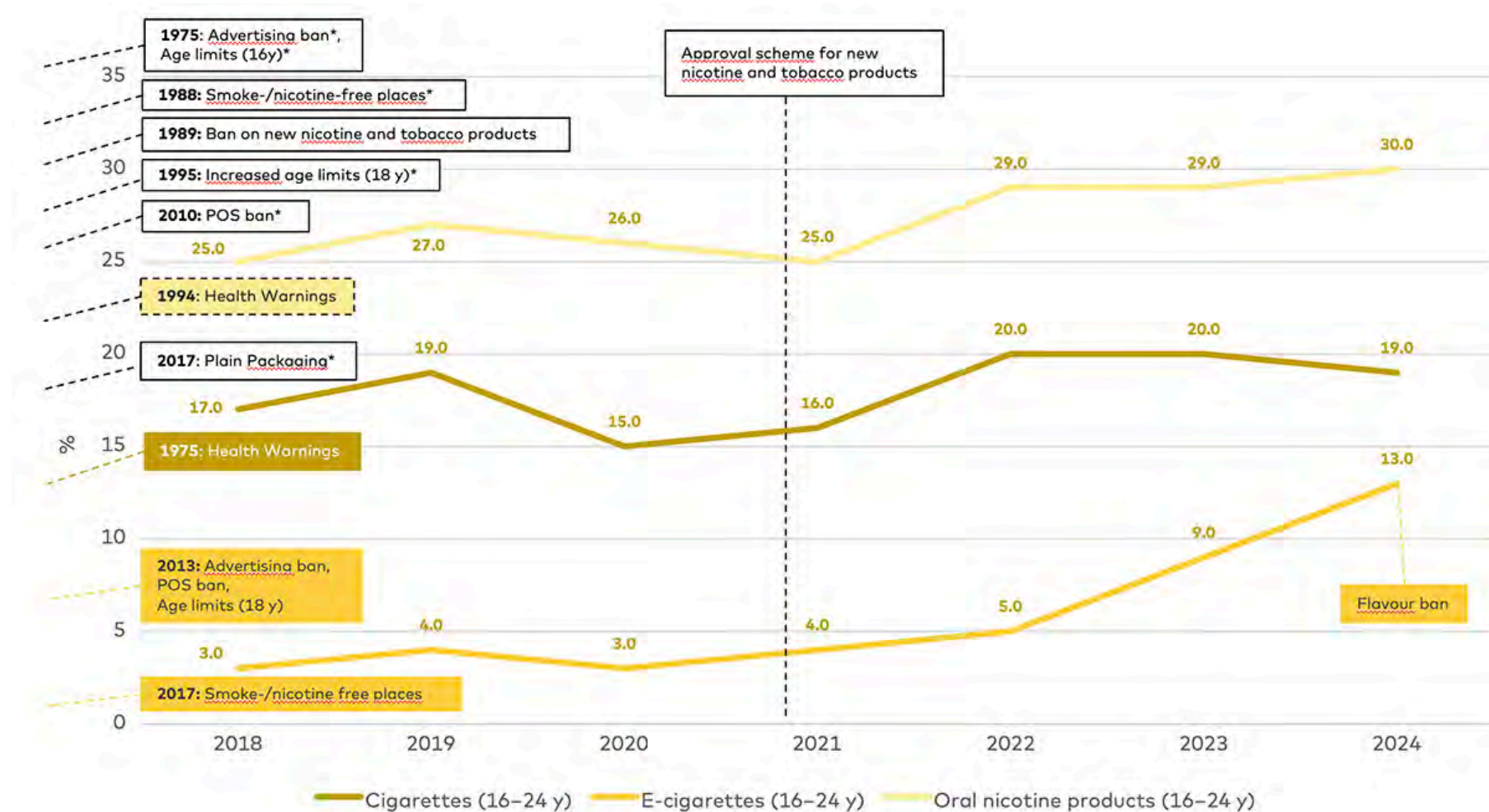
**Cigarettes** are regulated by the Tobacco Control Act. Beyond the FCTC, Norway requires plain packaging and a POS display ban (the latter exempted in stores only selling such products). Cigarettes are subject to a tax of NOK 3.15 (€0.27) per cigarette (The Norwegian Tax Administration, 2024).

**E-cigarettes** are regulated by the Tobacco Control Act. E-cigarettes with nicotine are subject to the ban on new nicotine products. While the import and sale are currently prohibited, the sale of e-cigarettes without nicotine is permitted. However, e-cigarettes containing nicotine will be allowed when the TPD enters into force in Norway and will be subject to the registration scheme and health warnings according to the Directive Article 20. Currently, plain packaging and health warnings for nicotine-free e-cigarettes are not required, but such requirements have been adopted and are expected to enter into force in 2025 (Helsedirektoratet, 2024). However, characteristic flavours are prohibited, as are advertising and sponsoring. E-cigarettes must not be visible at POS (except in stores only selling such products). The use of e-cigarettes is prohibited in several public places, including school facilities. The legal age for buying e-cigarettes in Norway is 18 years. E-liquids are subject to taxation of NOK 5.11 (€0.44) per millilitre (The Norwegian Tax Administration, 2024).

**Nicotine pouches** are not allowed to be sold or imported into Norway (Helsedirektoratet, 2023). However, the sale of *white snus* in Norway is permitted, as it contains minimal amounts of tobacco and is thus regulated as snus (Salokannel & Ollila, 2021).

**Snus** is regulated as a tobacco product in the Tobacco Control Act. Snus must be in plain packaging, which is required to display a health warning. Characteristic flavours are not regulated. Advertising and sponsorship of all sorts is prohibited, and snus may not be visible at POS (except in stores only selling such products). The use of snus in various public areas is not regulated, but the use is prohibited at schools and kindergarten premises during the school hours. The legal age for buying snus in Norway is 18 years. Snus is subject to a tax of NOK 1.28 (€0.11) per gram of the packaging weight (The Norwegian Tax Administration, 2024).

Figure 4.4. Use and regulations of cigarettes, e-cigarettes, and oral nicotine products in Norway from 2018–2024



Prevalence data: Drug Survey 2018–2024.

Note: \*Regulations only concerning tobacco products, i.e. snus and cigarettes.



## Sweden

In Sweden, nicotine products are regulated by the Law on tobacco and similar products (Socialdepartementet, 2018) and the Law on tobacco-free nicotine products (Socialdepartementet, 2022). Over the past years, several changes have been made to the regulative landscape of nicotine products in Sweden, especially by the introduction of the Law on tobacco-free nicotine products in 2022.

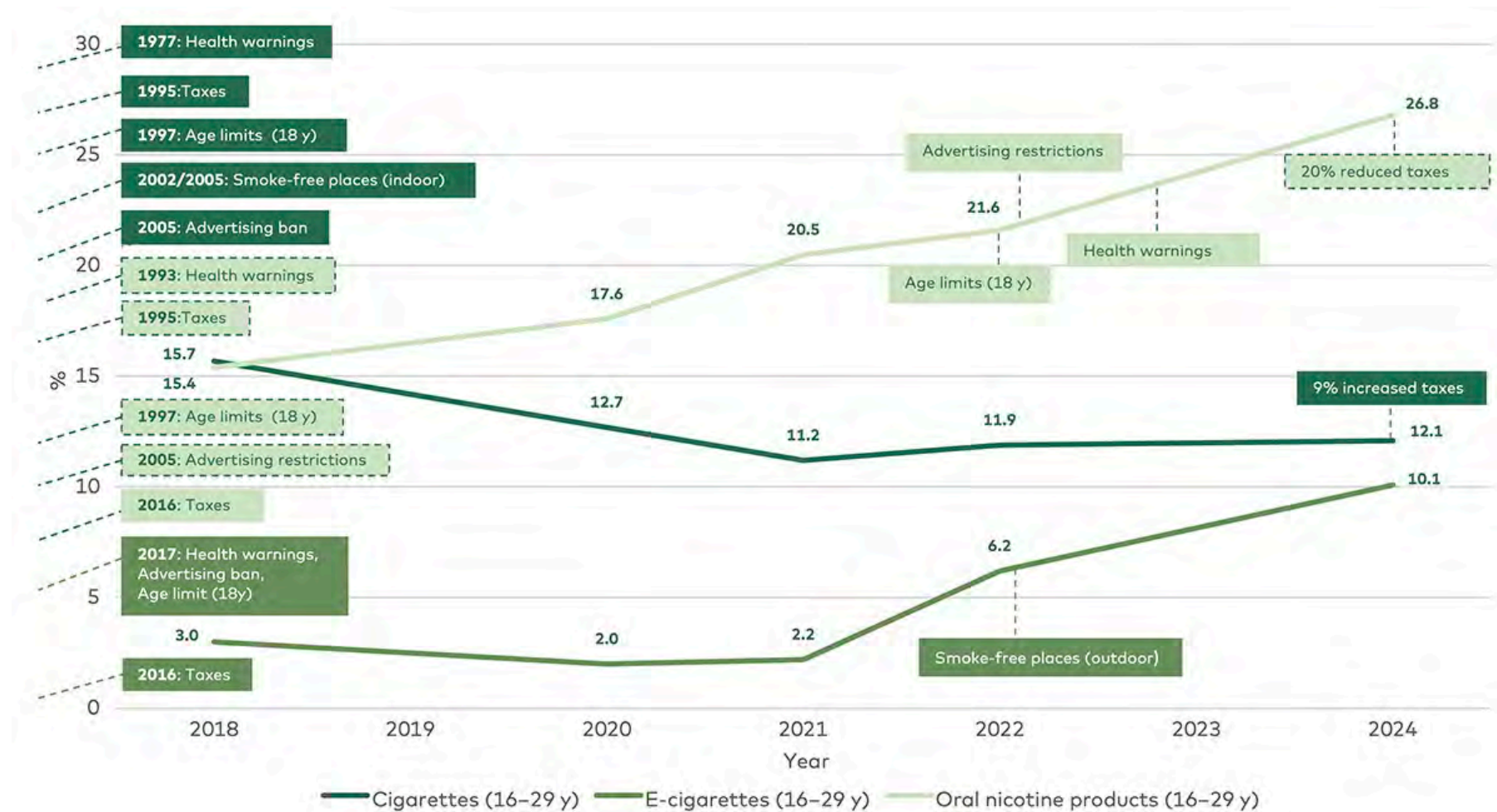
**Cigarettes** are regulated by the Law on tobacco and similar products. Beyond the TPD 2014, Sweden requires that POS are not visible from outside the store, and must not be intrusive, solicitous, or encourage use. Further, smoke-free environments in public places indoors and certain public places outdoors are regulated. Cigarettes are subject to a tax of SEK 2.01 per cigarette + 1% of the retail price, which results in a minimum tax of €0.17 per cigarette, depending on the retail price (Skatteverket, 2024).

**E-cigarettes** are regulated by the Law on tobacco and similar products. Packaging for e-cigarettes and refill containers must display a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. Advertising is restricted and sponsorship is prohibited. Display at POS is allowed but must not be intrusive, solicitous, or encourage use. Where smoking is not allowed, the use of e-cigarettes is also prohibited. The legal age for buying e-cigarettes in Sweden is 18 years. E-liquids with a nicotine concentration under 15 mg/ml are subject to a tax of SEK 2,020 (€178.71) per litre. E-liquids with a nicotine concentration between 15 and 20 mg/ml are subject to a tax of SEK 4,040 (€357.42) per litre of liquid (Skatteverket, 2024).

**Nicotine pouches** are regulated as tobacco-free nicotine products. Packaging for nicotine pouches must display a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. Advertising is restricted to adults over the age of 25 years and sponsorship is prohibited. Display at POS is allowed but must not be intrusive, solicitous, or encourage use. The legal age for buying nicotine pouches in Sweden is 18 years. Nicotine pouches are subject to a tax of SEK 202 (€17.86) per kg product (Skatteverket, 2024).

**Snus** is sold legally in Sweden, as it is exempt from the TPD 2014. This is argued by a long tradition of snus use in the Swedish society and is based on Sweden's agreement not to market snus in other EU countries and the agreement to restrict distance sale. Packaging for snus must display a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. Advertising and sponsoring are prohibited. Advertising at POS is allowed but must not be intrusive, solicitous, or encourage use. The legal age for buying snus in Sweden is 18 years. Snus is subject to a tax of SEK 421 (€36,46) per kg snus (Finansdepartementet, 2022).

Figure 4.5. Use and regulations of cigarettes, e-cigarettes, and oral nicotine products in Sweden from 2018–2024



Prevalence data: National Public Health Survey 2018–2024.

Note: Oral nicotine products only included snus until 2022, when nicotine pouches were explicitly included in the measure.

## Baltic countries

---



### Estonia

Regulations on nicotine products in Estonia are regulated by several laws, but most prominently the Tobacco Act (Riigikogu, 2005). Amendments to the law concerning new nicotine products will enter into force on 1 January 2025. Some of these amendments will be elaborated below.

**Cigarettes** are regulated by the Tobacco Act. Beyond the TPD 2014, Estonia has implemented a point-of-sale display ban for cigarettes. As of 1 January 2025, cigarettes will be subject to a tax of €0.12 per cigarette + 30% of the maximum retail price. This results in a tax of €0.17 per cigarette (Tax and Customs Board, 2024).

**E-cigarettes** are regulated as products related to tobacco products in the Tobacco Act. Packaging for e-cigarettes must display a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is restricted to menthol, mint, and tobacco. Advertising and sponsoring are prohibited, and e-cigarettes may not be visible at POS. The use of e-cigarettes is prohibited in various public places, including educational institutions. The legal age for purchasing and using e-cigarettes is 18 years (Riigikogu, 2005). As of 1 January 2025, e-cigarettes are subject to a tax of €0.22 per ml e-liquid (Tax and Customs Board, 2024).

**Nicotine pouches** are regulated as tobacco-related products in the Tobacco Act. Packaging for nicotine pouches must display a health warning, but there are no requirements of plain packaging. The content of characteristic flavours is not regulated. Advertising and sponsoring are prohibited, and nicotine pouches may not be visible at POS. The use of nicotine pouches is not allowed on premises of child and educational institutions. The legal age for purchasing and using nicotine pouches in Estonia is 18 years. Distance sale is prohibited. As of 1 January 2025, nicotine pouches are subject to a tax of €0.22 per gram of product (Tax and Customs Board, 2024).

**Snus** is prohibited in Estonia in accordance with the TPD 2014.







## Latvia

In Latvia, nicotine products are primarily regulated by the Law on the Handling of Tobacco Products, Tobacco Substitute Products, Herbal Products for Smoking, Electronic Smoking Devices and Their Liquids from 2016 (Saeima, 2016). Several amendments and changes to the law have been introduced in the past years to reduce the availability of new nicotine products, especially among youth in Latvia (Veselības ministrija, 2024).

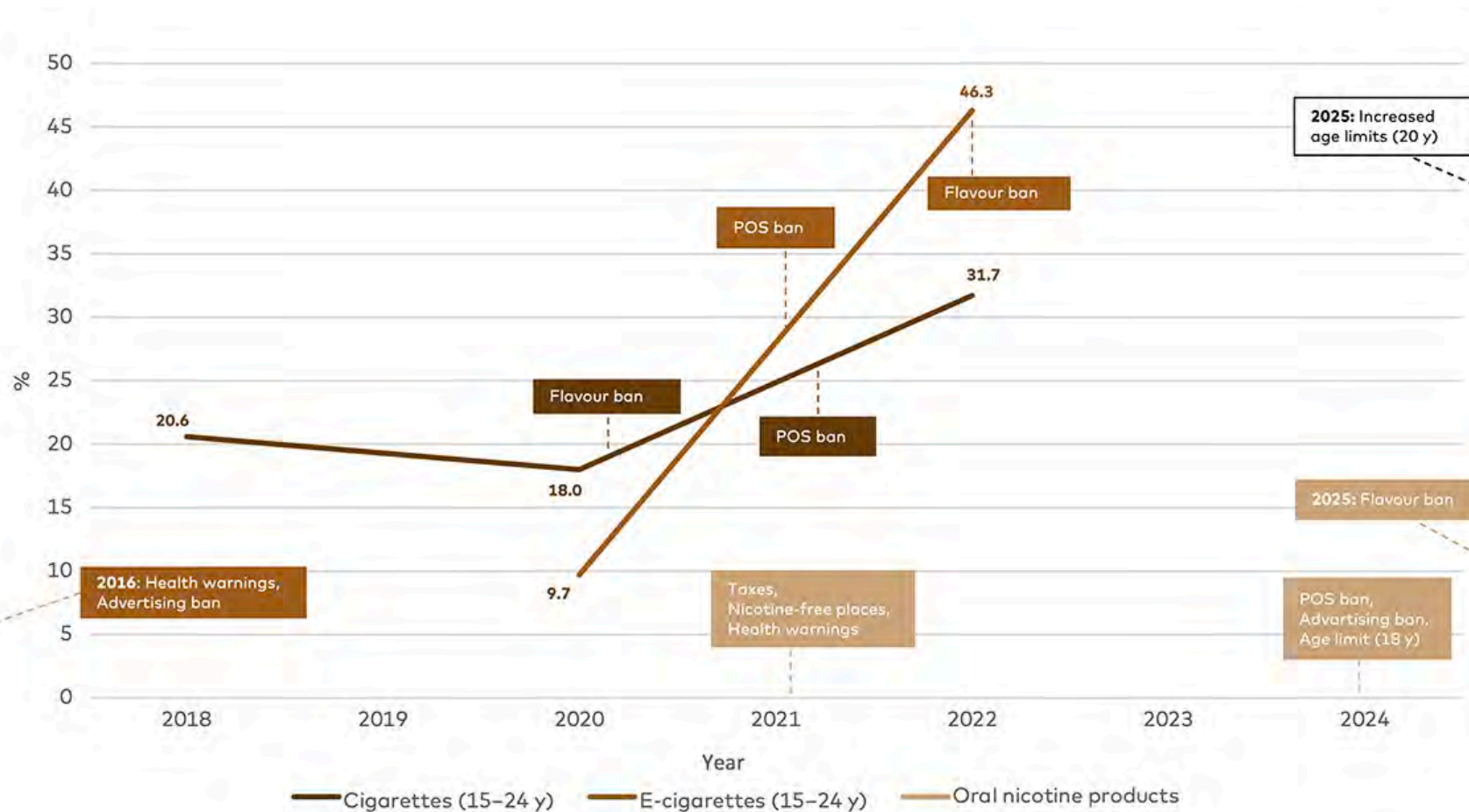
**Cigarettes** are regulated by the Law on the Handling of Tobacco Products, etc. Beyond the 2014 TPD, Latvia has implemented a POS display ban for cigarettes. As of 1 January 2025, the age limit for purchasing and smoking will increase to 20 years. Cigarettes are subject to a tax of €0.16 per cigarette + 15% of the maximum retail price, which results in a minimum tax of €0.16 per cigarette, depending on the retail price (Ministry of Finance, 2023).

**E-cigarettes** are regulated as electronic smoking devices in Latvia. Packaging must display a health warning, but plain packaging is not required. It is prohibited to add fruits and other symbols related to the flavour of the product. As of 1 January 2025, the content of characteristic flavours in e-cigarettes with and without nicotine is restricted to tobacco. The list of allowed additives that provide the tobacco flavours will be added to the Tobacco Law. Advertising and sponsoring are prohibited across all forms of media, and e-cigarettes may not be visible at POS. E-cigarettes and cigarette smoking are prohibited in the same places, i.e. it is not allowed at educational institutions and various other public places or situations. As of 1 January 2025, the legal age for purchasing and using e-cigarettes is 20 years, and distance sale is prohibited (Saeima, 2016). E-liquids are subject to a tax of €0.24 per ml e-liquid (Ministry of Finance, 2023).

**Nicotine pouches** are regulated as a tobacco substitute product in Latvia. Packaging for nicotine pouches must display a health warning, but plain packaging is not required. As of 1 January 2025, the content of characteristic flavours is restricted to tobacco, and nicotine content must not exceed 4 mg per gram of product. The list of allowed additives that provide the tobacco flavours will be added into the Tobacco Law. Advertising and sponsoring are prohibited across all forms of media, and nicotine pouches may not be visible at POS. The use of nicotine pouches is not allowed in educational institutions and distance sale is prohibited. As of 1 January 2025, the legal age for purchasing and using nicotine pouches is 20 years (Saeima, 2016). Nicotine pouches are subject to a tax of €138 per kg of product (Ministry of Finance, 2023).

**Snus** is prohibited in Latvia in accordance with the TPD 2014.

Figure 4.7. Use and regulations of cigarettes and e-cigarettes in Latvia from 2018–2024



Prevalence data: Health Behaviour among Latvian Adult Population 2018–2022.

Note: There is no prevalence data on oral nicotine products in Latvia, therefore only regulations are presented here.



## Lithuania

In Lithuania, nicotine products are regulated by the Tobacco Control Law (Republic of Lithuania, 1996). Amendments to this law are planned for 2025 to include tobacco-free products, such as nicotine pouches. In 2023, the Parliament of Lithuania presented a National Agenda on Drugs, Tobacco and Alcohol control, prevention, and harm reduction until 2035, followed by the approval of the 2024–2026 Action Plan for the implementation of this agenda (Government of the Republic of Lithuania, 2024; Parliament of the Republic of Lithuania, 2023).

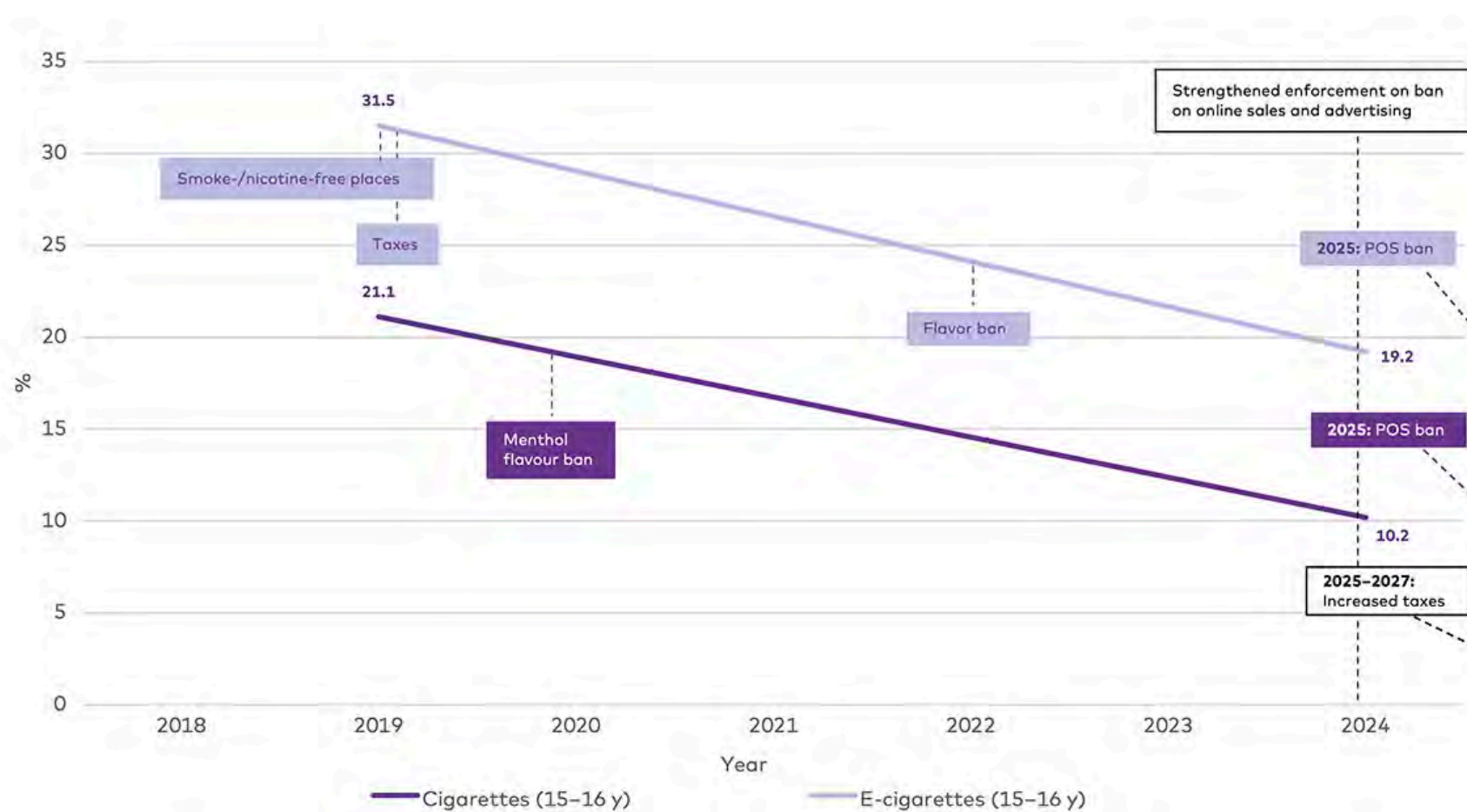
**Cigarettes** are regulated by the Tobacco Control Law. Beyond the TPD, a POS ban will enter into force on 1 January 2025 (Republic of Lithuania, 2022). Additionally, as of 1 January 2025 cigarettes are subject to a minimum combined tax of €0.15 per cigarette (Republic of Lithuania, 2024).

**E-cigarettes** are regulated by the Tobacco Control Law. Packaging for e-cigarettes must display a health warning, and the packaging may not appeal to minors. The content of characteristic flavours is prohibited. Advertising and sponsoring are prohibited. A POS display ban will be implemented 1 January 2025. The use of e-cigarettes is not allowed at educational institutions and various other public places or situations. The legal age for buying, possessing, and using e-cigarettes in Lithuania is 18 years. As of 1 January 2025, e-liquids are subject to a tax of €0.63 per ml e-liquid (Republic of Lithuania, 2024; Valstybinė mokesčių inspekcija, 2024).

**Nicotine pouches** are prohibited in Lithuania (The 2024 Effective Anti-Smoking Policies Global Index, 2024).

**Snus** is prohibited in Lithuania in accordance with the TPD 2014.

Figure 4.8. Use and regulations of cigarettes and e-cigarettes in Lithuania from 2018–2024



Prevalence data: ESPAD 2019+2024.

# DISCUSSION AND IMPLICATIONS



Image: iStock

This last section of the report will wrap up, discuss, and provide some overall perspectives of the development in nicotine product use and regulations across the Nordic and Baltic countries.

The report presents an illustration and overview of the current status for each country. When comparing current trends in nicotine product use with ongoing regulations, it is crucial to bear in mind that changes in behaviour – such as smoking cessation or decreasing the number of cigarettes smoked – do not happen overnight. Neither do new regulatory initiatives; the process of deciding on a law, actually implementing it, and seeing the effect may take years (Bertollini et al.; Levy et al., 2004). Hence, for now it is not possible to draw any conclusions on the effectiveness of these new regulations on nicotine products in the Nordic and Baltic countries. Presenting how the Nordic and Baltic countries are working with this highly important public health challenge can – and hopefully will – be used in the work with future nicotine product preventive initiatives.

## Wrapping up the development in new nicotine product use

Across the Nordic and Baltic countries, cigarette smoking continues to decline among youth, except for Latvia and Norway. The use of e-cigarettes is increasing among all countries, except for Lithuania and the use of oral nicotine products has increased across most Nordic and Baltic countries from 2018 to 2024. Most countries experienced a rapid increase in the use of e-cigarettes among youth from 2021 and the following years. Previously, the overall use of e-cigarettes in youth was relatively low, except in Iceland and Lithuania, where it was more prevalent already before 2021. Iceland saw a rapid increase already from 2015, which has been attributed to the lack of regulations (Kristjansson et al., 2019; Raitasalo et al., 2022).

The rapid rise in **e-cigarette** use among youth is probably associated with the launch of disposable e-cigarettes, also known as vapes, in many countries around 2021. A study from Denmark shows, for example, that most of the increase in

e-cigarette use can be explained by an increasing use of disposables (Jarlstrup et al., 2023). Also in Latvia, the rapid increase has been attributed to the introduction of disposables, according to information provided by the Latvian national representative.

In Norway, the regulation of e-cigarettes differs from the regulation of other countries in this report, as nicotine-containing e-cigarettes are currently prohibited. Studies from before 2020 show that more than half of the youth currently using e-cigarettes are using e-cigarettes without nicotine (Tokle et al., 2022). In the last few years, however, Norway has also seen a rapid increase in the use of e-cigarettes among youth. Whether the tendency of use of e-cigarettes without nicotine continues has not yet been examined. In Finland, the use of e-cigarettes among youth initially declined until 2021, following strict regulations implemented in 2016. However, the introduction of disposables, which circumvent these regulations and are predominantly illicit, has contributed to more than a doubling of use of e-cigarettes among Finnish youth, according to information provided by the Finnish national representative. The issue of illegal disposable e-cigarettes as an explanation for the increasing use concerns most likely others of the included countries.

Some areas call for attention in examining the use of **oral nicotine products** and the following regulations across countries. Until the launch of oral nicotine pouches, the use mostly referred to snus, which has been on the market in Sweden for decades. With the development of new oral nicotine products, the terminology is still developing, both among researchers, politicians, and public health workers, but also among youth who are using these products. The knowledge on nicotine pouches is still evolving, and given that the pouches look very much like snus, the two products are easily confused (Vibjerg, 2023). Information on use across countries therefore varies; some countries measure the use of snus, others measure the use of nicotine pouches, and yet others measure the combined use of these products ([table 1](#)).

Overall, there is an increasing use of oral nicotine products in the Nordic and Baltic countries, which is most likely due to the launch of nicotine pouches. In Denmark, for example, until the introduction of nicotine pouches, oral nicotine products (snus) were not that prevalent among youth. Over the past few years, oral nicotine products have become quite popular – especially among boys, with almost one in five using them. Research shows that most of the increase stems from the use of nicotine pouches (Pedersen et al., 2022a). In Iceland, there was a rapid increase in the use of oral nicotine products between 2020 and 2021, which may be explained by changes in the measurements; since 2021, nicotine pouches have been included in the data. Additionally, the lack of taxation on nicotine pouches might explain the considerable rise in use in Iceland.

Among the countries in this report, Finland is the only one that has not seen an increase in the use of oral nicotine products. This may be explained by the fact that the indicator from Finland only included snus. Nicotine pouches were first measured in 2023, but only separately from snus and not combined for the 14–20-year-olds. Since April 2023, nicotine pouches have no longer been covered by the Medicines Act in Finland. An increase in both the sale and import of nicotine pouches has been seen (Lindholm, 2023). This may imply a potential rise in the use from 2023 onwards which has not yet been addressed (Ruokolainen et al., 2024).

Another key finding is the development of nicotine product use according to **gender**. While new nicotine products increase in popularity among both boys and girls, there seems to be a special increased popularity among girls. Oral nicotine products, i.e. nicotine pouches, are still most prevalent among boys, but the increase in use since 2018 has been more pronounced among girls. Hence, the gap between genders seems to narrow. This is also true for e-cigarettes, where the increase in use has been by far most pronounced among girls. As a result, across countries there seems to be a tendency of e-cigarettes becoming more common among girls than boys.

Some of the contributing factors for this increasing use among girls may be related to attractive marketing features, such as a wide variety of flavours and designs of e-cigarettes. This may appeal more to girls (Piñeiro et al., 2016; Yao et al., 2016). Additionally, the absence of tobacco in some of the new products, i.e. in nicotine pouches, may create a perception of reduced harm, making them potentially appealing to youth who are typically more risk-averse (Czaplicki et al., 2022; O'Connor et al., 2022). Consequently, the growing availability of these products is reshaping the consumer landscape, drawing in new groups such as young girls who are traditionally less likely to engage in tobacco and nicotine use (Zetterqvist, 2024).

## Perspectives on regulations across the Nordic and Baltic countries

After decades of tobacco control, including the enactment of the European Tobacco Products Directive and the WHO Framework Convention on Tobacco Control, there are now quite uniform regulations overall for tobacco, i.e. cigarettes, across the Nordic and Baltic countries.

Although e-cigarettes are currently more regulated than newer products such as nicotine pouches, none of these common regulations incorporate e-cigarettes and nicotine pouches to the same extent as cigarettes. For the newer nicotine products, regulations are still developing. Therefore, at present, national regulations on new nicotine products vary markedly across countries. This is probably also due to differences in culture, political landscape, and development in the use of the

products, as well as international regulations and initiatives, such as those issued by the EU and WHO.

Some of the **regulations that vary** between countries pertain to taxation, flavouring bans, and plain packaging on the newer products. For example, flavours other than tobacco are banned in e-liquids in Norway, Latvia, Lithuania, and Finland. Menthol flavouring is permitted in Denmark and Estonia, whereas there are no regulations in Iceland and Sweden of characteristic flavours in e-liquids for e-cigarettes.

Another example is the variety in the sales ban of nicotine products. Nicotine pouches are banned in Norway and Lithuania, snus is banned in all countries except Norway and Sweden, and e-cigarettes containing nicotine are to date banned in Norway. Further, there is diverse taxation of nicotine pouches from €0.02 per gram in Sweden to €0.22 per gram in Estonia.

**New and pioneering initiatives** have been breaking the uniformity. These initiatives include a change in 2021 from a ban on new nicotine products in Norway to an approval scheme. Nicotine-containing e-cigarettes and nicotine pouches have not been approved and are for now banned on the market in Norway (Helse- og omsorgsdepartementet, 2023). However, with the implementation of the TPD from 2014, which is expected to enter into force in Norway in 2025, e-cigarettes with nicotine will be allowed.

**A promising initiative** is seen in Latvia, where the Government decided that from 2025 the legal age of buying and using cigarettes, e-cigarettes, and nicotine pouches will be 20 years instead of 18. The long-term consequences may be wide-ranging; evidence shows that increasing the legal access age can prevent or delay the initiation of tobacco consumption among adolescents and youth (Institute of Medicine, 2015). Also, some countries are starting to regulate the amount of nicotine allowed in nicotine pouches. In Latvia, a nicotine limit of 4 mg enters into force on 1 January 2025. In other countries, such as Denmark and Finland, nicotine concentration restrictions have been proposed, but have not yet entered into force. (Sosiaali- ja terveystieteiden ministeriö, 2024; Sundheds- og indenrigsministeriet, 2023).

Since 2018, all Nordic and Baltic countries have, to varying degrees, amended existing acts or drafted new ones to include or **strengthen the regulations** on e-cigarettes and oral nicotine products, particularly nicotine pouches (Figures 4.1–4.8). Additional amendments and regulations are planned, drafted, or still under discussion. For example, in Finland, several regulations on nicotine pouches, such as a flavouring ban, proper health warnings, nicotine content restrictions, plain packaging, and use restrictions have been suggested in a Government Proposal, and in Denmark, as a part of a new prevention plan, proposals of plain packaging, nicotine content restrictions, and a flavouring ban regarding nicotine pouches are in the pipeline (Indenrigs- og sundhedsministeriet, 2024c).



These regulatory variations have broader implications, particularly in the **context of cross-border sales and enforcement**. Some countries permit import of products from neighbouring countries, although the specific product cannot be sold within the country. This results in a legal sale of nicotine products across borders, affecting the actual availability of the products. For example, some Nordic countries permit the import of nicotine products for 'personal use'. It is permitted to bring 1 kg of snus into Finland (Sosiaali- ja terveystieteiden ministeriö, 2016), while the import of snus is completely prohibited in Iceland (Skatturinn, 2024).

Furthermore, trade of more than the allowed amount of banned products across borders, leading to **illegal cross-border sales, affects the enforcement** of a country's national regulations (Salokannel & Ollila, 2021). The rapid increase of most often illegal disposable e-cigarettes challenges the regulation in many countries, for example in Denmark, where the use of flavoured disposable e-cigarettes is prevalent among youth although e-liquids with characteristic flavours are banned (Lund et al., 2024). In Norway, the availability of nicotine-containing e-cigarettes contradicts the current ban (Tokle & Bakken, 2023; Tokle et al., 2022), and much indicates that there is a market for illegal trade of nicotine pouches in Lithuania, despite the national sales ban (Onusaitytė, 2024). These challenges also reflect broader issues in the regulation and market dynamics. For example, the availability of illegal products on digital platforms may contribute to ease the product availability – also cross-border (Tokle & Bakken, 2023). To improve the adoption and enhancement of national regulations, more strategic cross-border collaboration is needed (Linnansaari et al., 2023).

To inspire future tobacco and nicotine preventive efforts in the Nordic and Baltic countries, it is relevant that these countries learn from the trends highlighted by the data in the report and act on them both in practice and politically.

The data shows that interest in new nicotine products is increasing among young people, and the trend indicates heightened popularity among girls. There may be many reasons for this, but in terms of preventive efforts, it is important to investigate in further studies whether it is girls in general, or if there are factors indicating that certain groups of girls use nicotine products to a greater extent than others. Such knowledge will be important for the precision of interventions. Girls' nicotine addiction can also have other consequences, for example, on a foetus during pregnancy.

In addition to preventing the use of new nicotine products, it is also important that the Nordic and Baltic countries have relevant health-promoting measures available such as nicotine cessation services for young people who wish to quit their nicotine use.

Furthermore, to enable better direct comparisons of data across the Nordic and Baltic countries, **there is a need for validated data that utilises the same age groups**

**and measures in data collection.** The lack of directly comparable data highlights a significant potential for increased Nordic and Baltic collaboration in this field, which could also strengthen cooperation within the framework of the Nordic Co-operation Programme for Health and Social Affairs 2025–2030.

The current and future regulations and amendments presented in the report also underline the **importance of a continued strategic political focus** not only within but also between countries. Collaboration and harmonising regulations across the Nordic and Baltic countries could help secure a more unified and proactive approach in preventing the increasing use of new nicotine products among youth and it would be a stepping stone toward maximising the Nordic Added Value in this regard.

# ABBREVIATIONS

EEA – *European Economic Area*

EU – *European Union*

FCTC – *Framework Convention on Tobacco Control*

POS – *Point of Sale*

TPD – *Tobacco Product Directive*

# ACKNOWLEDGEMENTS

We would like to express our thanks to the following organisations and representatives from the Nordic and Baltic countries for the guidance and help in finding and providing data sources, regulatory sources, and insights on this topic in their respective countries. Thanks are also extended for reviewing the presented prevalence data and regulations.

## **Denmark**

Danish Health Authority  
Ministry of the Interior and Health of Denmark

## **Finland**

Finnish Institute for Health and Welfare (THL)  
Ministry of Social Affairs and Health

## **Iceland**

Directorate of Health  
Ministry of Health

## **Norway**

Anders Bakken, Researcher at Section for Youth Research, OsloMet  
Norwegian Directorate of Health  
Norwegian Ministry of Health and Care Services

## **Sweden**

Public Health Agency of Sweden  
Martina Zetterqvist, Investigator at the Swedish Council for Information on Alcohol and Other Drugs (CAN)

## **Estonia**

Rainer Reile, Senior researcher at the Department for epidemiology and biostatistics, National Institute for Health Development  
Aive Telling, Environmental Health Policy Manager at the Ministry of Social Affairs

## **Latvia**

Sanita Lazdiņa, Deputy Head of the Mental Health, Addiction Prevention and Integrated Services Unit in the Ministry of Health of Latvia  
Una Mārtiņšone, Senior Public Health Analyst at the Centre for Disease Prevention and Control

**Lithuania**

Rūta Gedminienė, Chief Specialist of Monitoring and Analysis Division at the Drug, Tobacco and Alcohol Control Department (NTAKD)

Jelena Talačkienė, Adviser at the Mental Health Division, Ministry of Health of Lithuania

Lastly, we would like to thank **Charlotta Pisinger**, Professor at the University of Copenhagen and Adjunct Professor at the University of Southern Denmark, and **Lisbeth Lund**, PhD student at the National Institute of Public Health, Denmark, for their insights into the field and feedback during the writing process.

# REFERENCES

- Alþingi (Althingi – Parliament of Iceland). (2024). *Lög um breytingu á ýmsum lögum vegna fjárlaga fyrir árið 2025* [Law on the amendment of various laws regarding the budget for the year 2025], <https://www.althingi.is/altext/155/s/0404.html>
- Amato, M. S., Bottcher, M. M., Cha, S., Jacobs, M. A., Pearson, J. L., & Graham, A. L. (2021). 'It's really addictive and I'm trapped': A qualitative analysis of the reasons for quitting vaping among treatment-seeking young people. *Addictive Behaviors*, 112, 106599. <https://doi.org/10.1016/j.addbeh.2020.106599>
- Andersen, M. B., & Bast, L. S. (2021). *ŠRØG – En undersøgelse af tobak, adfærd og regler. Udvalgte tendenser 2021* [ŠSMOKE – A study of tobacco, behavior, and regulations. Selected trends 2021]. Statens Institut for Folkesundhed, Syddansk Universitet.
- Bertollini, R., Ribeiro, S., Mauer-Stender, K., & Galea, G. (2016). Tobacco control in Europe: A policy review. *European Respiratory Review*, 25(140), 151–157. <https://doi.org/10.1183/16000617.0021-2016>
- Czaplicki, L., Patel, M., Rahman, B., Yoon, S., Schillo, B., & Rose, S. W. (2022). Oral nicotine marketing claims in direct-mail advertising. *Tobacco Control*, 31(5), 663–666. <https://doi.org/10.1136/tobaccocontrol-2020-056446>
- Directive 2014/40. *Directive (EU) 2014/40 of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC* (2014). <https://eur-lex.europa.eu/eli/dir/2014/40/oj/eng>
- Directorate of Health (Iceland). *On the Public Health Watch and interpretation of figures*. Retrieved October 11, 2024, from <https://island.is/en/lydheilsuvaktin/um-lydheilsuvaktina-og-tulkun-talna>
- Elgesem, F. (2023). *Rusundersøkelsen 2023 Dokumentasjonsnotat* [Drug survey 2023 documentation note]. [https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2023/\\_attachment/inline/98582c11-3d0a-4b57-b9e0-b3b6a3e54fb3:1b9948795aeada2f471b95696282361574e95ef2/NOT2023-53.pdf](https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2023/_attachment/inline/98582c11-3d0a-4b57-b9e0-b3b6a3e54fb3:1b9948795aeada2f471b95696282361574e95ef2/NOT2023-53.pdf)
- Elgesem, F., & Falnes-Dalheim, E. (2024). *Rusundersøkelsen 2024 dokumentasjonsnotat* [Drug survey 2024 documentation note]. [https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2024/\\_attachment/inline/ce2d3d9d-bb37-4b88-8c94-2b798ada06a7:9c0c4e067e9044fa841116adf22fdaa5ee13b6ef/NOT2024-47.pdf](https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2024/_attachment/inline/ce2d3d9d-bb37-4b88-8c94-2b798ada06a7:9c0c4e067e9044fa841116adf22fdaa5ee13b6ef/NOT2024-47.pdf)

Finansdepartementet (Ministry of Finance, Sweden). (2022). *Lag om tobaksskatt* [Act on tobacco tax], [https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2022155-om-tobaksskatt\\_sfs-2022-155/](https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2022155-om-tobaksskatt_sfs-2022-155/)

Folketinget (The Danish Parliament). (2021). *Lov om ændring af lov om forskellige forbrugsafgifter og opkrævningsloven* [Act on the Amendment of the act on various consumption taxes and the collection act]. <https://www.retsinformation.dk/eli/lta/2021/2616>

Folkhälsomyndigheten (Public Health Agency of Sweden). (2023). *Från årsskiftet ska tobaksfria nikotinprodukter anmälas* [From the turn of the year, tobacco-free nicotine products must be registered]. <https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2023/december/fran-arsskiftet-ska-tobaksfria-nikotinprodukter-anmalas/>

Folkhälsomyndigheten. (2024a). *Kvalitetsdeklaration: Nationella folkhälsoenkäten 'Hälsa på lika villkor?' (HLV)* [Quality Declaration National Public Health Survey 'Health on Equal Terms?' (HLV)]. <https://www.folkhalsomyndigheten.se/contentassets/9b1b216c596a487ca6c6aa6dc413efb4/kvalitetsdeklaration-hlv-20242.pdf>

Folkhälsomyndigheten. (2024b). *Nationella folkhälsoenkäten 'Hälsa på lika villkor?'* [National public health survey 'Health on equal terms?']. Folkhälsomyndigheten. Retrieved 16.12 from <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/om-vara-datainsamlingar/nationella-folkhalsoenkaten/>

Folkhälsomyndigheten. (2024c). *Statistikens framställning Nationella folkhälsoenkäten 'Hälsa på lika villkor?' (HLV)* [Presentation of statistics national public health survey 'Health on equal terms?' (HLV)]. <https://www.folkhalsomyndigheten.se/contentassets/9b1b216c596a487ca6c6aa6dc413efb4/statistikens-framstallning-hlv-2024.pdf>

Goodman, E., & Capitman, J. (2000). Depressive symptoms and cigarette smoking among teens. *Pediatrics*, 106(4), 748–755. <https://doi.org/10.1542/peds.106.4.748>

Government of the Republic of Lithuania. (2024). *Nutarimas dėl nacionalinės darbotvarkės narkotikų, tabako ir alkoholio kontrolės, vartojimo prevencijos ir žalos mažinimo klausimais iki 2035 metų įgyvendinimo 2024–2026 metų plano patvirtinimo* [Resolution on the approval of the 2024–2026 plan for the implementation of the national agenda for drug, tobacco, and alcohol control, consumption prevention, and harm reduction until 2035], <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/7c5a8dc40e9511ef8e4be9fad87afa59?jfwid=32wf90sn>

- Grinberga, D., Velika, B., Pudule, I., Gavare, I., & Villeruša, A. (2019). *Latvijas iedzīvotāju veselību ietekmējošo paradumu pētījums, 2018* [Health behaviour among Latvian adult population, 2018]. <https://www.spkc.gov.lv/lv/media/4297/download?attachment>
- Grinberga, D., Velika, B., Pudule, I., Gavare, I., & Villeruša, A. (2021). *Latvijas iedzīvotāju veselību ietekmējošo paradumu pētījums, 2020* [Health behaviour among Latvian adult population, 2020]. <https://www.spkc.gov.lv/lv/media/16574/download?attachment>
- Grinberga, D., Velika, B., Pudule, I., Gavare, I., & Villeruša, A. (2023). *Latvijas iedzīvotāju veselību ietekmējošo paradumu pētījums, 2022* [Health behaviour among Latvian adult population, 2022]. <https://www.spkc.gov.lv/lv/media/18708/download?attachment>
- Heilbrigðisráðuneyti (Ministry of Health, Iceland). (2022). *Lög um nikótínvörur, rafrettur og áfyllingar fyrir rafrettur* [Act on nicotine products, e-cigarettes and refills for e-cigarettes]. <https://www.althingi.is/lagas/nuna/2018087.html>
- Heinly, A., & Walley, S. (2023). The nicotine and tobacco epidemic among adolescents: New products are addicting our youth. *Current Opinion in Pediatrics*, 35(4), 513–521. <https://doi.org/10.1097/mop.0000000000001271>
- Helsedirektoratet (Norwegian Directorate of Health). (2023). *Tobacco control in Norway: Tobacco legislation, policies, milestones, tobacco use and smoking prevalence in Norway*. Retrieved August 27, 2024, from <https://www.helsedirektoratet.no/english/tobacco-control-in-norway>
- Helsedirektoratet. (2024). *E-sigaretter, fordampere og e-væske* [E-cigarettes, vaporizers, and e-liquid]. Retrieved August 27, 2024, from <https://www.helsedirektoratet.no/tema/tobakk-royk-og-snus/e-sigaretter-elektroniske-sigaretter-og-regelverk>
- Helse- og omsorgsdepartementet (Ministry of Health and Care Services, Norway). (2021). *Forskrift om godkjenningsordning for nye tobakks- og nikotinprodukter* [Regulation on the approval scheme for new tobacco and nicotine products]. <https://lovdata.no/dokument/SF/forskrift/2021-06-17-2131?q=tobakk>
- Helse- og omsorgsdepartementet. (2023). *Lov om vern mot tobakksskader (tobakksskadeloven)* [Act on protection against the harmful effects of tobacco (Tobacco Control Act)]. <https://lovdata.no/dokument/NL/lov/1973-03-09-14/>
- Indenrigs- og Sundhedsministeriet (Ministry of the Interior and Health, Denmark). (2021a). *Bekendtgørelse af lov om elektroniske cigaretter m.v.* [Regulation on the act on electronic cigarettes, etc.]. <https://www.retsinformation.dk/eli/lta/2021/1876#idb67e8bfa-98d0-4dc5-9656-8910497d719e>



Indenrigs- og Sundhedsministeriet. (2021b). *Bekendtgørelse af lov om røgfri miljøer* [Regulation on the act on smoke-free environments].

<https://www.retsinformation.dk/eli/lta/2021/1632#idf071aa81-6b21-4c25-9e03-b8b9d5b2920b>

Indenrigs- og Sundhedsministeriet. (2024a). *Bekendtgørelse af lov om forbud mod salg af tobak og alkohol til personer under 18 år* [Regulation on the act prohibiting the sale of tobacco and alcohol to persons under 18 years of age].

<https://www.retsinformation.dk/eli/lta/2021/583>

Indenrigs- og Sundhedsministeriet. (2024b). *Bekendtgørelse af lov om tobaksvarer m.v.* [Regulation on the law on tobacco products, etc.].

<https://www.retsinformation.dk/eli/lta/2024/1161>

Indenrigs- og sundhedsministeriet. (2024c). *L 53 Forslag til lov om ændring af lov om tobaksvarer m.v. og forskellige andre love* [L 53 Proposal for a law amending the law on tobacco products, etc., and various other laws]. Folketinget.

[https://www.ft.dk/ripdf/samling/20241/lovforslag/153/20241\\_153\\_som\\_fremSAT.pdf](https://www.ft.dk/ripdf/samling/20241/lovforslag/153/20241_153_som_fremSAT.pdf)

Institute of Medicine (2015). *Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/18997>

Jacobsen, L. K., Krystal, J. H., Mencl, W. E., Westerveld, M., Frost, S. J., & Pugh, K. R. (2005). Effects of smoking and smoking abstinence on cognition in adolescent tobacco smokers. *Biological Psychiatry*, *57*(1), 56–66.

<https://doi.org/10.1016/j.biopsych.2004.10.022>

Jarlstrup, N. S., Andersen, M. B., Kjeld, S. G., & Bast, L. S. (2020). *§RØG – En undersøgelse af tobak, adfærd og regler. Basisrapport 2020* [§SMOKE – a study of tobacco, behavior, and regulations. Base report 2020]. Statens Institut for Folkesundhed, Syddansk Universitet.

[https://www.sst.dk/-/media/Udgivelser/2020/Paragraf-roeg/Paragraf-roeg-En-undersoegelse-af-tobak-adfaerd-og-regler.ashx?](https://www.sst.dk/-/media/Udgivelser/2020/Paragraf-roeg/Paragraf-roeg-En-undersoegelse-af-tobak-adfaerd-og-regler.ashx?sc_lang=da&hash=A68E3313544D944CD6B7ED2424D2D2F1)

[sc\\_lang=da&hash=A68E3313544D944CD6B7ED2424D2D2F1](https://www.sst.dk/-/media/Udgivelser/2020/Paragraf-roeg/Paragraf-roeg-En-undersoegelse-af-tobak-adfaerd-og-regler.ashx?sc_lang=da&hash=A68E3313544D944CD6B7ED2424D2D2F1)

Jarlstrup, N. S., Pedersen, M. T., Lund, L., & Bast, L. S. (2023). *§RØG – En undersøgelse af tobak, adfærd og regler. Udvalgte tendenser 2022, rapport 4* [§SMOKE – a study of tobacco, behavior, and regulations. Selected trends 2022, Report 4]. Statens Institut for Folkesundhed, Syddansk Universitet.

<https://mediebibliotek.cancer.dk/m/645945da69e327de/original/Paragraf-roeg-undersoegelse-2022.pdf>

Johnson, J. G., Cohen, P., Pine, D. S., Klein, D. F., Kasen, S., & Brook, J. S. (2000). Association between cigarette smoking and anxiety disorders during adolescence and early adulthood. *JAMA*, *284*(18), 2348–2351.

<https://doi.org/10.1001/jama.284.18.2348>

Jordan, C. J., & Andersen, S. L. (2017). Sensitive periods of substance abuse: Early risk for the transition to dependence. *Developmental Cognitive Neuroscience*, 25, 29–44. <https://doi.org/https://doi.org/10.1016/j.dcn.2016.10.004>

Kristjansson, A. L., Allegrante, J. P., Sigfusson, J., & Sigfusdottir, I. D. (2019). Do population trends in adolescent electronic cigarette use coincide with changes in prevalence of cigarette smoking? *Preventive Medicine Reports*, 15, 100913. <https://doi.org/10.1016/j.pmedr.2019.100913>

Levy, D. T., Chaloupka, F., & Gitchell, J. (2004). The effects of tobacco control policies on smoking rates: A tobacco control scorecard. *Journal of Public Health Management and Practice*, 10(4), 338–353. [https://journals.lww.com/jphmp/fulltext/2004/07000/the\\_effects\\_of\\_tobacco\\_control\\_policies\\_on\\_smoking.11.aspx](https://journals.lww.com/jphmp/fulltext/2004/07000/the_effects_of_tobacco_control_policies_on_smoking.11.aspx)

Lindholm, P. (2023). Nuorten suosiman 'valkonuuskan' markkina villiintyi, kun laintulkinta muuttui yllättäen – tuonti kiihtyy ja nikotiinipusseja saa jo kaupoista [The market for youth-favoured 'white snus' went wild when the legal interpretation suddenly changed – imports are accelerating, and nicotine pouches are already available in stores]. Yle. <https://yle.fi/a/74-20032039>

Linnansaari, A., Ollila, H., Pisinger, C., Scheffels, J., Kinnunen, J. M., & Rimpelä, A. (2023). Towards tobacco-free generation: Implementation of preventive tobacco policies in the Nordic countries. *Scandinavian Journal of Public Health*, 51, 1108–1121. <https://doi.org/10.1177/14034948221106867>

Lund, L., Jarlstrup, N., & Bast, L. S. (2024). *§RØG – en undersøgelse af tobak, adfærd og regler: Udvalgte tendenser 2023, rapport 5* [§SMOKE – a study of tobacco, behaviour, and regulations. Selected trends 2023, report 5]. Statens Institut for Folkesundhed, Syddansk Universitet. [https://www.sdu.dk/da/sif/rapporter/2024/roeg\\_rapport\\_5\\_tobak\\_regler\\_adfaerd](https://www.sdu.dk/da/sif/rapporter/2024/roeg_rapport_5_tobak_regler_adfaerd)

Mathew, A. R., Hogarth, L., Leventhal, A. M., Cook, J. W., & Hitsman, B. (2017). Cigarette smoking and depression comorbidity: Systematic review and proposed theoretical model. *Addiction*, 112(3), 401–412. <https://doi.org/10.1111/add.13604>

Miluna-Meldere, S., Vanka, S. A., Skadins, I., Kroica, J., Sperga, M., & Rostoka, D. (2024). Oral mucosal changes caused by nicotine pouches: Case series. *Diagnostic Pathology*, 19(1), 127–110. <https://doi.org/10.1186/s13000-024-01549-3>

Ministry of Finance (Latvia). (2023). *Changes in taxation from 2024*. Retrieved October 1, 2024, from <https://www.fm.gov.lv/en/changes-taxation-2024-0>

Ministry of Health, Iceland. (2021). *Comments on the bill to amend Act no. 87/2018, on electronic courts and refills for e-cigarettes (nicotine products)*. <https://samradapi.island.is/api/Documents/ebb4a73a-5463-eb11-9b9f-005056bcce7e>

National Center for Chronic Disease Prevention, & Health Promotion (US) Office on Smoking and Health. (2014). *The health consequences of smoking: 50 years of progress. A report of the Surgeon General*. [www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)

National Institutes of Health; U.S. Department of Health and Human Services. (2020). *Vaping devices (electronic cigarettes) DrugFacts*. Retrieved August 28, 2024, from <https://nida.nih.gov/publications/drugfacts/vaping-devices-electronic-cigarettes>

O'Connor, R., Schneller, L. M., Felicione, N. J., Talhout, R., Goniewicz, M. L., & Ashley, D. L. (2022). Evolution of tobacco products: Recent history and future directions. *Tobacco Control, 31*(2), 175–182. <https://doi.org/10.1136/tobaccocontrol-2021-056544>

Onusaitytė, E. (2024). Ragina reglamentuoti nikotino pagalvėles: šiuo metu prekyba vyksta nelegaliai. *LRT*. <https://www.lrt.lt/naujienos/verslas/4/2340840/ragina-reglamentuoti-nikotino-pagalveles-siuo-metu-prekyba-vyksta-nelegaliai>

Parliament of the Republic of Lithuania. (2023). Nutarimas dėl nacionalinės darbotvarkės narkotikų, tabako ir alkoholio kontrolės, vartojimo prevencijos ir žalos mažinimo klausimais iki 2035 metų patvirtinimo [Resolution on the approval of the national agenda for drug, tobacco, and alcohol control, consumption prevention, and harm reduction until 2035]. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/1bc8cc00faf111edbc0bd16e3a4d3b97?jfwid=-117zma86m>

Pedersen, M. T., Lund, L., & Bast, L. S. (2022a). *Brug af røgfri nikotinprodukter blandt unge: §RØG – en undersøgelse af forbrug af snus, tyggetobak og nikotinposer* [Use of smokeless nicotine products among young people: §SMOKE – a study on the consumption of snus, chewing tobacco, and nicotine pouches].

Pedersen, M. T., Lund, L., & Bast, L. S. (2022b). *§RØG – En undersøgelse af tobak, adfærd og regler. Udvalgte tendenser 2021, rapport 3* [§SMOKE – a study of tobacco, behavior, and regulations. Selected trends 2021, report 3]. [https://www.sdu.dk/da/sif/rapporter/2022/paragraf\\_roeg\\_en\\_undersogelse\\_af\\_tobak\\_adfaerd\\_og\\_regler](https://www.sdu.dk/da/sif/rapporter/2022/paragraf_roeg_en_undersogelse_af_tobak_adfaerd_og_regler)

Piñeiro, B., Correa, J. B., Simmons, V. N., Harrell, P. T., Menzie, N. S., Unrod, M., Meltzer, L. R., & Brandon, T. H. (2016). Gender differences in use and expectancies of e-cigarettes: Online survey results. *Addictive Behaviors, 52*, 91–97. <https://doi.org/https://doi.org/10.1016/j.addbeh.2015.09.006>

Raitasalo, K., Bye, E. K., Pisinger, C., Scheffels, J., Tokle, R., Kinnunen, J. M., Ollila, H., & Rimpelä, A. (2022). Single, dual, and triple use of cigarettes, e-cigarettes, and snus among adolescents in the Nordic countries. *International Journal of Environmental Research and Public Health, 19*(2). <https://doi.org/10.3390/ijerph19020683>

- Reile, R., Tekkel, M., & Veideman, T. (2019). *Eesti täiskasvanud rahvastiku tervisekäitumise uuring 2018* [Estonian adult population health behavior study 2018]. <https://www.tai.ee/et/valjaanded/eesti-taiskasvanud-rahvastiku-tervisekaitumise-uuring-2018>
- Reile, R., & Veideman, T. (2021). *Eesti täiskasvanud rahvastiku tervisekäitumise uuring 2020* [Estonian adult population health behavior study 2020]. <https://www.tai.ee/et/valjaanded/eesti-taiskasvanud-rahvastiku-tervisekaitumise-uuring-2020>
- Reile, R., & Veideman, T. (2023). *Eesti täiskasvanud rahvastiku tervisekäitumise uuring 2022* [Estonian adult population health behavior study 2022]. <https://tai.ee/et/valjaanded/eesti-taiskasvanud-rahvastiku-tervisekaitumise-uuring-2022-metoodika-ja-standardtabelite>
- Republic of Lithuania. (1996). *Tabako, tabako gaminių ir su jais susijusių gaminių kontrolės* [Law on the control of tobacco, tobacco products, and related products], [https://www.e-tar.lt/portal/lt/legalAct/TAR.F8090E375DA0/asr#part\\_a401594f72b04bdd8358e8f68f7b749c](https://www.e-tar.lt/portal/lt/legalAct/TAR.F8090E375DA0/asr#part_a401594f72b04bdd8358e8f68f7b749c)
- Republic of Lithuania. (2022). *Tabako, tabako gaminių ir su jais susijusių gaminių kontrolės įstatymo nr. I-1143 2, 17, 26 straipsnių pakeitimo ir įstatymo papildymo 151 straipsniu* [Amendment of articles 2, 17, and 26 and addition of article 151 to the tobacco, tobacco products, and related products control law No. I-1143], <https://www.e-tar.lt/portal/lt/legalAct/98bb3e0076cb11edbc04912defe897d1>
- Republic of Lithuania. (2024). *Akcizų įstatymo nr. IX-569 23, 24, 25, 26, 30, 31, 65 ir 74 straipsnių pakeitimo* [Law on amendments to articles 23, 24, 25, 26, 30, 31, 65, and 74 of the excise duty law No. IX-569], <https://www.e-tar.lt/portal/lt/legalAct/6465fc90353c11efbdaea558de59136c>
- Riigikogu (Parliament of Estonia) . (2005). *Tubakaseadus* [Tobacco act], <https://www.riigiteataja.ee/akt/112032015077?leiaKehtiv#para25>
- Robichaud, M. O., Seidenberg, A. B., & Byron, M. J. (2020). Tobacco companies introduce 'tobacco-free' nicotine pouches. *Tobacco Control*, 29(e1), e145–e146. <https://doi.org/https://doi.org/10.1136/tobaccocontrol-2019-055321>
- Rod, N. H., Bast, L. S., Diderichsen, F., Grøntved, A., Gyrd-Hansen, D., Pisinger, C., Rod, M. H., Schipperijin, J., Tetens, I., Toft, U., & Tolstrup, J. (2024). *Strukturel forebyggelse – Med fokus på kost, tobak og nikotin, alkohol og fysisk aktivitet* [Structural prevention – focusing on diet, tobacco and nicotine, alcohol, and physical activity]. [https://vidensraad.dk/sites/default/files/node/field\\_downloads/vff\\_strukturelforebyggelse\\_sep2024\\_rapport DIGI\\_single\\_03.pdf](https://vidensraad.dk/sites/default/files/node/field_downloads/vff_strukturelforebyggelse_sep2024_rapport DIGI_single_03.pdf). Vidensråd for Forebyggelse.

Rungraungrayabkul, D., Gaewkhiew, P., Vichayanrat, T., Shrestha, B., & Buajeeb, W. (2024). What is the impact of nicotine pouches on oral health: A systematic review. *BMC Oral Health*, 24(1), 889. <https://doi.org/10.1186/s12903-024-04598-8>

Ruokolainen, O., Ollila, H., & Härkänen, T. (2024). Nicotine pouch use by sex, school type and tobacco product use among Finnish adolescents during the 2023 change in regulatory scheme with deregulated sales. *Addiction*, 119(11), 2023–2030. <https://doi.org/10.1111/add.16585>

Saeima (Parliament of Latvia). (2016). Tabakas izstrādājumu, tabakas aizstājējproduktu, augu smēķēšanas produktu, elektronisko smēķēšanas ierīču un to šķidrumu aprites likums [Law on the handling of tobacco products, tobacco substitute products, herbal products for smoking, electronic smoking devices and their liquids], <https://likumi.lv/ta/id/282077-tabakas-izstradajumu-nbsp-tabakas-aizstajejproduktu-augu-smekesanas-produktu-elektronisko-smekesanas-iericu-un-to-skidrumu-apri>

Salokannel, M., & Ollila, E. (2021). Snus and snus-like nicotine products moving across Nordic borders: Can laws protect young people? *Nordic Studies on Alcohol and Drugs*, 38(6), 540–554. <https://doi.org/10.1177/1455072521995704>

Sargent, J. D., Gabrielli, J., Budney, A., Soneji, S., & Wills, T. A. (2017). Adolescent smoking experimentation as a predictor of daily cigarette smoking. *Drug and Alcohol Dependence*, 175, 55–59. <https://doi.org/https://doi.org/10.1016/j.drugalcdep.2017.01.038>

Skat (Danish Tax Authority). (2020). *Afgiften på tobaksvarer stiger fra 1. april 2020* [Tax on tobacco products to increase from April 1, 2020]. Retrieved November 15, 2024, from <https://info.skat.dk/data.aspx?oid=2294846>

Skatteministeriet (Danish Ministry of Taxation). (2024). Lov om ændring af lov om forskellige forbrugsafgifter [Act on amendments to the act on various excise duties]. <https://www.retsinformation.dk/eli/lta/2024/331>

Skatteverket (Swedish Tax Agency). (2024). *Paying excise duty on nicotine goods as a private individual*. Retrieved September 30, 2024, from <https://www.skatteverket.se/servicelankar/otherlanguages/inenglishengelska/individualsandemployees/taxaccountpaytax/nicotinegoods.4.5b35a6251761e6914209e15.html>

Skatturinn (Iceland Revenue and Customs). (2024). *Duty free imports*. Retrieved December 16, 2024, from <https://www.skatturinn.is/english/individuals/customs-matters/travelling-to-iceland/duty-free-imports/>

Smith, R. F., McDonald, C. G., Bergstrom, H. C., Ehlinger, D. G., & Brielmaier, J. M. (2015). Adolescent nicotine induces persisting changes in development of neural connectivity. *Neuroscience and Biobehavioral Reviews*, 55, 432–443. <https://doi.org/10.1016/j.neubiorev.2015.05.019>

Socialdepartementet (Ministry of Health and Social Affairs (Sweden). (2018). Lag om tobak och liknande produkter [Act on tobacco and similar products].

[https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-20182088-om-tobak-och-liknande-produkter\\_sfs-2018-2088/#K4](https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-20182088-om-tobak-och-liknande-produkter_sfs-2018-2088/#K4)

Socialdepartementet. (2022). Lag om tobaksfria nikotinprodukter [Act on tobacco-free nicotine products].

[https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-20221257-om-tobaksfria-nikotinprodukter\\_sfs-2022-1257/](https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-20221257-om-tobaksfria-nikotinprodukter_sfs-2022-1257/)

Sosiaali- ja terveystieteiden ministeriö (Ministry of Social Affairs and Health, Finland).

(2013). Kemikaalilaki [Chemicals act].

<https://finlex.fi/fi/laki/ajantasa/2013/20130599?search%5Btype%5D=pika&search%5Bpika%5D=kemikaalilaki>

Sosiaali- ja terveystieteiden ministeriö. (2016). Tupakkalaki [Tobacco act].

<https://www.finlex.fi/fi/laki/ajantasa/2016/20160549>

Sosiaali- ja terveystieteiden ministeriö. (2024). *Luonnos nikotiinipusseja koskevasta hallituksen esityksestä lausunnolle* [Draft of the government proposal regarding nicotine pouches for consultation].

<https://stm.fi/-/luonnos-nikotiinipusseja-koskevasta-hallituksen-esityksesta-lausunnolle>

Statistisk sentralbyrå (Statistics Norway). (2024). *Smoking, alcohol and other drugs*. <https://www.ssb.no/helse/helseforhold-og-levevaner/statistikk/royk-alkohol-og-andre-rusmidler#om-statistikken>

Sundheds- og indenrigsministeriet (Ministry for the Interior and Health, Denmark).

(2019). *Aftale: National handleplan mod børn og unges rygning* [Agreement: National action plan against smoking among children and adolescents]. Retrieved from

<https://www.ism.dk/Media/A/3/Aftaletekst%20-%20National%20handleplan%20mod%20b%C3%B8rn%20og%20unges%20rygning.pdf>

Sundheds- og indenrigsministeriet. (2023). *En forebyggelsesplan målrettet børn og unge – tobak, nikotin og alkohol* [Prevention plan targeted at children and adolescents – tobacco, nicotine, and alcohol]. Retrieved from

<https://www.ism.dk/Media/638355544796222251/Aftaletekst.pdf>

Tax and Customs Board (Estonia). (2024). *Tobacco products*. Retrieved October 1, 2024, from

<https://www.emta.ee/ariklient/maksud-ja-tasumine/aktsiisid/tubakatooted#levinum-hind>

Terveyden ja hyvinvoinnin laitos (THL) (Finnish Institute for Health and Welfare).

(2024). *Tupakkatilasto 2023. Tilastoraportti 55/2024* [Tobacco statistics 2023. Statistical report 55/2024].

<https://thl.fi/tilastot-ja-data/tilastot-aiheittain/paihteet-ja-riippuvuudet/tupakka>

*The 2024 effective anti-smoking policies global index.* (2024). Retrieved October 29, 2024, from <https://antismoking.global/world-map>

The ESPAD Group. (2020). *ESPAD report 2019: Results from the European School Survey Project on Alcohol and Other Drugs.* [http://www.espad.org/sites/default/files/2020.3878\\_EN\\_04.pdf](http://www.espad.org/sites/default/files/2020.3878_EN_04.pdf)

The Norwegian Tax Administration. (2024). *Tax on tobacco.* Retrieved September 20, 2024, from <https://www.skatteetaten.no/en/rates/tax-on-tobacco/>

Todorovic, J. (2019). *Rusundersøkelsen 2019 dokumentasjonsrapport* [Drug survey 2019 documentation report]. <https://www.ssb.no/helse/artikler-og-publikasjoner/attachment/402088?ts=16e17a581e8>

Tokle, R., & Bakken, A. (2023). Røyking, snusing og vaping [Smoking, use of snus, and vaping]. *Kort Oppsummert*, 2. <https://oda.oslomet.no/oda-xmlui/bitstream/handle/11250/3069344/Kort-oppsummert-2-2023.pdf?sequence=5&isAllowed=y>

Tokle, R., Brunborg, G. S., & Vedøy, T. F. (2022). Adolescents' use of nicotine-free and nicotine e-cigarettes: A longitudinal study of vaping transitions and vaper characteristics. *Nicotine & Tobacco Research*, 24(3), 400–407. <https://doi.org/10.1093/ntr/ntab192>

Torsteinsen, A. (2020). *Rusundersøkelsen 2020 dokumentasjonsrapport* [Drug survey 2020 documentation report]. Statistisk sentralbyrå. <https://www.ssb.no/helse/artikler-og-publikasjoner/attachment/433678?ts=17508258108>

Torsteinsen, A. (2021). *Rusundersøkelsen 2021 dokumentasjonsrapport* [Drug survey 2021 documentation report]. Statistisk sentralbyrå. [https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2021/\\_attachment/inline/df59c9a8-3f1f-40a1-b4d5-0598fa3144c6:82fb60be83a49fb240d993ae186a9023793fc09a/NOT2021-33.pdf](https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2021/_attachment/inline/df59c9a8-3f1f-40a1-b4d5-0598fa3144c6:82fb60be83a49fb240d993ae186a9023793fc09a/NOT2021-33.pdf)

Torsteinsen, A., & Holmøy, A. (2022). *Rusundersøkelsen 2022 dokumentasjonsnotat* [Drug survey 2022 documentation note]. Statistisk sentralbyrå. [https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2022/\\_attachment/inline/14e60c8a-0366-4efa-83ca-9f06e724513e:ce33914bbec39af2ea3136e90506ae578a7f1e38/NOT2022-29.pdf](https://www.ssb.no/helse/helseforhold-og-levevaner/artikler/rusundersokelsen-2022/_attachment/inline/14e60c8a-0366-4efa-83ca-9f06e724513e:ce33914bbec39af2ea3136e90506ae578a7f1e38/NOT2022-29.pdf)

Treur, J. L., Willemsen, G., Bartels, M., Geels, L. M., van Beek, J. H., Huppertz, C., van Beijsterveldt, C. E., Boomsma, D. I., & Vink, J. M. (2015). Smoking during adolescence as a risk factor for attention problems. *Biological Psychiatry*, 78(9), 656–663. <https://doi.org/10.1016/j.biopsych.2014.06.019>

Tukes (Finnish Safety and Chemicals Agency). (2023). *Temporart beslut enligt 45 b § 3 mom. i kemikalielagen om begränsning av utsläppande på marknaden av vissa nikotinprodukter* [Temporary decision according to section 45b, subsection 3 of the Chemicals act on the restriction of market release of certain nicotine products].

Retrieved from

[https://tukes.fi/documents/5470659/9357216/P%C3%A4%C3%A4t%C3%B6s\\_nikotiiniipussit\\_FINAL\\_3\\_sv\\_20230614135705498.pdf/20dd3640-134b-4950-2c6d-8a817d68284a](https://tukes.fi/documents/5470659/9357216/P%C3%A4%C3%A4t%C3%B6s_nikotiiniipussit_FINAL_3_sv_20230614135705498.pdf/20dd3640-134b-4950-2c6d-8a817d68284a)  
[/P%C3%A4%C3%A4t%C3%B6s\\_nikotiiniipussit\\_FINAL\\_3\\_sv\\_20230614135705498.pdf?t=1686854217078](https://tukes.fi/documents/5470659/9357216/P%C3%A4%C3%A4t%C3%B6s_nikotiiniipussit_FINAL_3_sv_20230614135705498.pdf?t=1686854217078)

United Nations. (2024). *Status of treaties: WHO framework convention on tobacco control*. [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IX-4&chapter=9&clang=en#3](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IX-4&chapter=9&clang=en#3)

Valstybinė mokesčių inspekcija (State Tax Inspectorate, Lithuania). (2024). *Excise duty*. <https://www.vmi.lt/evmi/en/akcizai3>

Valvira (Finnish National Supervisory Authority for Welfare and Health. (2023). *Nicotine bags are subject to the Tobacco act*. <https://valvira.fi/-/nikotiiniipusseihin-sovelletaan-tupakkalakia>

Vero (Finnish Tax Authority). (2024). *Excise duty table for tobacco*. <https://www.vero.fi/en/businesses-and-corporations/taxes-and-charges/excise-taxation/excise-duty-on-tobacco/excise-duty-table-for-tobacco/>

Veselības ministrija (Ministry of Health, Latvia). (2024, 18/06). *Nosaka stingrākas prasības tabakas aizstājējproduktu (nikotīna spilventiņu) importētājiem, ražotājiem un tirgotājiem produktu laišanai tirgū Latvijā* [Sets stricter requirements for importers, manufacturers and traders of tobacco substitute products (nicotine pads) for placing products on the market in Latvia]

[https://www.vm.gov.lv/lv/jaunums/nosaka-stingrakas-prasibas-tabakas-aizstajejproduktu-nikotina-spilventinu-importetajiem-razotajiem-un-tirgotajiem-produktu-laisanai-tirgu-latvija?](https://www.vm.gov.lv/lv/jaunums/nosaka-stingrakas-prasibas-tabakas-aizstajejproduktu-nikotina-spilventinu-importetajiem-razotajiem-un-tirgotajiem-produktu-laisanai-tirgu-latvija?utm_source=https%3A%2F%2Fwww.google.com%2F)  
[utm\\_source=https%3A%2F%2Fwww.google.com%2F](https://www.vm.gov.lv/lv/jaunums/nosaka-stingrakas-prasibas-tabakas-aizstajejproduktu-nikotina-spilventinu-importetajiem-razotajiem-un-tirgotajiem-produktu-laisanai-tirgu-latvija?utm_source=https%3A%2F%2Fwww.google.com%2F)

Vestbo, J., Andreasen, J. T., Bast, L. S., Lund, L., & Pisinger, C. (2022). *Nikotinbrug blandt børn og unge – Konsekvenser og forebyggelse* [Nicotine use among children and adolescents – consequences and prevention]. Vidensråd for Forebyggelse. <https://vidensraad.dk/rapport/nikotinbrug-blandt-boern-og-unge-konsekvenser-og-forebyggelse>

Vestbo, J., Pisinger, C., Bast, L. S., & Gyrd-Hansen, D. (2018). *Forebyggelse af børns og unges rygning. Hvad virker?* [Prevention of smoking among children and adolescents. What works?]. Vidensråd for Forebyggelse.



<https://vidensraad.dk/rapport/forebyggelse-af-rygning-blandt-boern-og-unge-hvad-virker>

Vibjerg, H. (2023). Youth and the use of nicotine products. *Tobacco Prevention & Cessation*, 9(Supplement). <https://doi.org/10.18332/tpc/162727>

World Health Organization. (2003). WHO framework convention on tobacco control, <https://iris.who.int/bitstream/handle/10665/42811/9241591013.pdf?sequence=1>

World Health Organization. (2024a). *Tobacco: E-cigarettes*. Retrieved 28.08 from <https://www.who.int/news-room/questions-and-answers/item/tobacco-e-cigarettes>

World Health Organization. (2024b). *WHO global report on trends in prevalence of tobacco use 2000–2030*. <https://iris.who.int/bitstream/handle/10665/375711/9789240088283-eng.pdf?sequence=1>

Yao, T., Jiang, N., Grana, R., Ling, P. M., & Glantz, S. A. (2016). A content analysis of electronic cigarette manufacturer websites in China. *Tobacco Control*, 25(2), 188–194. <https://doi.org/10.1136/tobaccocontrol-2014-051840>

Yuan, M., Cross, S. J., Loughlin, S. E., & Leslie, F. M. (2015). Nicotine and the adolescent brain. *The Journal of Physiology*, 593(16), 3397–3412. <https://doi.org/10.1113/jp270492>

Zetterqvist, M. (2024). *Självrapporterade rök- och snusvanor 2003–2023* [Self-reported smoking and snus habits 2003–2023]. The Swedish Council for Information on Alcohol and Other Drugs (CAN). <https://www.can.se/app/uploads/2024/05/can-rapport-226-sjalvrappporterade-rok-och-snusvanor-2003-2023.pdf>

# ABOUT THE PUBLICATION

## Use of nicotine products among youth in the Nordic and Baltic countries

Published by  
Nordic Welfare Centre  
© March 2025

**Authors:** Stine Arp and Lotus Sofie Bast, National Institute of Public Health, University of Southern Denmark

**Project manager:** Nadja Frederiksen

**Publisher:** Eva Franzén

**Editor:** Nadja Frederiksen

**Cover photo:** iStock

**Layout:** Agger Grafisk Design

ISBN: 978-91-89787-14-8

DOI: <https://doi.org/10.52746/TZJP1306>

### **Nordic Welfare Centre**

Box 1073, SE-101 39 Stockholm  
Visiting address: Svensksundsvägen 11A  
Telephone: +46 8 545 536 00  
[info@nordicwelfare.org](mailto:info@nordicwelfare.org)

### **Nordic Welfare Centre**

c/o Folkhälsan  
Topeliuksenkatu 20  
FI-00250 Helsinki  
Telephone: +358 20 741 08 80  
[info@nordicwelfare.org](mailto:info@nordicwelfare.org)