

Heated Tobacco Products and Emerging Nicotine Product Use in Slovakia Report

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Acknowledgments

The project is funded by Economics for Health at Johns Hopkins University (JHU) to conduct economic research on tobacco taxation in Slovakia. JHU is a partner of the Bloomberg Initiative to Reduce Tobacco Use. The views expressed in this document cannot be attributed to, nor do they represent, the views of the Institute of Economic Research SAS, JHU, or Bloomberg Philanthropies.

Overview

The Slovak market for tobacco and nicotine products is undergoing a marked transformation, with declining cigarette consumption alongside rapid growth in emerging nicotine products. While cigarettes remain dominant, their sales have been falling, by about 5.1 percent annually between 2022 and 2025, whereas alternatives such as heated tobacco products, e-cigarettes, nicotine pouches, and e-liquids are expanding quickly. HTPs have grown steadily as a substitute for cigarettes, though recent regulations, especially the ban on flavored variants, are expected to slow their momentum. In contrast, newer categories show very strong growth, particularly e-cigarettes and e-liquids, with annual increases of around 80 to 85 percent, while nicotine pouches are also rising significantly. By 2025, these emerging products will account for nearly one-quarter of the total nicotine market, reflecting a clear shift in consumption patterns rather than a decline in overall nicotine use.

Market developments are increasingly shaped by policy and regulatory changes. The introduction of excise taxation on emerging nicotine products in 2025 represents a major step toward reducing affordability, especially for younger users, while integrating these products into the fiscal framework. At the same time, regulatory measures such as flavor bans demonstrate a strong ability to influence market dynamics, product composition, and consumer behavior.

Consumer attitudes reinforce these trends. In Slovakia, emerging nicotine products are perceived as highly attractive, significantly more than in the EU average, yet actual usage remains closer to European levels. This gap suggests further growth potential. Consumers associate these products not only with smoking cessation but also with social appeal, such as being more modern or socially acceptable. Preferences for fruit flavors and convenient disposable devices further increase attractiveness, while raising concerns about youth uptake and environmental impact. Despite their high appeal, public support for regulation remains relatively strong and comparable to the EU average. This indicates that consumers are aware of potential risks and are willing to accept certain restrictions. At the same time, youth behavior highlights a critical challenge. Declining cigarette use is being offset by rising e-cigarette consumption, with initiation typically occurring between ages 13 and 16. This suggests that emerging products are becoming a new entry point into nicotine use, with important implications for long term public health.

Overall, the Slovak nicotine market is becoming more diversified and dynamic, shaped by strong demand for alternatives, evolving consumer preferences, and increasingly active regulatory intervention.

Introduction

In recent years, the tobacco and nicotine market in Slovakia has undergone a profound transformation. While the prevalence of conventional cigarette smoking continues to slowly decline in many countries, including Slovakia. Meanwhile, heated tobacco products (HTPs), e-cigarettes, and other emerging nicotine products are rapidly gaining popularity. These products are often marketed as less harmful compared to conventional tobacco cigarettes and are labeled by the industry as harm-reduction tools (Bialous & Glantz, 2018; Glantz, 2018). The evidence, however, suggests that these products are harmful, and research is still establishing the precise magnitude and nature of these harms. A major reason for concern is their high appeal among young people, who are increasingly initiating nicotine use with these emerging nicotine products rather than conventional cigarettes. In some cases, the young users are not even previous smokers and initiate nicotine use directly with these emerging products, which makes the claim of harm reduction questionable (Zobena, 2021).

This dynamic shift in consumption patterns creates a new challenge for public health, use regulation, and associated taxation policies. The rapid uptake of emerging nicotine products brings new challenges regarding youth initiation, long-term health effects, and the ability to adapt existing legal frameworks that were initially designed for conventional products. At the same time, the growing fiscal potential of these products cannot be overlooked, as they affect both public health and government revenue from excise taxes.

The motivation for this report stems from the need to provide a comprehensive and evidence-based analysis of these emerging trends, particularly in Slovakia. Understanding how emerging nicotine products are used, who consumes them, and the users' attitude towards them is crucial for policymaking. Slovakia represents an important case study: it is a country where the slow decline of cigarette smoking coincides with a rapid uptake of emerging nicotine products, making it possible to observe the substitution effects, regulatory gaps, and efforts to fix them, and fiscal implications in real time.

This report aims to contribute to the debate on how public authorities can respond to the evolving environment of nicotine use. The analysis focuses on overall trends and basic market characteristics using a unique dataset provided by the Ministry of Finance SR. However, it also explores the fiscal and regulatory dimensions, as well as perceptions of these emerging products, based on surveys.

The analysis is based on monthly scanner data collected from retail cash registers from January 2022 to June 2025. While this dataset provides granular insights into physical retail trends, it is subject to certain methodological limitations, most notably the lack of universally

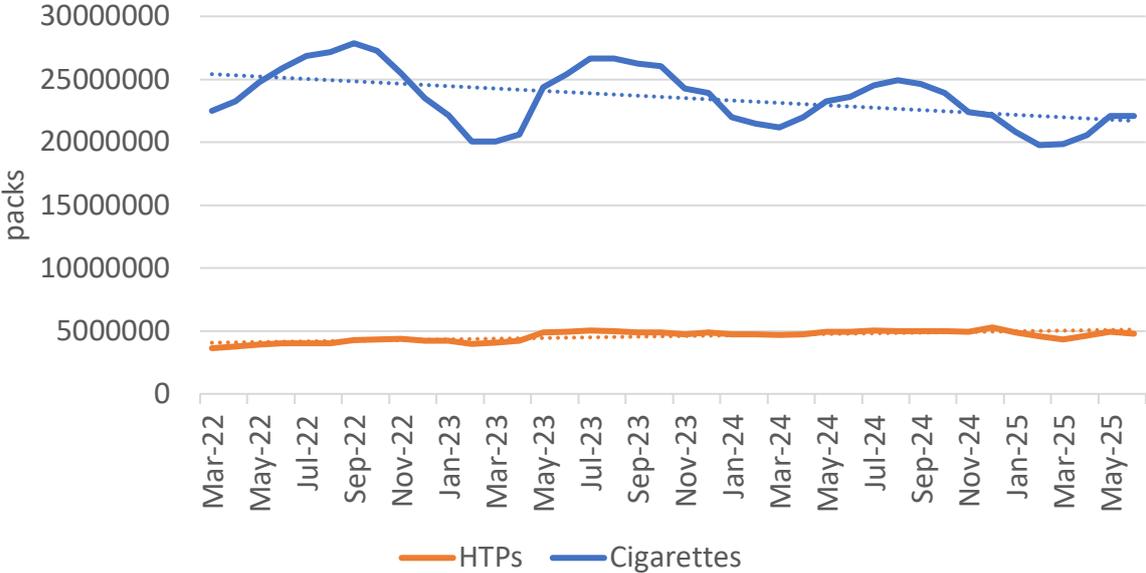
accepted packaging standards and a coherent and widely accepted methodology for labelling emerging nicotine products. Consequently, the figures presented should be interpreted as a lower bound of market volume rather than an exhaustive census. Furthermore, because the dataset is restricted to physical point-of-sale transactions, it excludes internet sales and cross-border shopping, which are prominent channels for nicotine consumption. This implies that while the findings provide a lower bound for total consumption levels, the monthly frequency of the data ensures that the identified growth rates and behavioral shifts remain a robust indicator of domestic retail trajectories and seasonal trends. As already shown in our previous research report (Hudcovský & Morvay, 2025), tobacco taxation is a crucial policy tool for curbing smoking rates, mitigating associated health risks, and enhancing fiscal revenues in Slovakia. This report highlights Slovakia's progress in taxing emerging nicotine products over recent years, resulting in increased public revenue and expected better public health outcomes. However, the study also identifies areas for further improvement.

Market Trends

This section of the report will focus on recent market trends for conventional and emerging nicotine products. The greatest added value of this review lies in the use of scanner data from the Ministry of Finance of the Slovak Republic, which enables us to provide a detailed descriptive analysis previously unavailable from other data sources. To better identify sales trends, the products are split into two groups. The first one deals with the sales of conventional cigarettes and HTPs, the second with the emerging nicotine products categorized as nicotine pouches, e-cigarettes, and e-liquids.

Due to high variability in the sales data, the trends are reported as a three-month moving average. As shown in Figure 1, conventional cigarette sales remain dominant in both absolute and relative terms. However, they exhibit a declining trend over the period, reflecting the gradual reduction in conventional tobacco consumption at the pace of approximately 107,000 packs per month between mid-2022 and mid-2025. In contrast, HTP sales show a consistent increase in sales of 16,000 packs per month on average, confirming their increasingly important role in the Slovak tobacco market. While HTPs remain at a much lower volume compared to cigarettes, the steady increase illustrates their rising popularity and potential to substitute for conventional products in the coming years, as explained in further detail in a later section of the report.

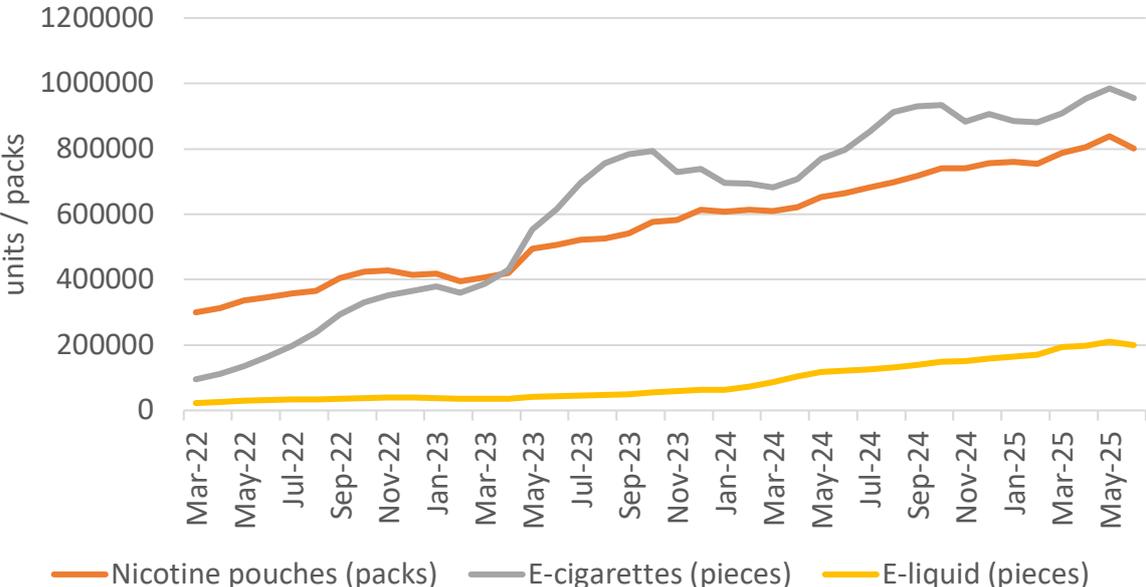
Figure 1. HTP and manufactured cigarettes sales in Slovakia (3-m moving average; 1.2022 – 6.2025, in packs per month)



Source: Ministry of Finance SR, scanner data.

The Slovak market has also witnessed significant growth in other emerging nicotine products, particularly e-cigarettes, e-liquids, and nicotine pouches (Figure 2). Between mid-2022 and mid-2025, sales of these products increased sharply, with e-cigarettes exhibiting the most significant upward trend. By mid-2025, monthly e-cigarette sales reached close to one million units, marking on average approximately 16,900 units increase in sales compared to the early part of the observation period. Nicotine pouches also followed a similar robust growth pattern with an average monthly increase in sales of 9600 packs. E-liquids, while starting from a lower base, show an apparent, steady increase in sales of 4,000 units per month. The pace was higher, especially in the second half of the observed period, reflecting the growing number of consumers using refillable vaping devices.

Figure 2. Emerging nicotine product sales in Slovakia (3-m moving average; 1.2022 – 6.2025, in units or packs per month)



Source: Ministry of Finance SR, scanner data.

Taking it on an annual basis, Table 1 shows the average growth between June 2022 and June 2025. An evident decline of 5.1 percent is observed in manufactured cigarettes, the only category to exhibit a downward trend. HTPs increased by 6.3 percent, with sales in June 2025 reaching 1.2 times the level of June 2022. Nicotine pouches grew by 32.2 percent per year and more than doubled their sales volume over the same period. E-cigarettes recorded an 80 percent annual growth rate, reaching almost six times their initial sales, while e-liquids grew by 84.6 percent annually, exceeding six times the level observed in June 2022. Such a substantial expansion of these products was accompanied by discussion and, in 2025, the eventual introduction of taxation on emerging nicotine products, reflecting their rising market significance and the need to integrate them into the fiscal framework.

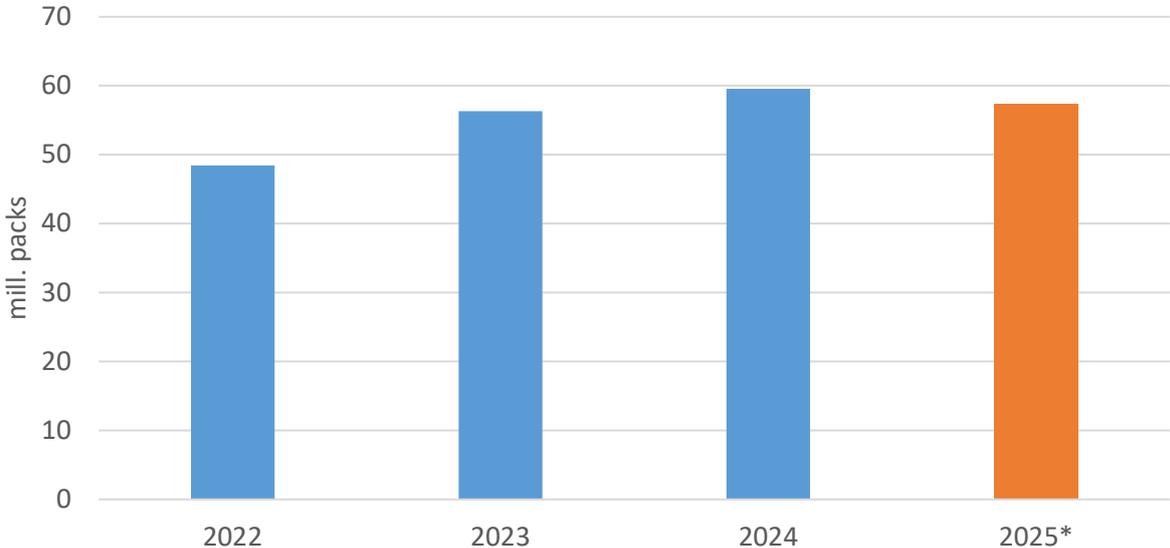
Table 1. Sales growth rates by volume (6-2022 to 6-2025)

	Conventional Cigarettes	HTP	E-cigarettes	Nicotine pouches	E-liquid
Average annual growth	-5.1%	6.3%	80.0%	32.2%	84.6%
Ratio 6.25/6.22	0.85	1.20	5.8	2.3	6.3

Source: Ministry of Finance SR, scanner data.

Special attention needs to be paid to sales trends for HTPs (Figure 3), which, after years of continuous growth, are forecast to significantly slow in 2025 for the first time. Sales are expected to stall or decrease from around 60 to 57 million packs, based on preliminary 2025 data and the extrapolation of historical growth trends. This could plausibly be linked to the implementation of the EU directive banning characterizing flavors in heated tobacco products, in effect since January 2025 (with a transition period till June 2025; the full effect of the ban starts in July 2025). It is expected that the introduction of the ban will affect the overall share of HTP users, as scanner data indicate that flavored HTPs accounted for roughly 50 percent of all HTP sales in 2024, prior to the ban. Although information on the share of flavored HTPs relative to total consumption is unavailable, the industry itself claimed during negotiations that the ban would affect a substantial portion of its HTP sales. Slovakia was one of the last countries to adopt the ban, which has been applicable across the entire EU since 2023. Such a shift illustrates how regulatory measures, supported by credible, uniformly applied enforcement at the EU level, can effectively shape the trajectory of emerging nicotine product markets.

Figure 3. HTP sales development trend (2022 – 2024, in million packs) and estimated sales in 2025.



Source: Ministry of Finance SR, scanner data.

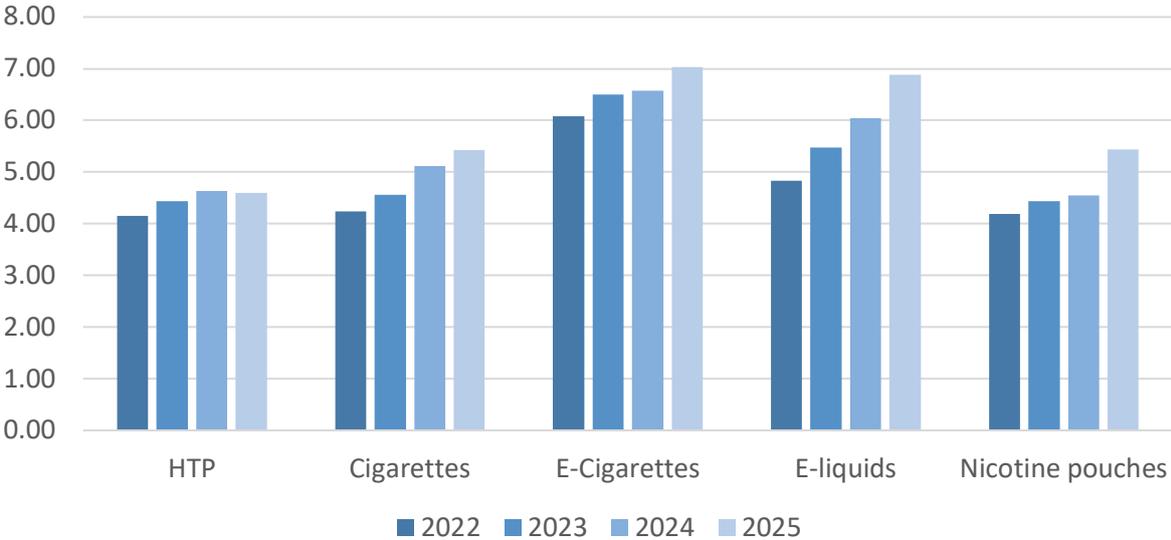
Note: *Data available up to June 2025. Preliminary data for 2025 are extrapolated based on historical development trends of the category in previous years.

In Figure 4, we observe the weighted average prices (WAP), which developed differently across product categories between 2022 and 2025. It is noteworthy that manufactured cigarette prices continued to increase in 2025 despite the absence of a tax increase, the last

one having taken place in February 2024. HTPs also did not face a tax increase in 2025, as their taxation follows the traditional tobacco excise calendar, yet their prices stopped rising. A contributing factor might be the already mentioned characteristic flavor ban, with producers keeping prices stable to compensate for the lack of variety at the expense of industry profit margins.

Among emerging nicotine products, the effect of the newly introduced 2025 excise tax¹ is only partially included due to the transition period of tax-stamp non-labelled packages allowed to be sold by the end of June 2025. Still, the relatively visible growth is in the case of nicotine pouches and e-liquids, where prices rose more sharply compared to earlier years. Also, e-cigarettes experienced a similar increase; however, it was the smallest among the emerging nicotine products.² Therefore, as a robustness check, Figure 5 shows the price development of the most frequently sold brand of individual emerging nicotine products.

Figure 4. Development of WAP based on scanner data (in € per pack/unit)

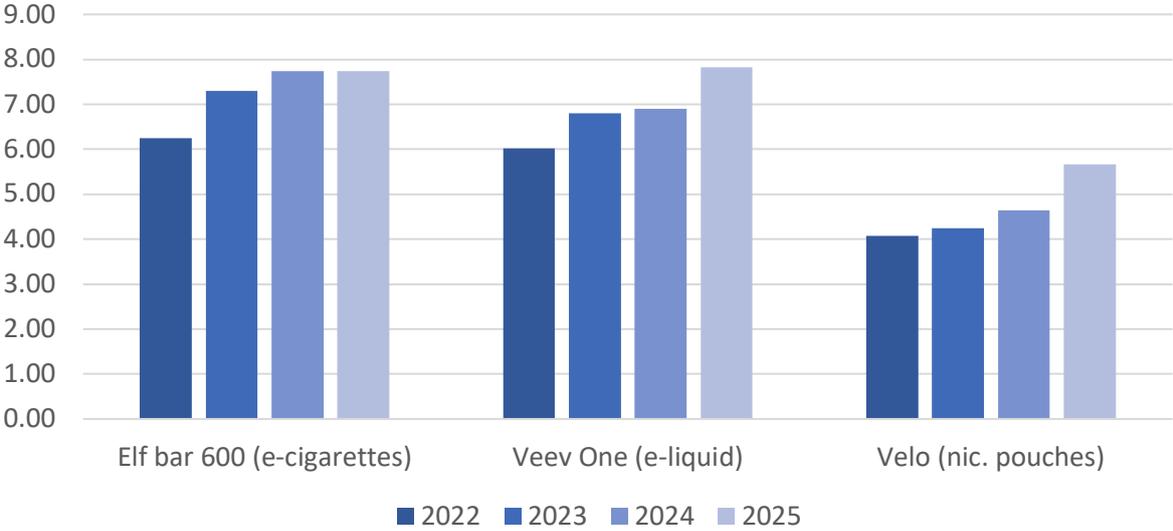


Source: Ministry of Finance SR, scanner data.

¹ Detailed description of the 2025 excise tax introduction on alternative nicotine products is provided in the following section of the report.

² The effect of the newly introduced excise tax is less visible in this category, probably due to the huge variability in the data originating in different sizes and types of use of these products (refillable, disposable, pod system).

Figure 5. Development of WAP of most frequently sold brands in individual categories based on scanner data (in € per pack/unit)



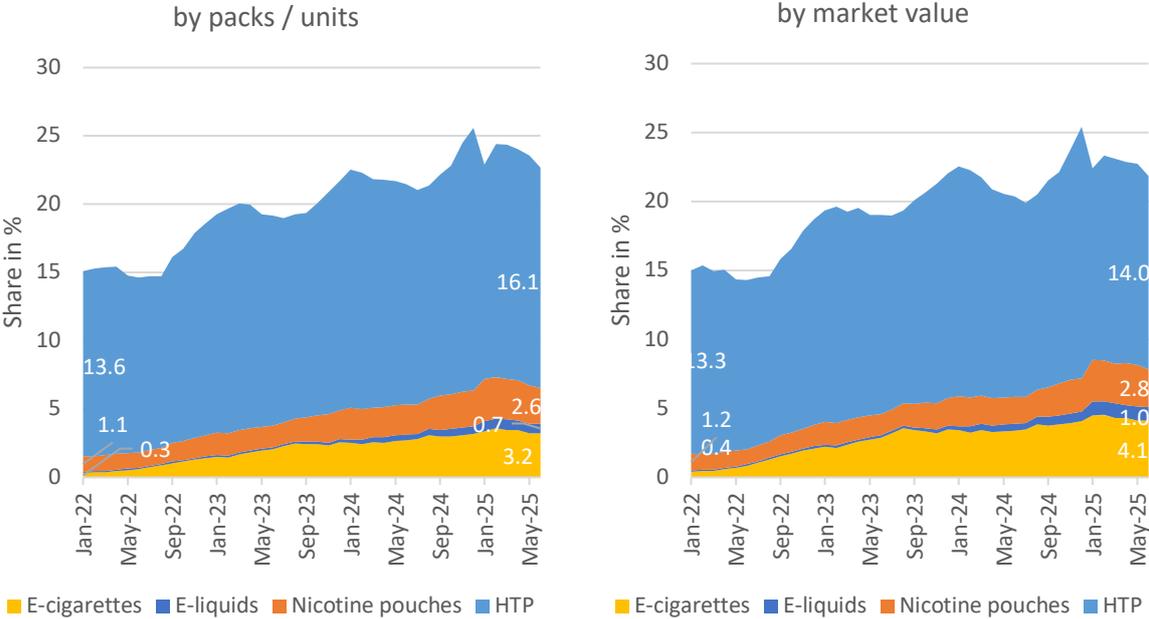
Source: Ministry of Finance SR, scanner data.

Note: Elf bar 600 (e-cigarette) contains approximately 600 puffs, Veev One (e-liquid) contains 2ml of liquid with a nicotine concentration of 20mg/ml. Velo (nicotine pouches) consists of 20 individual pouches of various nicotine concentrations. Data for Elf bar 600 and Veev One are available from 6/2022 onwards. The WAP for 2025 is based solely on data available as of June 2025.

The increasing importance of market alternatives is reflected in their evolving market shares (Figure 5). Together, by the end of the analyzed period, the emerging nicotine products represented almost 25 percent of the whole market for tobacco and nicotine products in Slovakia. HTPs gained about 2.5 percentage points, e-cigarettes increased by 2.1 percentage points, nicotine pouches added 1.5 percentage points, and e-liquids grew marginally, by 0.4 percentage points. This suggests that disposable devices are preferred over refillable ones.

When measured by market value derived from the scanner data, the overall picture changes slightly. The share of HTPs grew by only 0.7 percentage points, suggesting slower price growth relative to volume. We hypothesize that such development happened in order to secure a larger market share for HTPs. E-cigarettes expanded by 2.9 percentage points, indicating that their price dynamics contributed more strongly to value growth compared to their share by packs. Nicotine pouches rose by 1.6 percentage points, broadly in line with the pace of the overall market, while e-liquids increased by 0.6 percentage points, reflecting a development similar to their unit-based growth. Obviously, the remainder of the market, and still the vast majority, continues to be represented by conventional manufactured cigarettes.

Figure 6. Market share development in overall market for tobacco and nicotine products (in %)



Source: Ministry of Finance SR, scanner data.

Excise Tax Legislation on Nicotine Products

HTPs were introduced to the Slovak market in 2017 and quickly gained popularity. Although it was subject to the excise tax since its introduction to the market, HTPs benefited from a lower tax burden compared to conventional cigarettes up to the year 2021 (Table 2). However, in 2020, the government decided to implement an excise tax calendar and set the level of excise duty on HTP at a level securing comparable prices to neighboring countries. Since then, their fiscal advantage has been gradually eroded as excise duties on HTPs have been increased in successive steps. The current excise calendar foresees that by 2028, the effective taxation of HTPs will nearly converge in effective rate with that of conventional cigarettes.

That means HTPs will no longer enjoy preferential treatment within the tax system. Combined with the ban on flavored HTPs implemented in January 2025 in Slovakia, these measures are expected to affect both the attractiveness and the pace of further expansion.³

³ The excise tax increase on HTPs was initiated in 2021 and set to converge with the taxation of conventional cigarettes in subsequent years under Act No. 106/2004 Coll. on Excise Duty on Tobacco Products. In addition, the ban on characterizing flavors in HTPs implemented in January 2025 represents the transposition of Directive 2014/40/EU, as further amended by Commission Delegated

Table 2. Effective excise tax on cigarettes and HTPs (EUR/1 kg tobacco)

	2020	2021	2022	2023	2024	2025	2026 proposal	2027 proposal	2028 proposal
HTPs	76.7	132.2	160	187.8	211.3	211.3	238.1	238.1	264.8
Cigarettes	148.4	171.3	183.5	195.6	217.9	219.7	242.9	244.6	267.5
HTP/Cig (%)	52	77	87	96	97	96	98	97	99

Source: Act No. 106/2004 Coll. on the Excise Duty on Tobacco Products, Ministry of Finance SR.

Since February 2025, the scope of excise taxation in Slovakia has been expanded to cover a range of emerging nicotine products. The new products subject to tax include e-liquids, nicotine pouches, and other novel nicotine products. Products belonging in this category are, e.g. nicotine patches, sprays, gums, herbal sticks or any other future alternative of nicotine delivery ensuring the “future-proof” effectiveness of the tax reform. Tax rates were set at 0.10 euro per gram for nicotine pouches, and 0.20 euro per milliliter for e-liquids. E-cigarette devices are not subject to tax, except for disposable units, for which the tax applies to the e-liquid already prefilled by the manufacturer.

The next planned increase is scheduled for February 2027, when rates for e-liquids will rise to 0.30 euro per milliliter (a 50% increase), and nicotine pouches as well as other nicotine products will be taxed at 0.20 euro per gram (a 100% increase). The intention of these steps is to reduce the affordability of emerging nicotine products, especially for youth, although the effect of the 2025 tax changes is only partially visible in the available data so far due to the extended sell-off of untaxed products.

The reform also introduced new obligations for market participants. Traders and distributors of these products are required to obtain permits, while all emerging nicotine products must be marked with tax stamps. Companies were obliged to report their stock levels, with a sell-off of untaxed inventory permitted only until June 30, 2025.

Directive (EU) 2022/2100, which abolished the exemption previously granted to HTPs and aligned them with conventional cigarettes.

Table 3. Excise tax calendar on nicotine products

	Tax rate (Feb 1, 2025 – Jan 31, 2027)	Tax rate (from Feb 1, 2027)
E-liquids	€ 0.20 / ml	€ 0.30 / ml
Nicotine pouches	€ 0.10 / g	€ 0.20 / g
Other nicotine products	€ 0.10 / g	€ 0.20 / g

Source: Act No. 106/2004 Coll. on the Excise Duty on Tobacco Products.

Consumers' Attitudes Towards Emerging Nicotine Products

This section of the analysis examines consumer attitudes toward emerging nicotine products, perceived as alternatives to conventional tobacco smoking. The assessment primarily draws on data from the European Commission (2024), published in the Special Eurobarometer 539. Fieldwork for this survey (face-to-face data collection) was carried out in all EU countries in May and June 2023, and the report was published in 2024. The survey included EU citizens from various demographic and social groups. The Eurobarometer survey is further supplemented by information from surveys focused on youth, conducted by domestic authorities. The purpose is not to provide exhaustive statistical coverage, but rather to highlight Slovak-specific features and recent trends within this field. For context, the data for Slovakia are compared with the EU average and, where relevant, with the regional average of the Visegrad Four countries (Czech Republic, Poland, Slovakia, and Hungary), which share similar economic and social characteristics.

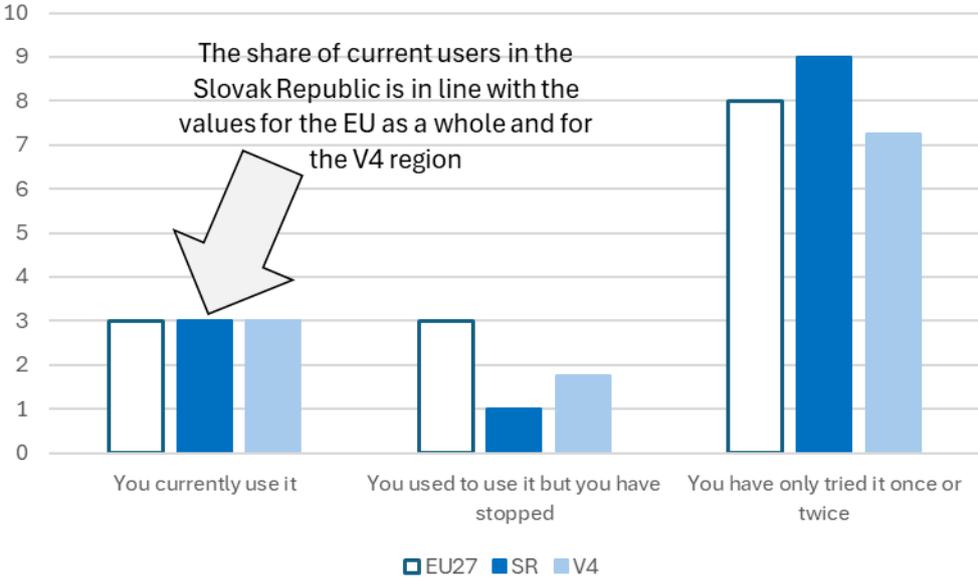
Higher appeal rate than usage rate

When comparing data on actual use and attractiveness of these products, there is a disproportion: attractiveness is higher than actual use. The parameters of e-cigarette use (the distribution of individuals across current users, former users, and those who have only tried them) in Slovakia are very close to the European average and also to the V4 regional average, as presented in Figure 7. For heated tobacco products (HTPs), the share of users is higher in Slovakia, but this is not a large difference given the overall low numbers (Figure 8).

Hypothetically, above-average use of HTPs (with a higher rate of use than e-cigarettes) may be related to the way these products were marketed when they first appeared on the market. HTPs were sold in highly accessible locations, separate from other nicotine products (e.g., separate kiosks in shopping malls). This helped create the impression of an "alternative," something "different, harmless," and at the same time, these products were very accessible

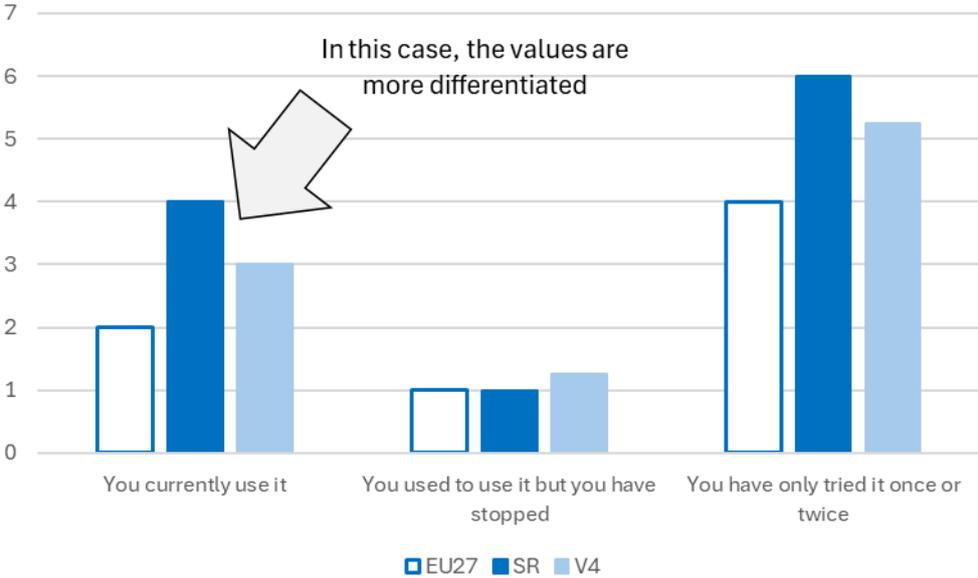
and conspicuous due to this method of sale. This may have helped to create an initial strong wave of customers and addiction to these products.

Figure 7. Share of Individuals Who Currently Use or Have Tried E-Cigarettes



Source: European Commission, own elaboration.

Figure 8. Share of Individuals Who Currently Use or Have Tried HTPs

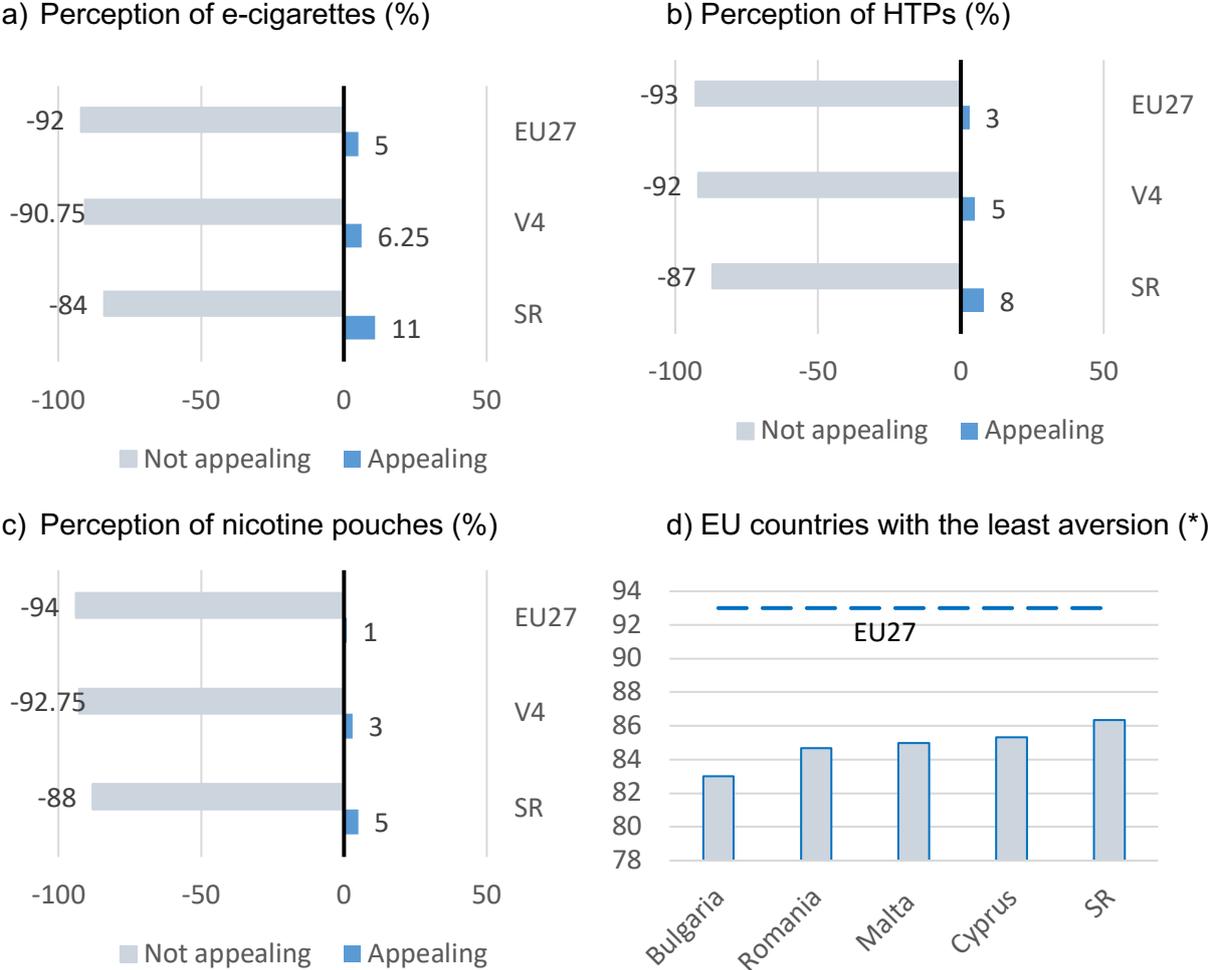


Source: European Commission, own elaboration.

The differences between Slovakia and the EU27 are not particularly significant in terms of use parameters, but the picture changes when looking at perceived attractiveness. In Slovakia, e-cigarettes, HTPs, and nicotine pouches are generally viewed as more appealing (Figures 9a,

b, c). The proportion of consumers who find these products attractive is more than double the EU average, placing Slovakia among the five countries with the lowest share of respondents who describe these products as not appealing (Figure 9d).

Figure 9. Attractiveness or unattractiveness of emerging nicotine products

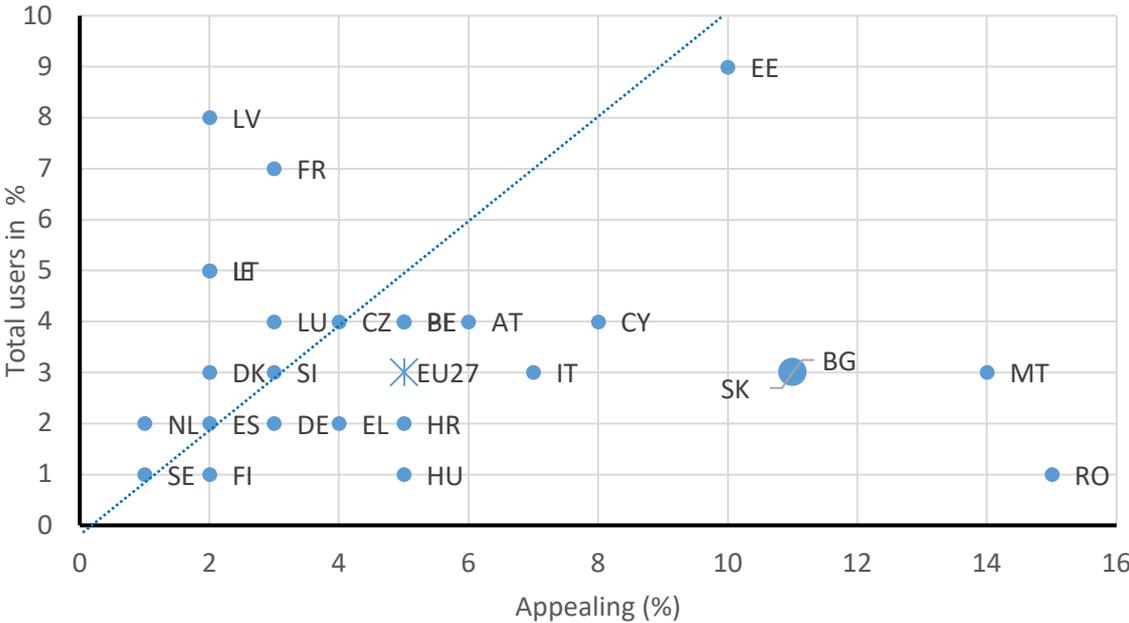


Source: European Commission, own elaboration.

Note: (*) The five EU countries with the lowest average proportion of "not appealing" responses for the three types of alternative nicotine products.

The combination of high perceived attractiveness and comparatively lower actual use is illustrated in Figure 10 and Figure 11. When contrasting these two dimensions, Slovakia's position is markedly skewed to the right of the diagonal line, indicating a significant imbalance between how attractive consumers find these products and how many use them. In the case of e-cigarettes, Slovakia joins Bulgaria, Romania, and Malta in forming a distinct group of countries where this disproportion is especially pronounced.

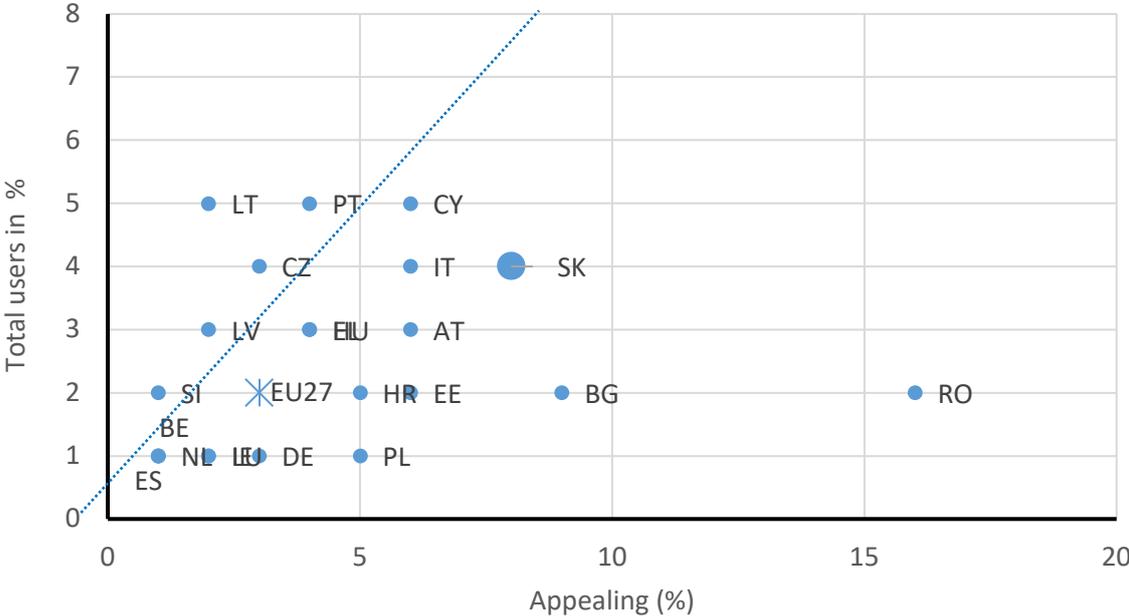
Figure 10. Combinations of attractiveness and actual use of e-cigarettes



Source: European Commission, own elaboration.

Note: On the horizontal axis is the proportion of those who find the product appealing.

Figure 11. Combinations of attractiveness and actual use of HTPs



Source: European Commission, own elaboration.

Note: On the horizontal axis is the proportion of those who find the product appealing.

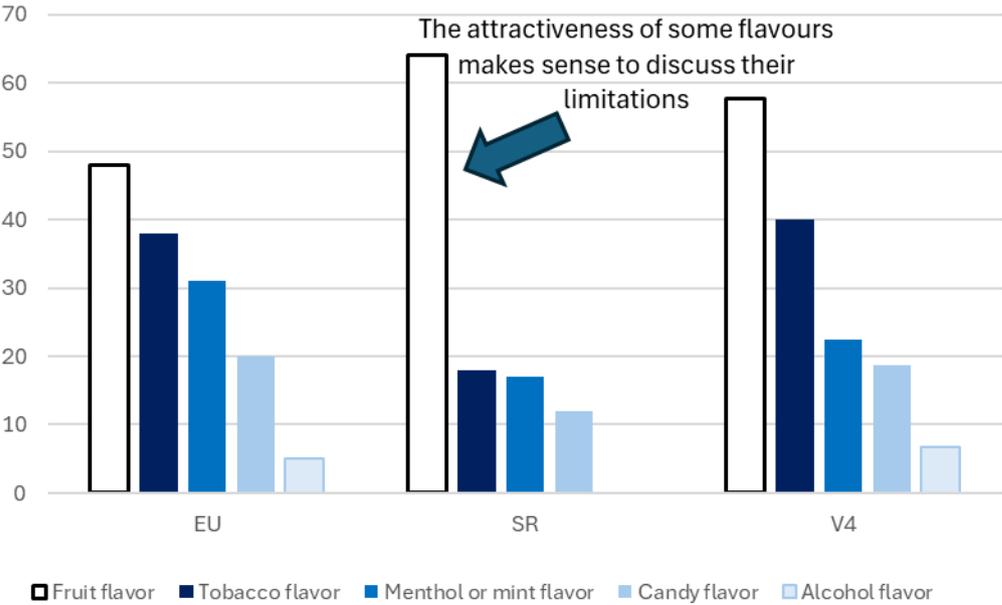
A certain paradox between the high perception of attractiveness of products, their lower actual consumption, and even the willingness to support their restriction (as will be shown in the following) can be explained by strong arguments about their harmfulness to society. Although consumers find the product attractive, there is a strong information campaign that these

products are also harmful and are not a harmless alternative. There is also a campaign explaining that if there are restrictions on the consumption of conventional cigarettes, then the use of products falsely perceived as alternatives should also be similarly penalized. There was also an important information campaign by the Ministry of Finance (in 2024) explaining the need to tax emerging nicotine products in a similar way to conventional nicotine products.

Use in the Slovak way: with a fruity flavor and a greater environmental burden

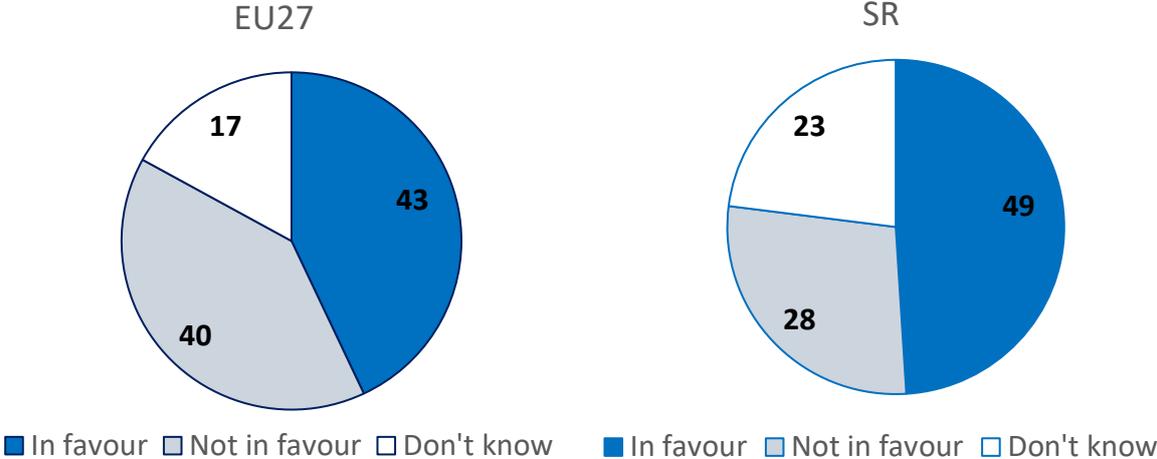
Slovak consumers show a clear preference for fruit flavored of e-liquids (Figure 12). By contrast, tobacco, menthol, and mint flavors are far less popular, yet these are the only categories which could remain available after 2026, following the ongoing discussion on the ban of flavors. The strong preference for fruit flavors adds weight to the ongoing debate about the implications of such restrictions. At the same time, acceptance of flavor bans among Slovak consumers is relatively high, even exceeding the EU average (Figure 13).

Figure 12. Flavor preferences in % (more than one could be indicated).



Source: European Commission, own elaboration.

Figure 13. Attitudes towards banning flavors

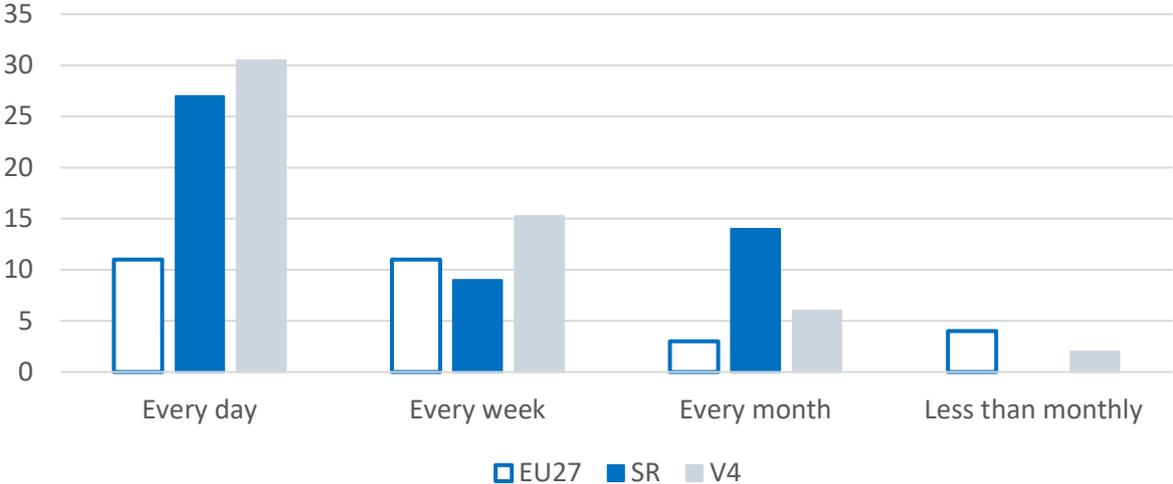


Source: European Commission, own elaboration.

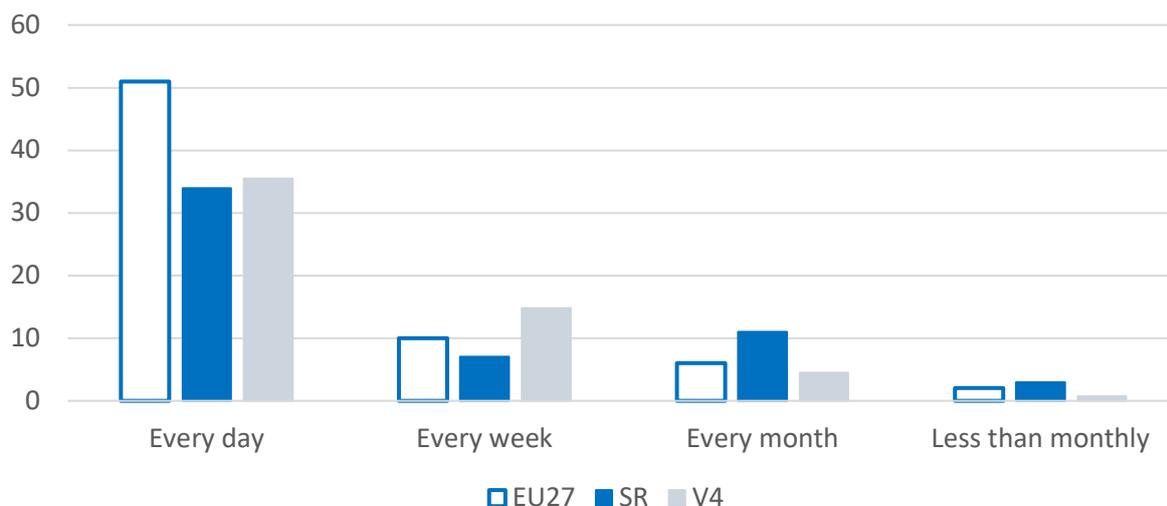
A problematic aspect of e-cigarette use in Slovakia is the preference for device types that are more harmful to the environment (Figures 14 a, b, c). Compared with other options, Slovak consumers show a stronger inclination toward disposable products, which generate more waste and pose greater environmental challenges.

Figure 14. Frequency of device use when consuming e-cigarettes

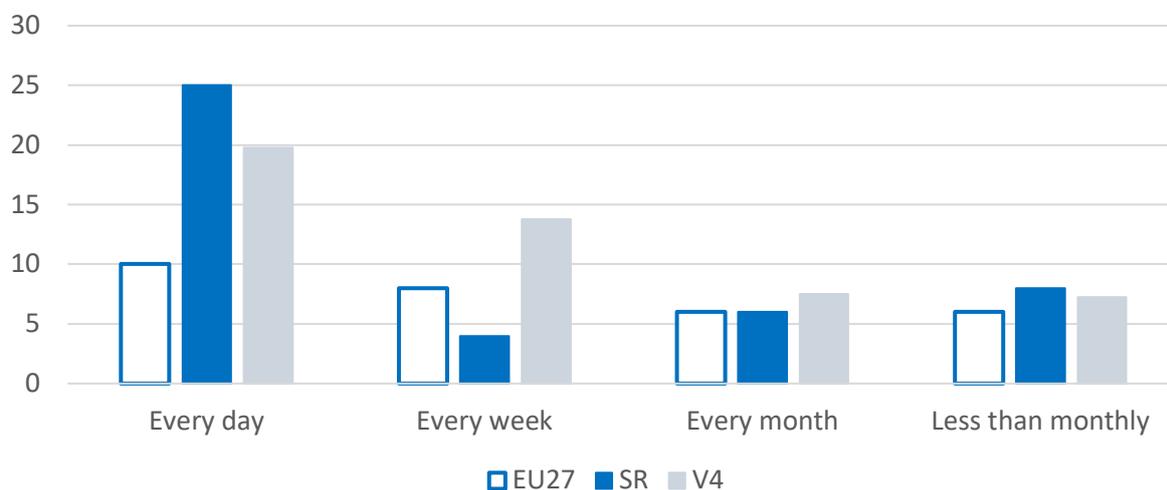
a) A reusable device that can be recharged with a single-use cartridge that is thrown away after use (pod - system)



b) A refillable device which contains a tank that is refilled with an e-liquid from a separate container



c) A disposable device which is thrown away after use



Source: European Commission, own elaboration.

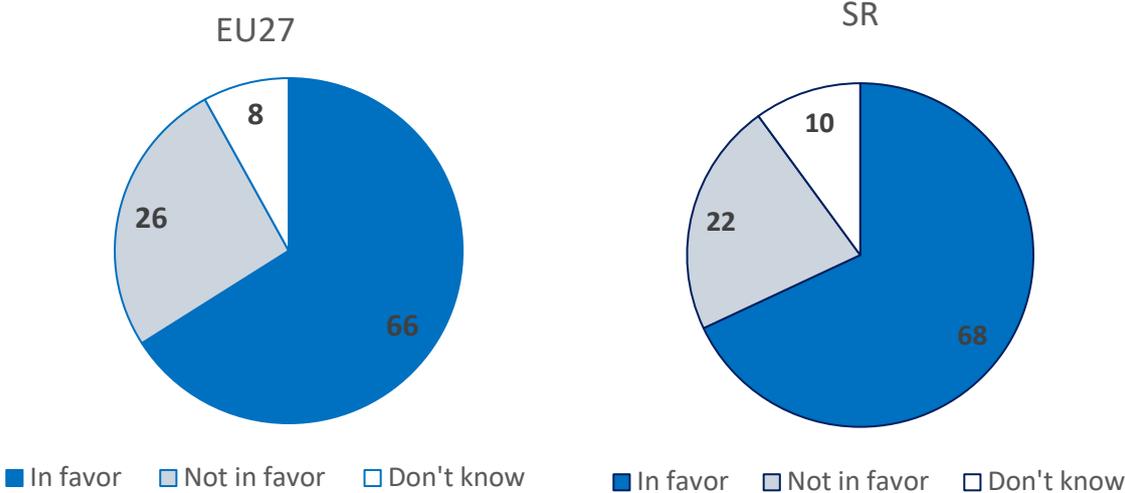
Note: Answer to the question "How often do you use the following devices for e-cigarettes? (%)"

Acceptance of the regulation is relatively good

It has been shown earlier that the perceived attractiveness of emerging nicotine products in Slovakia is significantly higher than the EU27 average. Nevertheless, the level of acceptance of restrictive measures is very similar in both cases. On average, consumers in Slovakia and in the EU express comparable support for banning the use of emerging nicotine products in places where tobacco smoking is already prohibited (Figure 15). In this context, the term "relatively good support" refers to the fact that, despite the high attractiveness of these products in Slovakia, consumers still show a willingness to accept regulatory restrictions at levels close to the EU average.

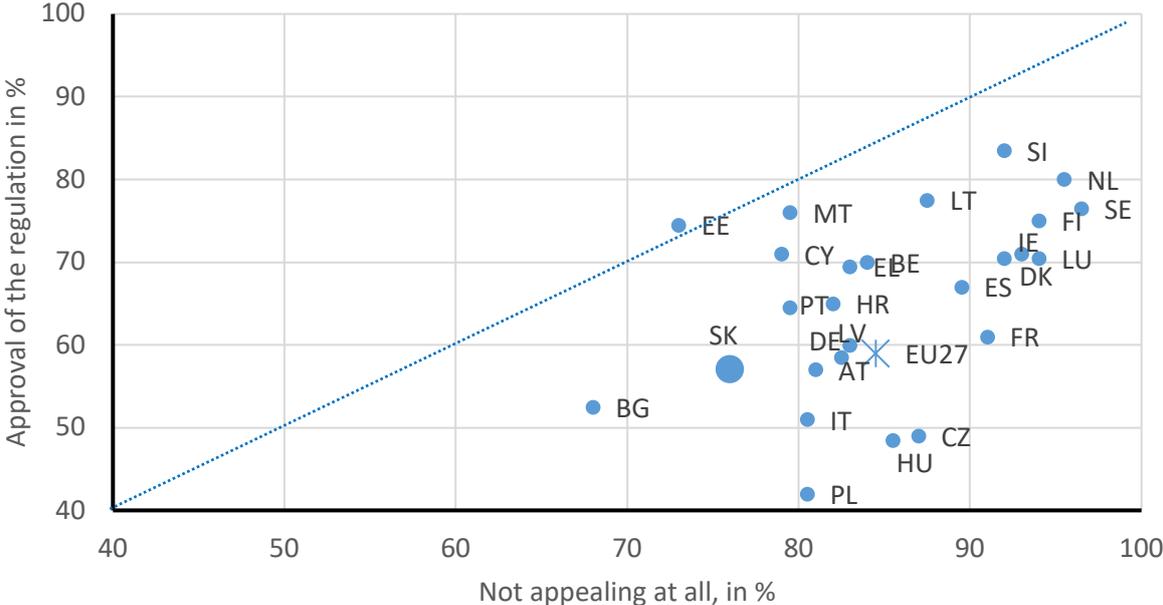
Across the EU, the share of respondents who consider emerging nicotine products “not appealing at all” is higher than the share supporting their regulation (Figure 16). This indicates that although many consumers are critical of these products, not all of them are in favor of regulating them to the same extent as conventional tobacco. In Slovakia, consumers are less critical (lower proportion of “not appealing at all” responses), yet their support for regulation remains similar to the EU average.

Figure 15. Attitude to the ban on use of e-cigarettes or HTPs in environment where smoking is prohibited (%)



Source: European Commission, own elaboration.

Figure 16. Combination of negative perception and support for regulation of emerging nicotine products



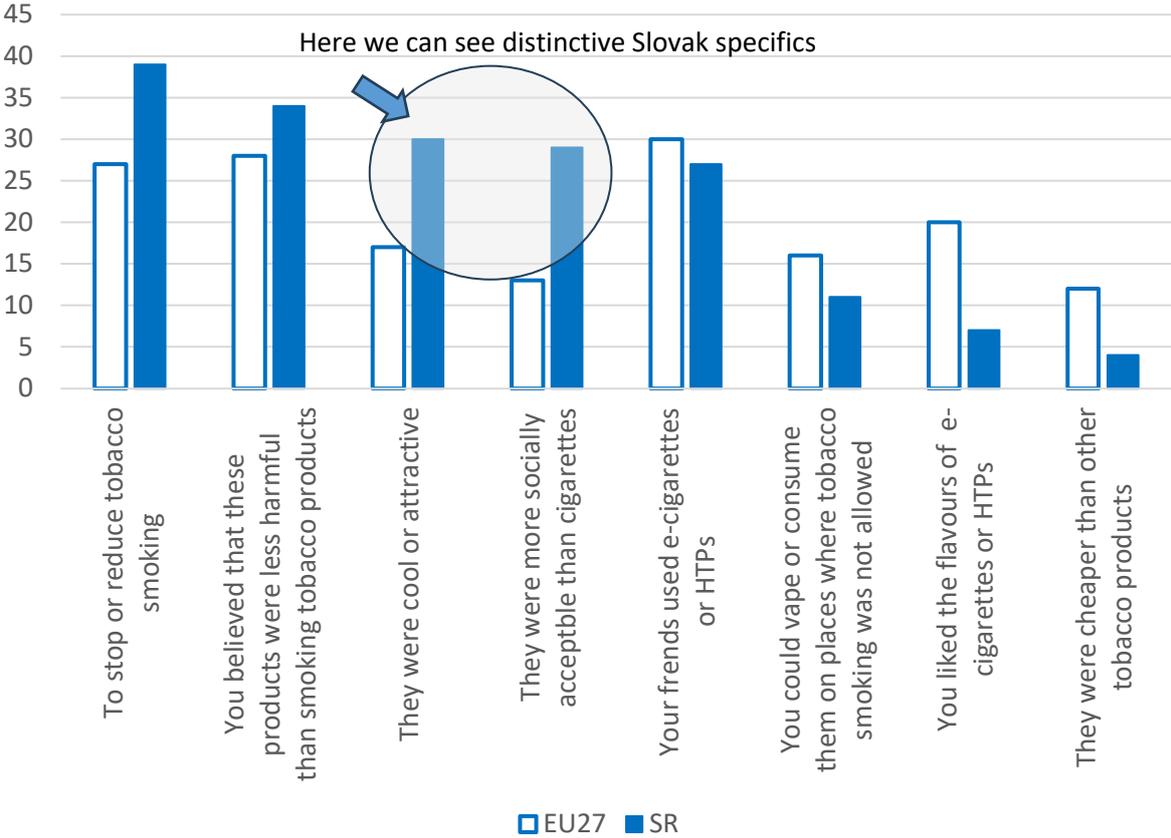
Source: European Commission, own elaboration.

Slovak consumers associate alternatives more with smoking cessation

There are several peculiarities in Slovakia regarding the reasons consumers choose emerging nicotine products. In Slovakia, the use of these products is strongly associated with attempts to quit smoking (Figures 17 and 18). Although “alternatives” in the form of emerging nicotine products are not always used as substitutes for tobacco, the substitution effect appears more widespread in Slovakia than in the EU on average (Figure 18).

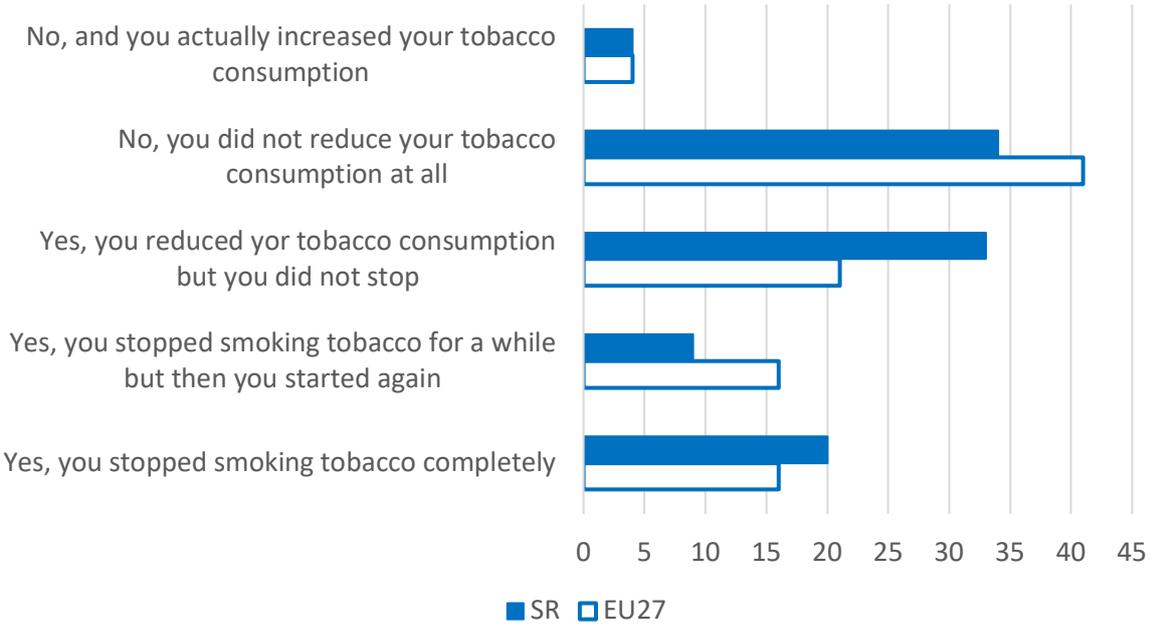
At the same time, Slovak consumers also stand out in other motivations. The search for emerging nicotine products, because they are perceived as attractive (the term "cool" was used in the survey) or more socially acceptable compared to tobacco, is more pronounced (Figure 17), adding a distinct social dimension to their appeal. There are more specificities in the perception of Slovak consumers; in Figure 17, only cases where the Slovak value is significantly above the EU average are highlighted.

Figure 17. Reasons why consumers choose emerging nicotine products instead of smoking tobacco (% , multiple selection allowed)



Source: European Commission, own elaboration.

Figure 18. Have emerging nicotine products replaced tobacco smoking? (%)



Source: European Commission, own elaboration.

Consumption pattern among youth

A youth perspective on the use of emerging nicotine products, especially e-cigarettes, can be drawn from the results of the “European School Survey Project on Alcohol and Other Drugs”, conducted regularly in Slovakia, most recently in 2024 by the Research Institute of Child Psychology and Pathopsychology (see Kopányiová and Tomšík, 2025). The survey covers children in the last year of primary school and secondary school students. In the case of emerging nicotine products, these data are particularly relevant, as these are emerging products that are spreading rapidly among young people.

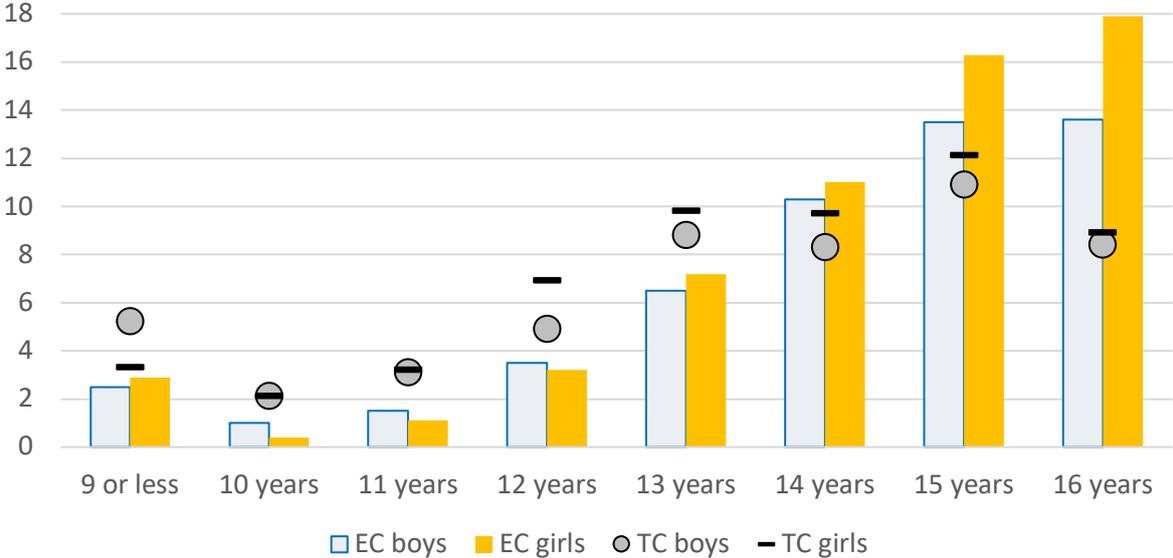
The report shows a marked decline in conventional cigarette use among youth. The share of regular smokers (defined as those smoking 1–5 or more cigarettes per day) fell from 32.7 percent in 2007 to 17.5 percent in 2024. Similarly, the share of heavy smokers (20 or more cigarettes per day) dropped from 2.9 percent to 1.9 percent over the same period. While these figures are encouraging, they are largely the result of substitution: the decrease in cigarette smoking has been offset by the rise of e-cigarettes.

The critical age for initiating e-cigarette use is between 13 and 16, with most starting at 15–16. This pattern mirrors the initiation period for conventional cigarettes, underscoring the need to target prevention and education measures at or before this age group. Although the age of initiation is similar, the trajectory of use differs: e-cigarettes display a steeper “ramp-up” phase and some gender-specific features. At the youngest ages (9–13), experimentation with tobacco

cigarettes is still more common. After age 13, however, e-cigarette use rises sharply (Figure 19a), with a notable increase among girls. This may reflect both the growing popularity of e-cigarettes in more recent years and their greater availability to older age cohorts included in the survey.

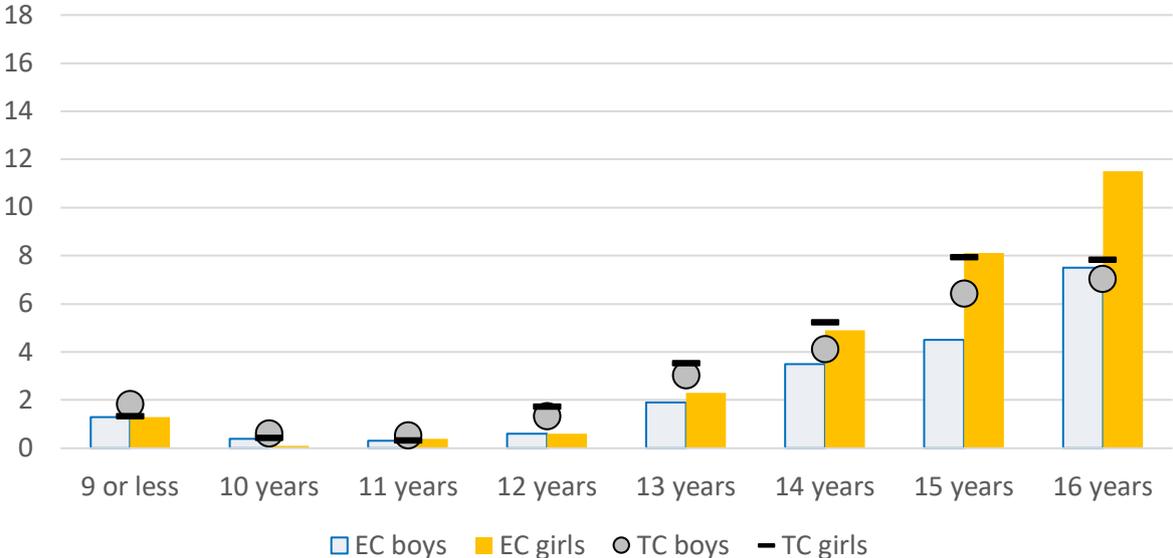
Figure 19. From the first try to regular use

a) The first attempt to smoke cigarettes took place at the age of: (shares in %)



Note: EC- electronic cigarettes, TC- tobacco cigarettes

b) Regular use began at age: (shares in %)



Source: ESPAD 2024, Research Institute of Child Psychology and Pathopsychology.

Note: EC- electronic cigarettes, TC- tobacco cigarettes

A similar pattern emerges in the data on regular smoking. At younger ages, conventional cigarettes are preferred, while in later adolescence, electronic cigarettes become more common. Once again, there is a marked onset of interest among girls around the age of 16 (Figure 19b). As expected, the absolute levels of regular use are lower than in the single-try data, but the age and gender patterns remain visible.

An important finding is the higher propensity to use e-cigarettes among girls. The share of girls with no experience of e-cigarettes is about nine percentage points lower than the corresponding share among boys (Table 4), pointing to a gender gap in experimentation and uptake.

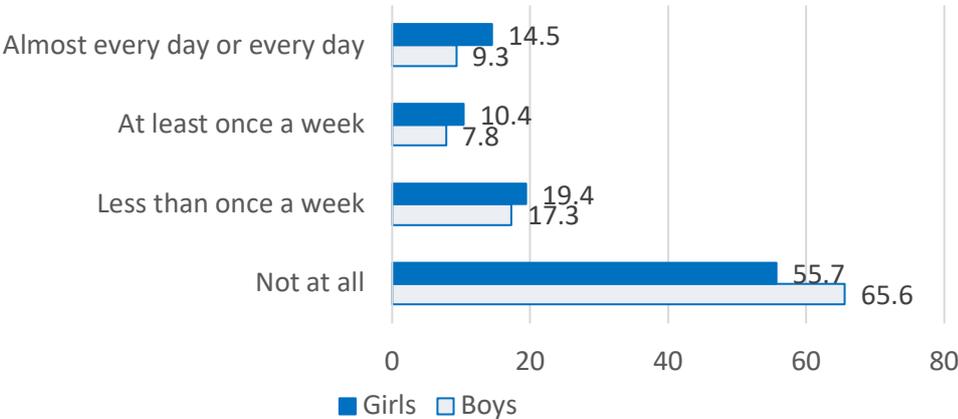
Table 4. Percentage of young people who have not tried cigarettes or not become regular users

	tobacco cigarettes		e- cigarettes	
	boys	girls	boys	girls
Never smoked the first cigarette (%)	48.3	44.2	47.8	40.1
Never shifted to regular smoking (%)	75.4	71.8	79.9	70.8

Source: ESPAD 2024, Research Institute of Child Psychology and Pathopsychology.

Gender differences are also visible in the frequency of e-cigarette use and in the preferred ingredients. Girls reported using e-cigarettes more frequently, with the proportion of those who had not used an e-cigarette in the past month about ten percentage points lower than among boy (Figure 20).

Figure 20. Gender differences in frequency of use (%)



Source: ESPAD 2024, Research Institute of Child Psychology and Pathopsychology.

Medical staff at the National Institute of Childhood Diseases (NÚDCH – Národný ústav detských chorôb) have expressed concern about the growing nicotine addiction among children and the increasing use of emerging nicotine products. They highlight that these products attract children because of their form and flavors, while also creating a false impression of being harmless. Their discreet nature makes them less noticeable to parents and harder to detect compared to conventional tobacco cigarettes, which complicates early identification of emerging problems.

According to the Institute, smoking of conventional cigarettes among children has been in long-term decline, but this trend has been accompanied by substitution with a wide range of alternative products. Medical staff report encountering cases of adolescents who have developed nicotine dependence syndrome as a result of such use (NÚDCH, 2025).

Key Messages and Recommendations

1. **Strengthen excise taxation of emerging products**

Slovakia made significant progress with the introduction of excise duty on emerging nicotine products. It is recommended to continue in regular and predictable increases in excise taxes on e-liquids, e-cigarettes and nicotine pouches to reduce affordability, curb youth uptake and secure steady revenue growth even as consumption patterns change.

2. **Prepare for stricter flavor regulation**

The traditional flavors of emerging nicotine products seem to be less preferred in Slovakia, and given the strong preference for fruit flavors among Slovak users, full implementation of the flavor ban should reduce their appeal, especially among youth.

3. **Limit or ban the disposable devices**

As disposable e-cigarettes create sizeable environmental waste, their strict regulation or complete ban should be introduced. Alternatively, introducing aggressive environmental fees could also help to limit their appeal and/or use and reduce waste.

4. **Strengthen youth protection measures**

Despite already implemented regulations, the emerging nicotine products are still relatively easily accessible to youth. Earlier prevention programs, better enforcement of age-of-sale rules, and targeted inspections of retail and online vendors are needed to slow the rise of youth use of emerging nicotine products.

5. Improve open information and product transparency

Despite increasing awareness about the potential harm of emerging nicotine products, a significant proportion of the population might perceive them as harmless. Therefore, clear communication about nicotine content and warnings about health risks can counter the incorrect perception of users that emerging products are harmless.

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