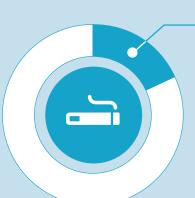




Statistics on smoking, smoking cessation, and the use of e-cigarettes (vapes) in the Netherlands

# **Smoking in the Netherlands**



18.2%

of adults (18 years and older) in the Netherlands smoked tobacco products in 2024

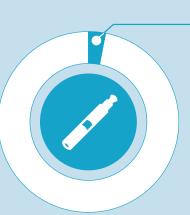


35.3%

of adults who smoked in the Netherlands made a serious quit attempt in 2024



About **2.6 million** of the 14.5 million adults in the Netherlands smoked in 2024



3.1%

of adults in the Netherlands regularly used an e-cigarette in 2024

# Smoking in the Netherlands: Key statistics for 2024



This report outlines key statistics on smoking, smoking cessation, tobacco smoke exposure, and e-cigarette (electronic cigarette) use among adults in the Netherlands in 2024. It is an English-language translation of the <a href="Dutch-language report">Dutch-language report</a>. All statistics come from the Health Survey database, which is part of the Netherlands Lifestyle Monitor data collection.<sup>1</sup>

### **The Netherlands Lifestyle Monitor**

The Lifestyle Monitor includes multiple data sources. One of these sources is the *Health Survey*, which is conducted by <u>Statistics Netherlands</u>. The Trimbos Institute and Statistics Netherlands are part of the Lifestyle Monitor Consortium, which is responsible for the content and data collection of the Lifestyle Monitor. The National Institute for Public Health and the Environment coordinated the data collection. The Lifestyle Monitor Consortium has been commissioned by the Ministry of Health, Welfare and Sport in the Netherlands and Statistics Netherlands.

### The Health Survey

The *Health Survey* is an annual survey of the population of the Netherlands, which has been conducted by Statistics Netherlands since 1981. Statistics Netherlands collects data on the health of the population of the Netherlands through an annual random, representative sample of adults from the municipal population registry. Respondents were first approached to participate in the survey via the internet. A selection of those who were invited to participate in the survey but did not respond were approached for a face-to-face interview. More information about the survey methods used to collect data for the *Health Survey* can be found on the website of Statistics Netherlands.<sup>2</sup>

A total of 7,820 adults (18 years and older) completed the *Health Survey* in 2024. In addition to collecting data about other health topics, the *Health Survey* collects data on smoking, smoking cessation, and the use of e-cigarettes by the population of the Netherlands.

#### The role of the Trimbos Institute

The Trimbos Institute publishes key national statistics on smoking, alcohol use, and drug use. Key smoking statistics include, but are not limited to, smoking rates, rates of adults who use e-cigarettes, and smoking cessation attempts in the Netherlands. Both local and national government agencies in the Netherlands use these statistics to monitor tobacco use and gain insight into how tobacco control policies work. Experts at the Trimbos Institute used the data from the *Health Survey* to calculate the statistics presented in this report.

This report presents statistics about 'smokers' (which include both daily and non-daily smokers) and 'daily smokers' (who smoke every day); this report also presents statistics on e-cigarette use. All statistics describe the adult population, defined as aged 18 years and older. In many figures, 2024 data is compared with data from 2023 and with data from 2014, which was the first year in which the Lifestyle Monitor consortium collected data. A selection of the statistics have also been published in Dutch on the 'State of Public Health and Health Care' website.<sup>3</sup>

### What is meant by 'significant'?

This report sometimes describes differences as 'significant'. By that, it is meant that these differences are *statistically* significant. Differences are statistically significant if the odds are very small that these differences are caused by mere chance. This report frequently compared data of more than one year (2014, 2023, and 2024); if differences between years are significant, this is noted in the text.

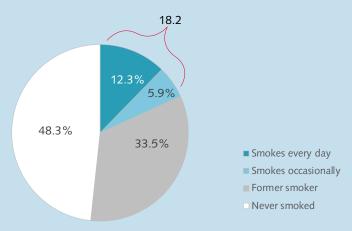
# **Netherlands Expertise Center for Tobacco control**

The Netherlands Expertise Center for Tobacco Control is part of the Trimbos Institute. The Center develops, collates, and disseminates independent knowledge on all aspects of tobacco use and tobacco control to health professionals, scientists, and public officials in the Netherlands. These dissemination activities include sharing information about tobacco usage, prevention options, treatment of tobacco addiction, and policy options.

# **Smoking in the Netherlands**



Figure 1. Smoking rate among adults in the Netherlands in 2024

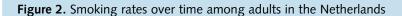


**Note:** Approximately 18.2% of adults in the Netherlands smoked tobacco products in 2024. This includes 12.3% daily smokers and 5.9% occasional (non-daily) smokers. Of adults in the Netherlands who reported smoking, 67.5% smoked every day.

Table 1. Estimated number of smokers in 2024

	Estimation	Lower limit	Upper limit
All smokers	2,556,000	2,422,000	2,689,000
Lower education	674,000	601,000	747,000
Middle education	1,080,000	988,000	1,171,000
Higher education	803,000	723,000	882,000
Daily smokers	1,719,000	1,606,000	1,833,000
Lower education	581,000	512,000	649,000
Middle education	792,000	712,000	871,000
Higher education	347,000	294,000	400,000
Non-daily smokers	837,000	768,000	905,000
Lower education	93,000	66,000	120,000
Middle education	288,000	243,000	333,000
Higher education	2,556,000	2,422,000	2,689,000

**Note:** About 2.6 million adults in the Netherlands smoked in 2024. As this is an estimation, Table 1 also shows lower and upper limits of the number of adults who smoked. Data is not available on the education level of all study participants. Therefore, the estimate for the total population sometimes differs from the estimates for the education groups combined.



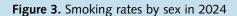


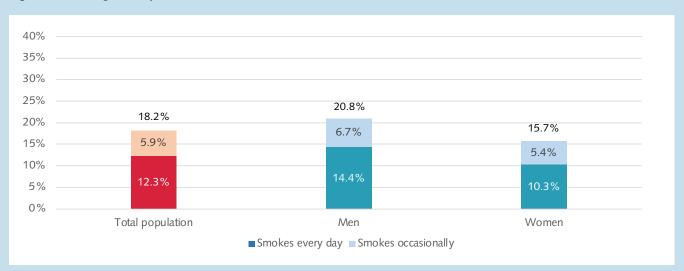
**Note:** The overall smoking rate did not change significantly\* between 2023 and 2024. The daily smoking rate decreased significantly between 2023 and 2024. The adult smoking rate in the Netherlands decreased significantly between 2014 and 2024. In addition, the proportion of adults who smoke *every day* decreased significantly between 2014 and 2024. The proportion of occasional smokers has not increased or decreased significantly between 2014 and 2024.



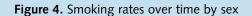
<sup>\*</sup> A definition of significance is on Page 2.

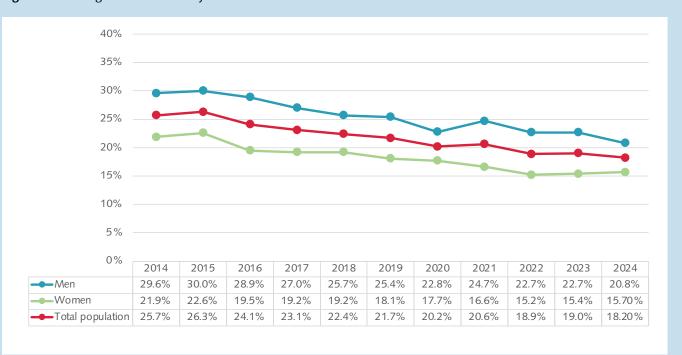






**Note:** Significantly more men in the Netherlands reported smoking than women. In addition, more men reported smoking every day. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

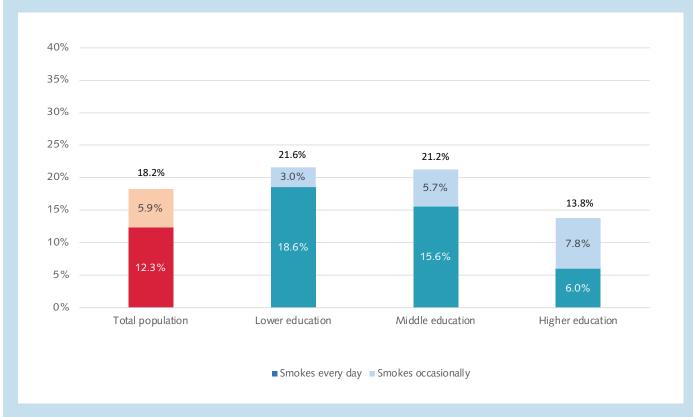




**Note:** Between 2023 and 2024, the smoking rate did not change significantly for both men and women in the Netherlands. However, smoking rates did decrease significantly between 2014 and 2024 for both men and women. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.



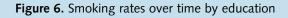


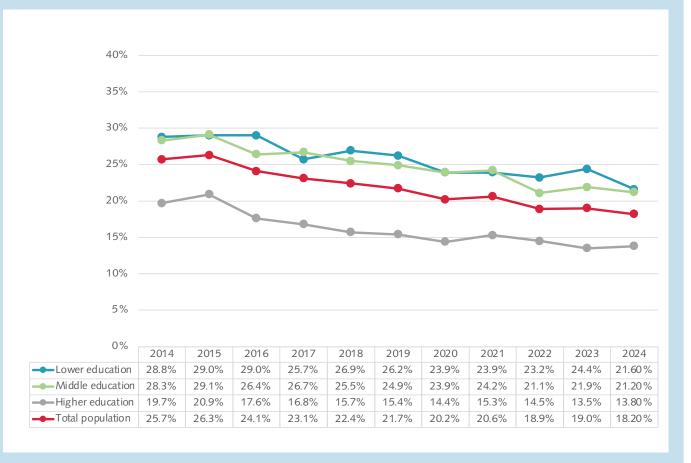


**Note:** In the Netherlands, smoking rates are significantly higher among people with lower or middle levels of education than among people with higher education. Daily smoking rates differ in all three education groups. As the Netherlands has a relatively higher percentage of people with higher education than of people with lower or middle education levels, the absolute number of smokers with higher education is higher than the number of smokers with lower or middle education. These figures are shown in Table 1. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

Due to rounding, the percentages do not always add up to their total.







**Note:** Between 2023 and 2024, the smoking rate did not significantly decrease or increase in all three educational groups. In addition, smoking rates decreased significantly between 2014 and 2024 among all three groups. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

# What are lower, middle, and higher levels of education in the Netherlands?

This report presents information about people who smoke and educational levels in the Netherlands. A description of the educational level categories is below:

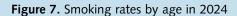
Lower education: Elementary school, lower secondary education, or lower vocational education

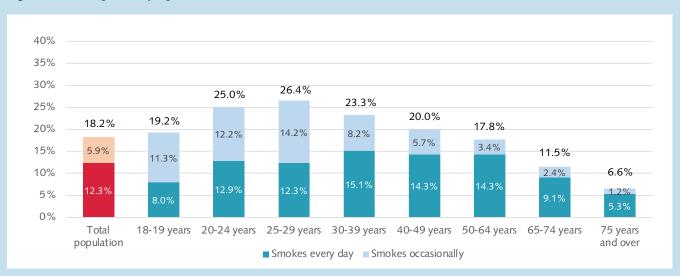
Middle education: Intermediate vocational education or higher secondary education

Higher education: Higher vocational education or university

In this report, adults were grouped into three levels of education. Among people 18 to 24 years old, we used the highest level of education they either completed or are currently studying to attain. Among people aged 25 years and older, we used the highest level of education completed.

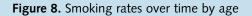


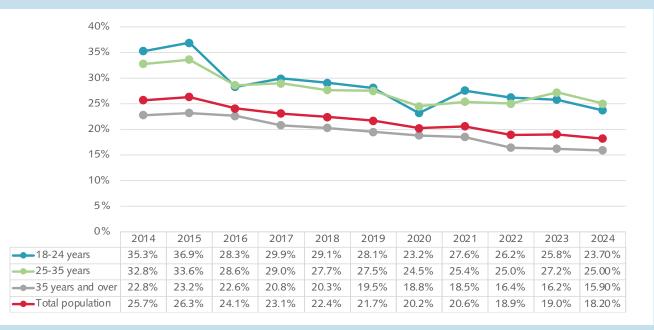




**Note:** In the Netherlands, over 1 out of 4 people aged 20 to 29 reported smoking in 2024. People aged 75 and older were the least likely to report smoking. In smokers who were aged 75 and older, a larger proportion of them smoked every day compared to younger smokers. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

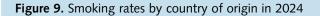
Due to rounding, the percentages do not always add up to their total.

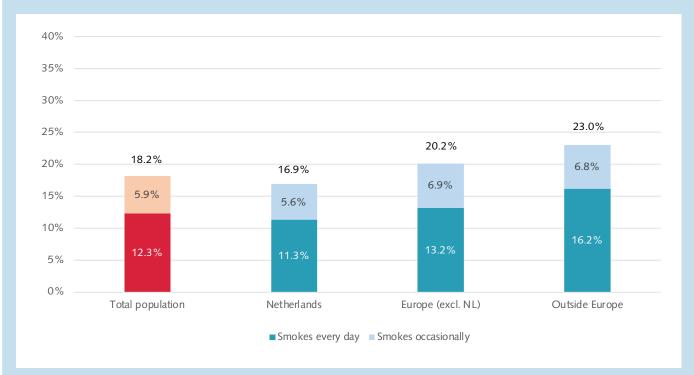




**Note:** Between 2023 and 2024, the smoking rate did not significantly decrease or increase in all three age groups (18-24 years, 25-34 years, 35 years and older) in the Netherlands. Between 2014 and 2024, the smoking rates decreased significantly in all three age groups. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.







**Note:** In the Netherlands, both the overall smoking rate and the daily smoking rate were higher among people with either a European or non-European country of origin than among people born in the Netherlands. There was no difference in the percentage of smokers between people with and European country of origin and a country of origin outside of Europe. Among people of Dutch origin, a significantly smaller proportion smoked every day than among people with a country of origin outside of Europe, but they did not differ from people of European origin. There was no difference between people of European origin and those of non-European origin. For comparison, this figure shows the percentages of the total population in red. Due to rounding, the percentages do not always add up to their total.

## What is a country of origin?

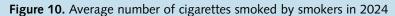
A person's country of origin is defined by the following criteria:

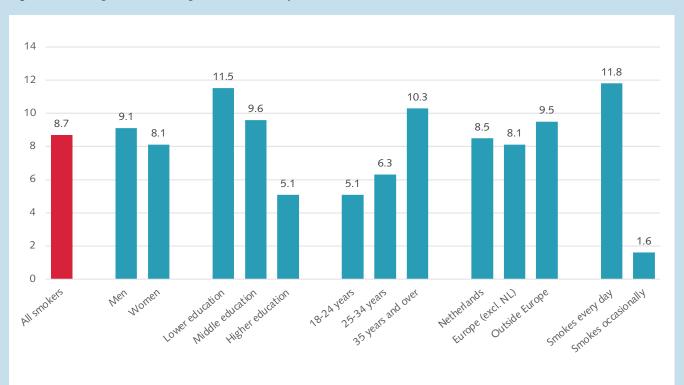
- A person who was born in the Netherlands and *both* parents were born in the Netherlands is classified to have the Netherlands as their country of origin.
- A person who was born in the Netherlands and *both* parents were born outside of the Netherlands has the same country of origin as their mother.
- A person who was born in the Netherlands and *one* parent was born outside of the Netherlands has the same country of origin as that parent.
- A person who was born outside the Netherlands has their country of birth as their country of origin.

Statistics Netherlands further categorizes a foreign country of origin into 'European' and 'Non-European'. The government of the Netherlands uses statistics on people's country of origin to explain differences in cultural practices and health behaviors.

Want to know more about this topic? Visit the Statistics Netherlands website for more information.

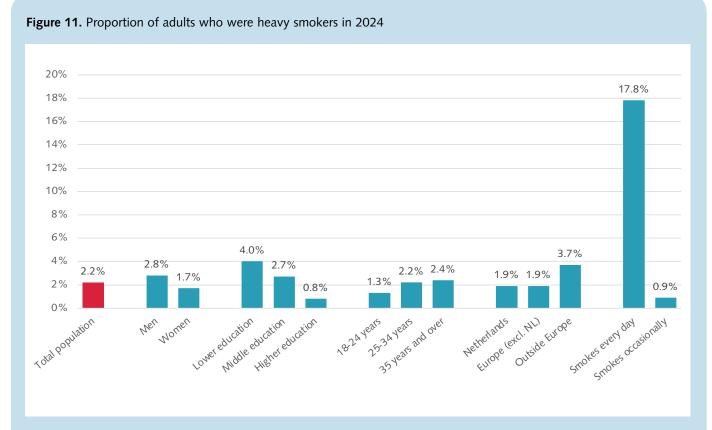






**Note:** This figure presents data only from people who reported smoking cigarettes in the Netherlands in 2024. The figure displays the average number of cigarettes smoked each day. Men, people with lower education, people aged 35 and over, and daily smokers reported smoking the highest number of cigarettes per day in 2024. The analysis found no significant differences by country of origin.





**Note:** In 2024 in the Netherlands, only a small percentage of people (2.2%) reported smoking more than 20 cigarettes a day; these people are considered heavy smokers. People who reported being heavy smokers tended to be men, had lower educational attainment, and reported smoking every day. We found no effect of age. People with an origin outside of Europe were more often heavy smokers than people with a Dutch origin or people with a European country of origin. This figure displays the heavy smoking rate of the total adult population of the Netherlands in red for comparison.

## What is heavy smoking?

Someone who smokes 20 cigarettes or more on average each day is called a 'heavy smoker'.

It is important to know how many heavy smokers there are and whether their number of cigarettes increases or decreases over time. Heavy smokers are more likely to become ill or to die due to their smoking. People who smoke heavily for their entire life tend to live 13 years less than those who never smoked. People who smoke every day, but who are not heavy smokers, reduce their life expectancy by nine years on average. Occasional smokers, defined as people who do not smoke every day, tend to live on average five years fewer than non-smokers.<sup>4</sup>



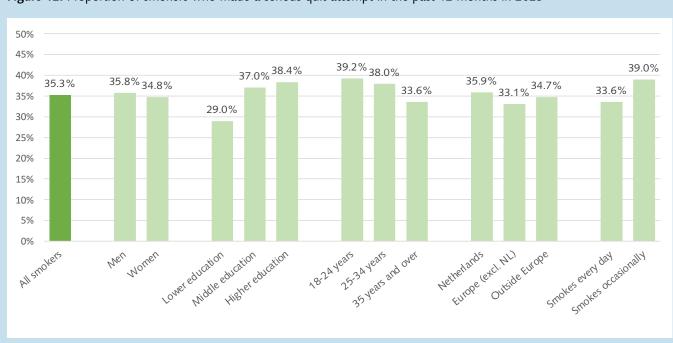


Figure 12. Proportion of smokers who made a serious quit attempt in the past 12 months in 2023

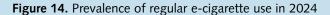
**Note:** In the Netherlands, about 1 out of 3 people who smoke reported having made a serious quit attempt in the past 12 months in 2024. A quit attempt is considered a serious attempt if the person tries to quit smoking and does not smoke for at least 24 hours. People with a lower level of education were less likely to have made a serious quit attempt than people with a middle or higher level of education. We found no significant difference for sex, age, country of origin, and daily smoking. This figure displays the smoking rate of the total smoking population of the Netherlands in dark green for comparison.

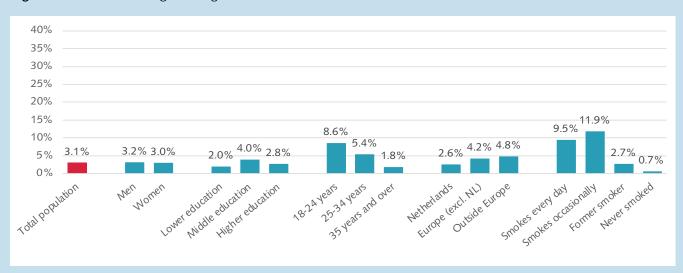


Figure 13. Proportion of smokers who had made a serious quit attempt in the past 12 months over time

**Note:** In the Netherlands, the rate of smokers who had made a serious quit in the past year did not significantly change between 2023 and 2024. The rate of serious quit attempts remained about the same between 2014 and 2024.



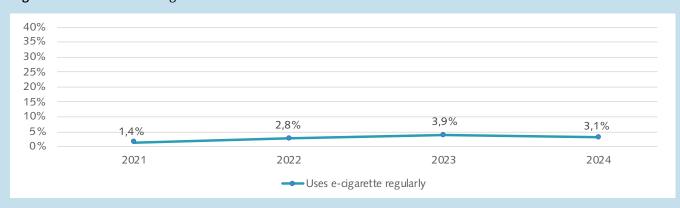




**Note:** This figure presents information about e-cigarette use among all adults in the Netherlands in 2024. People with a middle level of education and people aged 18 to 24 were most likely to report regularly using an e-cigarette. People of Dutch origin are least likely to use an e-cigarette than people of European origin or an origin outside of Europe. There was no difference for sex or daily smoking. This figure displays the e-cigarette use rate of the total adult population of the Netherlands in red for comparison.

The survey also asked respondents if they used heated tobacco products; only 0.6% of those surveyed reported using such products.

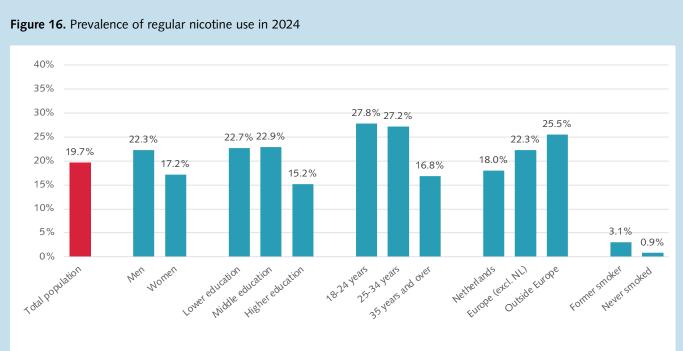
Figure 15. Prevalence of e-cigarette use over time



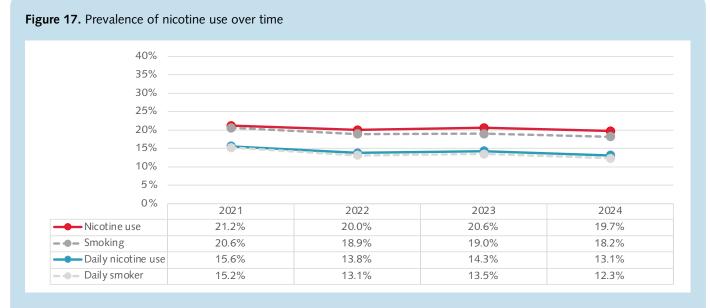
**Note:** This figure presents information about e-cigarette use among all adults in the Netherlands in 2024. Of all adults, 3.1% regularly used an electronic cigarette (vape) in 2024. The percentage of adults who regularly used an electronic cigarette has decreased significantly between 2023 and 2024. Between 2021 and 2024, the percentage of adults who regularly use e-cigarettes has increased. Of the 3.1% regular users of electronic cigarettes, 1.9% had smoked tobacco and 1.3% had not. This means that 59.8% of people who regularly used an electronic cigarette had also smoked tobacco. The question about e-cigarette use has been asked in the same way since 2021. Therefore, we can only look at trends in e-cigarette use from 2021 onwards. Electronic cigarettes have been available in the Netherlands since 2007.

the Netherlands in red for comparison.



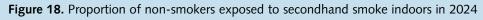


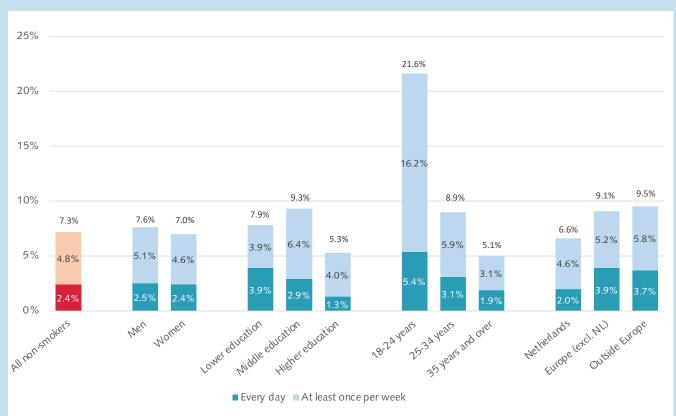
**Note:** This graph shows the use of one or more nicotine products. These include tobacco products, e-cigarettes, and heated tobacco products. Nicotine products are used most often by men and least often used by people with a higher education, people aged 35 or older, and people of Dutch origin. This figure displays the nicotine use rate of the total adult population of



**Note:** Daily nicotine use refers to someone using at least one nicotine product daily. The percentage of adults who regularly use a nicotine product remained the same between 2023 and 2024. Between 2021 and 2024, the percentage of adults who regularly used a nicotine product decreased. The question about e-cigarette use has been asked in the same way since 2021, therefore we can only examine nicotine use trends from 2021 onward.







**Note:** This figure contains information only about non-smoking adults in the Netherlands in 2024. It shows the proportion of non-smokers in the Netherlands that reported having been exposed to secondhand smoke inside homes or other indoor spaces. People with a high level of education are less likely to be exposed to secondhand smoke than people with a low or medium level of education. The percentage of people who were exposed to secondhand smoke differs significantly between all age groups, with the group of 18-24 years being exposed most often. People with a Dutch origin were less likely to report being exposed to secondhand smoke than people with a European origin or an origin outside of Europe. There is no difference between people with a European origin and an origin outside of Europe. This figure displays the exposure rate of all non-smokers the Netherlands in red for comparison. Due to rounding, the percentages do not always add up to their total.



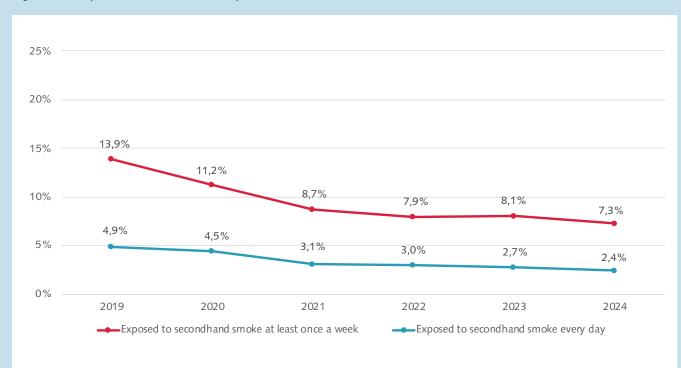


Figure 19. Proportion of non-smokers exposed to secondhand smoke indoors over time

**Note:** The percentage of non-smokers who are exposed to secondhand smoke remained the same between 2023 and 2024. The percentage of non-smokers that are exposed to secondhand smoke indoors decreased significantly between 2019 and 2024. The question about exposure to secondhand smoke has been asked in the same way since 2019. That is why we can only look at the change over time from 2019 onwards.

## Secondhand smoke: breathing in someone else's tobacco smoke

Secondhand smoke is tobacco smoke from burning tobacco products and smoke that has been breathed out by a person who is smoking. Exposure to secondhand smoke harms health. Secondhand smoke contains toxins similar to those in tobacco smoke. Exposure to secondhand smoke can cause illnesses similar to those that smoking cigarettes does. It is particularly harmful to children. Exposing children to secondhand smoke increases their chance of getting lung infections, ear infections, and other illnesses.<sup>5</sup>



- 1. Health Survey / Lifestyle Monitor, Statistics Netherlands (CBS) in collaboration with National Institute for Public Health and the Environment (RIVM), and Trimbos Institute, 2023.
- 2. Health Survey as of 2014. https://www.cbs.nl/en-gb/our-services/methods/surveys/korte-onderzoeksbeschrijvingen/health-survey-as-of-2014.
- 3. State of Public Health and Care (Staat van V & Z). www.staatvenz.nl/kerncijfers.
- 4. Reep-van den Bergh CMM, Harteloh PPM, Croes EA. Doodsoorzaak nr. 1 bij jonge Nederlanders: de sigaret. NTvG. 2018;161(D1991).
- 5. US Surgeon General. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Washington, DC: Department of Health and Human Services (2006).





# **Further reading**



Want to know more about tobacco use and exposure to tobacco smoke in the Netherlands? The following publications may be interesting:

- Collecting data on tobacco use in the Netherlands
- Smoking cessation counselling in maternity care in the Netherlands
- Dutch Youth Health Care: From smoke-free houses to smoke-free parents
- Local tobacco control policies in the Netherlands

### Our mission

The Netherlands Expertise Center for Tobacco Control continues to monitor tobacco use in the Netherlands. The most recent key statistics on tobacco use, alcohol use and drug use among adults are on our website: <a href="mailto:trimbos.nl/kennis/cijfers">trimbos.nl/kennis/cijfers</a> (in Dutch).

Please contact Marieke van Aerde (maerde@trimbos.nl) if there are any questions regarding this report.

#### Colophon

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