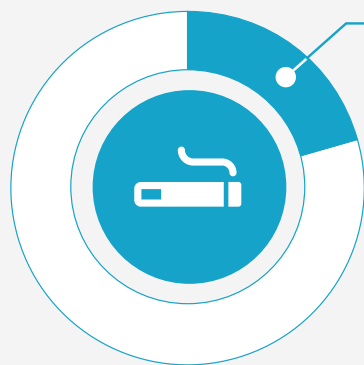


SMOKING IN THE NETHERLANDS: KEY STATISTICS FOR 2023

STATISTICS ON SMOKING, SMOKING CESSATION, AND
THE USE OF E-CIGARETTES (VAPES) IN THE NETHERLANDS

SMOKING IN THE NETHERLANDS



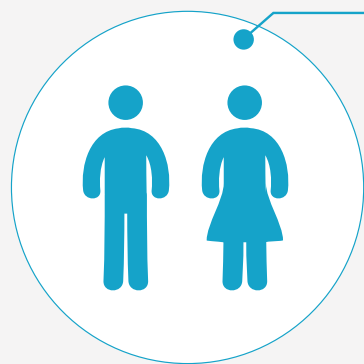
19.0%

of adults (18 and older) in the Netherlands smoked tobacco products in 2023



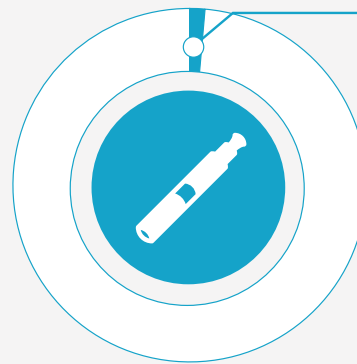
34.4%

of adults who smoke in the Netherlands made a serious quit attempt in 2023



About 2.7 million

of the 14.5 million adults in the Netherlands smoked in 2023



3.9%

of adults in the Netherlands regularly used an e-cigarette in 2023

NETHERLANDS EXPERTISE CENTRE FOR TOBACCO CONTROL

The Netherlands Expertise Centre for Tobacco Control (NET) is part of the Trimbos Institute. The Centre 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: KEY STATISTICS FOR 2023

This report outlines key statistics on smoking, smoking cessation, tobacco smoke exposure, and e-cigarette (electronic cigarette) use among adults in the Netherlands in 2023. It is an English-language translation of the [Dutch-language report](#). All statistics come from the *Health Survey* database, which is part of the Netherlands Lifestyle Monitor data collection.¹

THE NETHERLANDS LIFESTYLE MONITOR

The Lifestyle Monitor includes multiple data sources. One of these sources is the Health Survey, which is conducted by [Statistics Netherlands](#). 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.

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](#).²

A total of 7,708 adults (18+ years) completed the *Health Survey* in 2023. 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 trends in 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.

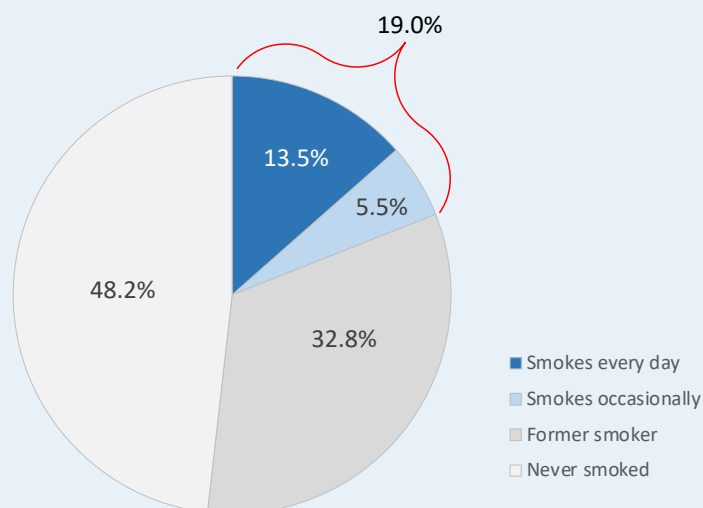
This report presents statistics about 'smokers' (which include both daily and non-daily smokers) and 'daily smokers' (who smoke every day); this report also presents statistics on e-cigarette use. All statistics describe the adult population, defined as aged 18 years and older. In many figures, 2023 data is compared with data from 2022 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 on the ['State of Public Health and Health Care' website](#) in Dutch).³

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, 2022, and 2023); if differences between years are significant, this is noted in the text.



Figure 1. Smoking rate among adults in the Netherlands in 2023



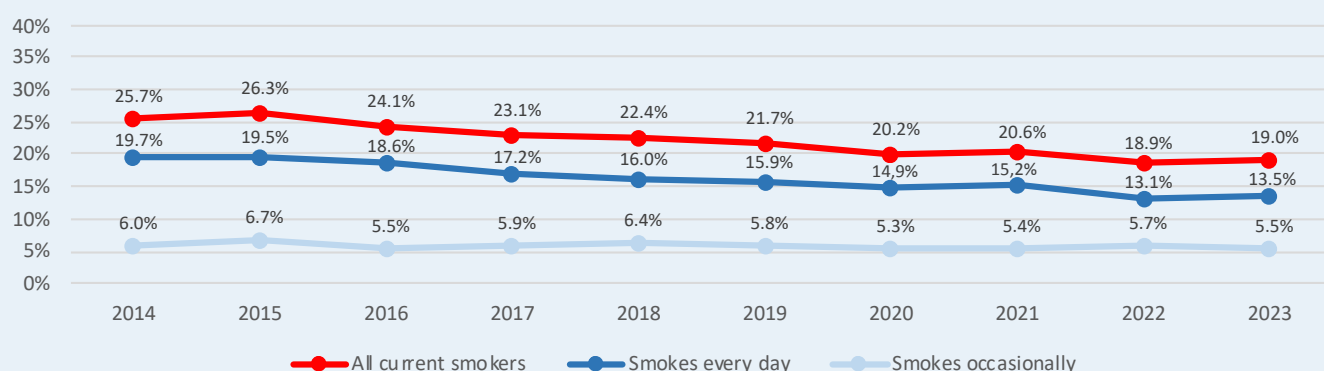
Note: Approximately 19.0% of adults in the Netherlands smoked tobacco products in 2023. This includes 13.5% daily smokers and 5.5% occasional (non-daily) smokers. Of adults in the Netherlands who reported smoking, 71.3% smoked every day.

Table 1. Estimated number of smokers in 2023

	Estimation	Lower limit	Upper limit
All smokers	2,694,000	2,555,000	2,833,000
Lower education	741,000	662,000	820,000
Middle education	1,112,000	1,019,000	1,205,000
Higher education	790,000	710,000	871,000
Daily smokers	1,920,000	1,799,000	2,041,000
Lower education	668,000	593,000	743,000
Middle education	857,000	774,000	939,000
Higher education	347,000	293,000	439,000
Non-daily smokers	774,000	705,000	843,000
Lower education	73,000	49,000	97,000
Middle education	255,000	211,000	299,000
Higher education	444,000	387,000	501,000

Note: About 2.7 million adults in the Netherlands smoked in 2023. As this is an estimation, Table 1 also shows lower and upper limits of the number of adults who smoked. Since the educational attainment of some of the people who smoked in 2023 is not known, the totals of the three education groups do not equal the total group of people who smoked.

Figure 2. Smoking rates over time among adults in the Netherlands

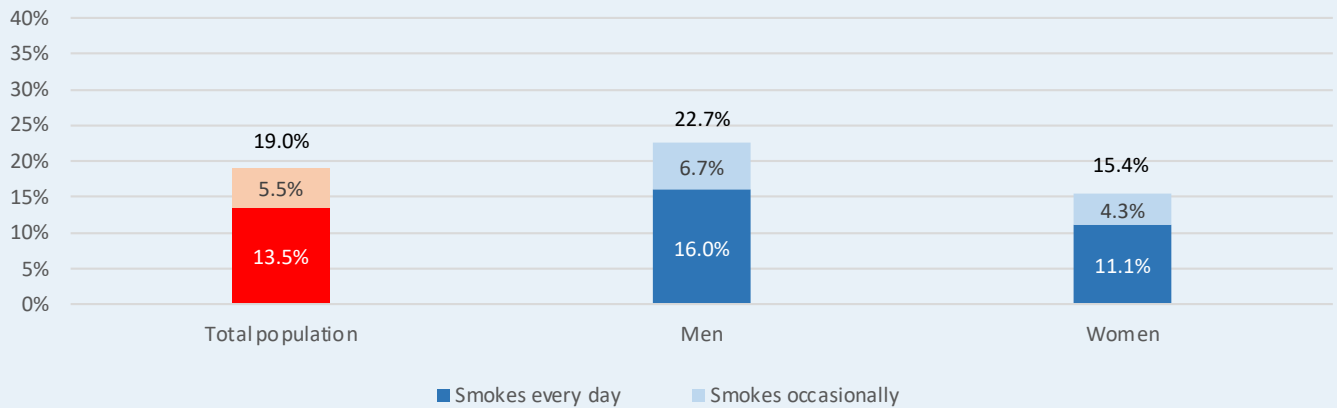


Note: Both the overall smoking rate and the daily smoking rate did not change significantly between 2022 and 2023. The adult smoking rate in the Netherlands decreased significantly between 2014 and 2023. In addition, the proportion of adults who smoke every day decreased significantly between 2014 and 2023. The proportion of occasional smokers has not increased or decreased significantly between 2014 and 2023.

* A definition of significance is on Page 2.

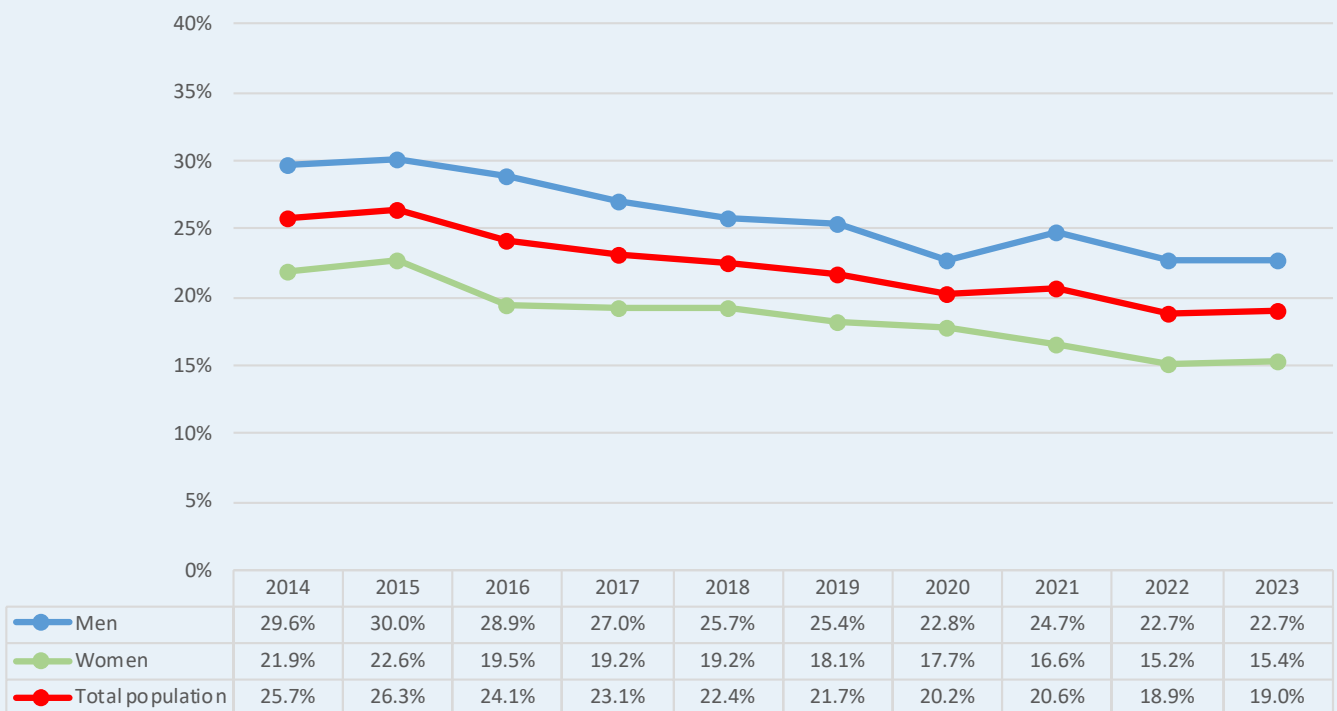


Figure 3. Smoking rates by sex in 2023



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.

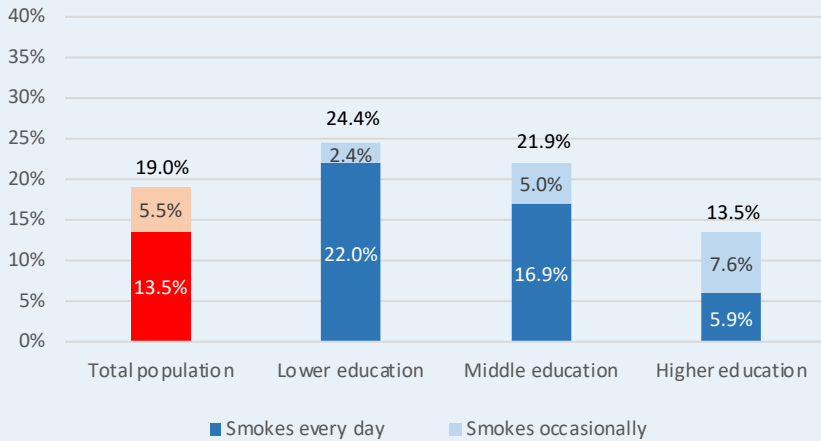
Figure 4. Smoking rates over time by sex



Note: Between 2022 and 2023, the smoking rate did not change significantly for both men and women in the Netherlands. However, smoking rates did decrease significantly between 2014 and 2023 for both men and women. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.



Figure 5. Smoking rates by education in 2023



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. 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:

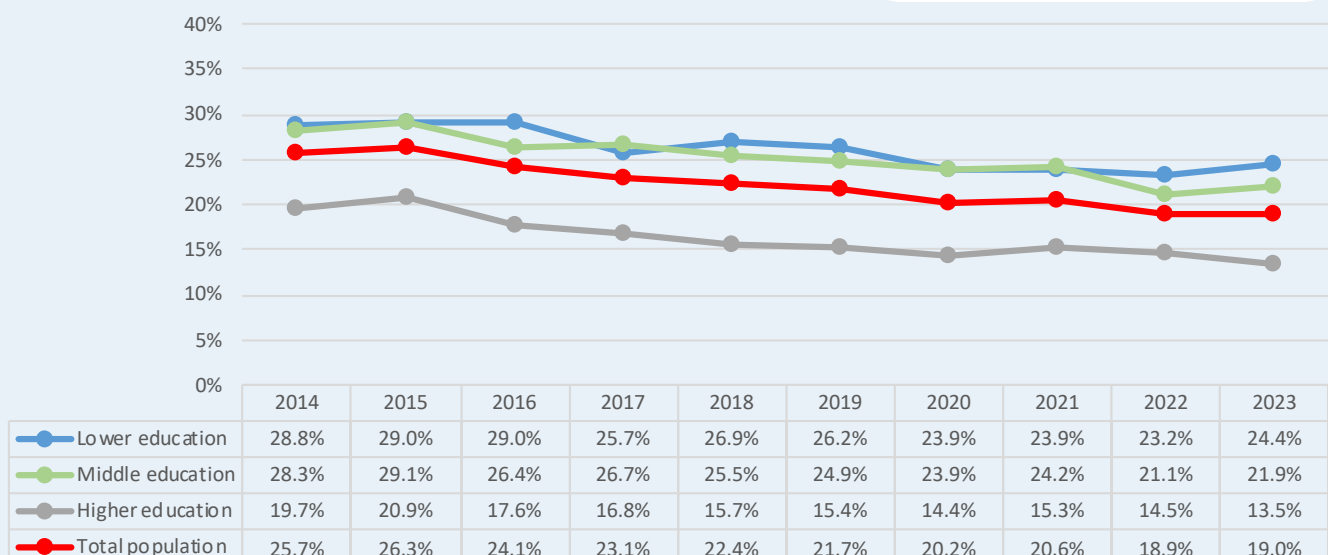
Intermediate vocational education or higher secondary education

Higher education:

Higher vocational education or university

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

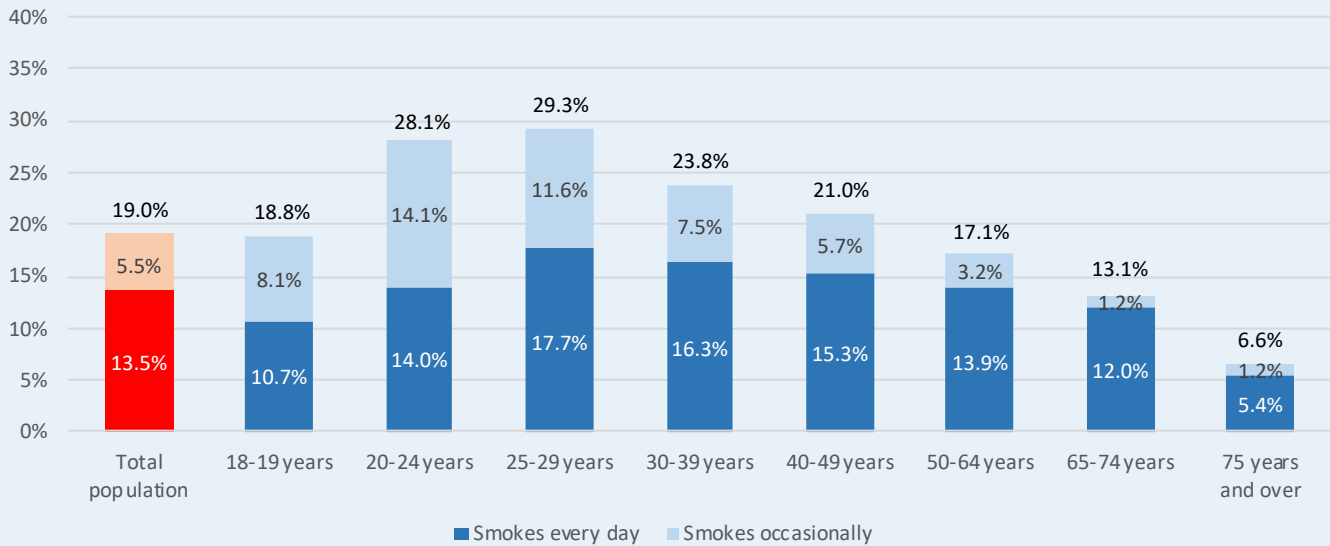
Figure 6. Smoking rates over time by education



Note: Between 2022 and 2023, the smoking rate did not significantly decrease or increase in all three educational groups. In addition, smoking rates decreased significantly between 2014 and 2023 among all three groups. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

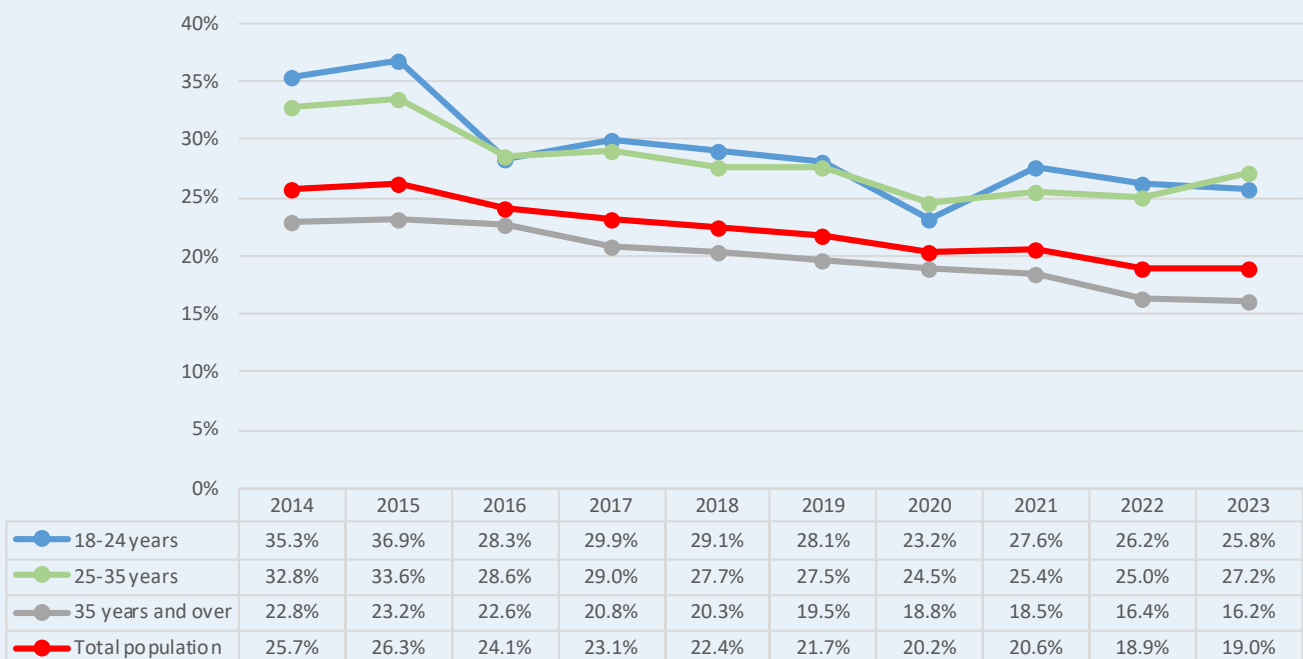


Figure 7. Smoking rates by age in 2023



Note: In the Netherlands, over 1 out of 4 people aged 20 to 29 reported smoking in 2023. People aged 75 and over were the least likely to report smoking. When people smoke, older people were more likely to smoke every day. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

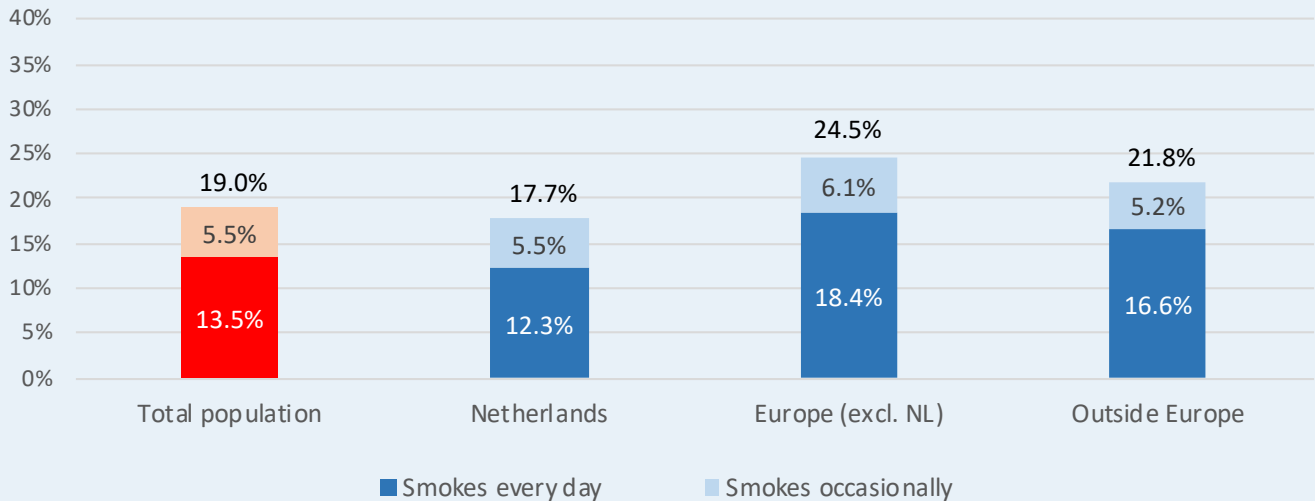
Figure 8. Smoking rates over time by age



Note: Between 2022 and 2023, the smoking rate did not significantly decrease or increase in all three age groups (18-24 years, 25-34 years, 35 years and over) in the Netherlands. Between 2014 and 2023, 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.



Figure 9. Smoking rates by country of origin in 2023



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 in 2023. We found no significant differences between two groups with country of origin outside the Netherlands. This figure displays the smoking rate of the total population of the Netherlands in red for comparison. Due to rounding, the percentages do not add up to their total.

WHAT IS A COUNTRY OF ORIGIN?

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

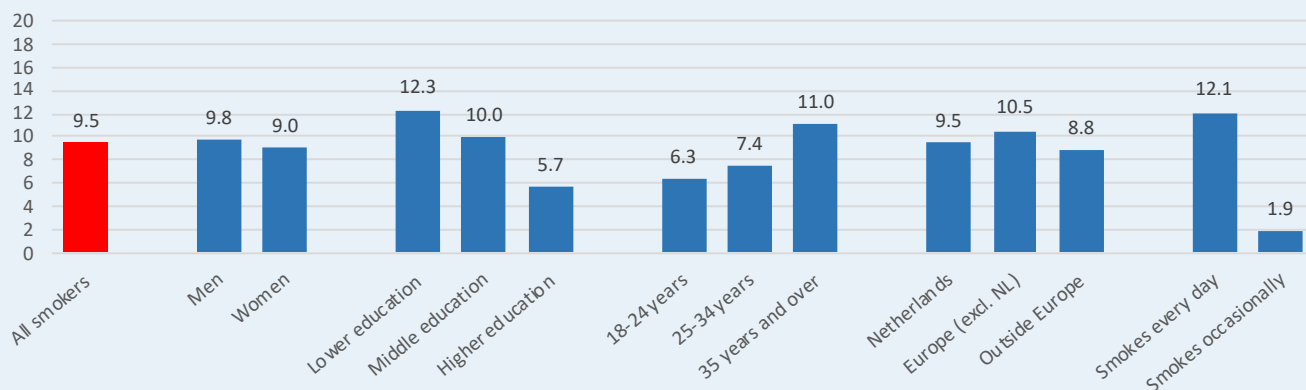
- A person who was born in the Netherlands and both parents were both born in the Netherlands is classified to have the Netherlands as their country of origin.
- A person who was born in the Netherlands and both parents were born outside of the Netherlands has the same country of origin as their mother.
- 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 on this topic? Visit the [Statistics Netherlands website](#) for more information.

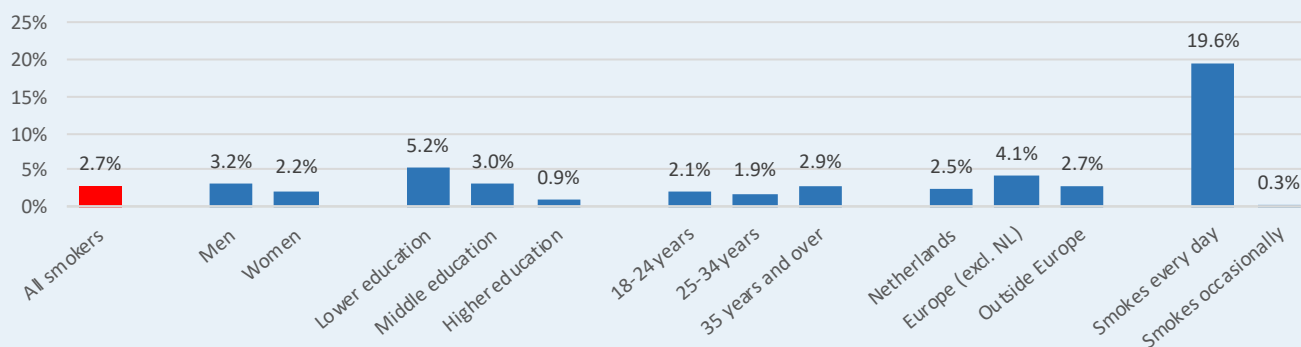


Figure 10. Average number of cigarettes smoked by smokers in 2023



Note: This figure presents data only from people who reported smoking cigarettes in the Netherlands in 2023. It displays the average number of cigarettes smoked each day. People with lower education, people aged 35 and over, and daily smokers reported smoking the greatest number of cigarettes per day in 2023. The analysis found no significant differences by sex and country of origin. This figure displays the smoking rate of the total adult population of the Netherlands in red for comparison.

Figure 11. Proportion of adults who were heavy smokers in 2023



Note: In 2023 in the Netherlands, only a small percentage of people (2.7%) reported smoking more than 20 cigarettes a day (heavy smokers). People who reported being heavy smokers tended to be men, had a lower educational attainment, and reported smoking every day. We found no effect of age. Among the origin groups, only the groups with Dutch origin and European origin differ significantly from each other. This figure displays the heavy smoking rate of the total adult population of the Netherlands in red for comparison.

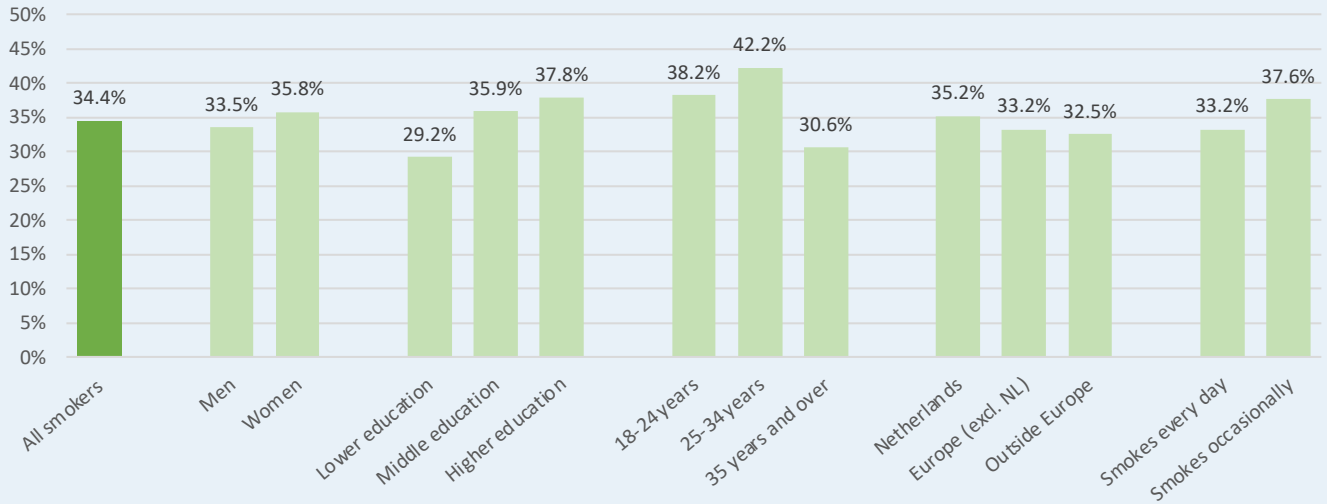
WHAT IS A HEAVY SMOKER?

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 9 years on average. Occasional smokers, defined as people who do not smoke every day, tend to live on average 5 years fewer than non-smokers.⁴

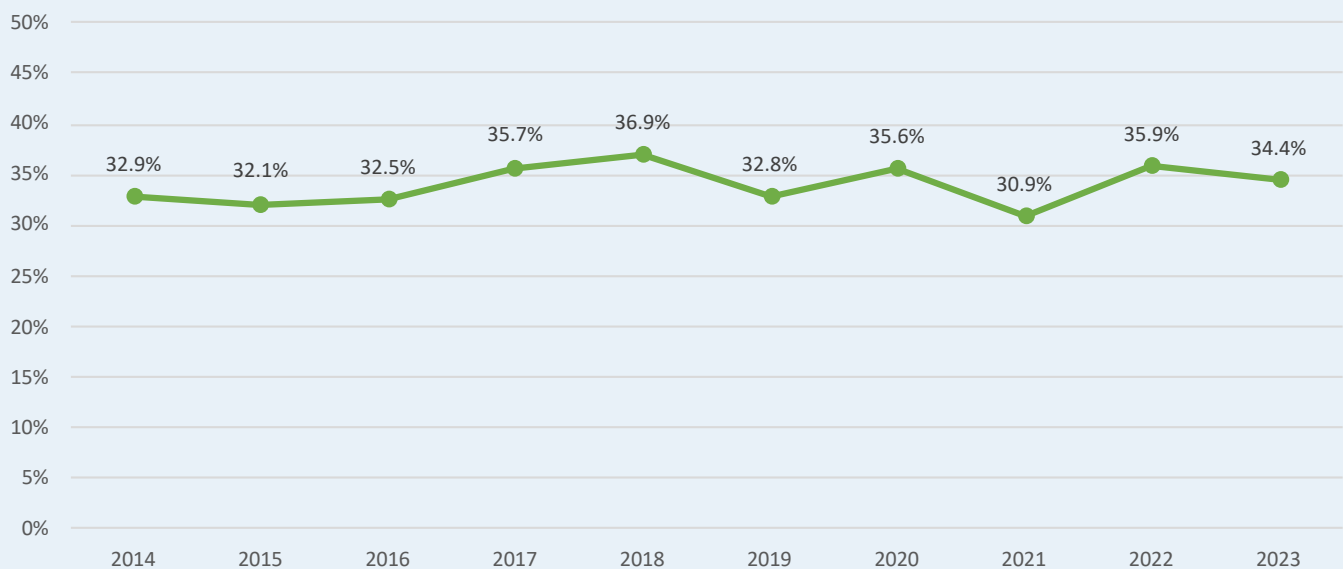


Figure 12. Proportion of smokers who made a serious quit attempt in the past 12 months in 2023



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 2023. A quit attempt is considered a serious one if someone tries to quit smoking and does not smoke for at least 24 hours. People with a high level of education were more likely to having made a serious quit attempt than people with a middle or lower level of education. The percentage of quit attempts did not significantly differ between low and middle education. People between 25 and 34 years were more likely to make a quit attempt than people aged 35 or over, but there was no difference with people aged 18 to 24. We found no significant difference for sex, country of origin, and daily smoking. This figure displays the smoking rate of the total adult population of the Netherlands in dark green for comparison.

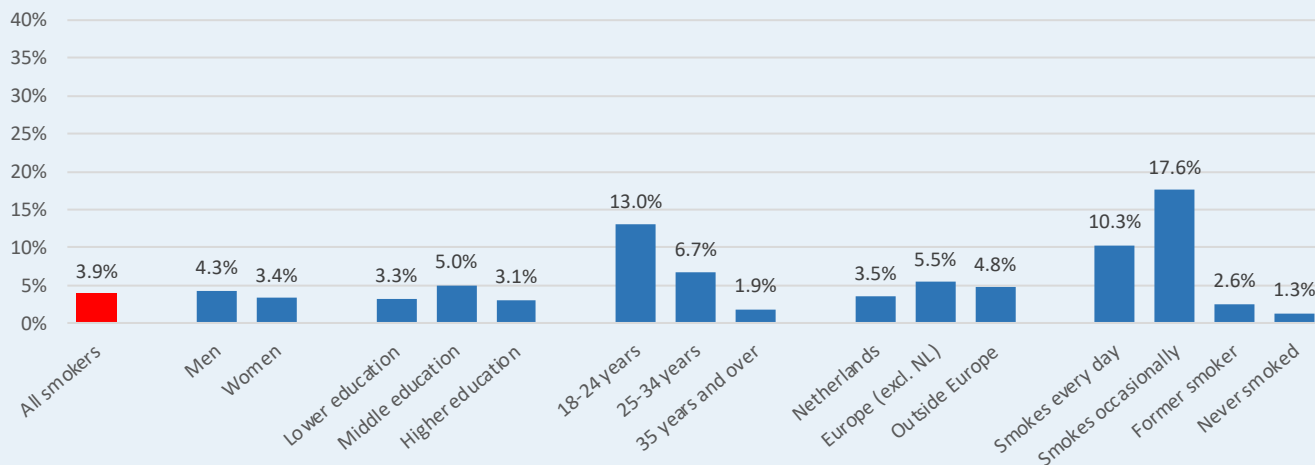
Figure 13. Proportion of smokers who had made a serious quit attempt in the past 12 months over time



Note: In the Netherlands, the rate of smokers who had made a serious quit in the past year did not significantly increase or decrease between 2022 and 2023. The rate remained about the same between 2014 and 2023.



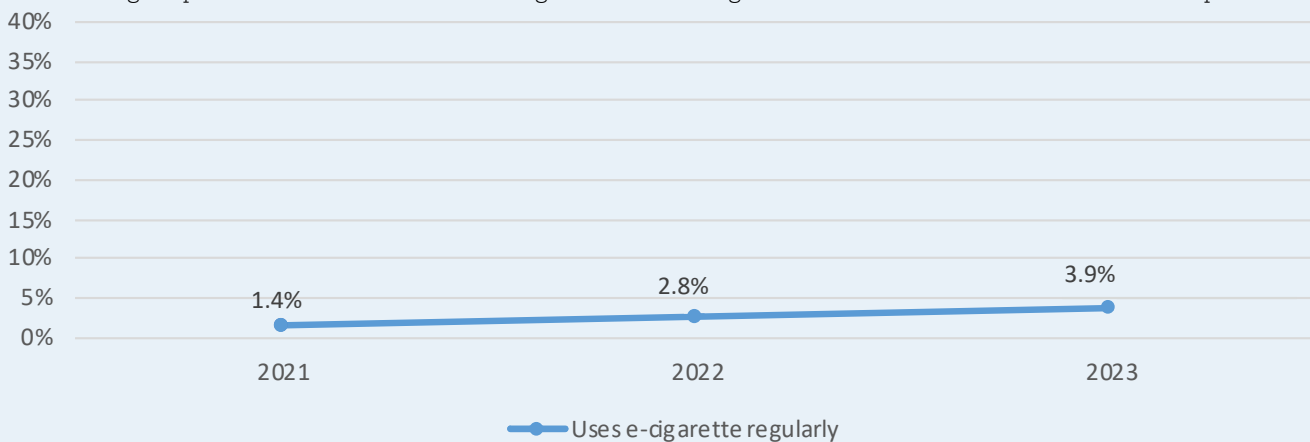
Figure 14. Prevalence of regular e-cigarette use in 2023



Note: This figure presents information about e-cigarette use among all adults in the Netherlands in 2023. 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 European origin are more likely to use an e-cigarette than people of Dutch origin, but do not differ from people of non-European origin. There was no difference for sex. 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 0.4% of those surveyed reported using such products.

Figure 15. Prevalence of e-cigarette use over time

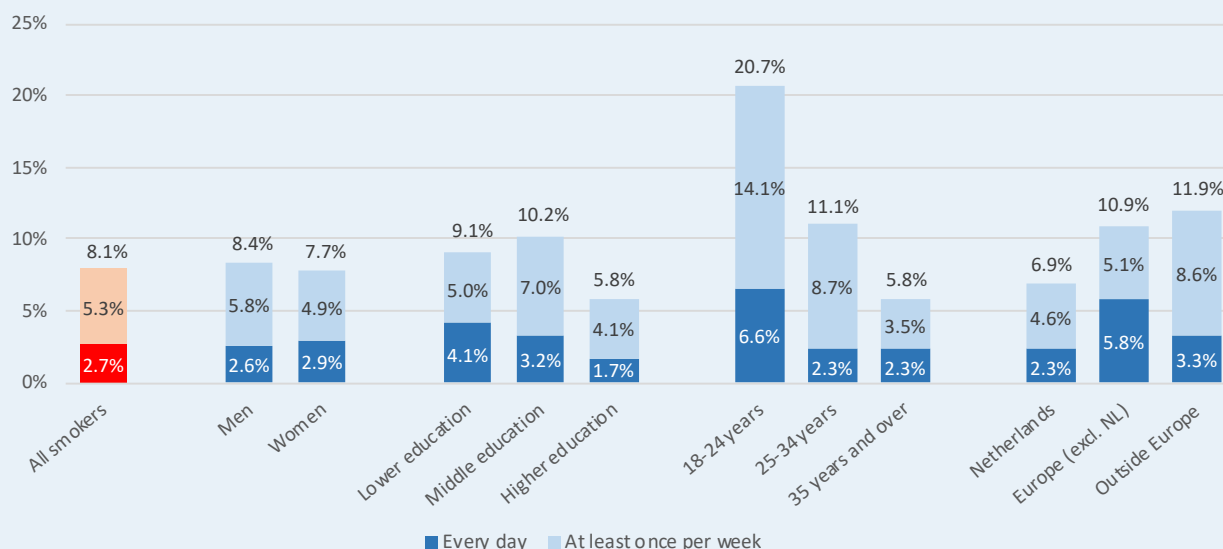
Note: This figure presents information about e-cigarette use among all adults in the Netherlands in 2022. People with



a middle level of education, people aged 18 to 24, people with a non-European country of origin, and people who smoke tobacco products every day were most likely to report regularly using an e-cigarette. There was a significant difference in e-cigarette use between those who smoke tobacco products (9.3%) and those who do not smoke tobacco products (1.2%). The survey also asked respondents if they used heated tobacco products; only 0.5% of those surveyed reported using such products. This figure displays the e-cigarette use rate of the total adult population of the Netherlands in red for comparison.

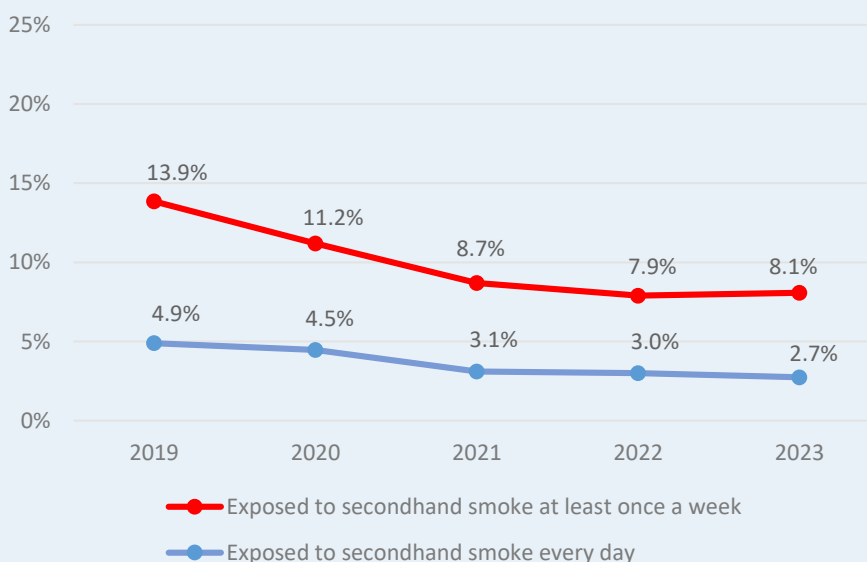


Figure 16. Proportion of non-smokers exposed to secondhand smoke indoors in 2023



Note: This figure contains information only about non-smoking adults in the Netherlands. 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 reported significantly less often being exposed to secondhand smoke than people with a low or medium level of education. The percentage of people who are exposed to secondhand smoke differs significantly between all age groups, with the group of 18-24 years being exposed most often. There is no difference for country of origin. This figure displays the exposure rate of all non-smokers the Netherlands in red for comparison.

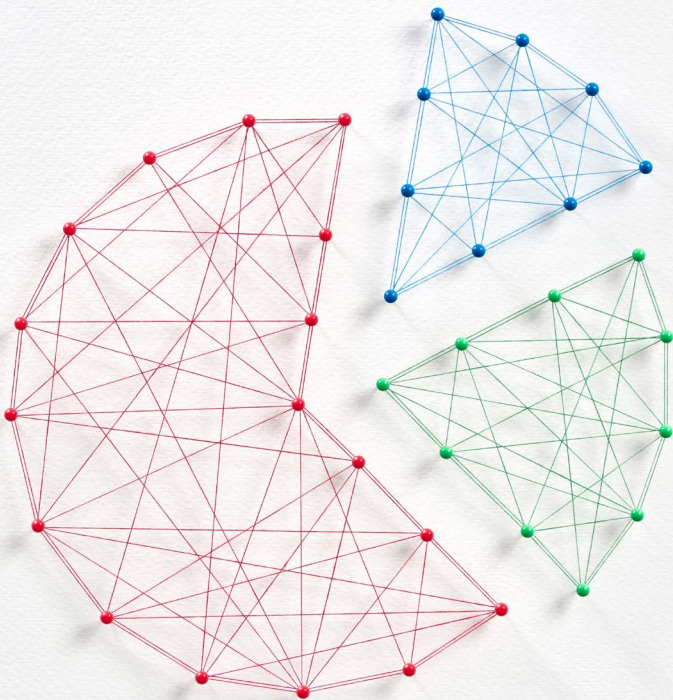
Figure 17. Proportion of non-smokers exposed to secondhand smoke indoors over time



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 and causes illnesses similar to those that smoking does. It is particularly harmful to children. Exposing children to secondhand smoke increases their chance of getting lung infections, ear infections, and other illnesses.⁵

Note: The percentage of non-smokers who are exposed to secondhand smoke remained the same between 2022 and 2023. The percentage of non-smokers that are exposed to secondhand smoke indoors decreased significantly between 2019 and 2023. 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.



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 Centre for Tobacco Control continues to monitor tobacco use in the Netherlands. We publish the most recent key statistics on tobacco use, alcohol use and drugs use on our website: trimbos.nl/kennis/cijfers (in Dutch).

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

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Colophon

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