

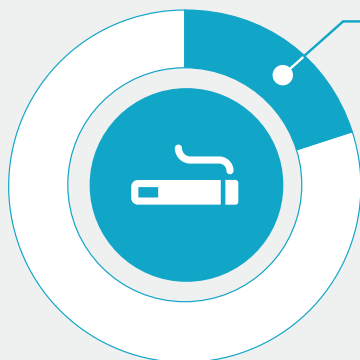
MAY 2021

# SMOKING IN THE NETHERLANDS: KEY STATISTICS FOR 2020

STATISTICS ON SMOKING, SMOKING CESSATION, AND  
THE USE OF ELECTRONIC CIGARETTES IN THE NETHERLANDS

## SMOKING IN THE NETHERLANDS

20.2%



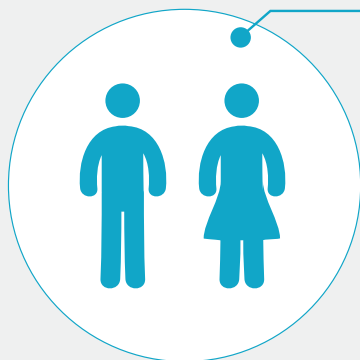
of adults  
(18 and older) in  
the Netherlands  
smoked in 2020

35.6%

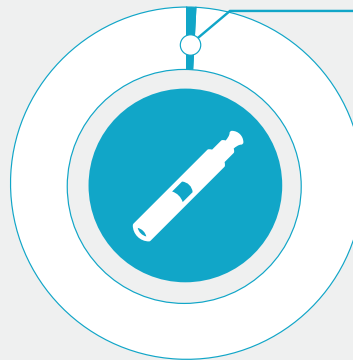


Over 1 in 3 people  
(35.6%) who smoke  
in the Netherlands  
made a serious quit  
attempt in 2020

About  
**2.8 million** of  
the 13.9 adults  
in the Netherlands  
smoked in 2020



1.1%



of adults in the  
Netherlands used  
an electronic  
cigarette regularly  
in 2020

## 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 2020

This bulletin outlines key statistics on smoking, smoking cessation, tobacco smoke exposure, and electronic cigarette use among adults in 2020 in the Netherlands. It is an English translation of the [Dutch language version](#). All statistics are derived 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 consists of multiple data sources. One of these sources is the Health Survey, 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. This effort is coordinated by the National Institute for Public Health and the Environment (RIVM) and has been commissioned by the Ministry of Health, Welfare and Sport in the Netherlands.

### THE ANNUAL HEALTH SURVEY

The Health Survey is an annual population survey 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 from the municipal population registry (Personal Records Database). Respondents are first approached to participate in the survey via 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.

The data provides national key statistics on smoking in the population of the Netherlands. Over 7000 people aged 18 years or older completed the Health Survey in 2020.

More information about the survey method of the Health Survey can be found on the [website of Statistics Netherlands](#).<sup>2</sup>

### 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, trends in the number of quit attempts, and the number of adults who use electronic cigarettes. Both local and national government authorities in the Netherlands use these statistics to monitor tobacco use and how control policies work. Experts at the Trimbos Institute used the data from the Health Survey to calculate the statistics presented in this bulletin.

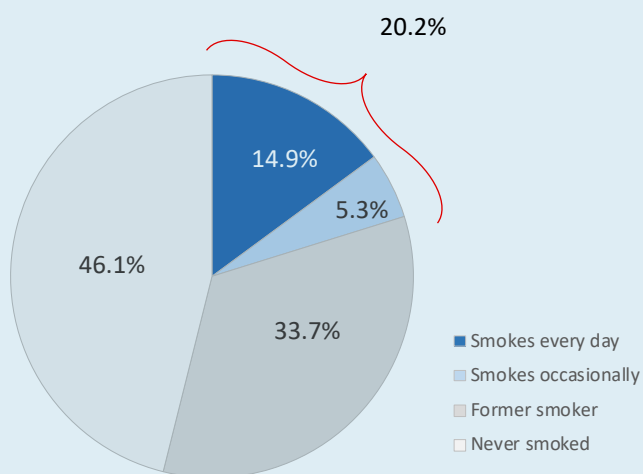
This bulletin presents separate statistics for 'smokers' (which include both daily and non-daily smokers) and 'daily smokers' (who smoke every day). All statistics describe the population aged 18 years and older in 2020. In many figures, 2020 data is compared with data from the year before (2019) and the year in which the Lifestyle Monitor consortium started collecting data (2014). Subgroups are compared based on education, migration background, gender, and age. A selection of the statistics have also been published on the ['State of Public Health and Health Care' website](#).<sup>3</sup> The linked website covers all relevant statistics used by the Ministry of Health, Welfare and Sport to monitor relevant health policies.

### WHAT IS MEANT BY 'SIGNIFICANT'?

This bulletin 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 bulletin frequently compared data of more than one year (2014, 2019, and 2020); if differences between years are significant, this is noted in the text.



Figure 1. Smoking rate among adults in the Netherlands in 2020



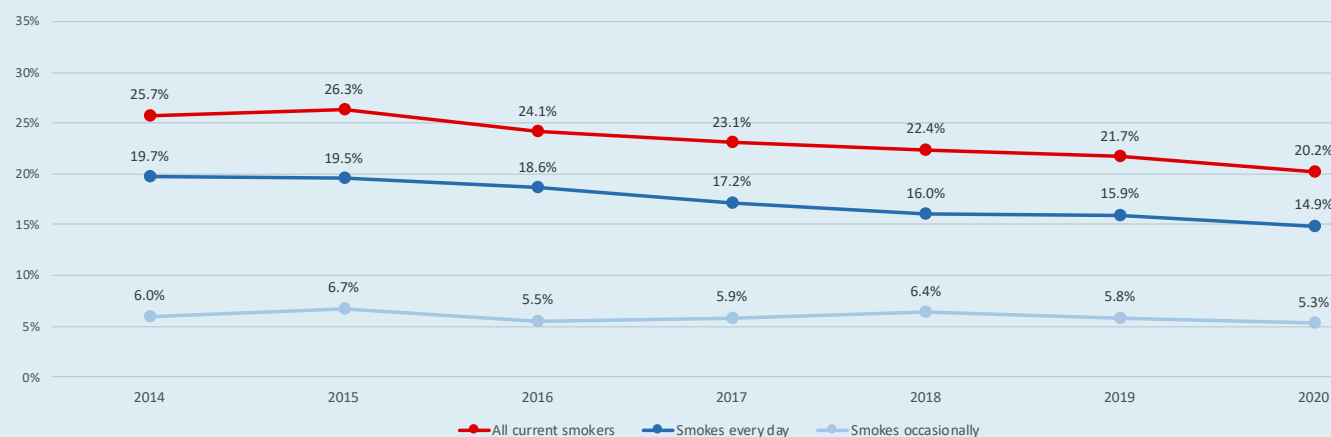
**Note:** Approximately 20.2% of adults in the Netherlands smoked in 2020. This includes 14.9% daily smokers and 5.3% occasional (non-daily) smokers. Of people in the Netherlands who reported smoking, 73.7% smoked every day.

Table 1. Estimated number of smokers in 2020

	Estimation	Lower limit	Upper limit
<b>All smokers</b>	2,788,000	2,632,000	2,943,000
Lower education	790,000	702,000	879,000
Middle education	1,167,000	1,063,000	1,271,000
Higher education	758,000	672,000	844,000
<b>Daily smokers</b>	2,054,000	1,916,000	2,192,000
Lower education	686,000	603,000	769,000
Middle education	869,000	777,000	960,000
Higher education	434,000	367,000	501,000

**Note:** About 2.8 million people in the Netherlands aged 18 and over smoked in 2020. As this is an estimation, Table 1 also shows lower and upper limits of the number of adults in the Netherlands who smoked. Since the educational attainment of some people who smoked in 2020 is not known, the totals of the three education groups do not equal the total group of smokers.

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

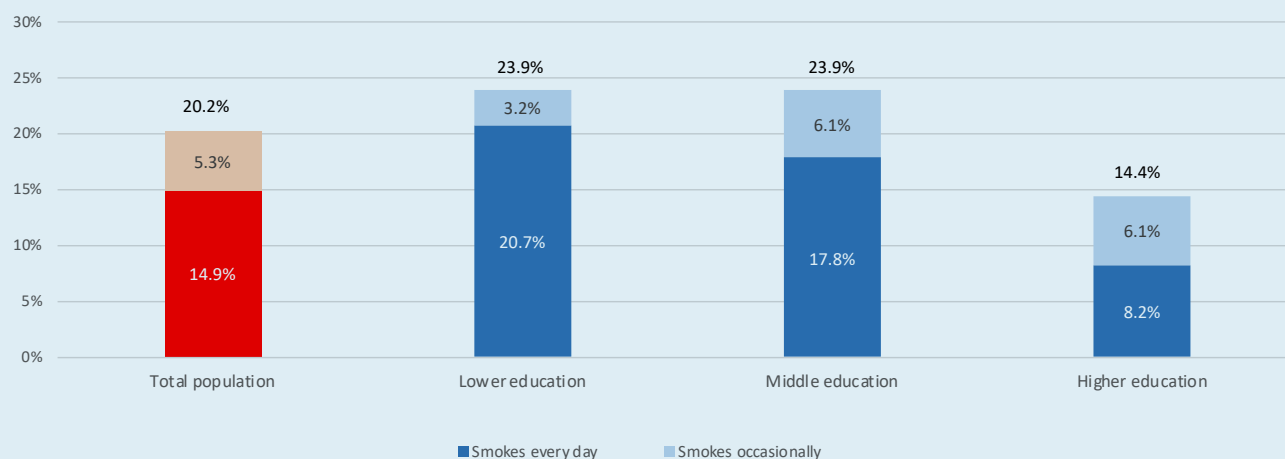


**Note:** The adult smoking rate has decreased significantly\* between 2014 and 2020. As well, the proportion of people who smoke *every day* decreased significantly in that same period. The overall smoking rate decreased significantly between 2019 and 2020, but the percentage of daily smokers did not. The proportion of occasional smokers has not increased or decreased significantly over time.

\* A definition of significance has been provided on page 2.

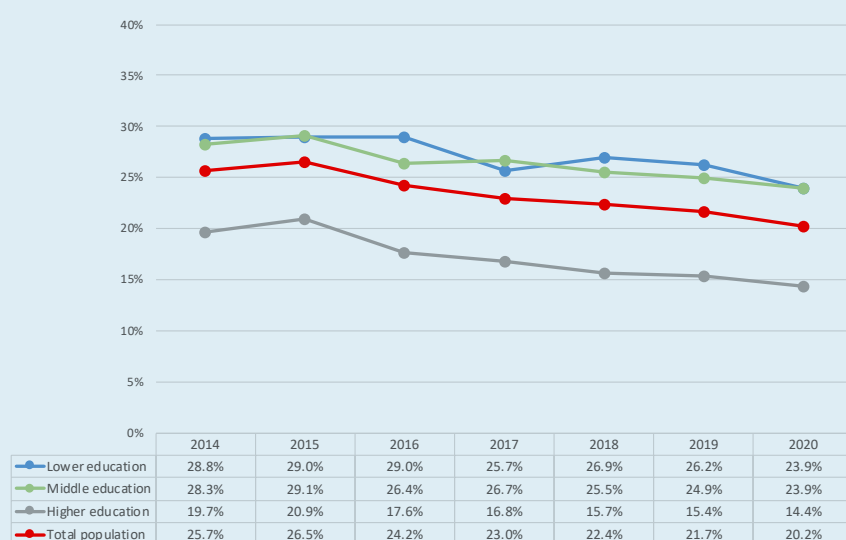


Figure 3. Smoking rates in 2020 by education



**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 population of the Netherlands in red for comparison.

Figure 4. Smoking rates over time by education



**Note:** Between 2019 and 2020, the smoking rates remained approximately the same in all three education groups in the Netherlands. However, smoking rates decreased significantly between 2014 and 2020 among all three groups. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

#### WHAT ARE LOWER, MIDDLE, AND HIGHER LEVELS OF EDUCATION IN THE NETHERLANDS?

This bulletin 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

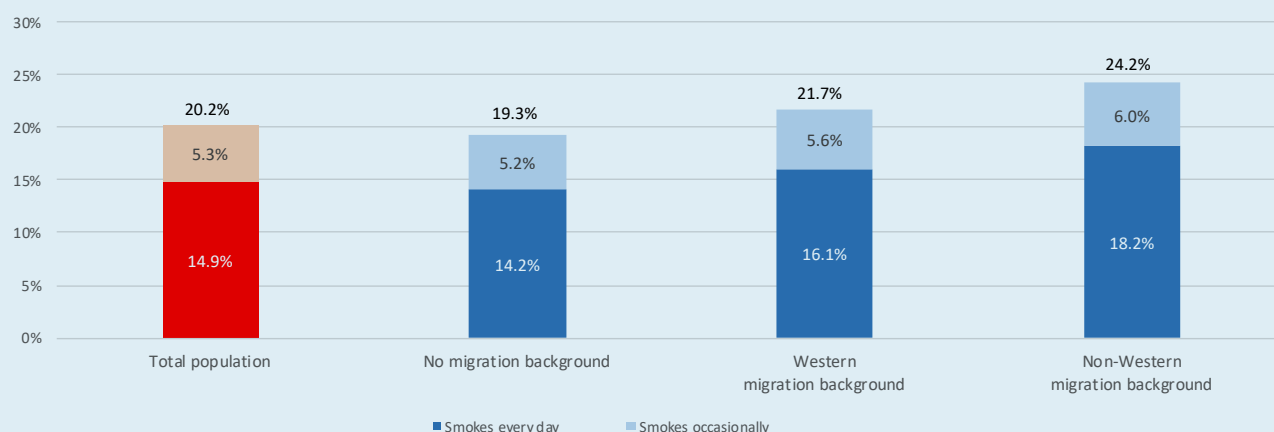
##### Higher education:

Higher vocational education or university

In this bulletin, people 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 only used the highest level of education completed.

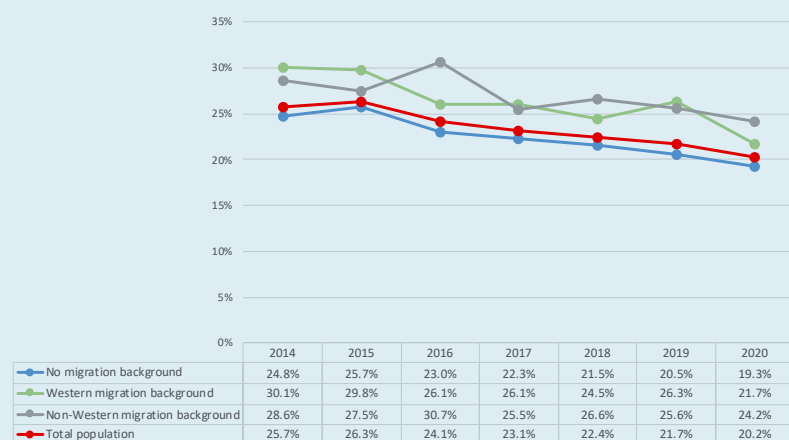


Figure 5. Smoking rates in 2020 by migration background



**Note:** In the Netherlands, both overall smoking rates and daily smoking rates were higher among people with a non-Western migration background than among people with no migration background. We found no difference in overall smoking rates between people with a Western migration background and people from the other two groups. Due to rounding, some of the percentages do not add up to their total. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

Figure 6. Smoking rates over time by migration background



**Note:** Between 2019 and 2020, smoking rates decreased significantly among people with a Western migration background. They remained relatively the same among people with no migration background, and a non-Western background. Between 2014 and 2020, smoking rates significantly decreased among all three groups.

**Caution:** While a relatively small group of people with a non-Western migration background participate in the study each year (2020: 851 respondents), statistics for these groups tend to fluctuate more over time. When interpreting statistics for smaller groups such as those presented here, it is important to focus on long-term trends only. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

### WHAT IS A MIGRATION BACKGROUND?

The group of 'people with a migration background' includes people who live in the Netherlands and have at least one parent who was born outside of the Netherlands. People have a Western migration background if he/she has at least one parent who has been born in a country in North America, Oceania (i.e., Australia and neighboring countries), Japan, Indonesia, or Europe. However, if a person has at least one parent born elsewhere outside of the Netherlands, that person is considered to have a non-Western migration background. This would include a parent from a country in Africa, Asia or South America.

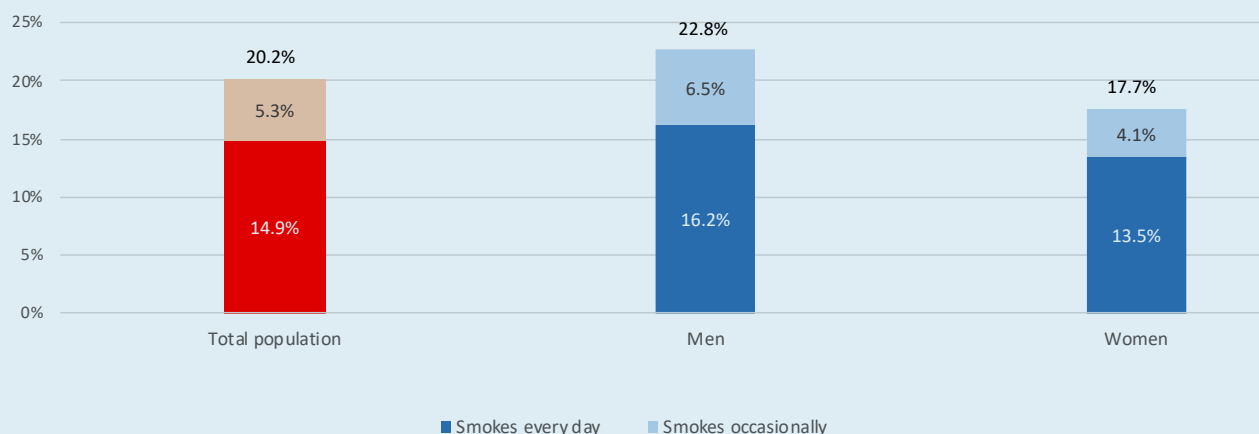
The government of the Netherlands uses statistics on people's migration background to explain differences in cultural background, income inequalities, and other policy-related outcomes.

Want to know more on this topic?  
Visit the [Statistics Netherlands](https://www.csb.nl/en) website for more details.



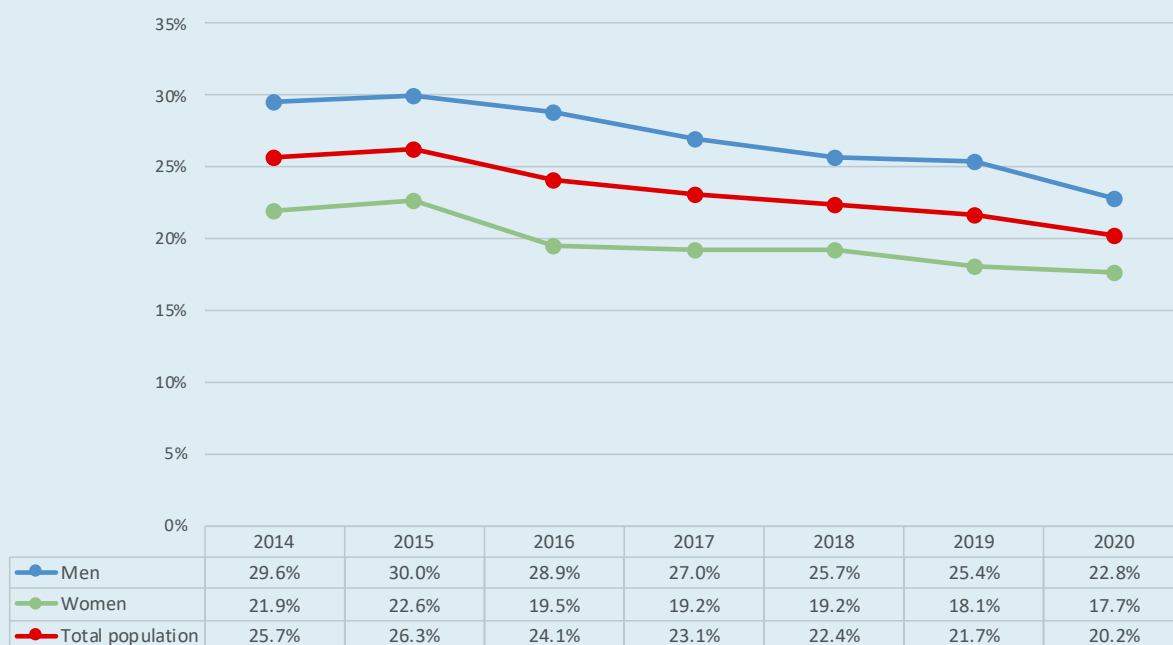


Figure 7. Smoking rates in 2020 by gender



**Note:** Significantly more men in the Netherlands reported smoking than women. In addition, more men reported smoking every day. Due to rounding, some of the percentages do not add up to their total. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

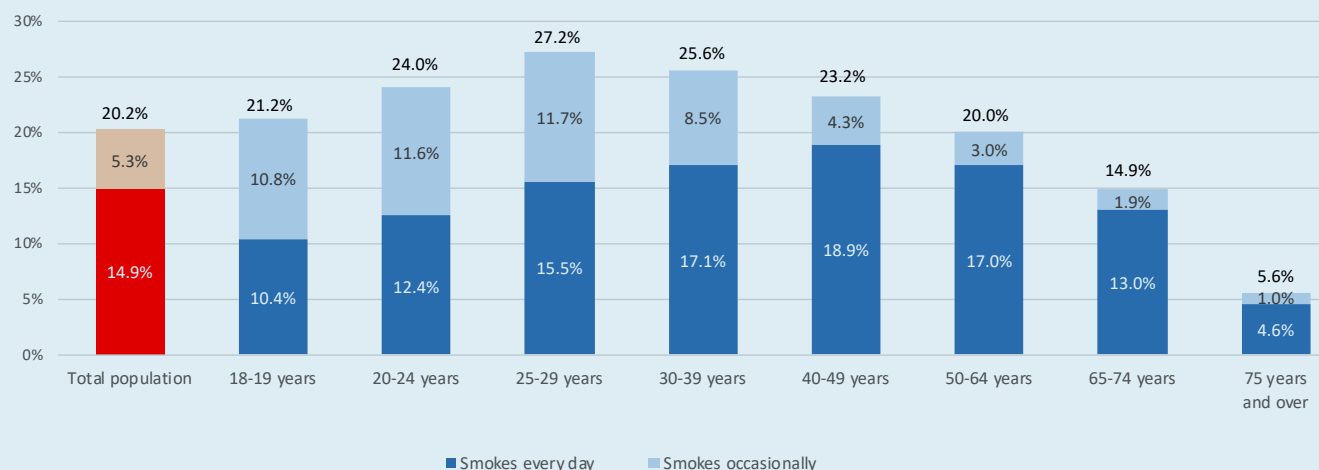
Figure 8. Smoking rates over time by gender



**Note:** In the Netherlands between 2019 and 2020, the smoking rate decreased significantly among men, but has not changed significantly among women. However, smoking rates did decrease significantly between 2014 and 2020 for both men and women. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

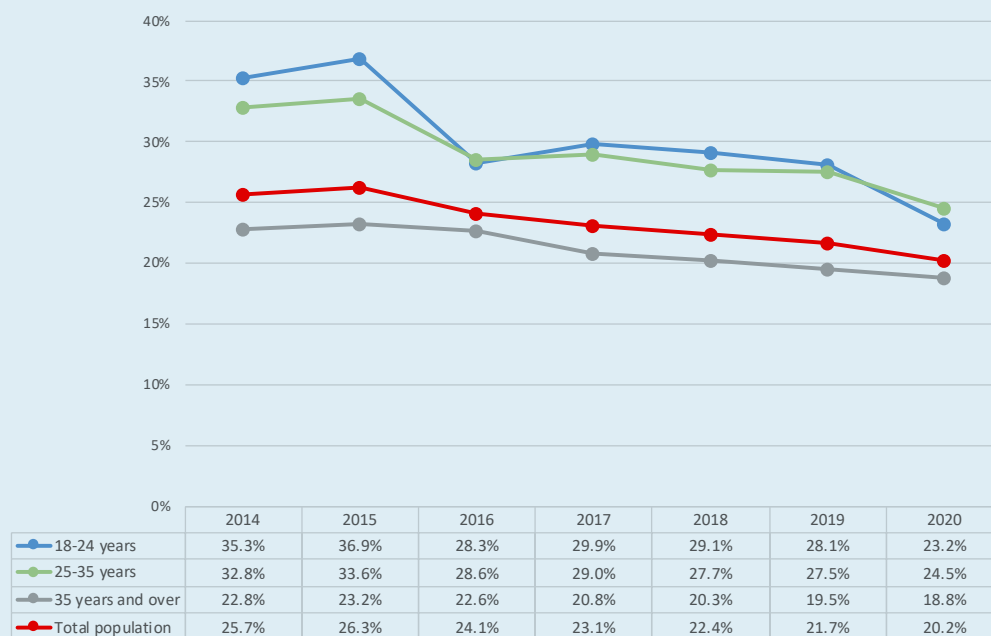


Figure 9. Smoking rates in 2020 by age



**Note:** In the Netherlands, 1 out of 5 people aged 18 to 19 smoke; as well, 1 out of 4 people aged 20 to 29 smoke. About half of those reported smoking every day. People aged 75 and over were least likely to report smoking. In general, older smokers are more likely to smoke every day. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

Figure 10. Smoking rates over time by age

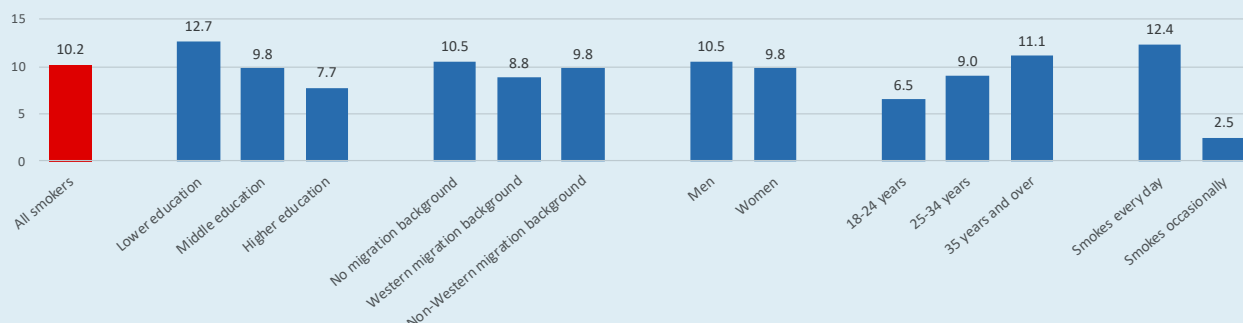


**Note:** In the Netherlands, the smoking rates decreased significantly in all three age groups between 2014 and 2020. Among people aged 18 to 24, the smoking rate decrease significantly between 2019 and 2020. No such difference was found in the other age groups. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.



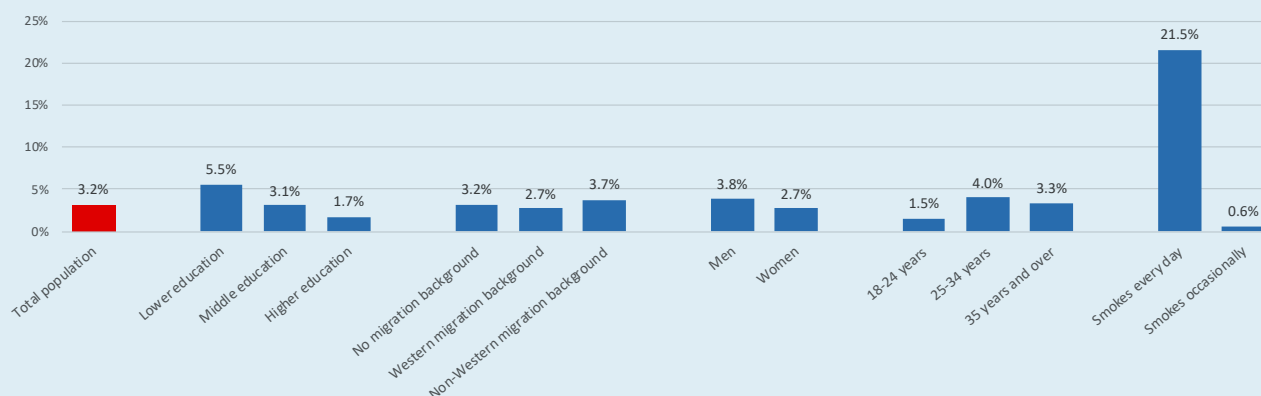
## NUMBER OF CIGARETTES PER DAY

Figure 11. Average number of cigarettes smoked by smokers in 2020



**Note:** Figure 11 presents data only from people who reported smoking cigarettes. It displays the average number of cigarettes smoked each day. In the Netherlands, people with lower education reported smoking the highest number of cigarettes among all education groups. Further, people aged 35 and over reported smoking the highest number of cigarettes among all age groups. Daily smokers of all ages smoked more than non-daily smokers. The analysis found no difference between men and women. While smokers with no migration background tend to smoke more than smokers with an Western migration background, we found no difference in reported number of cigarettes between smokers with a non-Western migration background and smokers from the other two groups. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.

Figure 12. Proportion of adults who were a heavy smoker in 2020



**Note:** In the Netherlands, only a small portion of people (3.2%) reported smoking more than 20 cigarettes a day, which classifies them as heavy smokers. People who are heavy smokers tend to be men, have lower educational attainment, are 25 years or older, and smoke every day. We found no effect of migration background. This figure displays the heavy smoking rate of the total population of the Netherlands in red for comparison.

### WHAT IS A HEAVY SMOKER?

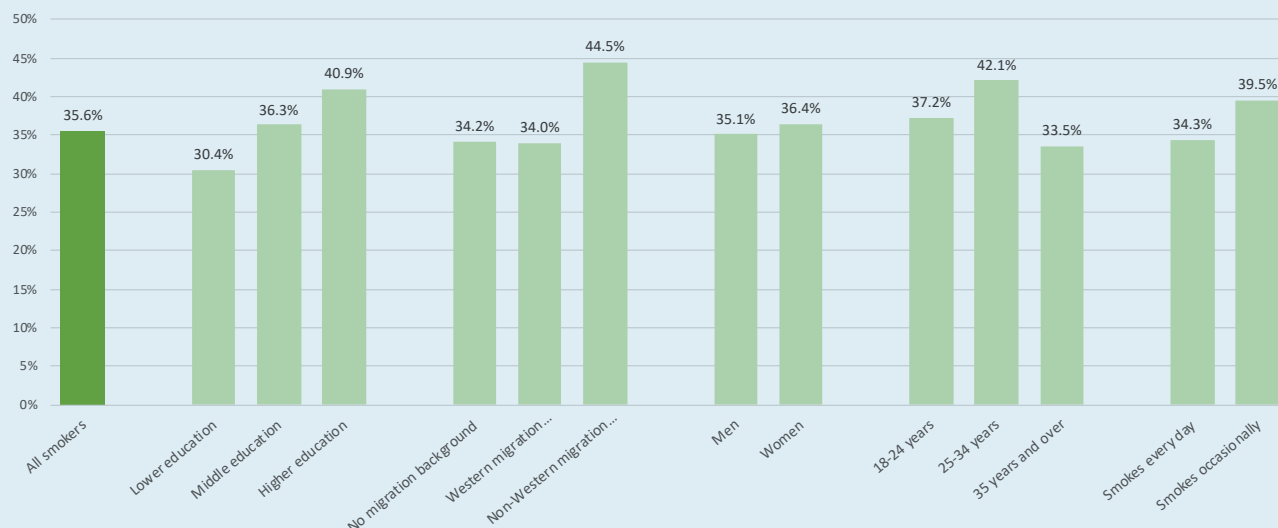
Someone who smokes 20 cigarettes or more on average each day is called a 'heavy smoker'.

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.<sup>4</sup>



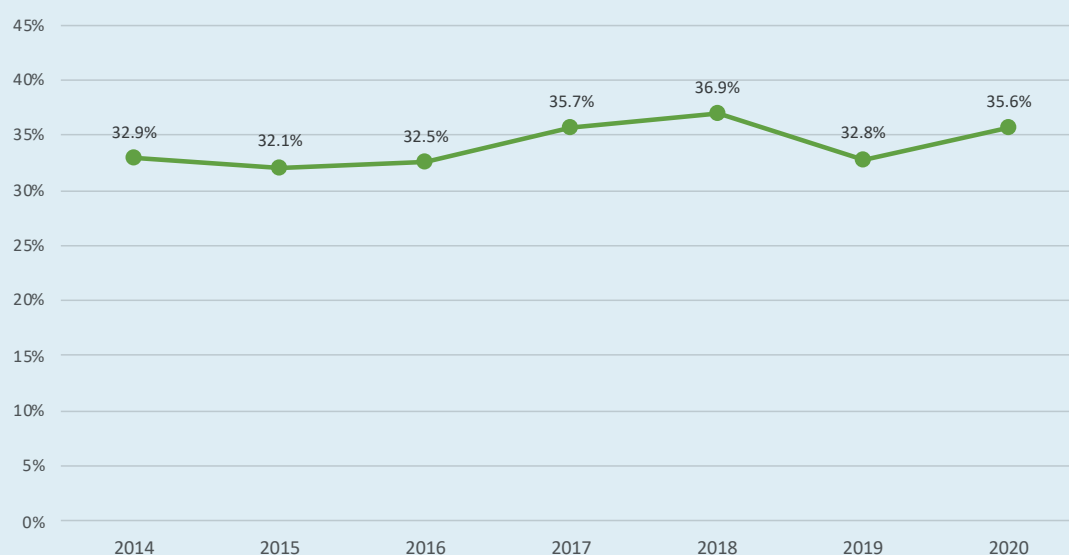


Figure 13. Proportion of smokers who recently made a serious quit attempt in 2020



**Note:** In the Netherlands, about 1 out of 3 smokers reported having recently made a serious quit attempt in 2020. 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 low level of education. There was no significant difference between people with a middle level of education and any of the two other education groups. Quit attempts were most common among people with a non-Western migration background and people aged 25 to 34. We found no significant difference between men and women or between daily and non-daily smokers. This figure displays the smoking rate of the total population of the Netherlands in dark green for comparison.

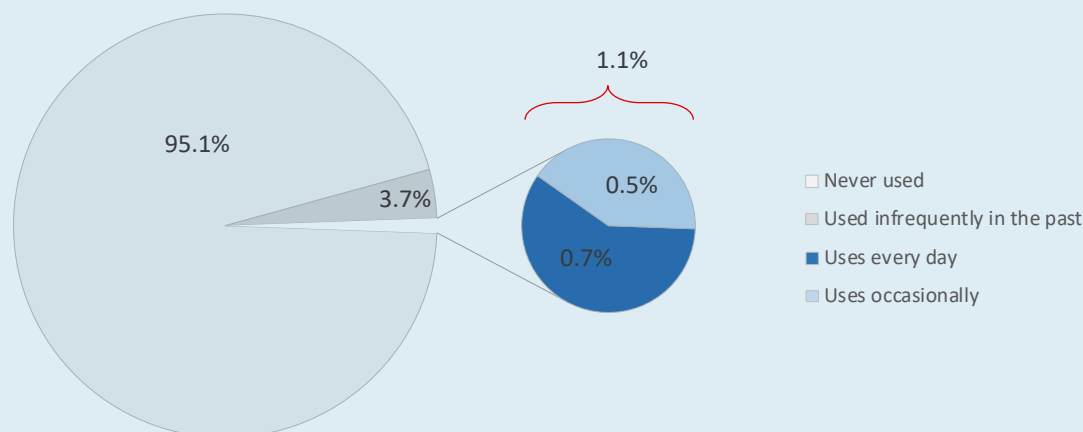
Figure 14. Proportion of smokers who had recently made a serious quit attempt by year



**Note:** In the Netherlands, the rate of smokers who had recently made a serious quit attempt remained about the same between 2014 and 2020, and between 2019 and 2020.

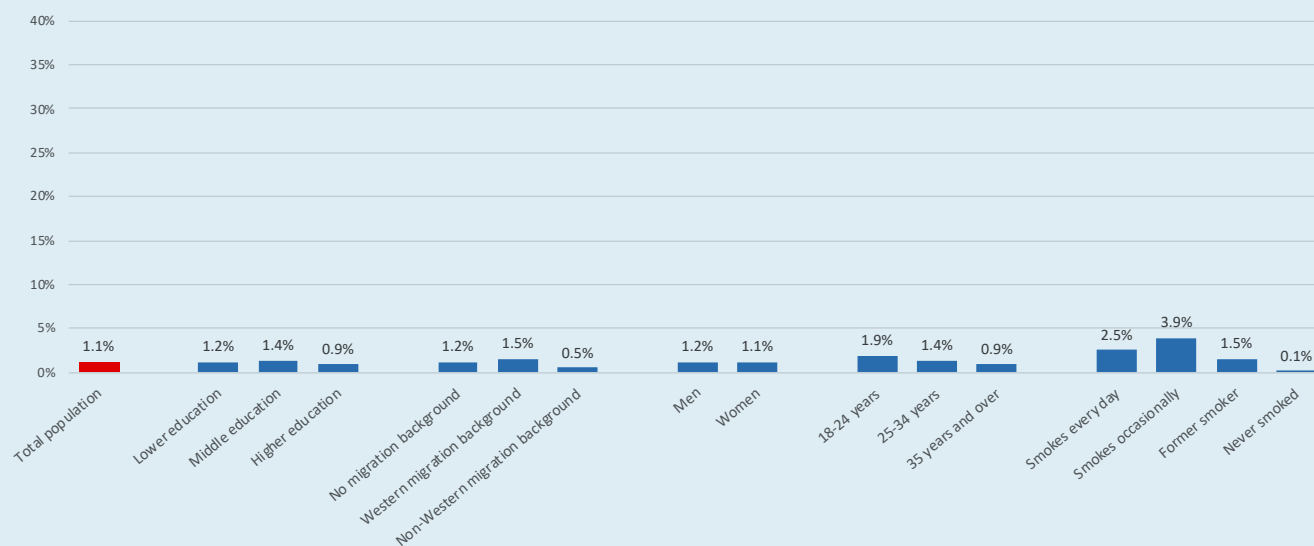


Figure 15. Prevalence of electronic cigarettes use in 2020



**Note:** Figure 15 presents information about electronic cigarette (e-cigarette) use among all adults in the Netherlands (smokers and non-smokers). About 1.1% of adults in the Netherlands used an e-cigarette regularly in 2020. This includes 0.5% daily users and 0.7% non-daily users. E-cigarettes have been available on the market in the Netherlands since 2007 and are regulated by the Dutch Tobacco Act. In the Netherlands, the sale of nicotine and non-nicotine e-cigarette liquid is restricted to adults. Due to rounding, some of the percentages do not add up to their total.

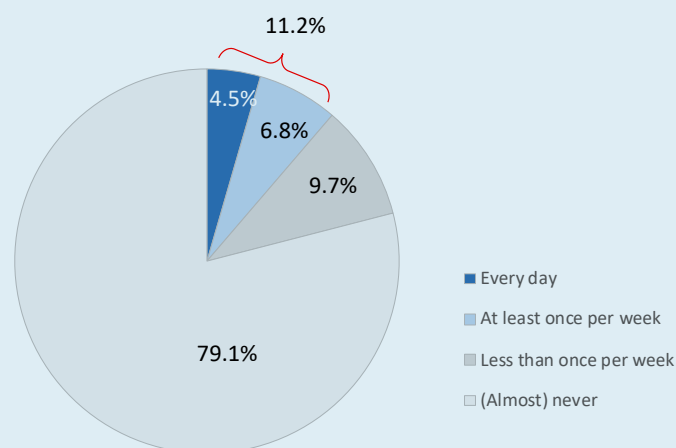
Figure 16. Prevalence of regular electronic cigarettes use by year



**Note:** Figure 16 presents information about e-cigarette use among all adults in the Netherlands (smokers and non-smokers). People aged 18 to 24 were more likely to use an e-cigarette regularly than people aged 35 and over. We found no difference between people aged 25 to 34 and any of the other two age groups. In the Netherlands, smokers are far more likely to regularly use e-cigarettes than both former smokers and those who never smoked. Daily smokers are more likely to have report using e-cigarettes regularly than occasional smokers. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.



Figure 17. Proportion of non-smokers exposed to secondhand smoke indoors in 2020

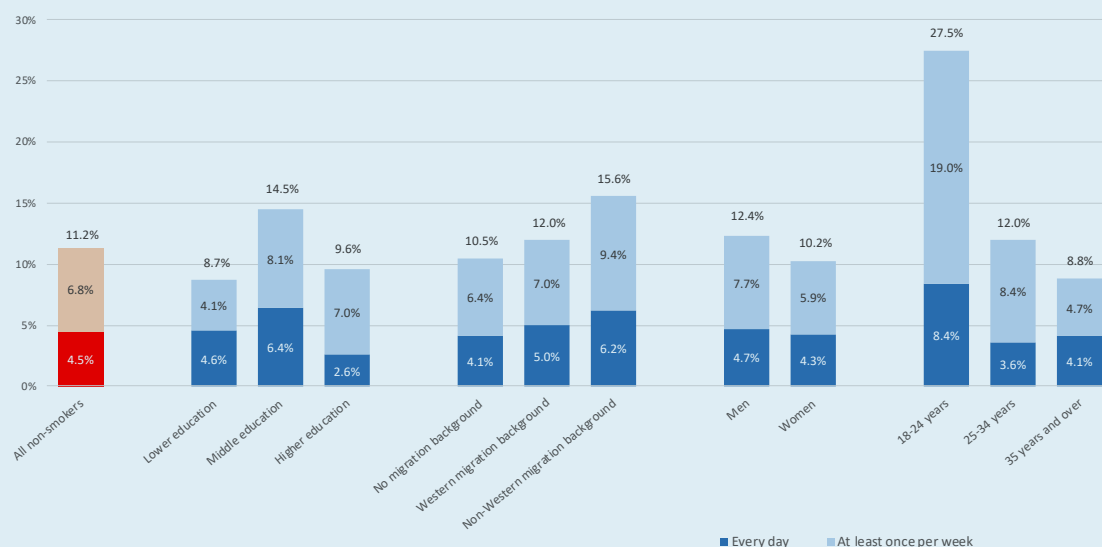


**Note:** Figure 17 contains information only about non-smoking adults, which includes former smokers and those who never smoked. It shows the proportion of non-smokers in the Netherlands that reported having been exposed to secondhand smoke indoors (inside homes or other indoor spaces). In 2020, 11.2% of non-smokers have been regularly exposed to tobacco smoke. Of those, 4.5% are exposed every day and 6.8% at least once per week.

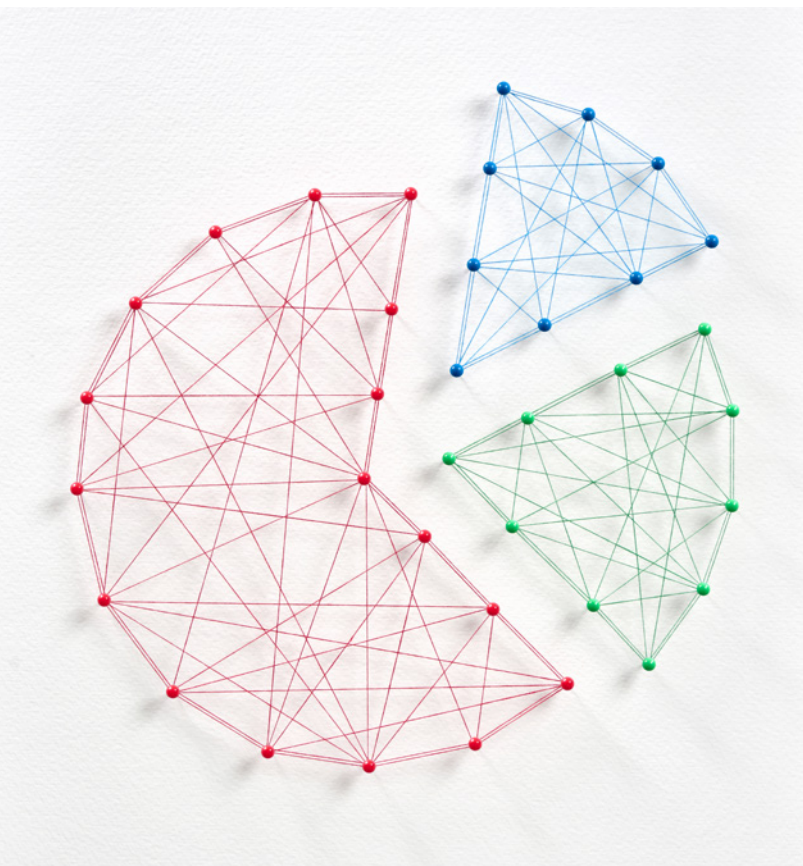
### SECONDHAND SMOKE: BREATHING SOMEONE ELSE'S TOBACCO SMOKE

Secondhand smoke is tobacco smoke from burning tobacco products and smoke that has been breathed out by a person smoking. Secondhand smoke harms your health, even if you don't smoke yourself. Secondhand smoke contains similar toxins as tobacco smoke and causes similar illnesses as smoking. 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>

Figure 18. Proportion of non-smokers exposed to secondhand smoke indoors in 2020 by subgroup



**Note:** Figure 18 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 indoors (inside homes or other indoor spaces). People most likely to be exposed regularly are those with intermediate level of educational attainment, those with a non-Western migration background, men, and those aged 18 to 24. Non-smokers with a non-Western migration background were more likely to report having been exposed regularly than non-smokers with no migration background, but both groups did not differ significantly from the group of people with a Western migration background. Due to rounding, some of the percentages do not add up to their total. This figure displays the smoking rate of the total population of the Netherlands in red for comparison.



### FURTHER READING...

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

- [Dutch Youth Health Care: From smoke-free houses to smoke-free parents](#)
- [Local tobacco control policies in the Netherlands](#)
- [Factsheet: Water pipe \(hookah\) smoking](#)

### 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/kerncijfers](https://trimbos.nl/kerncijfers) (in Dutch).

Please contact Jeroen Bommelé ([jbommele@trimbos.nl](mailto:jbommele@trimbos.nl)) if you have any questions regarding this bulletin.

### REFERENCES

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### Colophon

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