SMOKING IN THE NETHERLANDS: KEY STATISTICS FOR 2018

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

SMOKING IN THE NETHERLANDS

- **22.4%** of adults (18 and older) in the Netherlands smoked cigarettes in 2018
- **36.9%** More than 1 in 3 people who smoke in the Netherlands made a quit attempt in 2018
- **3.1%** Approximately **three million** adults in the Netherlands smoked in 2018
- **3.1%** of adults in the Netherlands used an electronic cigarette at least once in 2018
This bulletin outlines key statistics on smoking, smoking cessation, tobacco smoke exposure, and electronic cigarette use among adults in 2018. It is an English translation of the Dutch-language version. All statistics are derived from the Health Survey database, which is part of the Dutch Lifestyle Monitor.¹

THE LIFESTYLE MONITOR
The Lifestyle Monitor Consortium is comprised of research institutes that monitor lifestyle-related behaviors in the Netherlands. 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. The Health Survey, which is conducted by Statistics Netherlands, is one of many data collection efforts coordinated by the Lifestyle Monitor Consortium.

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 (BRP)). Respondents are first approached to participate in the survey via the internet. A selection of those who were invited to participate 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 8000 people aged 18 years or older filled out the Health Survey in 2018.

More information about the survey method of the Health Survey can be found on the website of Statistics Netherlands.²

THE ROLE OF THE TRIMBOS INSTITUTE
The Trimbos Institute publishes national key 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 government authorities and authorities in the national government in the Netherlands use these statistics to monitor tobacco control policies. 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 includes both daily and non-daily smokers) and ‘daily smokers’ (who smoke every day). All statistics describe the population aged 18 years and older in 2018. In many figures, 2018 data is compared with data from the year before (2017) and with the year the Lifestyle Monitor consortium was founded (2014). Subgroups are compared based on education, immigration background, gender, and age. A selection of the statistics have also been published on the ‘State of Public Health and Care’ website.³ The linked website covers all relevant statistics use by the Ministry of Health, Welfare and Sport to monitor relevant health policies.

WHAT IS MEAN 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, 2017, and 2018); if differences between years are significant, this is noted in the text.
**Figure 1.** Smoking rate among adults in the Netherlands in 2018.

- **Smokes every day:** 33.4%
- **Smokes occasionally:** 44.2%
- **Former smoker:** 16.0%
- **Never smoked:** 6.4%

**Figure 2.** Smoking rates over time.

- **2014:**
  - All current smokers: 25.7%
  - Smokes every day: 19.7%
  - Smokes occasionally: 6.0%

- **2015:**
  - All current smokers: 26.3%
  - Smokes every day: 19.5%
  - Smokes occasionally: 6.7%

- **2016:**
  - All current smokers: 24.1%
  - Smokes every day: 18.6%
  - Smokes occasionally: 5.5%

- **2017:**
  - All current smokers: 23.1%
  - Smokes every day: 17.2%
  - Smokes occasionally: 5.9%

- **2018:**
  - All current smokers: 22.4%
  - Smokes every day: 16.0%
  - Smokes occasionally: 6.4%

**Table 1. Estimated number of smokers in 2018.**

<table>
<thead>
<tr>
<th></th>
<th>Estimation</th>
<th>Lower limit</th>
<th>Upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All smokers</strong></td>
<td>3,026,000</td>
<td>2,892,000</td>
<td>3,161,000</td>
</tr>
<tr>
<td>Lower education</td>
<td>894,000</td>
<td>815,000</td>
<td>973,000</td>
</tr>
<tr>
<td>Middle education</td>
<td>1,343,000</td>
<td>1,248,000</td>
<td>1,438,000</td>
</tr>
<tr>
<td>Higher education</td>
<td>735,000</td>
<td>663,000</td>
<td>808,000</td>
</tr>
<tr>
<td><strong>Daily smokers</strong></td>
<td>2,166,000</td>
<td>2,050,000</td>
<td>2,282,000</td>
</tr>
<tr>
<td>Lower education</td>
<td>752,000</td>
<td>680,000</td>
<td>825,000</td>
</tr>
<tr>
<td>Middle education</td>
<td>1,002,000</td>
<td>919,000</td>
<td>1,084,000</td>
</tr>
<tr>
<td>Higher education</td>
<td>367,000</td>
<td>316,000</td>
<td>417,000</td>
</tr>
</tbody>
</table>

**Note:** About three million people in the Netherlands aged 18 and over smoked in 2018. As this is an estimation, Table 1 also shows lower and upper limits. Since the educational attainment of some smokers is not known, the totals of the three education groups do not equal the total group of smokers.

**Note:** The adult smoking rate has decreased significantly* between 2014 and 2018. As well, the proportion of people who smoke every day decreased significantly in that same period. While overall smoking rates did not decrease significantly between 2017 and 2018, daily smoking rates did. The proportion of occasional smokers never increased or decreased significantly over time.

* A definition of significance has been provided on page 3.
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. Figure 3 displays the smoking rate of the total population of the Netherlands in red for comparison.

Figure 3. Smoking rates in 2018 by education.

Note: Between 2017 and 2018, the smoking rates remained approximately the same in all three education groups in the Netherlands. Among people with middle or higher levels of education, however, smoking rates decreased significantly between 2014 and 2018. There were no such differences among lower education people between 2014 and 2018.

Figure 4. Smoking rates over time by education.

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, 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 attaining. Among people aged 25 and over, we only used the highest level of education completed.
Note: Between 2017 and 2018, smoking rates stayed about the same among people with no immigration background, a Western immigration background, and a non-Western background. Between 2014 and 2018, however, smoking rates significantly decreased among both people with a Western immigration background and people with no immigration background. There was no such decrease among people with a non-Western immigration background in the Netherlands.

Caution: While a relatively small group of people with a non-Western immigration background participate in the study each year (800 respondents), statistics for these groups tend to fluctuate more over time. When interpreting statistics for smaller groups like this, it is important to focus on long term trends only.
Figure 7. Smoking rates in 2018 by gender.

**Note:** Significantly more men in the Netherlands reported smoking than women. In addition, more men reported smoking every day.

Figure 8. Smoking rates over time by gender.

**Note:** In the Netherlands between 2017 and 2018, the smoking rates have not changed significantly for either men or women. However, they did decrease significantly between 2014 and 2018.
Note: In the Netherlands, 1 out of 5 people aged 18 to 19 smoke; as well, 1 out of 3 people aged 20 to 24 smoke. About half of the people aged 20 to 24 reported smoking cigarettes every day. Among people aged 25 to 65, approximately 1 out of 4 reported smoking. People aged 65 and over tend to report smoking the least.

Note: In the Netherlands, the smoking rates decreased significantly among 18 to 19-years-olds between 2014 and 2018. As a relatively small group of 18-19-year-olds (200) and 20-24 year-olds (400) participated in the survey, statistics for these groups tend to fluctuate more over time. When interpreting statistics for smaller groups like these, it is important to focus on long term trends only.
Figure 11. Average number of cigarettes smoked by smokers in 2018.

Note: Figure 11 presents data only from those who reported smoking cigarettes. It displays the average number of cigarettes smoked each day. In the Netherlands, people report smoking the highest number of cigarettes are those with a lower level of education, those with no immigration background, men, people aged 35 and over, and those who smoke every day.

Figure 12. Proportion of adults who were a heavy smoker in 2018.

Note: In the Netherlands, only a small portion of people (3.3%) reported smoking more than 20 cigarettes a day, which classifies them as heavy smoker. People who are heavy smokers tend to have lower educational attainment, be 35 years old or older, and smoke every day. In the Netherlands, there were no significant differences between groups with different immigration backgrounds.

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 increases or decreases over time. Heavy smokers are more likely to become ill or to die due to their smoking addiction. People who smoke heavily for their entire life tend to live 13 years shorter than those who never smoked. People who smoke every day, but 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 5 years less, on average, than non-smokers.4
Figure 13. Proportion of smokers who had recently made a serious quit attempt in 2018.

Note: In the Netherlands, over 1 out of 3 smokers reported having recently made a serious quit attempt in 2018. A quit attempt is considered a serious one if someone tries to quit smoking and does not smoke for at least 24 hours. Among people with lower education, a significantly smaller proportion made a serious quit attempt than among those with middle or higher levels of education. Quit attempts are most common among people with a non-Western immigration background and people aged 25 to 34.

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 rose significantly between 2014 and 2018. The increase between 2017 and 2018 was not significant.
Figure 15. Prevalence of electronic cigarettes use in 2018.

Note: Figure 15 presents information about electronic cigarettes (e-cigarettes) use among all adults in the Netherlands (smokers and non-smokers). About 3% of adults in the Netherlands used an e-cigarette in 2018. There were no significant differences in the use of e-cigarettes between any of the subgroups. In the Netherlands, smokers are far more likely to have used e-cigarettes than both former smokers and those who never smoked. Daily smokers are more likely to have reported using e-cigarettes than occasional smokers.

Figure 16. Prevalence of electronic cigarettes us by year.

Note: Figure 16 presents information about e-cigarette use among all adults in the Netherlands (smokers and non-smokers). Ecigarettes have been available on the market in the Netherlands since 2017. The use of e-cigarettes has not changed significantly between 2016 and 2018.
Note: Figure 15 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). People who had been exposed were split between those who have been exposed for less than one hour per day on average and people exposed for more than one hour per day on average. In the Netherlands, groups most exposed to secondhand smoke are people with middle level of education, people with an immigration background, men, and people aged 18 to 24. People aged 18 to 24 are also most likely to have been exposed for more than one hour per day.

Figure 17. Proportion of non-smokers who were exposed to secondhand smoke indoors in 2018.

Figure 18. Proportion of non-smokers who were exposed to secondhand smoke indoors by year.

Note: Figure 16 contains information only about non-smoking adults in the Netherlands. The overall indoor exposure rate decreased between 2014 and 2018 (red line). In addition, the proportion of non-smokers exposed for over an hour also decreased in that same period.
REFERENCES


FURTHER READING

Want to know more about tobacco in the Netherlands? The following publications may be interesting for you:
• Smoking in the Netherlands: Key statistics 2017
• Factsheet: Water pipe (hookah) smoking
• Dutch Youth Health Care: From smoke free houses to smoke free parents

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 (in Dutch).

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