

Statistical bulletin

Adult smoking habits in the UK: 2021

Cigarette smoking habits among adults in the UK, including the proportion of people who smoke, demographic breakdowns, changes over time and use of e-cigarettes.



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Next release: To be announced

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1. Main points

- In the UK, in 2021, 13.3% of people aged 18 years and over smoked cigarettes, which equates to around 6.6 million people in the population; this is the lowest proportion of current smokers since records started in 2011 based on our estimates from the Annual Population Survey (APS).
- Of the constituent countries, the highest proportion of current smokers in 2021 was in Scotland (14.8%) and the lowest was in England (13.0%); Wales and Northern Ireland reported 14.1% and 13.8% current smokers, respectively.
- In 2021, 15.1% of men smoked compared with 11.5% of women in the UK; this trend has been consistent since 2011.
- In the UK, those aged 25 to 34 years had the highest proportion of current smokers (15.8%), compared with those aged 65 years and over who had the lowest (8.0%) in 2021.
- In the UK, those who had no qualifications were more likely to be current smokers (28.2%) than those whose highest level of education was a degree or equivalent (6.6%) in 2021.
- In Great Britain, 7.7% of Opinions and Lifestyle Survey (OPN) respondents, aged 16 years and over, in 2021 said they currently used an e-cigarette daily or occasionally, based on data collected in August and September 2021, which equates to around 4 million adults in the population; this is an increase on the estimate from 2020, where 6.4% of people reported daily or occasional e-cigarette use.

The coronavirus (COVID-19) pandemic has meant changes for the APS and OPN data collection in 2020 and 2021. See our <u>methodology article</u> for more information.

Statistician's comment

"This year, we have reported 13.3% of adults aged 18 years and over in the UK were smokers in 2021; this is a decrease from 14.0% in 2020. This is the lowest proportion of current smokers since 2011, when we began recording smoking prevalence from the Annual Population Survey (APS).

The decrease in the proportion of current smokers may be partly attributed to the increase in vaping and e-cigarette use. Data from the Opinions and Lifestyle Survey (OPN) have shown regular use of a vaping device has increased in 2021 and the highest usage was among those aged 16 to 24 years."

James Tucker, Data and Analysis for Social Care and Health Division, Office for National Statistics

Follow James Tucker on Twitter @ONSJames

2. Data collection changes during the coronavirus (COVID-19) pandemic

The Office for National Statistics (ONS) collects data on <u>adult smoking habits</u> using two surveys. The <u>Annual Population Survey (APS)</u> provides headline indicators of the number of adults aged 18 years and over who smoke in the UK, and the <u>Opinions and Lifestyle Survey (OPN)</u> collects more detailed information on smoking habits, intention to quit smoking, and e-cigarette users aged 16 years and over in Great Britain.

3. Smoking prevalence based on data from the Annual Population Survey (APS)

As noted in <u>our release last year</u>, the change in the mode of data collection for the APS, introduced at the end of March 2020, affected the comparability of our smoking prevalence estimates with previous years.

Because of the coronavirus (COVID-19) pandemic, changes were made to the APS data collection in 2020 and 2021. The smoking prevalence estimates from the APS for 2020 and 2021 were produced using an updated weighting methodology to remove the effect of the change in method of data collection, introduced at the end of March 2020. Figures for 2020 and 2021 are now comparable with previous years. Please see our methodology article for more information.

Proportion of current smokers in the UK

In 2021, the proportion of current smokers in the UK was 13.3%, which equates to 6.6 million people. There has been a <u>statistically significant</u> decrease in the proportion of smokers from 2020 (14.0% of the population). The trend in smoking prevalence continued to decrease, and the latest figure represents a 6.9 percentage point decrease in current smokers compared with 2011 (20.2% of the population).

Vaping devices such as e-cigarettes have played a major role in the decrease in smoking prevalence in the UK. In this bulletin, we have reported an increase in e-cigarette use, and organisations such as Action on Smoking Health (ASH) have reported similar increases in e-cigarettes (vapes) usage among adults in Great Britain. Research from Italy has shown that, during the coronavirus pandemic, there was a decrease in smoking prevalence; however, the average number of cigarettes consumed daily increased among current smokers. Policies associated with the Tobacco Control Plan for England (PDF, 548KB), such as increased public awareness campaigns and smokefree places, may have contributed to decreased smoking prevalence.

Official smoking prevalence estimates for Wales, Scotland and Northern Ireland should be taken from devolved health or national surveys (see Section 6).

We use the APS as the official measure of smoking prevalence in England to monitor and track progress against the <u>Tobacco Control Plan for England</u> and <u>the Khan review</u>. The Tobacco Control Plan aims to reduce smoking prevalence among adults in England to 12% or less by the end of 2022. In 2021, England had the lowest proportion of current smokers with 13.0%, which equates to around 5.4 million people. This is a statistically significant decrease in the proportion of smokers from 2020, with 13.8% (around 5.7 million people).

For the other constituent countries of the UK, Scotland had the highest proportion of current smokers (14.8%, around 620,000 people). In Wales and Northern Ireland, the proportion of current smokers was 14.1% (around 340,000 people) and 13.8% (around 190,000 people), respectively. Since 2011, there has been a <u>statistically significant</u> decline in the proportion of current smokers in England, Scotland, Wales and Northern Ireland. For Northern Ireland, the estimate over time has been more variable because of the smaller sample size.

The Khan review, an independent review commissioned by the Secretary of State for Health and Social Care, was set up to review the feasibility of government policies aimed at achieving smokefree by 2030. Policies aimed at reducing smoking prevalence have helped to cut the proportion of current smokers in England. However, despite the success of these policies, according to the Khan review it is likely that the smokefree target of 5% current smokers by 2030 will be missed. The Khan review has made several recommendations to help achieve the smokefree target, such as increased investment, increasing the age of sale of tobacco from 18 years, promoting vaping as an alternative to smoking, and improving preventative measures in the NHS. As these recommendations are implemented, in time we will be able to monitor the effect they have on the trend of the proportion of current smokers in England.

Figure 1: Smoking prevalence has fallen in all four countries of the UK since 2011

Proportion who were current smokers, all persons aged 18 years and over, UK, 2011 to 2021

Notes:

1. Because of changes in weighting, the smoking prevalence estimates for 2020 and 2021 are now comparable with estimates from previous years.

.xlsx

Characteristics of current cigarette smokers in the UK

As in previous years, in 2021, men were more likely to smoke than women in the UK. Across all constituent countries of the UK, 15.1% of men (around 3.7 million) and 11.5% of women (around 2.9 million) reported being current smokers.

Current cigarette smokers in 2021 by age

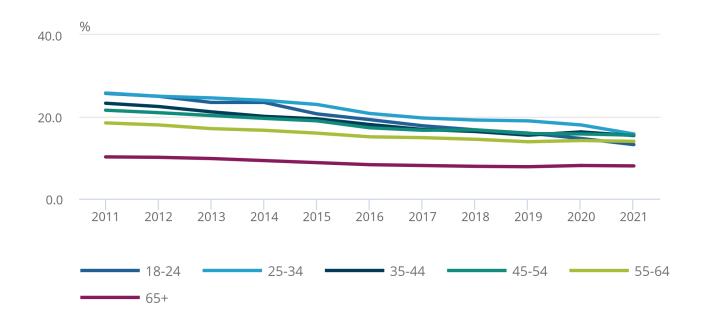
Those aged 25 to 34 years continued to have the highest proportion of current smokers (15.8%, around 1.3 million people), when compared with any other age group, and those aged 65 years and over continued to have the lowest proportion of current smokers (8.0%, around 900,000 people). Across time, the largest reduction in smoking prevalence has been among those aged 18 to 24 years; 25.7% of this group smoked in 2011 compared with 13.2% in 2021, which is a reduction of almost 12.5 percentage points (see Figure 2). Research from the University of Essex suggests that increased taxation on tobacco products has been effective at reducing smoking prevalence among those aged under 25 years.

Figure 2: People aged 25 to 34 years continued to have the highest smoking prevalence

Proportion who were current smokers, all persons by age group, UK, 2011 to 2021

Figure 2: People aged 25 to 34 years continued to have the highest smoking prevalence

Proportion who were current smokers, all persons by age group, UK, 2011 to 2021



Source: Office for National Statistics - Annual Population Survey

Local authority smoking prevalence

Smoking prevalence estimates by local authority area tend to fluctuate each year because of their small sample sizes producing more statistical uncertainty. Therefore, we describe local authorities where the proportion of smokers has been consistently high or low on a year-to-year basis. This year, we have included smoking prevalence estimates for Northern Ireland from 2015 to 2021.

Since 2012, the City of Kingston Upon Hull and Blackpool have been in the 10 local authorities with the highest proportion of current smokers eight and nine times, respectively. In 2021, the proportion of current smokers in City of Kingston Upon Hull and Blackpool was 22.0% and 20.6%, respectively. In 2021, Oadby and Wigston (3.2%) and West Oxfordshire (3.7%) had the lowest levels of smoking prevalence in England. This is around 10 percentage points lower than the UK estimate (13.3%). Table 4 in the accompanying dataset contains information on smoking prevalence in local and unitary authority areas of England, Scotland, Wales, and Northern Ireland by sex, between 2012 and 2021. Additional data for local areas in England can be found in Office for Health Improvement and Disparities Local Tobacco Control Profiles.

Figure 3: The proportion of current smokers by local authority of the UK

The proportion who were current smokers, all person aged 18 years and over by local authority, UK, 2015 to 2021

Notes:

- 1. Smoking prevalence estimates for Buckinghamshire unitary authority are not available for 2015 to 2020.
- 2. Official smoking prevalence estimates for Wales, Scotland and Northern Ireland should be taken from devolved health or national surveys.
- 3. Confidence intervals for local authority estimates of smoking prevalence can be found in the accompanying dataset.

Download the data

.xlsx

4. Characteristics of current cigarette smokers in the UK

In this section, we describe data from the APS, which cover adults aged 18 years and over in the UK. Smoking habits are associated with a variety of characteristics, such as relationship status and education level.

Around one in four people who are unemployed smoked compared with around one in eight people who are in paid employment

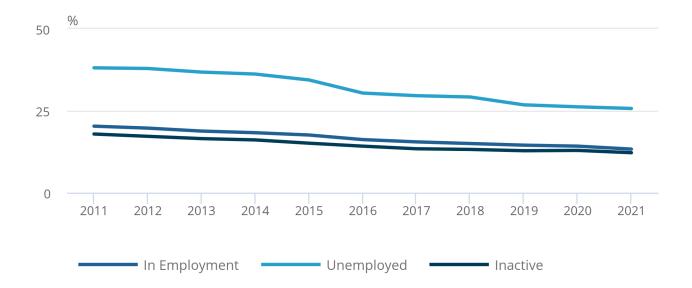
In 2021, when looking at smoking prevalence by economic activity in the UK, those who were defined as unemployed had a higher proportion of current smokers (25.7%), compared with those who were in paid employment (13.3%). People who were economically inactive had the lowest percentage of reported current smokers (12.2%).

Figure 4: Those who were unemployed had a higher proportion of current smokers compared with those who were in paid employment

The proportion who were current smokers by economic activity, all persons aged 18 years and over, UK, 2011 to 2021

Figure 4: Those who were unemployed had a higher proportion of current smokers compared with those who were in paid employment

The proportion who were current smokers by economic activity, all persons aged 18 years and over, UK, 2011 to 2021



Source: Office for National Statistics - Annual Population Survey

Around one in four people with no qualifications were current smokers compared with 1 in 15 people whose highest level of education is a degree or equivalent

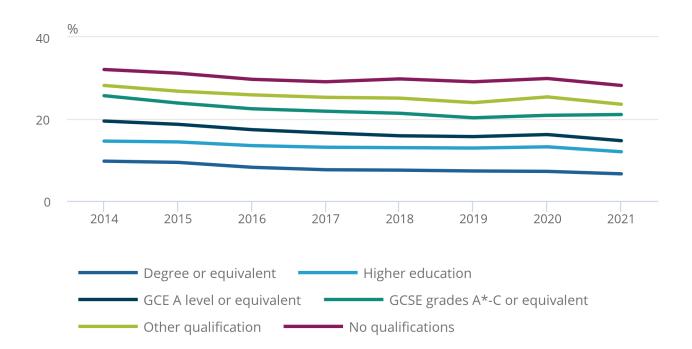
In 2021, 28.2% of people who have no qualifications were current smokers. The proportion is higher than those who reported a degree as their highest level of education, at 6.6%, and those who reported higher education as their highest level of education, at 12.0%.

Figure 5: The highest proportion of current smokers was among those who reported they had no qualifications

The proportion who were current smokers by highest level of education attainment, all persons aged 18 years and over, UK, 2014 to 2021

Figure 5: The highest proportion of current smokers was among those who reported they had no qualifications

The proportion who were current smokers by highest level of education attainment, all persons aged 18 years and over, UK, 2014 to 2021



Source: Office for National Statistics - Annual Population Survey

The <u>accompanying datasets</u> include a wider range of data on the characteristics of cigarette smokers from the APS, including estimates by socio-economic status, relationship status, housing tenure, country of birth, ethnicity, and religion.

5. Smoking prevalence based on the data from Opinions and Lifestyle Survey (OPN)

The <u>Opinions and Lifestyle Survey</u> is conducted by an online-self completion questionnaire. Telephone interviews are available if requested by a respondent, however the predominant mode of collection is online. For more information, please see our accompanying <u>methodology article</u>.

Current smokers in Great Britain

The proportion of adults aged 16 years and over who said they smoked cigarettes in Great Britain decreased significantly from 14.5% in 2020 to 12.7% in 2021, continuing the downward trend seen since 1974. This is in line with the reduction in smoking we see in the Annual Population Survey (which covers the UK and adults aged 18 years and over). Over 2020 and 2021, there were many factors that may have contributed to this trend change, some of which reflect real changes in smoking habits and some of which relate to changes in the way in which the data were collected.

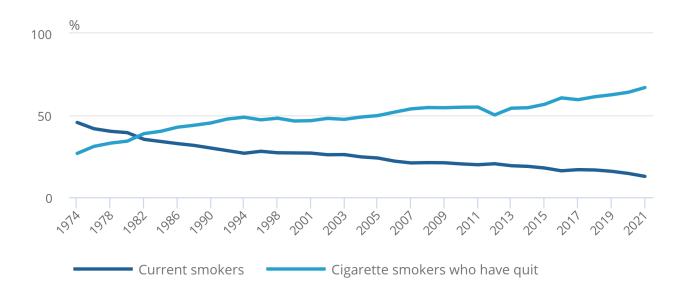
During the coronavirus (COVID-19) pandemic, with emphasis on overall and respiratory health, the trends could reflect a behavioural change, with respondents more likely to reduce or give up smoking. Social smokers may not have socialised as much during lockdowns and working from home may also have had some influence on smoking prevalence. Coinciding with this, the OPN underwent a change in mode from an interviewer-led telephone survey to a self-completion mixed-mode online survey along with a question-order change and sample-frame change. More information can be found in the OPN QMI. With many changes occurring concurrently, we recommend caution when interpreting the movement in the trend.

While the proportion of current smokers continues to fall, the proportion of smokers who have quit continues to increase and reached its record high in 2021 (Figure 6). Among those who have ever smoked, 66.9% said they had quit in 2021, which is a statistically significant increase since 2015.

Figure 6: The proportion of cigarette smokers who have quit continued to increase

The proportion of current smokers and those who have quit, for all persons aged 16 years and over, Great Britain, 1974 to 2021

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Source: Office for National Statistics - Opinions and Lifestyle Survey

Notes:

- 1. The proportion of cigarette smokers who have quit is the proportion of all those who said that they have smoked cigarettes regularly who do not currently smoke.
- 2. From March 2020, the survey moved to weekly data collection.
- 3. From 25 August 2021, the survey moved to fortnightly data collection.
- 4. Data are weighted from 2000 onwards.
- 5. Data on cigarette use were collected on a two-year basis prior to 2000.
- 6. Information on the changes in legislation and government policy can be found on the Action on Smoking and Health (ASH) website.

Those who intended to quit smoking waited longer to have their first cigarette of the day

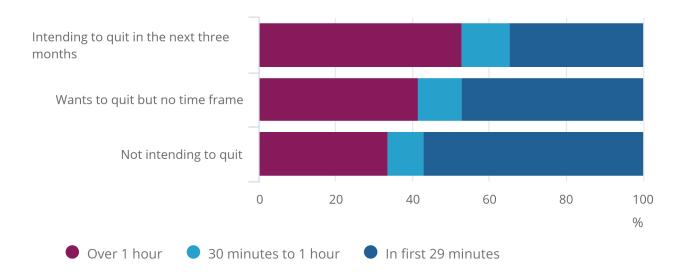
Of the people who currently smoked, 55.3% stated that they intended to quit smoking, with 21.7% of current smokers intending to quit within the next three months at the time of interview. When current smokers intended to quit, they also waited longer to have their first cigarette of the day after waking (see Figure 7). Among those who intended to quit within the next three months, 47.2% had their first cigarette within the first hour of waking compared with 66.5% of those not intending to quit.

Figure 7: Current smokers who intended to quit waited longer to have their first cigarette of the day

Time waited until first cigarette of the day by intention to quit, Great Britain, 2021

Figure 7: Current smokers who intended to quit waited longer to have their first cigarette of the day

Time waited until first cigarette of the day by intention to quit, Great Britain, 2021



Source: Office for National Statistics - Opinions and Lifestyle Survey

Notes:

1. The data refer to the amount of time cigarette smokers typically waited until they had their first cigarette after waking.

Electronic cigarettes use

Before March 2020, respondents were asked whether they currently use a vaping device, such as an e-shisha or e-pipe; as such, people were classed as current users even if their frequency of use was "daily" or "occasional". In March 2020, the survey question changed to ask respondents if they were daily or occasional users. Questions on vaping were only asked during August and September 2021.

Prevalence of vaping in Great Britain

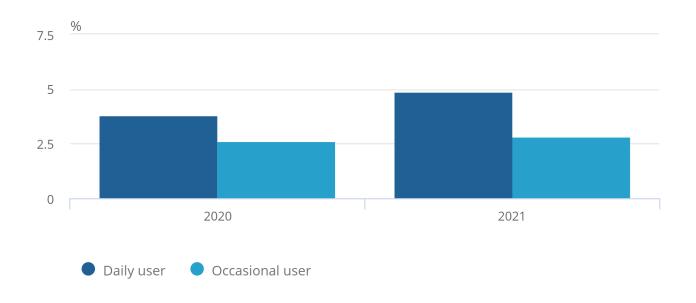
In 2021, 4.9% of survey respondents reported that they were currently daily users of an e-cigarette, which is an increase from 3.8% in 2020, although not statistically significant. A further 2.8% reported using an e-cigarette occasionally, which is an increase from 2.6% in 2020, although not statistically significant. Together, this equates to around 4 million vapers in the population of Great Britain.

Figure 8: The proportion of current daily vapers increased in 2021 compared with 2020

Proportion of daily and occasional vapers, Great Britain, 2020 and 2021

Figure 8: The proportion of current daily vapers increased in 2021 compared with 2020

Proportion of daily and occasional vapers, Great Britain, 2020 and 2021



Source: Office for National Statistics - Opinions and Lifestyle Survey

Notes:

1. From 25 August 2021, the survey moved to fortnightly data collection.

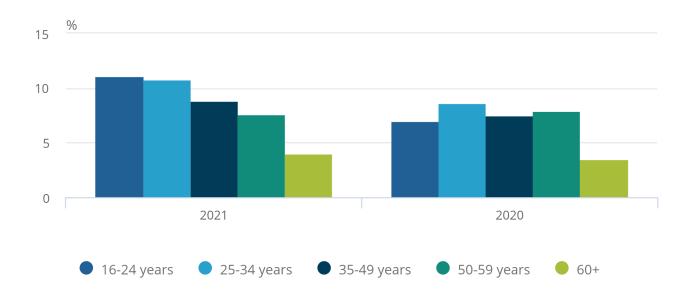
As seen in previous years, a higher proportion of men reported vaping daily or as an occasional user (9.7%) compared with women (5.7%) in 2021. This is the first year since the data collection began in 2014 that young people aged 16 to 24 years reported the highest proportion of vapers (daily and occasional) at 11.1% (see Figure 9). Because of changes in survey methodology, caution is recommended when interpreting trends over this period. For more information on methodological changes, please see our accompanying methodology article.

Figure 9: Daily and occasional vape use was the highest in those aged 16 to 24 years in 2021 compared with 2020

Proportion of daily and occasional vapers by age, Great Britain, 2020 and 2021

Figure 9: Daily and occasional vape use was the highest in those aged 16 to 24 years in 2021 compared with 2020

Proportion of daily and occasional vapers by age, Great Britain, 2020 and 2021



Source: Office for National Statistics – Opinions and Lifestyle Survey

Notes:

1. From 25 August 2021, the survey moved to fortnightly data collection.

High prevalence of vaping among current smokers

In 2021, the proportion of vapers was highest among current cigarette smokers (25.3%) and ex-cigarette smokers (15.0%). Only 1.5% of people who have never smoked reported that they currently vape.

6. Other UK sources of data on smoking prevalence during the coronavirus pandemic

The devolved countries of the UK each have their own health surveys, which are used to provide official estimates of smoking in each country. These surveys are also used to track progress against each country's targets to reduce smoking. These are:

- the Northern Ireland Health Survey, which shows that <u>17% of adults smoked cigarettes in 2021 to 2022</u>
- the National Survey for Wales, which shows that <u>13% of adults smoked cigarettes in April 2021 to March</u> <u>2022</u>
- the Scottish Health Survey, which shows that 11% of adults smoked cigarettes in 2021 (PDF, 12.7MB)

The Office for Health Improvement and Disparities, through their <u>Local Tobacco Control Profiles</u>, details data on a wide range of indicators related to the smoking of cigarettes including different measures of prevalence in adults and young people, smoking-related mortality, and the <u>wider impacts of smoking on health</u>. The <u>Health Survey for England</u> and the <u>Smoking Toolkit Study</u> (non-Government Statistical Service) also collect data on smoking habits and e-cigarettes.

7. Adult smoking habits in the UK data

Smoking habits in the UK and its constituent countries

Dataset | Released 6 December 2022

Annual data on the proportion of adults who currently smoke, the proportion of ex-smokers, and the proportion of those who have never smoked, by sex and age.

E-cigarette use in Great Britain

Dataset | Released 6 December 2022

Annual data on the proportion of adults in Great Britain who use e-cigarettes, by different characteristics such as age, sex and cigarette smoking status.

E-cigarette use in England

Dataset | Released 6 December 2022

Annual data on the proportion of adults in England who use e-cigarettes, by different characteristics such as age, sex and cigarette smoking status.

Adult smoking habits in Great Britain

Dataset | Released 6 December 2022

Annual data on the proportion of adults in Great Britain who smoke cigarettes, cigarette consumption, the proportion who have never smoked cigarettes, and the proportion of smokers who have quit, by sex and age over time.

Adult smoking habits in England

Dataset | Released 6 December 2022

Annual data on the proportion of adults in England who smoke cigarettes, cigarette consumption, the proportion who have never smoked cigarettes, and the proportion of smokers who have quit, by sex and age over time.

8. Glossary

Current cigarette smokers

The Annual Population Survey (APS) defines current cigarette smokers as those who said they smoke cigarettes nowadays. With the Opinions and Lifestyle Survey (OPN), current cigarette smokers are those who said they smoked cigarettes, even if occasionally. Current cigarette smokers are provided as a proportion of those in the population.

Cigarette smokers who have quit

From the OPN, those who said they have smoked cigarettes regularly, but they do not currently smoke, are cigarette smokers who have quit. This is provided as a proportion of those who have ever smoked cigarettes regularly.

Current vapers

From the OPN, those who said they currently use e-cigarettes, a vaping device, or both are current vapers. Current vapers are provided as a proportion of those in the population.

Survey mode

Survey mode is the method that is used to collect information from respondents. There are different types of survey mode such as face to face, telephone, online and mixed mode.

Selection bias

Selection bias is an experimental error that occurs when the participant pool, or the subsequent data, is not representative of the target population.

Statistical significance

Significance has been determined using <u>95% confidence intervals</u>, which provide the range of values within which we are 95% confident that the true value lies. The 95% confidence intervals for the estimates are available in the <u>accompanying datasets</u>.

Economic activity

International Labour Organisation (ILO) definitions of economic activity are used. Unemployed people are those who are not currently in work but who are looking for work. The group "economically inactive" contains those who are not in work and not looking for work. This includes retired people and students. More information regarding economic activity can be found in the <u>Labour Force Survey - user guidance</u>.

9. Measuring the data

Annual Population Survey (APS)

The data on smoking habits in the UK come from the APS. The survey covers residents of the UK aged 18 years and over. Further information on the APS and survey methodology is available.

As noted in our release last year, the change from a mixed-mode to telephone-only data collection for the APS, introduced at the end of March 2020, resulted in a potentially biased sample. Previous research has shown that estimates from participants in telephone interviews are likely to underestimate smoking prevalence. Evidence of this can be found in Section 2 and Section 3 of our release last year. The change in the mode of data collection meant our smoking prevalence estimates for 2020 were not comparable with the previous years' estimates. For this release, we have updated our weighting methodology to improve comparability of our smoking prevalence estimates for 2020 and 2021. Details of this update can be found in our methodology article.

Opinions and Lifestyle Survey (OPN)

Data on smoking and e-cigarette use for Great Britain for those aged 16 years and over come from the OPN. In March 2020, the OPN was transformed from a monthly to weekly omnibus survey to understand how the coronavirus (COVID-19) pandemic is affecting life in Great Britain. Consequentially, the number of questions relating to smoking and vaping habits was greatly reduced (see <u>Section 4</u>). Further <u>information on the OPN and survey methodology</u> is available.

Analysis

The analysis reported in this release used survey weights to make estimates representative of the population. Survey weights take into account non-response and attrition as well as the distribution of population characteristics such as sex and age, where someone lives, and socio-economic characteristics.

10 . Strengths and limitations

Strengths

Robust methods are adopted for the Annual Population Survey (APS) and Opinions and Lifestyle Survey (OPN) sampling and weighting strategies to limit the impact of bias. Quality assurance procedures are undertaken throughout the analysis stages to minimise the risk of error.

The sample size of the APS is large, approximately 164,751 respondents, making it possible to generate statistics for small geographic areas. The sample size of the OPN in 2021 was approximately 242,022, making the cigarette smoking estimates more robust compared with earlier years.

Limitations

Comparisons between periods and groups must be done with caution as estimates are provided from a sample survey; as such, <u>confidence intervals</u> are included in the <u>accompanying datasets</u> to present the sampling variability. These should be taken into account when assessing differences between periods, as true differences may not exist.

There are differences when comparing estimates of smoking prevalence from different surveys. These differences are attributable to a range of factors, for example:

- different survey questions
- different methods of sampling
- · different methods of weighting

11. Related links

Office for Health Improvement and Disparities: Local Tobacco Control Profiles

Web page | Updated as and when new data become available

Data on a wide range of indicators related to the smoking of cigarettes including different measures of prevalence in adults and young people, smoking-related mortality, and the wider impacts of smoking on health.

Smoking prevalence in the UK and the impact of data collection changes: 2020

Bulletin | Released 7 December 2021

Impact that the coronavirus (COVID-19) pandemic has had on data collection, how this has influenced estimates of smoking prevalence and the comparability of these estimates.

12. Cite this statistical bulletin

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