

Statistical bulletin

Adult smoking habits in the UK: 2018

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.



+44 (0)1633 456222

Release date: 2 July 2019

Next release: To be announced

Table of contents

1. Main points

- 2. Collaboration
- 3. Things you need to know about this release
- 4. The proportion who are current smokers in the UK, its constituent countries and local areas, 2011 to 2018
- 5. Characteristics of current cigarette smokers in the UK
- 6. Other characteristics of smokers in the UK
- 7. Data on smokers who have quit and smokers who intend to quit, Great Britain, 1974 to 2018.
- 8. The use of electronic cigarettes (e-cigarettes), Great Britain
- 9. Health consequences of cigarette smoking
- 10. Other sources of data to understand smoking and its impact
- 11. Limitations of surveys when it comes to measuring smoking prevalence
- 12. Changes to legislation and government policy
- 13. Quality and methodology

1. Main points

- In the UK, 14.7% of people aged 18 years and above smoked cigarettes in 2018, which equates to around 7.2 million people in the population and represents a statistically significant decline of more than 5 percentage points since 2011, based on our estimate from the Annual Population Survey.
- Of the constituent countries, 14.4% of adults in England smoked; for Wales, this figure was 15.9%; Scotland, 16.3% and Northern Ireland, 15.5%.
- In the UK, 16.5% of men smoked compared with 13.0% of women.
- Those aged 25 to 34 years had the highest proportion of current smokers (19.2%).
- Around 1 in 4 (25.5%) people in routine and manual occupations smoked, compared with just 1 in 10 people (10.2%) in managerial and professional occupations.
- In Great Britain, 58.4% of people aged 16 years and above who currently smoked said they wanted to quit and 61.3% of those who have ever smoked said they had quit, based on our estimates from the Opinions and Lifestyle Survey.
- In Great Britain, 6.3% of people in 2018 said they currently used an e-cigarette, which equates to approximately 3.2 million adults in the population.

2. Collaboration



This publication is produced in partnership with Public Health England.

As part of a cross-government approach to improve the coherence of statistics on tobacco and e-cigarette use, this release is published on the same day as other related releases from Public Health England and NHS Digital. Public Health England's update to their <u>Local Tobacco Control Profiles</u> includes: new smoking prevalence data for 2018 including the gap between smoking prevalence in routine and manual, and other occupations; updated data for lung, oral and oesophageal cancer registrations; updated data for smoking-related fires and fatalities caused by them.

NHS Digital's latest <u>compendium of smoking statistics</u> includes headline figures from this report. NHS Digital's report also brings the latest smoking statistics for England into one place, including smoking-related ill-health, smoking patterns in children, and the availability and affordability of tobacco. The report also includes the latest data on women's smoking status at the time of delivery.

3. Things you need to know about this release

This release describes data on smoking habits from two surveys. Data for the UK are taken from the <u>Annual Population Survey</u> (APS), a continuous household survey that covers adults aged 18 years and above. Data for Great Britain are taken from the <u>Opinions and Lifestyle Survey</u> (OPN), a survey that collects data over an eightmonth period for adults aged 16 years and above.

This bulletin describes headline smoking prevalence figures from the APS. Due to its large sample of around 320,000 households each year (the OPN covers around 16,000 households per year), this survey allows for greater precision when it comes to estimating the proportion of the population who currently smoke.

The APS sample size also allows comparisons to be made at the local authority area-level. The OPN contains a wider range of smoking-related questions, such as average daily cigarette consumption, but is constrained by the smaller sample in the geographic breakdown it can provide. Combined, these two data sources provide a powerful tool to understand smoking habits.

Transformation of the Opinions and Lifestyle Survey

As part of the <u>Census and Data Collection Transformation Programme</u> (CDCTP), in ONS, the method for collecting Opinions and Lifestyle Survey (OPN) questionnaire responses is being transformed from a face-to-face interview to online with telephone follow up (mixed-mode).

The transformation is in two stages. The first stage made the move from face-to-face to telephone collection in April 2018. In this bulletin, 2018 estimates are based on two months of data collected using the previous face-to-face interview, and six months of data collected using a new questionnaire designed for telephone data collection. In the second stage, the OPN will move to mixed-mode collection in late 2019.

Several pilot tests have been conducted over the last two years to establish the impact of transforming the OPN, the results of which showed that there has been minimal impact on the data because of switching from face-to-face to telephone data collection. For data on smoking and e-cigarette use, the transformation has impacted the continuity of some of our time series, particularly cigarette consumption. Further information on how the transformation has impacted data on smoking and e-cigarette use can be found in the quality and methodology section. In our accompanying datasets, we have marked where the transformation of the OPN has impacted continuity and where caution is needed when comparing data across the time series.

4. The proportion who are current smokers in the UK, its constituent countries and local areas, 2011 to 2018

In this section, we describe data from the Annual Population Survey, which covers the UK and includes adults aged 18 years and above.

In 2018, the prevalence of smoking in the UK was 14.7%, a similar proportion to 2017

In 2018, the proportion of current smokers in the UK was 14.7%, which equates to around 7.2 million people, a statistically significant decline of more than 5 percentage points since 2011 (see Figure 1).

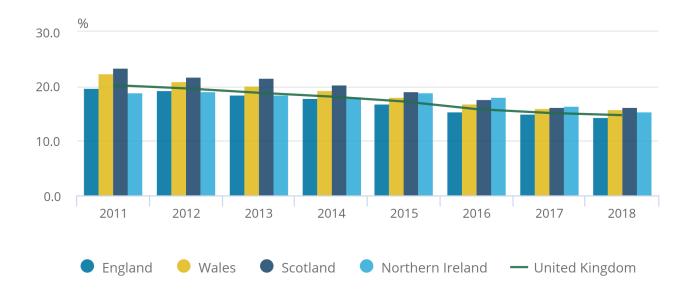
Of the constituent countries, Scotland continued to have the highest proportion of current smokers (16.3%, around 678,000 people). England continued to have the lowest proportion of current smokers (14.4%, around 5.9 million people), for the sixth consecutive year. In Wales and Northern Ireland, the proportion of current smokers was 15.9% (around 383,000 people) and 15.5% (around 213,000 people), respectively (see Figure 1). Since 2011, there has been a statistically significant decline in the proportion of current smokers in all four countries of the UK.

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 2018

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 2018



Source: Office for National Statistics - Annual Population Survey

As in previous years, in 2018 more men than women smoked in the UK and within all constituent countries. In the UK, 16.5% of men (around 3.9 million) and 13.0% of women (around 3.2 million) reported being current smokers.

Since 2011, the largest fall in smoking prevalence has been among 18- to 24year-olds

Those aged 25 to 34 years continued to have the highest proportion of current smokers (19.2%, around 1.6 million people) in 2018, when compared with any other age group. Those aged 65 years and above continued to have the lowest (7.9%, around 905,000 people).

Across time, the largest reduction in smoking prevalence has been among 18- to 24-year-olds; 25.7% of this group smoked in 2011 compared with 16.8% in 2018, a reduction of around 9 percentage points. The proportion of current smokers in the youngest age group is now similar to the 35- to 44 and 45- to 54 age groups (see Figure 2).

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

Proportion who were current smokers, all persons by age group, UK, 2011 to 2018

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

Proportion who were current smokers, all persons by age group, UK, 2011 to 2018



Source: Office for National Statistics – Annual Population Survey

The City of Kingston upon Hull has featured in the 10 local authorities with the highest prevalence for the fourth consecutive year

Smoking prevalence estimates by local authority area tend to fluctuate each year due to their small sample sizes producing more statistical uncertainty. Therefore, here we briefly describe local authorities where the proportion of smokers has been consistently high or low on a year-to-year basis. Please note, local authorities in Northern Ireland are not included as this level of detail is not available on the Annual Population Survey (APS) for Northern Ireland.

The City of Kingston upon Hull has been in the 10 local authorities with the highest proportion of current smokers since 2015, with 26.1% of the population reporting they smoked in 2018.

Between 2011 and 2017, Blackpool consistently featured in the 10 local authorities with the highest smoking prevalence. But in 2018, it did not feature in this group, with a smoking prevalence of 21.1%. However, this still remains significantly higher than the national average.

Areas with the lowest levels of smoking prevalence tend to fluctuate on a year-to-year basis. In 2017 and 2018, Brentwood featured in the bottom 10 of local authorities ranked by smoking prevalence. In 2018, the prevalence of smoking in Brentwood was 6.8%. This is around 8 percentage points lower than the level of smoking in the broader population of the UK.

To make our local authority data more accessible, we have produced two tools to help explore the data. Our interactive map (see Figure 3), shows the proportion of current smokers in local and unitary authorities of Great Britain for 2018. Our interactive chart (see Figure 4) allows you to select several local and unitary authorities, to see how smoking prevalence has changed since 2012.

As noted, smoking prevalence estimates by local authority can fluctuate due to smaller sample sizes; quality measures for these estimates can be found in the associated datasets.

Local authority data for England are also available in Public Health England's <u>Local Tobacco Control Profiles</u>. This tool allows users to compare a local authority against other local authorities in the region and benchmark a local authority against the England or regional average.

Figure 3: The proportion of current smokers by local authority in Great Britain

The proportion of current smokers among adults aged 18 years and above by local authority, Great Britain, 2018

Data Download

Figure 4: Smoking prevalence across Great Britain has declined since 2012, but this varies by local area

The proportion of current smokers among adults aged 18 years and above by local authority, Great Britain, 2012 to 2018

Data Download

5. Characteristics of current cigarette smokers in the UK

In this section, we describe data from the Annual Population Survey, which covers the UK and includes adults aged 18 years and above.

Smoking habits are associated with a variety of different characteristics – examples include relationship status and education level. To show how smoking status tends to be associated with inequality we have produced estimates of smoking prevalence by socio-economic status, based on the National Statistics definition. This is derived based on the status a person's last meaningful occupation falls under and can include those who are currently employed, unemployed and economically inactive. Our analyses on socio-economic status are restricted to those of working age, 18 to 64 years.

Around 1 in 4 people in routine and manual occupations smoked compared with just 1 in 10 people in managerial and professional occupations

When looking at smoking prevalence by socio-economic status, 25.5% of those working in routine and manual occupations (for example, as labourers, bar staff, lorry drivers, receptionists and care workers) said they currently smoked in 2018. This proportion is significantly higher than those reported among managerial and professional occupations (10.2% – for those who work as lawyers, architects, nurses and teachers, for example) and intermediate occupations (15.7% – for those who work as office clerks, managerial assistants and administrative assistants, for example).

Since 2014, there have been statistically significant declines in the proportion of current smokers among all socioeconomic groups (see Figure 5). These findings are generally in keeping with those showing that, <u>as personal incomes increase, people are less likely to smoke</u>.

Figure 5: In 2018, smoking prevalence was 2.5 times higher in routine and manual occupations than managerial and professional occupations

The proportion who were current smokers by socio-economic status group, those aged 18 to 64 years, UK, 2014 to 2018

Figure 5: In 2018, smoking prevalence was 2.5 times higher in routine and manual occupations than managerial and professional occupations

The proportion who were current smokers by socio-economic status group, those aged 18 to 64 years, UK, 2014 to 2018



Source: Office for National Statistics – Annual Population Survey

In England, the gap in smoking prevalence between those in routine and manual occupations and those in other occupations has widened, significantly, since 2012

The <u>Tobacco Control Plan for England (2017)</u> sets out the ambition to "reduce the inequality gap in smoking prevalence, between those in routine and manual occupations and the general population". To assess the extent of the inequity, we calculated the odds of those in the routine and manual population being smokers compared with those in managerial and professional, and intermediate occupations.

Results showed that routine and manual workers in England were more than twice as likely to be smokers as other occupations and that the gap has widened significantly between 2012 (unadjusted odds ratio 2.27, 95% confidence interval 2.21 to 2.34) and 2018 (unadjusted odds ratio 2.47, 95% confidence interval 2.38 to 2.56). These data are available in Public Health England's Local Tobacco Control Profiles.

6. Other characteristics of smokers in the UK

In the datasets, we include a wider range of data on the characteristics of smokers from the Annual Population Survey. The main findings for 2018 include:

- economic activity: the proportion of current smokers was significantly higher among unemployed people (29.2%) when compared with those who were employed (15.0%) and economically inactive (13.2%)
- relationship status: those who were married or in a civil partnership had the lowest proportion of current smokers (9.5%), which was less than half the prevalence in those who were cohabiting (21.8%) or single (21.0%); the proportion of current smokers in widowed, divorced or separated respondents was 16.8%
- education: those with no qualifications had the highest proportion of current smokers (29.8%), which is around four times the proportion in those with a degree (7.5%)
- ethnicity: the proportion of current smokers ranged from 7.9% among Chinese respondents (and 9.2% among Asian respondents), to 20.4% among respondents from the Mixed ethnic group
- country of birth: those who were born in Poland had the highest proportion of current smokers (25.9%), whereas people born in India had the lowest proportion (5.3%)
- religion (England only): the proportion of current smokers was lowest in Sikh people (4.7%); smoking prevalence in other religions varied by sex, for example, the proportion of current smokers among Muslim men (20.5%) was over four times higher than among Muslim women (4.6%)
- self-perceived health: smokers were less likely to report having very good health and more likely to report having very bad health, when compared with those who have never smoked; reporting bad or very bad general health was more than 2.5 times as common in current smokers than those who have never smoked (12.2% and 4.7%, respectively)
- housing tenure: there was a significantly lower proportion of current smokers in those who owned their property outright (8.3%) or with a mortgage (10.7%), compared with those who rented (31.0% in local authority or housing association renters, and 22.6% in private renters)

This year we have also included figures on smoking prevalence by sexual orientation, for 2015 to 2017. The most recent year of data available is 2017, as the <u>official statistics on the proportion of people identifying as each sexual orientation</u> for 2018 are not yet available.

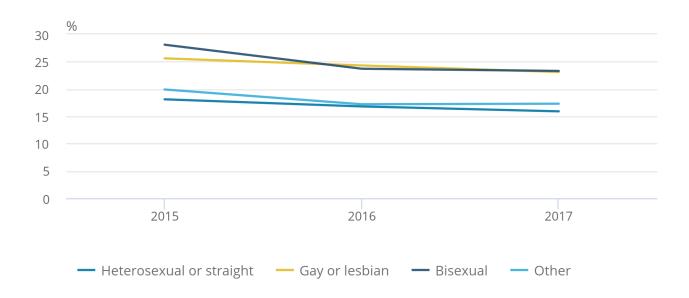
In 2017, the proportion of current smokers was significantly higher in people who identified as gay or lesbian (23.1%) or bisexual (23.3%), than heterosexual (straight) people (15.9%).

Figure 6: In 2017, smoking prevalence was 1.5 times higher in lesbian, gay and bisexual people than heterosexual or straight people

The proportion who were current smokers by sexual orientation, UK, 2015 to 2017

Figure 6: In 2017, smoking prevalence was 1.5 times higher in lesbian, gay and bisexual people than heterosexual or straight people

The proportion who were current smokers by sexual orientation, UK, 2015 to 2017



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. The "other" category captures people who do not consider themselves to be heterosexual or straight, bisexual, gay or lesbian. It might also include people who responded "other" for different reasons such as those who did not understand the terminology or who are against categorisation. There is currently no further breakdown of "other" collected in the Annual Population Survey so no assumptions can be made about the sexual orientation or gender identity of those responding "other".
- 2. Those who refused to answer or responded "don't know" are not included in this analysis.

7. Data on smokers who have quit and smokers who intend to quit, Great Britain, 1974 to 2018

In this section, we describe data from the Opinions and Lifestyle Survey, which covers Great Britain and includes adults aged 16 years and above. Data from the Opinions and Lifestyle Survey benefits from a long time series, which began in 1974.

The proportion of smokers who have quit is at one of the highest levels to date

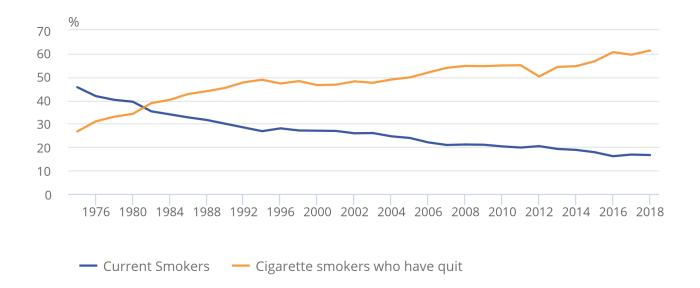
The prevalence of smoking among the population in Great Britain continues to fall whilst the proportion of cigarette smokers who have quit continues to increase (see Figure 7). In 2018, among those who have ever smoked, 61.3% said that they had quit; this is around 35 percentage points higher than that observed in 1974 (26.7%).

Figure 7: The proportion of cigarette smokers who have quit continues to increase

The proportion of smokers who have quit, all persons aged 16 years and over, Great Britain, 1974 to 2018

1982: The supportions of convices evident are quit overtakes that proportion of smokers who have quit largely due to largely due to took off in the early 70s.

The proportion of smokers who have quit, all persons aged 16 years and over, Great Britain, 1974 to 2018



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. Data collected in 2018 were collected using a telephone only questionnaire whereas previously data were collected using a face-to-face interview; further information on this can be found in the quality and methodology section.
- 3. Data are weighted from 2000 onwards.
- 4. Data on cigarette use were collected on a two-year basis prior to 2000.
- 5. Information on the changes in legislation and government policy can be found on the <u>action on smoking</u> <u>and health website (ASH)</u>.

Those who intend to quit smoking wait longer to have their first cigarette of the day

Of the people who currently smoke, 58.4% stated that they intend to quit smoking, with 18.6% of current smokers intending to quit within the next three months, at the time of interview.

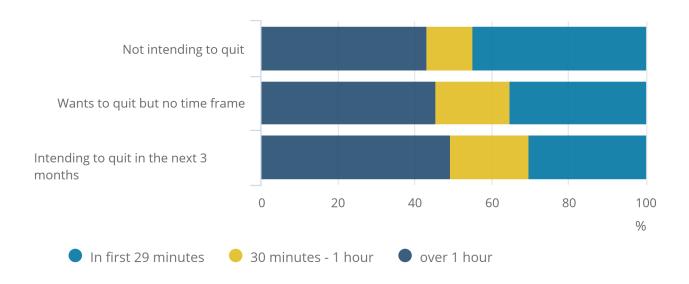
Current smokers who intend to quit also wait longer to have their first cigarette of the day after waking (see Figure 8). When looking at those who intend to quit within the next three months, a smaller proportion had their first cigarette within the first 30 minutes of waking (30.2%) when compared with cigarette smokers who had no intention of quitting (44.9%).

Figure 8: Current smokers who intend to quit wait longer to have their first cigarette of the day

Time waited until first cigarette of the day by intention to quit, Great Britain, 2018

Figure 8: Current smokers who intend to quit wait longer to have their first cigarette of the day

Time waited until first cigarette of the day by intention to quit, Great Britain, 2018



Source: Office for National Statistics – Opinions and Lifestyle Survey

Notes:

1. Data refers to the amount of time cigarette smokers typically wait until they have their first cigarette after waking.

8. The use of electronic cigarettes (e-cigarettes), Great Britain

In this section, we describe data from the Opinions and Lifestyle Survey, which covers Great Britain and includes adults aged 16 years and above.

E-cigarettes are increasingly being used by smokers to help quit smoking. A recent evidence review commissioned by Public Health England found that <u>vaping poses a small fraction of the risk of smoking and that e-cigarettes could be contributing to at least 20,000 successful quits of smoking per year.</u>

There are approximately 3.2 million vapers in Great Britain

In 2018, within the total population of Great Britain, 6.3% of people reported that they currently used an e-cigarette (vaped): this equates to approximately 3.2 million vapers in the population of Great Britain (this number could range from 2.8 to 3.6 million vapers when considering the range of our confidence intervals).

This proportion is significantly higher than that observed in 2014 when only 3.7% vaped, when data collection began.

Figure 9: The proportion of current vapers in 2018 has significantly increased since 2014

Proportion who were current vapers, Great Britain, 2014 to 2018

Figure 9: The proportion of current vapers in 2018 has significantly increased since 2014

Proportion who were current vapers, Great Britain, 2014 to 2018



Source: Office for National Statistics – Opinions and Lifestyle Survey

When looking at the prevalence of vaping by sex, a higher proportion of men reported vaping (7.7%) when compared with women (5.0%) in 2018. By age, those aged 35 to 49 years had the highest proportion of vapers at 8.5%.

In 2018, the proportion of vapers was highest among current cigarette smokers (15.0%) and ex-cigarette smokers (12.8%). Only 0.8% of people who have never smoked reported that they currently vape.

The most common reason given for vaping was as an aid to stop smoking, with more than half (52.8%) of vapers reporting using e-cigarettes for that purpose in 2018.

9. Health consequences of cigarette smoking

Smoking is a leading cause of preventable death in the UK. In 2018, 77,800 deaths were attributable to smoking in England. Estimates from the governments of the devolved countries suggest that smoking is responsible for around 5,500 deaths each year in Wales, 10,000 deaths per year in Scotland and 2,300 deaths per year in Northern Ireland. Exposure to second-hand smoke (passive smoking) can lead to a range of diseases, many of which are fatal, with children especially vulnerable to the effects of passive smoking.

In England, there were estimated to be 489,300 hospital admissions attributable to smoking in 2017 to 2018. Reducing the prevalence of cigarette smoking is therefore a main objective for the government and devolved administrations. The government set a smoking prevalence target for England of 12% by 2022. The Welsh Government has a target of 16% by 2020. The Scottish Government has a target (PDF, 258KB) of 5% by 2034. The Department of Health, Social Services and Public Safety in Northern Ireland has a target (PDF, 3.13MB) of 15% by 2020.

The UK and devolved governments have published the following papers: <u>Tobacco Control Plan for England, Tenyear tobacco control strategy for Northern Ireland, Tobacco Control Delivery Plan for Wales, and Creating a Tobacco-Free Generation – A Tobacco Control Plan for Scotland (PDF, 258KB). These set out their respective strategies for reducing the proportion of the population that smokes and the harm caused by tobacco use.</u>

10. Other sources of data to understand smoking and its impact

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:

- The Northern Ireland Health Survey shows that <u>18% of adults in Northern Ireland currently smoke</u> <u>cigarettes</u>
- The National Survey for Wales shows that 19% of adults in Wales currently smoke cigarettes (PDF, 1.17 MB)
- The Scottish Health Survey shows that 18% of adults in Scotland currently smoke cigarettes

Public Health England, via their <u>Local Tobacco Control Profiles</u>, detail 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. The <u>Health Survey for England</u> also collects data on smoking habits.

NHS Digital produce an <u>annual compendium</u>, bringing together an array of smoking-related data such as smoking-related hospital admissions and deaths, smoking-related prescriptions and expenditure. Their report also includes the prevalence data for adults reported here as well as prevalence data for children from their Smoking, Drinking and Drugs Survey. The NHS Digital report is published on the same day as this report.

11. Limitations of surveys when it comes to measuring smoking prevalence

There are limitations in using survey data to study smoking prevalence. The data described in this bulletin are based on self-reported behaviours. As such, it is likely that the findings underestimate cigarette consumption and, to a lesser extent, cigarette smoking prevalence.

For example, evidence suggests that when respondents are asked how many cigarettes they smoke per day, there is a tendency for respondents to round the figure to the size of the cigarette packet. Underestimates of consumption are likely to occur in all age groups.

There are also 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 and different methods of weighting.

12. Changes to legislation and government policy

Information on the changes in legislation and government policy can be found on the <u>action on smoking and health website (ASH)</u>.

13. Quality and methodology

The <u>Annual Population Survey</u> and <u>Opinions and Lifestyle Survey</u> Quality and Methodology Information reports contain information on:

- · the strengths and limitations of the data
- the quality of the output: including the accuracy of the data and how it compares with related data
- uses and users
- how the output was created

The Annual Population Survey

The data on smoking habits in the UK come from the Annual Population Survey (APS). This survey has an annual sample size of approximately 320,000 respondents, making it possible to generate statistics for small geographical areas. The data on smoking are collected on the Labour Force Survey, which forms a component of the APS. Further information on the survey and survey methodology is available.

The data on smoking from the APS concern all respondents aged 18 years and above; this differs from smoking data from the Opinions and Lifestyle Survey, which also collects data from 16- and 17-year-olds.

From 2016, there has been a change in the questions in the APS, which has had an impact on the calculation of ex-smokers.

The Opinions and Lifestyle Survey

Data on smoking and e-cigarette use for Great Britain come from the Opinions and Lifestyle Survey (OPN). The survey has an annual sample size of around 8,000 respondents. Compared with the APS, the OPN contains a wider range of smoking-related questions, such as average daily cigarette consumption. <u>A methodological note</u> describes further information on the OPN including the sampling frame, sampling, data collection, response rates, weighting and standard errors.

As mentioned in the Things you need to know about this release section, the OPN is being transformed from a face-to-face interview to online with telephone follow-up (mixed-mode), as part of the Census and Data Collection Transformation Programme (CDCTP).

Several pilot tests have been conducted over the last two years to establish the impact of transforming the OPN, the results of which showed that there has been minimal impact on the data because of switching from face-to-face to telephone data collection. In all, there have been two main impacts for data on smoking and e-cigarette use, which follow. Before describing these results, it is important to note that, because the OPN samples from around 2,000 individuals per month, the findings are based on small sample sizes, and therefore should be treated with some caution.

The results of the pilot studies showed that there have been significant differences for estimates of average daily cigarette consumption.

Differences were observed in cigarette consumption at the weekend and on weekdays; significantly more respondents to the telephone interview pilot aged 16 to 44 years reported smoking fewer than 10 cigarettes at the weekend (62.9%) compared with respondents to the face-to-face interview in the same age group (36.5%). The reverse pattern was observed in the same age group (aged 16 to 44 years) in terms of smoking 20 or more cigarettes on the weekend (9.0% on the telephone compared with 25.9% on the face-to-face interview).

For weekdays, significantly more respondents aged 45 years and over reported smoking fewer than 10 cigarettes in the face-to-face interview (44.4%) compared with respondents in the same age bracket on the telephone interview (25.6%).

In terms of e-cigarette usage, while there was no significant difference between modes in terms of current use, a significantly lower proportion of respondents reported having used one in the past on the telephone interview compared with the face-to-face interview.

For these differences, it is likely that the redesign of questions for telephone collection may have had an impact on the responses.

For cigarette consumption, the redesigned telephone question benefits from asking for the usual amount smoked for each day of the week, while the previous face-to-face question asks for the usual amount smoked "at the weekend" and "on weekdays." How respondents interpret or define "the weekend", for example, if this includes Friday, and/or focuses on more "social" occasions, may lead to the higher average number of cigarettes at the weekend for the face-to-face sample.

For the e-cigarette question and the differences found for the response category "I have used one in the past but I no longer use one", further investigation into these differences indicated that this change is likely due to the redesigned question.

The redesigned telephone question used to derive the variable (to allow comparison with the face-to-face response categories) clearly distinguishes between "regularly used" and "just tried" responses. The face-to-face variable does not use "regularly" as part of its distinction. It is therefore possible that some respondents in the face-to-face sample were identifying as past "users" of e-cigarettes, when by definition they had only "tried" a device. This suggestion is also supported by lower face-to-face estimates for the "I have tried one in the past but I no longer use one" category compared with telephone estimates (for nearly all demographic breakdowns).

The <u>results of the pilot studies</u> also describe data that compares telephone only collection with online data collection.