

Statistical bulletin

# Adult smoking habits in the UK: 2016

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



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# 1 . Main points

- In 2016, of all adult survey respondents in the UK, 15.8% smoked which equates to around 7.6 million in the population.
- Of the constituent countries, 15.5% of adults in England smoked; for Wales, this figure was 16.9%; Scotland, 17.7% and Northern Ireland, 18.1%.
- In the UK, 17.7% of men were current smokers which was significantly higher in comparison with 14.1% of women.
- Those aged 18 to 24 in the UK experienced the largest decline in smoking prevalence of 6.5 percentage points since 2010.
- Among current smokers in Great Britain, men smoked 12.0 cigarettes each day on average whereas women smoked 11.0 cigarettes each day on average; these are some of the lowest levels observed since 1974.
- In Great Britain, 5.6% of respondents in 2016 stated they currently used an e-cigarette in 2016, which equates to approximately 2.9 million people in the population.

## 2 . Collaboration

This publication is produced in partnership with Public Health England.

**Public Health England**



Public Health  
England

## 3 . Things you need to know about this release

This release describes data on smoking habits from two surveys. Data for the UK is taken from the [Annual Population Survey](#) (APS), a continuous household survey that covers adults aged 18 years and above. Data for Great Britain is taken from the [Opinions and Lifestyle Survey](#) (OPN). The OPN is a face-to-face interview of 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 2,000 households per month](#)), 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 level of local authority area. 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 is able to provide. Combined, these two data sources provide a powerful tool to understand smoking habits.

The commentary in this bulletin is based on conclusions drawn from “weighted” population counts. When conducting social surveys it is not possible to interview everyone in the population, as this would be too expensive. The “weighting” is used to weight the sample back to the population from which the sample was drawn, with the aim of making estimates reflect the population as a whole.

From 2016, there has been a change in the questions in the APS, which has had an impact on the calculation of ex-smokers. Previously respondents were asked the following two questions:

- Have you ever smoked a cigarette, cigar or pipe? (yes or no)
- Do you smoke cigarettes at all nowadays? (yes or no)

The prevalence of ex-smokers was then calculated as those respondents answering “yes” to the first questions and “no” to the second. However, it was felt that this was generally overestimating the prevalence of ex-smokers as respondents who had perhaps only smoked just one cigarette previously in their life, may answer “yes” to the first question and would therefore be classed as an ex-smoker when they have not ever been a regular smoker. In response to this, the questions have been changed as follows:

- Have you ever smoked cigarettes regularly? (yes or no)
- And do you smoke cigarettes at all nowadays? (yes or no)

The prevalence of ex-smokers is calculated as the proportion of respondents answering “yes” to the first and “no” to the second question. This has reduced the proportion of the population considered to be “ex-smokers” and also consequently increased the “never smoked” category. All three of these questions are asked in the OPN, which allows us to estimate the impact of the change on the results by comparing the figures in the APS with the OPN. For example, in 2015, the proportion of ex-smokers according to the APS (in the UK, those aged 18 and over) was 34.0% whereas according to the OPN (in GB, those aged 16 and over) it was 23.3%. For comparison, in 2016, the proportion of ex-smokers according to the APS was 25.9%, compared with the OPN where it was 24.7%.

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. [Evidence suggests that when respondents are asked how many cigarettes they smoke per day, there is a tendency for respondents to round the figure down to the nearest multiple of 10.](#) Please note, underestimates of consumption are likely to occur in all age groups.

## 4 . Cigarette smoking

Smoking is a leading cause of preventable death in the UK. In 2015, [around 79,000 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 in Wales](#), [13,500 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 around 474,000 hospital admissions attributable to smoking in 2015/16](#). 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 18.5% by 2015, which has been met. The [Welsh government has a target](#) of 16% by 2020. The [Scottish government has a target](#) of 5% by 2034. The [Department of Health, Social Services and Public Safety in Northern Ireland has a target](#) of 15%.

The UK and devolved governments have published the following papers: [Healthy Lives, Healthy People – A Tobacco Control Plan for England](#), [Ten year tobacco control strategy for Northern Ireland](#), [Tobacco Control Action Plan for Wales](#) and [Creating a Tobacco-Free Generation – A Tobacco Control Plan for Scotland](#). These set out their respective strategies for reducing the proportion of the population that smokes and the harm caused by tobacco use.

## **5 . Smoking habits in the UK, its constituent countries and local areas using data from the Annual Population Survey, 2010 to 2016 (adults aged 18 and over)**

**In the UK, the proportion of current smokers in 2016 (15.8%) which was the lowest prevalence recorded since 2010**

In 2016, the proportion of current smokers in the UK was 15.8%, which equates to around 7.6 million in the population, a statistically significant decline of more than 4 percentage points since 2010 (see Figure 1).

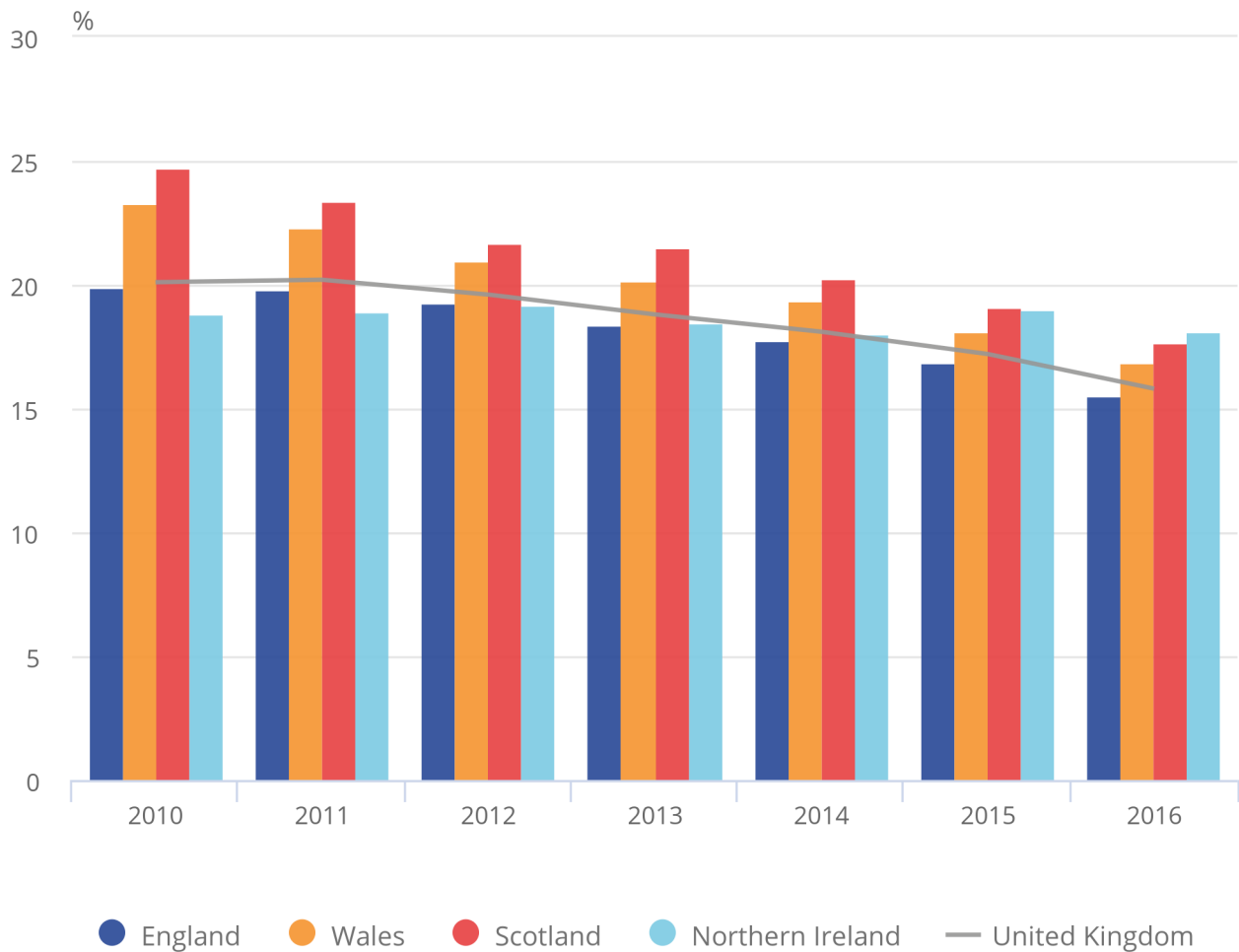
Of the constituent countries, Northern Ireland had the highest proportion of current smokers (18.1%, around 243,000 people). England continued to have the smallest proportion of current smokers (15.5%, around 6.3 million people) for the fourth consecutive year. In Scotland and Wales, the proportion of current smokers was 17.7% (around 718,000 people) and 16.9% (around 399,000 people) respectively. Since 2010, Scotland has seen the largest decline in the proportion of smokers by 7 percentage points.

**Figure 1: Proportion of current smokers, all persons aged 18 and over**

UK, 2010 to 2016

Figure 1: Proportion of current smokers, all persons aged 18 and over

UK, 2010 to 2016



Source: Annual Population Survey - Office for National Statistics

Source: Annual Population Survey - Office for National Statistics

**Notes:**

1. Figures are for all those aged 18 years and above.

In 2016, men were still more likely to smoke than women across the UK and its constituent countries. Specifically, 17.7% of men were current smokers compared with 14.1% of women.

## **Those aged 18 to 24 experienced the largest decline in smoking prevalence of around 6 percentage points since 2010**

In 2016, it was found that those aged 18 to 24 experienced the largest decline in smoking prevalence of around 6 percentage points since 2010, however, still remained the second most likely age group to smoke at 19.3% (see Figure 2).

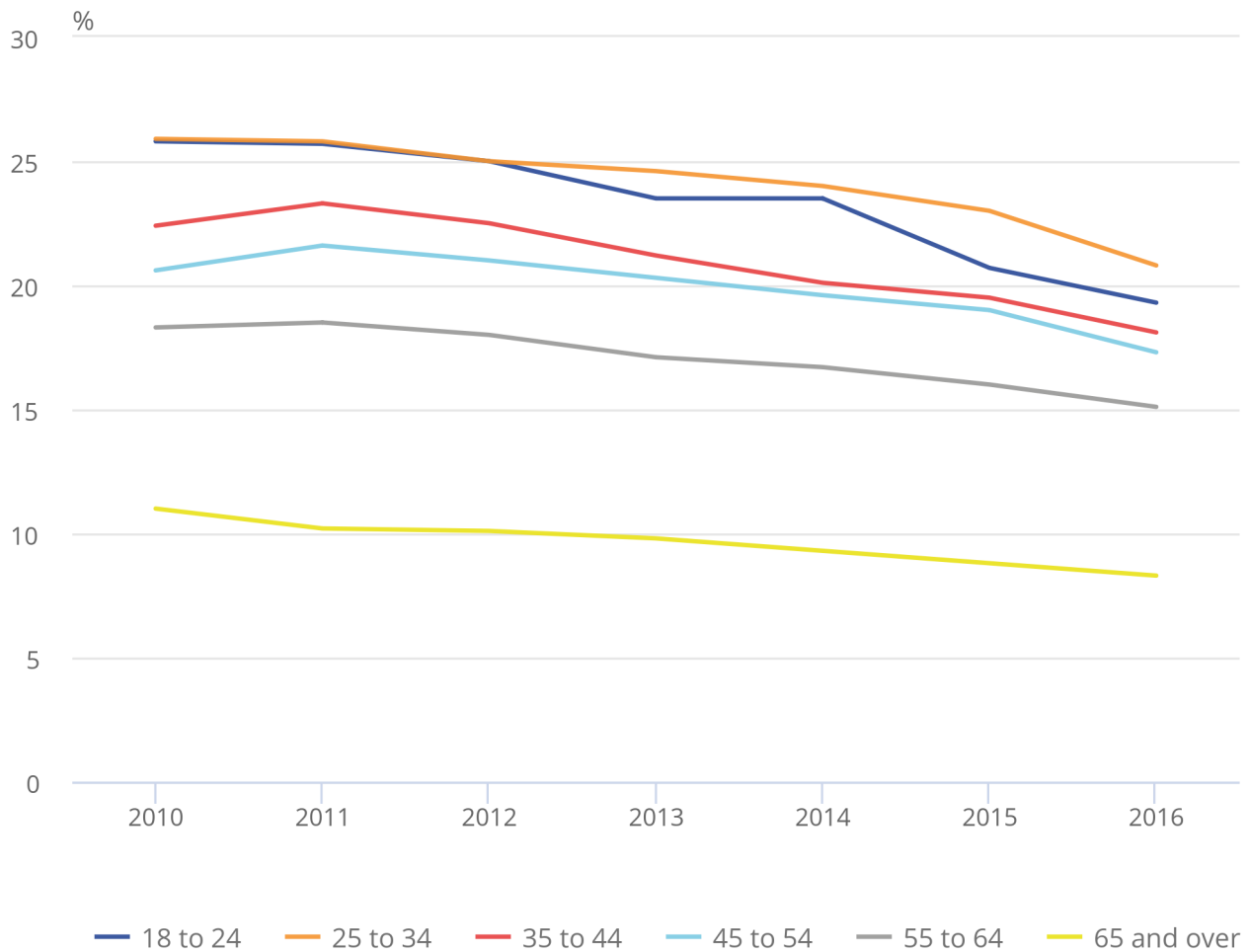
The prevalence of smoking continued to be more common among those aged 25 to 34 years. In this age group, 20.8% of respondents smoked. Despite this trend, those aged 25 to 34 years experienced the largest significant decline since 2015. On the other hand, smoking remained the least common in people aged 65 and over where 8.3% were current smokers.

## Figure 2: Proportion of current smokers, all persons by age group

UK, 2010 to 2016

### Figure 2: Proportion of current smokers, all persons by age group

UK, 2010 to 2016



Source: Annual Population Survey - Office for National Statistics

Source: Annual Population Survey - Office for National Statistics

Smoking prevalence estimates by local authority area tend to fluctuate each year due to their small sample sizes producing a larger degree of statistical uncertainty. To improve robustness, 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 here as this level of detail is not available on the Annual Population Survey (APS) for Northern Ireland.

In 2016, Blackpool remained in the top 10 of local authorities ranked by smoking prevalence, where it has been since 2012. In 2016, there were 22.5% of adults aged 18 and over in Blackpool who currently smoked, a figure that was around 7 percentage points higher than that observed among all adult respondents in the UK. However, the smoking prevalence for Blackpool has been declining in recent years, which may be due to its [strategy to reduce smoking](#). Similarly, Dundee City featured in the top 10 for the fourth consecutive year and had the highest overall smoking prevalence in 2014 and 2015.

For the bottom 10 local areas, Chiltern was the only local area to feature in 3 consecutive years. In 2016, the smoking prevalence for Chiltern was 7.4%, around 3 percentage points higher than the overall lowest, Epsom and Ewell at 4.9%, but around 11 percentage points lower than the level of smoking in the broader population of the UK.

## **6 . Smoking habits in Great Britain using data from the Opinions and Lifestyle Survey, 1974 to 2016 (adults aged 16 and over)**

### **Average daily cigarette consumption still remained at some of the lowest levels since 1974 for both men and women**

Since 1974, the number of cigarettes smoked each day on average amongst current smokers has been declining (see Figure 3). Although the average daily cigarette consumption for men in Great Britain increased slightly in 2016 to 12.0, this increase was not statistically significant. For women, the average consumption in 2016 was similar to that observed in 2015 at 11.0.

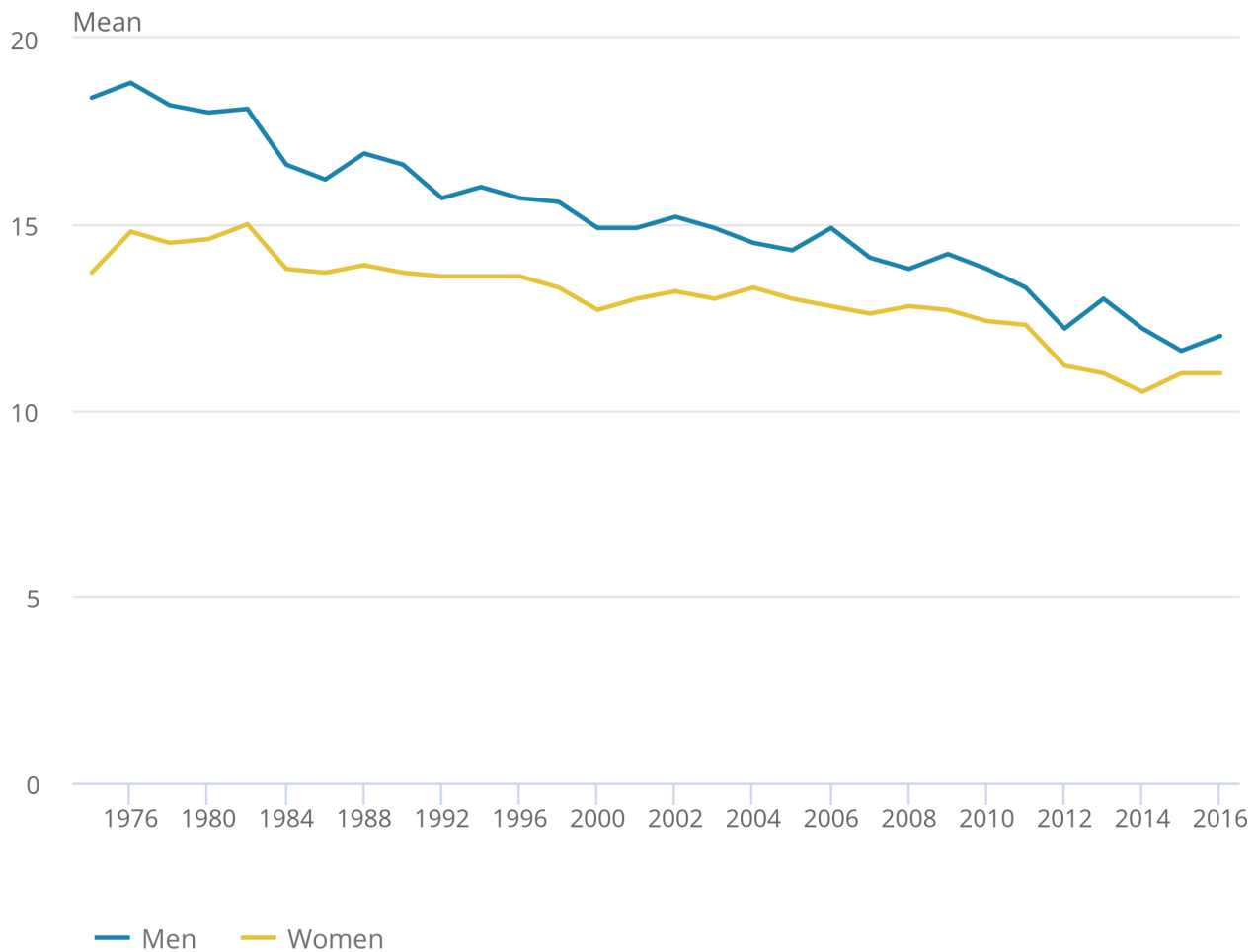


**Figure 3: Average daily consumption of cigarettes among current smokers for men and women aged 16 and over**

Great Britain, 1974 to 2016

Figure 3: Average daily consumption of cigarettes among current smokers for men and women aged 16 and over

Great Britain, 1974 to 2016



Source: Opinions and Lifestyle Survey; General Lifestyle Survey; General Household Survey - Office

Source: Opinions and Lifestyle Survey; General Lifestyle Survey; General Household Survey - Office for National Statistics

**Notes:**

1. The average daily cigarette consumption refers to the mean.
2. Data are weighted from 2000 onwards.
3. Data on cigarette use were collected on a 2-year basis prior to 2000.
4. Estimates prior to 2005 are based on fiscal year as opposed to calendar year.

## As the proportion of current smokers continues to decline, the proportion of smokers who have quit continues to increase

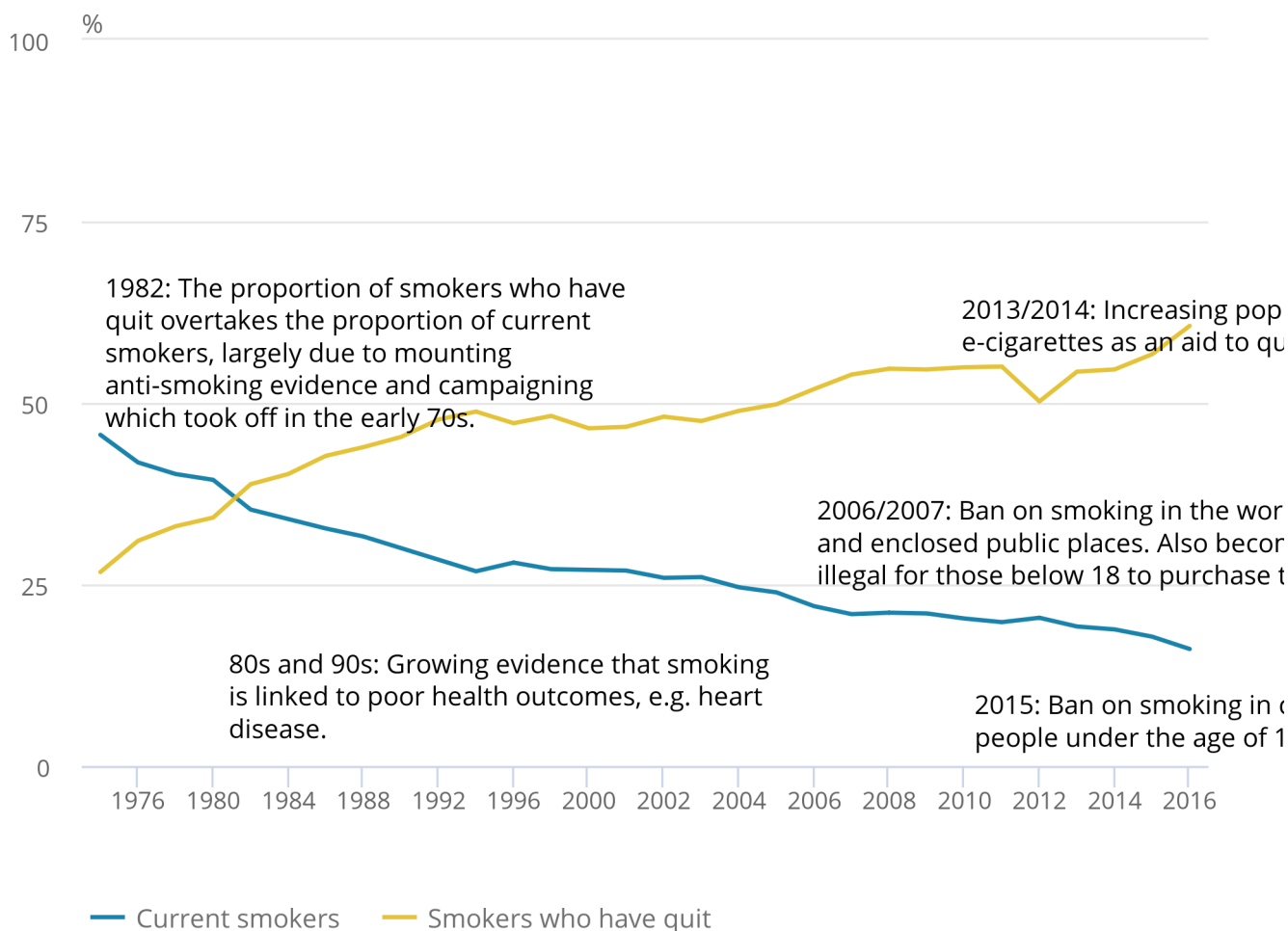
The prevalence of smoking among the population in Great Britain continues to fall whilst the proportion of smokers who have quit continues to increase. In 2016, of those aged 16 years and over who had ever smoked cigarettes, 60.6% had quit, which was the highest proportion of smokers who have quit since the time series began.

**Figure 4: Proportion of current smokers and smokers who have quit, all persons aged 16 and over**

Great Britain, 1974 to 2016

Figure 4: Proportion of current smokers and smokers who have quit, all persons aged 16 and over

Great Britain, 1974 to 2016



Source: Opinions and Lifestyle Survey; General Lifestyle Survey; General Household Survey - Office

Source: Opinions and Lifestyle Survey; General Lifestyle Survey; General Household Survey - Office for National Statistics

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 are weighted from 2000 onwards.
3. Data on cigarette use were collected on a 2-year basis prior to 2000.
4. Estimates prior to 2005 are based on fiscal year as opposed to calendar year.
5. Information on the changes in legislation and government policy can be found on the [action on smoking and health website \(ASH\)](#).

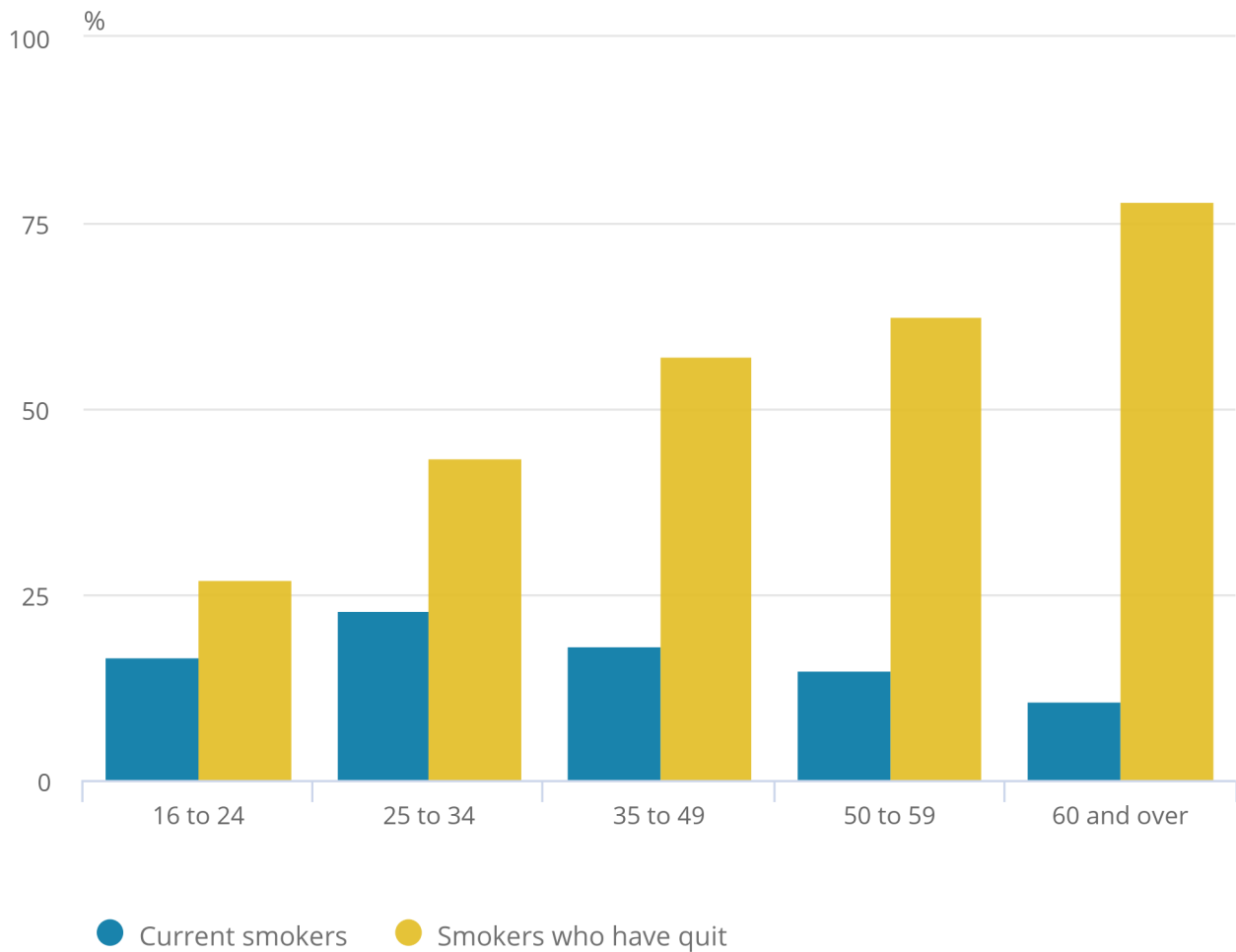
Generally from the age of 25, smoking prevalence amongst the population falls and this was reflected in the data on smokers who have quit (see Figure 5). The difference between smokers who have quit was larger between the age groups compared with the proportion of current smokers. The proportion of smokers who have quit for those aged 60 and over was 78.1% in 2016, which was almost three times more than the proportion of smokers who have quit aged 16 to 24 at 27.0%.

## Figure 5: Proportion of current smokers and smokers who have quit, all persons by age group

Great Britain, 2016

### Figure 5: Proportion of current smokers and smokers who have quit, all persons by age group

Great Britain, 2016



Source: Opinions and Lifestyle Survey - Office for National Statistics

Source: Opinions and Lifestyle Survey - Office for National Statistics

#### 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.

## Other characteristics of smokers

The data discussed in this publication can be found in the datasets section of the bulletin.

In the datasets, there is also data for [Great Britain](#) and [England](#) that has not been included within the commentary including:

- proportion who have never smoked cigarettes, by sex and age, 1974 to 2016
- cigarette smoking habits, by economic activity, 2000 to 2016
- cigarette smoking habits and whether dependent children live in the household, 2000 to 2016
- cigarette smoking habits, by highest level of qualification, 2014 to 2016
- cigarette smoking habits, by income per year, 2014 to 2016
- cigarette smoking habits, by socio-economic classification, 2014 to 2016
- cigarette smoking habits, by relationship status, 2014 to 2016
- cigarette smoking habits, by lone person household, 2014 to 2016
- type of cigarette smoked, by sex, 2014 to 2016

## **7 . E-cigarette use in Great Britain using data from the Opinions and Lifestyle Survey, 2014 to 2016 (adults aged 16 and over)**

### **Approximately 2.9 million people in Great Britain currently use e-cigarettes**

In Great Britain, 5.6% of respondents stated in 2016 they were current e-cigarette users, which equates to approximately 2.9 million of the population. In 2016, of all respondents 18.6% said that they had tried an e-cigarette, whereas 13.4% stated they have been an e-cigarette user but no longer use one.

Of those aged 16 and over, a higher proportion of men were current e-cigarette users (6.3%) compared with women (4.9%). Men were also more likely to have tried an e-cigarette or been an e-cigarette user in comparison with women.

E-cigarette use by age showed that the youngest, those aged 16 to 24 years, were more likely to have tried an e-cigarette and been an e-cigarette user, compared with the older age groups. Those aged 35 to 49 were found to most likely be current e-cigarette users.

However, there was a difference found in the proportion of current e-cigarette users when comparing men and women and their respective age groups. The most common age group for men to currently use e-cigarettes was 16 to 24 at 8.9%, whereas this was the least common age group for women at 2.6%. The most common age group for women who were current e-cigarette users was those aged 50 to 59 at 7.5%, which was almost 2 percentage points higher than men of this age group. All other age groups showed that men were more likely to currently use e-cigarettes than women.

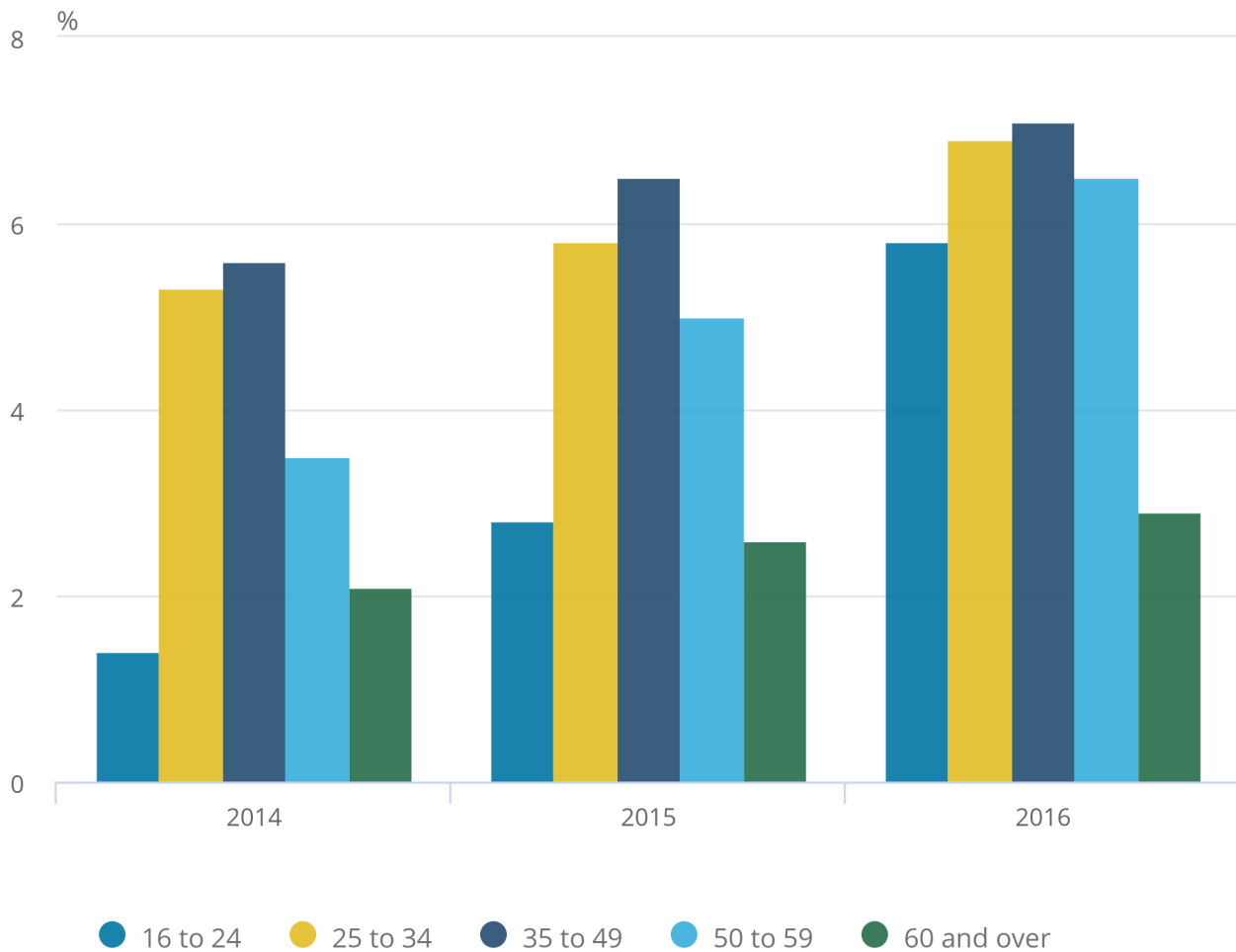
While it may be too early to identify trends without a longer time series, it is interesting to observe the difference in proportion of current e-cigarette users particularly by age since 2014 (see Figure 6). The findings show that the largest increase in current use was among those aged 16 to 24 years followed by those aged 50 to 59 years. Despite this, the sample on e-cigarette use tends to be small (in 2016, the sample size for those aged 16 to 24 was 538), meaning that random fluctuation is more likely to occur. As such, we will need monitor these trends in the coming years before drawing solid conclusions.

**Figure 6: Proportion of current e-cigarette users, all persons by age group**

Great Britain, 2014 to 2016

Figure 6: Proportion of current e-cigarette users, all persons by age group

Great Britain, 2014 to 2016



Source: Opinions and Lifestyle Survey - Office for National Statistics

Source: Opinions and Lifestyle Survey - Office for National Statistics

### The most common reason for using an e-cigarette was as an aid to stop smoking

Both current and ex-smokers stated their main reason for using e-cigarettes was as an aid to stop smoking (50.1% and 48.2% respectively). The second most common reason for both groups was that they perceived e-cigarettes to be less harmful than cigarettes, however, the proportion of ex-smokers stating this reason was almost twice that of current cigarette smokers (35.2% and 18.1% respectively).

The proportion of current e-cigarette users was highest amongst cigarette smokers (13.7%) compared with ex-smokers (12.1%). Interestingly, the average daily cigarette consumption by e-cigarette use was 10.9 for both current e-cigarette users and those who had never used an e-cigarette. The average was slightly higher at 12.8 for ex e-cigarette users.

Of all current e-cigarette users aged 16 and over, just over three-quarters (75.3%) used their e-cigarette every day and a further 15.9% used one at least once a week.

## **Smokers tend to have a different perception on the harm of e-cigarettes if they have never used an e-cigarette**

Recently, there has been growing interest in smokers' perceptions on the harm of smoking cigarettes relative to harm of using e-cigarettes. In our data, on the whole, smokers tend to have a different perception of e-cigarettes when compared with the perceptions held by ex-smokers and those who have never smoked. Particularly in 2016, smokers were less likely to view e-cigarettes as being less harmful than cigarettes. Smokers' perceptions, however, were associated with their use of e-cigarettes.

The most negative view of e-cigarettes were held by smokers who have never used one previously. Specifically, 60.8% of smokers who had never used an e-cigarette felt that e-cigarettes were less harmful than cigarettes; this proportion is around 14 percentage points lower than the 75.1% of smokers who have ever used an e-cigarette (that is, current and past use). Interestingly, dual users of cigarettes and e-cigarettes had more accurate perceptions. In 2016, of dual users, 91.1% reported that e-cigarettes were less harmful than cigarettes, something which was also found when looking at 2015 data. Despite this, here it must be noted that the sample of dual users tends to be much lower, due to this behaviour being less common (in 2016, there were 174 dual use respondents who completed the perception of harm questions).

## **Other characteristics of e-cigarette users**

The data discussed in this publication can be found in the datasets tables section of the bulletin.

In the datasets, there is also data for [Great Britain](#) and [England](#) that has not been included within the commentary including:

- self-declared e-cigarette use, by cigarette smoking status, 2016
- main reason for using e-cigarettes, 2015 to 2016
- e-cigarette use by highest level of qualification, 2014 to 2016
- type of e-cigarette used, 2015 to 2016
- perceptions of health impact of e-cigarettes on others (who are exposed to them but do not use them directly), by e-cigarette and cigarette smoking status, 2015 to 2016.

There are also supplementary data tables that are available that were conducted for this release based on user feedback.

## 8 . 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 [22% of adults in Northern Ireland currently smoke cigarettes](#); The Welsh Health Survey shows that [19% of adults in Wales currently smoke cigarettes](#); The Scottish Health Survey shows that [21% of adults in Scotland currently smoking cigarettes](#).

Public Health England, via their [Local Tobacco Control Profiles](#), 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 [Health Survey for England](#) also collects data on smoking habits.

NHS Digital produce an [annual compendium](#), 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.

## 9 . Upcoming changes to this bulletin

For the next release, we are looking to improve the method used to calculate the 95% confidence intervals for our smoking statistics. The confidence intervals in this release are based on a normal approximation method, which does not take into account the design of the surveys used to produce the estimates described in this report. We do not feel that the new method will have substantial implications for the main messages reported here.

This release is the first time that we have co-ordinated the release of our smoking statistics with those published by other areas of government including NHS Digital.

Following this release, we will also be working with Public Health England on a piece of analysis designed to examine the links between deprivation and smoking. This work will be published upon its completion.

## 10 . Background notes



## 1. The Opinions and Lifestyle Survey

The data on smoking habits in Great Britain were collected on the Opinions and Lifestyle Survey (OPN) – an omnibus survey run by the Office for National Statistics. The survey is run monthly and is open for both government and non-government organisations to run questions.

The OPN is the only randomised probability sample omnibus survey in Great Britain and provides a fast, reliable and flexible service to customers.

More information on the survey and survey methodology can be found in the [Opinions and Lifestyle Survey Information Guide](#).

The data from the OPN follow on from a series of releases from the General Household Survey (GHS) and General Lifestyle Survey (GLF). The OPN and GLF or GHS provide comparable results. However, there are some differences in the design and content of the two surveys. More information can be found in the [Opinions and Lifestyle Survey – Smoking Habits amongst Adults, 2012](#) publication.

## 2. Changes to legislation and government policy

Information on the changes in legislation and government policy can be found on the [action on smoking and health website \(ASH\)](#).

# 11 . Quality and methodology

1. The [Annual Population Survey](#) and [Opinions and Lifestyle Survey](#) 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

## 2. 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 to smoking data from the Opinions and Lifestyle Survey, which also collects data from 16 and 17 year olds.

This year we based our headline smoking statistics on data from the APS as this provides a consistent methodology across the whole of the UK. The large sample size also allows analyses to be made at the level of local authority area. Please note, in our release local authorities in Northern Ireland are not included as this detail is not available in the APS.

## 3. Official estimates of smoking prevalence in the devolved countries of the UK

The smoking data for the UK reported in this bulletin allow for comparisons to be made across each constituent country due to the consistent methodology. Official estimates of smoking prevalence in the devolved countries, however, should be taken from the respective health surveys of [England](#), [Wales](#), [Scotland](#) and [Northern Ireland](#).

## 4. Reliability

It is likely that the survey underestimates cigarette consumption and, to a lesser extent, cigarette smoking prevalence. Evidence suggests that [when respondents are asked how many cigarettes they smoke per day, there is a tendency for respondents to round the figure down to the nearest multiple of 10](#).

Underestimates of consumption are likely to occur in all age groups.

Under-reporting of prevalence, however, is more likely to occur among young people, in particular those aged under 18 (as a result of the legal age of purchase for cigarettes in the UK). To protect their privacy, those aged 16 and 17 are given the option to complete the smoking section of the OPN themselves, so that neither the questions nor the responses can be heard by any of the other persons present.