# Adult drinking habits in Great Britain: 2005 to 2016 

Annual data on alcohol consumption by adults, including changes in drinking patterns in recent years and data for those who do not drink.

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## 1. Main points

- In Great Britain, 56.9\% of Opinions and Lifestyle Survey respondents aged 16 years and over in 2016 drank alcohol, which equates to 29 million people in the population.
- 7.8 million people "binged" on alcohol on their heaviest drinking day.
- Young people aged 16 to 24 years in Great Britain are less likely to drink than any other age group; when they do drink, consumption on their heaviest drinking day tends to be higher than other ages.
- The highest earners, those earning $£ 40,000$ and above annually, are more likely to be frequent drinkers and "binge" on their heaviest drinking day when compared with the lowest earners.
- In 2016, similar patterns of drinking were observed in England, Scotland and Wales; of the English regions, binge drinking was more common in the north.
- Among men who "binged", normal strength beer was the most popular choice of alcohol, for females wine was the most popular choice.


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

Our Adult Drinking Habits series describes alcohol consumption data for adults aged 16 years and above in Great Britain from the Opinions and Lifestyle Survey (OPN). The OPN is a face-to-face interview; the data on alcohol concern self-reported consumption on the heaviest drinking day prior to interview. In 2016, the findings are based on the responses of around 7,700 people in Great Britain.

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" makes the sample more representative of the population.

In this bulletin, our definition of binge drinking is based on that detailed in the government's Alcohol Strategy. Specifically, this concerns males who exceeded 8 units on their heaviest drinking day (around 4 pints of normal strength beer or three-quarters of a bottle of wine) and females who exceeded 6 units on their heaviest drinking day (around 3 pints of normal strength beer or 2 large glasses of wine). The latest government guidelines recommend individuals drink no more than 14 units of alcohol per week and that these units should be spread over 3 or more days. Given that the data on alcohol from the OPN measure drinking on just one day, we do not address the latest guidelines in this bulletin.

It is likely that the data reported here underestimate drinking levels to some extent. Social surveys consistently produce estimates of alcohol consumption that are lower than the levels indicated by alcohol sales data. This is likely to be because people either consciously or unconsciously underestimate their alcohol consumption. However, it gives an insight into peoples' perceptions of their drinking habits.

## 3 . Adult drinking habits in Great Britain, 2005 to 2016

The proportion of adults who said they drink alcohol is at its lowest level since 2005

In 2016, among adults aged 16 years and above, $56.9 \%$ of respondents drank alcohol in the week before being interviewed for the Opinions and Lifestyle Survey, the lowest level seen since our time series began in 2005 ( $64.2 \%$ ) (Figure 1). This equates to around 29 million people in the population of Great Britain. Across time, there has been a similar reduction in the number of those who drank on 5 days or more in the week prior to interview. In 2016, in Great Britain 9.6\% of adults (around 4.9 million people in the population) drank alcohol on 5 or more days.

Since 2005, there has been around a 2 percentage points increase in the number of people stating that they do not drink alcohol at all (that is, teetotallers). In 2016, of all people $20.9 \%$ (around 10.6 million people in the population) said that they did not drink alcohol.

The drinking behaviour described here is likely to be impacted by characteristics of local populations such as culture and ethnicity; please see the commentary on drinking behaviour by region for further information.

Figure 1: The proportion (\%) of respondents who drank alcohol in the week prior to interview, Great Britain, 2005 to 2016

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## 7.8 million people "binged" on their heaviest drinking day

Focusing on those in the population who drank alcohol (around 29 million people), $26.8 \%$ of adults (around 7.8 million people) in 2016 "binged" on their heaviest drinking day prior to interview.

Young people are less likely to have consumed alcohol; less than half (46.0\%) of those aged 16 to 24 years reported drinking alcohol in the previous week, compared with $64.2 \%$ of those aged 45 to 64 years. Despite this, young drinkers are more likely than any other age group to "binge" on their heaviest drinking day. Among drinkers aged 16 to 24 years, $37.3 \%$ reported binge drinking on their heaviest drinking day in 2016 compared with just $10.3 \%$ of drinkers aged above the age of 65 years.

Finding generally higher levels of binge drinking among those aged 16 to 24 years could be due to the data capturing those who tend to drink a lot on a Friday or Saturday night and then not much else during the rest of the week. Data from other sources, which measure drinking habits on more than one day, show that the most harmful drinking tends to be among middle-aged drinkers, as these individuals are more likely to drink every day.

## Men are more likely to be drinkers than women

In 2016, men were more likely to be drinkers than women. Specifically, $62.8 \%$ of men drank in the previous week compared with $51.3 \%$ of women. When looking at sex-specific patterns of binge drinking, $28.2 \%$ of males stated they exceeded 8 units of alcohol on their heaviest day, whereas $25.3 \%$ of females stated that they exceeded 6 units of alcohol. When looking at binge drinking by age and sex (see Figure 2), for males aged 16 to 64 years, there tends to be very little difference in the proportion of those who "binged" on their heaviest drinking day. For females aged 16 to 24 years, the proportion of those binge drinking tends to decrease across these agebands.

Figure 2: Proportion (\%) of adult drinkers who "binged" alcohol on their heaviest drinking day by age and sex, Great Britain, 2016


Source: Opinions and Lifestyle Survey, Office for National Statistics
Notes:

1. Binge drinking is defined as males who exceeded 8 units of alcohol on their heaviest drinking day, and females who exceeded 6 units on their heaviest drinking day.

## The highest earners are more likely to drink and binge on their heaviest drinking day

In 2016, almost 4 out of 5 people ( $77.4 \%$ ) in the highest income band (annual income of $£ 40,000$ or more) said they drank alcohol in the last week and alcohol consumption generally falls with the level of income (Figure 3). Around 3 in 10 ( $29.4 \%$ ) people in the lowest income band stated that they were teetotal compared with less than 1 in $10(9.0 \%)$ for the highest income band. Binge drinking is also more common among those high earners. Specifically, binge drinking was two times more common among the highest earners (21.8\%) when compared with the lowest earners (10.7\%).

Figure 3: Proportion (\%) of those who drank in the previous week split by self-reported gross annual earnings, Great Britain, 2016

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Source: Opinions and Lifestyle Survey, Office for National Statistics

The difference in percentage of those who drank in the previous week could be due to the characteristics of those in each income group. For example, women were less likely to drink alcohol in the previous week than men but made up a higher proportion (67.5\%) of the drinkers in the lowest income group. As the income bands rise, the proportion of male drinkers tends to rise, whereas in females this tends to fall. In the £40,000 income band, $70.8 \%$ of those who had drank in the past week were men (Figure 4). Given that women are more likely to work in lower paid jobs or sectors, these findings likely reflect the sex distribution across the income bands.

Figure 4: Proportion (\%) of those who drank in the previous week by self-reported gross annual earnings and sex, Great Britain, 2016

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Source: Opinions and Lifestyle Survey, Office for National Statistics

The age demographic of each income group may also partially explain the differences, as higher income bands have a smaller amount of those aged 16 to 24 years, who are less likely to have drunk in the previous week. In each income group over £20,000, over 70\% were aged between 25 and 64.

## 3 in 4 people in the South West of England drank in the previous week

Of the constituent countries, in 2016 England had the highest proportion of people who said they drank alcohol in the previous week (57.4\%); this was followed by Wales (54.7\%) and then Scotland (53.0\%). These proportions were not found to be statistically different from each other.

Of the English regions, 3 in 4 people (70.1\%) in the South West drank in the previous week, a figure that was statistically higher than that found in all other English regions. Fewer than half of people in London said they drank in the previous week (47.0\%), the lowest of all the regions (Figure 5).

Figure 5: Proportion (\%) of those who drank in the previous week, areas of Great Britain, 2016
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Source: Opinions and Lifestyle Survey, Office for National Statistics

## In 2016, binge drinking tended to be more common in the north of England

When looking at drinkers who "binged" on their heaviest drinking day, of the constituent countries of Great Britain excessive drinking was more common in Scotland (32.3\%), followed by Wales (29.7\%) and then England (26.2\%). These proportions were not found to be statistically different from each other.

Of the English regions, 40.4\% of drinkers in the North East "binged" on their heaviest drinking day; with the exception of the North West, this proportion is statistically higher than all other regions of England (Figure 6).

Figure 6: Proportion (\%) of drinkers who "binged" on their heaviest drinking day, areas of Great Britain, 2016

Figure 6: Proportion (\%) of drinkers who \"binged\" on their heaviest drinking day, areas of Great Britain, 2016


Source: Opinions and Lifestyle Survey, Office for National Statistics
Notes:

1. Binge drinking is defined as males who exceeded 8 units of alcohol on their heaviest drinking day, and females who exceeded 6 units on their heaviest drinking day.

When considering drinking habits across Great Britain, it is worth bearing in mind that the findings will be impacted by cultural differences. Data from the 2011 Census show that London is one of the most ethnically diverse areas; this could explain why these areas have some of the lowest percentages of drinking in the past week. Indeed, our data for 2016 show that drinking in the past week is more common among those who reported being White ( $61.5 \%$ ) relative to those who reported being any other ethnicity ( $25.7 \%$ ). Furthermore, the level of teetotalism is lower amongst those who are White (15.7\%) compared with all other ethnicity groups ( $56.0 \%$ ).

## Among men who "binged" on their heaviest drinking day, normal strength beer was the most popular choice of alcohol, for females wine was the most popular choice

When looking at those who "binged" on their heaviest drinking day, $67.1 \%$ of male drinkers stated they had drunk normal strength beer, the most popular choice of alcohol. Among female binge drinkers, the most popular choice was wine, with 3 in 4 (70.0\%) stating they drank this form of alcohol.

Drinking habits among binge drinkers tend to differ by age. For instance, young binge drinkers (that is, those aged 16 to 24 years) are more likely to drink spirits and liqueurs than any other age group. Among binge drinkers aged 45 years and above, wine becomes a more likely choice of alcoholic drink.

## 4. Other characteristics of drinkers

The data related to the discussions in this bulletin can be found in the accompanying datasets; separate tables are also provided for England. As well as the points discussed, there are also tables available on:

- Drinking frequency in the week before interview, by sex and age, 2005 to 2016
- Proportion of the population who drank the stated amounts of alcohol on their heaviest drinking day in the week before interview, by sex and age, 2005 to 2016
- Drinking habits and economic activity, 2014 to 2016
- Drinking habits, by level of education, 2014 to 2016
- Drinking habits by socio-economic classification, 2014 to 2016
- Drinking habits by age and whether person lives alone, 2014 to 2016
- Drinking habits, by sex and whether dependent children live in the household, 2014 to 2016
- Drinking in pregnancy, 2014 to 2016
- Drinking habits and cigarette smoking, 2014 to 2016


## 5. Other sources of data to understand drinking and its impact

There are a number of additional sources of data produced across government, which can also be used to understand drinking habits and its wider effects on health. NHS Digital produce an annual compendium, bringing together an array of drinking-related data including alcohol-related hospital admissions and deaths, alcoholrelated prescriptions, drinking behaviours among adults and children, expenditure and affordability.

Public Health England's Local Alcohol Profiles contain a number of indicators, which detail the impact of harmful drinking across local authority areas in England. The constituent countries of Great Britain each have their own health surveys (see background notes for further information on these surveys).

## 6 . Upcoming consultation on our definition of alcoholrelated deaths

The Office for National Statistics produces an annual bulletin which mainly details deaths associated with the longterm abuse of alcohol across the UK and each of its countries. In the coming months we will be working to review our definition of alcohol-related deaths. This work is being conducted to improve the consistency of outputs on deaths related to the abuse of alcohol produced by different government departments across the UK. We will be holding a consultation on this definition in the summer of 2017 with the view to using an improved definition in our next release.

## 7 . Planned improvements

Over the next 12 months, we will be working to improve the method used to calculate the $95 \%$ confidence intervals for our alcohol 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 in this bulletin.

## 8 . The Opinions and Lifestyle Survey

The data in this report 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 currently 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 Quality and Methodology Information report.

## How to commission a module on the survey

Clients can enquire about purchasing modules of questions by emailing the survey manager at opinions@ons.gsi. gov.uk.

## 9. Quality and methodology

## 1. Opinions and Lifestyle Survey Quality and Methodology Information document

The Opinions and Lifestyle Survey Quality and Methodology Information document contains important 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. Comparability

This report provides information on the alcohol consumption habits of adults in Great Britain and follows on from the series of releases from the General Household Survey (GHS) and General Lifestyle Survey (GLF).

The OPN and GHS/GLF provide comparable results. However there are some differences in the design and content of the surveys. More information can be found in the Opinions and Lifestyle Survey, Smoking Habits Amongst Adults, 2014 publication.

In 2006, some changes were introduced to the methodology used to estimate alcohol consumption. The assumed number of units for "normal strength beer, stout, lager, or cider", "strong beer, stout, lager or cider" and "wine" categories changed. The 2005 estimates produced in this report have been recalculated and based on the same alcohol content assumptions as later estimates.

The methodology for estimating wine consumption also changed in 2006. From 2006, respondents were asked about wine glass size, from a choice of small ( 125 millilitres), medium ( 175 millilitres) or large ( 250 millilitres). Previously it was assumed that 175 millilitres glasses had been used. The 2005 estimates do not, therefore, account for these potential differences in wine glass size.

## 3. Coherence

There are a number of other sources of alcohol consumption data. Some of these have been listed below, together with a brief explanation of their comparability with the OPN.

## Health Survey for England (NHS Digital), Welsh Health Survey (Welsh government) and Scottish Health Survey (Scottish government)

There are some differences in the approach to data collection between these surveys. One difference is in the collection modes used to collect drinking data on these surveys.

The Opinions and Lifestyle Survey collects data using Computer Assisted Personal Interviewing (CAPI). This is the main method used on the Health Survey for England (HSE) and Scottish Health Survey (SHeS). However, on HSE and SHeS, paper booklets are used to collect alcohol consumption data for 16 and 17 year olds and in certain cases those aged 18 to 24 (18 to 19 for SHeS).

The main collection mode for the Welsh Health Survey (WHS) is paper questionnaire.

Alcohol consumption data collected using CAPI tend to be lower than those using paper questionnaires. More information about these differences can be found in An Analysis of Mode Effects Using Data From the Health Survey for England 2006 and the Boost Survey for London

More information on each of these surveys, and the data collected, can be found on the NHS Digital, Welsh government and Scottish government websites.

## 4. Reliability

It is likely that the estimates underestimate drinking levels to some extent. Social surveys consistently produce estimates of alcohol consumption that are lower than the levels indicated by alcohol sales data. This is likely to be because people either consciously or unconsciously underestimate their alcohol consumption.

## 5. Approach to statistical significance

Where estimates for different populations have been described as different throughout this commentary, they have been tested and found to be significantly different at $5 \%$ significance level ( $p$ less than 0.05 ).
$95 \%$ confidence intervals for each table value have been supplied as a separate table. Where historical data have been provided, confidence intervals have been supplied for the last 2 years (2015 and 2016).

## 6. Assumed levels of alcohol in beverages

Table 1 shows the assumed number of units for each measure of each drink type collected on the Opinions and Lifestyle Survey.

Table 1: Assumed alcohol content of drinks and measures collected on the Opinions and Lifestyle Survey

| Type of drink | Measure | Assumed units of alcohol |
| :---: | :---: | :---: |
| Normal strength beer, stout, lager or cider | Half-pint | 1 |
| Normal strength beer, stout, lager or cider | Pint | 2 |
| Normal strength beer, stout, lager or cider | Small can | 1.5 |
| Normal strength beer, stout, lager or cider | Large can | 2 |
| Normal strength beer, stout, lager or cider | Bottle | 1.5 |
| Normal strength beer, stout, lager or cider | Schooner | $1.3{ }^{1}$ |
| Strong beer, stout, lager or cider | Half-pint | 2 |
| Strong beer, stout, lager or cider | Pint | 4 |
| Strong beer, stout, lager or cider | Small can | 2 |
| Strong beer, stout, lager or cider | Large can | 3 |
| Strong beer, stout, lager or cider | Bottle | 2 |
| Strong beer, stout, lager or cider | Schooner | $2.7^{2}$ |
| Spirits or liqueurs | Standard 25ml measure | 1 |
| Sherry or martini | Glass | 1 |
| Wine (including champagne and babycham) | Small glass (125ml) | 1.5 |
| Wine (including champagne and babycham) | Medium glass (175ml) | 2 |
| Wine (including champagne and babycham) | Large glass (250ml) | 3 |
| Wine (including champagne and babycham) | Bottle | 9 |
| Wine (including champagne and babycham) | Unknown glass size | 2 |
| Alcopops | Small can | 1.5 |
| Alcopops | Standard bottle | 1.5 |
| Alcopops | Large bottle | 3.5 |

Source: Office for National Statistics
Notes:

1. A schooner is $2 / 3$ of a pint. When people said that they drank normal strength beer, stout, lager or cider in schooners, a value of $4 / 3$ (four divided by three) units was used for each schooner that was consumed
2. A schooner is $2 / 3$ of a pint. When people said that they drank normal strength beer, stout, lager or cider in schooners, a value of $8 / 3$ (eight divided by three) units was used for each schooner that was consumed
