

Statistical bulletin

Alcohol-specific deaths in the UK: registered in 2019

Deaths caused by diseases known to be a direct consequence of alcohol misuse by sex, age, region and deprivation.



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1 . Main points

- In 2019, there were 7,565 deaths registered in the UK that related to alcohol-specific causes, the second highest since the data time series began in 2001.
- The 2019 age-standardised alcohol-specific death rate was 11.8 deaths per 100,000 people, remaining stable with no significant change since last year.
- Since the beginning of the data time series in 2001, rates of alcohol-specific deaths for males have consistently been more than double those for females (16.1 and 7.8 deaths per 100,000 registered in 2019 respectively).
- Alcohol-specific death rates were highest among those aged 55 to 59 years and 60 to 64 years for both men and women in 2019.
- Northern Ireland and Scotland had the highest rates of alcohol-specific death in 2019 (18.8 and 18.6 deaths per 100,000 people respectively).
- Since 2001, the alcohol-specific death rate has risen significantly for both men and women in England and in Northern Ireland.

If you are struggling with your drinking, please consider visiting [Get help now](#) on the Alcohol Change UK website. Help is available if you are concerned for yourself or on behalf of a family member or friend.

2 . Alcohol-specific deaths in the UK

Rates of alcohol-specific deaths have remained stable in recent years

There were 7,565 deaths related to alcohol-specific causes registered in the UK in 2019, equivalent to 11.8 deaths per 100,000 people; this is similar to the figures seen in 2018 when there were 7,551 registered deaths, equivalent to 11.9 deaths per 100,000 people.

Overall, rates of alcohol-specific deaths in the UK have remained stable in recent years, with no [statistically significant](#) differences in the year-on-year rates since 2012. Despite this, the 2019 rate is significantly higher than that observed at the beginning of the data time series in 2001, when there were 10.6 deaths per 100,000 population.

Alcohol-specific deaths only include those health conditions where each death is a direct consequence of alcohol misuse (that is, wholly attributable causes such as alcoholic liver disease). See [Measuring the data](#) for more information.

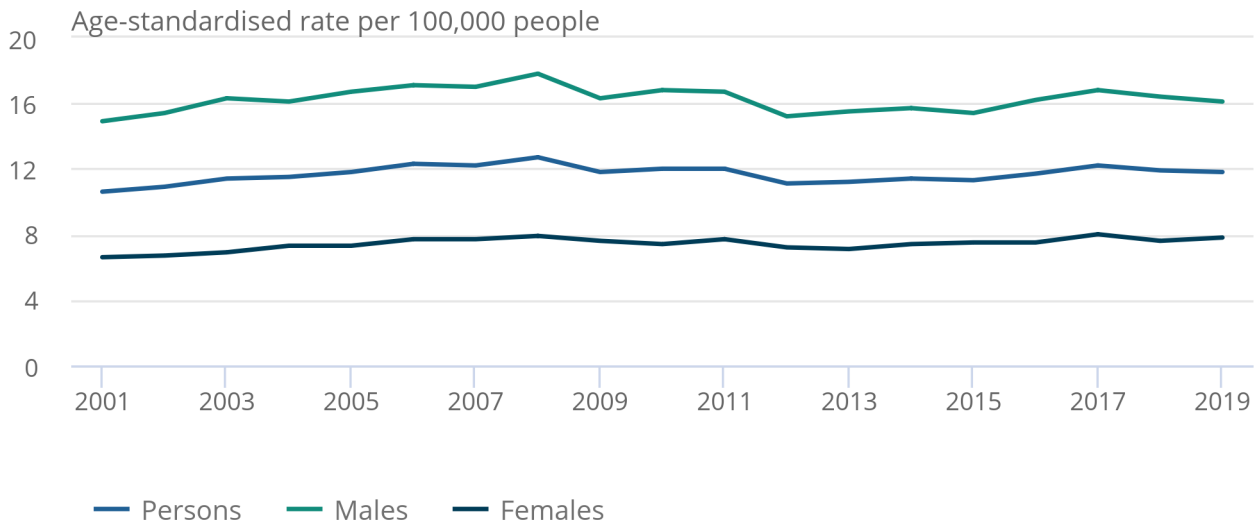
Figure 1 shows the trend in alcohol-specific death rates since 2001 for males, females and all persons in the UK.

Figure 1: Rates of alcohol-specific deaths have increased by 11.3% since 2001

Age-standardised alcohol-specific death rates per 100,000 people, by sex; UK, deaths registered between 2001 and 2019

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Age-standardised alcohol-specific death rates per 100,000 people, by sex; UK, deaths registered between 2001 and 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Deaths of non-residents are included in figures for the UK.
3. Figures are for deaths registered in each calendar year.
4. Calculations are based on rounded figures.

Rates of male alcohol-specific deaths are twice those of females

Over the course of the data time series, males have accounted for between 66.3% and 69.1% of all alcohol-specific deaths, and females between 30.9% and 33.7% of deaths. Taking population and age distribution into account, the latest rates in the UK were 16.1 (5,019 deaths) and 7.8 (2,546 deaths) per 100,000 people, for males and females respectively.

There have been significant increases since 2001 in the rate of alcohol-specific deaths in people aged 55 to 79 years

UK alcohol-specific deaths by age group show that in 2019 the highest rates for both men and women were among those aged 55 to 59 years and 60 to 64 years. For the 55 to 59 years age group the male death rate was 40.0 per 100,000 and for women it was 20.5 per 100,000, while the 60 to 64 years age group saw death rates of 40.7 and 19.1 for men and women respectively.

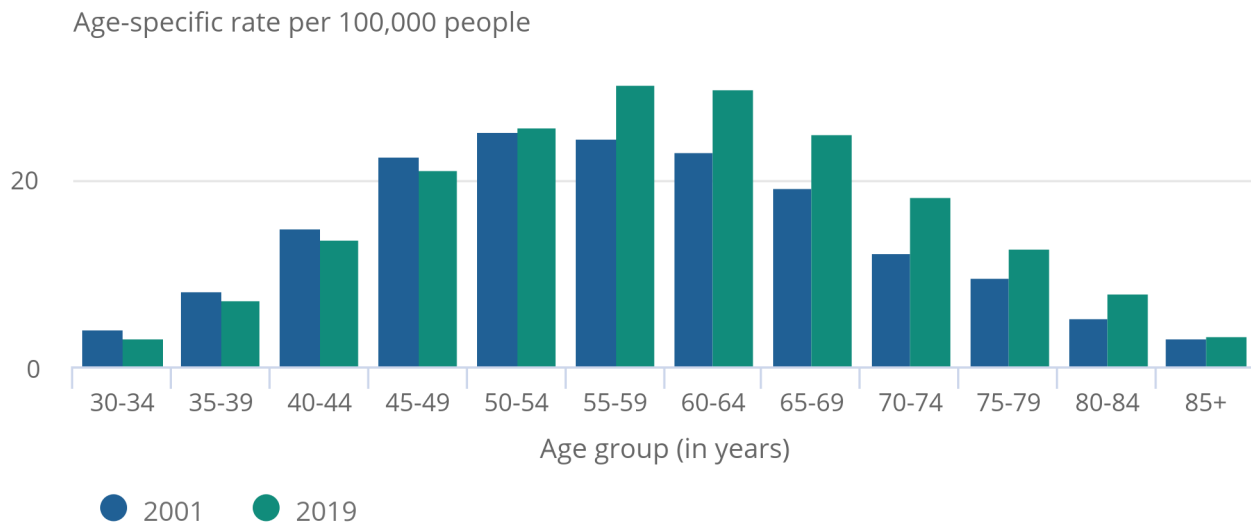
Over the course of the data time series between 2001 and 2019, there have been statistically significant increases in age-specific death rates for people aged 55 to 79 years. Changes in alcohol-specific death rates over time by age group in people are shown in Figure 2.

Figure 2: In 2019, alcohol-specific death rates were highest among 55- to 59-year-olds and 60- to 64-year-olds

Age-specific alcohol-specific death rates per 100,000 people, by five-year age group; UK, deaths registered in 2001 and 2019

Figure 2: In 2019, alcohol-specific death rates were highest among 55- to 59-year-olds and 60- to 64-year-olds

Age-specific alcohol-specific death rates per 100,000 people, by five-year age group; UK, deaths registered in 2001 and 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Rates are expressed per 100,000 population.
2. Deaths of non-residents are included in figures for the UK.
3. Figures are for deaths registered in each calendar year.
4. Figures are for those aged 30 years and over as a result of small numbers of deaths in the younger age groups producing more statistical uncertainty.

The majority of alcohol-specific deaths are attributed to alcoholic liver disease

Given that the definition of alcohol-specific deaths includes mostly chronic conditions, such as alcoholic liver disease, the increased rates in the older age groups may be a consequence of misuse of alcohol that began years, or even decades, earlier. A third of alcohol-specific deaths in those aged under 30 years were caused by alcoholic liver disease in 2019, while more than three-quarters of alcohol-specific deaths in those aged over 30 years were from this condition.

The proportion of alcohol-specific deaths due to mental and behavioural disorders increased with age, reaching a high of 47.6% of alcohol-specific deaths in persons aged 85 to 89 years. The reverse is true for accidental poisoning by and exposure to alcohol, which accounted for 50.0% of alcohol-specific deaths in those aged 20 to 24 years and no more than 2.4% in those aged over 65 years.

Figure 3 shows the number of alcohol-specific deaths by five-year age group and the following three individual causes, which contributed 96.2% of all alcohol-specific deaths registered in 2019:

- alcoholic liver disease (International Classification of Diseases: ICD-10 code K70, 77.2% of alcohol-specific deaths)
- mental and behavioural disorders due to the use of alcohol (ICD-10 code F10, 12.7% of deaths)
- accidental poisoning by and exposure to alcohol (ICD-10 code X45, 6.4% of deaths)

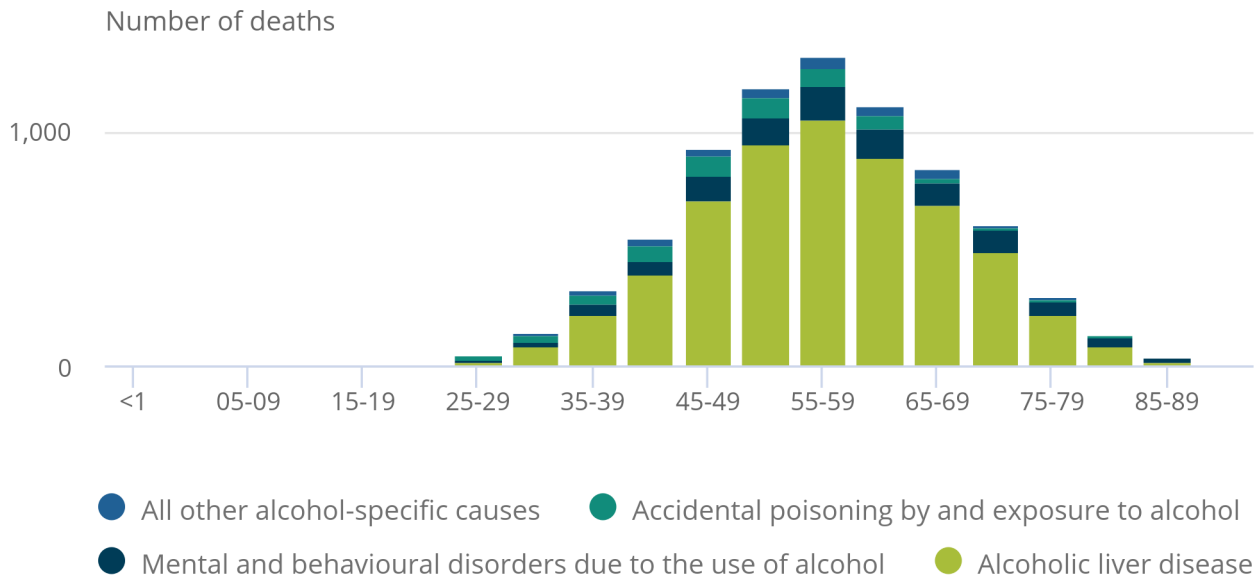
For more information on the definition of an alcohol-specific death, see [Section 10: Measuring the data](#).

Figure 3: More than three-quarters of alcohol-specific deaths were caused by alcoholic liver disease

Numbers of alcohol-specific deaths, by five-year age group and individual cause; UK, deaths registered in 2019

Figure 3: More than three-quarters of alcohol-specific deaths were caused by alcoholic liver disease

Numbers of alcohol-specific deaths, by five-year age group and individual cause; UK, deaths registered in 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Deaths of non-residents are included in figures for the UK.
2. Figures are for deaths registered in each calendar year.

High numbers of deaths due to the misuse of alcohol have been reported across Europe, with the European Commission reporting that [about 800 people in Europe die from alcohol-attributable causes every single day \(PDF, 498KB\)](#), and the World Health Organization reporting that [across 30 European countries, 7.6 million years of life were lost prematurely in 2016 alone \(PDF, 5.43MB\)](#).

3 . Alcohol-specific deaths by UK constituent country

Northern Ireland was the UK constituent country with the highest alcohol-specific death rate in 2019 with 18.8 deaths per 100,000, however, the difference between Northern Ireland and Scotland in 2019 was not [statistically significant](#). England and Wales continue to have lower rates of alcohol-specific deaths, with 10.9 and 11.8 deaths per 100,000 people respectively.

Since the beginning of the data time series in 2001, age-standardised rates of alcohol-specific deaths in Scotland have tended to be highest of the four UK constituent countries. Since peaking at 28.5 deaths per 100,000 in 2006, the alcohol-specific death rate has fallen by more than a third to 18.6 deaths per 100,000 in 2019. A [minimum unit pricing policy was implemented by the Scottish Government](#) on 1 May 2018. It is too early to measure the impact of this policy on mortality using the alcohol-specific definition, however, this will remain a point of interest in the future. [Minimum pricing for alcohol was also introduced in Wales](#) on 2 March 2020.

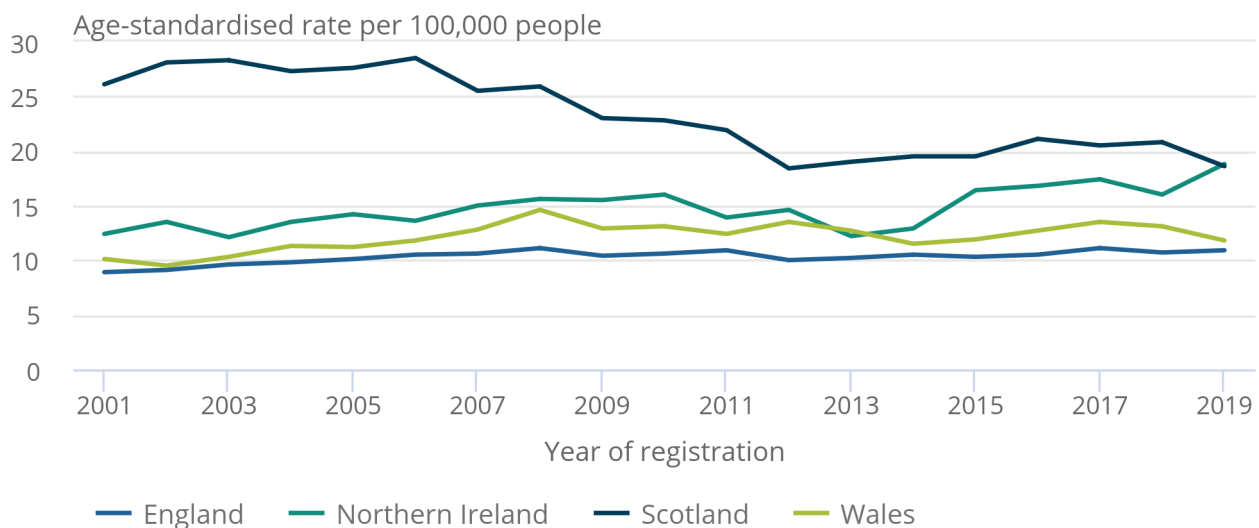
Scotland remains the only UK constituent country to show statistically significant improvement when comparing with 2001 rates. In comparison, both England and Northern Ireland had statistically significant increases in the alcohol-specific death rate over the same period, while the increase seen in Wales was not statistically significant.

Figure 4: Of the four UK constituent countries, rates of alcohol-specific deaths were highest in Northern Ireland in 2019

Age-standardised alcohol-specific death rates per 100,000 people; UK constituent countries, deaths registered between 2001 and 2019

Figure 4: Of the four UK constituent countries, rates of alcohol-specific deaths were highest in Northern Ireland in 2019

Age-standardised alcohol-specific death rates per 100,000 people; UK constituent countries, deaths registered between 2001 and 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures for Scotland and Northern Ireland include deaths of non-residents. However, figures for England and Wales (separately) exclude deaths of non-residents and are based on November 2020 boundaries.
3. Figures are for deaths registered in each calendar year.

Male alcohol-specific death rates have increased significantly in England and Northern Ireland since 2001

Scotland had the highest alcohol-specific death rate for males in 2019 at 25.2 deaths per 100,000 males, a statistically significant decrease of 35.4% compared with the rate in 2001 (39.0 deaths per 100,000 males). Northern Ireland had the next highest rate with 24.2 deaths per 100,000 males in 2019, which was significantly higher than the rate of 17.0 in 2001 and represented a rise of 42.4%.

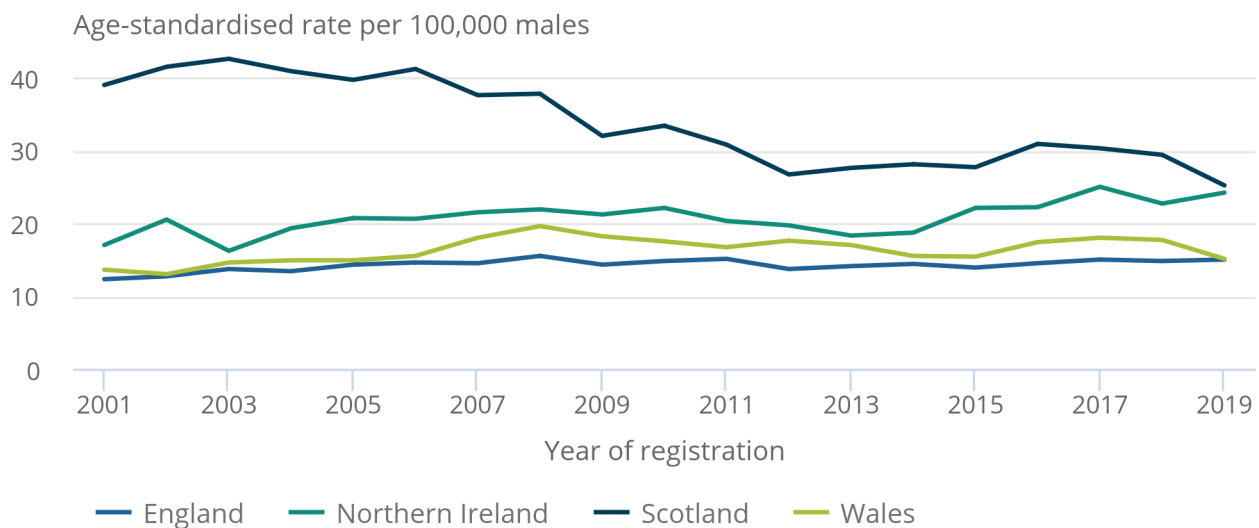
The rate in England rose significantly from 12.3 deaths per 100,000 in 2001 to 15.0 per 100,000 in 2019 (a rise of 22.0%). In Wales, the death rate rose from 13.6 to 13.1 per 100,000 over the same time period (a rise of 11.0%), however in Wales, the rise was not statistically significant.

Figure 5: Scotland is the only country to see a decrease over time in male rates of alcohol-specific deaths

Age-standardised alcohol-specific death rates per 100,000 males; UK constituent countries, deaths registered between 2001 and 2019

Figure 5: Scotland is the only country to see a decrease over time in male rates of alcohol-specific deaths

Age-standardised alcohol-specific death rates per 100,000 males; UK constituent countries, deaths registered between 2001 and 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures for Scotland and Northern Ireland include deaths of non-residents. However, figures for England and Wales (separately) exclude deaths of non-residents and are based on November 2020 boundaries.
3. Figures are for deaths registered in each calendar year.

Female alcohol-specific death rates have increased significantly in England and Northern Ireland since 2001

Although the alcohol-specific death rate in England remained the lowest of the four countries at 7.0 deaths per 100,000 females (see Figure 6), England saw a significant increase in the female death rate since 2001 (an increase of 25.0% from 5.6 deaths per 100,000). Over the same time period, the female rate of alcohol-specific deaths in Northern Ireland increased significantly from 8.2 to 13.6 deaths per 100,000 females (an increase of 65.9%).

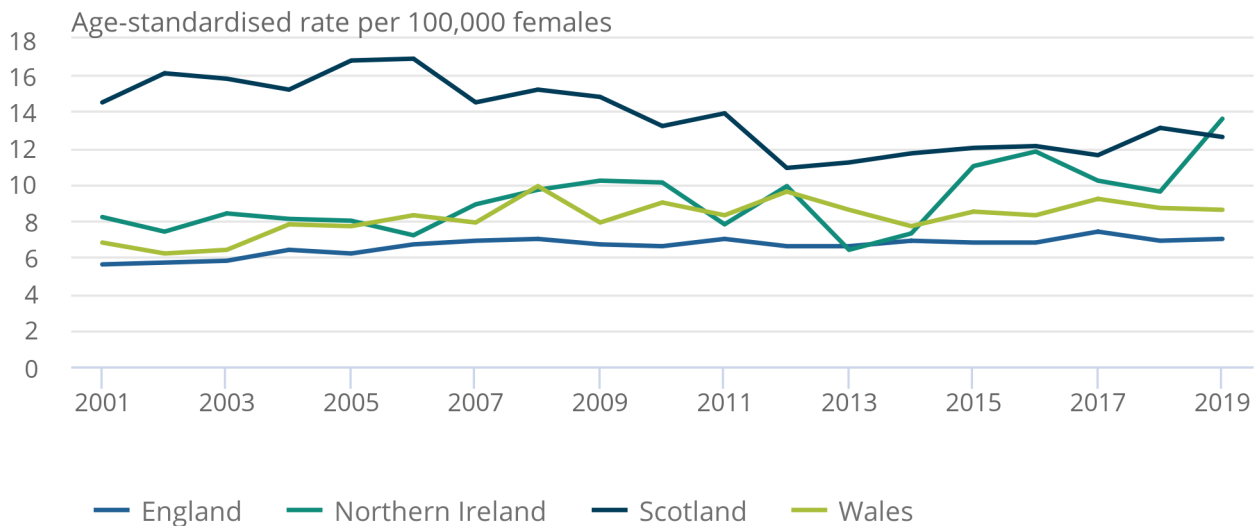
In Scotland, the female alcohol-specific death rate (12.6 deaths per 100,000) was 13.1% lower than in 2001 (14.5 per 100,000), however, this change was not statistically significant. The death rate for females in Wales (8.6 per 100,000) was 26.5% higher than in 2001 (6.8 per 100,000), but again this change was not statistically significant.

Figure 6: Scotland is the only country to see a decrease over time in female rates of alcohol-specific deaths

Age-standardised alcohol-specific death rates per 100,000 females; UK constituent countries, deaths registered between 2001 and 2019

Figure 6: Scotland is the only country to see a decrease over time in female rates of alcohol-specific deaths

Age-standardised alcohol-specific death rates per 100,000 females; UK constituent countries, deaths registered between 2001 and 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019, National Records of Scotland and Northern Ireland Statistics and Research Agency

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures for Scotland and Northern Ireland include deaths of non-residents. However, figures for England and Wales (separately) exclude deaths of non-residents and are based on November 2020 boundaries.
3. Figures are for deaths registered in each calendar year.

4 . Alcohol-specific deaths by English region

Alcohol-specific death rates remained highest in the North East region in 2019

For deaths registered in 2019, regional age-standardised rates of alcohol-specific deaths range from 7.9 deaths per 100,000 people in London to 16.6 deaths in the North East. For the sixth consecutive year, the North East had the highest rate of any English region; prior to 2014, the North West tended to have the highest rate.

When comparing the rate of alcohol-specific deaths in 2019 with deaths registered in 2018, there was a significant increase in Yorkshire and The Humber (from 11.7 to 13.9 deaths per 100,000) and a significant decrease in the South West (from 10.7 to 8.7 deaths per 100,000). No other regions saw a [statistically significant](#) change in the rate of alcohol-specific deaths over the same time period.

Alcohol-specific death rates have increased in all regions of England except London since the data time series began in 2001 and have tended to be higher in the north relative to the south of England. However, the ratio between male and female rates of death was greatest in London, as has been the case for 14 consecutive years. In 2019, the male rate for London was 11.6 deaths per 100,000, over two and a half times the female rate of 4.5 deaths per 100,000.

Figure 7: London was the only English region to have lower rates of alcohol-specific deaths in 2019 compared with 2001

Age-standardised alcohol-specific death rates per 100,000, by sex; English regions and constituent countries of the UK, deaths registered in 2001 and 2019

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures for England, its regions and Wales exclude deaths of non-residents and are based on November 2020 boundaries.
3. Figures are for deaths registered in each calendar year.

[Data download](#)

5 . Alcohol-specific deaths and deprivation

Alcohol-specific death rates were significantly higher in the most deprived areas of England and Wales

In this section of the bulletin, we look at alcohol-specific death rates and how these differ among those living in the most deprived local areas versus the least deprived areas.

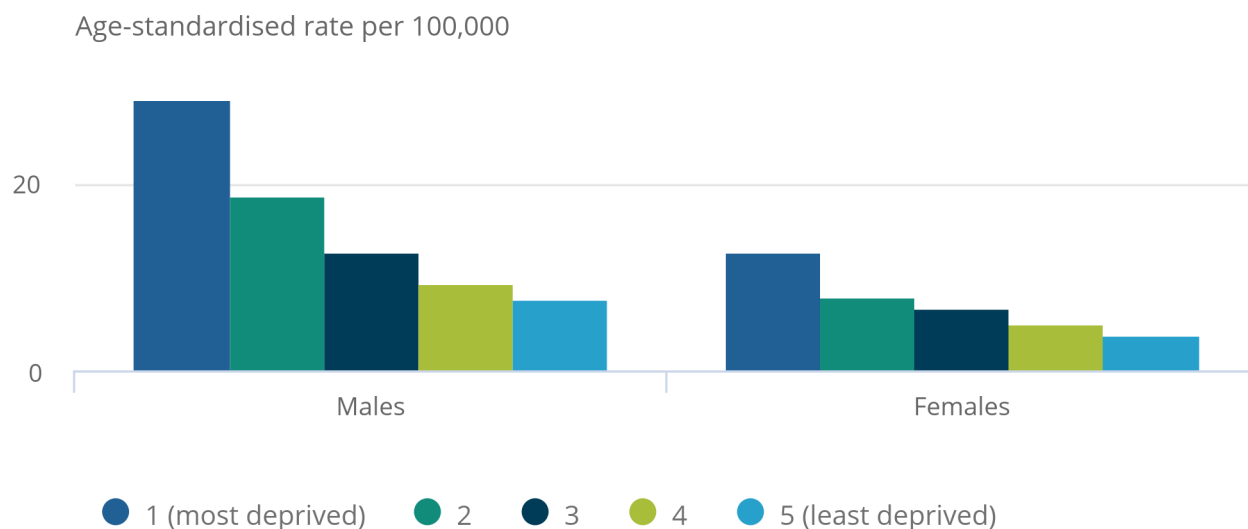
The Index of Multiple Deprivation (IMD) is an overall measure of deprivation based on factors such as income, employment, health, education, crime, the living environment and access to housing within an area. There are different measurements for [England](#) and [Wales](#), which are not directly comparable.

Figure 8: Alcohol-specific death rates in England were significantly higher in the most deprived areas

Alcohol-specific age-standardised rates of death per 100,000 population by deprivation quintile; England, registered in 2019

Figure 8: Alcohol-specific death rates in England were significantly higher in the most deprived areas

Alcohol-specific age-standardised rates of death per 100,000 population by deprivation quintile; England, registered in 2019



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures for Scotland and Northern Ireland include deaths of non-residents. However, figures for England and Wales (separately) exclude deaths of non-residents and are based on November 2020 boundaries.
3. Figures are for deaths registered in each calendar year.

When comparing alcohol-specific death rates in 2019 by English areas of deprivation, a clear pattern emerges (see Figure 8). For males, the most deprived areas (quintile 1) had an age-standardised alcohol-specific death rate of 29.1 per 100,000, nearly four times higher than the rate of 7.6 deaths per 100,000 seen in the least deprived areas (quintile 5).

For females, the most deprived areas had an age-standardised alcohol-specific death rate of 12.6 deaths per 100,000, more than three times higher than the rate of 3.9 deaths per 100,000 seen in the least deprived areas.

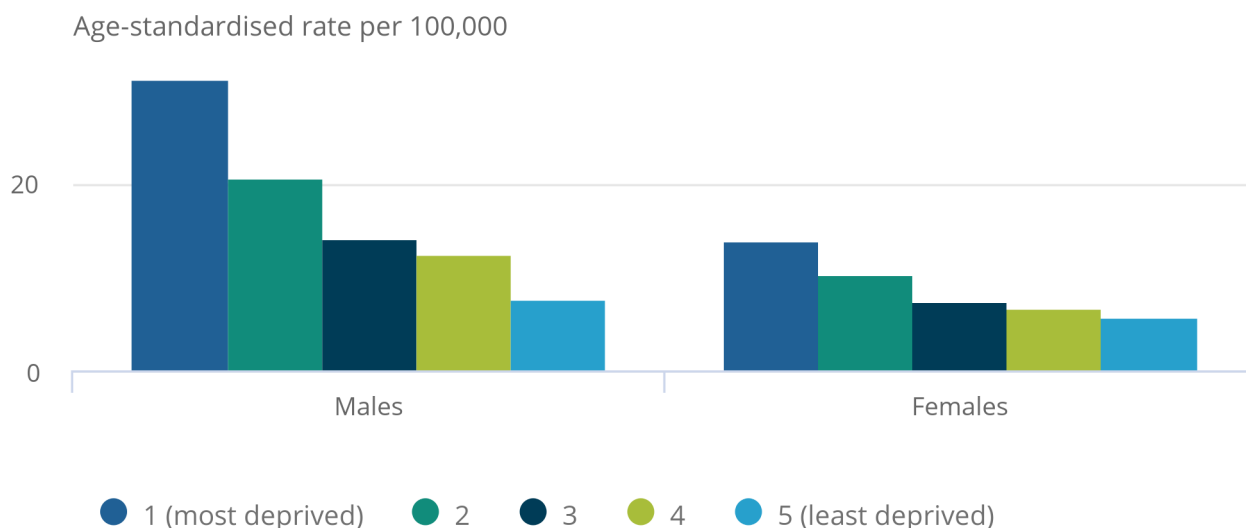
The trends seen for both sexes are consistent with the trends seen in previous years, which can be found in our [accompanying datasets](#).

Figure 9: In Wales, the most deprived areas had significantly higher rates of alcohol-specific deaths

Alcohol-specific age-standardised rates of death per 100,000 population by deprivation quintile; Wales, registered between 2015 and 2019 combined

Figure 9: In Wales, the most deprived areas had significantly higher rates of alcohol-specific deaths

Alcohol-specific age-standardised rates of death per 100,000 population by deprivation quintile; Wales, registered between 2015 and 2019 combined



Source: Office for National Statistics - Alcohol-specific deaths in the UK: registered in 2019

Notes:

1. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
2. Figures exclude deaths of non-residents and are based on November 2020 boundaries.
3. Deprivation quintiles are based on the Welsh Index of Multiple Deprivation, 2019 version. IMD Quintiles range from 1 to 5, with 1 being the most deprived and 5 being the least deprived.

Because of the lower number of deaths in Wales, in order to calculate robust age-standardised rates for each quintile of deprivation we have aggregated the five-year period from 2015 to 2019. The relationship between deprivation and the rate of alcohol-specific deaths in Wales was similar to the relationship seen in England.

The rate of alcohol-specific deaths for males over the period 2015 to 2019 was 31.1 deaths per 100,000 in the most deprived areas of Wales, more than four times higher than the 7.7 deaths per 100,000 seen in the least deprived areas. For females, the death rate was 14.0 deaths per 100,000 in the most deprived areas, nearly two and a half times higher than the 5.7 deaths per 100,000 seen in the least deprived areas (see Figure 9).

6 . UK deaths using the previous ONS definition of alcohol-related deaths

UK deaths caused by unspecified hepatitis, fibrosis and cirrhosis of the liver remained stable in 2019

The definition that was used in [previous Office for National Statistics bulletins](#) to estimate deaths due to alcohol misuse (up to 2015 death registrations) included unspecified hepatitis (International Classification of Diseases: ICD-10 code K73) and fibrosis and cirrhosis of the liver (ICD-10 code K74, excluding biliary cirrhosis). Following our [consultation](#) in 2017, the [definition](#) was changed to include only alcohol-specific deaths, meaning that those conditions where death is only partially attributable to alcohol are excluded.

However, the consultation also highlighted support for continued publication of deaths due to these two conditions. Therefore, we will continue to provide the number of deaths caused by these conditions in the UK, separate from the number of alcohol-specific deaths (please see the accompanying [supplementary dataset](#) for a further breakdown).

Deaths from these two conditions are still counted in separate measures of alcohol-related harm produced by public health agencies across the UK (see [see Section 11, Strengths and limitations](#)).

Table 1: Compared with 2018, the rate of unspecified hepatitis and fibrosis and cirrhosis of the liver has decreased for females and remained the same for males
Age-standardised rates per 100,000 people caused by unspecified hepatitis and fibrosis and cirrhosis of the liver, by sex, UK, registered between 2013 and 2019

Year of registration	2013	2014	2015	2016	2017	2018	2019
Persons	2.9	3.0	3.0	3.2	3.1	3.0	3.0
Males	3.7	3.9	4.0	4.3	4.2	3.9	3.9
Females	2.1	2.3	2.3	2.4	2.2	2.3	2.2

Source: Office for National Statistics – Alcohol-specific deaths in the UK registered in 2019

Notes

1. Deaths are defined using the International Classification of Diseases Tenth Revision (ICD-10) codes; K73 (chronic hepatitis not elsewhere specified) and K740-K742, K746 (fibrosis and cirrhosis of the liver, excluding biliary cirrhosis).
2. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
3. Deaths of non-residents are included in figures for the UK.
4. Figures are for deaths registered in each calendar year.

7 . Registration delays

The information used to produce mortality statistics is based on the details collected when deaths are certified and registered. In England and Wales, deaths should be registered within five days of the death occurring, but there are some situations that result in the registration of the death being delayed. Deaths considered unexpected, accidental or suspicious will be referred to a coroner who may order a post-mortem or carry out a full inquest to ascertain the reasons for the death. In 2019, 32.9% of alcohol-specific deaths were certified by coroners.

In England and Wales, 88.5% of alcohol-specific deaths registered in 2019 occurred in the same year, this compares with 94.6% when looking at deaths from all causes. For alcohol-specific deaths registered in 2019, the average (median) time between death occurrence and registration was six days in England, five days in Wales, four days in Scotland and seven days in Northern Ireland. Within England, the median delays range from four days in the North East to seven days in the East of England, the East Midlands, London and the South East.

8 . Alcohol-specific deaths in the UK data

[Alcohol-specific deaths in the UK](#)

Dataset | Released 2 February 2021

Annual data on age-standardised and age-specific alcohol-specific death rates in the UK, its constituent countries and regions of England.

[Alcohol-specific deaths by sex, age group and individual cause of death](#)

Dataset | Released 2 February 2021

Annual data on number of alcohol-specific deaths by sex, age group and individual cause of death, UK constituent countries.

[Alcohol-specific deaths in the UK: liver diseases, the impact of deprivation and registration delays](#)

Dataset | Released 2 February 2021

Annual data on deaths caused by unspecified hepatitis, and fibrosis and cirrhosis of the liver in the UK. Age-standardised rates for alcohol-specific deaths by deprivation quintile in England and Wales, and median registration delays by region.

9 . Glossary

Alcohol-specific death

This bulletin uses the National Statistics definition of alcohol-specific deaths; it includes those health conditions where each death is a direct consequence of alcohol misuse (that is, wholly attributable deaths). This is explored in greater detail in Section 10, [Measuring the data](#).

Year of registration

Figures are based on deaths registered in each calendar year, rather than the date of which the death occurs. On a national level, trends are broadly similar whether the data are analysed by year of occurrence or year of registration. Registration delays can have greater influence on smaller geographical areas.

Age-specific mortality rates

Age-specific mortality rates are used to allow comparisons between specified age groups.

Age-standardised mortality rates

Age-standardised mortality rates allow for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time. In this bulletin, age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population.

Statistical significance

The term "significant" refers to statistically significant changes or differences based on unrounded figures. Significance has been determined using the 95% confidence intervals, where instances of non-overlapping confidence intervals between figures indicate the difference is unlikely to have arisen from random fluctuation (or chance).

10 . Measuring the data

Statistics on mortality are derived from the information provided when deaths are certified and registered. These statistics are assessed fully compliant with the [Code of Practice for Statistics](#) and are therefore designated as [National Statistics](#). Further information about the methods and quality of these statistics can be found in the [Mortality statistics in England and Wales Quality and Methodology Information \(QMI\)](#) and the [User guide to mortality statistics](#). The Office for National Statistics (ONS) holds mortality data for England and Wales. Figures for the UK include data kindly provided by [National Records of Scotland](#) and the [Northern Ireland Statistics and Research Agency](#).

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Alcohol-specific deaths in the UK](#) Quality and Methodology Information (QMI) report.

National Statistics definition of alcohol-specific deaths

The National Statistics definition of alcohol-specific deaths includes only those health conditions where each death is a direct consequence of alcohol misuse (that is, wholly attributable deaths; see Table 2). Most of these are chronic (longer-term) conditions associated with continued misuse of alcohol. The conditions included in the definition are defined using the International Classification of Diseases (10th Revision; ICD-10); as such, the data time series of this release begins in 2001, when the Office for National Statistics (ONS) started coding deaths using ICD-10.

The alcohol-specific definition is a precise but narrow definition, best suited to evaluating trends over time, and to look at the relative difference between different regions and countries. It is an underestimate of the full extent of alcohol-attributable mortality; for example, [Public Health England](#) estimated that in England, in 2018, 24,720 deaths could be attributed to alcohol, 4.3 times higher than the 5,698 deaths that fell within the National Statistics definition of an alcohol-specific death.

Because of the difficulties involved in producing an estimate of the full extent of alcohol attributable mortality, these figures are not routinely produced, and equivalent estimates from the [Scottish Public Health Observatory](#) and [Public Health Wales](#) are not directly comparable. For more information on alcohol-related mortality and morbidity please see [Section 11, different sources of data to understand the impact of alcohol consumption](#).

Table 2: National Statistics definition of alcohol-specific deaths

ICD-10 code	Description of condition
E24.4	Alcohol-induced pseudo-Cushing's syndrome
F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol induced chronic pancreatitis
Q86.0	Fetal induced alcohol syndrome (dysmorphic)
R78.0	Excess alcohol blood levels
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent

Source: International Classification of Diseases, 10th Revision (ICD-10)

Notes

1. The definition agreed following a 2017 user consultation includes conditions that are wholly attributable to alcohol based on codes from the International Classification of Diseases (10th Revision; ICD-10).

Populations

Mortality rates are calculated using the number of deaths and [mid-year population estimates](#) provided by the ONS Population Estimates Unit. Population estimates are based on the decennial UK census estimates and use information on births, deaths and migration to estimate the mid-year population in non-census years.

11 . Strengths and limitations

The definition of alcohol-specific death

When trying to ascertain the impact of alcohol consumption on mortality, there tend to be two main approaches, each with its own advantages and disadvantages. The first counts deaths from diseases that are a direct consequence of alcohol misuse (that is, wholly attributable deaths), such as the definition of alcohol-specific deaths reported in this release. One benefit of using the definition of alcohol-specific deaths, is that it provides a consistent methodology for the whole of the UK, meaning that robust and comparable estimates of trends in alcohol mortality can be made.

The definition of alcohol-specific deaths, however, underestimates the burden of alcohol consumption on mortality as it excludes diseases where there is evidence showing that only a proportion of the deaths, for a given cause, are caused by alcohol (that is, partially attributable deaths; see [The relationship between different dimensions of alcohol use and the burden of disease - an update \(PDF, 1.13MB\)](#)). These include diseases such as chronic hepatitis, unspecified fibrosis and cirrhosis of the liver, and cancers of the mouth, oesophagus and liver. Additionally, road accidents, falls, fires, suicide or violence involving people who had been drinking are not included in the alcohol-specific death definition. Public health agencies across the UK including [Public Health England](#) (PHE), the [Scottish Public Health Observatory](#), and [Public Health Wales](#) also use definitions that aim to capture the wider burden of alcohol consumption on population health and health service use (a separate definition is not available for Northern Ireland).

These definitions work by counting the number of wholly attributable deaths in addition to a proportion of deaths from partially attributable conditions; partially attributable estimates are derived by combining academic research about the impact of alcohol consumption on different conditions with data on alcohol consumption in a given population. These definitions benefit from providing a more realistic estimate of deaths caused by alcohol, however, the estimates tend to be less comparable, particularly across time because of changes in drinking behaviour, and between countries because of different data sources being used to measure the amount of alcohol consumed.

Following our [consultation](#) in 2017, the [definition](#) was changed to include only alcohol-specific deaths, meaning that those conditions where death is only partially attributable to alcohol are excluded, they can include certain forms of cancer. The definition of alcohol-specific deaths is a more conservative estimate of the harms related to alcohol misuse.

Strengths

- Consistent methodology across the UK, allowing for robust and comparable estimates of trends in alcohol mortality to be made.
- The precision of the alcohol-specific definition reduces the uncertainty which arises when estimating the total number of alcohol-attributable deaths.
- Using the alcohol-specific definition figures can be produced regularly and reliably from routinely collected data.

Limitations

- The alcohol-specific definition underestimates the true extent of alcohol-attributable mortality.
- The largely chronic nature of the conditions defined as wholly attributable to alcohol mean that there may be a delay between changes in alcohol consumption and behaviour and the resulting change in the number of alcohol-specific deaths.

Different sources of data to understand the impact of alcohol consumption

The devolved countries of the UK each produce their own statistics on the impact of alcohol consumption on mortality. These statistics are compiled by the [Scottish Public Health Observatory](#), [Public Health Wales](#) and the [Northern Ireland Statistics and Research Agency](#).

Public Health England (PHE), via their [Local Alcohol Profiles](#), provide data on a wide range of indicators related to the misuse of alcohol including mortality, hospital admissions, wider impacts (for example, alcohol-related traffic accidents) and patients using alcohol misuse services.

With a focus on England particularly, NHS Digital produce an [annual compendium](#), bringing together an array of data related to alcohol consumption, the misuse of alcohol, and the effects of alcohol misuse on health and health service use.

When looking at the data from the public health agencies:

- PHE estimate that [24,720 deaths in 2018 were caused by alcohol consumption](#) in England
- there were an estimated [3,705 deaths attributable to alcohol consumption](#) in 2015 among adults aged 16 years and over in Scotland, equating to 6.5% of the total number of deaths (57,327)
- in Wales, it is estimated that approximately [1,630 people died from alcohol-attributable causes](#) over the period 2015 to 2017

Monitoring the harmful use of alcohol consumption is a requirement under the Sustainable Development Goals (SDGs). The statistics in this report will be used to help monitor progress towards that goal. UK data on the SDG indicators can be explored on our [SDGs reporting platform](#).

User-requested data

Special extracts and tabulations of alcohol-specific deaths (and other causes of mortality) data for England and Wales are available to order for a charge (subject to legal frameworks, disclosure control, resources and agreement of costs, where appropriate). Such requests or enquiries should be made to the Mortality Analysis Team via email to health.data@ons.gov.uk or by telephone on +44 (0)1633 456501. Our [charging policy](#) is also available.

12 . Related links

[Quarterly alcohol-specific deaths in England and Wales](#)

Bulletin | Published 2 February 2021

Data on alcohol-specific deaths in England and Wales by quarter: 2001 to 2019 registrations and Quarter 1 (Jan to Mar) to Quarter 3 (July to Sept) 2020 provisional registrations.

[Alcohol-specific deaths, Scotland](#)

Statistics | Published 24 November 2020

National Records of Scotland (NRS) statistics on the most recent official death registration data available on alcohol-specific mortality across Scotland.

[Alcohol-specific deaths, Northern Ireland](#)

Statistics | Published 2 February 2021

Northern Ireland Statistics and Research Agency (NISRA) statistics on the most recent official death registration data available on alcohol-specific mortality across Northern Ireland.