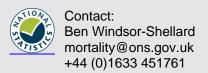


Statistical bulletin

# Alcohol-related deaths in the UK: registered in 2014

Deaths in the UK that are known to be direct consequences of alcohol misuse, such as alcoholic liver disease.



Release date: 2 February 2016

Next release: To be announced

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### 1. Main points

- In 2014, there were 8,697 alcohol-related deaths registered in the UK, an age-standardised rate of 14.3 deaths per 100,000 population
- In the UK as a whole, alcohol-related death rates have fallen since peaking in 2008, but the rate in 2014 is still higher than that observed in 1994
- The majority of alcohol-related deaths (65%) in the UK in 2014 were among males.
- Alcohol-related death rates were highest among 55 to 64-year-olds in 2014.
- For both sexes, Scotland had the highest alcohol-related death rates in 2014. However, Scotland has also seen the fastest decrease in its rates since they peaked in the 2000s
- Alcohol-related death rates for both sexes were significantly higher in the north of England than the south in 2014.
- England and Wales are the only UK countries where alcohol-related death rates for females were significantly higher in 2014 than 1994

### 2. Summary

In 2014, there were 8,697 alcohol-related deaths registered in the UK, an age-standardised rate of 14.3 deaths per 100,000 population. Of these, 5,687 deaths were among males (65% of the deaths) and 3,010 among females (35% of the deaths), with rates of 19.4 deaths per 100,000 males and 9.6 per 100,000 females.

In 2014, Scotland had the highest age-standardised alcohol-related death rate for males at 31.2 deaths per 100,000. This rate is significantly higher than those of any other constituent country of the UK. Rates in Northern Ireland (20.3 per 100,000 males), Wales (19.9 per 100,000 males), and England (18.1 deaths per 100,000) were not statistically significantly different from each other.

Scotland also had the highest alcohol-related death rate for females at 13.3 deaths per 100,000. This rate is significantly higher than that in England and Northern Ireland, but not significantly different from that in Wales. Rates in Wales (10.4 deaths per 100,000), England (9.1 per 100,000), and Northern Ireland (8.5 deaths per 100,000 females) were not statistically significantly different from each other.

Age-specific alcohol-related death rates among females were typically half those observed among males across all age groups. In 2014, the age-specific rate was highest among males aged 60 to 64 (47.6 deaths per 100,000) and among females aged 55 to 59 years (22.1 deaths per 100,000).

Figures are based on deaths registered in each calendar year, rather than occurring in each year. Since the majority of alcohol-related deaths registered in 2014 also occurred in that year (90%), registration delays are likely to have no impact on the findings.

### 3. Time trends for the UK as a whole, 1994 to 2014

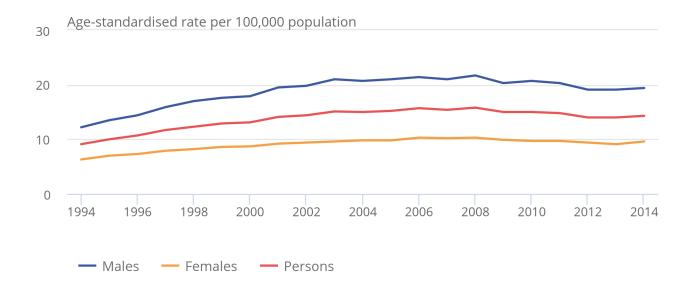
## Rates of alcohol-related deaths have fallen, but still remain higher than those observed 20 years ago

The age-standardised rate for alcohol-related deaths in the UK has fallen from 15.8 deaths per 100,000 people in 2008, when the rate peaked, to 14.3 per 100,000 in 2014. Despite this improvement, the 2014 rate is still higher than that observed in 1994 (9.1 deaths per 100,000 people) when our records began.

Between 1994 and 2014, alcohol-related death rates among males were typically double that of females. In 2014, there were 19.4 alcohol-related deaths per 100,000 males, compared with 9.6 deaths per 100,000 females.

Figure 1: Age-standardised alcohol-related death rates per 100,000 population, UK, 1994 to 2014

Figure 1: Age-standardised alcohol-related death rates per 100,000 population, UK, 1994 to 2014



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 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.
- 5. In 2014 the average number of days between date of death and death registration in England and Wales was 5 days for alcohol-related causes.

#### Alcohol-related death rates highest among 55 to 64-year-olds in 2014

In each year between 1994 and 2014, the age-specific rate for alcohol-related deaths increased steadily with age, before generally peaking among those in their 50s or 60s. The rate then fell in subsequent age groups and, in some cases, the oldest age groups from 75 years upwards had rates similar to those in their 40s.

In 2014, age-specific rates for men were highest among those aged 60 to 64 years (47.6 deaths per 100,000 men) and lowest among 25 to 29-year-olds (1.8 per 100,000). For women, rates were highest among 55 to 59-year-olds (22.1 per 100,000) and lowest among 25 to 29-year-olds (1.1 per 100,000).

## Alcohol-related death rates decreased among those younger than 60 since peaking in the 2000s

In age groups below 30 to 34 years, because there are generally fewer deaths related to alcohol than at older ages, it is not always possible to calculate reliable age-specific death rates. Therefore, we have based the analysis of time trends in age-specific rates on those in age groups from 30 to 34 years upwards.

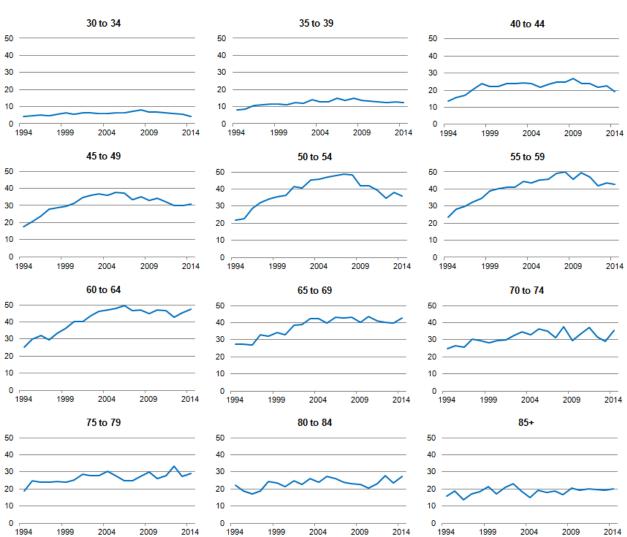
For men, age-specific rates initially increased in the majority of age groups, despite annual fluctuations, between 1994 and the 2000s when they peaked. The most noticeable increases were in age groups up to 55 to 59 years, where rates at their peak were double those observed in 1994. Rates in these age groups have since fallen significantly to date, but in older age groups they have remained relatively stable. A similar picture was observed in women; however, only 40 to 44-year-olds and 50 to 54-year-olds experienced significant decreases in rates between the year they peaked and 2014.

Overall, despite improvements in the last decade or so, age-specific alcohol-related death rates were still higher in 2014 than in 1994.

Figure 2: Age-specific alcohol-related death rates per 100,000 males, UK, 1994 to 2014

Time trends of male alcohol-related deaths by age-group United Kingdom, 1994 to 2014

Age-specific rate per 100,000 males



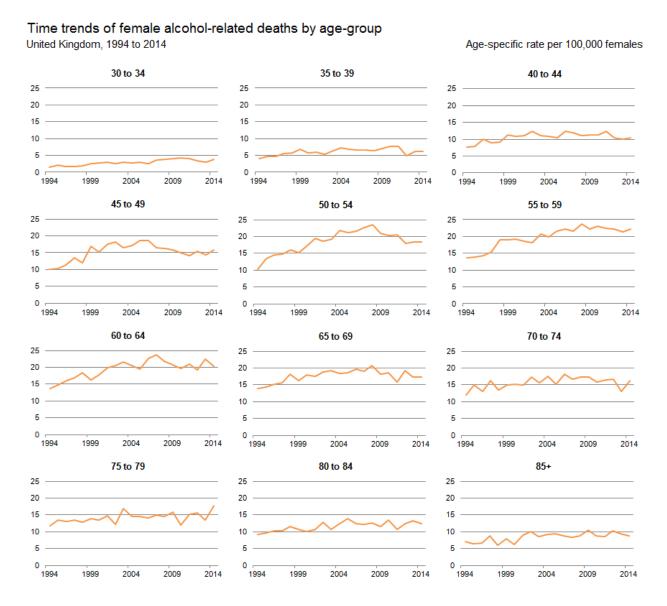
Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
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Figure 3: Age-specific alcohol-related death rates per 100,000 females, UK, 1994 to 2014

UK



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 2. Rates are expressed per 100,000 population and standardised to the 2013 European Standard Population.
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## 4. Comparisons between the 4 countries of the UK, 1994 to 2014

### Males in Scotland experienced the fastest decrease in alcohol-related death rates since 2003

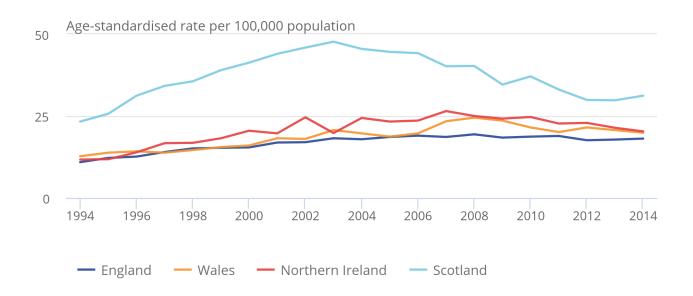
In 2014, Scotland had the highest age-standardised alcohol-related death rate for males at 31.2 deaths per 100,000. This rate is significantly higher than those of any other constituent country of the UK. Rates in England (18.1 deaths per 100,000), Wales (19.9 per 100,000 males) and Northern Ireland (20.3 per 100,000 males) were not statistically significantly different from each other.

In all constituent countries of the UK, the age-standardised alcohol-related death rate for males rose in the 1990s before peaking in the 2000s. Rates have generally fallen to date, but are still significantly higher than they were in 1994.

Scotland had the highest alcohol-related death rates over the period 1994 to 2014, as well as the steepest increase in rates between 1994 and the 2000s. Despite this, compared with other UK countries, Scotland saw the most substantial decrease in male alcohol-related death rates between 2003, when its rate peaked at 47.7 deaths per 100,000, and 2014. By 2014, the rate in Scotland had fallen significantly to 31.2 deaths per 100,000. Alcohol-related death rates for males were generally lower in England than in any other UK country over the last 2 decades, but these rates were sometimes not significantly different from those observed in Wales and Northern Ireland.

Figure 4: Age-standardised alcohol-related death rates per 100,000 males, UK constituent country, 1994 to 2014

Figure 4: Age-standardised alcohol-related death rates per 100,000 males, UK constituent country, 1994 to 2014



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 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.
- 5. In 2014 the average number of days between date of death and death registration in England and Wales was 5 days for alcohol-related causes.

## England and Wales are the only UK countries where alcohol-related death rates for females were significantly higher in 2014 than 1994

In 2014, Scotland had the highest alcohol-related death rate for females at 13.3 deaths per 100,000. This rate is significantly higher than that in England and Northern Ireland, but not significantly different from that in Wales. Rates in Wales (10.4 deaths per 100,000), England (9.1 per 100,000), and Northern Ireland (8.5 deaths per 100,000 females) were not statistically significantly different from each other.

In each UK country, alcohol-related death rates increased in the 1990s before peaking in the mid to late 2000s. The increase in rates up to 2006 was noticeably steeper in Scotland than elsewhere.

Since peaking, rates in some countries have fallen significantly to date, while others have remained relatively stable.

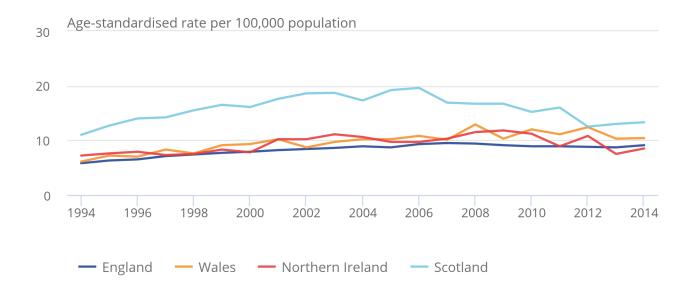
Rates in Scotland were significantly higher than those in England between 1994 and 2014. Compared with Wales and Northern Ireland, rates in Scotland were significantly higher in each year up 2011, but not always significantly higher afterwards.

Overall, England and Wales are the only UK countries where the age-standardised alcohol-related death rates for females were significantly higher in 2014 than 1994.

Since 1994, female alcohol-related death rates in England, Northern Ireland and Wales have been largely comparable, with very few significant differences between these countries during the whole time period.

Figure 5: Age-standardised alcohol-related death rates per 100,000 females, UK constituent country, 1994 to 2014

Figure 5: Age-standardised alcohol-related death rates per 100,000 females, UK constituent country, 1994 to 2014



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 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.
- 5. In 2014 the average number of days between date of death and death registration in England and Wales was 5 days for alcohol-related causes.

### 5. Regions of England

## Alcohol-related deaths rates for both sexes were significantly higher in the north of England than the south in 2014

For males, alcohol-related death rates were significantly higher among regions in the north of England than those in the south. In 2014, there were 25.5 and 24.2 alcohol-related deaths per 100,000 in the North West and the North East, respectively. Conversely, in the South East and the East of England where rates were lowest, there were 15.1 and 13.3 deaths per 100,000, respectively.

As with males, female alcohol-related death rates were also significantly higher in the north of England than the south. In 2014, there were 15.1 and 13.4 alcohol-related deaths per 100,000 in the North East and the North West, respectively. Conversely, in London and the East of England, where rates were lowest, there were 6.8 and 7.3 deaths per 100,000 females, respectively.

For all regions of England, rates of alcohol-related deaths typically peaked in the mid-to-late-2000s. With the exception of London, rates for both sexes were significantly higher in 2014 than in 1994.

In some regions of England, the rate of alcohol-related death for both sexes has more than doubled since the time series began. For example, in Yorkshire and The Humber, rates of alcohol-related deaths in 1994 were 7.9 and 4.1 deaths per 100,000 for males and females, respectively. In 2014, these rates were 18.6 and 8.9 deaths per 100,000 for males and females, respectively.

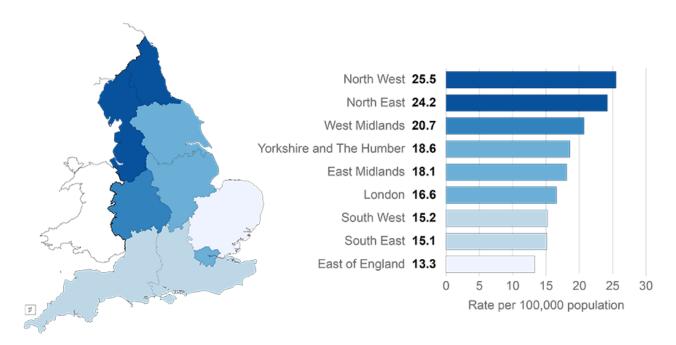
The regional differences recorded in alcohol-related deaths are likely to have resulted from regional differences in drinking habits. Consumption habit data from Public Health England (2006) shows that in 1998, males and females in the North West were most likely to have been binge drinking on one day in the week before the survey, while males in the East of England, and females in the East of England, London and the South East were least likely to display these drinking habits.

An investigation into age-standardised hospital admissions due to alcohol-related causes between 2001 and 2004 by the North East Public Health Observatory (2006) revealed a similar pattern, with the North West recording the highest regional admissions and the East of England recording the lowest rates for both sexes.

The geographic variation in alcohol-related death rates has been well documented in previous research. For example, Breakwell et al. (2007) reported a <u>strong link between higher alcohol-related death rates and those living in the most deprived neighbourhoods of England and Wales (2.95 Mb Pdf)</u>. Similarly, Fone et al. (2013) showed that <u>those living in the most deprived areas of Wales were more likely to demonstrate harmful binge drinking behaviour</u> than those in the least deprived areas. Erskine et al. (2010) also supported these findings, additionally reporting <u>higher risk of alcohol-related deaths in urban areas</u>, after accounting for socio-economic status.

Figure 6: Age-standardised rates of alcohol-related deaths for males, by region, England, 2014

## Map 1 Age-standardised rates of alcohol-related deaths for males, by region, England, 2014



- 1 A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 2 Rates per 100,000 population, standardised to the 2013 European Standard Population.
- 3 Deaths of non-residents are excluded.
- 4 Figures are for deaths registered in 2014.
- 5 In 2014 the average number of days between the date of death and death registration in England and Wales was five days for alcohol-related causes.
- Source: Office for National Statistics licensed under the Open Government Licence v.3.0.

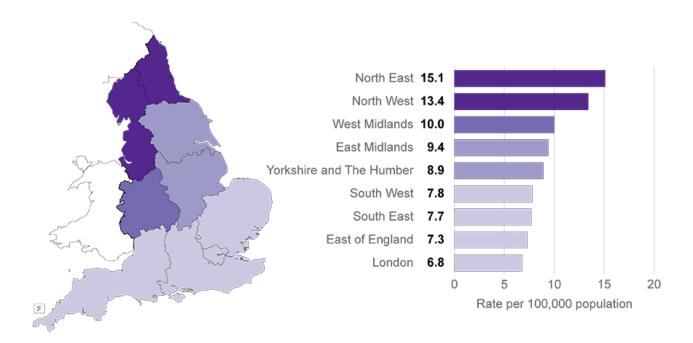
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**Source: Office for National Statistics** 

Figure 7: Age-standardised rates of alcohol-related deaths for females, by region, England, 2014

Map 2 Age-standardised rates of alcohol-related deaths

for females, by region, England, 2014



- 1 A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 2 Rates per 100,000 population, standardised to the 2013 European Standard Population.
- 3 Deaths of non-residents are excluded.
- 4 Figures are for deaths registered in 2014.
- 5 In 2014 the average number of days between the date of death and death registration in England and Wales was five days for alcohol-related causes.

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Source: Office for National Statistics

## 6. Deaths mentioning an alcohol-related cause as a contributory factor

Alcohol increases the risk of developing or dying from certain conditions, but its contribution in causing deaths from these conditions can be difficult to quantify. To provide a more comprehensive picture of the extent to which alcohol consumption is involved in causing deaths, we examined the information on death certificates to see if an alcohol-related condition was recorded as a contributory factor in deaths from some underlying causes which are known to be associated with alcohol consumption (partially-attributable conditions). Our analysis was limited to 2014 deaths data for England and Wales only.

Overall, an alcohol-related cause was recorded as a contributory factor on the death certificate in 1.2% (1,536 out of the 133,321) of deaths from the partially-attributable conditions examined.

The majority of deaths mentioning an alcohol-related cause as a contributory factor were from Ischaemic (coronary) heart disease (627 deaths). Conversely, the fewest number of deaths mentioning an alcohol-related cause was cancer of the oesophagus (26 deaths).

The extent to which an alcohol-related condition was recorded on death certificates as a contributory factor varied by cause of death. The cause with the highest proportion of deaths mentioning an alcohol-related condition was liver cancer. In 2014, approximately 10% (439 out of 4,452) of deaths from liver cancer mentioned an alcohol-related condition as a contributory factor. An alcohol-related cause also contributed to 5% (94 out of 1,792) of deaths from transport accidents and 2% (51 out of 2,345) of deaths from cancer of the mouth and throat.

The list of partially-attributable conditions we examined and the proportion of deaths from each mentioning an alcohol-related condition are in Table 1.

Table 1: Deaths from causes where an alcohol-related condition was recorded as a contributory factor, England and Wales, 2014

Underlying cause of death	Number of deaths from underlying cause	Number of deaths from underlying cause mentioning an alcohol-related condition	<u> </u>
Cancer of Oesophagus	6,754	26	0.4
Cancer of the lip, oral cavity and pharynx (mouth and throat)	2,345	51	2.2
Haemorraghic stroke	8,667	74	0.9
Liver cancer	4,452	439	9.9
Ischaemic stroke	19,094	86	0.5
Hypertensive diseases	6,114	87	1.4
Ischaemic heart disease	60,509	627	1.0
Pneumonia	25,386	146	0.6
Transport accident	1,792	94	5.2

Source: Office for National Statistics

#### Notes:

- 1. Figures are for deaths registered in 2014.
- 2. Figures include deaths of those who are not usually resident in England and Wales.
- 3. Underlying cause of death was defined using the International Classification of Diseases Tenth (ICD-10) codes specified in the respective download table.
- 4. A common definition of alcohol-related death is used across the United Kingdom. See the section on the National Statistics definition of alcohol-related deaths for more information.
- 5. Where the decedent had more that one alcohol-related condition present at death, only one is counted.

### 7. Alcohol-related deaths definition

#### What is the National Statistics definition of alcohol-related deaths?

The National Statistics definition of alcohol-related deaths includes underlying causes of death regarded as those being most directly due to alcohol consumption, as shown in Table 2. The definition is primarily based on chronic conditions associated with long-term abuse of alcohol and, to a lesser extent, acute conditions. Apart from poisoning with alcohol (accidental, intentional or undetermined), the definition excludes other external causes of death, such as road traffic and other accidents.

The definition does not include diseases that are partially attributable to alcohol, such as cancers of the mouth, oesophagus and liver. However, all deaths from chronic liver disease and cirrhosis (excluding biliary cirrhosis) are included, even when alcohol is not specifically mentioned on the death certificate.

Table 2: National Statistics definition of alcohol-related deaths (ICD-10)

ICD-10 code	Text
F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
142.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K73	Chronic hepatitis, not elsewhere classified
K74	Fibrosis and cirrhosis of liver (Excluding K74.3-K74.5 - Biliary cirrhosis)
K86.0	Alcohol induced chronic pancreatitis
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: Office for National Statistics

## How does the National Statistics definition differ from definitions developed by other government departments?

The National Statistics definition of alcohol-related deaths was developed for the purposes of monitoring alcohol-related deaths across all the constituent countries of the UK, using consistent methodology based solely on the information collected at death registration. Therefore, our definition differs from those developed within some constituent countries.

Specifically, <u>Public Health England (PHE)</u>, <u>The Scottish Public Health Observatory (ScotPHO)</u> and <u>Public Health Wales (PHW)</u> report alcohol deaths data using different 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, while PHW use the definition developed by PHE. These definitions include conditions where alcohol is the direct cause of all cases (also known as alcohol-specific or wholly-attributable conditions), as well as conditions where alcohol is causally implicated in some, but not all cases of the outcome (also known as partially-attributable conditions).

By definition, only a proportion of deaths from partially-attributable conditions are reported. For example, Jones and Bellis (2014) estimate that in England, 63% of oesophageal cancer cases among men and 51% among women aged 55 to 64 years are caused by alcohol consumption. In addition to chronic conditions like cancer and cardiovascular disease, some external causes of death such as road traffic accidents and falls are also attributable to alcohol. For example, Jones and Bellis (2014) estimate that among 35 to 44-year-olds in England, alcohol consumption is responsible for 37% of male and 20% female deaths due to falls.

The differences between our definition and those used by each public health organisation mentioned are similar, so we will only highlight the major ones using PHE as an example.

First, the term "alcohol-related" is used in different contexts by the Office for National Statistics (ONS) and PHE. As used by us, it refers to alcohol-specific or wholly-attributable conditions (for example, alcoholic liver disease), as well as all cases of certain liver diseases even when alcohol is not specifically mentioned on the death certificate. Conversely, as used by PHE, the term "alcohol-related" refers to wholly-attributable and partially-attributable conditions (for example, hypertensive diseases, various cancers and falls).

Second, we include all deaths from certain liver diseases – fibrosis and liver cirrhosis, and unspecified chronic hepatitis – in our definition on the assumption that, in England and Wales, many of them are caused by alcohol, even if this is not explicitly stated. Our assumption is based on the known under-reporting of alcoholism on death certificates due to death certifiers not being aware of previous alcoholism, or being uncertain of its relationship with the cause of death. It is our view that excluding deaths from these conditions will grossly under-estimate the number of alcohol-related deaths. We exclude biliary cirrhosis, an autoimmune disease, from our definition because there is no evidence that it is associated with alcohol consumption. Conversely, PHE treat these liver diseases (including biliary cirrhosis) as partially-attributable to alcohol, so only a proportion of deaths from them are included in their alcohol-related deaths definition.

Third, although the list of wholly-attributable conditions in our definition and that of PHE is broadly similar, there are more of these alcohol-specific conditions on their list than on ours. One reason for this is that we only include the underlying cause of death in our definition, while PHE include conditions which are regarded as secondary causes, that is, those conditions that describe the nature of the injury sustained or other consequences of external causes of death.

There has been growing interest in the use of partially-attributable conditions to provide a truer burden of alcohol consumption on population health and use of health services associated with these conditions. For example, recent government guidelines recommend that both sexes consume no more than 14 units of alcohol per week and that these units should be spread over several days (Department of Health, 2016). These guidelines stem from evidence showing that more than 14 units of alcohol per week increases the risk of developing conditions that are partially attributable to alcohol (Holmes et al., 2016). Other government departments such as PHE use wholly and partially-attributable conditions to assess the wider impacts of alcohol consumption on hospital admissions (Public Health England, 2015).

The definitions of alcohol-related deaths developed by the public health organisations are not consistent and cannot be used to compare UK countries. We therefore recommend using the National Statistics definition to monitor trends for the UK and to make comparisons between its constituent countries. The country-specific definitions are useful in monitoring the wider impact of alcohol consumption within UK countries and for comparing local areas in England.

#### 8. Context and uses of these statistics

Alcohol is a psychoactive substance, with dependence producing properties. It has been widely used for ritualistic and recreational purposes for centuries. Once consumed, alcohol is quickly absorbed by the stomach and small intestine and carried throughout the bloodstream where its effects on the brain are quickly established. The human body treats alcohol as a toxic substance, and removes it by breaking it down in the liver (FPH, 2008).

The harmful effects of alcohol on the human body can be categorised as acute (immediate) or chronic (longerterm). Examples of acute effects include reduced co-ordination and lowered inhibitions, while chronic effects include liver cirrhosis, heart disease and increased risk of developing liver, bowel and other forms of cancer (Cancer Research 2014). All types of alcoholic beverage (for example, beer, wine, spirits) increase the risk of certain cancers and recently it has been estimated that between 4 to 6% of new cancers in the UK are caused by alcohol consumption (COC, 2015).

In 2014, the UK consumed an average of 9.4 litres of alcohol per adult (defined as those aged 15 years and above; BBPA, 2015). Excessive drinking is estimated to <u>result in approximately 3.3 million (5.9% of all deaths)</u> deaths globally each year (WHO, 2014). This is greater than, for example, the proportion of deaths from HIV /AIDS (2.8%), violence (0.9%) or tuberculosis (1.7%) (WHO, 2014). In England, <u>alcohol misuse costs the National Health Service (NHS) around £3.5 billion per year</u> (House of Commons Health Committee, 2012).

Given the harmful effects of excessive alcohol consumption, there is widespread policy, professional and public interest in the prevalence of alcohol-related deaths in the UK. The main users of these statistics include the Department of Health and devolved government administrations, public health organisations and local government. The figures on alcohol-related deaths are used to monitor and develop policies to protect the health of the general public.

In January 2016, the government published <u>new guidelines for alcohol consumption</u> (Department of Health, 2016), recommending that men and women should drink no more than 14 units of alcohol per week and that these units should be spread across several days. These new guidelines outline the government's commitment to protecting the population from serious health threats, helping people to live longer, healthier and more fulfilling lives. The Home Office's <u>Alcohol Strategy (2012)</u> introduced a minimum unit price for alcohol and initiated a consultation on banning multi-buy alcohol discounting in order to reduce the number of people drinking to harmful levels.

Non-government users of these statistics include non-profit organisations such as <u>Drinkaware</u> and <u>Addaction</u>. These organisations use the statistics to raise awareness of the potential risks associated with excessive drinking habits, to target support services to groups at risk of experiencing adverse consequences of alcohol consumption and to inform public opinion and government policy. Many of these organisations have signed up as partners to the government's <u>Public Health Responsibility Deal</u> (Department of Health, 2014). Academics and researchers also use the statistics to investigate the cause and impacts of alcohol-related deaths.

These statistics are of interest to the general public. Local and national media report on alcohol-related death trends and geographical patterns and may comment on the effectiveness of current or proposed government policies.

This statistical bulletin presents figures for the UK, England and Wales, and English regions. Statistics for Scotland are also published by the <u>National Records of Scotland</u> while those for Northern Ireland are published by the <u>Northern Ireland Statistics and Research Agency</u>.

### 9. 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 5 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.

Alcohol-related death statistics are presented based on the number of deaths registered in each calendar year, rather than the number of deaths that actually occurred in that year. This method is used because there is a requirement for consistent and timely data, despite a potential limitation in data quality caused by registration delays.

In 2014, fewer deaths from alcohol-related causes were registered within 5 days than deaths from all other causes (55% compared with 71%) in England and Wales. The average (median) time taken for a death to be registered was 5 days, a day longer than from all causes of death. Approximately 80% of alcohol-related deaths were registered within 30 days, while approximately 4% took upwards of 6 months to be registered. The majority of alcohol-related deaths registered in 2014 also occurred in that year (90%). The average registration period for alcohol-related deaths in Scotland and Northern Ireland were 3 days and 6 days respectively.

Table 3: Registration period for alcohol-related deaths and all-cause mortality, England and Wales, deaths registered in 2014

Cause	Deaths registered in 2014	Proportion of deaths registered (%)						
		Within 5 days	Six days to one month (6-30 days)	One to three months (31 - 91 days)	Three to six months (92 - 183 days)	Six months to one year (184 - 365 days)	Over 1 year (over 365 days)	
Alcohol- related	7,307	54.6	25.1	8.5	7.5	3.0	1.4	
All- cause mortality	501,424	71.0	22.0	2.2	2.5	1.5	0.9	

Source: Office for National Statistics

#### Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section of the bulletin for further information.
- 2. Figures include deaths of those who are not usually resident in England and Wales.
- 3. Deaths where the day and/or month of death are missing have been excluded.

#### 10. Full results

Figures for alcohol-related deaths for the UK, England, Northern Ireland, Scotland, Wales, and regions of England can be found in the datasets (Microsoft Excel workbooks) on our website.

The 3 workbooks contain:

- Results for the UK (134 Kb Excel sheet) age-standardised rates per 100,000 (with 95% confidence intervals) and numbers of alcohol-related deaths for the period 1994 to 2014. Age-specific rates per 100,000 (with 95% confidence intervals) and numbers of alcohol-related deaths for the period 1994 to 2014. Both sets of figures are available split by sex.
- 2. Results for constituent countries of the UK (148 Kb Excel sheet) for each constituent country, age-standardised rates per 100,000 (with 95% confidence intervals) and number of alcohol-related deaths for the period 1994 to 2014. Figures are available split by sex.
- Alcohol-related deaths by individual cause (333 Kb Excel sheet) for each constituent country, the number
  of alcohol-related deaths by the individual cause of death for the period 2001 to 2014. Figures are available
  split by sex and 5-year age groups.

Detailed statistics for <u>Scotland</u>, published by National Records of Scotland and for <u>Northern Ireland</u>, published by the Northern Ireland Statistics and Research Agency (NISRA) are available on their respective websites.

#### 11. References

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### 12. Background notes

- Statistics on mortality are derived from the information provided when deaths are certified and registered.
   Further information about the methods and quality of these statistics can be found in the <u>Quality and Methodology Report (211.4 Kb Pdf)</u>.
- 2. In England and Wales, deaths should be registered within 5 days of the death occurring, but there are some situations which result in the registration of the death being delayed, for instance if a death is considered unexpected, accidental or suspicious. In 2014, the average number of days between date of death and death registration was 5 days for alcohol-related causes. Further information on the impact of registration delays on data quality is available.

- 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.
- 4. The tenth revision of the International Classification of Diseases (ICD-10) was introduced in Scotland in 2000 and in England and Wales and Northern Ireland in 2001.
- 5. In January 2014, ONS introduced a new version of ICD-10 (software version 2013) which replaced the version introduced in 2011 (version 2010). To understand the impact of these changes on mortality statistics, ONS carried out bridge coding studies in which a sample of deaths that had previously been coded using the old software were then independently recoded using the new version of ICD-10 (Office for National Statistics, 2014). It is not anticipated that this change will have a big impact on the assignment of underlying cause of death for the alcohol related deaths reported in this bulletin.
- 6. The introduction of ICD-10 in England and Wales in 2001 had a significant effect on mortality rates for some diseases, causing a discontinuity in mortality trends for these causes of death. However, the change resulted in a difference of less than 1% in the number of deaths from alcohol-related causes.
- 7. Figures are for deaths registered in each calendar year.
- 8. This bulletin presents age-standardised rates calculated using the direct method of standardisation while the 2013 European Standard Population was used as the standard. These make allowances for differences in the age structure of the population, over time and between sexes. The age-standardised rate for a particular cause of death is that which would have occurred if the observed age-specific rates for that cause had applied in the given standard population. Previously published rates for 1991 to1993 are not comparable with those calculated using 1976 ESP.
- 9. Within this bulletin, a difference which is described as "statistically significant" has been assessed using 95% confidence intervals. If a difference is said to be statistically significant, it is unlikely that it could have occurred by chance alone. Confidence intervals give a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. As a general rule, if the confidence interval around an estimate overlaps with the interval around another, there is no significant difference between the 2 estimates. When the number of deaths are less than 100, the method used to calculate confidence intervals is different (see <a href="Dobson et al., 1991">Dobson et al., 1991</a>).
- 10. Alcohol-related death rates included in this bulletin are presented with 95% confidence intervals in the reference tables accompanying this release.
- 11. Special extracts and tabulations of alcohol-related death (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:

Mortality Analysis Team, Life Events and Population Sources Division Office for National Statistics Government Buildings Cardiff Road Newport South Wales NP10 8XG

Tel: +44 (0) 1633 456736 Email: mortality@ons.gsi.gov.uk.

Our charging policy is available on our website.

- 12. As a valued user of our statistics, we would welcome feedback on this release. In particular, the content, format and structure. Please send feedback to the postal or email address above.
- 13. Differences referred to in this bulletin are based on unrounded figures.
- 14. Details of the policy governing the release of new data are available from the Media Relations Office.

- 15. These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.
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16. Details of the policy governing the release of new data are available by visiting <a href="www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a> or from the Media Relations Office email: <a href="media.relations@ons.gsi.gov.uk">media.relations@ons.gsi.gov.uk</a>