

Statistical bulletin

Alcohol-related deaths in the UK: registered in 2011

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



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1. Key findings

- In 2011 there were 8,748 alcohol-related deaths in the UK, 42 fewer than in 2010 (8,790)
- Males aged 30 and over are significantly more likely than females to die of alcohol-related causes. Over 66% of all alcohol-related deaths in the UK in 2011 were among males
- Age-specific alcohol-related death rates were highest for those aged 55 to 59 and lowest for those less than 30
- Alcohol-related death rates varied between English regions and tended to be highest in the North and lowest in the East of England over the last ten years
- Female alcohol-related death rates were higher in Wales than in England, in 2011
- Between 2007 and 2010 male alcohol-related death rates were significantly higher in Wales than in England. A three year decline in male death rates in Wales means this difference is no longer significant

2. Summary

This annual bulletin presents alcohol-related death figures and age-standardised rates for the UK, England, Wales, and regions of England for 2011. This updates the previous release <u>'Alcohol-related deaths in the United Kingdom, 2010'</u>. Data for Scotland and Northern Ireland are published separately; see the 'Context' section for details. There were 8,748 alcohol-related deaths in the UK in 2011, a decrease of 42 deaths on the number recorded in 2010 (8,790). This fall in the number of deaths has reduced the alcohol-related death rate from 12.9 per 100,000 population in 2010 to 12.6 per 100,000 population in 2011.

For both sexes, age-specific alcohol-related death rates in the UK were lowest among those less than 30 years old. For those aged 30 and over, males were significantly more likely than females to die of alcohol-related causes. For both sexes the number of alcohol-related deaths was highest for those aged 55 to 59, with 838 deaths among males (46.9 per 100,000 population) and 411 among females (22.4 per 100,000 population).

The trend in alcohol-related death rates has remained relatively stable over the last ten years for females across all age-standardised age groups. In contrast, the alcohol-related death rate trend has shown greater fluctuation for males, particularly in the last three years. However, there were no significant changes in rates across all age groups for both males and females between 2010 and 2011.

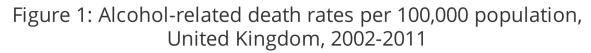
Across the regions of England there was significant geographical variation in alcohol-related death rates. In 2011, rates for males were highest in the North West (22.9 per 100,000 population) and lowest in the East of England (11.8 per 100,000 population). For females, rates were highest in the North West (10.8 per 100,000) and lowest in London (5.3 per 100,000).

Alcohol-related death rates for both males and females have been higher in Wales than in England over the last 10 years. For females, this difference is significant in 2011, with death rates for Females in England at 7.6 deaths per 100,000 population and 9.5 deaths per 100,000 population in Wales. However, there has been steady decline in the number of male deaths in Wales in each of the last three years. Consequently, while death rates for males remain higher in Wales than England, with 17.0 and 15.9 deaths per 100,000 population respectively, the difference is no longer significant. The fall in death rates among males in Wales has contributed to the overall decrease in alcohol-related death rates in the UK.

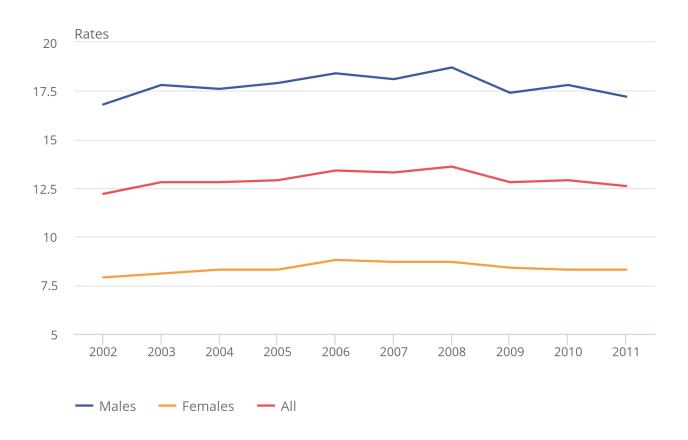
Alcohol-related death figures for the UK, England, Wales and the regions of England for 2002 to 2011 are presented in Tables 1 and 2 for males and Tables 3 and 4 for females.

Figure 1: Alcohol-related death rates per 100,000 population, United Kingdom, 2002-2011

United Kingdom



United Kingdom



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

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section of the Statistical Bulletin for further information
- 2. Figures are for deaths registered in each calendar year
- 3. Deaths of non-residents are included in figures for UK
- 4. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days of the date of death

3. Context

Excessive consumption of alcohol is a major preventable cause of premature mortality with alcohol-related deaths accounting for almost 1.5% of all deaths in England and Wales in 2011. In 2008, the Department of Health published a report titled <u>'The cost of alcohol harm to the NHS in England'</u> (Department of Health, 2008) which estimated that the cost of alcohol harm to the National Health Service (NHS) in England to be £2.7 billion each year (2006/07 prices).

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 other devolved health administrations, public health observatories and local governments. The figures on alcohol-related deaths are used to monitor and develop policies to protect the health of the public. In November 2010, the Department of Health published a White Paper titled <u>'Healthy lives, healthy people: our strategy for public health in England'</u> (2010) which outlines the Government's commitment to protecting the population from serious health threats and helping people to live longer, healthier and more fulfilling lives. Among other lifestyle and behavioural factors, the paper highlights the harmful effects of alcohol abuse and the associated cost to the NHS. This White Paper has led to the Home Office's <u>Alcohol Strategy</u> (2012) which introduces a minimum unit price for alcohol and initiates a consultation on banning multi-buy alcohol discounting in order to reduce the number of people drinking to damaging levels.

Non-government users include charitable organisations such as <u>Drinkaware</u>, and <u>Addaction</u>. These organisations use the statistics to educate people about the risks associated with alcohol consumption, to target support services to vulnerable groups and to inform public opinion and policy. Many of these organisations have also signed up as partners to the Government's <u>Public Health Responsibility Deal</u> (Department of Health, 2012) in which public, private and voluntary organisations sign-up and work collaboratively to address key public health issues, including alcohol abuse. Academics and researchers also use the statistics to investigate the causes and the impact of alcohol-related deaths.

The statistics are used by local and national media to report on geographical and temporal trends in alcoholrelated deaths and to comment on the effectiveness or potential effectiveness of government policies and are of great interest to the general public.

This statistical bulletin presents figures for the UK, England and Wales and English Regions. Statistics for Scotland, published by National Records of Scotland and statistics for Northern Ireland, published by the Northern Ireland Statistics and Research Agency (NISRA) are available at the links below.

Alcohol-related deaths in Scotland

Alcohol-related deaths in Northern Ireland

The World Health Organization (WHO) has developed a <u>Global Information System on Alcohol and Health</u>, which contains over 200 indicators to allow alcohol consumption and the effects of consumption, including mortality, to be compared on an international basis across continents. Both ONS and WHO publish age-standardised mortality rates which allow meaningful comparisons between geographical areas by accounting for differences in the age structure of their populations. However, rates published by ONS and WHO are not directly comparable as they are based on different standard population structures.

4. Comparison of age-specific rates in the United Kingdom

Age-standardised rates enable the comparison of trends in alcohol-related deaths over time because they take into account differences in the age structure of the populations being compared. However, as these rates are overall rates, they are not useful in comparing age groups within or across populations. In contrast, age-specific rates enable comparisons between age groups within a population. Comparisons presented in this section are based on age-specific 2011 figures.

Males aged 30 and over were significantly more likely than females to die from alcohol-related causes. For both sexes, the number of alcohol-related deaths increased sharply from the 25 to 29 year old age group, increasing to 838 for males (46.9 per 100,000) and 411 (22.4 per 100,000) for females aged 55 to 59. After this age, the number of alcohol-related deaths began to reduce steadily for males across each age group, reducing to 92 (20.1 per 100,000) for those aged 85 and over. The decline across age groups was more gradual in females, dropping to 81 (8.5 per 100,000) in the 85 and over age group.

Figure 2. Alcohol-related age-specific death rates per 100,000 population by five year age group, 2011

United Kingdom

Figure 2. Alcohol-related age-specific death rates per 100,000 population by five year age group, 2011

United Kingdom



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

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to 2011 UK mid-year population estimates
- 3. Rates are not calculated for persons aged under 20 due to small numbers
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year
- 6. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days

5. Comparison of age-standardised trends in the United Kingdom

The rate of age-standardised alcohol-related deaths in the UK increased annually between 1992 and 2008. Over this time the annual number of deaths more than doubled from 4,023 (6.7 per 100,000 population) to 9,031 (13.6 per 100,000 population). In 2009 the number of deaths dropped significantly to 8,664 (12.8 per 100,000 population) but has since been more variable, with no significant changes between years. The number of deaths in 2010 was 8,790 (12.9 per 100,000) falling slightly to 8,748 (12.6 per 100,000) in 2011. The current rate of alcohol-related deaths is the lowest it has been since 2002 while the number of deaths is the lowest since 2005.

The decrease in the number of alcohol-related deaths in 2011 was driven by a decrease in the number of male deaths, which dropped from 5,865 (17.8 per 100,000) in 2010 to 5,792 (17.2 per 100,000) in 2011. The number of female deaths showed a small increase between 2010 and 2011 from 2,925 to 2,956. However, the rate of female alcohol-related deaths remained constant at 8.3 per 100,000 in both 2010 and 2011.

Despite the decrease in alcohol-related deaths among males, there continues to be more alcohol-related deaths in males than in females. The majority (66%) of all alcohol-related deaths in the UK in 2011 were among males. Alcohol-related death rates in males increased between 2000 and 2006 but the trend has been inconsistent in the last five years, with rates falling from 18.7 per 100,000 in 2008 to 17.2 per 100,000 in 2011. For females, rates also increased between 2000 and 2006, but have shown a consistent decrease from 8.8 per 100,000 in 2006 to 8.3 per 100,000 in 2011.

The causes of death defined as alcohol-related in this bulletin (see the 'Definition' section for details) are those causes regarded as being most directly due to alcohol consumption. Data on alcohol consumption in Great Britain, collected as part of the General Lifestyle Survey (GLF) and presented in the <u>General Lifestyle Survey</u>. <u>Overview Report, 2010 (668.3 Kb Pdf)</u> (ONS, 2012), showed that alcohol consumption between 1992 and 2010 was higher in males than in females. Differences in consumption rates are likely to be the main factor responsible for the higher number of alcohol-related deaths observed in males than females.

GLF data also show that alcohol consumption for both males and females tended to increase until 2002 and declined thereafter (data available to 2010. The 2011 data on alcohol consumption will be available in March 2013 in the General Lifestyle Survey Overview Report, 2011). However, despite an apparent decrease in alcohol consumption, it is likely that it will take a number of years for any resulting reduction in alcohol-related deaths to become apparent. This is because diseases associated with excessive alcohol consumption are often slow to develop. For example, Alcoholic Liver Disease is the most prevalent of all alcohol-related deaths in 2011. This disease takes many years to develop.

Within each age group, the alcohol-related death rate for females has remained fairly constant over the last 10 years. The largest fluctuation was in women aged 55 to 74 where the rate increased from 18.8 per 100,000 in 2002 to 21.5 per 100,000 in 2008, before falling to 19.6 per 100,000 in 2011.

In contrast, for males, trends in death rates for each age group aged over 34 have fluctuated much more widely. Over the last three years there has been a reduction in alcohol-related deaths in males aged 35 to 54, decreasing significantly from 31.0 in 2008, to 27.2 per 100,000 in 2011, the lowest rate for this age group since 2000. This UK decrease was influenced in part by a decline in the rate for Welsh males aged 35 to 54 from 38.4 to 29.0 per 100,000 between 2008 and 2011.

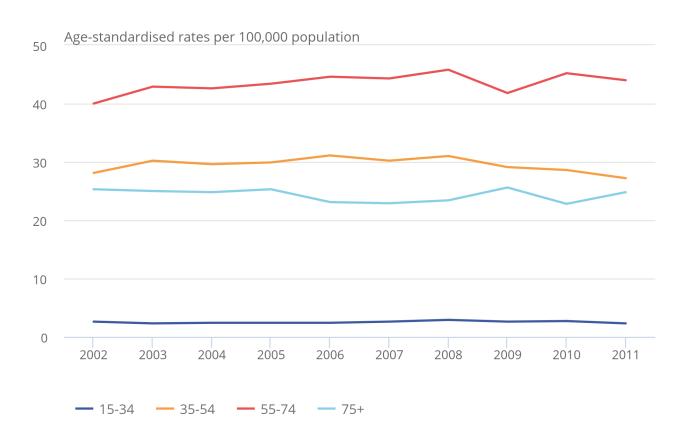
The death rate for males aged 55 to 74 rose steadily until 2008 and has become more variable in the last three years. The current rate of 44.0 deaths per 100,000 is the lowest since 2005. Among males aged 75 and over the rate has fluctuated over the last four years, decreasing significantly between 2009 and 2010, but stabilising between 2010 and 2011, at 24.8 deaths per 100,000.

Figure 3. Alcohol-related death rates per 100,000 population by age group, males, 2002-2011

United Kingdom

Figure 3. Alcohol-related death rates per 100,000 population by age group, males, 2002-2011

United Kingdom



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

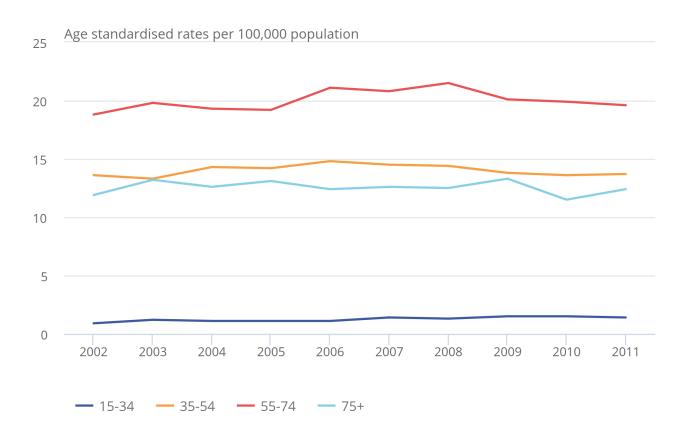
- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to the European Standard Population
- 3. Rates are not calculated for persons aged under 15 due to small numbers
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year
- 6. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days

Figure 4. Alcohol-related death rates per 100,000 population by age group, females, 2002-2011

United Kingdom

Figure 4. Alcohol-related death rates per 100,000 population by age group, females, 2002-2011

United Kingdom



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

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to the European Standard Population
- 3. Rates are not calculated for persons aged under 15 due to small numbers
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year
- 6. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days of the date of death

6. England

The number of male deaths in England continued to show an increasing trend between 2010 and 2011, rising from 4,439 to 4,503. However, due to an increase in population size, the overall rate decreased from 16.1 to 15.9 per 100,000 population. The number of female deaths also increased from 2,230 to 2,272, leading to an increase from 7.5 to 7.6 deaths per 100,000 population.

Between 2000 and 2006, the number of alcohol-related deaths generally increased for both sexes. Since 2006, the trend in the number of male deaths has been more variable with rates ranging from 15.8 per 100,000 (4,315 deaths) in 2009 to 16.7 per 100,000 (4,476 deaths) in 2008. For females, the number of deaths continued to increase until 2007 but then began to decrease, falling from 8.0 per 100,000 (2,310 deaths) in 2007 to 7.5 per 100,000 (2,230 deaths) in 2010.

7. Regions of England

There is variation in age-standardised alcohol-related death rates between the different regions of England. Over the last ten years, the North West and North East regions have consistently displayed the highest rates for both males and females. In 2011, the rate for males was 22.9 per 100,000 in the North West, and 21.5 per 100,000 in the North East, while for females the rate was 10.8 in the North West and 10.4 in the North East. The lowest rates for both males and females and females have tended to be the East of England, with 11.8 deaths per 100,000 for males and 5.6 per 100,000 for females. However, in 2011, London had the lowest female death rate at 5.3 per 100,000.

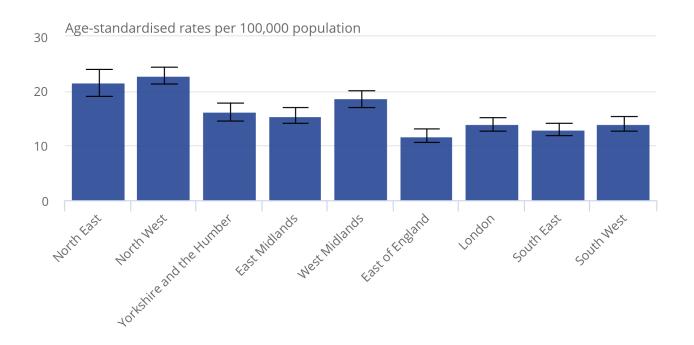
Figures from the <u>General Lifestyle Survey (668.3 Kb Pdf)</u> (2010) show that regions where alcohol-related deaths are highest, people also report the heaviest levels of alcohol consumption. In the North West, 20% of people reported drinking heavily on at least one day in the last week, more than in any other region. In all regions, at least half of those aged 16 and over consummed any alcohol in the week before interview. London had the lowest proportion of adults drinking in the seven days before interview, with 53% reporting drinking over this period.

Figure 5a. Alcohol-related death rates per 100,000 population, males and females, regions of England, 2011

Male

Figure 5a. Alcohol-related death rates per 100,000 population, males and females, regions of England, 2011

Male



Source: Source: Office for National Statistics

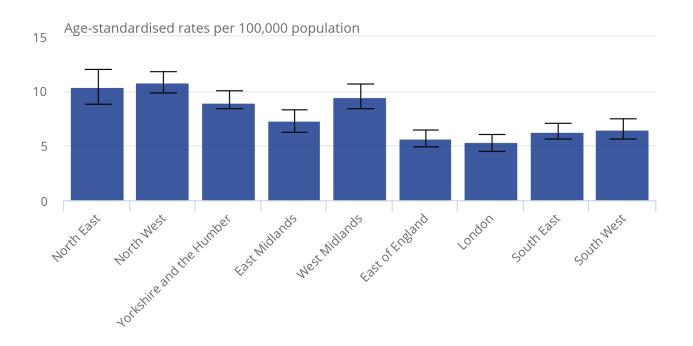
- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to the European Standard Population
- 3. Figures are for deaths registered in each calendar year
- 4. Confidence intervals 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 one figure overlaps with the interval around another, we cannot say with certainty that there is more than a chance difference between the two figures
- 5. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days of the date of death

Figure 5b. Alcohol-related death rates per 100,000 population, males and females, regions of England, 2011

Female

Figure 5b. Alcohol-related death rates per 100,000 population, males and females, regions of England, 2011

Female



Source: Source: Office for National Statistics

Notes:

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to the European Standard Population
- 3. Figures are for deaths registered in each calendar year
- 4. 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 one figure overlaps with the interval around another, we cannot say with certainty that there is more than a chance difference between the two figures
- 5. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days of the date of death

For females, increases in death rates were more variable, with small (but not significant) increases across the majority of regions between 2010 and 2011.

Comparing the five year period between 2007 and 2011 there have been no significant changes in alcoholrelated deaths within regions for either males or females. The geographic variability in alcohol-related deaths rates has been well documented in previous research. For instance, Breakwell et al. (2007) examined geographical variation in the number of alcohol-related deaths between 1991 and 2004 and found a strong association between death rates and deprivation in England and Wales, with death rates being higher in the most deprived areas. Siegler et al. (2011), also demonstrated that alcohol-related deaths varied by socio-economic class with higher death rates in those in the most disadvantaged classes. Erskine et al. (2010) supported these findings and identified that risk of alcohol-related death is higher in urban areas than rural areas, even when adjusting for socio-economic status.

8. Wales

In 2011, the alcohol-related death rate was higher in Wales than in England. The rate for females in Wales was 9.5 per 100,000 population, significantly higher than the rate for females in England (7.6 per 100,000). Between 2007 and 2010, male rates were significantly higher in Wales than in England, but a steady decline from 21.4 per 100,000 in 2008 to 17.0 deaths per 100,000 in 2011 in Wales means this difference was not significant in 2011. (There were 17.0 and 15.9 deaths per 100,000 population in Wales and England respectively).

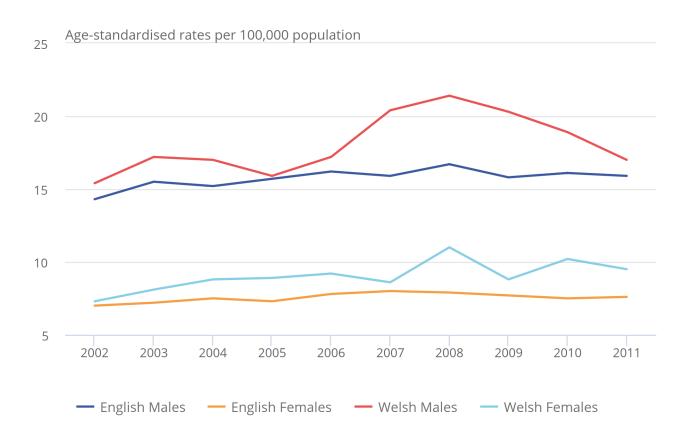
Results from the <u>General Lifestyle Survey (668.3 Kb Pdf)</u> (ONS, 2012) showed that in 2010 average consumption of alcohol was higher in Wales than in England. In Wales, the average weekly consumption was 13.1 units per person in 2010, rising from 12.4 units in 2009. This compared to 11.5 units of alcohol consumed by persons in England in 2010 each week.

Comparing alcohol-related death rates in Wales with Regions of England, rates for females in Wales were not significantly different from regions of England with the highest rates. Rates in the North East and North West were 10.4 and 10.8 per 100,000 population respectively, while the rate in the West Midlands (9.5 per 100,000) was most closely comparable to females in Wales (9.5 per 100,000). For males in Wales, alcohol-related death rates were significantly lower than in the North East (21.5 per 100,000) and North West (22.5 per 100,000) and were most closely comparable to rates in Yorkshire and The Humber (16.3 per 100,000) and the West Midlands (18.6 per 100,000).

Overall, the number of alcohol-related deaths in Wales increased from 340 deaths to 430 deaths between 2000 and 2006. For males, the number of deaths increased from 271 (17.2 per 100,000 population) in 2006 to a peak of 344 (21.4 per 100,000) in 2008 before decreasing to 287 (17.0 per 100,000) in 2011. For females, movements between subsequent years since 2007 were more variable, ranging from 151 deaths (8.6 per 100,000) in 2007 to 197 (11.0 per 100,000) in 2008. In 2011 there were 172 female alcohol-related deaths in Wales.

Figure 6. Alcohol-related death rates per 100,000 population, males and females, England and Wales, 2002-2011

Figure 6. Alcohol-related death rates per 100,000 population, males and females, England and Wales, 2002-2011



Source: Office for National Statistics

- 1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information
- 2. Rates per 100,000 population, standardised to the European Standard Population
- 3. Figures exclude deaths of non-residents
- 4. Figures are for deaths registered in each calendar year
- 5. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days

9. Data tables - males

Table 1: Male alcohol-related death rates, 2002-2011

Rate per 100,000 population

| | | | | | | | • | | • • | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|
| Country/Region | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| United Kingdom | 16.8 | 17.8 | 17.6 | 17.9 | 18.4 | 18.1 | 18.7 | 17.4 | 17.8 | 17.2 |
| England | 14.3 | 15.5 | 15.2 | 15.7 | 16.2 | 15.9 | 16.7 | 15.8 | 16.1 | 15.9 |
| North East | 17.6 | 17.5 | 20.9 | 20.1 | 21.7 | 21.4 | 22.6 | 20.6 | 22.6 | 21.5 |
| North West | 19.4 | 20.8 | 21.1 | 21.3 | 21.4 | 23.7 | 23.0 | 22.5 | 21.3 | 22.9 |
| Yorkshire and The Humber | 12.2 | 14.9 | 15.9 | 16.9 | 17.0 | 16.4 | 16.7 | 16.1 | 16.5 | 16.3 |
| East Midlands | 11.8 | 13.7 | 12.3 | 13.9 | 14.2 | 13.3 | 16.2 | 14.8 | 16.3 | 15.5 |
| West Midlands | 16.7 | 19.0 | 17.6 | 18.7 | 19.0 | 18.7 | 21.4 | 18.6 | 18.6 | 18.6 |
| East of England | 10.0 | 10.7 | 9.9 | 10.0 | 11.2 | 11.7 | 12.5 | 11.4 | 11.7 | 11.8 |
| London | 18.1 | 18.2 | 17.0 | 16.3 | 18.3 | 14.4 | 15.5 | 14.8 | 15.3 | 14.0 |
| South East | 12.4 | 13.6 | 12.3 | 13.0 | 13.3 | 13.1 | 12.6 | 12.9 | 13.0 | 12.9 |
| South West | 11.7 | 12.5 | 12.7 | 14.4 | 12.9 | 14.1 | 14.6 | 14.0 | 14.3 | 14.0 |
| Wales | 15.4 | 17.2 | 17.0 | 15.9 | 17.2 | 20.4 | 21.4 | 20.3 | 18.9 | 17.0 |
| | | | | | | | | | | |

Source: Office for National Statistics

Notes:

1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information

2. Rates per 100,000 population standardised to the European Standard Population

3. Deaths of non-residents are included in figures for the UK, but excluded in figures for England, Wales and regions

4. Figures are for deaths registered in each calendar year

5. Of deaths registered in 2011 in England and Wales, alcohol-related deaths were registered within an average of four days of the date of death

Table 2: Number of male alcohol-related deaths, 2002-2011

| Country/Region | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| United Kingdom | 5,069 | 5,443 | 5,431 | 5,566 | 5,768 | 5,732 | 5,999 | 5,690 | 5,865 | 5,792 |
| England | 3,635 | 3,968 | 3,922 | 4,103 | 4,271 | 4,234 | 4,476 | 4,315 | 4,439 | 4,503 |
| North East | 233 | 236 | 278 | 269 | 294 | 291 | 310 | 287 | 314 | 303 |
| North West | 676 | 719 | 742 | 750 | 761 | 845 | 826 | 811 | 780 | 863 |
| Yorkshire and The Humber | 308 | 381 | 414 | 446 | 447 | 439 | 447 | 437 | 451 | 456 |
| East Midlands | 266 | 311 | 280 | 327 | 334 | 318 | 388 | 362 | 399 | 391 |
| West Midlands | 455 | 522 | 484 | 518 | 533 | 521 | 601 | 529 | 535 | 554 |
| East of England | 286 | 314 | 297 | 299 | 343 | 360 | 389 | 360 | 372 | 388 |
| London | 572 | 564 | 541 | 517 | 601 | 477 | 524 | 510 | 544 | 499 |
| South East | 525 | 574 | 534 | 570 | 584 | 583 | 569 | 597 | 616 | 621 |
| South West | 314 | 347 | 352 | 407 | 374 | 400 | 422 | 422 | 428 | 428 |
| Wales | 236 | 269 | 266 | 254 | 271 | 326 | 344 | 334 | 309 | 287 |

Source: Office for National Statistics

Notes:

1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information

2. Deaths of non-residents are included in figures for the UK, but excluded in figures for England, Wales and regions

3. Figures are for deaths registered in each calendar year

10 . Data tables - females

Table 3: Female alcohol-related death rates, 2002-2011

| | | | | | | | Rate p | er 100,0 |)00 pop | ulation |
|--------------------------|------|------|------|------|------|------|--------|----------|---------|---------|
| Country/Region | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| United Kingdom | 7.9 | 8.1 | 8.3 | 8.3 | 8.8 | 8.7 | 8.7 | 8.4 | 8.3 | 8.3 |
| England | 7.0 | 7.2 | 7.5 | 7.3 | 7.8 | 8.0 | 7.9 | 7.7 | 7.5 | 7.6 |
| North East | 7.4 | 10.8 | 10.5 | 9.3 | 9.7 | 11.4 | 11.7 | 10.6 | 10.2 | 10.4 |
| North West | 10.4 | 10.4 | 11.3 | 11.1 | 12.0 | 12.3 | 12.6 | 11.7 | 11.7 | 10.8 |
| Yorkshire and The Humber | 5.8 | 6.8 | 7.2 | 6.8 | 8.4 | 8.2 | 7.1 | 7.8 | 7.4 | 8.9 |
| East Midlands | 6.9 | 6.9 | 8.2 | 7.2 | 6.8 | 7.8 | 7.7 | 7.9 | 6.8 | 7.3 |
| West Midlands | 8.2 | 7.4 | 8.7 | 9.0 | 9.0 | 9.4 | 10.2 | 9.1 | 9.4 | 9.5 |
| East of England | 5.3 | 5.1 | 5.5 | 5.9 | 6.3 | 6.2 | 5.3 | 5.2 | 5.5 | 5.6 |
| London | 7.2 | 7.5 | 6.1 | 6.3 | 6.1 | 6.3 | 5.8 | 5.9 | 6.4 | 5.3 |
| South East | 6.0 | 6.1 | 6.2 | 6.1 | 6.7 | 6.2 | 6.2 | 6.5 | 6.0 | 6.3 |
| South West | 5.8 | 5.5 | 5.4 | 5.5 | 6.4 | 6.5 | 6.8 | 6.7 | 6.0 | 6.5 |
| Wales | 7.3 | 8.1 | 8.8 | 8.9 | 9.2 | 8.6 | 11.0 | 8.8 | 10.2 | 9.5 |

Source: Office for National Statistics

Notes:

1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information

2. Rates per 100,000 population standardised to the European Standard Population

3. Deaths of non-residents are included in figures for the UK, but excluded in figures for England, Wales and regions

4. Figures are for deaths registered in each calendar year

| Country/Region | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| United Kingdom | 2,632 | 2,721 | 2,790 | 2,820 | 2,990 | 2,992 | 3,032 | 2,974 | 2,925 | 2,956 |
| England | 1,957 | 2,016 | 2,114 | 2,094 | 2,246 | 2,310 | 2,295 | 2,267 | 2,230 | 2,272 |
| North East | 106 | 151 | 148 | 133 | 141 | 164 | 175 | 163 | 155 | 158 |
| North West | 381 | 389 | 425 | 423 | 448 | 465 | 486 | 438 | 449 | 433 |
| Yorkshire and The Humber | 165 | 190 | 204 | 203 | 235 | 239 | 208 | 229 | 221 | 261 |
| East Midlands | 169 | 171 | 202 | 178 | 170 | 194 | 194 | 205 | 180 | 188 |
| West Midlands | 242 | 216 | 258 | 259 | 268 | 288 | 307 | 280 | 286 | 296 |
| East of England | 171 | 170 | 186 | 193 | 214 | 214 | 180 | 180 | 193 | 198 |
| London | 262 | 263 | 217 | 227 | 222 | 227 | 215 | 226 | 244 | 205 |
| South East | 284 | 297 | 297 | 304 | 337 | 310 | 308 | 327 | 306 | 322 |
| South West | 177 | 169 | 177 | 174 | 211 | 209 | 222 | 219 | 196 | 211 |
| Wales | 127 | 143 | 150 | 152 | 159 | 151 | 197 | 159 | 185 | 172 |

Source: Office for National Statistics

Notes:

1. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information

2. Deaths of non-residents are included in figures for the UK, but excluded in figures for England, Wales and regions

3. Figures are for deaths registered in each calendar year

11. Results on the Office for National Statistics website

Figures for alcohol-related deaths for the UK, England, Wales and regions of England can be found in Microsoft Excel workbooks on the Office for National Statistics website.

The two workbooks contain:

- <u>Results for the UK (58 Kb Excel sheet)</u> age-standardised rates per 100,000 (with 95% confidence intervals) and numbers of alcohol-related deaths for the period 1991 to 2011. Figures are available split by sex and broad age groups (All ages, 1–14, 15–34, 35–54, 55–74 and 75 and over)
- <u>Results for England and Wales (177 Kb Excel sheet)</u> age-standardised rates per 100,000 (with 95% confidence intervals) and numbers of alcohol-related deaths for England and Wales, England, Wales and regions of England for the period 1991-2011. Figures are available split by sex and broad age groups (All ages, 1–14, 15–34, 35–54, 55–74 and 75 and over; figures presented by sex only for regions of England)

Statistics for Scotland, published by National Records of Scotland and statistics for Northern Ireland, published by the Northern Ireland Statistics and Research Agency (NISRA) are available at the links below.

Alcohol-related deaths in Scotland

Alcohol-related deaths in Northern Ireland

12. Definition

The National Statistics definition of alcohol-related deaths only includes those causes regarded as being most directly due to alcohol consumption, as shown in Box 1 below. It does not include other diseases where alcohol has been shown to have some causal relationship, such as cancers of the mouth, oesophagus and liver. The definition includes all deaths from chronic liver disease and cirrhosis (excluding biliary cirrhosis), even when alcohol is not specifically mentioned on the death certificate. Apart from deaths due to poisoning with alcohol (accidental, intentional or undetermined), this definition excludes any other external causes of death, such as road traffic and other accidents. The definition allows for consistent comparisons over time for those deaths most clearly associated with alcohol consumption.

Box 1. National Statistics definition of alcohol-related deaths

| 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 |
| I42.6 | 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 - Billiary 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 |

International Classification of Diseases, Tenth Revision (ICD-10)

13. 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 which 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 2011, fewer alcohol-related deaths were registered within five days than deaths from all causes (63% compared to 78% respectively). On average, the median registration period for alcohol-related deaths was 4 days, with a range of 0 to 1254 days. The majority (83%) of deaths were registered within one month while a small proportion (5%) were delayed by six months or more.

Table 5: Registration period for alcohol-related deaths and all-cause mortality, deaths registered in 2011

| - | | | | Proporti | ion of deaths registe | red (per cent) |
|---------------------|---|---|--|---|---|-----------------------------------|
| Cause | Deaths Within registered 5 days in 2011 | 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 | 7,249 62.8% | 5 19.8% | 4.9% | 7.6% | 4.0% | 0.9% |
| All- cause | 484,363 77.7% | 5 16.3% | 1.4% | 2.2% | 1.8% | 0.7% |

England and Wales

Source: Office for National Statistics

Notes:

1. All cause mortality was extracted based on the underlying cause of death, defined using the International Classification of Diseases, tenth revision (ICD-10)

2. A common definition of alcohol-related death is used across the United Kingdom; see the 'Definition' section for further information

3. Figures include deaths of non-residents

4. Deaths where the day and/or month of death are missing have been excluded

14. References

Breakwell C, Baker A, Griffiths C, Jackson G, Fegan G and Marshall D (2007) Trends and geographical variations in alcohol-related deaths in the United Kingdom, 1991-2004. Health Statistics Quarterly 33, 6-22 (Accessed 7/1 /13).

Department of Health (2008) The cost of alcohol harm to the NHS in England (Accessed 7/1/13).

Department of Health (2010) Healthy lives, healthy people: our strategy for public health in England (Accessed 7 /1/13).

Department of Health (2012) Public Health Responsibility Deal (Accessed 7/1/13).

Erskine, S., Maheswaran, R., Pearson, T. & Gleeson, D. (2010) Socioeconomic deprivation, urban-rural location and alcohol-related mortality in England and Wales. BMC Public Health, 10:99

Home Office (2012) Alcohol Strategy (Accessed 7/1/13).

ONS (2011a) Smoking and drinking among adults, 2009 Report (Accessed 7/1/13).

ONS (2011b) Alcohol-related deaths in the United Kingdom, 2000-2009 (208.3 Kb Pdf) (Accessed 7/1/13).

ONS (2012) General Lifestyle Survey Overview Report, 2010 (668.3 Kb Pdf) (Accessed 7/1/13).

Siegler V, Al-Hamad A, Johnson B And Wells C (2011) Social inequalities in alcohol-related adult mortality by National Statistics Socio-economic Classification, England and Wales, 2001-03. Health Statistics Quarterly 50 (Accessed 7/1/13).

15. 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</u> <u>Methodology Report (382.3 Kb Pdf)</u>.
- 2. In England and Wales, deaths should be registered within five 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 2011 the average number of days between date of death and death registration was 4 days for alcohol-related causes. Further information on the impact of registration delays on data quality is available.
- 3. 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. 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.
- 6. Figures are for deaths registered in each calendar year.
- 7. This bulletin presents age-standardised (also known as 'directly-standardised') rates, standardised to the European Standard Population. 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.
- 8. UK rates for each year between 2002 and 2010 were calculated using mid-year population estimates rolled forward from the respective 2001 Census of each UK constituent country as the denominator. However, 2011 UK rates were based on a combination of the 2011 Census population estimates for England and Wales and rolled forward mid-year population estimates (from the 2001 Census) for Scotland and Northern Ireland. The ONS recently released revised mid-year population estimates from 2002 onwards, based on the 2011 Census. The next edition of this bulletin will therefore carry rates from 2002 onwards, based on the revised population estimates. A reconciliation report (361.9 Kb Pdf) explains national level differences between the population estimates from the 2001 Census and 2011 Census in more detail.
- 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 two estimates.
- Alcohol-related death rates included in this bulletin are presented with 95% confidence intervals in reference table 1 (58 Kb Excel sheet) and reference table 2 (177 Kb Excel sheet) 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 Gwent NP10 8XG

Tel: 01633 456736 E-mail: mortality@ons.gsi.gov.uk

The ONS charging policy is available on the ONS website.

- 12. As a valued user of our statistics, we would welcome feedback on this release. In particular, the content, format and structure. This is in line with the Health and Life Events user engagement strategy. Please send feedback to the postal or e-mail address in the Statistical contacts section.
- 13. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.
- 14. Details of the policy governing the release of new data are available by visiting <u>www.statisticsauthority.gov.</u> <u>uk/assessment/code-of-practice/index.html</u> or from the Media Relations Office email: <u>media.relations@ons.</u> <u>gsi.gov.uk</u>