Statistical bulletin

**Suicides in the UK: 2016 registrations**

Registered deaths in the UK from suicide analysed by sex, age, area of usual residence of the deceased and suicide method.

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1. Main points

- In the UK, there were 3.6% fewer suicides registered in 2016 than in 2015; this equates to 5,965 in 2016, a decrease from 6,188 deaths in 2015.

- Around three-quarters of all suicides in 2016 in the UK were male.

- Compared with registration year 2015, the English rate has fallen a significant amount, the Welsh and Northern Ireland rates have both fallen slightly, and the Scottish rate has risen a small amount.

- For deaths registered in 2016 in the UK, persons aged 40 to 44 years had the highest age-specific suicide rate at 15.3 per 100,000; this age group also had the highest rate among males at 24.1 per 100,000; the age group with the highest rate for females was 50 to 54 years, at 8.3 per 100,000.

- The most common suicide method in the UK in 2016 was hanging.

2. Statistician's comment

"The fall in suicide rates from 2015 to 2016 is the largest decrease in 20 years. It fell for both males and females in the UK, although men still account for three-quarters of all suicides. It's interesting to note that between 1981 and 2016, the male rate of suicide among the 75 and over age group has more than halved."

Emyr John, Health Analysis and Life Events, Office for National Statistics

3. Things you need to know about this release

Information for the media

If you are a journalist covering a suicide-related issue, please consider following the Samaritans’ media guidelines on the reporting of suicide, due to the potentially damaging consequences of irresponsible reporting. In particular, the guidelines advise including links to sources of support for anyone affected by the themes in the article, such as Samaritans.

Change in geographical coverage

Earlier in the year, we produced the statistical bulletin Suicides in Great Britain: 2016 registrations. To improve the timeliness of the publication and to produce estimates ahead of world suicide prevention day, we produced estimates for Great Britain as Northern Ireland data were not yet available. The Great Britain bulletin contains more information regarding:

- numbers, rates and commentary for Great Britain, England, Wales and English regions
- registration delays in England, Wales and Scotland
- narrative conclusions in England and Wales

This bulletin represents the updated UK version. Please note that the datasets have also been updated from Great Britain to UK estimates.
Suicide definition

The National Statistics definition of suicide includes all deaths from intentional self-harm for persons aged 10 and over, and deaths where the intent was undetermined for those aged 15 and over. This definition was revised in January 2016 and further information on the impact can be found in the 2014 suicide registrations bulletin.

Deaths from an event of undetermined intent in 10 to 14 year-olds are not included because although for older teenagers and adults we assume that in these deaths the harm was self-inflicted, for younger children it is not clear whether this assumption is appropriate. Deaths from an event of undetermined intent cannot be applied to children due to the possibility that these deaths were caused by unverifiable accidents, neglect or abuse.

Registration delays

In common with most other UK mortality statistics, suicide figures are presented for deaths registered in a particular calendar year, which enables figures to be published in a timely manner. The alternative would be to publish statistics based on the year in which the death occurred, however, this would delay the publication, cause repeated revisions to historical data and be inconsistent with other published mortality figures.

Publishing suicide figures based on year of registration means that many deaths appear in the statistics of a year that is later than the year in which the death occurred. Differences in the death registration systems in England, Wales, Scotland and Northern Ireland mean that the length of registration delays varies between these countries and has implications for the comparability of mortality statistics across the UK. That is, the UK suicide figures for deaths registered in 2016 will comprise deaths occurring in different time periods for different countries of the UK. However, as suicide trends tend to change relatively slowly over time, this is unlikely to have a great impact on the usability of UK suicide statistics.

Where to go for help

If you are struggling to cope, please call Samaritans on 116 123 (UK and ROI), email jo@samaritans.org, or visit the Samaritans website to find details of the nearest branch. Samaritans is available round the clock, every single day of the year, providing a safe place for anyone struggling to cope, whoever they are, however they feel, whatever life has done to them.

Resources are also available online: “U can Cope” includes a film and resources that are designed for people in distress and those trying to support them, to instil hope, promote appropriate self-help and inform people regarding useful strategies and how they can access help and support; “Staying safe if you’re not sure life’s worth living” includes practical, compassionate advice and many useful links for people in distress.

4. Suicide rates in the UK decrease in 2016

In the UK, there were 223 fewer suicides registered in 2016 than in 2015; this is a 3.6% fall. Of the 5,965 suicides registered in 2016, a total of 4,508 were male and 1,457 were female. The age-standardised rate for the UK has also seen a reduction, with 10.4 persons per 100,000 dying from suicide in 2016, compared with 10.9 per 100,000 in 2015. The fall in the suicide rates from 2015 to 2016 is the largest seen since the decrease between 1995 and 1996.

We’ve observed that age-standardised rates generally fell between years 1981 and 2007, with rates in subsequent years increasing to reach a peak of 11.1 deaths per 100,000 in 2013. It’s worth noting that the 2013 peak is still substantially less than the rates seen in the 1980s and 1990s.
If we compare with 2015 figures, the suicide rate has fallen by 3.6% for males and 7.4% for females in the UK; as such, the current age-standardised suicide rate for the UK is 16.0 per 100,000 for males and 5.0 per 100,000 for females.

In 1981, male deaths accounted for approximately 62.6% of all suicides registered. In succeeding years as the overall numbers of suicides fell, there was a more prominent fall in numbers for females. Therefore, the proportion of male suicides increased and has remained at approximately three-quarters of all suicides since the early 1990s.

**Figure 1: Age-standardised suicide rates by sex, for the UK, registered between 1981 and 2016**

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

Notes:

1. The National Statistics definition of suicide is given in “Things you need to know about this release” section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-standardised suicide rates per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations that may contain different proportions of people of different ages.

4. Deaths of non-residents are included in figures for the UK.

5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the “Registration delays” section of the UK Suicide bulletin.
5. Suicides in 2016 by country and region

From 2015 to 2016, the age-standardised suicide rate has fallen for males and females in the UK, England and in Wales. In Scotland, we have observed a small increase in the suicide rate for both males and females from 2015 to 2016. In Northern Ireland, we have observed a small decrease in the suicide rate for males and a small increase for females from 2015 to 2016 (as seen in Figure 2 for males and Figure 3 for females).

Please visit Suicides in Great Britain: 2016 registrations for more in depth commentary for England, Wales and Scotland.
Figure 2: Age-standardised suicide rates by country, for males, registered from 1981 to 2016

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

Notes:

1. The National Statistics definition of suicide is given in “Things you need to know about this release” section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-standardised suicide rates per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations that may contain different proportions of people of different ages.

4. Figures are for persons usually resident in each area, based on boundaries as of May 2017.

5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the “Registration delays” section of the UK Suicide bulletin.

Specifically looking at Northern Ireland, there were 297 registered suicides for all persons in 2016, fewer than the 318 observed in 2015. This decrease is also reflected in age standardised rates, which were 18.1 per 100,000 in 2016 compared with 19.3 per 100,000 in 2015.

In 2016, males in Northern Ireland had a lower age-standardised rate than observed in 2015, with 27.3 per 100,000 deaths, compared with 30.3 per 100,000 in 2015. Conversely, females in Northern Ireland saw an increase, with 9.2 per 100,000 deaths from suicide compared with 8.8 per 100,000 in 2015. Despite a rise in the rates for Northern Irish and Scottish females, UK rates continue to show falling patterns, driven by English, and to a lesser extent, Welsh figures.
Figure 3: Age-standardised suicide rates by country, for females, registered from 1981 to 2016

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

Notes:

1. The National Statistics definition of suicide is given in “Things you need to know about this release” section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-standardised suicide rates per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations that may contain different proportions of people of different ages.

4. Figures are for persons usually resident in each area, based on boundaries as of May 2017.

5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the “Registration delays” section of the UK Suicide bulletin.

Differences in how coroners across the UK operate, in the past and present, make comparison and the identification of important trends more complex. For example, the large increase seen in Northern Ireland between 2004 and 2006 (Figure 2 and Figure 3) coincides with a change to the Northern Ireland Coroner’s Service. Prior to April 2006, there were seven coroners districts in Northern Ireland. Following a review, the separate districts were amalgamated into one centralised Coroners Service. Since 2006, there has been no statistically significant change in the Northern Ireland suicide rate.
Figure 4 shows that Northern Ireland had the highest rate in the UK and was significantly higher than Wales and each region of England.
6. Suicides in the UK by age

While this section is based on UK figures, [Suicides in Great Britain: 2016 registrations](#) also looks at suicide by age for Great Britain. We identify similar trends in both geographies.

As seen in Figure 5, the 2016 age-specific suicide rates increase with age from 10 to 14 year-olds through to 40 to 54 year-olds; they then fall significantly until the age group 70 to 74 year-olds before increasing again for older age groups.

For deaths registered in 2016 in the UK, persons aged 40 to 44 years had the highest age-specific suicide rate at 15.3 per 100,000. This age group also had the highest rate among males at 24.1 per 100,000, whilst females aged 50 to 54 years had the highest rate at 8.3 per 100,000.
Figure 5: Age-specific suicide rates by sex and five-year age groups, UK, registered in 2016

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

Notes:

1. The National Statistics definition of suicide is given in ‘Things you need to know about this release’ section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-specific suicide rate per 100,000 population.

4. Rates were not calculated where there were fewer than three death registrations.

5. Deaths of non-residents are included in figures for the UK.

6. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the ‘Registration delays’ section of the UK Suicide bulletin.

Overall, the male age-specific suicide rate is around three- times higher than the female rate. The greatest disparity is between men and women aged 80 to 84 years, where men in this age group are more than four and a half times more likely to die by suicide. Males aged 15 to 19 years are only two and a half times more likely to die from suicide than females. As in previous years, the suicide rate for middle-aged men, notably those aged 40 to 44 years and 90 and over, is particularly high.
In Figure 5, the suicide rate increases from ages 80 years and over for both males and females. Many factors contribute to this widely seen phenomenon around the world (see the World Health Organisation's Preventing suicide: a global perspective (PDF, 5.12MB)) such as the deterioration of mental and physical health, bereavement, social loneliness and poverty. Figure 6 shows that, from 1981 to 1990, men aged 75 and over had the highest age-specific suicide rate. Between 1981 and 2016 (Figure 6), the male rate of suicide for this age group has more than halved.

From 1995 to 2011, men aged 30 to 44 years had the highest rates; there has been little change in the rates for this age group in following years. From 2007 onwards, we can see a considerable rise in the age-specific rate for men aged 45 to 59 years, from 18.3 per 100,000 in 2007 to 25.1 per 100,000 in 2013. Middle-aged men are more likely to be affected by economic adversity, alcoholism and isolation; furthermore, they are less inclined to seek help. For more information see: Men, suicide and society: why disadvantaged men in mid-life die by suicide (PDF, 2.59MB).

Since 2001, males aged under 30 years had the lowest suicide rate of any broad age group and, in 2016, the rate stands at 10.5 deaths per 100,000 population.
Figure 6: Age-specific suicide rates by broad age groups, males, UK, registered between 1981 and 2016

In Figure 7, the most noticeable change over time for female age-specific suicide rates by broad age group is the substantial fall for all those aged 45 and over. From 1981 to 2016, the female rate had fallen by 51.3% for those aged 45 to 59 years, by 71.6% for those aged 60 to 74 years and by 74.3% for those aged 75 and over.

Another notable trend is how little the rates have changed for those aged 10 to 29 years; they have not fallen below 2.0 per 100,000 or risen above 4.0 per 100,000 since 1981.

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

Notes:

1. The National Statistics definition of suicide is given in ‘Things you need to know about this release’ section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-specific suicide rate per 100,000 population.

4. Deaths of non-residents are included in figures for the UK.

5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the ‘Registration delays’ section of the UK Suicide bulletin.
Figure 7: Age-specific suicide rates by broad age groups, females, UK, registered between 1981 and 2016

![Graph showing age-specific suicide rates](image)

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

Notes:

1. The National Statistics definition of suicide is given in “Things you need to know about this release” section of the UK Suicide bulletin.

2. Figures are for persons aged 10 years and over.

3. Age-specific suicide rate per 100,000 population.

4. Deaths of non-residents are included in figures for the UK.

5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the “Registration delays” section of the UK Suicide bulletin.

7. Suicide methods

In 2016 in the UK, as in previous years, the most common method of suicide for both males and females was hanging, suffocation or strangulation (all grouped together). This has been the case for many years; however, the proportion of deaths from hanging has steadily been increasing. In 2016, a proportion of 58.7% of males either hanged, suffocated or strangulated; this compares with 42.8% for females (Figure 8).
The second most common method of suicide for both males and females was poisoning, with proportions of 18.3% and 36.2% respectively in 2016. Conversely to hangings, we’ve seen a decrease in the proportion of poisonings for both males and females in recent years. This decrease has been most pronounced for females, to the extent that prior to 2013, poisonings were more prevalent than hangings.

The proportion of deaths from drowning, falls and other methods has remained fairly consistent over recent years. The most noteworthy 2016 change was a small increase in female deaths from falls and fractures, from 4.0% in 2015 to 5.3% in 2016.

**Figure 8: Proportion of suicides by method and sex, UK, registered in 2016**

![Bar chart showing proportions of suicides by method and sex, UK, registered in 2016](image)

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

**Notes:**

1. The National Statistics definition of suicide is given in ‘Things you need to know about this release’ section of the UK Suicide bulletin.

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3. Deaths of non-residents are included in figures for the UK.

4. Figures are for deaths registered, rather than deaths occurring in each calendar year. Due to the length of time it takes to complete a coroner’s inquest, it can take months or even years for a suicide to be registered. More details can be found in the ‘Registration delays’ section of the UK Suicide bulletin.

5. Table 19 in the reference table, named 'Suicide in the United Kingdom', has more information regarding definitions.
A study by the **World Health Organisation (WHO)** in 2008, which compared methods of suicide by country, found that methods vary between countries and that this difference is driven primarily by the availability of means. For example, while hanging was the most common method in the majority of countries, suicide involving firearms was the most common method in the US and jumping from a height was the most common method in Hong Kong.

The report also highlighted differences in method between the sexes, with males tending to choose a more violent mechanism, such as hanging or suicide by firearm, whereas females tend to choose less violent mechanisms such as poisoning.

The increase in the proportion of suicides from hanging seen in the UK, particularly in women, may be related to restrictions on the availability of other methods, such as drugs used in overdose and to a misconception that hanging is a quick and painless way to die (see **Factors influencing the decision to use hanging as a method of suicide: qualitative study**).

**Analysis conducted in 2012 using our data** revealed that there was a major reduction in deaths involving the pain-killing drug co-proxamol, following its withdrawal in 2005. A separate study published in 2013, looking at the long-term effect of the reduced pack sizes of paracetamol on poisoning deaths and liver transplant, found that UK legislation to reduce the size of paracetamol packages was followed by a significant reduction in the number of deaths due to paracetamol overdose.

### 8. Registration delays

In common with most other UK mortality statistics, suicide figures are presented for deaths registered in a particular calendar year, which enables figures to be published in a timely manner. The alternative would be to publish statistics based on the year in which the death occurred; however, this would delay the publication, cause repeated revisions to historical data and be inconsistent with other published mortality figures.

Publishing suicide figures based on year of registration means that many deaths appear in the statistics of a year that is later than the year in which the death occurred. Differences in the death registration systems in England, Wales, Scotland and Northern Ireland mean that the length of registration delays varies between these countries and has implications for the comparability of mortality statistics across the UK. That is, the UK suicide figures for deaths registered in 2016 will comprise deaths occurring in different time periods for different countries of the UK. However, as suicide trends tend to change relatively slowly over time, this is unlikely to have a great impact on the usability of UK suicide statistics.

For more information see [Impact of registration delays on mortality statistics, 2011](#).

The median registration delay for Northern Ireland in 2016 was 147 days, a 10.9% decrease to the 2015 figure, which was 165 days. This change might be explained by the unusually high delay in 2015, as the 2016 delay is similar to the other years after 2010. Of the 297 suicides registered in Northern Ireland in 2016, a total of 148 also occurred in 2016 (49.8%). Registration delays in Northern Ireland have decreased 35.8% between 2001 and 2016. The peak, observed in 2005, coincided with major changes to the Northern Ireland Coroners Service (as mentioned above in section 4).

Please visit [Suicides in Great Britain: 2016 registrations](#) for more in depth commentary for England, Wales and Scotland.
Figure 9 presents data on the length of time taken to register a death (also known as the registration delay) for suicides in the constituent countries of the UK. This is calculated as the difference between the date each death occurred and the date it was registered, measured in days. Data where the exact date of death was unknown were excluded from this analysis. Approximately 0.02% of the data were excluded for this reason.
Analysis showed that the data were positively skewed, which suggests that taking the mean is not appropriate and also contained some deaths with very long registration delays. Therefore, the registration delay has been presented using the median value, as this is not influenced by extreme values.

The median is defined as the middle value if the delays were sorted by size. The lower and upper quartiles are also presented in Reference Table 18 in the Suicide registrations in the UK dataset to give an indication of the spread of registration delays that are found with suicides. The lower quartile is the smallest value below which 25% of the values lie; the upper quartile is the smallest value below which 75% of the values lie.

Additional information on registration delays for suicides, including separate figures for males and females and an indication of the range of registration delays (the lower and upper quartile), can be found in Reference Table 18 in the Suicide registrations in the UK dataset.

The death registration system in Northern Ireland is similar to that used in England and Wales, in that all suspected suicides are referred to the coroner. However, unlike in England and Wales, not all suicides are subject to inquest in Northern Ireland. Inquests are only held in complex cases or if the family request it, so a Registrar will register the death on receipt of the Coroner’s report. If there has been no inquest a Registrar awaits the deceased's family to register the death. If there has not been an inquest and the death has not been registered within a year of the death occurring, the General Register Office (GRO) are able to authorise the registration of the death on the authority of the Registrar General. For more information, visit the NISRA website.

More information on registration systems in England, Wales and Scotland can be found in the Suicides in Great Britain: 2016 registrations bulletin.

We hold mortality data for England and Wales. Figures for the UK include data kindly provided by the National Records of Scotland and the Northern Ireland Statistics and Research Agency.

9 . Links to related statistics

ONS Visual: Who is most at risk of suicide?: An article created in collaboration with the Samaritans, discussing factors such as marital status and levels of deprivation in relation to suicide.

ONS Article: Suicide by occupation, England: 2011 to 2015: This report describes recent analysis of deaths from suicide in different occupational groups among those aged 20 to 64 years. Such analysis can inform targeted suicide prevention measures and provide a broader understanding of influences on suicide.

NOMIS: Enables you to query a single data source in greater depth and download data. NOMIS provides mortality statistics for England and Wales, broken down by calendar year of registration (currently 2013 to 2016), age, sex, underlying cause of death and area of usual residence of the deceased. Instruction of use: “Query data”, “Life Events”, “Mortality statistics – underlying cause, sex and age”, make desired selections and download.

National Records of Scotland (NRS): The NRS provides the official suicide statistics for Scotland.

Northern Ireland Statistics and Research Agency (NISRA): The NISRA provides the official suicide statistics for Northern Ireland.

Samaritans: suicide statistics report 2017 (PDF, 2.15MB): This report pulls together the data about deaths by suicide for the UK and Republic of Ireland, including data for 2013 to 2015.

Coroners’ statistics (including statistics on the verdicts returned at inquests) are also available.
Eurostat provides a European comparison of suicide statistics.

World Health Organisation (WHO) provides an international comparison of suicide statistics.

Special extracts

Special extracts and tabulations of suicide data (and other causes of mortality) for England and Wales are available to order (subject to legal frameworks, disclosure control, resources and agreement of costs, where appropriate). User requested data will be published on our website. Such requests or enquiries should be made to the Mortality Analysis Team via email at mortality@ons.gsi.gov.uk or by telephone on +44 (0)1633 456490.

The ONS charging policy (PDF, 65.78KB) is also available to download.

10. Quality and methodology

Data ownership

Office for National Statistics holds mortality data for England and Wales. Figures for the UK include data kindly provided by the National Records of Scotland and the Northern Ireland Statistics and Research Agency.

Metadata

Information about the underlying mortality data, including details on how the data are collected and coded are available in the ONS mortality metadata.

User guide

The User guide to mortality statistics provides further information on the collection, production and quality of the underlying mortality data on which suicide death statistics are based.

Suicide rates

The Suicide rates Quality and Methodology Information report contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users of the data (as well as policy context)
- how the output was created
- the quality of the output: including the accuracy of the data

Age-standardised mortality rates were calculated using the number of suicides registered in each year as the numerator and the mid-year population estimate for that year as the denominator.

This bulletin presents age-standardised (also known as “directly-standardised”) rates, standardised to the 2013 European Standard Population (ESP). These are presented as suicides per 100,000 people. Age-standardised rates make allowances for differences in the size and age structure of the population, over time, between sexes and across different geographical areas.

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. Suicide rates for particular age groups (for example, Figures 5, 6 and 7) are age-specific rates. A template demonstrating how to calculate age-standardised rates using both the 1976 ESP and the 2013 ESP can be found in The impact of using the 2013 European Standard Population to calculate mortality and cancer incidence rates.
Confidence intervals

Within this bulletin, a difference which is described as “significant” has been assessed using 95% confidence intervals. Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. Calculations based on small numbers of events are often subject to random fluctuations. 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.

Revisions policy

The ONS revisions policy is available.

Life events user feedback

As a user of our statistics, we would welcome your feedback on this publication. Please get in touch either via email at mortality@ons.gsi.gov.uk or telephone on +44 (0)1633 456490.

Pre-release access

Equality of access to official statistics is a fundamental principle of statistical good practice. As of 1 July 2017, pre-release access to ONS statistics was removed in all but exceptional circumstances. Whenever a decision is taken to grant pre-release access in future, details will be published on our pre-release access page.