

Statistical bulletin

# Suicides in the UK: 2013 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. Key points

- 6,233 suicides of people aged 15 and over were registered in the UK in 2013, 252 more than in 2012 (a 4% increase)
- The UK suicide rate was 11.9 deaths per 100,000 population in 2013. The male suicide rate was more than three times higher than the female rate, with 19.0 male deaths per 100,000 compared to 5.1 female deaths
- The male suicide rate in 2013 was the highest since 2001. The lowest male rate since the beginning of the data series, at 16.6 per 100,000, was in 2007. Female rates have stayed relatively constant since 2007
- The highest UK suicide rate in 2013 by broad age group was among men aged 45 to 59, at 25.1 deaths per 100,000, the highest for that age group since 1981
- The most common method of suicide in the UK in 2013 was 'hanging, strangulation and suffocation' which accounted for 56.1% of male suicides and 40.2% of female suicides
- The highest suicide rate among the English regions was in North East England at 13.8 deaths per 100,000 population, while London had the lowest at 7.9 per 100,000

## 2. Summary

This bulletin presents the latest (2013) figures on suicide deaths in the UK for recent years. Figures from 1981 to 2013 are available in the accompanying reference table to download, and are discussed in the commentary to provide context to the latest data. Figures are given by sex, age, area of usual residence of the deceased and suicide method.

The Office for National Statistics (ONS) publishes suicide statistics for the UK as a whole and for England and Wales. The equivalent statistics for Scotland and Northern Ireland are produced by <u>National Records of Scotland</u> (formerly the General Register Office for Scotland) and the <u>Northern Ireland Statistics and Research Agency</u> respectively, and can be found on their websites.

In 2013, a total of 6,233 suicides in people aged 15 and over were registered in the UK. Of the total number of suicides, 78% were male and 22% were female.

There were 4,858 male suicides registered in the UK in 2013 (an age-standardised mortality rate of 19.0 deaths per 100,000 population). Looking at broad age groups, the 4559 age group had the highest rate since 1981 of 25.1 deaths per 100,000. This was the first year that this age group had the highest suicide rate.

There were 1,375 female suicides registered in the UK in 2013 (an age-standardised mortality rate of 5.1 deaths per 100,000 population). The highest rate by age group was for women aged 4559; in 2013 the rate for this group was 7.0 deaths per 100,000 population.

The most common method of suicide in the UK is 'hanging, strangulation and suffocation', followed by poisoning, for both males and females.

In England, the age-standardised suicide rate in 2013 was 10.7 deaths per 100,000 (4,722 deaths), compared with 15.9 in Wales (393 deaths). Within England, the suicide rate was highest in the North East at 13.8 deaths per 100,000 and lowest in London at 7.4 per 100,000 population.

Figures presented in this bulletin are for deaths registered in each year, rather than occurring each year. There can be a substantial delay between the date of death and date of registration. For details and implications see the section on methodological issues.

Suicide figures in England and Wales are also potentially affected by an increase over time in the use of 'narrative verdicts' by coroners. For full details see the section on methodological issues.

## 3. United Kingdom

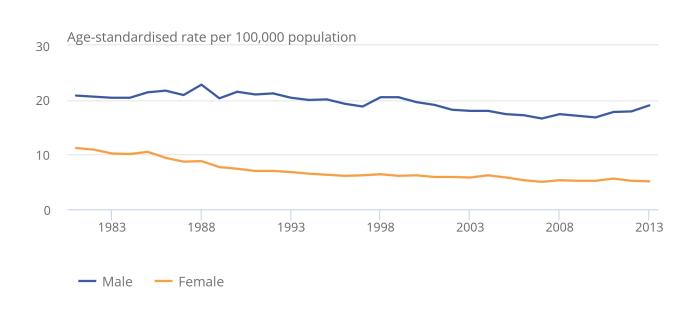
In 2013, a total of 6,233 suicides of people aged 15 and over were registered in the UK. A generally downward trend in suicide rates was observed between 1981 and 2007, with a decrease from 15.6 to 10.6 deaths per 100,000 population (see figure 1). There has been an increase in suicide rates since 2007, to 11.9 per 100,000. This level was last seen in 2004.

Of the total number of suicides registered in 2013 in the UK, 78% were male and 22% were female. Suicide rates have been consistently lower in females than in males throughout the time period covered by the data. Although suicide rates for both sexes fell significantly between 1981 and 2007, the fall was more pronounced among females. Consequently, the proportion of male suicides to female suicides has increased since 1981 when 63% were male and 37% were female. Since 2007, the female rate stayed relatively constant while the male rate increased significantly.

### Figure 1: Age-standardised suicide rates: by sex, deaths registered in each year from 1981 to 2013

### United Kingdom

# Figure 1: Age-standardised suicide rates: by sex, deaths registered in each year from 1981 to 2013 United Kingdom



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

#### Notes:

- 1. The National Statistics definition of suicide is given in the section 'Suicide definition'
- 2. Figures are for persons aged 15 years and over
- 3. Rates per 100,000 population, standardised to the European Standard Population (2013). Prior to 1994, the upper age group was 85+ rather than 90+
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year

When male suicide rates are analysed by five broad age groups, the 30 to 44 age group had the highest rate from 1995 to 2012 (see figure 2). However, in 2013, the 45 to 59 age group had the highest suicide rate out of any age group, having increased since 2007 to reach 25.1 deaths per 100,000 population, the highest rate since 1981. The rate for 60 to 74 year olds rose significantly from its 2012 level, to 14.5 per 100,000 in 2013. In contrast, the 15 to 29 age group was the only group to have a decrease in the age-specific rate in 2013.

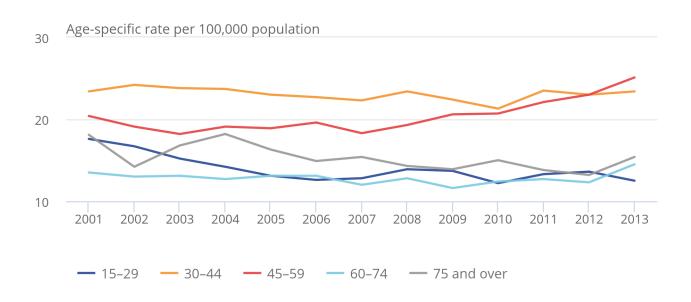
Suicide remains the leading cause of death in England and Wales for men aged between 20 and 34 years of age (24% of all deaths in 2013) and for men aged 35 to 49 years (13% of all deaths in 2013). Further data on causes of death can be found in the <u>Death Register Series</u>.

### Figure 2: Age-specific suicide rate, males, deaths registered in each year from 2002 to 2013

### United Kingdom

### Figure 2: Age-specific suicide rate, males, deaths registered in each year from 2002 to 2013

United Kingdom



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 the section 'Suicide definition'
- 2. Figures are for males aged 15 years and over
- 3. Age-specific suicide rates per 100,000 population
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year

Female age-specific suicide rates remained relatively constant since 2008. Since 2002, the highest rate has been for those aged 4559; in 2013 the rate for this group was 7.0 deaths per 100,000 population. The lowest rate has been for those aged 1529, where the 2013 rate was 2.9 deaths per 100,000.

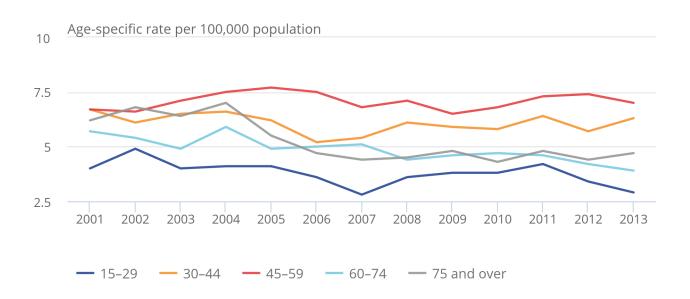
As with men, suicide is the leading cause of death among women aged between 20 and 34 years of age in England and Wales, accounting for 12% of all deaths registered in this age group in 2013. It is the third leading cause of death for those aged 35 to 49 in 2013 (6%). Further data on causes of death can be found in the <u>Death</u> <u>Register Series</u>.

### Figure 3: Age-specific suicide rate, females, deaths registered in each year from 2002 to 2013

### United Kingdom

### Figure 3: Age-specific suicide rate, females, deaths registered in each year from 2002 to 2013

United Kingdom



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

### Notes:

- 1. The National Statistics definition of suicide is given in the section 'Suicide definition'
- 2. Figures are for females aged 15 years and over
- 3. Age-specific rates per 100,000 population
- 4. Deaths of non-residents are included in figures for the UK
- 5. Figures are for deaths registered in each calendar year

## 4. England and Wales

There were 4,722 suicides among people aged 15 and over registered in England in 2013, 215 more than 2012. Of these, more than three-quarters (78%) were male (3,684 deaths). There were 1,038 female suicides (22.0%). The proportion of males to females committing suicide has increased steadily since 1981.

Overall, the age-standardised suicide rate also increased, from 10.2 deaths per 100,000 population in 2012 to 10.7 in 2013. This is not a significant increase although it is the highest seen since 2004 (11.0). This increase has been driven by an increase in the number of male suicides; the male age-standardised suicide rate increased from 16.2 deaths per 100,000 population in 2012 to 17.2 in 2013, while the female rate remained constant at 4.6 deaths per 100,000 population.

There were 393 suicides in those aged 15 and over in Wales in 2013; this is a rise of 59 deaths since 2012. Between 2012 and 2013, the number of male suicides rose by 23% from 257 to 317, while the number of female suicides dropped very slightly from 77 to 76.

The age-standardised suicide rate for all persons has been increasing since 2009 and reached 15.6 deaths per 100,000 population in 2013; this is the highest rate seen since 1982 (15.9). As with England, this is driven by the male population. The age-standardised suicide rate for males has increased significantly, from 18.8 in 2010 to 26.1 in 2013; this is the highest rate since 1981. For females, the rate has remained fairly consistent over the past few years and in 2013 was 5.8 deaths per 100,000 population.

The male suicide rate in Wales has been significantly higher than the rate in England since 2010. In 2013, the Wales suicide rate was significantly higher than all English regions except for the North East.

Registration delays in Wales decreased in 2013 whereas delays in England increased (see section on registration delays) so that more suicides that occurred in 2013 in Wales were registered in that year. Therefore, the higher suicide rate in Wales may partly be due to the deaths being registered more quickly rather than a real difference.

## 5. English regions

In 2013, the suicide rate was highest in the North East at 13.8 deaths per 100,000 population and lowest in London at 7.9 per 100,000 (see table 1). Reference table 5 shows that over the last 16 years (1998 to 2013) suicide rates have tended to be highest in the North East, the North West and South West; the lowest rates tend to be in London and the East of England. The age-standardised all persons rate of 7.9 deaths per 100,000 population in 2013 was the lowest rate of any region since 1981.

	Male		Female		Persons	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
England	3,684	17.2	1,038	4.6	4,722	10.7
North East	229	22.1	66	5.9	295	13.8
North West	567	20	148	5	715	12.3
Yorkshire and The Humber	407	19.1	95	4.3	502	11.6
East Midlands	307	16.7	77	4	384	10.2
West Midlands	384	17.2	91	3.9	475	10.4
East of England	353	14.9	103	4.1	456	9.4
London	395	12.4	121	3.7	516	7.9
South East	627	18	193	5.2	820	11.4
South West	415	19	144	6.3	559	12.5
Wales	317	26.1	76	5.8	393	15.6

# Table 1: Number of deaths and age-standardised suicide rate, by sex, country and region, England andWales, deaths registered in 2013

Source: Office for National Statistics

Notes:

1. The National Statistics definition of suicide is given below under 'Suicide definition'

2. Figures are for persons aged 15 years and over

3. Rates are age-standardised suicide rates per 100,000 population, standardised to the 2013 European Standard Population

4. Figures are for persons usually resident in each area, based on boundaries as of November 2014

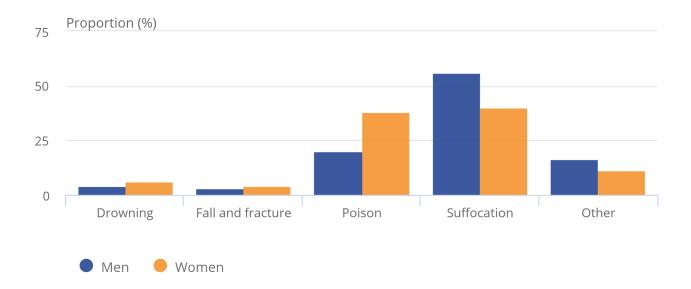
5. Figures are for deaths registered in 2013

## 6. Methods of suicide

The two most common methods of suicide among men in the United Kingdom are 'hanging, strangulation and suffocation' (all grouped together under one code) followed by poisoning (figure 4). This year, for the first time, the same pattern has been seen for women. Previously, the most common method of suicide by women was poisoning.

For both men and women, the proportion of deaths from poisoning has fallen over the last 11 years, from 28% in 2002 to 20% in 2013 for men, and from 49% in 2002 to 38% in 2013 for women. Conversely, the proportion of suicides from 'hanging, strangulation and suffocation' has increased over the same period, from 45% in 2002 to 56% in 2013 for men, and from 26% in 2002 to 40% in 2013 for women. Drowning, falls and other methods have remained fairly consistent over the past decade.

### Figure 4: Proportion of suicides by method and sex, United Kingdom, deaths registered in 2013 Figure 4: Proportion of suicides by method and sex, United Kingdom, deaths registered in 2013



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

Notes:

- 1. The National Statistics definition of suicide is given in the 'Suicide definition' tab
- 2. Figures are for persons aged 15 years and over
- 3. Deaths of non-residents are included in figures for the UK
- 4. Figures are for deaths registered in 2013

A study by the <u>World Health Organisation (WHO) in 2008</u>, which compared methods of suicide by country, found that methods of suicide vary between countries, and that this difference is driven primarily by availability of means. For example, while hanging (suffocation) was the most common method in the majority of countries, suicide by firearm was the most common method in the United States, and jumping from a height was the most common method in Hong Kong.

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

The increase in the proportion of suicides from hanging seen in the UK, in particular in women, may be related to restrictions on the availability of other methods, for example, drugs used in overdose and to a misconception that hanging is a quick and painless way to die (Biddle et al, 2010).

## 7. Suicide definition

The National Statistics definition of suicide includes deaths given an underlying cause of intentional self-harm or an injury/poisoning of undetermined intent. In England and Wales, it has been customary to assume that most injuries and poisonings of undetermined intent are cases where the harm was self-inflicted, but there was insufficient evidence to prove that the deceased deliberately intended to kill themselves (Adelstein and Mardon, 1975). This convention has been adopted across the UK. However, this cannot be applied to children due to the possibility that these deaths were caused by unverifiable accidents, neglect or abuse. Therefore, only persons aged 15 years and over are included in the suicide figures. Causes of death are coded using the International Classification of Diseases, Tenth Revision (ICD-10) (World Health Organisation, 2010). These are the codes used to define suicide:

# International Classification of Diseases, Tenth Revision codes used to define suicide in the United Kingdom

ICD-10 code	Description
X60–X84	Intentional self-harm
Y10–Y34 (1)	Injury/poisoning of undetermined intent
Y87.0 / Y87.2 (2)	Sequelae of intentional self-harm / injury / poisoning of undetermined intent

Notes:

1. Excluding Y33.9 where the coroner's verdict was pending in England and Wales, up to 2006. From 2007, deaths which were previously coded to Y33.9 are coded to U50.9

2. Y87.0 and Y87.2 are not included for England and Wales

## 8. Age-standardised rates

This bulletin reports age-standardised rates for all ages taken together, and age-specific rates for breakdowns by age group. Trends in rates take into account the changing size and age composition of the population. For example, there were 4,129 male suicides registered in the UK in 1981 (an age-standardised mortality rate of 20.8 deaths per 100,000 population). In 2013, the number of suicides registered was higher at 4,858, but the suicide rate was significantly lower than in 1981, at 19.0 deaths per 100,000.

Age-standardised rates are weighted using the European Standard Population (ESP), an artificial population intended to facilitate comparisons across populations that may have different age and sex structures. Eurostat, the statistical office of the European Union, decided at the end of 2012 to bring this population structure up-todate. The 2013 ESP takes account of changes in the EU population since the publication of the previous ESP in 1976.

All age-standardised rates in this bulletin have been calculated using the 2013 ESP, with revisions provided back to 1981. An ONS report examining the impact of the change in ESP on mortality data showed that rates for causes where deaths predominantly occur at older ages are significantly higher using the 2013 ESP compared with the 1976 ESP. This is because the larger number of older people in the 2013 ESP exerts more influence on these rates than in the 1976 ESP. However, it is important to understand that any difference between death rates based on the old and new ESP is purely methodological and does not indicate an actual increase in the previously published numbers of deaths or death rates.

The impact of the 2013 ESP on suicide rates has been small because many suicide deaths are in younger age groups. For the UK as a whole, the new rates in 1982 and 1983 were significantly higher than the old rates, while from 1984 onwards there were no significant differences between the age-standardised rates calculated using the 1976 and 2013 ESPs. When looking at the UK figures by sex, there was no significant difference for males, and only one significant change for females (in 1985). A similar pattern can be seen for England alone, and there were no significant changes for Wales or the regions within England.

## 9. 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 publication, cause repeated revisions to the figures for previous years and be inconsistent with other published mortality figures. Table 2 of the ONS publication <u>Mortality Metadata</u> presents figures on late registrations (for deaths from all causes).

The effect of publishing figures based on year of registration is that, due to late registrations, many suicide deaths appear in the statistics of a year which is later than the year when the death actually occurred. Differences in the death registration systems in England and Wales, Scotland and Northern Ireland mean that the level of registration delays vary between countries, which has implications for the comparability of mortality statistics across the UK. That is, the UK suicide figures for deaths registered in 2013 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.

Figure 5 shows that in 2013 the average (median) registration delay for suicides in England was 168 days. Of the 4,722 suicides in England registered in 2013, 51% occurred before 2013. In England, the average registration delay has gradually increased over time.

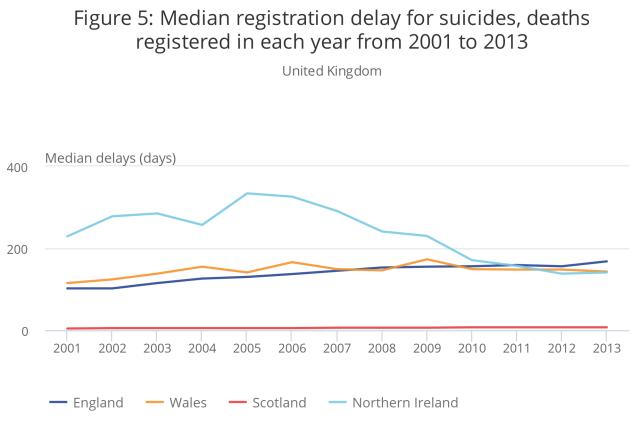
For Wales, the average (median) registration delay for suicides was 143 days in 2013. Out of the 393 suicides in Wales registered in 2013, 38% occurred before 2013. The average registration delay gradually increased between 2001 and 2009 and has remained relatively constant since then.

In Northern Ireland, average registration delays for suicides peaked in 2005 at 334 days, but had decreased sharply to 138 days by 2012, and was 141 days in 2013. 52% of suicides registered in Northern Ireland in 2013 also occurred in 2013.

In 2013, the average registration delay in Scotland was just 7 days. Although the registration delay has increased slightly since 2001, 96.7% of suicides registered in Scotland in 2013 also occurred in 2013.

### Figure 5: Median registration delay for suicides, deaths registered in each year from 2001 to 2013

### United Kingdom



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

### Notes:

- 1. The National Statistics definition of suicide is given below under 'Suicide definition'
- 2. Figures are for persons aged 15 years and over
- The registration delay is calculated as the difference between the date each death occurred and the date it was registered, measured in days. Additional information on the calculation of registration delays is provided Background Note 7
- 4. Figures are for deaths registered in each calendar year
- 5. Figures include deaths of non-residents

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 16. <u>Information on registration delays</u> for a range of causes in England and Wales in 2011 can be found on the ONS website.

Further analysis has been carried out on the England and Wales data for 2001 to 2012 based on the date the suicide occurred, to test whether the registration delays observed made any significant difference to the findings. For England and Wales combined, and both countries separately, there was no significant difference between the rates produced using suicide registrations and occurrences in any of the years. There were also no significant differences in results for any of the years, when analysed by sex or broad age group.

The time trend in suicide rates was very similar whether using date of registration or of occurrence. The main difference is that the occurrence-based trend appears slightly shifted to the left in comparison, this is expected as the deaths occurred before they were registered. When looking at occurrence data, the suicide rate in 2006 is slightly lower, whilst the rate in 2007 is slightly higher than with registration data. As the two rates are more similar, this suggests that the change in the trend in suicides may have occurred in 2006 rather than 2007 (based on England and Wales data only).

When considering the percentage of hard-to-code narrative verdicts (see next section) in England and Wales, there is a small difference when using the occurrence data instead of the registration data. This reflects the fact that hard-to-code narratives tend to be those cases with longer registration delays.

## 10 . Narrative verdicts in England and Wales

There are around 30,000 coroner's inquests held in England and Wales each year that conclude with a verdict (now 'conclusions' following implementation of reforms to the coronial system in England and Wales <u>Coroners</u> and Justice Act, 2009). In 2013, 88% of these inquests concluded with a 'short form' verdict such as accident, misadventure, natural causes, suicide or homicide. The remaining 12% were 'narrative verdicts' which can be used by a coroner or jury instead of a short form verdict to express their conclusions as to the cause of death. A narrative verdict can be given in a range of different circumstances, and for a variety of causes of death (see table 2).

# Table 2: Number of narrative verdicts, by underlying cause of death, England and Wales, deaths registered in 2013

Underlying cause of death Hard-to-code narrative verdict Other type of narrative verdict All narrative verdicts

All causes	2,405	1,528	3,933
Diseases	1,211	654	1,865
Neoplasms	268	178	446
Circulatory	255	180	435
Respiratory	98	55	153
Digestive system	161	79	240
Other disease or condition	429	162	591
External causes	1,194	874	2,068
Transport accidents	123	44	167
Other accidents	1,006	242	1,248
Intentional self-harm	0	236	236
Undetermined intent	0	251	251
Other external cause	65	101	166

Source: Office for National Statistics

Notes:

1. Underlying cause of death was defined using the International Classification of Diseases, Tenth Revision (ICD– 10) codes shown in Box 1 below

2. Figures include deaths of non-residents

3. Figures are for deaths registered in 2013

4. Narrative verdicts are a factual record of how, and in what circumstances the death occurred. They are sometimes returned where the cause of death does not easily fit any of the standard verdicts. Hard-to-code narrative verdicts are those where no indication of the deceased's intent has been given by the certifier, which makes it difficult for ONS to assign an underlying cause of death. A more in depth explanation can be found in the the statistical bulletin

In 2013, 53% of narrative verdicts in England and Wales resulted from an external cause of death (an injury or poisoning) rather than a disease. Some of these narrative verdicts clearly state the intent (for example, accidental) and mechanism (for example, hanging, poisoning) of death. However, in some cases, the coroner may not indicate clearly whether the fatal injury was accidental, or if there was deliberate intent to self-harm, or if intent could not be determined. ONS defines deaths where the intent has not been specified as 'hard-to-code'. The rules for coding cause of death mean that, if no indication of intent has been given by the certifier, a death from injury or poisoning must be coded as accidental.

# Table 3: Hard-to-code narrative verdicts as a percentage of all inquest verdicts, England, regions in England, and Wales, deaths registered in each year from 2006 to 2013

Percentage

	2006	2007	2008	2009	2010	2011	2012	2013
England	6	8	9	10	12	6	7	8
North East	4	6	6	7	8	2	3	3
North West	5	8	11	13	15	6	7	7
Yorkshire and The Humber	7	9	9	10	10	9	11	10
East Midlands	4	6	6	8	11	5	8	10
West Midlands	15	17	17	16	20	8	8	8
East of England	5	7	8	13	13	10	11	12
London	5	6	8	8	8	6	6	8
South East	5	6	7	6	8	5	5	7
South West	4	6	7	8	8	5	6	7
Wales	3	7	9	8	8	4	5	4

Source: Office for National Statistics

Notes:

1. Number of narrative verdicts defined by ONS as hard-to-code

2. Figures are for persons usually resident in each area, based on boundaries as of November 2014

3. Figures are for deaths registered in each calendar year

Between 2001 and 2010, there were large year-on-year increases in the number of narrative verdicts returned by coroners in England and Wales (reference table 13). The number of hard-to-code narrative verdicts registered in England in 2010 (3,170) was almost double the number registered in 2006 (1,592). In Wales, the number increased almost three-fold over the same period, from 52 in 2006 to 147 in 2010.

There is considerable variation in the use of narrative verdicts between coroners and therefore between regions (see table 3). Carroll, et al (2011) found that in the 10 English coroners' jurisdictions where the highest proportion of 'other' verdicts were given, the incidence of suicide decreased by 16% between 2001–02 and 2008–09, whereas it did not change in areas served by the 10 coroners who used narratives the least.

Following improvements by ONS in 2011 in the coding of narrative verdicts, the number of hard-to-code verdicts decreased between 2010 and 2011 by 46% in England (from 3,170 to 1,727) and by 49% in Wales (from 147 to 75). It rose again slightly from 2012 in England (though not in Wales). In 2013, the lowest percentage of hard-to-code verdicts occurred in North East England at 2.9%, while the highest was in East of England at 11.6%.

An analysis to assess the impact of narrative verdicts on suicide rates in England and Wales was undertaken by ONS in 2011 (<u>Hill and Cook, 2011</u>). Simulated age-standardised suicide rates were calculated for the years 2001 to 2009 using two different assumptions:

- Scenario 1: suicide rates were calculated assuming all deaths where a hard-to-code narrative verdict meant that the death been coded as an accidental hanging (ICD-10 codes W75–W76) or accidental poisoning (ICD-10 codes X40–X49) were intentional self-harm
- Scenario 2: suicide rates were calculated assuming that half of these deaths were intentional self-harm. This is more likely than Scenario 1

The results showed that, between 2001 and 2009, there were no statistically significant differences between the published and simulated suicide rates at national level. These analyses have been repeated annually for deaths registered in 2010 onwards (<u>Suicides in the United Kingdom, 2012, 2013, 2014</u>). ONS has now repeated the Scenario 1 analysis using the latest figures for regions of England, and for Wales (see background note 6).

Table 4 shows the results of adding all accidental hangings and poisonings from hard-to-code narrative verdicts with existing suicides (Scenario 1), for regions of England, and Wales in 2013. This can be compared with the actual rates shown in table 1. As expected, the rates are slightly higher, however, there is no significant difference except for England, for all persons, where the rate increased from 10.7 deaths per 100,000 population to 11.5 deaths per 100,000.

When half of the accidental hangings and poisonings are added to existing suicides for 2013 (Scenario 2) there is no significant change to the rates, for males or females, for any region.

	Males		Females	6	Persons	3
	Deaths	Rate	Deaths	Rate	Deaths	Rate
England	3,925	18.2	1,154	5.1	5,079	11.5
North East	237	22.9	71	6.3	308	14.4
North West	601	21.2	166	5.6	767	13.2
Yorkshire and The Humber	433	20.3	119	5.4	552	12.7
East Midlands	332	18	84	4.4	416	11
West Midlands	406	18.2	101	4.3	507	11.1
East of England	390	16.5	119	4.8	509	10.4
London	424	13.3	136	4.1	560	8.6
South East	659	18.9	206	5.6	865	12
South West	443	20.4	152	6.6	595	13.3
Wales	330	27.2	79	6	409	16.3

# Table 4: Simulated suicide rates – Scenario 1, by sex and region, England and Wales, deaths registered in 2013

Source: Office for National Statistics

Notes:

1. Underlying cause of death was defined using the International Classification of Diseases, Tenth Revision (ICD– 10)

2. Suicide rates were calculated assuming all deaths where a hard-to-code narrative verdict meant that the death been coded as an accidental hanging (ICD-10 codes W75–W76) or accidental poisoning (ICD-10 codes X40–X49) were intentional self-harm. These deaths were then added to the number of suicides (see 'Suicide definition' section) in order to calculate simulated suicide rates

3. Figures are for persons aged 15 years and over

4. Age-standardised rates per 100,000 population, standardised to the European Standard Population 2013

5. Figures are for persons usually resident in each area, based on boundaries as of November 2014

6. Figures are for deaths registered in 2013

## 11. Use of the statistics

Suicide statistics provide an indicator of mental health and are important for monitoring trends in deaths resulting from intentional (and probable) self-harm. The statistics are widely used to inform policy, planning and research in both the public and private sector and they enable policy makers and support services to target their resources most effectively. Key users include the Department of Health and devolved health administrations, public health organisations, local and health authorities, academics, and charity organisations.

### 12. Policy context

<u>Barr et al (2012)</u> carried out a time trend analysis in England which suggested that the recent recession in the UK could be an influencing factor in the increase in suicides. They found that local areas with greater rises in unemployment had also experienced higher rises in male suicides.

A review by the <u>Samaritans (2012)</u> emphasised that middle-aged men in lower socioeconomic groups are at particularly high risk of suicide. They pointed to evidence that suicidal behaviour results from the interaction of complex factors such as unemployment and economic hardship, lack of close social and family relationships, the influence of a historical culture of masculinity, personal crises such as divorce, as well as a general 'dip' in subjective wellbeing among people in their mid-years, compared to both younger and older people.

Each constituent country of the UK has a suicide prevention strategy in place which aims to identify risk factors, take action via cross-sector organisations, and reduce suicide rates.

In September 2012, the Department of Health launched '<u>Preventing Suicide in England: a cross-government</u> <u>outcomes strategy to save lives</u>'. This strategy aims to reduce the suicide rate and improve support for those affected by suicide and was informed by an earlier consultation on preventing suicide in England. The new strategy outlines six areas for action including: reducing the risk of suicide in key high-risk groups (for example, people in the care of mental health services, people with a history of self-harm, people in contact with the criminal justice system, and men aged under 50); reducing access to the means of suicide; and supporting research, data collection and monitoring.

The Welsh Assembly Government published '<u>Talk to Me: The National Action Plan to Reduce Suicide and Self</u><u>Harm in Wales, 2009–2014</u>'. A follow up strategy called 'Talk to Me 2' has now been put out for consultation to gather views about the content and priorities of a draft Strategy and Action Plan. It aims to promote, coordinate and support plans and programmes for the prevention of suicidal behaviours and self harm via collaborative work across statutory and third sector organisations. There are six objectives: awareness raising, responses to crisis and early intervention, information and support for the bereaved, supporting the media in responsible reporting, reducing access to the means of suicide and supporting learning information and monitoring systems to improve understanding of suicide and self harm.

In Scotland, following a 10-year '<u>Choose Life</u>' suicide prevention strategy and action plan launched in 2002, a summary of progress to date and recommendations for the final phase of the strategy are reported in '<u>Refreshing</u> the National Strategy and Action Plan to Prevent Suicide in Scotland', published by the Scottish Government in 2010. In 2013, the '<u>Scottish Government: Suicide Prevention Strategy 2013–2016</u>' was launched. The key themes are: responding to people in distress, talking about suicide, improving the NHS response to suicide, developing the evidence base and supporting change and improvement.

In 2006, the Department of Health, Social Services and Public Safety in Northern Ireland (DHSSPS) published ' <u>Protect Life: A Shared Vision – The Northern Ireland Suicide Prevention Strategy and Action Plan, 2006–2011</u>'. The strategy includes two targets: to obtain a 10% reduction in the overall suicide rate by 2008, and reduce the overall suicide rate by a further 5% by 2011. The aim, objectives and approach are similar to those in other UK countries and specific actions focussing on both the general population and the target population are also highlighted. In 2012, the strategy was refreshed to cover the period 2011 to March 2014 and the DHSSPS published an evaluation of the original 'Protect Life' strategy. It showed that there has been strong support and commitment to the Strategy. Progress has been made in a number of areas, however the issue of suicide has not diminished, with a need still for both crisis response and preventative interventions, especially following the recent economic downturn.

People with mental illness have a higher suicide risk than the general population (<u>Windfur and Kapur, 2011</u>). A National Confidential Inquiry into Suicide and Homicide by People with Mental Illness was set up to help reduce this risk. The recommendations of this project could assist health professionals and policymakers improve patient safety and reduce the suicide risk of individuals who are in contact with mental health services. The most recent annual report from the Confidential Inquiry was published in July 2014.

## 13. Comparison with other countries

It is not always possible to compare UK suicide statistics with those of other countries because of differences in the way suicide is defined and recorded. For example, deaths from injuries and poisonings of undetermined intent are included in UK suicide figures, (as well as deaths from intentional self-harm). This is because in the UK we assume that these deaths were self-inflicted, but there was insufficient evidence to prove that the deceased deliberately intended to kill themselves (Adelstein and Mardon, 1975). This cannot be assumed for child deaths, and so UK suicide figures routinely only include persons aged 15 years and over (although data for children aged ten and over are available on request). However, many other countries, including <u>Canada</u>, <u>United States</u> and <u>France</u>, use a narrower definition that does not include deaths from injuries and poisonings of undetermined intent, and do report on deaths of children aged between 10 and 14. The <u>Australian Bureau of Statistics</u> uses a similar definition to these countries, but does not routinely report on suicides of children under the age of 15.

Suicide figures published by <u>Eurostat</u> for European countries are based on a broadly comparable definition of deaths from intentional self-harm only. These are available for all ages and rates for males and females are age-standardised to the European Standard Population. Age-specific (or 'crude') rates for particular age groups are also available.

Suicide figures published by the <u>World Health Organization</u> (WHO) use official figures made available to WHO by its member states. These are based on actual death certificates signed by legally authorised personnel, usually doctors and, to a lesser extent, police officers. Although they are not all directly comparable or timely, the suicide figures published by the WHO give an overall perspective of the extent of suicide deaths around the world.

## 14. Suicide data available

Suicide figures for the UK, England and Wales, England, Wales and regions of England, and results from the analysis of the impact of hard-to-code narrative verdicts returned by coroners in England and Wales, can be found in a Microsoft Excel workbook by clicking on the 'data section for this publication' link.

The workbook contains:

- age-standardised suicide rates per 100,000 population (with 95% confidence limits) and numbers of suicides: by sex, for the UK, England and Wales, England, regions of England and Wales, deaths registered in each year from 1981 to 2013
- age-specific suicide rates per 100,000 population (with 95% confidence limits) and numbers of suicides: by sex and five-year age group, for the UK, England and Wales, England, and Wales, deaths registered in each year from 1981 to 2013
- age-specific suicide rate for broad age groups (with 95% confidence intervals): for males and females, United Kingdom, deaths registered in each year from 1981 to 2013
- number of narrative verdicts: by underlying cause of death, England and Wales, deaths registered in 2013
- number of narrative verdicts: by sex, for England and Wales and regions of England, deaths registered in each year from 2001 to 2013
- simulated age-standardised suicide rates per 100,000 population (with 95% confidence limits): by sex, for England and Wales and regions of England, deaths registered in each year from 2001 to 2013
- median registration delays (and the lower and upper quartiles) in England and Wales, Scotland and Northern Ireland, deaths registered in each year from 2001 to 2013

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### 16. Background notes

### 1. Sources of data

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

### 2. Mortality metadata

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

### 3. Calculation of UK suicide rates

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 population. Agestandardised rates 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. Suicide rates for particular age groups (for example, figures 2 and 3) are age-specific rates. A template demonstrating how to calculate age-standardised rates using both the <u>1976 ESP</u> and the <u>2013 ESP</u> can be found on the ONS website.

### 4. 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.

### 5. Coroners' statistics

Coroners' statistics (including statistics on the verdicts returned at inquests) are available from the Gov.uk website.

### 6. Regional analysis of narrative verdicts

The analysis of regional variations in the use of narrative verdicts, and the calculation of regional simulated suicide rates were based on the country/region of usual residence of the deceased. Please note that boundaries for coroner district areas are not aligned with regional boundaries (that is, they are not coterminous), so it is possible that narrative verdicts returned by an individual coroner may fall within more than one region.

### 7. Differences among UK death registration systems

In England and Wales, all suicides are certified by a coroner following an inquest. The death cannot be registered until the inquest is completed, which can take months or even years, and ONS is not notified that a death has occurred until it is registered. The only exception to this is when someone will be charged in relation to a death in this instance the coroner must adjourn the inquest, and they may carry out an 'accelerated registration'. The full details of these deaths are not recorded until the inquest is completed, but the majority are eventually coded as assaults and therefore would not be included in the suicides data.

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. The family of the deceased may also ask for an inquest and if one has been held, the registrar will register the death on receipt of the coroner's report. If there is no inquest the General Register Office (GRO) will write to the deceased's family (or other informant) to ask them to register the death. However, if the death is not registered within a year of its occurrence, GRO are able to register the death on the authority of the Registrar General.

In Scotland, a death must be registered within eight days. The Procurator Fiscal has a duty to investigate all sudden, suspicious, accidental, unexpected or unexplained deaths and any death occurring in circumstances that give rise to serious public concern, and a Fatal Accident Inquiry may follow. If the results of toxicological tests or a post mortem are not yet known, the cause of death can be given as 'unascertained, pending investigations', and the actual cause of death will be entered at a later date. Therefore National Records of Scotland (NRS) receive notification of deaths more quickly than ONS and the Northern Ireland Statistics and Research Agency (NISRA).

However, although NRS may know what caused the death (for example, hanging, poisoning), they may not be told whether it was due to an accident, assault or intentional self-harm until after the statistical database has been 'frozen' for the year. So NRS may have to code the death as an event of undetermined intent, which would be counted as a probable suicide. Consequently, Scotland has proportionally more deaths coded as being due to events of undetermined intent (and hence as probable suicides), compared with England, Wales and Northern Ireland.

### 8. Calculation of registration delays

Figure 5 presents data on the length of time taken to register a death (also known as the registration delay) for suicides. 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 or the date of death was more than 11 years before date of registration or where either the date of death or date of registration was clearly recorded incorrectly (that is, the death appeared to have been registered before it occurred) were excluded from this analysis. Approximately 0.01% of the data were excluded for these reasons.

Analysis showed that the data was positively skewed, and 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 is the middle value if the delays were sorted by size. The lower and upper quartiles are also presented in reference table 16 to give an indication of the spread of registration delays that are found with suicides. The lower quartile is the smallest values below which 25% of the values lie; the upper quartile is the smallest values below which 75% of the values lie.

### 9. Cause of death categories for narrative verdicts

Cause	ICD-10 Code
All causes	A00–R99, U50.9, V00–Y89
Diseases	A00–R99
Neoplasms	C00–D48
Circulatory	100–199
Respiratory	J00–J99
Digestive system	K00–K93
Other disease or condition	All other codes in the range A00–R99 not included above
External causes	V00-Y89, and U50.9
Transport accidents	V00–V99
Other accidents	W00–X59
Intentional self-harm	X60–X84
Undetermined intent	Y10-Y34
Other external cause	All other codes in the range V00–Y89, and U50.9

International Classification of Diseases, Tenth revision codes used to define the cause of death categories in Table 2

### 10. Coding changes

Several changes were introduced in 2011 that could have affected suicide statistics. In respect of narrative verdicts, an advice note was issued to coroners explaining what information is required in a narrative verdict to help ONS code cause of death using the International Classification of Diseases. Also, additional guidance was given to the ONS coding team to improve coding of narrative verdicts. Finally, an update of the ICD-10 software (version 2010) was introduced in the UK, which included a rule change that affected deaths coded as an event of undetermined intent. These changes were outlined in more detail in the statistical bulletin Suicides in the UK, 2011, which is available on the <u>ONS website</u>.

### 11. Special extracts

Special extracts and tabulations of suicide data (and data for 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). 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 NP10 8XG Tel: +44 (0)1633 651958 Email: <u>mortality@ons.gsi.</u> <u>gov.uk</u>

The ONS charging policy can be found on the ONS website.

### 12. 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 <u>mortality@ons.gsi.gov.uk</u> or telephone on +44 (0)1633 651958.

### 13. Revisions

The <u>ONS revisions policy</u> is available on our website.

### 14. Pre-release access

A <u>list of the names</u> of those given pre-publication access to the statistics and written commentary is available in the pre-release access list for Suicide in the United Kingdom 2013. The rules and principles which govern pre-release access are featured within the pre-release Access to Official Statistics Order 2008.

### 15. National Statistics

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### 17. Social media

Follow ONS on Facebook and Twitter.

### 18. Journalists

If you are a journalist covering a suicide-related issue, please consider following <u>Samaritans' media</u> <u>guidelines on the reporting of suicide</u>, 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.

### 19. Where to go for help

If you are struggling to cope, please call Samaritans on 08457 90 90 90 (UK) 1850 60 90 90 (ROI), email jo@samaritans.org, or visit the <u>Samaritans website</u> 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>U can Cope</u>' 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; '<u>Staying safe if you're not</u>

sure life's worth living' includes practical, compassionate advice and many useful links for people in distress.

20. 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>