

## Article

# Change in the standard of proof used by coroners and the impact on suicide death registrations data in England and Wales

Looking at the impact of the change in the standard of proof - the evidence threshold used by coroners - on suicide registrations statistics, England and Wales.

Contact:  
Rabiya Nasir, Beth Manders, Ben Windsor-Shellard  
health.data@ons.gov.uk  
+44 (0)1633 651901

Release date:

8 December 2020

Next release:

To be announced

## Table of contents

1. [Main points](#)
2. [Background](#)
3. [The number of deaths registered as suicide has increased but the upward trend started before the lower standard of proof was implemented](#)
4. [It is unlikely that the recent legal standard of proof change is the only factor associated with recent changes in suicide rates](#)
5. [Conclusions given by coroners have changed in a way that is consistent with the lower standard of proof](#)
6. [The number of deaths registered from certain accidental causes has decreased in 2019](#)
7. [The number of hard-to-code narrative conclusions has fallen in recent years](#)
8. [Implications for interpreting suicide statistics](#)
9. [Change in the standard of proof used by coroners and its impact on suicide death registrations data in England and Wales data](#)
10. [Glossary](#)
11. [Data sources and quality](#)
12. [Related links](#)

# 1 . Main points

- The standard of proof – the level of evidence needed by coroners to conclude whether a death was caused by suicide – was changed from the criminal standard of “beyond all reasonable doubt”, to the civil standard of “on the balance of probabilities” on 26 July 2018.
- This legal change has not resulted in any significant change in the reported suicide rate in England and Wales; recently observed increases in suicide among males and females in England, and females in Wales, began before the standard of proof was lowered.
- Since the change, the proportion of deaths in England and Wales with an underlying cause of intentional-self harm increased, whereas the proportion coded to undetermined intent decreased; this indicates a change in conclusions reached by coroners, but when taken as a whole does not impact our statistics as both of these are included in the suicide rate.
- Deaths due to accidental drowning and accidental hanging decreased in 2019 when compared with the average in the years 2013 to 2017, however, this has been a gradual trend over time and may not be connected to the legal change.
- We cannot conclude that the change in the standard of proof is responsible for the recent increase in suicide rates; the factors behind increasing suicide rates are likely to be complex and further monitoring is needed to determine the impact of the legal change compared with other influences.

If you are a journalist covering a suicide-related issue, please consider following the [Samaritans' media guidelines on the reporting of suicide](#) because of the potentially damaging consequences of irresponsible reporting. In particular, the guidelines advise on terminology and include links to sources of support for anyone affected by the themes in the article, such as [Samaritans](#).

If you are struggling to cope, please call Samaritans for free on 116 123 (UK and ROI), email [jo@samaritans.org](mailto: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.

## 2 . Background

On 26 July 2018, as a result of a [case in the High Court](#), the standard of proof – the evidence threshold – used by coroners to determine whether a death was caused by suicide was changed from the criminal standard of “beyond all reasonable doubt” to the civil standard of “on the balance of probabilities”. This article looks at whether the lower evidence threshold now used by coroners has resulted in more deaths being recorded as suicide and whether this creates a discontinuity in our annually reported National Statistics data time series .

The “standard of proof” refers to the level of evidence needed by coroners when determining whether a death was caused by suicide.

In England and Wales, all unnatural deaths are investigated by coroners to establish the cause and circumstances of the death. The investigation, known as an inquest, compiles evidence such as postmortem, toxicology reports, and interviews with relatives and friends. Once all the available evidence has been collected, a coroner will then determine the cause of death, and manner of death and surrounding circumstances.

After the coroner has reached their conclusion, the death is registered and the information is shared with the Office for National Statistics (ONS). We then compile this information and report annual statistics on deaths caused by suicide based on the date these deaths were registered.

The National Statistics definition of suicide includes all deaths caused by intentional self-harm and deaths caused by injury or poisoning of undetermined intent. See [Glossary](#) for further information.

To understand the impact of the standard of proof change, in this article we consider the following lines of enquiry:

- Since the lower standard of proof, have there been higher rates of death caused by suicide?
- Have coroners changed the way in which they categorise such deaths?
- Has there been a reduction in other causes of death that may now be considered suicide, such as accidental hanging, accidental poisoning and accidental drowning?
- What is the implication for interpreting suicide registration statistics in England and Wales?

The change in the standard of proof for suicide only applies to England and Wales – Northern Ireland and Scotland have separate systems (see our [Quality and Methodology Information](#) for further details).

### **3 . The number of deaths registered as suicide has increased but the upward trend started before the lower standard of proof was implemented**

Following several years of decline, the number of suicides registered in England and Wales began to increase in 2018. For the latest year of data, the suicide rate is statistically significantly higher for deaths registered in 2019 when compared with rates observed in the years before the increase, between 2014 and 2017 (Figure 1).

Statistically significant increases in suicide rates have been observed among both sexes in England and Wales. Among males, the rate of registered suicides in 2019 (16.9 deaths per 100,000 males) was 17.4% higher than the rate observed before the increase started in 2017 (14.4 deaths per 100,000).

Among females, the rate in 2019 (5.3 deaths per 100,000 females) was 15.2% higher than the rate in 2017 (4.6 deaths per 100,000). The female suicide rate has seen an upward trend since 2016 (4.5 deaths per 100,000), a year before the upward trend began in males.

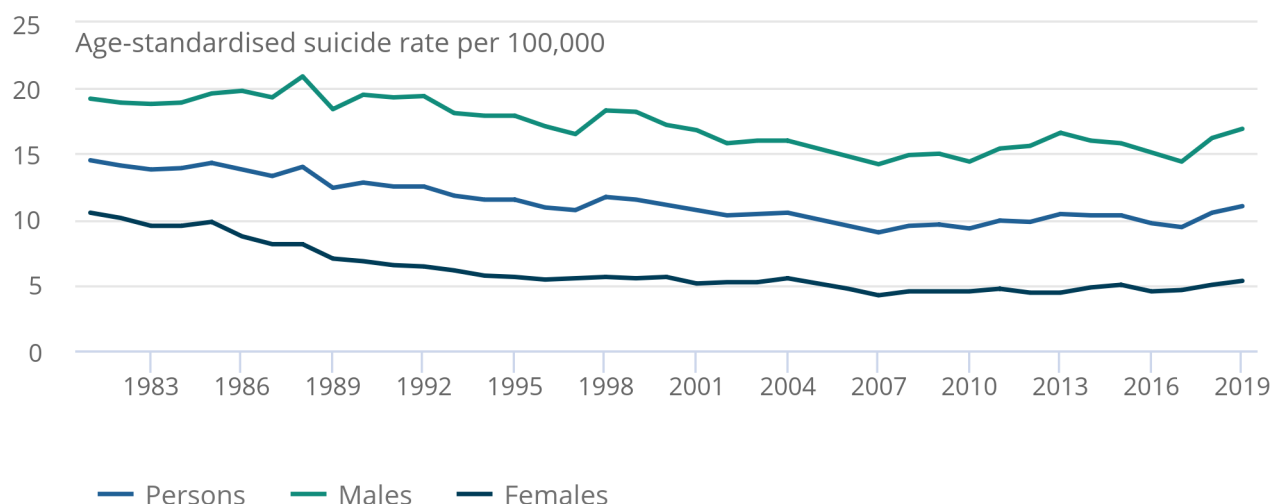
The latest rates of suicide in England and Wales remain statistically significantly lower than those seen at the beginning of our data time series in 1981. Additionally, among males and females, the recent increases are not unprecedented, with many other similar rates observed during the past two decades.

**Figure 1: The suicide rate in England and Wales has increased in recent years**

Age-standardised suicide rates, by sex, England and Wales, registered between 1981 and 2019

## Figure 1: The suicide rate in England and Wales has increased in recent years

Age-standardised suicide rates, by sex, England and Wales, registered between 1981 and 2019



Source: Office for National Statistics – Suicides in England and Wales

**Notes:**

1. The National Statistics definition of suicide is given in [Section 10: Glossary](#).
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 which may contain different proportions of people of different ages.
4. Figures include deaths of non-residents, based on latest postcode boundaries.
5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Because of 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.

When looking at rates of suicide for England and Wales separately (Figure 2), the increase in men since 2017 was also seen in England. Contrastingly, among males in Wales the suicide rate decreased between 2017 and 2019 (from 20.9 to 18.8 deaths per 100,000 males), though this was not statistically significant because of the relatively smaller number of deaths creating a large degree of statistical uncertainty.

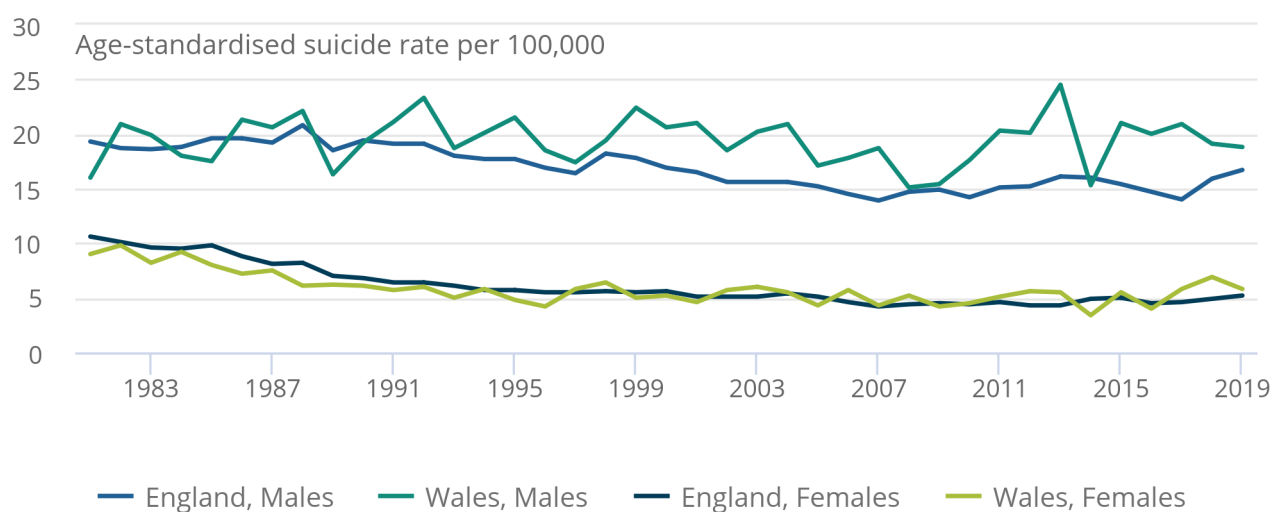
Females in England have also seen a statistically significant increase in the rate of registered suicides since 2016. In Wales, the rate among females increased statistically significantly between 2016 and 2018 from 4.0 to 6.9 deaths per 100,000 females; in 2019 the rate fell to 5.8 deaths per 100,000 females, though the latest rate was not statistically different from the previous year.

**Figure 2: Males in England and females in Wales have seen increases in the suicide rate in recent years**

Age-standardised suicide rates by sex and country, registered between 1981 and 2019

## Figure 2: Males in England and females in Wales have seen increases in the suicide rate in recent years

Age-standardised suicide rates by sex and country, registered between 1981 and 2019



**Source: Office for National Statistics – Suicides in England and Wales**

### Notes:

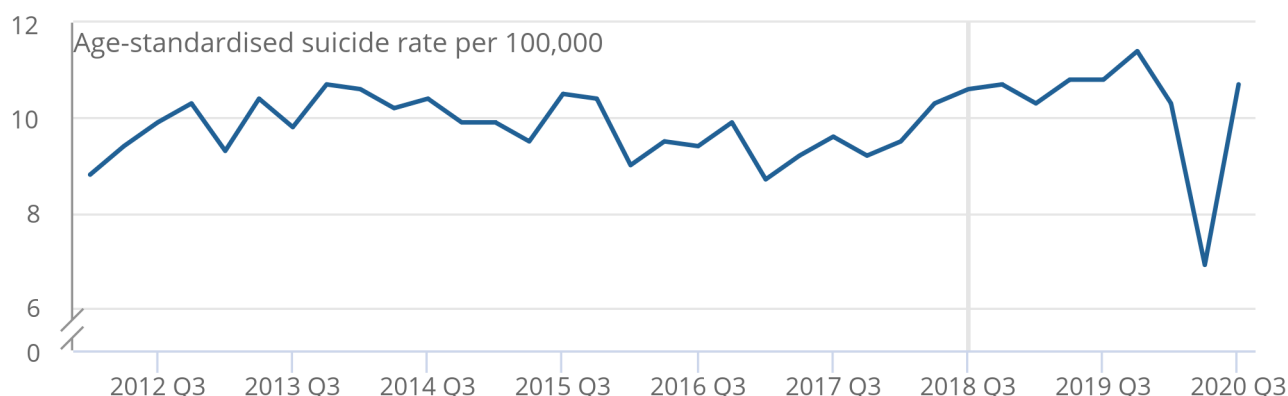
1. The National Statistics definition of suicide is given in [Section 10: Glossary](#).
2. Figures are for persons aged 10 years and over.
3. Age-standardised suicide rates per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations which may contain different proportions of people of different ages.
4. Figures exclude deaths of non-residents, based on latest postcode boundaries.
5. Figures are for deaths registered, rather than deaths occurring in each calendar year. Because of 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.

Looking at quarterly suicide registrations data for England these show that the overall increase started before the change in the standard of proof, during the latter part of 2017.

The lower number of deaths registered in both England and Wales caused by suicide in Quarter 2 (Apr to June) of 2020 should be interpreted with caution; this [likely reflects delays to inquests because of the impact of the coronavirus \(COVID-19\) pandemic on the coroner's service](#). The increase in registered suicides during the third quarter (July to Sept) of 2020 likely reflects the resuming of coroner's inquests.

**Figure 3: There has been a significant increase in the suicide rate in England from Quarter 1 2018 to Quarter 4 2019**

Figure 3: There has been a significant increase in the suicide rate in England from Quarter 1 2018 to Quarter 4 2019. Standard of p was lowered, 26 July 2018



**Source: Office for National Statistics – Suicides in England and Wales**

**Notes:**

1. The National Statistics definition of suicide is given in [Section 10: Glossary](#).
2. Figures for 2020 are provisional and will be finalised in late 2021 in the annual 'Suicides in the UK' bulletin.
3. Figures for England exclude deaths of non-residents, based on latest postcode boundaries.
4. The lower number of deaths registered caused by suicide in Quarter 2 of 2020 should be interpreted with caution; this likely reflects delays to inquests because of the impact of the coronavirus (COVID-19) pandemic on the coroner's service.
5. Q1 refers to January to March (inclusive), Q2 refers to April to June, Q3 refers to July to September, and Q4 refers to October to December.

In Wales, the suicide rate shows a volatile pattern because of the smaller number of deaths but has remained relatively stable across the quarters in recent years (Figure 4).

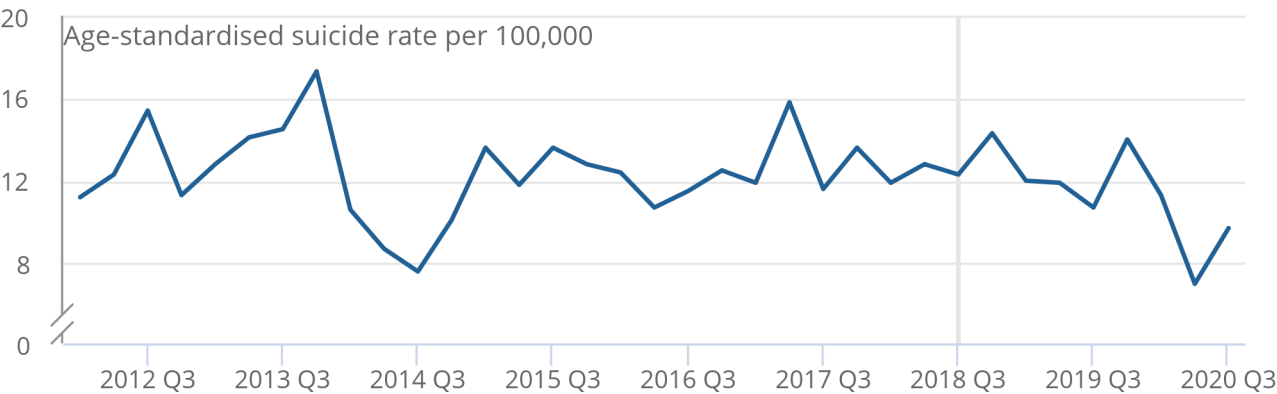
**Figure 4: Suicide rates in Wales over time are volatile because of small numbers of deaths**

Age-standardised suicide rates, persons, by quarter, Wales, 2012 to 2020

Figure 4: Suicide rates in Wales over time are volatile because of small numbers of deaths

Standard of pr  
was lowered o  
26 July 2018

Age-standardised suicide rates, persons, by quarter, Wales, 2012 to 2020



Source: Office for National Statistics – Suicides in England and Wales

Notes:

1. The National Statistics definition of suicide is given in [Section 10: Glossary](#).
2. Figures for 2020 are provisional and will be finalised in late 2021 in the annual 'Suicides in the UK' bulletin.
3. Figures for Wales exclude deaths of non-residents, based on latest postcode boundaries.
4. The lower number of deaths registered caused by suicide in Quarter 2 of 2020 should be interpreted with caution; this likely reflects delays to inquests because of the impact of the coronavirus (COVID-19) pandemic on the coroner's service.
5. Q1 refers to January to March (inclusive), Q2 refers to April to June, Q3 refers to July to September, and Q4 refers to October to December.

## **4 . It is unlikely that the recent legal standard of proof change is the only factor associated with recent changes in suicide rates**

While the rate of registered deaths caused by suicide has increased in recent years, it is not possible to say whether this is because of the recent legal change in the coroner standard of proof. First, there has not been a consistent pattern of increase in the rate of suicide across England and Wales since the legal change, and second, the upward trend started before the change in the coroner's standard of proof.

Whenever a change in suicide rates occurs, the reasons are complex and will rarely be because of one factor alone. Changes can generally be explained by two broad factors: true changes in the number of deaths caused by suicide because of a complex number of social factors, and artefacts in the data such as the change in the legal standard of proof.

Artefacts in the data occur regularly, demonstrated more recently in the second quarter (Apr to June) of 2020 where the pronounced drop in the rate of registered suicides is likely because of the coronavirus (COVID-19) pandemic causing delays to coroner's inquests.

The evolving nature of the data makes it difficult to understand changes and their impact over time. See our [Recent trends in suicide article](#) for further information on a range of factors associated with recent changes in suicide rates in England and Wales.

## **5 . Conclusions given by coroners have changed in a way that is consistent with the lower standard of proof**

Despite the overall death registrations data being inconclusive, data on the conclusions given by coroners do show a change that is consistent with the lower standard of proof.

[Suicide statistics](#) include deaths with an underlying cause of intentional self-harm; for these deaths, coroners had enough evidence to conclude that the deceased intended to end their own life. Suicide statistics also include deaths with an underlying cause of injury or poisoning of undetermined intent, based on the assumption that these are likely suicides; for these deaths, coroners were unable to determine whether the deceased did or did not intend to end their own life. Given the standard of proof change, one would expect the proportion of suicides with an underlying cause of intentional self-harm to increase.

### **Among men in England, the proportion of suicides with an underlying cause of intentional self-harm has risen by over 11 percentage points since before the change in the standard of proof**

Looking at quarterly registrations for England, data for men show an increase in the percentage of deaths given an underlying cause of intentional-self harm. The increase began in the third quarter (July to Sept) of 2018, the time when the standard of proof was lowered, and the increase has continued into the latest 2020 death registrations figures (Figure 5).



Among males in England, before the change, in the second quarter (Apr to June) of 2018, coroners concluded that 78.7% of the male deaths included in our suicide statistics were caused by intentional self-harm, rising to 89.9% in Quarter 3 of 2020 (Figure 5). The increase in the number of suicides with an underlying cause of intentional self-harm is mirrored by a decrease in the number of suicides with an underlying cause of injury or poisoning of undetermined intent – that is, suicides where the intent of the deceased is unclear based on the evidence available to the coroner. The percentage of suicides caused by undetermined intent decreased from 21.3% in Quarter 2 2018 to 10.1% in Quarter 3 2020.

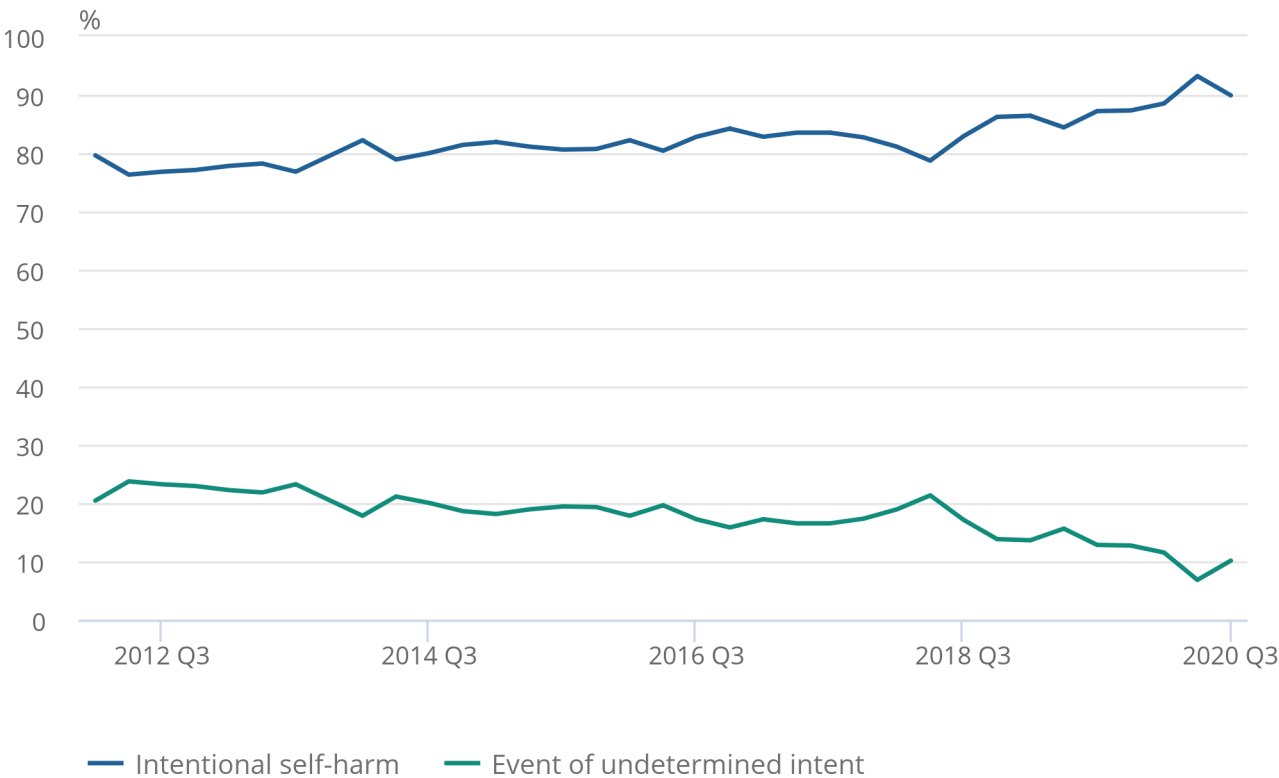
The clear change in the categorisation of these deaths by coroners does not impact our statistics, as the National Statistics definition used already include the affected categories – intentional self-harm and injury or poisoning of undetermined intent.

**Figure 5: Among males in England, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities**

Percentage of deaths from intentional self-harm and undetermined intent by quarter, males, England, 2012 to 2020

Figure 5: Among males in England, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities

Percentage of deaths from intentional self-harm and undetermined intent by quarter, males, England, 2012 to 2020



Source: Office for National Statistics – Suicides in England and Wales

Notes:

1. This figure separates deaths where the underlying cause was intentional self-harm or injury or poisoning of undetermined intent, based on the International Classification of Diseases, 10th Revision (ICD-10, codes X60 to X84 and Y10 to Y34, respectively). The National Statistics definition of suicide (see [Section 10: Glossary](#)) includes deaths from these two underlying causes.
2. Figures for 2020 are provisional and will be finalised in late 2021 in the annual 'Suicides in the UK' bulletin.
3. Figures for England exclude deaths of non-residents, based on latest postcode boundaries.
4. Q1 refers to January to March (inclusive), Q2 refers to April to June, Q3 refers to July to September, and Q4 refers to October to December.

## **For females in England, the proportion of suicides with an underlying cause of intentional self-harm has risen by almost 11 percentage points since before the change in the standard of proof**

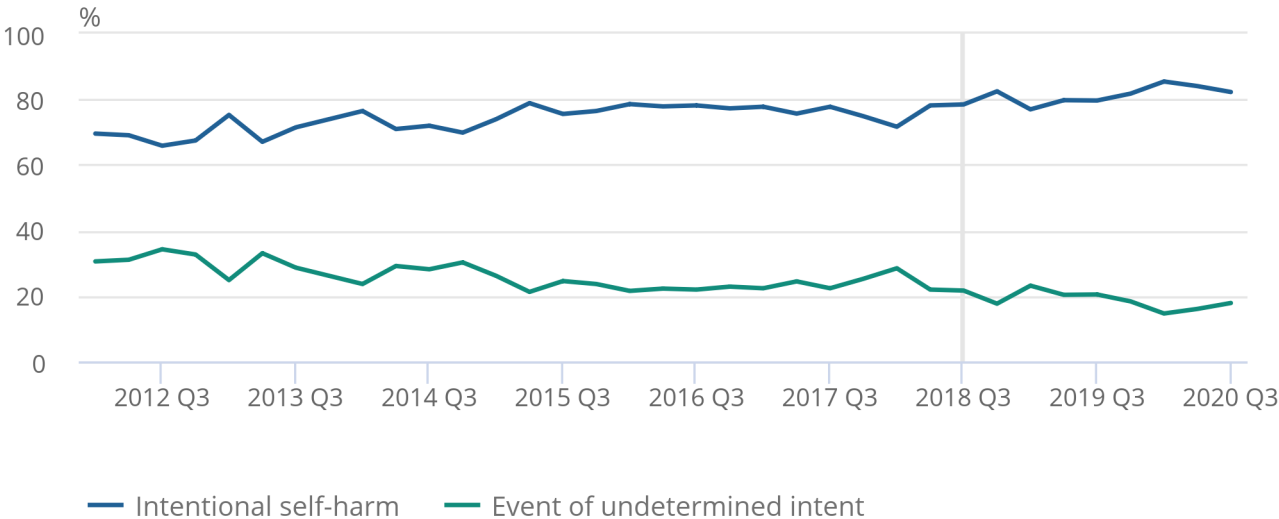
Among females in England, the increase in the percentage of suicides with an underlying cause of intentional self-harm began slightly earlier in the data time series. The percentage of suicides caused by intentional self-harm increased from 71.6% in Quarter 1 (Jan to Mar) 2018 to 82.2% in Quarter 3 2020 (Figure 6). This also coincides with a decrease in the percentage of suicides caused by an injury or poisoning of undetermined intent, from 28.4% in Quarter 1 2018 to 17.8% in Quarter 3 2020.

**Figure 6: Among females in England, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities**

Percentage of deaths from intentional self-harm and undetermined intent by quarter, females, England, 2012 to 2020

Figure 6: Among females in England, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities

Percentage of deaths from intentional self-harm and undetermined intent by quarter, females, England, 2012 to 2020



Source: Office for National Statistics – Suicides in England and Wales

Notes:

1. This figure separates deaths where the underlying cause was intentional self-harm or injury or poisoning of undetermined intent, based on the International Classification of Diseases, 10th Revision (ICD-10, codes X60 to X84 and Y10 to Y34, respectively). The National Statistics definition of suicide (see [Section 10: Glossary](#)) includes deaths from these two underlying causes.
2. Figures for 2020 are provisional and will be finalised in late 2021 in the annual 'Suicides in the UK' bulletin.
3. Figures for England exclude deaths of non-residents, based on latest postcode boundaries.
4. Q1 refers to January to March (inclusive), Q2 refers to April to June, Q3 refers to July to September, and Q4 refers to October to December.

**In Wales, the proportion of suicides with an underlying cause of intentional self-harm has increased by over 17 percentage points since before the change in the standard of proof**

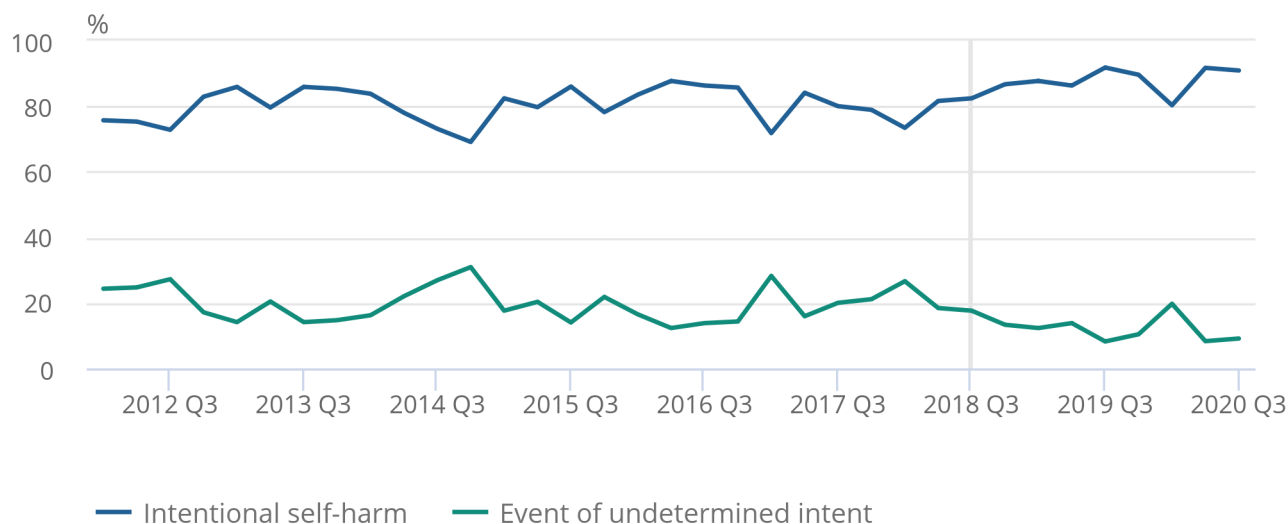
For all persons in Wales, the increase in the percentage of suicides with an underlying cause of intentional self-harm also began in Quarter 1 2018, increasing from 73.4% to 90.9% in Quarter 3 2020 (Figure 7). This also coincides with a decrease in the percentage of suicides caused by an injury or poisoning of undetermined intent, from 26.6% in Quarter 1 2018 to 9.1% in Quarter 3 2020.

**Figure 7: Among all persons in Wales, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities**

Percentage of deaths from intentional self-harm and undetermined intent by quarter, persons, Wales, 2012 to 2020

Figure 7: Among all persons in Wales, evidence shows a change in coronial-related behaviour consistent with the lower standard of proof – balance of probabilities

Percentage of deaths from intentional self-harm and undetermined intent by quarter, persons, Wales, 2012 to 2020



Source: Office for National Statistics – Suicides in England and Wales

**Notes:**

1. This figure separates deaths where the underlying cause was intentional self-harm or injury or poisoning of undetermined intent, based on the International Classification of Diseases, 10th Revision (ICD-10, codes X60 to X84 and Y10 to Y34, respectively). The National Statistics definition of suicide (see [Section 10: Glossary](#)) includes deaths from these two underlying causes.
2. Figures for 2020 are provisional and will be finalised in late 2021 in the annual 'Suicides in the UK' bulletin.
3. Figures for Wales exclude deaths of non-residents, based on latest postcode boundaries.

The increase in the percentage of deaths from intentional self-harm, and the coinciding decrease in the percentage of deaths from event of undetermined intent, is explained by a greater number of deaths receiving short form suicide conclusions (that is, formal outcome of the inquest that the cause of death was suicide having ruled out all other possible explanations) from the coroner investigating the death, and a decrease in the number of deaths receiving open conclusions.

In summary, the data presented here show that coroners have changed their behaviour in line with the standard of proof change. However, it seems as though this change has been gradual, as opposed to something that happened suddenly following the change in the standard of proof.

## 6 . The number of deaths registered from certain accidental causes has decreased in 2019

Given that the lower standard of proof relaxes the evidence threshold coroners need to conclude that a death was suicide, it is possible that numbers of certain accidental causes of death will decrease. Previous academic research has found that [coroners have sometimes used accidental conclusions for deaths considered as suicide by clinicians](#).

To examine this, we look at deaths registered in England and Wales from three accidental causes: accidental drowning (International Classification of Diseases: ICD-10 codes W65 and W74), accidental hanging (ICD-10 codes W75 and W76) and accidental poisoning (ICD-10 codes X40 and X49). We chose to look at these accidental causes because there are equivalent causes in the National Statistics definition of suicide.

When comparing the number of 2018 accidental hanging registrations (181 deaths) to the average number of accidental hanging registrations in each of the previous five years following the change in the standard of proof (2013 to 2017 ; 163 deaths), 2018 saw a percentage increase of 11.3% (see Figure 8). There was also an increase in the number of accidental poisoning registrations, with 2018 being 30.1% higher than the average number of registrations in each of the previous five years.

However, when comparing 2019 accidental registrations with the average number of accidental registrations in the years before the standard of proof change (2013 to 2017), 2019 saw a percentage decrease of 18.5% for accidental drowning (171 in 2019 compared with 210 for 2013 to 2017 average) and a 5.9% decrease for accidental hanging (153 in 2019 compared with 163 for 2013 to 2017 average) (Figure 8).

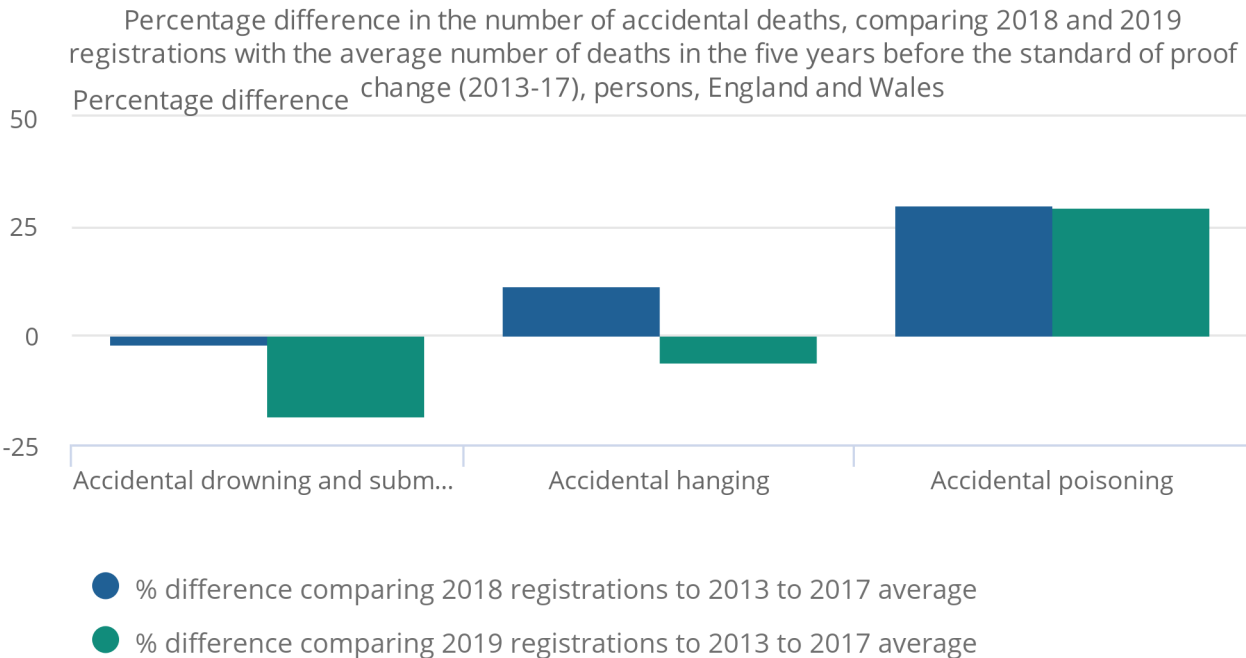
The reduction in accidental deaths registered in 2019 compared with previous years may evidence that coroners have changed their behaviour in line with the standard of proof change, however, this change has been gradual and data are based on small numbers of deaths so need continuous monitoring in the future.

In recent years, the above average number of registered accidental poisoning deaths is likely explained by the [increasing number of deaths related to drug poisoning in England and Wales](#).

**Figure 8: Deaths caused by accidental poisoning have increased in 2018 and 2019 compared with the average number of accidental poisonings in each of the previous five years**

Percentage difference in the number of accidental deaths, comparing 2018 and 2019 registrations with the average number of deaths in the five years before the standard of proof change (2013-17), persons, England and Wales

Figure 8: Deaths caused by accidental poisoning have increased in 2018 and 2019 compared with the average number of accidental poisonings in each of the previous five years



Source: Office for National Statistics – Suicides in England and Wales

Notes:

1. Deaths where the underlying cause was accidental drowning or submersion, accidental hanging, or accidental poisoning, based on the International Classification of Diseases, 10th Revision (ICD-10, codes W65 - W74, W75 – W76, and X40 - X49 respectively). The National Statistics definition of suicide (see [Section 10: Glossary](#)) includes deaths from these two underlying causes.
2. Data is for deaths certified by coroners only and those aged 10 years and above
3. Figures for England and Wales include deaths of non-residents, based on the latest postcode boundaries

7 . The number of hard-to-code narrative conclusions has fallen in recent years

As described in Section 1, following an inquest a coroner will conclude the cause of death. Coroners usually give “short form” conclusions, when the cause of death is clear and having ruled out all other possible explanations.

Sometimes, coroners give “narrative” conclusions; in several sentences these record how, and in what circumstances, the death occurred. Following death registration, expert mortality coders in the Office for National Statistics read narrative conclusions and will then assign each death with an underlying cause of death from the International Classification of Diseases, 10th Revision (ICD-10).

While it is straightforward to assign the underlying cause of death for many narrative conclusions, some narrative conclusions are more difficult to code, referred to as “hard-to-code” narrative conclusions. Hard-to-code narrative conclusions are not included in suicide statistics.

Since the change in the standard of proof, as with accidental causes of death, it is possible that numbers of hard-to-code narrative conclusions will reduce. To see if this has been the case, here we look at the number of hard-to-code narrative conclusions that were assigned an underlying cause of accidental hanging (International Classification of Diseases: ICD-10 codes W75 to W76) or accidental poisoning (ICD-10 codes X40 to X49) for deaths registered in England and Wales.

Looking at the data, and the number of deaths where the underlying cause was accidental hanging or poisoning and the narrative conclusion was hard-to-code, these increased by 9.5% in 2018 (a total of 309 registered deaths) when compared with the average number of registrations in each of the five years before the legal change (2013 to 2017; an average of 282 deaths per year). However, when looking at the number of registrations in 2019 (259 deaths), there was a reduction of 8.2% when compared with the average number of registrations in each of the five years before the legal change (2013 to 2017).

The reduction in hard-to-code narrative conclusions in 2019 compared with previous years may evidence that coroners have changed their behaviour in line with the standard of proof change, however, this change has been gradual and data are based on small numbers of deaths so need continuous monitoring in the future.

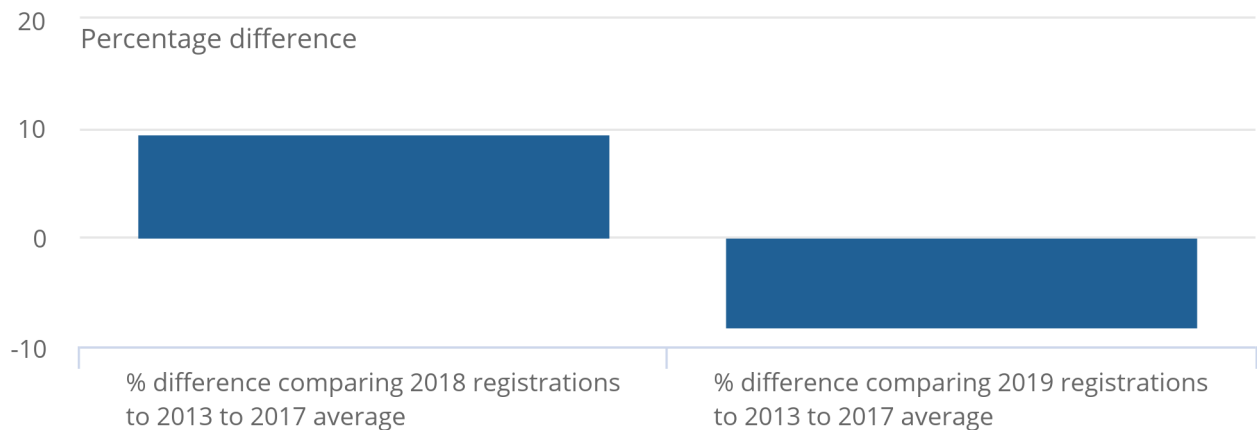


**Figure 9: The number of accidental deaths (hanging or poisoning) with hard-to-code narrative conclusions fell in 2019**

Percentage difference in the number of accidental deaths (hanging or poisoning) that had a hard-to-code narrative conclusion, comparing 2018 and 2019 registrations to the average number of deaths in the five years before the standard of proof change (2013)

Figure 9: The number of accidental deaths (hanging or poisoning) with hard-to-code narrative conclusions fell in 2019

Percentage difference in the number of accidental deaths (hanging or poisoning) that had a hard-to-code narrative conclusion, comparing 2018 and 2019 registrations to the average number of deaths in the five years before the standard of proof change (2013)



Source: Office for National Statistics – Suicides in England and Wales

Notes:

- 1. Deaths that had hard-to-code narrative conclusions (see [Section 10: Glossary](#)) where the underlying cause was accidental hanging, or accidental poisoning, based on the International Classification of Diseases, 10th Revision (ICD-10, codes W75 – W76, and X40 - X49 respectively). The National Statistics definition of suicide (see Section 8: glossary) includes deaths from these two underlying causes.
- 2. Data is for deaths certified by coroners only and those aged 10 years and above
- 3. Figures for England and Wales include deaths of non-residents, based on the latest postcode boundaries

8 . Implications for interpreting suicide statistics

Since the change in the standard of proof, suicide rates have not seen unprecedented increases. Recent increases have been seen among English males and females as well as Welsh females, but these increases started before the change in the standard of proof. During the same period Welsh men have seen decreases in suicide rates. Despite recent changes, the latest rates are still statistically significantly lower than they were at the beginning of our data time series in 1981.

While coroners have identified more deaths as intentional self-harm, and fewer deaths have been reported as undetermined intent, these changes do not impact statistics on suicide as both causes of death are already included in the statistics.

When looking at relevant accidental causes of death, there have been reductions in deaths from accidental hangings and accidental drowning registered in 2019. It is possible this could be because of the lower standard of proof, with these deaths now being identified as suicide.

However, changes in the conclusions reached by coroners have been gradual as opposed to something that has happened suddenly.

As such, when interpreting recent suicide death registration statistics, we cannot conclude that the change in the standard of proof is solely responsible for the recent increase in suicide rates. Whenever a change in suicide rates occurs, the reasons are complex and will seldom be because of one factor alone. The Office for National Statistics will continue to monitor over the coming years to further understand the impact of the change in the standard of proof on suicide rates.

## **9 . Change in the standard of proof used by coroners and its impact on suicide death registrations data in England and Wales data**

[Standard of proof suicide data](#)

Dataset | Released 8 December 2020

Number of suicides and suicide rates, by quarter, sex and country and underlying cause of death and proportion of suicides registered before and after the change in standard of proof.

## **10 . Glossary**

### **National Statistics definition of suicide**

This release is based on the National Statistics definition of suicide; this includes all deaths from intentional self-harm for persons aged 10 years and over and deaths caused by injury or poisoning where the intent was undetermined for those aged 15 years and over. Further information on the definition can be found in the [Suicide rates in the UK QMI](#).

### **Standard of proof**

The level of evidence needed by coroners when determining whether a death was caused by suicide, which was changed from the criminal standard – beyond all reasonable doubt – to the civil standard – on the balance of probabilities on 26 July 2018.

### **Registration delay**

Figures are based on deaths registered in each calendar year, rather than the date on which the death occurs. The difference between these dates is known as the registration delay.

## Narrative conclusion

For some deaths a coroner provides in several sentences how, and in what circumstances, the death occurred. Following death registration, expert mortality coders in the Office for National Statistics read narrative conclusions and will then assign each death with an underlying cause of death.

## Hard to code narrative conclusion

A narrative conclusion where the underlying cause of death is difficult to assign based on the information provided by the coroner. These are not included in suicide statistics.

## Open conclusion

These conclusions are given by coroners when it is not possible to determine whether the death was a result of an accident or a result of intentional self-harm.

## Age-standardised mortality rate

Age-standardised mortality rate in this bulletin refers to a weighted average of the age-specific mortality rates per 100,000 people and standardised to the 2013 European Standard Population. Age-standardised mortality rates allow for differences in the age structure of populations and therefore allow valid comparisons to be made between geographic areas, the sexes and over time.

## Statistical significance

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

# 11 . Data sources and quality

Statistics on mortality are derived from the information provided when deaths are certified and registered. These statistics are assessed fully compliant with the [Code of Practice for Statistics](#) and are therefore designated as [National Statistics](#).

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Mortality statistics in England and Wales QMI](#), the [Suicide rates in the UK QMI](#) and the [User guide to mortality statistics](#).

## Populations

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

## Strengths

Suicide deaths are compiled using information supplied when a death is registered, which gives complete population coverage.

The release uses the National Statistics definition of suicide, which is consistently used by government departments, agencies and the devolved administrations across the UK.

Quality assurance procedures have been undertaken throughout all stages of the analysis to minimise the risk of error.

## Limitations

Quarterly data for 2020 are provisional and may be subject to changes once annual death registrations are complete. For example, some deaths may be registered but the underlying cause of death has not yet been coded. Data for 2020 will be finalised in the annual [Suicides in the UK](#) release in 2021.

Numbers of suicides by quarter are often small, particularly where males and females are analysed separately, as demonstrated by the relatively wide confidence intervals. For this reason, any comparisons should be interpreted with caution and particular attention should be paid to overlapping confidence intervals where differences are then not statistically significant.

Since the beginning of our data time series in 2001, the number of suicide registrations in Quarter 1 (Jan to Mar) tend to be lower than those observed in any of the other quarters, something that should be kept in mind when making comparisons. Further guidance on how to interpret the data included in this release is available in the "Table interpretation" tab of the [accompanying dataset](#).

## Collaborations and acknowledgement

David Gunnell, Louis Appleby, Keith Hawton, Navneet Kapur, and Ann John.

## 12 . Related links

### [Suicides in England and Wales](#)

Bulletin | Released 1 September 2020

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

### [Quarterly suicide death registrations in England](#)

Bulletin | Released 1 September 2020

Provisional rate and number of suicide deaths registered in England per quarter. Includes 2001 to 2019 registrations and provisional data for Quarter 1 (Jan to Mar) and Quarter 2 (Apr to June) 2020.