

Statistical bulletin

Quarterly suicide death registrations in England: 2001 to 2019 registrations and Quarter 1 (Jan to Mar) to Quarter 4 (Oct to Dec) 2020 provisional data

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) to Quarter 4 (Oct to Dec) 2020.

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1 . Main points

- Provisional analysis show there were 11.7 suicide deaths per 100,000 people in Quarter 4 (Oct to Dec) 2020 in England, equivalent to 1,461 deaths registered; this rate is similar to rates seen in the fourth quarter of previous years.
- In Quarter 4 2020 death registrations, there were 17.7 suicide deaths per 100,000 males (1,085 deaths registered) and 5.9 suicide deaths per 100,000 females (376 deaths registered); these rates are similar to rates observed in the same quarter in previous years.
- Taken as a whole, 4,902 suicides were registered in England in 2020, equivalent to a provisional rate of 9.9 suicide deaths per 100,000 people; this represents a statistically significant reduction in the rate from 2019 when there were 10.8 suicide deaths per 100,000, but caution is required in the interpretation of this decrease.
- The reduction in the number of suicides registered in 2020 from the previous year most likely reflects delays to coroner inquests, because of the impact of the coronavirus pandemic, as opposed to a genuine decrease in suicide.

If you are a journalist covering a suicide-related issue, please consider following the [Samaritans' media guidelines on the reporting of suicide](#), owing to 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 Ireland), email jo@samaritans.org or [visit the Samaritans website](#) to find details of the nearest branch. Samaritans is available round the clock, every single day of the year, providing a safe place for anyone struggling to cope, whoever they are, however they feel, whatever life has done to them.

2 . Quarterly suicides

Around half of the suicides registered to the end of 2020 had a date of death that was also in 2020

The analysis reported in this release cannot be used to show the number of suicides with a date of death in 2020, including those that occurred during the coronavirus (COVID-19) pandemic.

Of the 4,902 suicides registered in England between January and December of 2020, more than half of these had a date of death that was also in 2020 (2,512 deaths or 51.2%). This is in line with expectation, given coroner involvement with the investigation of these deaths and the amount of time it takes to hold an inquest.

All deaths caused by suicide in England are investigated by coroners. Given the length of time it takes to hold an inquest, deaths tend to be registered around five to six months after they occurred.

For Quarter 4 (Oct to Dec) of 2020, 3.3% of the 1,461 suicides registered in the period occurred in the same period (48 deaths), with the remaining deaths occurring in the first quarter of 2020 (17.9% or 261 deaths), the second quarter of 2020 (26.3% or 384 deaths), the third quarter of 2020 (30.5% or 445 deaths) or prior to 2020 (22.1% or 323 deaths).

Table 1: Quarterly registered number and percentage of suicides by date of occurrence, England, provisional 2020 registrations

		Quarter of occurrence 2020					Total registered
		Prior to 2020	Q1	Q2	Q3	Q4	
Quarter of registration 2020	Q1	1,217 (96.4%)	45 (3.6%)				1,262
	Q2	431 (51.0%)	369 (43.7%)	45 (5.3%)			845
	Q3	419 (31.4%)	466 (34.9%)	378 (28.3%)	71 (5.3%)		1,334
	Q4	323 (22.1%)	261 (17.9%)	384 (26.3%)	445 (30.5%)	48 (3.3%)	1,461
Occurred		2,390	1,141	807	516	48	

Source: Office for National Statistics – Quarterly suicide death registrations in England

Notes

1. 2020 registration data are provisional.
2. The National Statistics definition of suicide is given in Section 5: Glossary.
3. Figures are for persons aged 10 years and over.
4. Figures for England exclude death of non-residents; geographical boundaries are based on the most up-to-date information available at the time of publication.
5. 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.
6. More details can be found in Section 6: Measuring the data.

The reduction in the number of suicides registered in 2020 from the previous year most likely reflects delays to coroner inquests, because of the impact of the coronavirus pandemic, as opposed to a genuine decrease in suicide

Based on the best available provisional data, 4,902 suicides were registered in England in 2020, equivalent to a provisional age-standardised mortality rate of 9.9 deaths per 100,000 people. The provisional suicide rate for 2020 is statistically significantly lower than the rate seen in 2019, when there were 10.8 suicides per 100,000 people (5,316 registered deaths).

These numbers should be interpreted with caution. At the beginning of the coronavirus pandemic, during the second quarter (Apr to June) of 2020, there was a 36.1% reduction in the rate of suicide when compared with the same period in 2019. Since the third quarter (Jul to Sept) of 2020, numbers of registered suicides have returned to previously observed levels.

The number of suicides registered in the second quarter of 2020 is the lowest it has been since 2001, when the data time series reported for this statistical release begins. As opposed to representing a genuine change in suicide, the lower number of registrations in the second quarter of 2020 most likely reflects the impact of the coronavirus pandemic on the coroner's service in England and Wales; for example, delays to inquests caused by the service adapting to social distancing measures.

Compared with the second quarter of 2020, the number of registered suicides increased in the third and fourth quarters. The increase most likely reflects the resuming of coroner's inquests; the number of registered suicides in the second half of 2020 are like those seen in previous years.

3 . Death registration delays

Registration delays continue to increase in the fourth quarter of 2020 in England

Registration delays refer to the time between the date of death and its eventual registration after inquest. When calculating the average delay between occurrence and registration, the median is used rather than the mean, as the median is not affected by rare cases where it takes many years for the death to be registered. For suicides, the median registration delay in Quarter 4 (Oct to Dec) increased from 172 days in 2019 to 177 days in 2020.

The median registration delay increased across all regions of England except Yorkshire and The Humber, East of England, London and South West in the fourth quarter of 2020. It was highest in the East Midlands – 254 days (up from 206 days in the same period in 2019).

4 . Quarterly suicide data

[Deaths caused by suicide by quarter in England](#)

Dataset | Released 26 April 2021

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) to Quarter 4 (Oct to Dec) 2020.

5 . Glossary

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 where the intent was undetermined for those aged 15 years and over. For further information on the definition used, please see our [annual release](#).

Year of registration

Figures are based on deaths registered in each calendar year, rather than the date on which the death occurs.

Registration delay

The registration delay refers to the time lag between the date of death (that is, when the death occurred) and the date the death was registered. For further information on the impact of registration delays, see [Section 6](#).

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. They 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. For more information see Section 8 of the [Suicide rates in the UK QMI](#).

Statistical significance

The term "significant" refers to [changes or differences based on unrounded figures](#). Significance has been determined using the 95%, where instances of non-overlapping [confidence intervals](#) between figures indicate the difference is unlikely to have arisen from random fluctuation. For more information see Section 8 of the [Suicide rates in the UK QMI](#).

6 . Measuring the data

The ONS is publishing more data and analysis than ever before. We are constantly reviewing our publications based on your feedback to make sure that we continue to meet the needs of our users. As a result, future editions of this publication may focus more strongly on headline indicators and main messages. Thank you for your continued support and we value your feedback.

Figures are for deaths registered, rather than deaths occurring in each quarter. In England, deaths caused by suicide are investigated by coroners; the investigation, known as an "inquest", can take months and sometimes years. The amount of time it takes to complete an inquest creates what is known as a "registration delay", which is a lag between the date of death and the date of death registration. For deaths caused by suicide, this generally means that around half of the deaths registered in a given year will have occurred in the previous year or earlier.

As such, publishing suicide figures based on death registration year means that many deaths appear in the statistics of a year that is later than the year in which the death occurred. Despite registration delays, publication of suicide statistics by registration year 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 historical data and be inconsistent with other published mortality figures. Additionally, data provided in our [Suicide occurrences, England and Wales](#) annual release show that when you compare rates based on registration year and rates based on the date of death, these follow the same pattern of peaks and troughs over time.

Quarterly age-standardised rates

Age-standardised mortality rates are calculated using the number of deaths and mid-year population estimates provided by our Population Estimates Unit. [Mid-year population estimates](#) were used for 2001 to 2019 rate calculations while [2018-based ONS population projections](#) were used for 2020 age-standardised rates. For more information on age-standardisation, please see the [Quality and Methodology Information report](#).

Calculation of mortality rates for quarterly deaths requires adjustments to be made to annual population estimates in order to calculate rates that are comparable with annual rates.

We calculate an annual population centred on the mid-point of the quarter using two years' worth of population estimates or projections. This is then multiplied by the proportion of the number of days within a quarter of the total number of days within that year. The output is used as the population denominator in calculations of age-standardised and age-specific mortality rates.

Quarter 4 (Oct to Dec) 2020 population:

$$\left(population2020(i) + \left(population2021(i) - population2020(i) * \left(\frac{m}{M} \right) \right) \right) * \left(\frac{N}{M} \right)$$

where:

- m is the number of days from 1 Oct 2020 (the start of the mid-year for the population estimate) to the mid-point of the relevant quarter, inclusive
- N is the number of days in the quarter, for example, Quarter 4 (Oct to Dec) 2020
- M is the number of days in 2020
- (i) is the age group

Quality and methodology

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created, including the change in the standard of proof, is available in the [Suicide rates in the UK QMI](#). It is also explained in this article: [New standard of proof for suicide at inquests in England and Wales](#).

7 . Strengths and limitations

This release aims to monitor suicide death registrations in England, based on the best available provisional data.

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.

Quarterly age-standardised rates are included to aid interpretation, such as whether changes by quarter in a given registration year are statistically meaningful. This is especially important when interpreting low numbers of deaths, which are prone to random fluctuation and volatility over time.

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) tends 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](#).

8 . Related links

[Suicides in England and Wales: 2019 registrations](#)

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.

[Recent trends in suicide: death occurrences in England and Wales between 2001 and 2018](#)

Article | Released 8 December 2020

Factors associated with recent changes in the rate of suicide in England and Wales, based on the date of death.

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

Article | Released 8 December 2020

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.