

Article

Deaths from suicide that occurred in England and Wales: April to July 2020

Suicides that occurred between April and July 2020 in England and Wales analysed by sex, age, and suicide method.

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1. Main points

- This is the first assessment of suicides in England and Wales, based on official death registrations, that
 occurred during the early months of the coronavirus (COVID-19) pandemic, until now not feasible because
 of death registration delays.
- 1,603 suicides occurred between April and July 2020 in England and Wales, the most complete period because of the late registration of deaths, equivalent to an age-standardised mortality rate of 9.2 deaths per 100,000 people; this rate is statistically significantly lower than rates for the same period in the previous three years, however, is statistically similar to the rate in 2016.
- The lower suicide rate was primarily driven by a decrease for males; the male suicide rate (13.9 deaths per 100,000 males) was statistically significantly lower than rates in the same period between 2017 and 2019, whereas the female rate (4.7 deaths per 100,000 females) showed no statistically significant change with earlier years.
- Between April and July 2020, age-specific suicide rates in England and Wales statistically significantly decreased for those aged 10 to 24 years and 25 to 44 years, when compared with the same period in 2019
- These statistics are consistent with other research including real-time suicide surveillance in England and international research studies during the pandemic.
- Deaths caused by suicide in England and Wales are investigated by coroners, resulting in registration delays; while these provisional data for 2020 suicides will be underestimates, late registrations for suicides between April and July 2020 are unlikely to fully explain the decrease, as most suicides for this period will now be registered even when allowing for disruption to coroners' inquests caused by the pandemic.

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

If you are struggling to cope, please call Samaritans for free on 116 123 (UK and ROI) or contact other sources of support, such as those listed on the NHS's <u>help for suicidal thoughts</u> webpage. Support 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.

Statistician's comment

"The latest available evidence shows that suicide rates did not increase during the early stages of the pandemic, which is contrary to some speculation at the time. Instead, we found suicide rates to be lower between April and July 2020 - the first wave of COVID-19 in England and Wales - when compared with the same period in previous years.

"Our findings are consistent with other studies, which found no increase in suicide in the seven months that followed the first national lockdown in 2020. They are also comparable with research covering other countries - such as the United States, Germany, Japan and Australia - which found that suicide numbers have remained largely unchanged or declined in the early months of the pandemic compared with the expected levels based on the pre-pandemic period."

Julie Stanborough, Health Analysis and Life Events, Office for National Statistics

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2. Background

This article provides the first analysis of suicides, based on official death registrations, that occurred at the beginning of the coronavirus (COVID-19) pandemic (April to July 2020), when there were widespread national and local restrictions. We use the National Statistics definition of suicide in this article, see Glossary for more information. Unlike our annual suicide publication, the analysis in this article is based on the date on which the death occurred.

There is understandable concern on how the pandemic has affected well-being and suicide risk (for more information, see One year on: data on COVID-19). The aim of the article is to contribute to existing evidence and to inform decision-making and policy monitoring of suicide prevention in England and Wales, based on the best available provisional data.

Until now it has not been feasible to provide insights into suicides that occurred during the early coronavirus pandemic period because of death registration delays. Deaths caused by suicide are investigated by coroners in England and Wales, resulting in a delay between the date of death and the date of death registration. In the past five years, median death registration delays from suicide have been no more than 166 days in England and 165 days in Wales. The article focuses on deaths between April 2020 and July 2020, for deaths registered up to 17 July 2021, the most complete period.

Given that roughly a year has passed, most suicides in the period of study have now been registered, even when allowing for the disruption to coroners' inquests caused by the pandemic. Our <u>quarterly provisional suicide</u> registrations release for England showed that the impact of the coronavirus pandemic on the suicide registrations was relatively short-term (<u>see Section 4</u> for further information). We have restricted this analysis to the end of July 2020 as data are not sufficiently complete, because of registration delays in the subsequent months.

Figures for suicide based on the date of death are subject to change, because of late registration of deaths. This analysis should be interpreted with caution and users should bear in mind the strengths and limitations outlined in Section 4: Late registration of suicide deaths and Section 8: Data sources and quality.

3. Suicides occurring between April and July 2020

There were 1,603 suicides between April and July 2020 in England and Wales, 18.0% fewer than the same period in 2019 when there were 1,955 suicides and 12.7% fewer than the five-year average (2015 to 2019 April to July period) of 1,835 suicides.

Around three-quarters of suicide deaths that occurred between April and July 2020 were among males (1,185 deaths; 73.9%).

There is no evidence that the number of suicides increased between April and July 2020, a period coinciding with the early coronavirus pandemic

Between April and July 2020, the age-standardised suicide rate was 9.2 deaths per 100,000 people, this was statistically lower than the same period between the years 2017 and 2019. However, the April to July suicide rate for 2020 was not statistically different to that of 2016.

The lower suicide rate for April to July 2020 is primarily driven by a decrease in male suicides. Male suicide rates were statistically lower during this period in 2020 (13.9 deaths per 100,000 males) compared with rates for the same periods between 2017 and 2019. Female rates during the same 2020 period (4.7 deaths per 100,000 females) showed no <u>statistically significant</u> changes with earlier years.

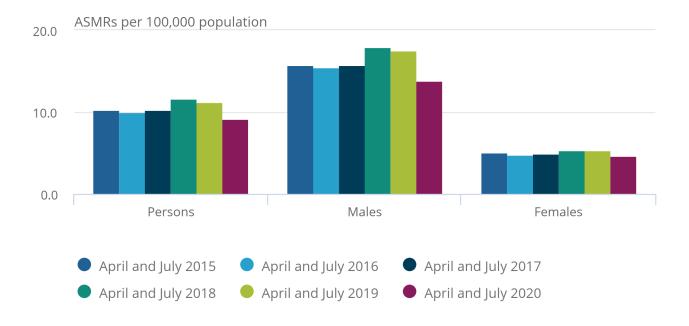
Figures for England and Wales separately are available in the accompanying dataset.

Figure 1: The April to July 2020 suicide rate decreased significantly for males

Age-standardised suicide rates by sex, England and Wales, deaths occurring between April and July, between 2015 and 2020

Figure 1: The April to July 2020 suicide rate decreased significantly for males

Age-standardised suicide rates by sex, England and Wales, deaths occurring between April and July, between 2015 and 2020



Source: Office for National Statistics - Deaths from suicide that occurred in England and Wales

Notes:

- 1. The National Statistics definition of suicide is given in Section 7: Glossary.
- 2. Figures are for persons aged 10 years and over.
- 3. ASMRs per 100,000 population, standardised to the 2013 European Standard Population. ASMRs are used to allow comparison between populations which may contain different proportions of people of different ages.
- 4. Figures for England and Wales combined (area code K04000001) include death of non-residents.
- 5. Figures are for deaths occurring, rather than deaths registered 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. More details can be found in <u>Section 4: Late registrations of suicide deaths</u>.

The lower suicide rate between April and July 2020 was primarily driven by a reduction in suicide during April 2020

Looking at the same figures by month of death, there was a significant reduction in suicide rates in April 2020 compared with April 2019 and April 2018; rates from May to July 2020 were lower but not statistically different compared with the respective rates in 2019.

The reduction of suicide in April was a result of a statistically significant decrease in the male suicide rate for that month, when compared with April 2019. A similar decrease in males was also seen in June 2020 compared with the same month in 2019. Statistically significant decreases were not observed for females.

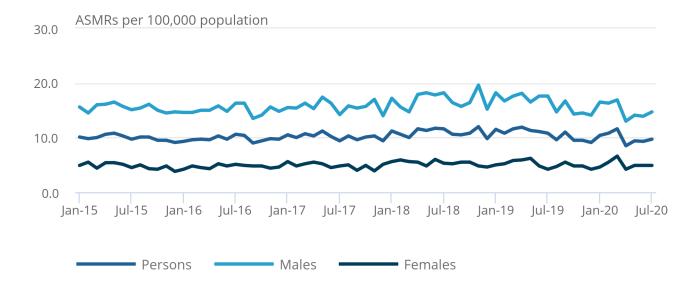
It is possible that some of the reduction in suicides will be explained by death registration delays. However, more than a year on, the impact of such delays is likely to have minimal impact for interpretation (see Section 4).

Figure 2: There were statistically significant decreases in the age-standardised mortality rates of all persons and males between March and April 2020

Monthly age-standardised suicide rates by sex, England and Wales, deaths occurring between January 2015 and July 2020

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Monthly age-standardised suicide rates by sex, England and Wales, deaths occurring between January 2015 and July 2020



Source: Office for National Statistics - Deaths from suicide that occurred in England and Wales

Notes:

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- 2. Figures are for persons aged 10 years and over.
- 3. ASMRs per 100,000 population, standardised to the 2013 European Standard Population. ASMRs are used to allow comparison between populations which may contain different proportions of people of different ages.
- 4. Figures for England and Wales combined (area code K04000001) include death of non-residents.
- 5. Figures are for deaths occurring, rather than deaths registered 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. More details can be found in <u>Section 4: Late registrations of suicide deaths</u>.

Age-specific suicide rates for persons decreased across all broad age groups in England and Wales. The largest decrease was seen in those aged 10 to 24 years between April and July 2020; the rate decreased by 30.2% from 6.3 deaths per 100,000 people in 2019 to 4.4 deaths per 100,000 in 2020, a statistically significant decrease. The only other age group to observe a statistically significant change in this period were those aged between 25 and 44 years; the rate decreased from 13.9 deaths per 100,000 people in 2019 to 10.5 deaths per 100,000 in 2020.

Males followed a similar trend to all persons; the only statistically significant changes in age-specific rates were decreases in those aged 10 to 24 and 25 to 44 years between April and July 2019 and April and July 2020.

Females also had several reductions by age, though because of the relatively smaller number of deaths none of the changes were found to be statistically significant. An increase in the age-specific suicide rate was seen among those aged 75 years and over as the rate increased by 25.0% from 3.6 deaths per 100,000 females in 2019 to 4.5 deaths per 100,000 in 2020, though this was not a statistically significant change. An increase in suicide rates among older women was also observed after the outbreak of Severe Acute Respiratory Syndrome (SARS) in Hong Kong.

Figure 3: There was a statistically significant decrease in the age-specific suicide rate for all persons aged 10 to 24 years and 25 to 44 years

Age-specific suicide rates for broad age groups, England and Wales, deaths occurring between April and July, between 2015 and 2020

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Age-specific suicide rates for broad age groups, England and Wales, deaths occurring between April and July, between 2015 and 2020



Source: Office for National Statistics - Deaths from suicide that occurred in England and Wales

Notes:

- 1. The National Statistics definition of suicide is given in <u>Section 7: Glossary</u>.
- 2. Figures are for persons aged 10 years and over.
- 3. Age-specific suicide rate per 100,000 population.
- 4. Figures for England and Wales combined (area code K04000001) include death of non-residents.
- 5. Figures are for deaths occurring, rather than deaths registered 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. More details can be found in <u>Section 4: Late registrations of suicide deaths</u>.

Suicide by method

Hanging, suffocation and strangulation (all grouped together) continued to be the most common method of suicide, accounting for 60.8% of all suicides that occurred between April to July 2020, an increase from 58.8% in April to July 2019 (Figure 4). While the latest increase was not statistically significant, hanging is the only method to see a statistically significant increase in proportion compared with April to July 2015 (from 55.1% of all suicides in 2015). This is consistent with the longer-term increase in suicide caused by hanging over the past two decades. The proportion of suicide deaths due to hanging was statistically higher in males (64.3%) than females (51.0%) between April and July 2020.

Poisoning was the second most common method and conversely saw a decrease in the proportions of all suicides since 2019, though this was not statistically significant. For suicides that occurred between April and July, poisonings decreased from 19.4% in 2019 to 18.9% in 2020.

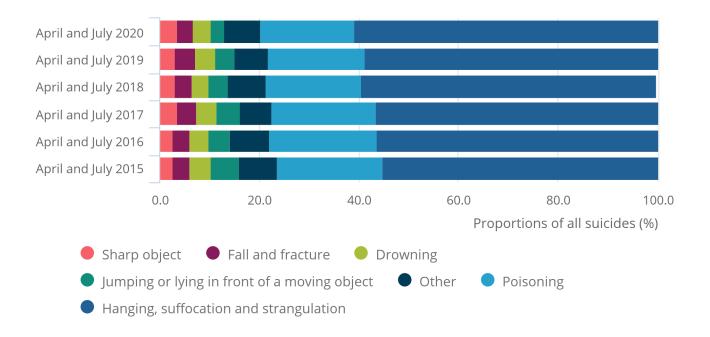
Reductions were also seen in the proportion of suicides caused by other methods including jumping or lying in front of a moving object, and fall and fracture.

Figure 4: The proportion of suicide deaths due to hanging continues to increase

Percentage of suicide by method, England and Wales, deaths occurring between April and July, between 2015 and 2020

Figure 4: The proportion of suicide deaths due to hanging continues to increase

Percentage of suicide by method, England and Wales, deaths occurring between April and July, between 2015 and 2020



Source: Office for National Statistics - Deaths from suicide that occurred in England and Wales

Notes:

- 1. The National Statistics definition of suicide is given in Section 7: Glossary.
- 2. Figures are for persons aged 10 years and over.
- 3. Figures for England and Wales combined (area code K04000001) include death of non-residents.
- 4. Figures are for deaths occurring, rather than deaths registered 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. More details can be found in <u>Section 4: Late registrations of suicide deaths</u>.
- 5. "Other" category includes methods of suicide such as firearm, smoke, fire and flames, and unspecified events.
- 6. More information regarding definitions can be found in Table 14 in the Suicides in England and Wales dataset.

4. Late registration of suicide deaths

In England and Wales, all deaths caused by suicide are certified by a coroner following an inquest and cannot be registered until the inquest is completed. This process can take months and in some cases years. The length of time it takes to hold an inquest creates a gap between the date of death and the date of death registration, referred to as a "registration delay".

The Office for National Statistics (ONS) only knows about a death once it has been registered. For deaths caused by suicide, this generally means that around half of the deaths registered each year will have occurred in the previous year or earlier. For deaths occurring between April and July 2020, 69.0% were registered in 2020 with the remaining 31.0% registered in 2021.

To assess the impact of late registrations of suicide deaths, we provide additional analysis on suicides registered up to one year and two years after occurrence. Between 2001 and 2019, most suicides have been registered within a year of occurrence (between 86.6% and 96.9% of deaths), with most remaining suicides registered in the following year. As such, late registrations are unlikely to impact the interpretation of the results in this article, even when allowing for the disruption to coroners' inquests caused by the coronavirus (COVID-19) pandemic. Our quarterly provisional suicide registrations release for England showed that the impact of the coronavirus pandemic on the suicide registrations was short-term.

Figure 5: Suicides registered up to a year after occurrence captures majority of the deaths

Number of suicides by registration delay, England and Wales, deaths occurring between April and July, between 2001 and 2020

Source: Office for National Statistics - Deaths from suicide that occurred in England and Wales

Notes:

- 1. The National Statistics definition of suicide is given in Section 7: Glossary.
- 2. Figures are for persons aged 10 years and over.
- 3. Figures for England and Wales combined (area code K04000001) include death of non-residents.
- 4. Figures are for deaths occurring, rather than deaths registered 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. More details can be found in <u>Section 4: Late registrations of suicide deaths</u>.
- 5. "Suicides registered up to one year after occurrence" refers to deaths where the registration delay was a year or less. "Suicides registered up to two years after occurrence" provides additional suicides where the delay was between one and two years. "Suicides using the most recent registrations" provides additional suicides that were registered up to the end of 17 July 2021.

5. Conclusion

The latest available evidence shows that suicide rates have not increased during the early stages of the coronavirus (COVID-19) pandemic. Instead, we found suicide rates to be lower between April and July 2020, when compared with the same period in previous years.

While provisional data for 2020 occurrences will be underestimates, late registrations for suicides between April and July 2020 are unlikely to fully explain the decrease, as most suicides for this period will now be registered even when allowing for disruption to coroners' inquests caused by the pandemic. In other words, it would take an unfeasibly large number of late suicide registrations to conclude there was an increase in suicide rates.

Our findings are consistent with figures from <u>real-time suicide surveillance in England</u> - covering a population of around 13 million people, there was no increase in suicide in the seven months that followed the first national lockdown in 2020. In a similar vein, international research that sourced data from 16 high-income and five upper-middle-income countries, found that <u>suicide numbers have remained largely unchanged or declined in the early months of the pandemic</u> compared with the expected levels based on the pre-pandemic period.

The Office for National Statistics (ONS) will continue to monitor national suicide levels to further understand the impact of the pandemic on suicide rates.

6. Suicide data

Deaths from suicide that occurred in England and Wales

Dataset | Released 2 September 2021

Number of suicides and suicide rates broken down by sex, age, month and method in England and Wales, occurred between April to July 2015 to 2020.

7. 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 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 <u>Suicide</u> rates in the UK Quality and Methodology information

Registration delay

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

Age-specific mortality rate

Age-specific mortality rate is the total number of deaths per 100,000 people of an age group, used to allow comparisons between specified age groups.

Age-standardised mortality rate

Age-standardised mortality rate (ASMRs) refers to a weighted average of the age-specific mortality rates per 100,000 people and standardised to the 2013 European Standard Population. ASMRs 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. We have adjusted the monthly ASMRs to allow for comparisons with annual rates. For more information see Section 5: Measuring the data.

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.

8. Data sources and quality

Data source

Statistics on mortality are derived from the information provided when deaths are certified and registered.

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

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the <u>Mortality statistics in England and Wales QMI</u>, the <u>Suicide rates in the UK QMI</u> and the <u>User guide to mortality statistics</u>.

Provisional data are used

Provisional death occurrences data are used for 2020 in this article, they are subject to change. This enables timely analysis to be completed to monitor trends.

Data coverage, timeliness and registration delays

Mortality data give complete population coverage. They ensure the estimates are of high precision and are representative of the underlying population at risk. However, because of <u>registration delays</u>, death occurrence data are always somewhat incomplete.

Monthly mortality rates

To calculate monthly mortality rates that are comparable with annual rates, adjustments must be made to annual population estimates to account for the time period covered. The population denominator for April to July is the sum of those individual months. Section 2 of the methodology article provides more detail on how this is calculated.

Monthly 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.

User-requested data

Special extracts and tabulations of suicide (and other causes of mortality) data for England and Wales are available to order for a charge (subject to legal frameworks, disclosure control, resources and agreement of costs, where appropriate). Such requests or enquiries should be made via email to health.data@ons.gov.uk. Our charging policy is also available.

9. Related links

Official suicide statistics for England and Wales

Bulletin | Released 1 September 2020

Official suicide statistics for England and Wales, provided by the Office for National Statistics (ONS). Figures are analysed by sex, age, area of usual residence of the deceased and suicide method.

Official suicide statistics for Scotland

Web page | Updated as new data become available

Official suicide statistics for Scotland, provided by National Records of Scotland (NRS).

Official suicide statistics for Northern Ireland

Web page | Updated as new data become available

Official suicide statistics for Northern Ireland, provided by Northern Ireland Statistics and Research Agency (NISRA).

Coroners statistics: 2020

Report | Released 13 May 2021

Annual data on deaths reported to coroners, including inquests and post-mortems held, inquest conclusions recorded and finds reported to coroners under treasure legislation.