

Statistical bulletin

Monthly mortality analysis, England and Wales: August 2021

Provisional death registration data for England and Wales, broken down by sex, age and country. Includes deaths due to coronavirus (COVID-19) and leading causes of death.

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Release date:
21 September 2021

Next release:
22 October 2021

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1 . Main points

- In August 2021, there were 40,460 deaths registered in England, 3,650 deaths (9.9%) more than the August five-year average (2015 to 2019) and there were 2,614 deaths registered in Wales, 119 deaths (4.8%) more than the August average.
- The leading cause of death in August 2021 was dementia and Alzheimer's disease in England (accounting for 10.9% of all deaths) and ischaemic heart diseases in Wales (12.1% of all deaths).
- Coronavirus (COVID-19) was the third leading cause of death in August 2021 in England (accounting for 5.3% of all deaths registered in August); in Wales, COVID-19 was the seventh leading cause of death and accounted for 2.7% of all deaths.
- Taking into account the population size and age structure, the age-standardised mortality rate (ASMR) for deaths due to COVID-19 in England (45.7 deaths per 100,000 people) increased significantly for the second consecutive month; the ASMR for deaths due to COVID-19 in Wales was 24.5 deaths per 100,000 people, significantly higher than in July 2021.
- The North East of England became the English region with the highest ASMR for deaths due to COVID-19 in August 2021 (72.8 deaths per 100,000 people), replacing the North West in June and July 2021; all English regions except the North West had statistically significant increases between July and August 2021.

2 . Death registrations and the overall mortality rate for August 2021

Based on provisional data, there were 40,460 deaths registered in England in August 2021. This was 5,708 more deaths than in August 2020 and 3,650 deaths more than the five-year average (2015 to 2019) (9.9% higher).

The five-year average has been provided for 2015 to 2019 (rather than 2016 to 2020) because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020. The average for 2015 to 2019 provides a comparison of the number of deaths expected in a usual (non-pandemic) year.

In Wales, the provisional number of deaths registered in August 2021 was 2,614. This was 236 more deaths than in August 2020 and 119 more deaths than the five-year average for August (4.8% higher).

In this edition, we have revised data for deaths registered in 2020 to use finalised mortality data. We have also revised the populations for July 2019 to June 2021 to use population estimates, rather than projections. For further information, see [Section 10: Measuring the Data](#).

Age-standardised mortality rates (ASMRs) are used for comparisons over time rather than numbers of deaths, as ASMRs account for changes to the population size and age structure. In England, mortality rates for the month of August generally decreased over time from 1,107.1 per 100,000 people in August 2001 (the first time point in this analysis), to a low of 749.3 deaths per 100,000 people in August 2020. In August 2021, mortality rates significantly increased compared with the previous year, to 851.9 deaths per 100,000 people. This was a similar mortality rate to that seen in August 2017. This pattern in ASMRs over time was seen in both males and females (Figure 1).

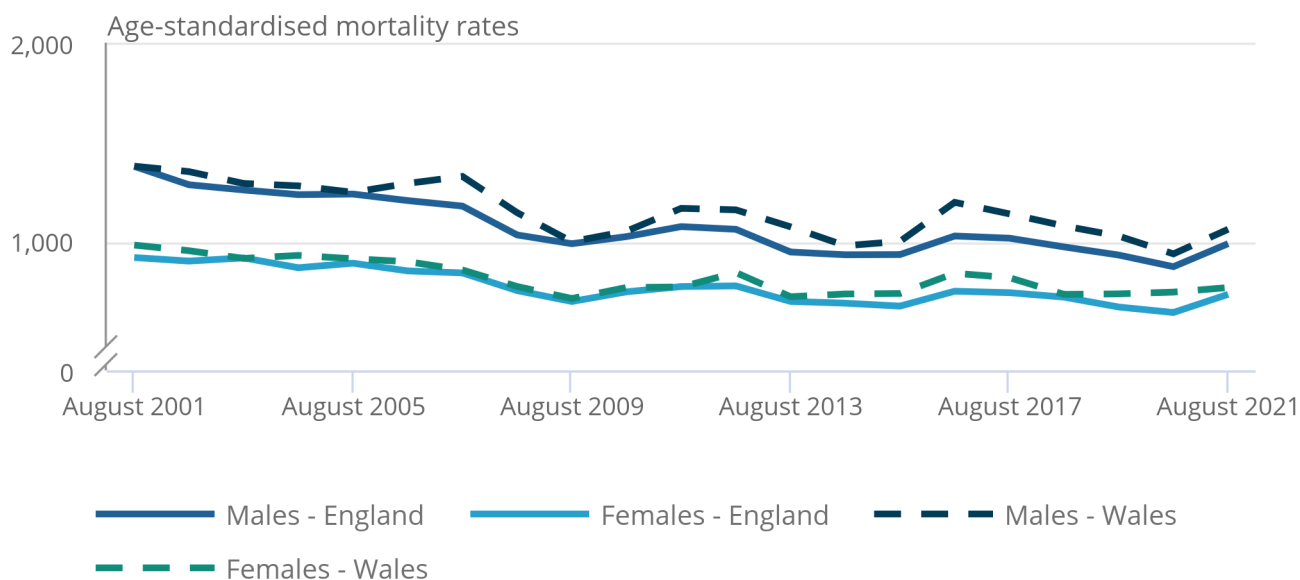
In Wales, mortality rates for August were also generally decreasing over time, but these improvements stalled from August 2010 onwards, in line with [previous findings on changing trends in mortality](#). The ASMR decreased from 1,144.7 deaths per 100,000 people in August 2001, to a low of 836.3 deaths per 100,000 people in August 2020. In August 2021, the mortality rate was 904.7 deaths per 100,000 people; this was higher than the previous August, but this difference was not [statistically significant](#).

Figure 1: Mortality rates for the month of August were higher in 2021 than in 2020 in England and Wales

Age-standardised mortality rates by sex, deaths registered in August 2001 to August 2021

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Age-standardised mortality rates by sex, deaths registered in August 2001 to August 2021



Source: Office for National Statistics – Monthly mortality analysis

Notes:

1. Age-standardised mortality rates per 100,000 people, standardised to the 2013 European Standard Population. Monthly rates in this bulletin are adjusted to allow for comparisons with annual rates. For more information, see [Section 10: Measuring the data](#).
2. Figures are for deaths registered rather than deaths occurring in each period.
3. Figures for 2021 are based on provisional mortality data and projected populations.
4. Figures exclude non-residents.

3 . Deaths due to COVID-19 registered in August 2021

The doctor certifying a death can list all causes in the chain of events that led to the death, and pre-existing conditions that may have contributed to the death. Using this information, we determine an underlying cause of death. More information on this process can be found in our [user guide](#).

Since March 2020 (when the first deaths involving coronavirus (COVID-19) were registered in England and Wales), where COVID-19 was mentioned on the death certificate it was the underlying cause of death in most cases (88.9% in England, 87.4% in Wales). For more information on our definition of COVID-19 deaths, see [Section 10: Measuring the data](#).

In this bulletin, we use the term "due to COVID-19" when referring only to deaths with an underlying cause of death of COVID-19 and we use the term "involving COVID-19" when referring to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

Of the 40,460 deaths registered in August 2021 in England, 5.3% (2,162 deaths) were due to COVID-19, a larger proportion than in July 2021 (2.4%). Including all deaths involving COVID-19 (2,456 deaths) increases the percentage to 6.1% of all deaths in England in August 2021.

In Wales, 2.7% of the 2,614 deaths registered in August 2021 were due to COVID-19 (70 deaths), a larger proportion than in July 2021 (1.2%). Including all deaths involving COVID-19 (79 deaths) increases the percentage to 3.0% of all deaths in Wales.

In both England and Wales, the numbers of deaths due to COVID-19 more than doubled in August 2021 compared with July 2021, but remained lower than the numbers seen in October 2020 to March 2021.

Mortality rates for deaths due to COVID-19

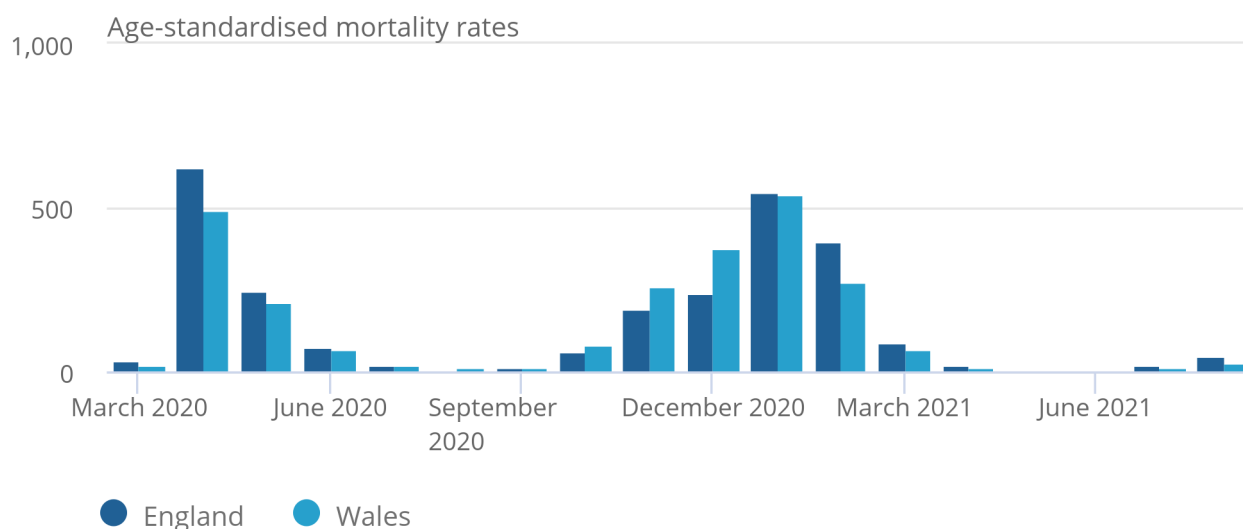
When adjusting for the size and age structure of the population, age-standardised mortality rates (ASMRs) for deaths due to COVID-19 in England for August 2021 showed [statistically significant](#) increases compared with July 2021. The ASMR for deaths due to COVID-19 increased to 45.7 deaths per 100,000 people in August 2021 (compared with 20.5 in July 2021). In Wales, the ASMR significantly increased to 24.5 deaths per 100,000 people in August 2021 (compared with 11.6 in July 2021).

Figure 2: Mortality rates due to COVID-19 increased significantly between July and August 2021 in England and Wales

Age-standardised mortality rates for deaths due to COVID-19, per 100,000 people, England and Wales, deaths registered in March 2020 to August 2021

Figure 2: Mortality rates due to COVID-19 increased significantly between July and August 2021 in England and Wales

Age-standardised mortality rates for deaths due to COVID-19, per 100,000 people, England and Wales, deaths registered in March 2020 to August 2021



Source: Office for National Statistics – Monthly mortality analysis

Notes:

1. Age-standardised mortality rates per 100,000 people, standardised to the 2013 European Standard Population. Monthly rates in this bulletin are adjusted to allow for comparisons with annual rates. For more information, see [Section 10: Measuring the data](#).
2. Figures for 2021 are based on provisional mortality data and projected populations.
3. Figures exclude non-residents of England and Wales.
4. Deaths "due to COVID-19" include only deaths where COVID-19 was the underlying cause of death. Age-standardised mortality rates for all deaths involving COVID-19 are available in the accompanying dataset.
5. The International Classification of Diseases, 10th Edition (ICD-10) definitions are as follows; coronavirus (COVID-19) (U07.1, U07.2 and U10.9). For more information on our definitions of COVID-19 deaths, see [Section 10: Measuring the data](#).
6. Because of small numbers, the rate for May 2021 in Wales is unreliable (19 deaths) so should be interpreted with caution, and the rate for June 2021 (3 deaths) has not been calculated.

In England, the ASMR for deaths due to COVID-19 significantly increased in August 2021 for males (60.6 deaths per 100,000 males) and females (33.5 deaths per 100,000 females) compared with July 2021.

In August 2021, the ASMRs for deaths due to COVID-19 in Wales increased compared with July 2021 in both males (35.6 deaths per 100,000 males) and females (15.9 deaths per 100,000 females). But this increase was only [statistically significant](#) in males. More information on mortality rates by sex is available in Tables 3a and 3b of the [accompanying dataset](#).

More about coronavirus

- Find the latest on [coronavirus \(COVID-19\) in the UK](#).
- [Explore the latest coronavirus data](#) from the ONS and other sources.
- All ONS analysis, summarised in our [coronavirus latest insights](#).
- View [all coronavirus data](#).
- Find out how we are [working safely in our studies and surveys](#).

4 . Leading causes of death

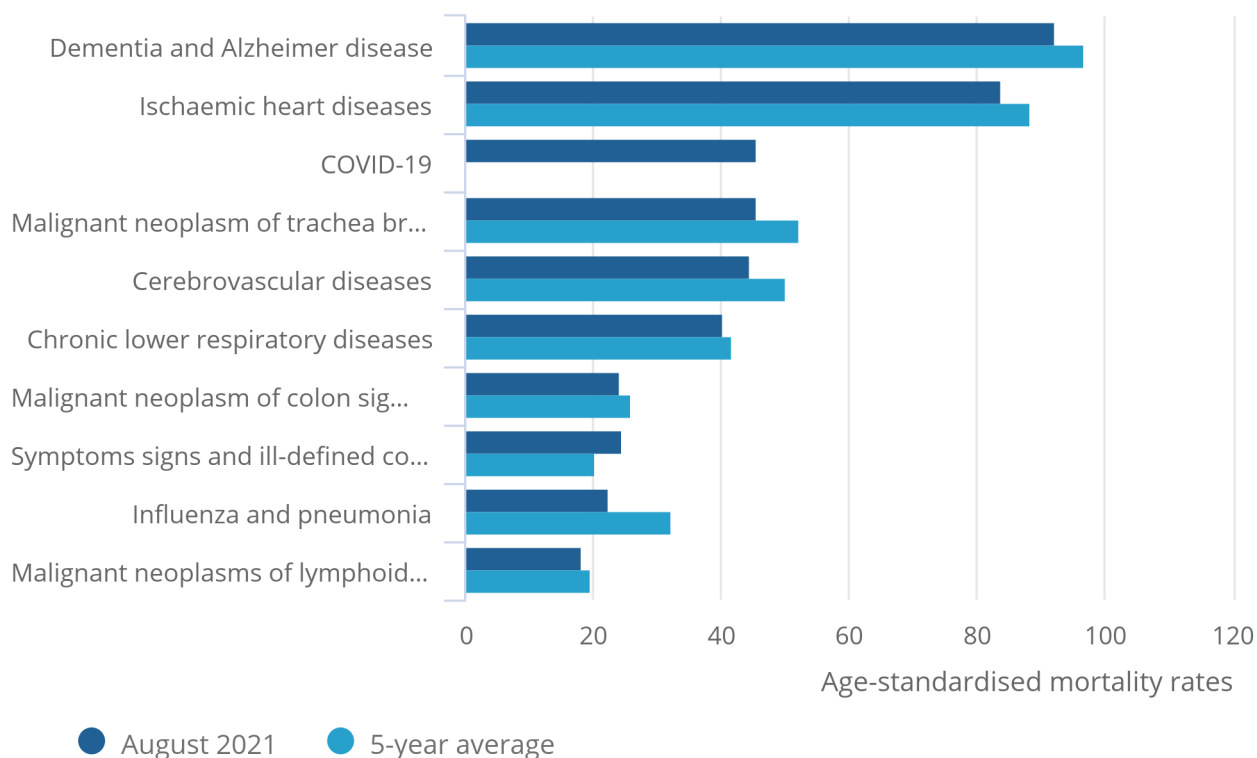
Figures 3 and 4 show the 10 most common underlying causes of death, (based on the [leading causes of death groupings](#)) registered in August 2021 for England and Wales, compared with the five-year average for August (2015 to 2019).

Figure 3: In England, dementia and Alzheimer's disease was the leading cause of death in August 2021, while COVID-19 rose to the third leading cause

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, England, deaths registered in August 2021

Figure 3: In England, dementia and Alzheimer's disease was the leading cause of death in August 2021, while COVID-19 rose to the third leading cause

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, England, deaths registered in August 2021



Source: Office for National Statistics – Monthly mortality analysis

Notes:

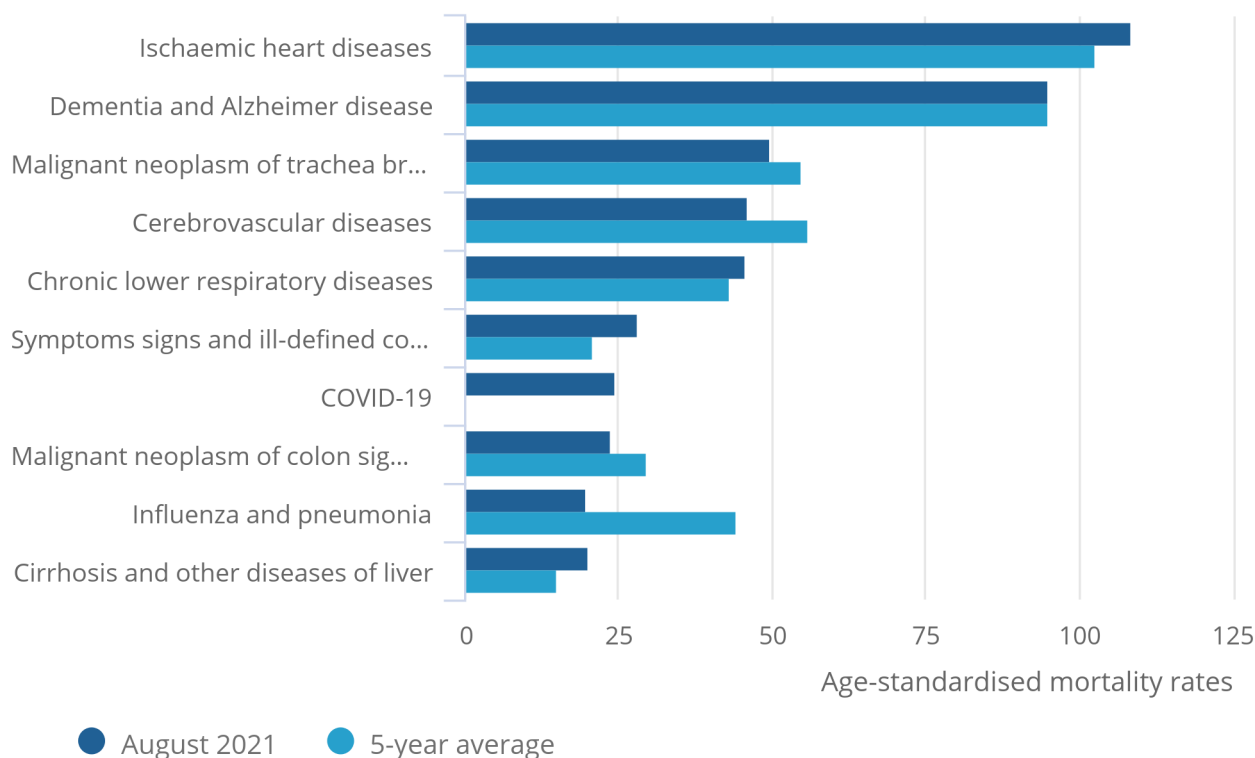
1. Age-standardised mortality rates per 100,000 population, standardised to the 2013 European Standard Population. Monthly rates are adjusted to allow for comparisons with annual rates. For more information, see [Section 10: Measuring the data](#).
2. Figures for 2021 are based on provisional mortality data and projected populations.
3. "COVID-19" includes only deaths where COVID-19 was the underlying cause of death.
4. Figures exclude deaths of non-residents.
5. The five-year average has been provided for 2015 to 2019 (rather than 2016 to 2020) because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020. The average for 2015 to 2019 provides a comparison of the number of deaths expected per month in a usual (non-pandemic) year.
6. Leading causes are ranked based on number of deaths, not age-standardised mortality rates.

Figure 4: In Wales, ischaemic heart diseases were the leading cause of death in August 2021, while COVID-19 rose to the seventh leading cause

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, Wales, deaths registered in August 2021

Figure 4: In Wales, ischaemic heart diseases were the leading cause of death in August 2021, while COVID-19 rose to the seventh leading cause

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, Wales, deaths registered in August 2021



Source: Office for National Statistics – Monthly mortality analysis

Notes:

1. Age-standardised mortality rates per 100,000 population, standardised to the 2013 European Standard Population. Monthly rates are adjusted to allow for comparisons with annual rates. For more information, see [Section 10: Measuring the data](#)
2. Figures for 2021 are based on provisional mortality data and projected populations.
3. "COVID-19" includes only deaths where COVID-19 was the underlying cause of death.
4. Figures exclude deaths of non-residents.
5. The five-year average has been provided for 2015 to 2019 (rather than 2016 to 2020) because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020. The average for 2015 to 2019 provides a comparison of the number of deaths expected per month in a usual (non-pandemic) year.
6. Leading causes are ranked based on number of deaths, not age-standardised mortality rates.

In England, dementia and Alzheimer's disease continued to be the leading cause of death in August 2021, with 92.2 deaths per 100,000 people (4,417 deaths). In Wales, ischaemic heart diseases were the leading cause of death, with 108.7 deaths per 100,000 people (316 deaths).

In England, coronavirus (COVID-19) was the third leading cause of death in August 2021 (2,162 deaths), having risen from the ninth leading cause in July 2021 (969 deaths). In Wales, COVID-19 entered the 10 most common leading causes for the first time since March 2021. In August 2021, COVID-19 was the seventh leading cause of death in Wales (70 deaths).

In England in August 2021, 5 of the 10 leading causes of death were significantly lower than the five-year average (2015 to 2019). As seen in previous months, the mortality rate for deaths with an underlying cause of influenza and pneumonia was 30.7% lower in August 2021 than the five-year average for August. This is likely in part to be because of coronavirus restrictions and guidance, such as social distancing, reducing the spread of infections such as flu.

Similar to recent months, in August 2021 symptoms, signs and ill-defined conditions were significantly higher than the five-year average in England. In August 2021, the mortality rate for symptoms, signs and ill-defined conditions was 19.5% higher than the five-year average for August. This leading cause group includes mostly deaths with a code for "old age" but is also used for causes such as "frailty".

In Wales in August 2021, mortality rates for 8 of the 10 leading causes were similar to the five-year average (not [statistically significantly](#) different). As seen in England, the August 2021 mortality rate for influenza and pneumonia was significantly lower than the five-year average for August (55.8% lower).

Leading causes of death registered in the year-to-date

In the first eight months (January to August) of 2021, the leading cause of death in both England and Wales was COVID-19. The year-to-date mortality rate for deaths due to COVID-19 was significantly higher in England (140.6 deaths per 100,000 people) than in Wales (115.6 deaths per 100,000 people).

In England, the year-to-date COVID-19 mortality rate was significantly higher than the next leading cause of death (dementia and Alzheimer's disease). In Wales, the year-to-date COVID-19 mortality rate had previously (January to July 2021) been significantly higher than the next leading cause, but in January to August 2021 there was no significant difference between COVID-19 and the second leading cause (ischaemic heart diseases).

More information on the 2021 year-to-date leading causes of death is available in Tables 11a and 11b of the [accompanying dataset](#). More in-depth [analysis of leading causes of death](#) is available in our annual publication based on finalised mortality data.

5 . Deaths registered in the year-to-date

There were 363,876 deaths registered in England and 23,504 in Wales during the first eight months (January to August) of 2021.

To gain a better idea of year-to-year differences in mortality rates, we calculated year-to-date age-standardised mortality rates (ASMRs) based on deaths registered in January to August of each year from 2001 to 2021 (Figure 5). For England, the year-to-date ASMR for 2021 was 983.0 deaths per 100,000 people, which was significantly lower than the same period in 2020 (1,061.5 deaths per 100,000 people). However, when compared with the same period in 2019 (917.6 deaths per 100,000 people), the 2021 year-to-date mortality rate was significantly higher.

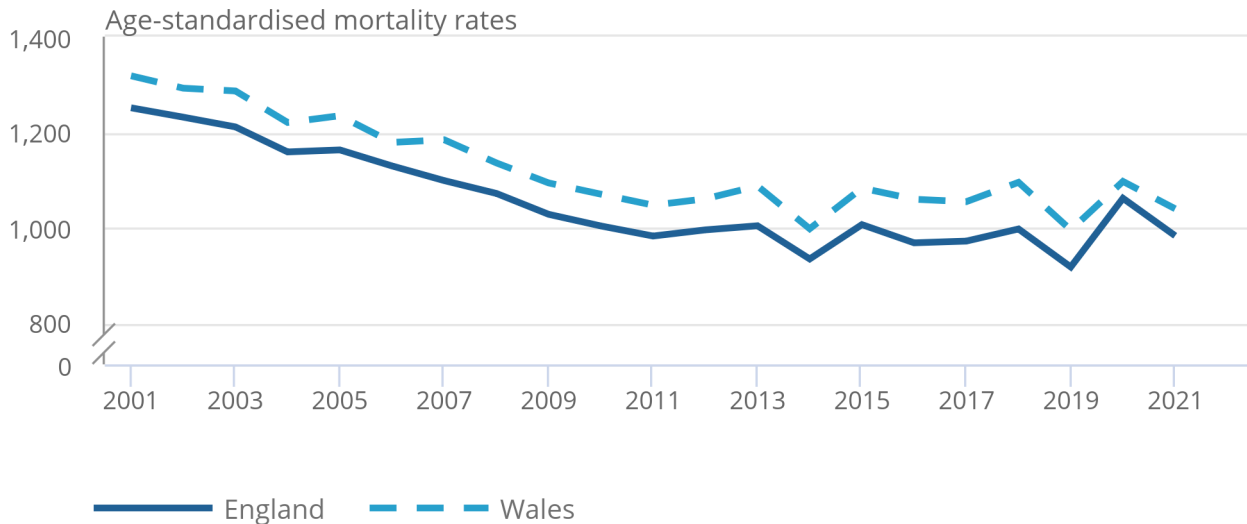
For Wales, the year-to-date ASMR for 2021 decreased to 1,039.5 deaths per 100,000 people. This was [statistically significantly](#) lower than the same period in 2020 (1,096.8 deaths per 100,000 people). But, as with England, January to August 2021 was significantly higher than the same period in 2019 (995.2 deaths per 100,000 people).

Figure 5: Year-to-date mortality rates in 2021 were significantly lower than 2020 but significantly higher than 2019 in both England and Wales

Age-standardised mortality rates, England and Wales, deaths registered in January to August 2001 to 2021

Figure 5: Year-to-date mortality rates in 2021 were significantly lower than 2020 but significantly higher than 2019 in both England and Wales

Age-standardised mortality rates, England and Wales, deaths registered in January to August 2001 to 2021



Source: Office for National Statistics – Monthly mortality analysis

Notes:

1. Age-standardised mortality rates per 100,000 population, standardised to the 2013 European Standard Population. Monthly rates in this bulletin are adjusted to allow for comparisons with annual rates. For more information, see [Section 10: Measuring the data](#).
2. Figures are for deaths registered rather than deaths occurring in each period.
3. Figures for 2021 are based on provisional mortality data and projected populations.
4. Figures exclude deaths of non-residents.

6 . Death occurrences in August 2021 and year-to-date

This section is based on the date a death occurred - rather than the date of registration used in the previous sections -- to monitor current mortality trends. Further information can be found in [Section 10: Measuring the data](#).

In England, 35,918 deaths occurred in August 2021 (and were registered by 7 September 2021). This was 1,528 fewer deaths than the five-year average (2015 to 2019) for August (4.1% lower). Of the 35,918 deaths that occurred, 6.1% were due to coronavirus (COVID-19) (2,183 deaths).

In Wales, 2,411 deaths occurred in August 2021 (and were registered by 7 September 2021), which was 79 fewer deaths than the five-year average (3.2% lower). COVID-19 was the underlying cause of death in 3.0% of all deaths that occurred (72 deaths).

In England, the first death due to COVID-19 occurred on 30 January 2020. Figure 6 shows the trend in COVID-19 death occurrences from March 2020 onwards. The largest number of COVID-19 deaths that occurred in a single day in England was on 8 April 2020 (1,228 deaths), followed by 19 January 2021 (1,203 deaths).

Figure 6: In England in August 2021, daily deaths due to COVID-19 remained low

Number of deaths occurring on each day from March 2020 to August 2021¹, five-year average and range, England

Notes:

1. Figures are for deaths occurring on each day rather than deaths registered, registered up to 7 September.
2. Figures exclude non-residents.
3. "COVID-19 deaths" include only deaths where COVID-19 was the underlying cause.
4. This chart includes deaths from 1 March 2020. Three deaths due to COVID-19 occurred prior to this (one death in January 2020 and two deaths in February 2020) in England, but are not included here.

Download this chart

[.XLSX](#)

Figure 7: In Wales in August 2021, daily deaths due to COVID-19 remained low

Number of deaths occurring on each day from March 2020 and August 2021, five-year average and range, Wales

Notes:

1. Figures are for deaths occurring on each day rather than deaths registered, registered up to 7 September.
2. Figures exclude non-residents.
3. "COVID-19 deaths" include only deaths where COVID-19 was the underlying cause.

Download this chart

[.XLSX](#)

It is important to note that the number of death occurrences is incomplete as it is likely that more deaths need to be registered, therefore comparisons should be treated with caution.

In particular, instances where the number of death occurrences on each day in August was below the range of the last five years are likely to be a result of when the data extract was created. Specifically, deaths that occurred towards the end of the month may not have been registered by the time the data extract was created. We would therefore expect the number of death occurrences to be higher in future releases.

7 . Pre-existing conditions of people whose death was due to COVID-19, deaths registered in April to June 2021

Data on pre-existing conditions of people who died due to coronavirus (COVID-19) in England and Wales for 2021 can be found in the [accompanying dataset](#). Quarterly analysis is available in the [April 2021 edition](#) and [July 2021 edition](#) of this bulletin.

8 . Monthly mortality data

[Monthly mortality analysis, England and Wales](#)

Dataset | Released 21 September 2021

Monthly data on death registrations and death occurrences in England and Wales, broken down by sex and age. Includes deaths due to coronavirus (COVID-19) by date of death occurrence, and comparisons of COVID-19 with the leading causes of death.

[Deaths due to COVID-19 by English region and Welsh health board](#)

Dataset | Released 21 September 2021

Provisional age-standardised mortality rates for deaths due to COVID-19 by age, sex, local authority and deprivation indices, and numbers of deaths by Middle-layer Super Output Area.

[Deaths involving COVID-19 by month of registration, UK](#)

Dataset | Released 21 September 2021

Provisional age-standardised mortality rates for deaths involving COVID-19 by sex and month of death registration, for England, Wales, Scotland, and Northern Ireland.

[Deaths registered monthly in England and Wales](#)

Dataset | Released 21 September 2021

Number of deaths registered each month by area of usual residence for England and Wales, by region, county, local and unitary authority, and London borough.

[Pre-existing conditions of people who died due to COVID-19, England and Wales](#)

Dataset | Released 23 August 2021

Pre-existing conditions of people who died due to COVID-19, broken down by country, broad age group, and place of death occurrence, usual residents of England and Wales.

9 . Glossary

Age-specific mortality rates

Age-specific mortality rates are used to allow comparisons between specified age groups.

Age-standardised mortality rates

Age-standardised mortality rates (ASMRs) are used to allow comparisons between populations that may contain different proportions of people of different ages. The 2013 European Standard Population is used to standardise rates. In this bulletin, we have adjusted the monthly ASMRs to allow for comparisons with annual rates. For more information see [Section 10: Measuring the data](#).

Coronaviruses

The World Health Organization (WHO) defines coronaviruses as "a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS)". Between 2001 and 2018, there were 12 deaths in England and Wales due to a coronavirus infection, with a further 13 deaths mentioning the virus as a contributory factor on the death certificate.

Coronavirus (COVID-19)

COVID-19 refers to the "coronavirus disease 2019" and is a disease that can affect the lungs and airways. It is caused by a type of coronavirus. Further information is available from the [World Health Organization \(WHO\)](#).

Pre-existing condition

A pre-existing condition is defined as any condition that either preceded the disease of interest (for example, COVID-19) in the sequence of events leading to death or was a contributory factor in the death but was not part of the causal sequence. More information on the pre-existing conditions methodology is available in the [accompanying dataset](#).

Registration delay

Mortality statistics are compiled from information supplied when deaths are certified and registered as part of civil registration, a legal requirement. According to the [Births and Deaths Registration Act 1953](#), a death should be registered within five days unless it is referred to a coroner for investigation. Mortality statistics for a given time period can be based on occurrence (death date) or registration (registration date); registration delay is the difference between date of occurrence and date of registration.

Statistical significance

The term "significant" refers to statistically significant changes or differences. Significance has been determined using the 95% confidence intervals, where instances of non-overlapping confidence intervals between estimates indicate the difference is unlikely to have arisen from random fluctuation.

95% confidence intervals

A confidence interval is a measure of the uncertainty around a specific estimate. If a confidence interval is 95%, it is expected that the interval will contain the true value on 95 occasions if repeated 100 times. As intervals around estimates widen, the level of uncertainty about where the true value lies increases. The size of the interval around the estimate is strongly related to the number of deaths, prevalence of health states and the size of the underlying population. At a national level, the overall level of error will be small compared with the error associated with a local area or a specific age and sex breakdown. More information is available on our [uncertainty pages](#).

10 . Measuring the data

This bulletin provides timely surveillance of mortality in England and Wales, based on the best available provisional data, including all-cause mortality and coronavirus (COVID-19) deaths.

Analysis contains deaths registered in August 2021 by age and sex, and also includes deaths that occurred in August 2021 by date of death. Non-residents of England and Wales are excluded. In August 2021, there were 77 deaths of non-residents that were registered in England and Wales.

Revisions to this analysis

Analysis of deaths registered in 2021 in this publication is based on provisional data. Data for deaths registered in 2020 are now final, so we have revised analysis based on 2020 registrations. Mortality trends in this revised dataset remain similar to those previously published. For example, deaths due to COVID-19 registered in 2020 increased by 0.3% in England and 0.1% in Wales when compared with the provisional data. This increase is likely explained by cause of death coding not being complete when the data extract was created using the provisional data. For more information on cause of deaths coding, see the [User guide to mortality statistics](#).

Age-standardised rates in this bulletin previously used [population projections](#) for 2020. Now that [mid-year population estimates for 2020](#) have been published, we have revised our mortality rates to use these populations. These revisions affect data from July 2019 to June 2021, because the 2020 populations are used in our [monthly population estimation method](#) for these months.

As part of the revisions process, we have refreshed deaths registered in January to July 2021 using our most recent (August 2021) database. Because of different data extraction dates, numbers of deaths for these months may differ from those previously published.

Data sources

This bulletin is based primarily on death registrations. Analysis by month of death registration is consistent with the [weekly death registrations release](#) and allows for a more timely analysis than would be possible using death occurrences. There is a section on death occurrences for surveillance of recent mortality trends. Death occurrences show the number of deaths that occurred within a calendar period and give a better indication of exactly when deaths were at their highest. This allows mortality to be related to other factors such as weather patterns.

A provisional extract of death registrations and death occurrences data is taken on the first working day after the eighth of the month, to allow time for deaths to be registered. For more detail on the data sources used, see our [methodology article](#).

Definition of COVID-19 deaths

We use the term "due to COVID-19" when referring only to deaths with an underlying cause of death of COVID-19. When taking into account all of the deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not, we use the term "involving COVID-19". The International Classification of Diseases (ICD-10) codes used to define COVID-19 are:

- U07.1: COVID-19, virus identified
- U07.2: COVID-19, virus not identified
- U09.9: Post-COVID condition, unspecified (this cannot be assigned to the underlying cause of death so is not included in the "deaths due to COVID-19" definition)
- U10.9: Multisystem inflammatory syndrome associated with COVID-19, unspecified.

Our definition of COVID-19 (regardless of whether it was the underlying cause or mentioned elsewhere on the death certificate) includes some cases where the certifying doctor suspected the death involved COVID-19 but was not certain (U07.2). For example, a doctor may have clinically diagnosed COVID-19 based on symptoms but this diagnosis may not have been confirmed with a test, so they may write "suspected COVID-19" on the death certificate. Of the 128,355 deaths due to COVID-19, 4,135 (3.2%) were classified as "suspected" COVID-19. Including all 144,526 deaths involving COVID-19, "suspected" COVID-19 was recorded on 3.3% (4,757 deaths) of all deaths involving COVID-19 in England and Wales. For more information on the ICD-10 definition of COVID-19, see [Section 8 of the methodology article](#).

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. [Section 2 of the methodology article](#) provides more detail on how this is calculated.

Acknowledgement

We would like to thank Charlee Humphries, Heidi Wilson, Craig Arnold, and Ben Aspey for their valued contribution to this bulletin.

11 . Strengths and limitations

Provisional data are used

Provisional death registrations and death occurrences data are used in this bulletin. This enables timely analysis to be completed to monitor mortality trends. However, as the data for 2021 are provisional, they are subject to change.

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 [registration delays](#), monthly death occurrence data are always somewhat incomplete. This is especially true for deaths that occurred towards the end of the month.

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](#) and [User guide to mortality statistics](#).

12 . Related links

[Deaths registered weekly in England and Wales](#)

Bulletin | Released 21 September 2021

Provisional counts of the number of deaths registered in England and Wales, including deaths involving the coronavirus (COVID-19) pandemic, by age, sex and region, in the latest weeks for which data are available.

[Deaths registered in England and Wales: 2020](#)

Bulletin | Released 6 July 2021

Registered deaths by age, sex, selected underlying causes of death and the leading causes of death. Contains death rates and death registrations by area of residence and single year of age.

[Deaths due to COVID-19, registered in England and Wales: 2020](#)

Article | Released 6 July 2021

Deaths registered in England and Wales due to coronavirus (COVID-19) by age, sex, region, place of death, and pre-existing condition.

[Coronavirus \(COVID-19\) latest data and analysis](#)

Web page | Updated as and when new data become available

Brings together the latest data and analysis on the coronavirus (COVID-19) pandemic in the UK and its effect on the economy and society.

[Deaths at home increased by a third in 2020, while deaths in hospitals fell except for COVID-19](#)

Article | Released 7 May 2021

The coronavirus (COVID-19) was the main reason for a rise in the overall number of deaths registered in England and Wales in 2020. Many deaths not due to COVID-19, which would normally have occurred in hospital, happened in private homes instead.