

Statistical bulletin

# Monthly mortality analysis, England and Wales: January 2022

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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# 1 . Main points

- In January 2022, there were 49,807 deaths registered in England, 5,655 deaths (10.2%) fewer than the January five-year average (2016 to 2019, and 2021); there were 3,262 deaths registered in Wales, 402 deaths (11.0%) fewer than the January average.
- In January 2022, there were 49,807 deaths registered in England, 3304 deaths (6.2%) fewer compared to the previous five-year average (2015 to 2019) for January, there were 3,262 deaths registered in Wales, 265 deaths (7.5%) fewer than the previous five year average for January.
- The leading cause of death in England in January 2022 was dementia and Alzheimer's disease (accounting for 11.9% of all deaths); in Wales, the leading cause was ischaemic heart diseases (11.5% of all deaths).
- Coronavirus (COVID-19) was the third leading cause of death in January 2022 in both England (accounting for 7.6% of all deaths) and Wales (7.3% of all deaths).
- The proportion of deaths due to COVID-19 (of all deaths that involved COVID-19) decreased between December 2021 and January 2022 in both England (from 83.8% to 73.7%) and Wales (from 79.6% to 76.2%).
- Taking into account the population size and age structure, the age-standardised mortality rate (ASMR) for deaths due to COVID-19 increased significantly between December 2021 and January 2022 in both England (79.3 deaths per 100,000 people, up from 56.3) and Wales (81.0 deaths per 100,000 people, up from 59.3).
- London was the English region with the highest ASMR for deaths due to COVID-19 in January 2022 (120.1 deaths per 100,000 people).

## 2 . Death registrations and the overall mortality rate for January 2022

Based on provisional data, there were 49,807 deaths registered in England in January 2022. This was 18,983 fewer deaths than in January 2021 and 5,655 fewer deaths than the five-year average (2016 to 2019, and 2021), a decrease of 10.2%. Compared to the previous five-year average (2015 to 2019) there were 3304 fewer deaths (6.2%) in January 2022 in England.

From the January 2022 edition of this bulletin onward, we calculate the five-year average from 2016 to 2019 and 2021. This moves our five-year average along by a year but does not include the exceptionally high number of deaths seen in 2020. This is so that deaths in 2022 are compared with a five-year average that is up-to-date while still being close to representing a usual (non-pandemic) year. For more information, see [Understanding excess deaths during a pandemic](#).

In Wales, the provisional number of deaths registered in January 2022 was 3,262. This was 1,169 fewer deaths than in January 2021 and 402 fewer deaths than the five-year average for January (11.0% below). Compared to the previous five-year average (2015 to 2019) there were 265 fewer deaths (7.5%) in January 2022 in Wales.

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, 2002 was the year with the highest January mortality rates since our time series began in 2001, at 1,581.7 per 100,000 people. Since then, overall mortality rates in England for the month of January generally decreased to a low of 1,034.2 deaths per 100,000 people in January 2016. Though a [statistically significant](#) increase in the mortality rate was observed in January 2021 (1,465.2 deaths per 100,000 people, compared with 1,151.7 per 100,000 people in January 2020), the ASMR significantly decreased in January 2022 (1,039.3 deaths per 100,000 people). This pattern in ASMRs over time was seen in both males and females (Figure 1).

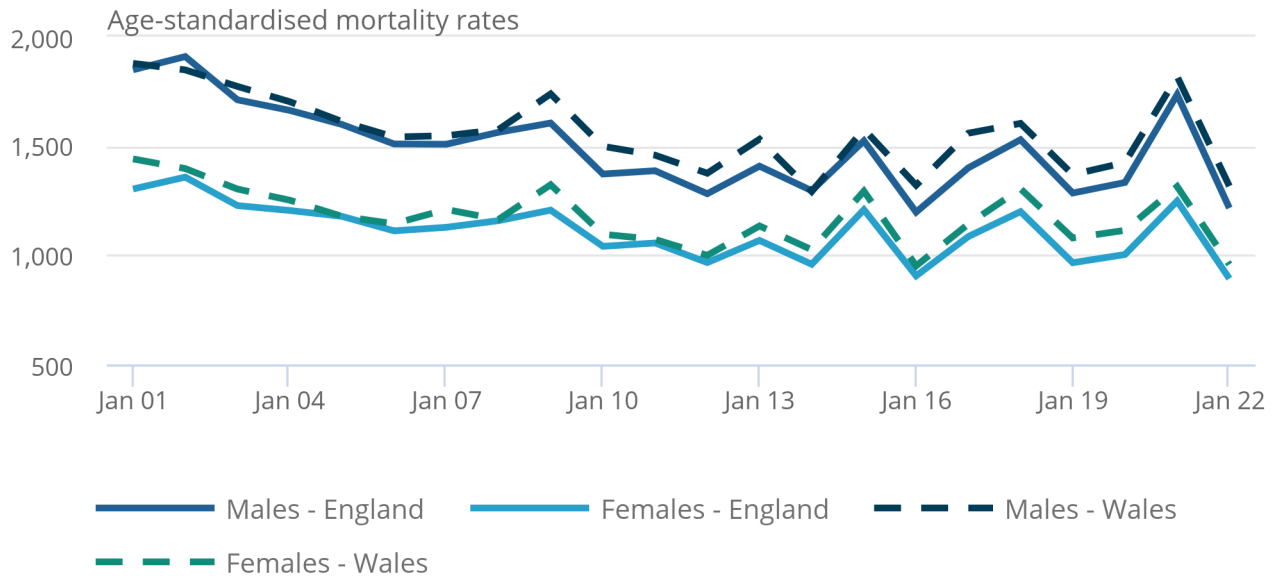
In Wales, mortality rates for January have generally decreased over time. The ASMR decreased from 1,626.5 per 100,000 people in January 2001 to a low of 1,114.0 deaths per 100,000 people in January 2016. Though a statistically significant increase in mortality rate was observed in January 2021 (1,538.2 deaths per 100,000 people, compared with 1,253.9 per 100,000 people in January 2020), the ASMR significantly decreased in January 2022 (1,117.1 deaths per 100,000 people). This pattern in ASMRs over time was seen in both males and females (Figure 1).

**Figure 1: Mortality rates for the month of January were significantly lower in 2022 than in 2021 in England and Wales**

Age-standardised mortality rates by sex, England and Wales, deaths registered in January 2001 to January 2022

Figure 1: Mortality rates for the month of January were significantly lower in 2022 than in 2021 in England and Wales

Age-standardised mortality rates by sex, England and Wales, deaths registered in January 2001 to January 2022



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 the [Measuring the data section](#).
2. Figures are for deaths registered rather than deaths occurring in each period.
3. Figures for 2021 and 2022 are based on provisional mortality data and projected populations.
4. Figures exclude non-residents.

### 3 . Deaths due to COVID-19 registered in January 2022

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 to mortality statistics](#).

Since March 2020 (when the first deaths involving coronavirus (COVID-19) were registered in England and Wales), when COVID-19 was mentioned on the death certificate it was the underlying cause of death in most cases (88.0% in England, 86.7% in Wales).

In England, April 2020 had the highest proportion of deaths involving COVID-19 that were also due to COVID-19 (95.2%), whereas May 2021 had the lowest proportion (68.8%). In Wales, April 2020 had the highest proportion of deaths involving COVID-19 that were also due to COVID-19 (94.1%), whereas June 2021 had the lowest proportion (42.9%). These proportions generally correspond with periods of low or high numbers of COVID-19 deaths in England and Wales.

The proportion of deaths due to COVID-19 (of all deaths that involved COVID-19) decreased between December 2021 and January 2022 in both England (from 83.8% to 73.7%) and Wales (from 79.6% to 76.2%). For more information on our definition of COVID-19 deaths, see the [Measuring the data section](#).

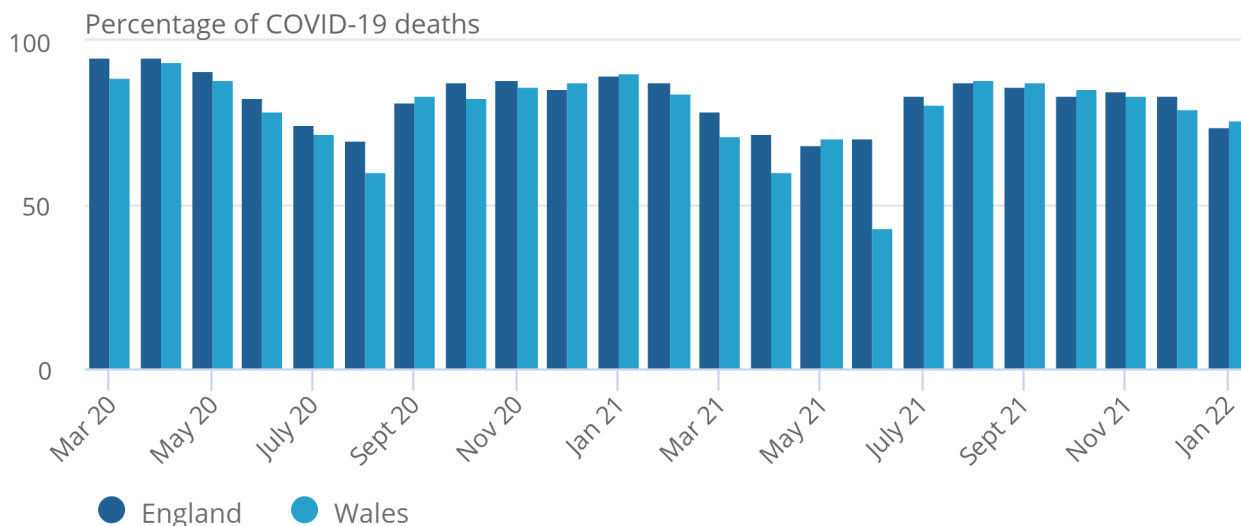
In this bulletin, we use the term "due to COVID-19" when referring only to deaths with an underlying cause of death of COVID-19, and we use the term "involving COVID-19" when referring to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

**Figure 2: The proportion of deaths due to COVID-19, when COVID-19 was mentioned anywhere on the death certificate, decreased between December 2021 and January 2022 in both England and Wales**

Percentage of deaths involving COVID-19, of which were due to COVID-19, England and Wales, deaths registered in March 2020 to January 2022

Figure 2: The proportion of deaths due to COVID-19, when COVID-19 was mentioned anywhere on the death certificate, decreased between December 2021 and January 2022 in both England and Wales

Percentage of deaths involving COVID-19, of which were due to COVID-19, England and Wales, deaths registered in March 2020 to January 2022



Source: Office for National Statistics - Monthly mortality analysis

Notes:

1. Figures are for deaths registered rather than deaths occurring in each period.
2. Figures for 2021 and 2022 are based on provisional mortality data and projected populations.
3. Figures exclude non-residents.
4. Deaths 'due to COVID-19' include only deaths where COVID-19 was the underlying cause of death, whereas deaths 'involving COVID-19' include deaths where COVID-19 was mentioned anywhere on the death certificate. For more information on our definitions of COVID-19 deaths, see the [Measuring the data section](#).
5. Because of small numbers, the proportions for May 2021 and June 2021 in Wales should be interpreted with caution.

Of the 49,807 deaths registered in January 2022 in England, 7.6% (3,797 deaths) were due to COVID-19, a larger proportion than in December 2021 (5.4%). Including all deaths involving COVID-19 (5,151 deaths), this percentage increases to 10.3% of all deaths in England in January 2022.

In Wales, 7.3% of the 3,262 deaths registered in January 2022 were due to COVID-19 (237 deaths), a larger proportion than in December 2021 (5.2%). Including all deaths involving COVID-19 (311 deaths), this percentage increases to 9.5% of all deaths in Wales.

## Mortality rates for deaths due to COVID-19

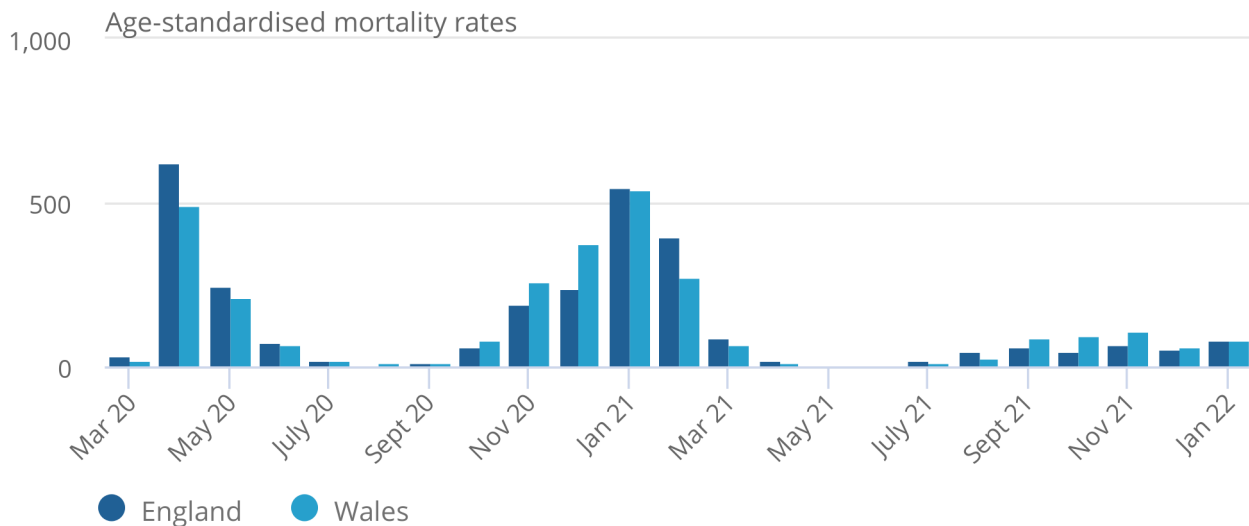
When adjusting for the size and age structure of the population, age-standardised mortality rates (ASMRs) for deaths due to COVID-19 in both England and Wales for January 2022 showed [statistically significant](#) increases compared with December 2021 (Figure 3). The ASMR for deaths due to COVID-19 increased to 79.3 deaths per 100,000 people in January 2022 in England (compared with 56.3 in December 2021), and to 81.0 deaths per 100,000 people in Wales (compared with 59.3 deaths per 100,000 people in December 2021). January 2022 is the fifth consecutive month where the ASMR for deaths due to COVID-19 in Wales was higher than in England.

**Figure 3: Mortality rates due to COVID-19 increased significantly between December 2021 and January 2022 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 January 2022

Figure 3: Mortality rates due to COVID-19 increased significantly between December 2021 and January 2022 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 January 2022



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 the [Measuring the data section](#).
2. Figures for 2021 and 2022 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 the [Measuring the data section](#).
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 and is denoted as ":" in the data downloads.

In England, the ASMR for deaths due to COVID-19 significantly increased in January 2022 for both males (105.0 deaths per 100,000 males) and females (60.0 deaths per 100,000 females), compared with December 2021.



In January 2022, the ASMR for deaths due to COVID-19 in Wales increased significantly compared with December 2021 in males (111.1 deaths per 100,000 males). The ASMR also increased, though not significantly, in females (59.2 deaths per 100,000 females).

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.
- View [all coronavirus data](#).
- Find out how we are [working safely in our studies and surveys](#).

## 4 . Leading causes of death

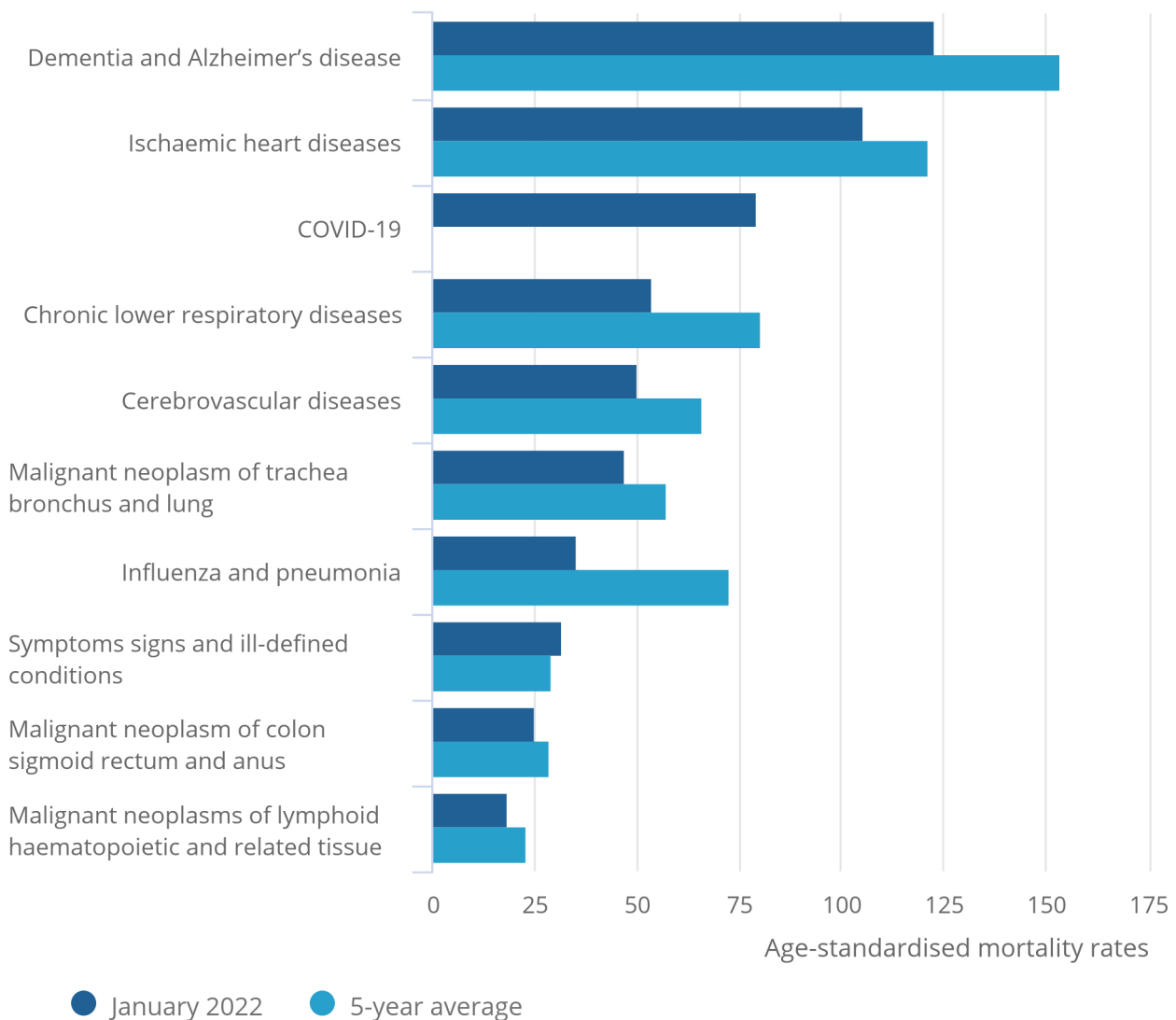
Figures 4 and 5 show the 10 most common underlying causes of death (based on the [leading causes of death groupings](#)), registered in January 2022 for England and Wales, compared with the five-year average for January (2016 to 2019, and 2021).

### Figure 4: In England, dementia and Alzheimer’s disease remained the leading cause of death in January 2022

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, England, deaths registered in January 2022

### Figure 4: In England, dementia and Alzheimer’s disease remained the leading cause of death in January 2022

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, England, deaths registered in January 2022



Notes:

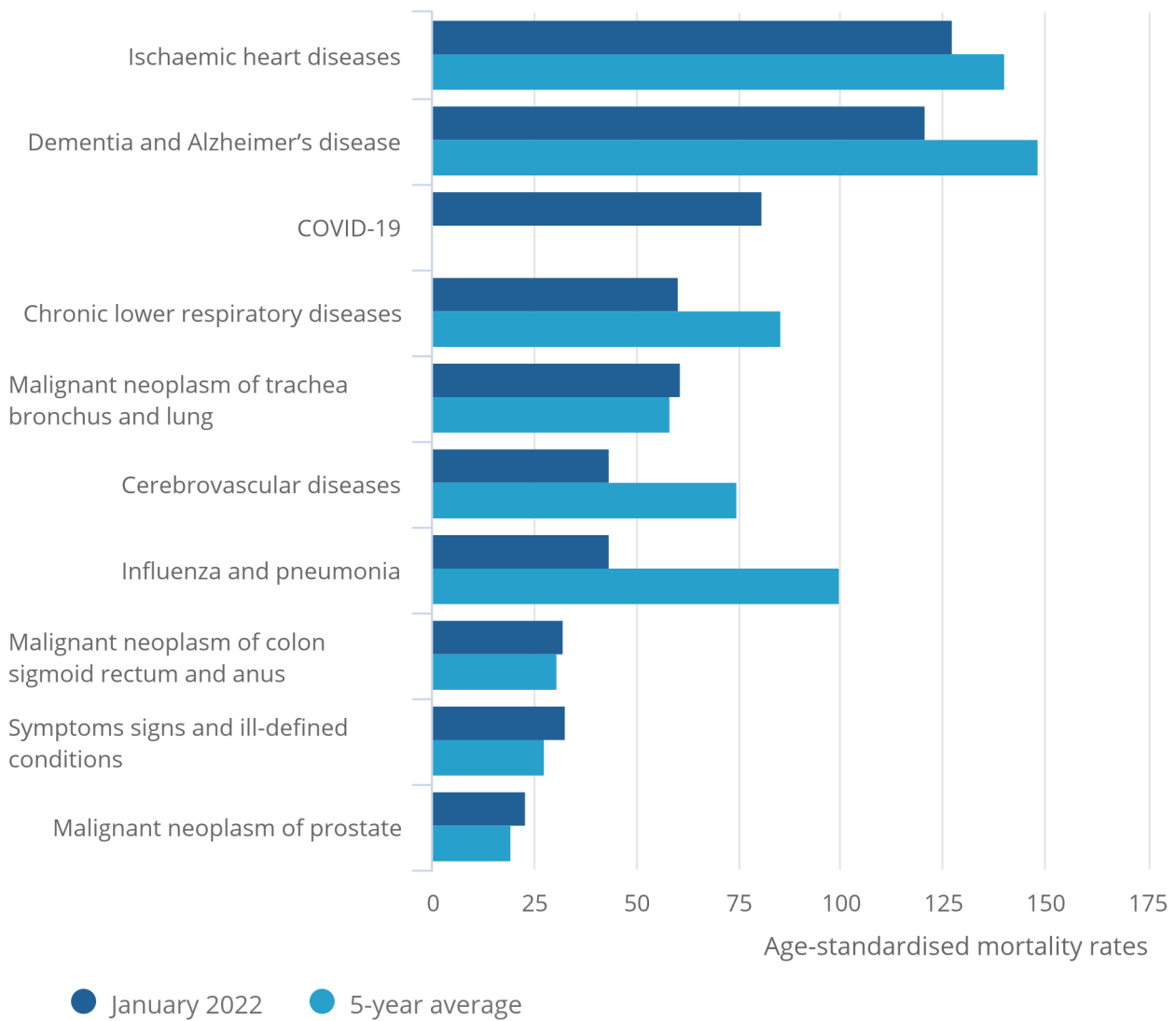
1. Age-standardised mortality rates per 100,000 population, standardised to the 2013 European Standard Population. Monthly rates in this bulletin are adjusted to allow for comparisons with annual rates. For more information, see the [Measuring the data section](#).
2. Figures for 2021 and 2022 are based 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 2016 to 2019 and 2021 (rather than 2016 to 2020) because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020. The average for 2016 to 2019, and 2021, provides a comparison of the number of deaths expected per month in a usual (non-pandemic) year. Where a five-year average cannot be provided, it is denoted as ":" in the data downloads.
6. Leading causes are ranked based on number of deaths, not age-standardised mortality rates.

**Figure 5: In Wales, Ischaemic heart diseases was the leading cause of death in January 2022**

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, Wales, deaths registered in January 2022

Figure 5: In Wales, Ischaemic heart diseases was the leading cause of death in January 2022

Age-standardised mortality rate for selected leading causes of death, per 100,000 people, Wales, deaths registered in January 2022



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 the [Measuring the data section](#).
2. Figures for 2021 and 2022 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 2016 to 2019 and 2021 (rather than 2016 to 2020) because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020. The average for 2016 to 2019, and 2021, provides a comparison of the number of deaths expected per month in a usual (non-pandemic) year. Where a five-year average cannot be provided, it is denoted as "-" in the data downloads.
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 January 2022, at 122.9 deaths per 100,000 people (5,939 deaths). In Wales, ischaemic heart diseases was the leading cause of death, at 127.2 deaths per 100,000 people (374 deaths).

In both England and Wales, coronavirus (COVID-19) was the third leading cause of death in January 2022 (3,797 and 237 deaths respectively), up from fourth in both England and Wales in December 2021.

In England in January 2022, 9 of the 10 leading causes of death were statistically significantly lower than the five-year average, and 1 of the 10 leading causes was statistically significantly higher than the five-year average (symptoms, signs, and ill-defined conditions, with a 9.0% increase in the age-standardised mortality rate (ASMR)). As seen in previous months, the mortality rate for deaths with an underlying cause of influenza and pneumonia was lower in January 2022 than the five-year average for January (51.2% lower). This is likely, in part, to be because of people continuing to follow coronavirus guidance, such as social distancing, reducing the spread of infections such as flu.

In Wales in January 2022, 5 of the 10 leading causes of death were statistically significantly higher than the five-year average and 5 of the 10 leading causes were not significantly different from the five-year average. As seen in England, the January 2022 mortality rate for influenza and pneumonia was significantly lower than the five-year average for January (56.6% lower).

## 5 . Death occurrences in January 2022

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 the [Measuring the data section](#).

In England, 43,503 deaths occurred in January 2022 (and were registered by 7 February 2022). This was 11,877 fewer deaths than the five-year average (2016 to 2019, and 2021) for January (21.4% lower). Of all deaths that occurred, 8.4% (3,669 deaths) were due to coronavirus (COVID-19).

In Wales, 2,965 deaths occurred in January 2022 (and were registered by 7 February 2022), which was 618 fewer deaths than the five-year average (17.2% lower). COVID-19 was the underlying cause of death in 7.9% of all deaths that occurred (234 deaths). In England, the first death due to COVID-19 occurred on 30 January 2020, whereas in Wales the first death due to COVID-19 occurred on 15 March 2020. Figures 6 and 7 show the trends in COVID-19 death occurrences from March 2020 onwards, for England and Wales respectively.

### Figure 6: In England in January 2022, daily deaths due to COVID-19 increased since December 2021

Number of deaths occurring on each day from March 2020 to January 2022, five-year average and range, England

**Notes:**

1. Figures are for deaths occurring on each day rather than deaths registered, registered up to 7 February 2022. Death occurrences will increase as more deaths are registered, particularly for later dates.
2. Figures for 2021 and 2022 (including deaths that occurred in 2020 but were registered in 2021, and deaths that occurred in 2021 but were registered in 2022) are based on provisional mortality data.
3. Figures exclude non-residents.
4. "COVID-19" includes only deaths where COVID-19 was the underlying cause.
5. This chart includes deaths from 1 March 2020. Three deaths due to COVID-19 occurred prior to this in England (one death in January 2020 and two deaths in February 2020), but are not included here.
6. The five-year average for 2022 has been provided for 2016 to 2019 and 2021, providing an up-to-date comparison that is still close to representing a usual (non-pandemic year), but not including the exceptionally high number of deaths seen in 2020. For more information, see [Understanding excess deaths during a pandemic](#).

**Download the data**

[.xlsx](#)

**Figure 7: In Wales in January 2022, daily deaths due to COVID-19 increased since December 2021****Number of deaths occurring on each day from March 2020 to January 2022, five-year average and range, Wales****Notes:**

1. Figures are for deaths occurring on each day rather than deaths registered, registered up to 7 February 2022. Death occurrences will increase as more deaths are registered, particularly for later dates.
2. Figures for 2021 and 2022 (including deaths that occurred in 2020 but were registered in 2021, and deaths that occurred in 2021 but were registered in 2022) are based on provisional mortality data.
3. Figures exclude non-residents.
4. "COVID-19" includes only deaths where COVID-19 was the underlying cause.
5. The five-year average for 2022 has been provided for 2016 to 2019 and 2021, providing an up-to-date comparison that is still close to representing a usual (non-pandemic year), but not including the exceptionally high number of deaths seen in 2020. For more information, see [Understanding excess deaths during a pandemic](#).

**Download the data**

[.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 January 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.

## 6 . Monthly mortality data

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

Dataset | Released 23 February 2022

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 23 February 2022

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 23 February 2022 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 23 February 2022

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.

### [Single year of age and average age of death of people whose death was due to or involved COVID-19](#)

Dataset | Released on 23 February 2022

Provisional deaths registration data for single year of age and average age of death (median and mean) of persons whose death involved coronavirus (COVID-19), England and Wales. Includes deaths due to COVID-19 and breakdowns by sex.

## 7 . 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 the [Measuring the data section](#).

### 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](#).

# 8 . 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 January 2022 by age and sex, and also includes deaths that occurred in January 2022 by date of death. Non-residents of England and Wales are excluded. In January 2022, there were 89 deaths of non-residents that were registered in England and Wales.

## 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 144,923 deaths due to COVID-19, 4,150 (2.9%) were classified as "suspected" COVID-19. Including all 164,737 deaths involving COVID-19, "suspected" COVID-19 was recorded on 2.9% (4,778 deaths) of all deaths involving COVID-19 in England and Wales (excluding non-residents). For more information on the ICD-10 definition of COVID-19, see 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. The [methodology article](#) provides more detail on how this is calculated.

## Acknowledgement

We would like to thank Alex Cooke, Rachel Woods, Fred Barton, and Paul Brown for their valued contribution to this bulletin.

# 9 . 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 and 2022 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](#).

## 10 . Related links

[Deaths registered weekly in England and Wales](#) Bulletin | Released weekly 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 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.

[Excess mortality and mortality displacement in England and Wales: 2020 to mid-2021](#) Article | Released 15 October 2021 Deaths registered in England and Wales by week, from 28 December 2019 to 2 July 2021. Breakdowns include country, sex, age group, region, place of death, and leading cause. Includes analysis of excess deaths and relative cumulative age-standardised mortality rates.

[Deaths registered in private homes, England and Wales: 2020 final and January to June 2021, provisional](#) Article | Released 10 November 2021 Deaths registered in private homes by age, sex, place of occurrence and selected underlying causes of death and the leading causes of death.