

Statistical bulletin

Deaths of care home residents, England and Wales: 2021

Registered deaths of care home residents by underlying and leading cause of death. Deaths of residents by age, sex, and area of usual residence. Experimental Statistics.

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1. Main points

- In England, there were 127,171 deaths of care home residents registered in 2021 (wherever the death occurred); this is a decrease of 18.2% compared with 2020 (28,205 deaths), and a decrease of 3.2% compared with the pre-coronavirus (COVID-19) pandemic five-year average between 2015 and 2019 (4,213 deaths).
- In Wales, there were 6,612 deaths of care home residents registered in 2021 (wherever the death occurred); this is a decrease of 19.7% compared with 2020 (1,624 deaths), and a decrease of 6.1% compared with the five-year average between 2015 and 2019 (429 deaths).
- England had statistically significantly higher age-standardised mortality rates for male care home residents compared with Wales (12,097 and 9,564 deaths per 100,000 male care home residents respectively); the difference between female care home residents in England and Wales was not statistically significant (9,490 and 8,562 deaths per 100,000 female care home residents respectively).
- The East was the region of England with the overall highest mortality rates (12,055 deaths per 100,000 care home residents) and London was the region with the lowest (8,673 deaths per 100,000 care home residents).
- Dementia and Alzheimer disease was the leading cause of death in both male and female care home
 residents in England (accounting for 26.4% and 34.0% of deaths respectively) and Wales (28.3% and
 36.2% respectively) in 2021; coronavirus (COVID-19) was the second highest leading cause of death in
 both male and female care home residents in England (11.5% and 10.8% respectively) and Wales (12.9%
 and 11.1% respectively).
- The majority of deaths of care home residents occurred within the care home or in hospital for both England (86.8% and 12.9% respectively) and Wales (82.5% and 17.3% respectively).

2. Overview of deaths of care home residents

For further information about this statistical bulletin (previously titled <u>Deaths in the Care Sector, England and Wales</u>), please refer to our <u>Deaths of care home residents</u>, <u>England and Wales QMI</u> and our <u>Deaths of care home residents</u>; <u>quality assurance of administrative data</u> article.

The term "care home residents" used in this bulletin refers to all deaths where either (a) the death occurred in a care home or (b) the death occurred elsewhere, but the place of residence of the deceased was recorded as a care home.

Caution needs to be taken when interpreting these results. Several factors may have contributed to lower total deaths in 2021 compared with 2020, including changes in care home occupancy, availability of vaccinations and availability of personal protective equipment (PPE). Comparator figures from the Care Quality Commission (CQC) and Care Inspectorate Wales (CIW) are available in the <u>accompanying dataset</u>.

3. Deaths of care home residents

In 2021, there were 127,171 deaths of care home residents registered in England (47,610 male deaths and 79,561 female deaths). This is an 18.2% decrease in deaths registered compared with 2020 (155,376 deaths).

In Wales, there were 6,612 deaths registered in 2021 (2,343 males and 4,269 females). This is a 19.7% decrease in deaths registered compared with 2020 (8,236 deaths).

The Care Quality Commission (CQC) receives death notifications from care home providers in England, while Care Inspectorate Wales (CIW) receives these for Wales. Deaths notified to these bodies are available in the <u>accompanying dataset</u>.

Age-standardised mortality rates

Age standardised mortality rates (ASMRs) account for population size and age structure (more information in <u>Section 10, Measuring the Data</u>). In England, ASMRs for deaths of care home residents in 2021 were 12,097 deaths per 100,000 male care home residents and 9,490 deaths per 100,000 female care home residents.

For Wales, ASMRs for deaths of care home residents in 2021 were 9,564 deaths per 100,000 male care home residents and 8,562 deaths per 100,000 female care home residents.

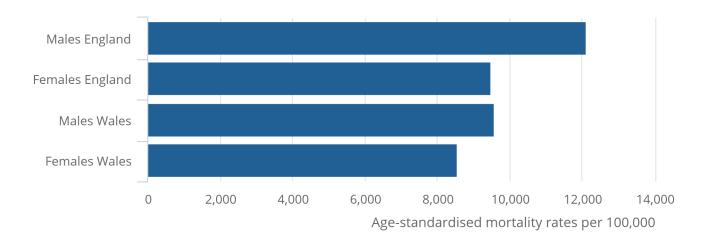
Compared with England, Wales had statistically significantly lower ASMRs for deaths of care home residents for males; however, deaths for female care home residents were not statistically significant.

Figure 1: In both England and Wales, male care home residents had a higher age-standardised mortality rate than female care home residents

Age-standardised mortality rates for deaths of care home residents per 100,000, England and Wales, deaths registered in 2021

Figure 1: In both England and Wales, male care home residents had a higher age-standardised mortality rate than female care home residents

Age-standardised mortality rates for deaths of care home residents per 100,000, England and Wales, deaths registered in 2021



Source: Office for National Statistics

Notes:

- 1. Based on deaths registered in 2021.
- 2. Figures exclude deaths of non-residents.
- 3. These rates are for all ages and are standardised to the 2013 European Standard Population.
- 4. ASMRs calculated for 2021 are based on Census 2021 data, (see Section 10, Measuring the Data).
- 5. Please note, confidence intervals are presented in the reference tables.

4. Deaths of care home residents by age

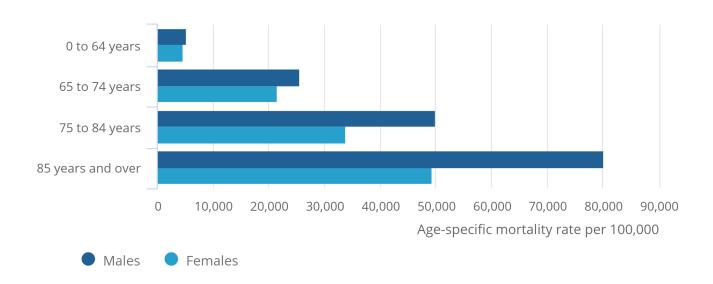
In England, when broken down by age group (0 to 64 years, 65 to 74 years, 75 to 84 years, 85 years and older), male care home residents had a statistically significantly higher age-specific mortality rate than female care home residents in all age groups except those aged 0 to 64 years (Figure 2).

Figure 2: In 2021, male care home residents in England aged 85 years and over had the highest agespecific mortality rates

Age-specific mortality rates for deaths of care home residents per 100,000 population, England, 2021

Figure 2: In 2021, male care home residents in England aged 85 years and over had the highest age-specific mortality rates

Age-specific mortality rates for deaths of care home residents per 100,000 population, England, 2021



Source: Office for National Statistics

Notes:

- 1. Based on deaths registered in 2021.
- 2. Figures exclude deaths of non-residents.
- 3. These rates are for all ages and are standardised to the 2013 European Standard Population.
- 4. ASMRs calculated for 2021 are based on Census 2021 data, (see Section 10, Measuring the Data).
- 5. Please note, confidence intervals are presented in the reference tables.

Wales follows a similar pattern. Males had a higher age-specific mortality rate than females; however, this was only statistically significant for males aged 75 to 84 and 85 years and older (Figure 3).

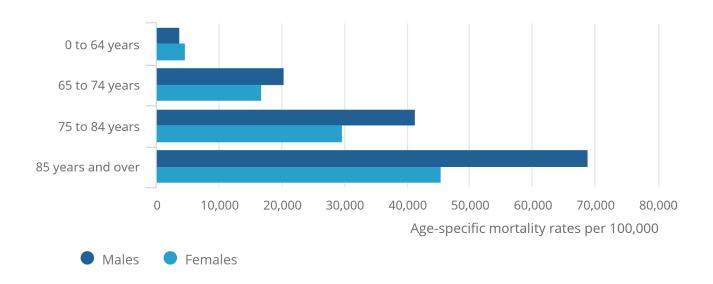
When comparing age-specific mortality rates between England and Wales in 2021, overall, all age groups in England had statistically significantly higher age-specific mortality rates compared with Wales, except for females aged 0 to 64 years (where the difference was not statistically significant).

Figure 3: In 2021, male care home residents in Wales aged 85 years and over had the highest age-specific mortality rates

Age-specific mortality rates for deaths of care home residents per 100,000 population, Wales, 2021

Figure 3: In 2021, male care home residents in Wales aged 85 years and over had the highest age-specific mortality rates

Age-specific mortality rates for deaths of care home residents per 100,000 population, Wales, 2021



Source: Office for National Statistics

Notes:

- 1. Based on deaths registered in 2021.
- 2. Figures exclude deaths of non-residents.
- 3. These rates are for all ages and are standardised to the 2013 European Standard Population.
- 4. ASMRs calculated for 2021 are based on Census 2021 data, (see Section 10, Measuring the Data).
- 5. Please note, confidence intervals are presented in the reference tables.

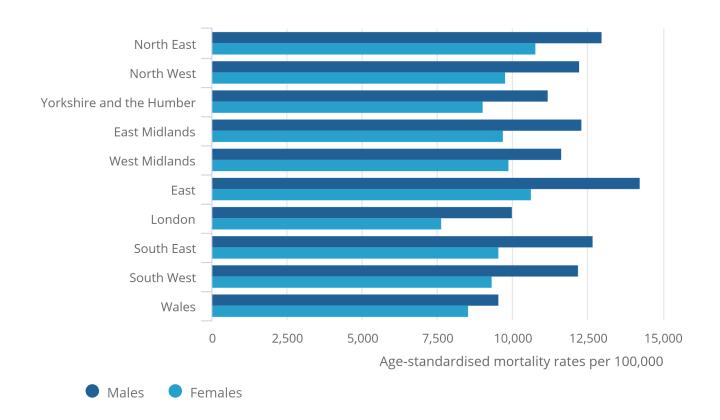
5. Deaths of care home residents by region

Figure 4: In 2021, male care home residents in the East of England had the highest age-standardised mortality rates

Age-standardised mortality rates per 100,000 population, males and females, English regions and Wales, 2021

Figure 4: In 2021, male care home residents in the East of England had the highest age-standardised mortality rates

Age-standardised mortality rates per 100,000 population, males and females, English regions and Wales, 2021



Source: Office for National Statistics

Notes:

- 1. Based on deaths registered in 2021.
- 2. Figures exclude deaths of non-residents.
- 3. These rates are for all ages and are standardised to the 2013 European Standard Population.
- 4. ASMRs calculated for 2021 are based on Census 2021 data, (see Section 10, Measuring the Data).
- 5. Please note, confidence intervals are presented in the reference tables.

In England in 2021, the East had the highest age-standardised mortality rates (ASMRs) for male care home resident deaths (14,239 deaths per 100,000 male care home residents). For female care home residents in England, the North East has the highest ASMRs (10,800 deaths per 100,000 female care home residents). This can be compared with London, which has the lowest mortality rate for both males and females, with 9,984 deaths per 100,000 male care home residents and 7,644 deaths per 100,000 female care home residents.

Wales had the lowest ASMR for males compared with the regions in England with a mortality rate of 9,654 deaths per 100,000 for male care home residents.

The numbers of deaths recorded by local authority are available in the accompanying dataset.

6. Place of death

In 2021, most deaths of care home residents registered in England (86.8%) occurred within care homes (110,412 deaths), compared with 12.9% that occurred in hospital and 0.3% occurring elsewhere. Care home resident deaths in Wales follow a similar pattern, with 82.5% of deaths occurring in a care home (5,455 deaths), compared with 17.3% of deaths that occurred in hospital and 0.2% that occurred elsewhere. This pattern remains unchanged for both England and Wales compared with 2020.

7. Leading cause of death

Leading cause of death groupings are based on categories developed by the World Health Organisation (WHO) (see <u>Section 10</u>, <u>Measuring the data</u>). Table 1 shows the top five underlying causes of death registered among care home residents for England and Wales. A full list of leading causes is available in the <u>accompanying dataset</u>.

Table 1: Dementia and Alzheimer disease was the leading cause of death in male and female care home residents

Percentage of deaths of care home residents for the five leading causes of death in England and Wales, 2021

Famalaa

England

Males		Females		
Dementia and Alzheimer disease	26.4	Dementia and Alzheimer disease	34.0	
COVID-19	11.5	COVID-19	10.8	
Cerebrovascular diseases	5.5	Symptoms, signs and ill-defined conditions	8.0	
Ischaemic heart diseases	5.3	Cerebrovascular diseases	6.1	
Malignant neoplasm of prostate	4.1	Ischaemic heart diseases	4.0	
Wales				
Males		Females		
Dementia and Alzheimer disease	28.3	Dementia and Alzheimer disease	36.2	
COVID-19	12.9	COVID-19	11.1	
Cerebrovascular diseases	7.6	Symptoms, signs and ill-defined conditions	7.3	
Ischaemic heart diseases	5.8	Cerebrovascular diseases	6.7	
Symptoms signs and ill-defined conditions	3.7	Ischaemic heart diseases	4.0	

Source: Office for National Statistics

Notes

- 1. Based on deaths registered in 2021.
- 2. The "Symptoms, signs and ill-defined conditions" category includes deaths where no more specific diagnosis can be made, including deaths certified as caused only by "old age", "frailty" or other similar terms.
- 3. Figures exclude deaths of non-residents.

Dementia and Alzheimer disease was the leading cause of death in all male and female care home residents aged 65 years and over in England. For those care home residents aged under 65 years, coronavirus (COVID-19) was the leading cause of death in both males and females, accounting for 8.7% and 9.2% of deaths respectively. In 2020, COVID-19 was the leading cause of death in care home residents aged 0 to 64 years, accounting for 13.5% of deaths in male care home residents and 13.4% of female care home residents in this age group.

In Wales, dementia and Alzheimer disease was the leading cause of death in all age groups for female care home residents, and for all male care home residents aged 65 and over. For male care home residents aged under 65 years, COVID-19 was the leading cause of death, accounting for 14.3% of deaths (compared with 12.5% of deaths of male care home residents in 2020).

When comparing the leading cause of death in the general population of England and Wales, as reported in our <u>Deaths registered in England and Wales; 2021 bulletin,</u> the leading cause of death for females in the general population was dementia and Alzheimer disease, accounting for 14.0% of deaths. The leading cause of death for males in the general population was ischaemic heart disease, accounting for 12.4% of deaths. COVID-19 was the second overall leading cause of death in the general population, accounting for 10.6% of deaths in females and 12.3% in males. The proportion of dementia and Alzheimer disease is higher in the care home resident population than in the general population, while the proportion of COVID-19 in care home residents is in line with the general population.

Breakdowns of leading causes of death by age group are available in our accompanying dataset.

8. Deaths of care home residents, England and Wales data

Deaths of care home residents, England and Wales

Dataset | Released 22 November 2022

Registered deaths of care home residents by underlying cause of death and the leading causes of death. Contains death registrations of care home residents by age, sex, and area of usual residence. Classified as Experimental Statistics.

9. Glossary

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. These are a better measure of mortality for use in comparison than the number of deaths, as they account for the population size and age structure. The 2013 European Standard Population is used to standardise rates.

Care home resident

The term "care home residents" used in this bulletin refers to all deaths where either (a) the death occurred in a care home or (b) the death occurred elsewhere but the place of residence of the deceased was recorded as a care home. The figures should not be confused with "deaths in care homes" as reported in other releases, which refers only to category (a).

10. Measuring the data

This bulletin provides information concerning mortality rates and causes of death for deaths of care home residents registered in 2021. When interpreting these mortality statistics please note that:

- death statistics are compiled from information supplied when deaths are certified and registered as part of civil registration, a legal requirement
- this release provides summary figures and more detail on both individual causes of death and selected leading causes of death, where individual causes are aggregated using a list developed by the World Health Organisation (WHO), modified for use in England and Wales
- summary figures published in the release include analysis of causes of death by broad disease groupings
 (a list of these is available in <u>Section 10 of our User guide to mortality statistics article</u>)
- figures in this release are presented for England and Wales separately because of the devolved nature of adult social care, as shown in this explainer from the Nuffield Trust

Age-standardised mortality rates

We publish internationally recognised age-standardised mortality rates (ASMRs) to facilitate comparisons, and these are calculated using the same methods as for all of our mortality releases, as explained in our <u>Mortality statistics in England and Wales QMI</u>.

For previous releases, our <u>2018-based population projections for England</u> and the <u>2018-based population projections for Wales on the Stats Wales website</u> have been used in combination with 2011 Census data to estimate the care home population of England and Wales. These were then used to calculate ASMRs. However, for this release, care home population numbers from Census 2021 were available to calculate ASMRs. This provides a more up-to-date measure of the care resident population. It also accounts for the impact that the coronavirus (COVID-19) pandemic may have had on the care resident population, owing to excess deaths of care home residents and fluctuations in occupancy rates.

Data on care home residents from Census 2021 have not yet been published. For further information on when Census 2021 publications are scheduled for release, see our Census 2021 release plans.

Experimental Statistics

These statistics have been submitted for assessment to the UK Statistics Authority. The results of this assessment are available on the Office for Statistics Regulation webpage. These statistics are currently designated as Experimental Statistics.

Collaboration

In the development of this bulletin, we have worked closely with partner departments across government including the <u>Care Quality Commission (CQC)</u> and the <u>Care Inspectorate Wales (CIW)</u>.

Care Quality Commission (CQC)

The CQC is the independent regulator of health and social care in England and receives statutory death notifications from care home providers in England. Notifications about deaths of care homes must be sent to the CQC without delay using the CQC Provider Portal. These are typically provided within two to three days of death. The data provided by the CQC are daily counts of care home residents who died in care homes, by date of notification. More information on the data provided by the CQC can be found in our Publication of statistics on deaths involving COVID-19 in care homes in England: transparency statement.

Notification forms ask service providers about the person who died, including their characteristics. However, these questions are not marked as mandatory and so we may not get all providers answering them, which would render the dataset incomplete. Therefore, Office for National Statistics (ONS) death registration data for characteristics of care home residents have not been compared with 2021 CQC data because of the degree of missingness within the death notification data.

CQC and ONS data differ, as the ONS reports death registrations while the CQC reports death notifications from care home providers. CQC data are timelier, as providers have a statutory responsibility to provide a death notification without delay, and so are typically provided within two to three days of death. CQC does not hold person-level information that allows a direct comparison between the two sources, so an accurate assessment between the different reporting criteria cannot be determined.

Care Inspectorate Wales (CIW)

In Wales, the Welsh Government publishes the number of deaths of registered adult care home residents notified to the CIW. Providers have a statutory responsibility to provide a death notification, so notifications are typically provided to CIW within two to three days of death, a shorter delay than with ONS death registrations.

Data are collected daily through an online form developed and maintained by CIW. The data are validated against previous returns and any significant changes are queried. Data include all notifications up to midnight each day, and the data collection covers residents of adult care homes.

The ONS uses a broader definition of care home residents than that used in the CIW data.

Coding of deaths

Our<u>leading causes of death groupings</u> are based on a list developed by the World Health Organization (WHO). This categorises causes of death using the <u>International Classification of Diseases</u>, <u>10th edition (ICD-10)</u>into groups that are epidemiologically more meaningful than single ICD-10 codes. This is for the purpose of comparing the most common causes of death in the population. Causes such as cancer and circulatory diseases are split into different subtypes, with the aim of providing policymakers with enough detail to generate appropriate health policies and interventions.

Deaths are cause coded using the World Health Organization's (WHO) International Classification of Diseases, 10th edition (ICD-10). Deaths are coded to ICD-10 using IRIS software (version 2013). Cause of death reported here represents the final underlying cause of death for ages 28 days and over. This takes account of additional information received from medical practitioners or coroners after the death has been registered.

For further information on how deaths are coded for this release, refer to our <u>Deaths of care home residents</u>, <u>England and Wales Quality and Methodology Information (QMI)</u> or to <u>Section 9</u>, <u>Cause of Death Coding in our User Guide to Mortality Statistics</u>.

Methodology guides

Information on the quality of data included in this release can be found in our <u>Deaths of care home residents:</u> <u>quality assurance of administrative data</u> article. Quality and methodology information on strengths, limitations, appropriate uses, and how the data were created for this release is available in our <u>Deaths of care home residents</u>. <u>England and Wales Quality and Methodology Information (QMI)</u>.

Our <u>User guide to mortality statistics</u> provides further information on data quality, legislation and procedures relating to mortality, and includes a <u>glossary of terms</u>.

The <u>Revisions policy for population and international migration statistics (including mortality statistics)</u> is also available.

Feedback

Comments on this release are welcomed. Feedback can be emailed to social.care@ons.gov.uk.

11 . Strengths and limitations

The strengths and limitations of Office for National Statistics (ONS) care home resident mortality data for England and Wales are the same as those summarised in the <u>Mortality statistics in England and Wales QMI, Section 4, Strengths and limitations subsection.</u>

Figures in this release represent England and Wales data separately because of the devolved nature of social care (as shown in this explainer from the Nuffield Trust); therefore, deaths of those whose usual residence is outside England and Wales, or deaths of residents that happened abroad, are not included in our analyses.

There is a large degree of comparability in death statistics between countries within the UK. There are some differences, although these are believed to have a negligible impact on the comparability of the statistics. These differences are outlined in our <u>Mortality statistics in England and Wales QMI</u>.

A five-year average of death registrations is presented to ensure that patterns in death registrations are comparable over time without the effect of year-on-year fluctuations.

For this release covering deaths registered in 2021, the five-year average for 2015 to 2019 was used (rather than 2016 to 2020). This is because of the impact of the coronavirus (COVID-19) pandemic on deaths registered in 2020, and so providing a comparison with the number of deaths expected in a non-pandemic year. For further information on calculating five-year averages for mortality statistics following the pandemic, refer to Understanding excess deaths during a pandemic | National Statistical (ons.gov.uk).

12. Related links

Deaths of care home residents: quality assurance of administrative data

Methodology Article | Released 28 October 2022

Summary of the administrative data sources and quality assurance undertaken in the production of care home resident deaths data, published in annual, weekly, and ad-hoc releases.

Deaths of care home residents, England and Wales QMI

Methodology Article | Released 28 October 2022

Quality and methodology information (QMI) for deaths of care home residents registered in England and Wales.

Deaths registered in England and Wales: 2021

Bulletin | Released 1 July 2022

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

Care home resident deaths registered in England and Wales, provisional

Dataset | Updated weekly

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

UK adult social care statistics

Website | Updated monthly

This tool compiles official statistics relating to adult social care across the four nations: England, Northern Ireland, Scotland, and Wales into one location. The landscape is updated each month with new publications from the previous month.

13. Cite this bulletin

Office for National Statistics (ONS), released 22 November 2022, ONS website, statistical bulletin, <u>Deaths of care home residents</u>, <u>England and Wales: 2021</u>