

Article

Deaths registered in private homes, England and Wales: 2020 final and January to June 2021, provisional

Deaths registered in private homes by age, sex, place of occurrence and selected underlying causes of death and the leading causes of death.

Contact: Health Statistics and Research health.data@ons.gov.uk +44 1633 582629 Release date: 10 November 2021 Next release: To be announced

Table of contents

- 1. Main points
- 2. Deaths in private homes, 2001 to 2021
- 3. Deaths by place of occurrence
- 4. Deaths in private homes by sex and age group
- 5. Cause of death
- 6. Deaths in private homes data
- 7. Glossary
- 8. Data sources and quality
- 9. Related links

1. Main points

- The number of deaths in private homes registered in 2020 was 166,576, which was 41,321 deaths above the five-year average (2015 to 2019); between January 2020 to June 2021 there were 252,486 deaths, which was 62,792 above average.
- The number of deaths in private homes has been generally increasing since 2005 but in 2020 there was a large increase, 29.2% higher than 2019.
- Between January 2021 and June 2021, the latest data shows that deaths in private homes have remained high with 85,910 deaths during this period compared with 84,051 deaths between January 2020 to June 2020.
- Private homes are the only place of occurrence where deaths have been consistently above the five-year average in all months from January 2020 to June 2021.
- In private homes, dementia and Alzheimer's disease was the leading cause of death with the largest increase in deaths in 2020 compared to the five-year average; 72.5% and 60.7% increase for males and females respectively (1,433 and 2,485 more deaths).
- Contributory factors of death on Part II of the death certificate show a similar pattern to the five-year average, with diabetes being consistently the most mentioned for deaths in private homes.

This bulletin focuses on deaths registered in England and Wales together. Further geographical breakdowns, including England and Wales separately, are available in the <u>accompanying dataset</u>. Data is up to the end of June 2021, the latest available when this analysis began. This analysis uses finalised data from 2001 to 2020 and provisional data for January to June 2021. Provisional data has been included to understand the impact of the pandemic more fully on deaths in private homes, which we will continue to monitor.

Statistician's comment

"Private homes are the only place where deaths have been consistently above the five-year average (2015 to 2019) in all months from January 2020 to June 2021. However, unlike hospitals, care homes and other settings, the main cause of death has not been COVID-19. Instead we have seen substantial increases in people dying from other things such as heart disease, dementia and Alzheimer's and various cancers. The pandemic therefore appears to have had an indirect effect on private home deaths. This could be because of a combination of factors which may include health service disruption, people choosing to stay away from health care settings or terminally ill people staying at home rather than being admitted to other settings for end of life care. More investigation is needed to understand this."

Sarah Caul, Head of Mortality Analysis

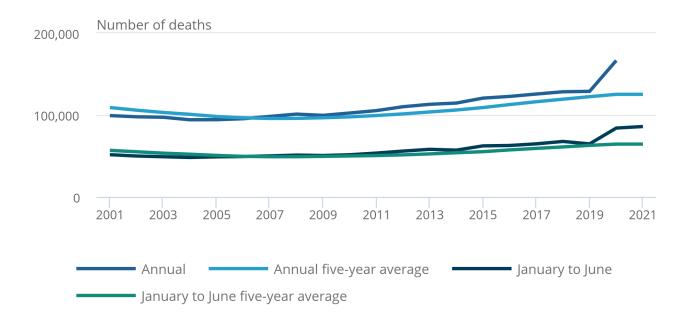
2. Deaths in private homes, 2001 to 2021

Figure 1: Deaths registered in private homes were higher than the five-year average from 2007 onwards

Deaths registered in private homes, England and Wales, 2001 to 2021 annually and January to June and the corresponding fiveyear average

Figure 1: Deaths registered in private homes were higher than the five-year average from 2007 onwards

Deaths registered in private homes, England and Wales, 2001 to 2021 annually and January to June and the corresponding five-year average



Source: Office for National Statistics

Notes:

- 1. All figures for 2021 are provisional.
- 2. The five-year average is based on the previous five years, for example 2001 is compared to the 1996 to 2000 average, with the exception of 2021 where the 2015 to 2019 average has been used as this provides a comparison of the number of deaths expected in a usual (non-pandemic) year.
- 3. Based on when a death was registered as opposed to when it occurred.
- 4. Figures include deaths of non-residents.
- 5. Private homes are defined as a person's own residence, which may have some shared facilities.

Deaths in private homes fell from 2001 to 2004 but from 2005 rose nearly every year (Figure 1). The number of deaths for the whole of 2020 and January to June 2021 was particularly high. The number of deaths in 2020 was 166,576, 33.0% more deaths than expected when looking at the 2015 to 2019 average.

A similar pattern can be seen for the first half of 2021 with the number of deaths registered between January and June 2021 being 33.3% higher than the five-year average (2015 to 2019) with 85,910 deaths.

It is currently unclear how the pandemic has driven the increase in 2020. Reasons for this increase could be a combination of factors which may include health service disruption, people choosing to stay away from health care settings or terminally ill people staying at home rather than being admitted to other settings for end-of-life care. More investigation is needed to understand this.

3. Deaths by place of occurrence

Private homes are the only place of occurrence where deaths were consistently above the five-year average (2015 to 2019) in all months from January 2020 to June 2021. Deaths in private homes remained above average when the total in all settings was below average and remained above average when deaths involving coronavirus (COVID-19) were removed from the total.

Figure 2: The number of deaths registered in private homes was higher than the five-year average in all months from January 2020 to June 2021

Deaths registered in all places of occurrence by month, England and Wales, January 2020 to June 2021

Notes:

- 1. All figures for 2021 are provisional.
- 2. The average for 2015 to 2019 provides a comparison of the number of deaths expected in a usual (non-pandemic) year.
- 3. Excess deaths are defined as the number of deaths above or below the five-year average.
- 4. Based on when a death was registered as opposed to when it occurred.
- 5. Figures include deaths of non-residents.
- 6. Private homes are defined as a person's own residence, which may have some shared facilities. Care homes include homes for the chronic sick; nursing homes; homes for people with mental health problems and non-NHS multi function sites. Hospices include Sue Ryder Homes; Marie Curie Centres; oncology centres; voluntary hospice units; and palliative care centres. Hospitals include acute or community, not psychiatric.

Download this chart

.xlsx

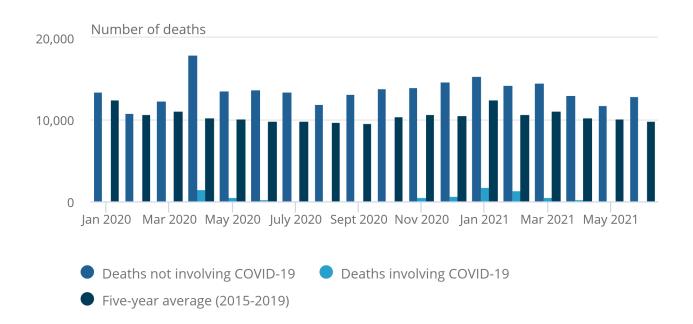
Weekly excess deaths data by place of occurrence can be found in our <u>Deaths registered weekly in England and</u> <u>Wales, provisional</u> bulletin.

Figure 3: Deaths registered in private homes were at their highest during the two peaks of the pandemic

Deaths registered in private homes by month, England and Wales, January 2020 to June 2021

Figure 3: Deaths registered in private homes were at their highest during the two peaks of the pandemic

Deaths registered in private homes by month, England and Wales, January 2020 to June 2021



Source: Office for National Statistics

Notes:

- 1. All figures for 2021 are provisional.
- 2. The average for 2015 to 2019 provides a comparison of the number of deaths expected in a usual (non-pandemic) year.
- 3. Based on when a death was registered as opposed to when it occurred.
- 4. Figures include deaths of non-residents.
- 5. The International Classification of Diseases, Tenth Edition (ICD-10) definitions are as follows; coronavirus (COVID-19) (U07.1, U07.2, U09.9 and U10.9).
- 6. "Deaths involving COVID-19" refers to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause of death or not.
- 7. Private homes are defined as a person's own residence, which may have some shared facilities.

Excess deaths in private homes between January 2020 and June 2021 were reflective of peaks in the COVID-19 pandemic. Some deaths during the early stages of the pandemic may have been recorded as not involving COVID-19 because of the limited availability of testing. Data on daily testing capacity in the UK is available on gov. <u>uk</u>.

4. Deaths in private homes by sex and age group

There were 166,576 registered deaths in 2020 that occurred in private homes. There were more deaths in males (92,042 deaths) than females (74,534 deaths); 31.7% and 34.6% above the five-year average respectively.

In England and Wales in 2020, the majority of age groups had more deaths in private homes compared with the five-year average for both males and females. This was particularly the case for those aged 80 years or older, with 21,390 excess deaths (51.8% of the total excess death in private homes) (Figure 4). For all months during the pandemic, the distribution of deaths across age groups was similar.

Figure 4: Males accounted for more than half of all excess deaths in private homes in 2020

Deaths registered in private homes by sex and age group, England and Wales, 2020

Notes:

- 1. Based on when a death was registered as opposed to when it occurred.
- 2. Figures include deaths of non-residents.
- 3. The average for 2015 to 2019 provides a comparison of the number of deaths expected in a usual (non-pandemic) year.
- 4. Age breakdowns may not sum the all ages total due to rounding.

Download this chart

.xlsx

5. Cause of death

Leading causes of death in private homes

This section uses the Office for National Statistics (ONS) leading causes of death groupings.

In 2020 in England and Wales, the overall leading cause of death was coronavirus (COVID-19) (73,766 deaths), of which 4.4% (3,221 deaths) occurred in private homes. COVID-19 was also the overall leading cause of death between January 2020 and June 2021.

Despite the comparably low number of deaths involving COVID-19 in private homes, there was a substantial increase in deaths from a range of other conditions. This points to the COVID-19 pandemic having an indirect impact on the rise in deaths.

For deaths in private homes in 2020, the leading cause of death was Ischaemic heart diseases in males and females, 17,852 and 8,076 deaths respectively, a 16.6% increase compared to the five-year average (2015 to 2019). Ischaemic heart diseases was also the leading cause of death in private homes between January 2020 and June 2021, and for the five-year average (2015 to 2019).

The cause with the largest proportional increase in 2020 was dementia and Alzheimer's disease for both males and females, 72.5% and 60.7% above the five-year average respectively.

Deaths from cancers appearing in the top 10 leading causes of death were also substantially raised, including of the trachea, bronchus and lung (26.4% increase). The rise could be because of a combination of factors which may include people choosing to stay at home to die or because access to health services was impacted by the COVID-19 pandemic. More investigation is required to understand this.

Additional data relating to leading causes, as well as short cause codes, are available in the accompanying tables.

Table 1: Ischaemic heart diseases were the leading cause of death in private homes, for both males and females

in 2020

Leading causes of death in private homes, by sex, England and Wales, 2020

	Leading causes of death	ICD-10 codes	2020	Five-year average (2015 to 2019)	Excess deaths	Percentage above five-year average (2015 to 2019)
	Ischaemic heart diseases	120–125	17,852	15,035	2,817	18.7%
	Malignant neoplasm of trachea, bronchus and lung	C33-C34	6,603	5,452	1,151	21.1%
	Malignant neoplasm of prostate	C61	4,723	3,285	1,438	43.8%
	Chronic lower respiratory diseases	J40–J47	4,655	4,074	581	14.3%
	Malignant neoplasm of colon, sigmoid, rectum and anus	C18-C21	3,886	2,853	1,033	36.2%
Males	Dementia and Alzheimer disease	F01, F03, G30	3,410	1,977	1,433	72.5%
	Malignant neoplasms, stated or presumed to be primary of lymphoid, haematopoietic and related tissue	C81-C96	2,179	1,479	700	47.3%
	Cerebrovascular diseases	160-169	1,952	1,532	420	27.4%
	COVID-19	U07.1, U07.2, U10.9	1,930	-	1,930	-
	Influenza and pneumonia	J09-J18	1,566	1,579	-13	-0.8%
	Ischaemic heart diseases	120–125	8,076	7,209	867	12.0%
	Dementia and Alzheimer disease	F01, F03, G30	6,580	4,095	2,485	60.7%
	Malignant neoplasm of trachea, bronchus and lung	C33-C34	5,971	4,492	1,479	32.9%
	Malignant neoplasm of breast	C50	3,901	2,849	1,052	36.9%

Females	Chronic lower respiratory diseases	J40-J47	3,844	3,317	527	15.9%
	Symptoms, signs and ill- defined conditions	R00-R99	3,581	2,360	1,221	51.7%
	Malignant neoplasm of colon, sigmoid, rectum and anus	C18-C21	2,903	2,125	778	36.6%
	Cerebrovascular diseases	160–169	2,360	1,888	472	25.0%
	Influenza and pneumonia	J09-J18	1,368	1,614	-246	-15.2%
	COVID-19	U07.1, U07.2, U10.9	1,291	-	1,291	-

Source: Office for National Statistics

Notes

- 1. Based on when a death was registered as opposed to when it occurred.
- 2. Figures include deaths of non-residents.
- 3. Leading causes groupings produced by the World Health Organisation (WHO) have been used.
- 4. The International Classification of Diseases, 10th Edition (ICD-10) have been used.
- 5. The average for 2015 to 2019 provides a comparison of the number of deaths expected in a usual (non-pandemic) year.

For information regarding the leading cause of death in England and Wales separately, please see the <u>accompanying dataset</u>.

Contributory factors to deaths in private homes

The death certificate (<u>Annex A (PDF, 224KB</u>)) used in England and Wales is set out in two parts: Part I gives the condition or sequence of conditions leading directly to death, while Part II gives details of any associated conditions that contributed to the death but are not part of the causal sequence. This section focuses on mentions in Part II, regardless of what the underlying cause of death was.

In 2020, there was a similar pattern to the five-year average (2015 to 2019) and in line with the higher number of deaths there was an increase in the number of mentions of contributory causes.

Diabetes had the highest number of mentions (16,205 mentions) for deaths registered in private homes. Diabetes was also the most prevalent contributory factor when looking at the five-year average (6,391 mentions), and between January 2020 and June 2021 (24,842 mentions).

6 . Deaths in private homes data

Deaths registered in private homes, England and Wales Dataset | 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.

7. Glossary

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 <u>World Health Organisation (WHO)</u>.

Excess deaths

Excess deaths are those deaths that are above the five-year average levels. For example, if on average 100 people died on this day over the past five years, but 120 died on the same day this year, this would mean there are 20 excess deaths.

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 <u>Births and Deaths Registration Act 1953</u>, 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.

8. Data sources and quality

Registration delays

This bulletin is based mainly on the date deaths are registered, not the date of death, because of the time taken for a death to be registered. Deaths in England and Wales are normally registered within five days, but there can be a considerably longer delay in some circumstances, particularly when the death is referred to a coroner. More information on this issue can be found in our<u>impact of registration delays article</u>.

Coding of deaths

Deaths are cause coded using the World Health Organization's (WHO)<u>International Classification of Diseases,</u> <u>tenth edition (ICD-10)</u>. 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 years and over. This takes account of additional information received from medical practitioners or coroners after the death has been registered.

On 1 January 2020, we updated the software used to code causes of death and derive a single underlying cause. This is known as Multicausal and Unicausal Selection Engine (MUSE) (IRIS version 5.5). More information is available on the <u>differences caused by the change of software</u>.

9. Related links

Deaths registered weekly in England and Wales, provisional

Bulletin | 2 November 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

Monthly mortality analysis, England and Wales

Bulletin | Released 22 October 2021

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

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.