



INTERNATIONAL  
LONG TERM CARE  
POLICY NETWORK

# England: Estimates of mortality of care home residents linked to the COVID-19 pandemic

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## **Itccovid.org**

This document is available through the website [Itccovid.org](#), which was set up in March 2020 as a rapidly shared collection of resources for community and institution-based long-term care responses to Covid-19. The website is hosted by CPEC at the London School of Economics and Political Science and draws on the resources of the International Long Term Care Policy Network.

Corrections and comments are welcome at [a.comas@lse.ac.uk](mailto:a.comas@lse.ac.uk). This document was last updated on 17 May 2020 and may be subject to revision.

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## 1. Key findings:

- Data on deaths in care homes directly attributed to COVID-19 underestimate the impact of the pandemic on care home residents, as they do not take account of indirect mortality effects of the pandemic and/or because of problems with the identification of the disease as the cause of death.
- Not all care home residents die in care homes. According to ONS data, 13% of all deaths of care home residents took place in hospitals (28% of residents whose deaths were linked to COVID died in hospitals).
- Data on registered COVID-19 deaths among care home residents in England only accounts for an estimated 54% of all excess deaths in care homes (compared to same period in 2019).
- Total excess mortality taking place in care homes since 28<sup>th</sup> December is estimated to be 19,319 (48% of all excess mortality in England), and excess mortality among care home residents was 22,231, 55% of all excess mortality in England.
- This short report has been updated since the first version of the 12<sup>th</sup> of May, as the ONS published more detailed data on care home residents on the 15<sup>th</sup> May. A more detailed analysis of the new data published by ONS will be added soon.

## 2. Introduction

This document sets out the information currently publicly available about the impact of COVID-19 on people who live and work in care homes, with a particular focus on mortality. There is still relatively little information to assess the full impact of the COVID-19 pandemic on people who use and provide long-term care in England.

This document will be updated and expanded as new data becomes publicly available. Comments on how to improve these estimates are welcome, please email [a.comas@lse.ac.uk](mailto:a.comas@lse.ac.uk).

## 3. Estimating excess mortality among care home residents

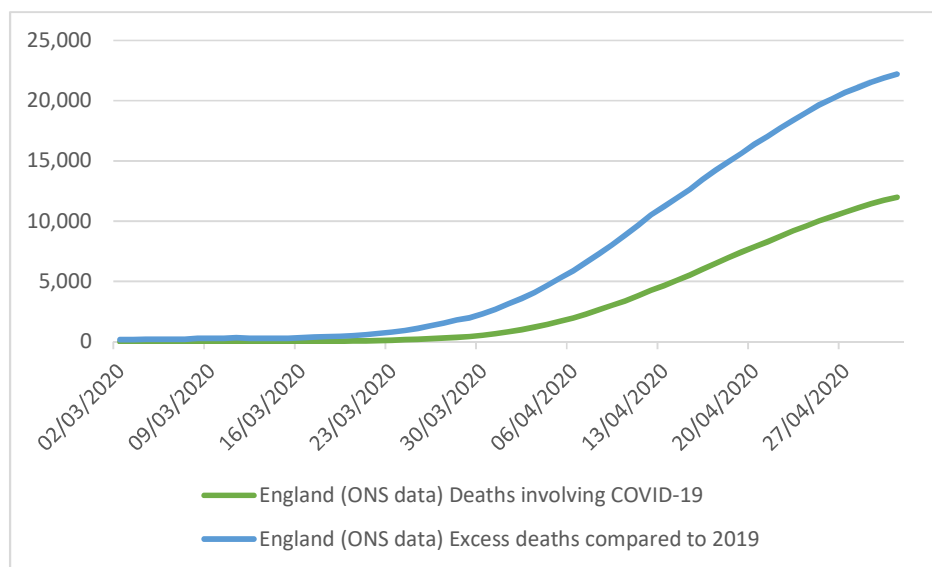
Measuring the number of deaths confirmed or suspected to be linked to COVID-19 requires a test to ascertain whether the person had the virus at the time of death, or a statement from the person reporting the death linking it to the virus. However, the impact on mortality of COVID-19 may be through both indirect as well as direct effects, and not all deaths directly linked to COVID-19 will be identified and recorded as such (for instance in death certificates). This is why it is important to also calculate “excess mortality” estimates for COVID-19, including among care home residents and home care users. Excess mortality represents the difference between the number of deaths in a given group that have happened during the pandemic, compared to the average number of deaths in previous years during the same period.

Examples of indirect causes of deaths linked to the pandemic would include cases in which people did not seek or receive medical care for other health conditions as a result of fear of

contracting the disease, a concern not to over-burden the National Health Service, or lack of access to care that would be normally provided. A recent letter to the Journal of America Medical Director suggests that many deaths in a French care home<sup>1</sup> affected by COVID-19 appeared to be linked to the consequences of residents being isolated in their rooms, without adequate eating, drinking or medical support, and not to the virus itself.

The figure below shows the difference between the excess mortality among care home residents in England and Wales between the 2<sup>nd</sup> March and the 1<sup>st</sup> May (registered by 9<sup>th</sup> May), and the number of deaths of care home residents registered as linked to COVID-19, based on data from the ONS<sup>2</sup>. Excess deaths have been estimated by comparing deaths during the same period in 2019. During that period, there were 22,231 “excess deaths” among care home residents, and 11,989 deaths linked to COVID-19. COVID-19 deaths accounted for 54% of all excess deaths in that period.

**Figure 1. “Excess mortality” among care home residents in England between 2<sup>nd</sup> March and 1<sup>st</sup> May (compared to same period in 2019) and number of deaths of care home residents linked to COVID-19.**



Source: own calculation based on data from the ONS<sup>3</sup>

<sup>1</sup> [https://www.jamda.com/article/S1525-8610\(20\)30354-6/pdf](https://www.jamda.com/article/S1525-8610(20)30354-6/pdf)

<sup>2</sup>

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/deathsinvolvingcovid19inthecaresectorenglandandwales/deathsoccurringupto1may2020andregisteredupto9may2020provisional> (Table 1)

<sup>3</sup>

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/deathsinvolvingcovid19inthecaresectorenglandandwales/deathsoccurringupto1may2020andregisteredupto9may2020provisional>

The table below sets out the information that would ideally be needed at national level to monitor the scale of infections and mortality among care home residents and staff and that can be directly or indirectly attributed to COVID-19. Where information has been found, details of the source and the calculations carried out are in the next section.

		<b>Residents</b>	<b>Staff</b>
<b>1</b>	<b>Numbers of tests carried out in care homes in your country</b>	<i>Not found</i>	<i>Not found</i>
<b>2</b>	<b>Number of care home residents and staff who tested positive for COVID-19</b>	<i>Not found</i>	<i>Not found</i>
<b>3</b>	<b>Number of care homes that have experienced outbreaks</b>	5,546 out of the 15,517 care homes in England (36%) had reported confirmed or suspected outbreaks of COVID-19 in care homes to Public Health England by 10 May	<i>N.A.</i>
<b>4</b>	<b>Number of care home residents transferred to hospital due to suspected or confirmed COVID</b>	<i>Not found</i>	<i>N.A. (although data on care home staff admitted to hospital would be of interest too)</i>
<b>5</b>	<b>Number of care home residents who died in hospital, deaths linked to COVID-19</b>	3,345 (ONS: 2 March to 1 <sup>st</sup> May, deaths registered up to 9 <sup>th</sup> May), 28% of all care home resident deaths linked to COVID-19 happened in hospital	<i>N.A.</i>
<b>6</b>	<b>Number of care home residents and staff who died and tested positive (before or after death) for COVID-19</b>	<i>Not found</i>	<i>Not found</i>
<b>7</b>	<b>Number of people who died in the care home, and tested positive for COVID-19</b>	<i>Not found</i>	<i>N.A.</i>
<b>8</b>	<b>Number of care home residents and staff who died from suspected/probable COVID-19</b>	12,185 (CQC: 10 April to 8 May)	131 across all social care sector (up to 20 <sup>th</sup> April, includes home care staff)
<b>9</b>	<b>Number of people who died in care homes from suspected/probable COVID-19</b>	8,314 (CQC: 10 April to 8 May) or 8,602 (ONS: 2 March to 1 May, registered up to 9 May)	<i>N.A.</i>

<b>10</b>	<b>Number of excess deaths in care homes compared to same time period in previous years</b>	19,319 (calculation based on ONS data to 1 <sup>st</sup> May): 48% of all excess mortality	N.A.
<b>11</b>	<b>Number of excess deaths of care home residents, compared to same period in previous years</b>	22,231 (ONS to 1 May, registered by 9 May) and 26,194 (CQC to 8 May). This is 55% of all excess mortality	N.A.
<b>12</b>	<b>How are care homes defined in the official mortality statistics in your country?</b>	Definition from CQC <sup>4</sup> : A care home is a place where personal care and accommodation are provided together. People may live in the service for short or long periods. For many people, it is their sole place of residence and so it becomes their home, although they do not legally own or rent it. Both the care that people receive and the premises are regulated. Examples: Residential home, rest home, convalescent home, respite care, mental health crisis house, therapeutic communities, nursing home	
<b>13</b>	<b>What is the total number of people who live in care homes (as per the definition of care homes used in the official mortality data in your country) And how many staff work there?</b>	Data from CQC reported by the BBC: 411,000 people living in care homes in England and Wales <sup>5</sup>	Data from Skills for care: in 2019 there were 685,000 jobs in residential adult social care settings <sup>6</sup>

#### 4. Sources and calculations:

This section provides details of the sources and calculations used to complete the table above, each number corresponds to the rows of the table for which we have some data:

#### 3. Number of care homes that have experienced outbreaks

<https://www.gov.uk/government/statistical-data-sets/covid-19-number-of-outbreaks-in-care-homes-management-information>

Rates of care home deaths with outbreaks range from 25.9% in the South East to 47.3% in the North East.

#### 5. Number of care home residents who died in hospital, death linked to COVID-19

<sup>4</sup> <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/service-types#care-homes-nursing>

<sup>5</sup> <https://www.bbc.co.uk/news/health-52284281>

<sup>6</sup> <https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/Size-of-the-adult-social-care-sector/Size-and-Structure-2019.pdf>

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathsinvolvingcovid19inthecaresectorenglandandwales>, table 5

CQC also provides data (on the same release, table 8, but the place of death is not stated for a large proportion of the care home residents).

#### **8. Number of care home residents and staff who died from suspected/probable COVID-19:**

For residents:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/numberofdeathsincareshomesnotifiedtothecarequalitycommissionengland> (table 4)

For staff:

Analysis of the deaths of people of working age population until the 20<sup>th</sup> April in England and Wales by the Office for National Statistics<sup>7</sup> found that people working in the social care sector had significantly higher death rates. There had been a total 131 (45 males and 86 females) deaths involving COVID-19, with rates of 23.4 deaths per 100,000 males (compared to 9.9 per 100,000) and 9.6 deaths per 100,000 females (compared to 5.2 deaths per 100,000). In contrast, the analysis did not find statistically higher rates of deaths among healthcare workers. The data published did not distinguish between social care staff working in care homes or in the community.

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathsregistereduptoandinclusing20april2020>

#### **9. Number of people who died in the care home from suspected/probable COVID-19:**

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathsinvolvingcovid19inthecaresectorenglandandwales>, tables 5 and 6

#### **10. Number of excess deaths in care homes compared to same time period in previous years:**

*Excess deaths among care home residents:*

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathsinvolvingcovid19inthecaresectorenglandandwales> table 1: 22,231 deaths

*Calculation of deaths in care homes:*

Using the estimate, based on data from Table 5 on place of death, that 13.1% of all care home residents died in homes, so 86.9% out of 22,231 deaths would result in 19,319 deaths in care homes.

*Comparison with total excess mortality in England:*

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/weeklyprovisionalfiguresondeathsregisteredinenglandandwales>

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7

All excess mortality in England in 2020 (up to 1<sup>st</sup> May) was 40,262 deaths. So 47.8% of all excess deaths in England in 2020 would have taken place in a care home.

#### **11. Number of excess deaths of care home residents, compared to same period in previous years:**

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathsinvolvingcovid19inthecaresectorenglandandwales> Table 1, comparison between 2020 and 2019, there are two sets of data, that collected by ONS (including deaths up to the 1<sup>st</sup> of May that were registered up to the 9<sup>th</sup> of May) and data from CQC (up to the 8<sup>th</sup> May). The ONS reported 22,231 excess deaths in care homes compared to 2019 (ONS to 1 May, registered by 9 May) and CQC 26,194 (CQC to 8 May)

*Comparison with total excess mortality in England:*

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/weeklyprovisionalfiguresondeathsregisteredinenglandandwales>

All excess mortality in England in 2020 (up to 1<sup>st</sup> May) amounted to 40,262 deaths. So 55.2% of all excess deaths in England in 2020 would have been deaths of care home residents (comparing 22,231 excess deaths in England as per ONS up to 1<sup>st</sup> of May).

## **5. Caveats**

The calculations above used the best publicly available data that the authors could find for England.

The data published so far by the ONS uses a different time frame from which to calculate total excess mortality (average number of deaths during the same time of the year in the last 5 years) and excess mortality among care home residents (average number of deaths in 2019).

The authors have not been able to contrast the approach they have used to estimate excess mortality in care homes with the methodology the ONS uses to estimate excess mortality in the population and like to encourage ONS to publish their own estimates of excess mortality among care home residents in a way that is comparable to their estimates of total deaths.