



# UK Health Security Agency

## Weekly Care Homes Evidence Digest

### Prevention and control of COVID-19 in home care/care homes settings

25<sup>th</sup> February 2022

#### Summary

This weekly digest contains a selection of evidence published in the last 7 days, in relation to the prevention and control of COVID-19 in home care/care home settings. We search a number of Covid-19 review repositories, an existing UK Health Security Agency (UKHSA) Covid-19 evidence digest (including Covid-19 evidence digests produced by Public Health England prior to October 2021), Ovid Medline and Embase, Social Care Online, medRxiv (pre-print server) and various websites. We select peer reviewed and non-peer reviewed publications (pre-prints), as well as systematic reviews, guidance and evidence summaries.

The digest is produced by UKHSA [Knowledge and Library Services](#) (KLS), in conjunction with a small editorial team.

We do not accept responsibility for the availability, reliability or content of the items included in this resource and do not necessarily endorse the views expressed within them. Our intent is to highlight early emerging research findings as well as research that has been subject to peer review and wider scrutiny.

The digest this week includes; from the USA, evidence of an association between COVID-19 deaths in nursing homes and overall facility conditions and location; and a suggested methodology for improving estimates of the impact of COVID-19 on long-term care facilities; from France, further evidence of the benefit of a COVID-19 vaccine booster in nursing home residents; and from the International Long-Term Care Policy Network, international evidence of a strong correlation between the number of COVID-19 deaths among people living in the community and among care home residents, highlighting the importance of community transmission.

From the UK, a call for research funders to support an effective care home research infrastructure as part of on-going national pandemic preparedness planning.

Finally, summaries of other recently published COVID-19 pandemic reports, guidance and statistics. An ongoing series of UKHSA rapid reviews on a range of COVID-19 related research questions can be also found at <https://ukhsalibrary.koha-ptfs.co.uk/covid19rapidreviews/>. A wider range of UKHSA information resources on the impact of the COVID-19 pandemic may be found at <https://ukhsalibrary.koha-ptfs.co.uk/coronavirusinformation/>.

## Peer-Reviewed Articles

| Publication date | Title / URL  | Journal / Article type                   | Digest  |
|------------------|--|--|---|
| 21.02.2022       | <p>A 2-year pandemic period analysis of facility and county-level characteristics of nursing home coronavirus deaths in the United States, January 1, 2020 – December 18, 2021</p> | Geriatric Nursing / Study                | <ul style="list-style-type: none"> <li>• Nursing home residents are highly susceptible to COVID-19 infection and complications. Authors used a generalized linear mixed Poisson model and spatial statistics to examine the determinants of COVID-19 deaths in 13,350 nursing homes in the first 2-year pandemic period using the Centers for Medicare and Medicaid Services and county-level related data.</li> <li>• The average prevalence of COVID-19 mortality among residents was 9.02 per 100 nursing home beds in the first 2-year of the pandemic.</li> <li>• Overall facility conditions and location are a determinant of health for residents</li> <li>• Facility rating is associated with COVID-19 deaths among nursing homes residents.</li> <li>• Spatial analysis showed a significant hotspot of nursing home COVID-19 deaths in the Northeast US. This study contributes tonursing home quality assessment for improving residents' health.</li> </ul>   |
| 22.02.2022       | <p>A Typology of COVID-19 Data Gaps and Noise From Long-Term Care Facilities: Approximating the True Numbers</p>   | Gerontology & Geriatric Medicine / Study | <ul style="list-style-type: none"> <li>• There is agreement that COVID-19 has had devastating impacts in long-term care facilities (LTCFs) but estimates of cases and deaths have varied widely with little attention to the causes of this variation.</li> <li>• The authors developed a typology of data vulnerabilities and a strategy for approximating the true total of COVID-19 cases and deaths in LTCFs. Based on iterative qualitative consensus, it categorises LTCF reporting vulnerabilities and their potential impacts on accuracy.</li> <li>• Concurrently, authors compiled one dataset based on LTCF self-reports and one based on confirmatory matching with California's COVID-19 databases, including death certificates.</li> <li>• The authors argue that the higher (self-report) case total approximates the lower bound of true COVID-19 cases, and the higher (confirmed match) death total approximates the lower bound of true COVID-19 deaths, both of which are higher than state and federal counts.</li> </ul> |

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|            |   |               | <ul style="list-style-type: none"> <li>LTCFs other than nursing facilities accounted for 35% of cases and 29% of deaths. Improving the accuracy of COVID-19 figures, particularly across types of LTCFs, would better inform interventions for these vulnerable populations.</li> </ul>   |
| 22.02.2022 | Strong decay of SARS-CoV-2 spike antibodies after two BNT162b2 vaccine doses and high antibody response to a third dose in nursing home residents | JAMDA / Study | <ul style="list-style-type: none"> <li>Cohort study to measure the antibody decay after two BNT162b2 doses and the antibody response after a third vaccine dose administered 6 months after the second one in nursing home residents with and without prior COVID-19.</li> <li>The strong and rapid decay of RBD-IgG levels after the second BNT162b2 dose in all residents and the high antibody response after the third dose validate the recommendation of a third vaccine dose in residents less than 6 months after the second dose, prioritizing residents without prior COVID-19.</li> <li>The slope of RBD-IgG decay after the third BNT162b2 dose and the protection level against SARS-CoV-2 B.1.1.529 (omicron) and other variants of concern provided by the high post-boost vaccination RBD-IgG response require further investigation in residents.</li> </ul> |

### Reports and other publications

| Publication date | Title / URL   | Author(s)                      | Digest  |
|------------------|---|--------------------------------|---|
| 22.02.2022       | International data on deaths attributed to COVID-19 among people living in care homes | Comas-Herrera, Adelina; et al. | <ul style="list-style-type: none"> <li>This resource aims to provide an overview of the international situation and will be updated regularly. It will not be included in the CHD after this week.</li> <li>The strong correlation between the number of COVID-19 deaths among people living in the community and among care home residents remains, highlighting the importance of community transmission despite all the measures to protect care homes.</li> <li>The ratio of cumulative deaths of care home residents linked to COVID-19 and the number of people living in care homes close to the beginning of the Pandemic is over 1 in 10 in Belgium, Slovenia, England, Scotland and the United States.</li> </ul> |

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|  |  |  | <ul style="list-style-type: none"> <li>Data gathered in these reports, for the few countries the authors covered, shows at least 421,959 care home residents have deaths linked to COVID-19 so far, equivalent to the entire population of cities like San Juan (Puerto Rico), Bratislava (Slovakia), Auckland (New Zealand) and Oakland (United States).</li> </ul> |
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## Guidance

| Publication date             | Title / URL   | Author(s) | Digest  |
|------------------------------|---|-----------|---|
| Updated<br><b>24.02.2022</b> | <a href="#">COVID-19: management of staff and exposed patients and residents in health and social care settings</a> | UKHSA     | <ul style="list-style-type: none"> <li>Guidance on the management of staff, patients and residents who have been exposed to COVID-19.</li> </ul>                    |
| Updated<br><b>18.02.2022</b> | <a href="#">Coronavirus (COVID-19): providing home care</a>   | DHSC      | <ul style="list-style-type: none"> <li>Information for those providing personal care to people living in their own home during the coronavirus outbreak.</li> </ul> |

## Statistics

| Publication date  | Title / URL   | Author(s) | Digest   |
|-------------------|---|-----------|--|
| <b>22.02.2022</b> | <a href="#">Number of deaths in care homes notified to the Care Quality Commission, England</a> | ONS, CQC  | <ul style="list-style-type: none"> <li>Provisional counts of deaths in care homes caused by the coronavirus (COVID-19) by local authority. Published by the Office for National Statistics and Care Quality Commission.</li> </ul>                               |
| <b>22.02.2022</b> | <a href="#">Care home resident deaths registered in England and Wales, provisional</a>          | ONS       | <ul style="list-style-type: none"> <li>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.</li> </ul> |

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|------------|--|------------------|---|
| 22.02.2022 | Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes (headline data): 16 February 2022 | Welsh Government | <ul style="list-style-type: none"> <li>• Notifications related to COVID-19 in adult care homes during the coronavirus pandemic for 22 February 2022.</li> </ul> |
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## Editorials and News

| Publication date | Title / URL   | Author(s)               | Digest   |
|------------------|---|-------------------------|--|
| 17.02.2022       | The COVID-19 pandemic has highlighted the need to invest in care home research infrastructure | Gordon, Adam L.; et al. | <ul style="list-style-type: none"> <li>• The COVID-19 pandemic resulted in catastrophic levels of morbidity and mortality for care home residents. Despite this, research platforms for COVID-19 in care homes arrived late in the pandemic compared with other care settings.</li> <li>• The Prophylactic Therapy in Care Homes Trial (PROTECT-CH) was established to provide a platform to deliver multi-centre cluster-randomized clinical trials of investigational medicinal products for COVID-19 prophylaxis in UK care homes, but by the time this infrastructure was in place, the widespread uptake of vaccination in care homes had changed the epidemiology of COVID-19 rendering the trial unfeasible.</li> <li>• Beyond COVID-19, there are many other research questions that require addressing to provide better care to people living in care homes.</li> <li>• PROTECT-CH has exposed a clear need for research funders to invest in, and legislate for, an effective care home research infrastructure as part of national pandemic preparedness planning. This would also invigorate care home research in the interim, leading to improved healthcare delivery specific to those living in this sector.</li> </ul> |