



# UK Health Security Agency

## Weekly Care Homes Evidence Digest

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

28<sup>th</sup> January 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 China, importance of self-esteem in moderating the association between death anxiety and health related quality of life in older people; from Canada, a retrospective cohort study of long-term care residents showing evidence of significant excess mortality in residents after the first two waves of the COVID-19 pandemic; from USA, an evaluation of the effectiveness of cleaning strategies in acute and long-term care facilities and lessons for optimising the approach during staff shortages; from Japan, further evidence of the need for mental health support for care givers and care receivers during the COVID-19 pandemic; from Spain, adverse psychological and functional impacts of COVID-19 in long-term care facilities and a call for regular assessment and appropriate interventions as a priority; and from Spain and Brazil, a multi-centre longitudinal study of risk factors for developing COVID-19 infection in nursing home residents; from Italy, further evidence of the benefit of COVID-19 boosters in substantially reducing mortality and morbidity in older people; and from Italy and Singapore, a narrative review with lessons from the Asian approach to containment measures for COVID-19 in long-term care facilities.

From the UK, a cohort study of long- term care residents showing lower risk of mortality and hospitalisation due to Omicron compared with previous SARS CoV-2 variants.

Finally, summaries of other recently published COVID-19 pandemic reports, guidance and statistics.

We now have a search facility for the Weekly Care Homes Evidence Digest. This can be achieved by using Endnote Software and accessing the monthly backups of the Research Digest. This will give access to the content of all previous weekly Digests and allow simple searches e.g. on authors, abstracts (where these are captured) and titles. Please note that this is not a substitute for a proper literature search. If you would like to access this facility please contact [arthur.pearce@phe.gov.uk](mailto:arthur.pearce@phe.gov.uk). 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
19.01.2022	<a href="#">Death anxiety, self-esteem, and health-related quality of life among geriatric caregivers during the COVID-19 pandemic</a>	Psychogeriatrics / Study	<ul style="list-style-type: none"> <li>• This study aimed to examine whether self-esteem could moderate the association between death anxiety and health-related quality of life during the pandemic, through a cross-sectional study of sample of 236 geriatric caregivers in nursing homes, conducted in Jinan and Heze cities, Shandong Province, China, from November 2020 to January 2021.</li> <li>• Data on sociodemographic variables, death anxiety, self-esteem, and health-related quality of life were collected. Descriptive analysis, Pearson correlation, and moderated analysis were used for statistical analysis.</li> <li>• The study found self-esteem played a moderating role between death anxiety and health-related quality of life during the pandemic, which implies that mental health should be given more attention, and that interventions for improving self-esteem need to be carried out.</li> </ul>
20.01.2022	<a href="#">COVID-19 excess mortality among long-term care residents in Ontario, Canada</a>	PLOS one / Study	<ul style="list-style-type: none"> <li>• Residents of long-term care homes have been disproportionately affected by COVID-19. Authors conducted a retrospective cohort study to determine the scale of pandemic-related deaths of long-term care residents in the province of Ontario, Canada, and to estimate excess mortality due to a positive COVID-19 test adjusted for demographics and regional variations.</li> <li>• Crude mortality rates for 2019 and 2020 were compared, as were predictors of mortality among residents with positive and negative tests from March 2020 to December 2020.</li> <li>• Study found the crude mortality rates were higher from April 2020 to June 2020 and from November 2020 to December 2020, corresponding to Wave 1 and Wave 2 of the pandemic in Ontario. There were also substantial increases in mortality among residents with a positive COVID-19 test.</li> </ul>

			<ul style="list-style-type: none"> <li>• The significant differences in excess mortality observed in relation to long-term care home ownership category and geographic region may indicate gaps in the healthcare system that warrant attention from policymakers.</li> <li>• Further investigation is needed to identify the most relevant factors in explaining these differences.</li> </ul>
21.01.2022	Psychological and functional impact of COVID-19 in long-term care facilities: The COVID-A Study	Am. J. Geriatric Psychiatry / Study	<ul style="list-style-type: none"> <li>• Study investigated the psychological and functional sequelae of the COVID-19 pandemic in older adults living in long term care facilities.</li> <li>• The COVID-19 pandemic was associated with high three-month rates of clinically significant symptoms of depression anxiety, posttraumatic stress disorder (PTSD), and sleep complaints in older LTCF residents.</li> <li>• Those who tested positive for COVID-19 at baseline endorsed greater symptoms of (PTSD) and anxiety.</li> <li>• Residents presented functional decline, regardless of COVID-19 status at baseline—possibly related to social isolation.</li> <li>• Results suggest that scheduled assessments and interventions aimed at reducing psychological impact and functional consequences may be a priority in older LTCF residents during a pandemic.</li> </ul>
22.01.2022	Factors Associated with Increased Caregiver Burden of Informal Caregivers during the COVID-19 Pandemic in Japan	J. of Nutrition, Health & Aging / Study	<ul style="list-style-type: none"> <li>• Study's objective was to explore the association between various factors and the increased caregiver burden of informal caregivers during the COVID-19 pandemic.</li> <li>• On February, 2021, 700 informal caregivers completed an online survey. Authors assessed change in caregiver burden during the COVID-19 pandemic. Among all caregiver participants, 41.0% complained of an increased caregiver burden</li> <li>• Factors associated with increased caregiver burden were: <ul style="list-style-type: none"> <li>○ Depressive symptoms in caregivers</li> <li>○ Dementia and low Barthel Index scores in care receivers</li> <li>○ Care days and times, and,</li> <li>○ Use of home care service and visiting care service.</li> </ul> </li> <li>• These findings suggest we need to pay attention to the physical and mental health of both the care receivers and caregivers.</li> </ul>

24.01.2022	Efficacy of COVID-19 vaccine booster doses in older people	European Geriatric Med. / Study	<ul style="list-style-type: none"> <li>• Provides updated analysis on efficacy of COVID-19 vaccine booster doses in older people (i.e., aged ≥ 80 years) based on ongoing Italian nationwide COVID-19 vaccination campaign.</li> <li>• Compared to those who completed the COVID-19 vaccination cycle for ≥ 5 months, those receiving booster doses had 75% lower risk of SARS-CoV-2 infection, 82–83% lower risk of COVID-19 hospitalization and ICU admission, and 81% lower risk of death.</li> <li>• Administration of COVID-19 vaccine boosters generated also greater protection (between 63 and 87% higher) against all these same endpoints compared to early completing a primary COVID-19 vaccination cycle.</li> <li>• Authors conclude administration of COVID-19 vaccine booster doses is advisable for reducing the risk of morbidity and mortality in older people.</li> </ul>
24.01.2022	Long-Term Care Facilities (LTCFs) During the COVID-19 Pandemic—Lessons From the Asian Approach: A Narrative Review	JAMDA / Study	<ul style="list-style-type: none"> <li>• The COVID-19 pandemic put into question the organizational skills of LTCF. The containment measures implemented in several Asian countries avoided heavy death tolls in LTCF in contrast to other countries across the globe.</li> <li>• The aim of this review is therefore to investigate and illustrate the measures that were undertaken in Asia to contain and prevent the spread of the COVID-19 pandemic in LTCF.</li> <li>• Author concludes that Asian preventive control guidelines are similar to those recommended elsewhere. Difference in timing and past experience with prior outbreaks such as SARS and MERS might have favored the Asian response.</li> <li>• Furthermore, sociocultural values toward older persons by protecting and making sure that LTCF are part of the health care system could have also played a role.</li> </ul>
21.01.2022	Effectiveness of various cleaning strategies in acute and long-term care facilities during novel corona virus 2019 disease pandemic-related staff shortages	PLOS one / Study	<ul style="list-style-type: none"> <li>• Study aimed to evaluate the effectiveness of daily, enhanced terminal, and contingency-based cleaning strategies in an acute care hospital (ACH) and a long-term care facility (LTCF), using SARS-CoV-2 RT-PCR and adenosine triphosphate (ATP) assays. <ul style="list-style-type: none"> <li>○ Daily cleaning involved light dusting and removal of visible debris while a patient is in the room.</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>○ Enhanced terminal cleaning involved wet mopping and surface wiping with disinfectants after a patient is permanently moved out of a room followed by ultraviolet light (UV-C), electrostatic spraying, or room fogging.</li> <li>○ Contingency-based strategies, performed only at the LTCF, involved cleaning by a commercial environmental remediation company with proprietary chemicals and room fogging.</li> <li>● At the ACH, SARS-CoV-2 RNA was detected on 66% of surfaces before cleaning and on 23% of those surfaces immediately after terminal cleaning, for a 65% post-cleaning reduction. UV-C enhancement resulted in an 83% reduction, while enhancement with electrostatic bleach application resulted in a 50% reduction. ATP levels on RNA positive surfaces were not significantly different from those of RNA negative surfaces.</li> <li>● LTCF contamination rates differed between the dementia, rehabilitation, and residential units. 67% of surfaces had RNA after room fogging without terminal-style wiping. Fogging with wiping led to a -11% change in the proportion of positive surfaces. At the LTCF, mean ATP levels were lower after terminal cleaning.</li> <li>● Previous reports have shown time spent cleaning by hospital employed environmental services staff did not correlate with cleaning thoroughness. However, time spent cleaning by a commercial remediation company in this study was associated with cleaning effectiveness.</li> <li>● These findings may be useful for optimizing allocation of cleaning resources during staffing shortages.</li> </ul>
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## Preprints

Publication Date	Title / URL	Preprint Source	Digest
23.01.2022	<a href="#">Outcomes of SARS-CoV-2 Omicron infection in residents of Long-Term Care</a>	MedRxiv	<ul style="list-style-type: none"> <li>● Authors used cohort study to compare risk of hospital admission / death in LTCF residents in England who had tested positive for SARS-CoV-2 in the period shortly before Omicron emerged (Delta dominant)</li> </ul>

			<p>and the Omicron-dominant period, adjusting for age, sex, vaccine type, and booster vaccination. Variants were confirmed by sequencing or spike-gene status in a subset.</p> <ul style="list-style-type: none"> <li>• Risk of hospital admission was markedly lower in 398 residents infected in the pre-Omicron period (10.8% hospitalised) compared to 1,241 residents infected in the Omicron-period (4.01% hospitalised); findings were similar in residents with confirmed variant.</li> <li>• No residents with previous infection were hospitalised in either period.</li> <li>• Mortality was lower in the Omicron versus the pre-Omicron period.</li> <li>• This suggests the current wave of Omicron infections is unlikely to lead to a major surge in severe disease in LTCF populations with high levels of vaccine coverage and/or natural immunity.</li> </ul>
24.01.2022	Risk factors for developing symptomatic COVID-19 in older residents of nursing homes: A hypothesis-generating observational study	MedRxiv	<ul style="list-style-type: none"> <li>• Study aimed to identify risk factors associated with developing COVID-19 infection with symptoms in institutionalized older people.</li> <li>• A 1-year longitudinal multicenter study was conducted in 5 Nursing homes (NH) during the period December 2019 to March 2021. Inclusion criteria was residents aged &gt;65 years, living in the NH permanently, with a diagnostic test for COVID-19 confirmed by reverse transcription polymerase chain reaction and/or serological test.</li> <li>• Of the total sample of 78 individuals who tested positive for COVID-19, mean age 84.6 years, 79.5% were female.</li> <li>• 51.3% participants presented with COVID-19 symptoms. Living in a private NH and having suffered a stroke were positively associated with developing COVID-19 infection with symptoms.</li> <li>• Authors conclude that having suffered a stroke and living permanently in a private health care facility were positively associated with symptomatic COVID-19 in this sample of institutionalized older people.</li> </ul>

## Guidance

Publication date	Title / URL	Author(s)	Digest
19.01.2022	<a href="#">Updated guidance on self-isolation for residents in adult care homes and indoor visiting: letter from Deputy Chief Medical Officer and Deputy Chief Nursing Officer</a>	Scottish Government	<ul style="list-style-type: none"> <li>Letter from Graham Ellis, Deputy Chief Medical Officer and Anne Armstrong, Deputy Chief Nursing Officer, to the adult care sector.</li> </ul>
25.01.2022	<a href="#">Coronavirus (COVID-19): minimising the risk over winter and updated protective measures for Omicron variant for care at home settings</a>	Scottish Government	<ul style="list-style-type: none"> <li>Summary of updated guidance sent, in letters, to the care at home, housing support, supported housing and building-based day services sectors highlighting measures that should be taken to minimise the risk of COVID-19, including the Omicron variant.</li> </ul>
Updated 26.01.2022	<a href="#">Supported living services during coronavirus (COVID-19)</a>	DHSC	<ul style="list-style-type: none"> <li>Guidance for providers of supported living settings.</li> </ul>
Updated 26.01.2022	<a href="#">Coronavirus (COVID-19) testing service for extra care and supported living settings</a>	UKHSA	<ul style="list-style-type: none"> <li>Guidance on regular testing for extra care and supported living (ECSL) settings that meet the eligibility criteria.</li> </ul>

## Statistics

Publication date	Title / URL	Author(s)	Digest
25.01.2022	<a href="#">Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 19 January 2022</a>	Welsh Government	<ul style="list-style-type: none"> <li>The report provides provisional counts of the number of adult care homes reporting one or more confirmed cases of COVID-19 and provisional counts of deaths in care homes. This is based on notifications by care home providers to Care Inspectorate Wales. The location of death may be in the care home, in hospital or another location.</li> </ul>

<b>25.01.2022</b>	Care home resident deaths registered in England and Wales, provisional	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>
<b>25.01.2022</b>	Number of deaths in care homes notified to the Care Quality Commission, England	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>26.01.2022</b>	Coronavirus (COVID-19): adult care homes - additional data	Scottish Government	<ul style="list-style-type: none"> <li>Weekly data on COVID-19 in adult care homes in Scotland.</li> </ul>