



Public Health  
England

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## **Weekly Care Homes Evidence Digest**

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

**2<sup>nd</sup> July 2021**

#### **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 PHE Covid-19 evidence digest, 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 PHE **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.

## Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
23.06.2021	Association between Family Caregivers and Depressive Symptoms among Community-Dwelling Older Adults in Japan: A Cross-Sectional Study during the COVID-19 Pandemic	Archives of Gerontology and Geriatrics / Study	<ul style="list-style-type: none"> <li>This cross-sectional study included 957 (mean age [standard deviation] = 80.8 [4.8] years; 53.5% females) community-dwelling older adults aged <math>\geq 65</math> years from a semi-urban area of Japan, who completed a mailed questionnaire.</li> <li>Results include: Compared to non-caregivers, family caregivers were associated with the incidence (OR [95% CI] = 3.17 [1.55–6.51], <math>p &lt; 0.01</math>) and persistence of depressive symptoms (OR [95% CI] = 2.39 [1.30–4.38], <math>p &lt; 0.01</math>). Primary caregivers, caregivers for individuals with severe care needs, and caregivers with increased burden during the pandemic had a high risk of depressive symptoms.</li> </ul>
23.06.2021	Effectiveness of BNT162b2 and ChAdOx1 nCoV-19 COVID-19 vaccination at preventing hospitalisations in people aged at least 80 years: a test-negative, case-control study	Lancet Infectious Diseases / Study	<ul style="list-style-type: none"> <li>This prospective test-negative case-control study included adults aged at least 80 years who were admitted to hospital in two NHS trusts in Bristol, UK with signs and symptoms of respiratory disease.</li> <li>Between Dec 18, 2020, and Feb 26, 2021, 466 adults were eligible (144 test-positive and 322 test-negative). 18 (13%) of 135 people with SARS-CoV-2 infection and 90 (34%) of 269 controls received one dose of BNT162b2. The adjusted vaccine effectiveness was 71.4% (95% CI 46.5–90.6). Nine (25%) of 36 people with COVID-19 infection and 53 (59%) of 90 controls received one dose of ChAdOx1 nCoV-19. The adjusted vaccine effectiveness was 80.4% (95% CI 36.4–94.5). When BNT162b2 effectiveness analysis was restricted to the period covered by ChAdOx1 nCoV-19, the estimate was 79.3% (95% CI 47.0–92.5).</li> </ul>
23.06.2021	Vaccine effectiveness of the first dose of ChAdOx1 nCoV-19 and BNT162b2 against SARS-CoV-2 infection in residents of long-term care facilities in England	Lancet Infectious Diseases / Study	<ul style="list-style-type: none"> <li>In this cohort study, we included long-term care facility residents undergoing routine asymptomatic SARS-CoV-2 testing between Dec 8, 2020 (the date the vaccine was first deployed in a long-term care facility), and March 15, 2021, using national testing data linked within the COVID-19 Datastore.</li> <li>10 412 care home residents aged 65 years and older from 310 LTCFs were included in this analysis. The median participant age was 86 years (IQR 80–91), 7247 (69.6%) of 10 412 residents were female,</li> </ul>

	(VIVALDI): a prospective cohort study		<p>and 1155 residents (11.1%) had evidence of previous SARS-CoV-2 infection. 9160 (88.0%) residents received at least one vaccine dose, of whom 6138 (67.0%) received ChAdOx1 and 3022 (33.0%) received BNT162b2. Between Dec 8, 2020, and March 15, 2021, there were 36 352 PCR results in 670 628 person-days, and 1335 PCR-positive infections (713 in unvaccinated residents and 612 in vaccinated residents) were included.</p> <ul style="list-style-type: none"> <li>• Authors interpretation of results: Single-dose vaccination with BNT162b2 and ChAdOx1 vaccines provides substantial protection against infection in older adults from 4–7 weeks after vaccination and might reduce SARS-CoV-2 transmission. However, the risk of infection is not eliminated, highlighting the ongoing need for non-pharmaceutical interventions to prevent transmission in long-term care facilities.</li> </ul>
24.06.2021	Asymptomatic SARS-CoV-2 Infection Following First Dose mRNA-1273 COVID-19 Vaccine in a Veterans Affairs Long Term Care Facility	American Journal of Infection Control /Study	<ul style="list-style-type: none"> <li>• An outbreak of SARS-CoV-2 involving four residents of a U.S. Veterans Affairs long term care facility occurred following administration of the first dose of the mRNA-1273 vaccine (Moderna) to thirty out of thirty-three residents. Three out of four positive cases were partially vaccinated and remained asymptomatic. One of two partially vaccinated patients who were tested for anti-spike protein antibodies had detectable levels at the time of diagnosis. The mortality rate was lower compared to a prior outbreak reported in this facility.</li> </ul>
24.06.2021	Functional, cognitive, and nutritional decline in 435 elderly nursing home residents after the first wave of the COVID-19 Pandemic	European Geriatric medicine / Study	<ul style="list-style-type: none"> <li>• The study included 435 residents from 4 different nursing homes (69, 75, 118, and 173, respectively). The mean age of people included in this study was <math>86.77 \pm 8.5</math> years. Of these patients, 341 (78.4%) were women. There were 191 (43.9%) who had presented positive in microbiological tests for COVID-19.</li> <li>• Significant functional, cognitive, and nutritional decline in institutionalized elderly after the first wave of COVID-19 was observed. The authors concluded that these results may be caused by the lockdown itself, since no differences have been found between COVID-19 and non-COVID-19 patients.</li> </ul>
25.06.2021	COVID outbreak after the 1st dose of COVID vaccine among	Geriatric Nursing / Study	<ul style="list-style-type: none"> <li>• The purpose of this study was to assess the effectiveness of Pfizer-BioNTech COVID19 vaccine among nursing home residents by exploring the outcomes of a major COVID-19 outbreak following</li> </ul>

	the nursing home residents: What happened?		<p>COVID-19 vaccination in a nursing home located at a metropolitan area of South-Central Texas.</p> <ul style="list-style-type: none"> <li>The study highlights: <ul style="list-style-type: none"> <li>The risk of SARS-CoV-2 infection was significantly lower among nursing home residents who received both doses of the COVID-19 vaccine during the COVID-19 outbreak.</li> <li>Partially vaccinated nursing home residents were found less likely to be symptomatic during the outbreak.</li> </ul> </li> </ul>
25.06.2021	Impact of the Coronavirus Disease 2019 Outbreak on Activity and Exercise Levels among Older Patients	The journal of nutrition, health & aging / Study	<ul style="list-style-type: none"> <li>A total of 175 patients (79.0±7.0 years) undergoing outpatient or home-based rehabilitation, stratified into groups, based on frailty status.</li> <li>The main diseases for which the patients were undergoing rehabilitation were cognitive dysfunction and dementia (n=50, 29%), osteoarticular disease and fractures (n=47, 27%), stroke (n=30, 17%), neurological disease (n=27, 15%), heart disease (n=12, 7%), respiratory disease (n=7, 4%), and other diseases (n=2, 1%).</li> <li>The percentage of patients who went out at least once a week decreased after the outbreak from 91% to 87%, from 65% to 46%, and from 47% to 36% in the non-frail, frail, and nursing care requirement groups, respectively. The proportion of older patients participating in exercise during the outbreak was 75%, 51%, and 41% in the non-frail, frail, and nursing care requirement groups, respectively.</li> </ul>
27.06.2021	Different aspects of frailty and COVID-19: points to consider in the current pandemic and future ones	BMC Geriatrics / Study	<ul style="list-style-type: none"> <li>In this narrative review authors found that in older frail adults, many mechanisms contribute to the severity of COVID-19, particularly cytokine storm; those mechanisms include lower immunological capacity and status of ongoing chronic inflammation and reduced gut microbiota diversity.</li> <li>Higher degrees of frailty were associated with poor outcomes and higher mortality rates during and after ICU admission. Also, the response to COVID-19 vaccination among frail older adults might differ from the general population regarding effectiveness and side effects.</li> </ul>

## Preprints

Publication date	Title / URL	Journal / Article type	Digest
28.06.2021	Effectiveness of vaccination against SARS-CoV-2 infection and Covid-19 hospitalization among Finnish elderly and chronically ill – An interim analysis of a nationwide cohort study	MedRxiv / Preprint	<ul style="list-style-type: none"> <li>In Finland, both mRNA and adenovirus vector (AdV) Covid-19 vaccines have been used after the vaccination campaign started on December 27, 2020. Vaccination of the elderly and chronically ill was prioritized and the interval between doses set to 12 weeks.</li> <li>The objective of this interim analysis was to evaluate first and second dose vaccine effectiveness (VE) in a real-world setting. The cohorts included 901,092 elderly (89% vaccinated) and 774,526 chronically ill (69% vaccinated) individuals</li> <li>Covid-19 vaccines protect against SARS-CoV-2 infection and Covid-19 hospitalization. A single dose provides moderate protection in elderly and chronically ill, although 2 doses are clearly superior.</li> </ul>
30.06.2021	Age reporting in the Brazilian COVID-19 vaccination database: What can we learn from it?	MedRxiv / Preprint	<ul style="list-style-type: none"> <li>In Brazil, the start of the vaccination campaign against COVID-19 marked the collection of new administrative data: every citizen must be registered and need to show an identity document to get vaccinated. The requirement of proof-of-age documentation provides a unique opportunity for measuring the elderly population using a different database.</li> <li>Article examines the reliability of age distributions of men and women 80 years and older. Authors show that requiring proof-of-age, such as in the vaccination records, increases data quality, mainly through the reduction of age heaping and age exaggeration.</li> <li>However, I.D. cards cannot fully solve wrong birth dates that result from weak historical registration systems.</li> </ul>

### Reports and other publications

Publication date	Title / URL	Author(s)	Digest
28.06.2021	Effect of the covid-19 outbreak on retirement communities	Aaron Kulakiewicz, Hannah Cromarty	<ul style="list-style-type: none"> <li>This House of Commons library Research Briefing was prepared in advance of a Westminster Hall Debate on the covid-19 pandemic experience of retirement communities. The debate was held on July 1<sup>st</sup>, and was led by Jim Shannon MP.</li> </ul>

**Guidance**

Publication date	Title / URL	Author(s)	Digest
Updated 29.06.2021	Coronavirus (COVID-19) testing for adult social care settings	DHSC	<ul style="list-style-type: none"> <li>• Outlines the COVID-19 testing available for testing staff, residents and visitors for all adult social care settings.</li> </ul>
Updated 29.06.2021	Coronavirus (COVID-19): changes to the Care Act 2014	DHSC	<ul style="list-style-type: none"> <li>• Changes to the Care Act 2014 to help local authorities prioritise care and support during the coronavirus (COVID-19) outbreak.</li> <li>• The guidance sets out how local authorities can use the new Care Act provisions, created under the Coronavirus Act 2020, to prioritise care and support for those who need it most.</li> <li>• The provisions are temporary and should only be used when it is not possible for local authorities to comply with their duties under the Care Act 2014.</li> </ul>

**Statistics**

Publication date	Title / URL	Author(s)	Digest
29.06.2021	Number of deaths in care homes notified to the Care Quality Commission, England	ONS	<ul style="list-style-type: none"> <li>• Weekly updated provisional counts of deaths caused by the coronavirus (COVID-19) by local authority</li> </ul>
29.06.2021	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 the coronavirus (COVID-19), in the latest weeks for which data are available.</li> </ul>

## Editorials and News

Publication date	Title / URL	Author(s)	Digest
27.06.2021	Adult social care given over £250 million extra to continue coronavirus (COVID-19) protections	DHSC	<ul style="list-style-type: none"> <li>• People in care homes or those being cared for at home will benefit from an extra £250 million to continue to protect them from COVID-19 transmission.</li> </ul>