



UK Health Security Agency

Weekly Care Homes Evidence Digest

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

25th March 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 Canada, a mixed methods survey of the impact of COVID-19 pandemic management strategies in one long-term care facility; from Spain, use of antibody quantification in care homes in identifying people with an impaired immune response to vaccination who are at high risk of acquiring and transmitting SARS-CoV-2; from Switzerland, a cross-sectional study of the sero-prevalence of SARS-CoV-2 in nursing home employees who managed outbreaks showing substantial impact compared to the general population and to home health care staff in the community; and an observational study in a long-term care facility showing substantial contribution of both occupational and community exposures to COVID-19 risk among health care workers; an international comparison of mortality in nursing homes across USA and Europe showing correlations between COVID-19 deaths in nursing homes with COVID-19 deaths in the total population and with the mean size of nursing homes; from Italy, a qualitative study of the disaster response to COVID-19 in care homes

with a call for better disaster preparedness; and from the Netherlands, evidence of the negative impact of downscaling activities for residents during the COVID-19 pandemic on the mental health of carers and their ability to provide adequate care and emotional support.

From the UK, a review of the impact of social distancing and isolation strategies in preventing and controlling the transmission of SARS-CoV-2 and other infectious diseases in care homes; and a call for urgent evaluative research on these interventions.

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.

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/>.

*The Digest is moving to a monthly publication cycle for the next few months, with the next edition being published on the **29th April**, while we take time to reflect what form the Digest should take in the future. We welcome views from our readership and invite you to comment on the current scope and format of the Digest and what would be most informative and helpful to you going forward. If you would like to comment please visit <https://forms.office.com/r/tcTswRACmu>.*

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
15.03.2022	The Impact of Pandemic Management Strategies on Staff Mental Health, Work Behaviours, and Resident Care in One Long-Term Care Facility in British Columbia: A Mixed Method Study	Journal of Long-Term Care / Study	<ul style="list-style-type: none"> • The objective of this mixed methods case study was to explore staff reports of outcomes associated with LTRC [long-term residential care] pandemic management strategies, particularly their impact on LTRC staff mental health, work behaviours and quality of care or service provision. • Survey data demonstrated that staff perceived the sick time policy and staffing levels as the most inadequate pandemic management strategies. Survey data also showed the visitation policy, the sick time policy and the single site employment policy were most significantly associated with negative outcomes to staff mental health, work behaviours and quality of care or service delivery
15.03.2022	Social Distancing and Isolation Strategies to Prevent and Control the Transmission of COVID-19 and Other Infectious Diseases in Care Homes for Older People: An International Review	Environmental Research & Public Health / Study	<ul style="list-style-type: none"> • This review aimed to assess the social distancing and isolation strategies used by care homes to prevent and control the transmission of COVID-19 and other infectious diseases. • Strategies used to prevent and control the transmission of COVID-19 and other infectious diseases included social distancing and isolation of residents and staff, zoning and cohorting of residents, restriction of resident movement/activities, restriction of visitors and restriction of staff working patterns. • This review demonstrates a lack of empirical evidence and the limited nature of policy documentation around social distancing and isolation measures in care homes.
15.03.2022	SARS-CoV-2 outbreak in a nursing home after vaccination with BNT162b2: A role for the quantification of circulating antibodies	Vaccine / Study	<ul style="list-style-type: none"> • At the outbreak onset 96% of residents and 76% of HCW had received two doses of BNT162b2. Twenty-eight residents (28/53) and six HCW (6/33) were infected. • Among 50 residents with available serological status, nineteen (19/25) with serum concentration < 300 U/mL and seven (7/25) with concentration > 300 U/mL acquired SARS-CoV-2 (RR 2.7 [95 %CI 1.4–5.3]). The quantification of circulating antibodies could be useful in

			detecting people with an impaired immune response who are at high risk of acquiring and spreading SARS-CoV-2.
16.03.2022	Seroprevalence of SARS-CoV-2 antibodies, associated factors, experiences and attitudes of nursing home and home healthcare employees in Switzerland	BMC Infectious Diseases / Study	<ul style="list-style-type: none"> • This cross-sectional study is part of the national Corona Immunitas research program of coordinated, seroprevalence studies in Switzerland. Six nursing homes and six home healthcare organizations providing at home care services in Zurich were selected and 296 and 131 employees were recruited, respectively. • Seroprevalence of SARS-CoV-2 was 14.9% (95% CI 11.1%-19.6%; range 3.8% to 24.4%) for nursing home employees and 3.8% (95% CI 1.4–9.1%; range 0% to 10%) for home healthcare employees, compared to the general population of Zurich at 3.5% in September 2020 for those aged 20–64. • Nursing home employees who worked through SARS-CoV-2 outbreaks at their work were substantially more affected by SARS-CoV-2 infection compared to the general population and to home healthcare employees who similarly worked through outbreaks in their communities.
17.03.2022	COVID-19 pandemic and mortality in nursing homes across USA and Europe up to October 2021	European Geriatric Medicine / Study	<ul style="list-style-type: none"> • We explored the relationship between COVID-19 mortality in NHs with the average size of NHs and with the COVID-19 deaths at a population level. • There was a wide variation in prevalence of COVID-19 cases and deaths between countries. We observed a significant correlation between COVID-19 deaths in NHs and that of the total population and between the mean size of NHs and COVID-19 deaths.
17.03.2022	Disaster Response in Italian Nursing Homes: A Qualitative Study during the COVID-19 Pandemic	Geriatrics / Study	<ul style="list-style-type: none"> • Our results indicate that the shift from resident-centered care towards collective-protective approaches led through the suspending of established care principles to an emergency vacuum: implementable strategies were lacking and the subsequent development of temporary, immediate, and mostly suboptimal solutions by unprepared staff led to manifold organizational, medical, and ethical conflicts against the background of unclear legislation, changing protocols, and fear of legal consequences.

			<ul style="list-style-type: none"> Without disaster preparedness protocols and support in decision-making during disasters, professionals in NHs are hardly able to cope with emergency situations.
18.03.2022	Occupational and community risk of SARS-CoV-2 infection among employees of a long-term care facility: an observational study	Antimicrobial Resistance & Infection Control / Study	<ul style="list-style-type: none"> We performed a nested analysis of a seroprevalence study among all volunteering LTCF staff to determine community and nosocomial risk factors for SARS-CoV-2 seropositivity using modified Poisson regression. We also combined epidemiological and genetic sequencing data from a coronavirus disease 2019 (COVID-19) outbreak investigation in a LTCF ward to infer transmission dynamics and acquisition routes of SARS-CoV-2, and evaluated strain relatedness using a maximum likelihood phylogenetic tree. Among 285 LTCF employees, 176 participated in the seroprevalence study, of whom 30 (17%) were seropositive for SARS-CoV-2. Most (141/176, 80%) were healthcare workers (HCWs). Among 18 employees included in the outbreak investigation, the outbreak reconstruction suggests 4 likely importation events by HCWs with secondary transmissions to other HCWs and patients. These two complementary epidemiologic and molecular approaches suggest a substantial contribution of both occupational and community exposures to COVID-19 risk among HCWs in LTCFs
22.03.2022	The influence of the down- and upscaling of activities in long-term care facilities during the COVID-19 visitor ban on caregivers' exhaustion and ability to provide care and support: A questionnaire study	Geriatric Nursing / Study	<ul style="list-style-type: none"> This study demonstrates that the downscaling of certain activities for residents in LTCFs during the COVID-19 visitor-ban had a negative impact on caregivers' exhaustion and on their perceived ability to provide adequate ADL care and emotional support. An adequate balance in the organization of different types of meaningful activities, which require different levels of supervision, is beneficial for residents and caregivers. Moreover, it might decrease caregiver exhaustion and contribute to feelings of personal accomplishment.

Guidance

Publication date	Title / URL	Author(s)	Digest
22.03.2022 Updated	Visiting arrangements in care homes	DHSC	<ul style="list-style-type: none"> Sets out how care homes can support families and visitors to visit residents.

Statistics

Publication date	Title / URL	Author(s)	Digest
22.03.2022	Care home resident deaths registered in England and Wales, provisional	ONS	<ul style="list-style-type: none"> 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.
22.03.2022	Number of deaths in care homes notified to the Care Quality Commission, England	ONS, CQC	<ul style="list-style-type: none"> 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.
22.03.2022	Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 16 March 2022	Welsh Government	<ul style="list-style-type: none"> Notifications related to COVID-19 in adult care homes during the coronavirus pandemic for 1 March 2020 to 16 March 2022.
23.03.2022	Coronavirus (COVID-19): adult care homes - additional data	Scottish Government	<ul style="list-style-type: none"> Weekly data on COVID-19 in adult care homes in Scotland.