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Weekly Care Homes Evidence Digest

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

16th April 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.

This week's digest includes: from Spain, Germany and Belgium, further evidence on the immunogenicity and effectiveness of Covid-19 vaccination in long term care facilities; from Italy, reflections from home palliative care professionals on the impact of Covid-19; from the Global Ageing Network, cross cultural perspectives on the challenges of the Covid-19 pandemic in long term facilities; and from the UK, a summary of the emerging evidence on the use of information and communications technology (ICT) and data sharing in long-term care settings. Finally, summaries of recently published 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 (which is available to PHE staff by raising a software request with IT) 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 gareth.durling@phe.gov.uk.

An ongoing series of PHE rapid reviews on a range of Covid-19 related research questions can be also found at <https://phelibrary.koha-ptfs.co.uk/covid19rapidreviews/>.

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
08.04.2021	Home palliative care professionals perception of challenges during the Covid-19 outbreak: A qualitative study	Palliative Medicine	<ul style="list-style-type: none"> • Home palliative care services have played an essential role during the first wave of the SARS-CoV-2 outbreak by providing symptom control, drug procurement, and psychological support for frail patients and their families unable to leave their homes • Three main themes were identified: The first theme showed both patient-related and practice-related challenges participants faced in their daily work, requiring the implementation of different communication methods and patient and family education on risk prevention. • The second theme showed the perception of increased responsibility and being the only landmark for family played a decisive role in participants' positive attitude. • The third theme highlighted the participants' perception of the critical role of a home care setting in this emergency situation.
09.04.2021	Bringing Kidney Care Home: Lessons from Covid-19	NEJM Innovations in Care Delivery / Commentary	<ul style="list-style-type: none"> • Explores methods for preservation and expansion of home care for dialysis patients with regulatory changes and better coordination among programs • This is of particular interest during the pandemic as has dialysis has predominantly been delivered in dialysis centres, even when home dialysis would offer the same benefits with less cost and more convenience for the patients

Preprints

Publication date	Title / URL	Journal / Article type	Digest
09.04.2021	Effects of BNT162b2 mRNA Vaccination on COVID-19 Disease, Hospitalisation and Mortality in Nursing Homes and	Lancet Preprints / Study	<ul style="list-style-type: none"> • Reports on associations of vaccination with COVID-19 infection, hospitalisation, and mortality from three cohorts of all nursing home residents, nursing home staff, and healthcare workers in Catalonia on 27 December 2020

	Healthcare Workers: A Prospective Cohort Study Including 28,594 Nursing Home Residents, 26,238 Nursing Home Staff, and 61,951 Healthcare Workers in Catalonia		<ul style="list-style-type: none"> Vaccination was associated with 85%-96% reduction in SARS-CoV-2 infection in all three cohorts, and bigger reductions in hospitalisations and mortality amongst nursing home residents for up to two months. More data are needed on the long-term effects of COVID-19 vaccines.
10.04.2021	Direct and indirect effectiveness of mRNA vaccination against SARS-CoV-2 infection in long-term care facilities in Spain	medRxiv / study	<ul style="list-style-type: none"> The objective was to estimate indirect and total (direct plus indirect) effects of COVID-19 vaccination in residents in long-term care facilities (LTCF).
10.04.2021	Antibody Responses in Elderly Residential Care Persons following COVID-19 mRNA Vaccination	medRxiv / study	<ul style="list-style-type: none"> COVID-19 disproportionately impacts older adults residing at long-term care facilities. Data regarding antibody response to COVID-19 vaccines in this population is limited. Our objective was to quantify the presence and magnitude of antibody response in older, vaccinated residents at assisted living, personal care, and independent living facilities.
13.04.2021	High coverage COVID-19 mRNA vaccination rapidly controls SARS-CoV-2 transmission in Long-Term Care Facilities	medRxiv / study	<ul style="list-style-type: none"> To evaluate the early effect of the administration of BNT162b2 mRNA vaccines in LTCFs, we monitored subsequent SARS-CoV-2 documented infections and deaths in Catalonia, a region of Spain, and compared them to counterfactual model predictions from February 6th to March 28th, 2021, the subsequent time period after which 70% of residents were fully vaccinated.

Reports and other publications

Publication date	Title / URL	Author(s)	Digest
07.04.2021	Humoral and cellular immunogenicity of the BNT162b2 mRNA Covid-19	van Praet, Jens T.; et al.	<ul style="list-style-type: none"> Reports on study to determine immunogenicity of the BNT162b2 mRNA Covid-19 Vaccine in nursing home residents in comparison to COVID-19-naïve healthcare workers four weeks after the first vaccine dose

	Vaccine in nursing home residents		<ul style="list-style-type: none"> • Four weeks after the first vaccine dose, the humoral and cellular immunogenicity of the vaccine was suboptimal in COVID-19-naïve nursing home residents in comparison to COVID-19-naïve healthcare workers. • Longitudinal studies are required to determine whether these differences are the result of a delayed or a quantitatively lower immune response
07.04.2021	SARS-CoV-2 outbreak in a long-term care facility after vaccination with BNT162b2	Westholter, Dirk; Taube, Christian.	<ul style="list-style-type: none"> • Reports on case of a SARS-CoV-2 outbreak after application of the first dose of BNT162b2 vaccine in an elderly care home in North-Rhine Westfalia, Germany • Authors' analysis of a SARS-CoV-2 outbreak revealed a vulnerable phase after administration of the first dose of BNT162b2 in a long-term care facility: a single dose of BNT162b2 did not prevent symptomatic and fatal outcomes of SARS-CoV-2 infections in this high-risk population up to 23 days after the initial vaccination, indicating an incomplete protection against severe Covid-19 for that period
08.04.2021	Delirium triggered by COVID-19 vaccine in an elderly patient	Zavala-Jonguitud, Luis Fernando; Pérez-García, Carla Cristina	<ul style="list-style-type: none"> • Describes case of an 89-year-old patient, who developed delirium after the administration of the BNT162b2 vaccine. • This patient had several predisposing factors for delirium such as age, polypharmacy and sensitive impairment, and we consider that this vaccine-induced immune reaction was enough to disrupt his frail homeostasis. • To the authors' knowledge, this is the first case report of COVID-19 vaccine associated with delirium. It is important that physicians are aware that this might happen, so they have close observation of their patients, and warn high-risk patients and their families.

Guidance

Publication date	Title / URL	Author(s)	Digest
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01.04.2021	Admission and care of residents in a care home during COVID-19	PHE	<ul style="list-style-type: none"> This note outlines the changes made to ‘Admission and care of residents during COVID-19 incident in a care home’, originally published on 2 April 2020.
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Evidence Summaries

Publication Date	Title / URL	Author(s)	Digest
30.03.2021	Long-term care and COVID-19: The first 6 months	Canadian Institute for Health Information	<ul style="list-style-type: none"> The COVID-19 pandemic has disproportionately affected Canada’s retirement homes and long-term care (LTC) homes. Our release takes a closer look at the impact of COVID-19 on LTC residents and staff during the first 6 months of the pandemic (known as Wave 1) and provides early comparisons of outbreaks, cases and deaths between the first and second waves (to February 15, 2021).
12.04.2021	The use of Information and Communications Technology and Data Sharing in Long-Term Care settings	William Byrd, Sian Smith, Maximilian Salcher-Konrad and Adelina Comas-Herrera	<ul style="list-style-type: none"> This evidence summary covers emerging evidence on the use of information and communications technology (ICT) and data sharing in long-term care settings (both in facilities and in the community) in response to the COVID-19 pandemic.

Statistics

Publication date	Title / URL	Author(s)	Digest
08.04.2021	Deaths registered weekly in England and Wales, provisional	ONS	<ul style="list-style-type: none"> Provisional counts of the number of deaths registered in England and Wales, by age, sex and region, in the latest weeks for which data are available. Includes the most up-to-date figures available for deaths involving the coronavirus (COVID-19).
13.04.2021	Number of deaths in care homes notified to the Care Quality Commission, England	ONS	<ul style="list-style-type: none"> Weekly updated provisional counts of deaths caused by the coronavirus (COVID-19) by local authority

13.04.2021	Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 9 April 2021	Welsh Government	<ul style="list-style-type: none"> In order to improve the timely availability of data related to coronavirus (COVID-19) in adult care homes the Welsh Government and Care Inspectorate Wales (CIW) have agreed to publish 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, based on notifications by care home providers to CIW.
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Editorials and News

Publication date	Title / URL	Author(s)	Digest
10.03.2021	Interpretation of COVID-19 case fatality risk measures in England	Katie Harman et al.	<ul style="list-style-type: none"> Case fatality risk (CFR) describes the risk of fatality among individuals diagnosed with COVID-19. These metrics can indicate crude trends in the risk of death with COVID-19 and are often used as international comparators. However, demographic factors and changing testing practices can lead to substantial discrepancies. Here, we highlight complexity of CFR interpretation, using England as an example.
12.04.2021	The Rollout of COVID-19 Vaccines in Canadian Long-Term Care Homes, 9th April update	Samir Sinha	<ul style="list-style-type: none"> In early November 2020, prior to the arrival of its first vaccines, Canada's National Advisory Committee on Immunization (NACI) recommended that the first stage of immunizations be given to residents, staff and family caregivers in Long-Term Care (LTC), retirement homes and other congregate settings for older persons, adults over 70, health-care workers, and adults in Indigenous communities
13.04.2021	Elder Care providers and COVID-19: Cross-cultural perspectives research report	Global Ageing Network (GAN)	<ul style="list-style-type: none"> This summary examines how elder care providers in 11 countries responded to the challenges posed by COVID-19 in residential settings such as nursing homes or group homes. Their insights have the potential to help all providers around the world become better prepared for future health crises.