



UK Health Security Agency

Weekly Care Homes Evidence Digest

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

5th November 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 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.

This week's digest includes; from USA, a report of near universal contamination of nursing home environments with SARS-CoV-2 in rooms of residents with COVID-19 and a call for research on implications for prevention and control; and key thematic areas to improve infection and prevention control in care homes during the COVID-19 pandemic; from Canada, impact of COVID-19 policies on psychosocial health of long term care and supported living residents and their families; and evidence of the need to review optimal regimes for COVID-19 vaccination in nursing home residents; from Japan, impact of the COVID-19 pandemic on psychosocial factors among older people living in the community; from Norway, impact of COVID-19 restrictions on spouses of people living at home with dementia; from Spain, epidemiology of COVID-19 in long-term care staff and the role in nursing home outbreaks; further evidence of the impact of COVID-19 on hospital referral and mortality during the first wave; evidence of the longitudinal impacts on the mental health of older people as a consequence of the COVID 19 pandemic; and further evidence of the value of COVID-19 vaccination for residents and staff in care homes for the elderly;

from the Netherlands, impact of visiting policy for long term care facilities on well-being of residents, family members and staff during the COVID-19 pandemic; from Italy, evidence of waning immunity in nursing home residents following two doses of COVID-19 vaccines.

From the UK, evidence of the 'real world' impact of the use of lateral flow tests for staff and visitors in care home settings; several papers showing evidence of the benefits of the use of a community palliative care response to support care home residents and staff during the COVID-19 pandemic; reflections and lessons for maintaining contact with families and friends in care homes during the COVID-19 pandemic; and an assessment of the potential impact of mandatory vaccination for care home workers in England.

Finally, summaries of other recently published 9 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
20.10.2021	The COVID-19 pandemic as experienced by the spouses of home-dwelling people with dementia – a qualitative study	BMC Geriatrics / Study	<ul style="list-style-type: none"> The study had a qualitative descriptive design using individual telephone interviews for data collection. A total sample of 17 spouses of people with dementia were included, 14 women and three men ages 52 to 82 years. The participants emphasized four main perspectives: 1) Radical changes in available services, 2) Restrictions changed everyday life, 3) Impacts on health and well-being, and 4) Actions that made life easier. The participants also described how positive activities and easily accessible services helped them in this situation.
20.10.2021	Epidemiology of COVID-19 among health personnel in long-term care centers in Seville	Revista Clinica Espanola / Study	<ul style="list-style-type: none"> This work aims to analyze COVID-19 epidemiology among healthcare staff based in the Seville healthcare district (Spain) and evaluate its role in outbreaks in nursing homes. Authors conclude: A high incidence in nursing home staff along with delays in isolation were observed, which could affect the dynamics of transmission in outbreaks. It is necessary to review disease identification and isolation practices among staff as well as emphasize rapid implementation of prevention measures.
21.10.2021	Environmental Contamination with SARS-CoV-2 in Nursing Homes	Journal of the American Geriatrics Society / Study	<ul style="list-style-type: none"> A prospective cohort study was conducted between October 2020 and January 2021 in four Michigan NHs. Swabs from high-touch surfaces in COVID-19 infected-patient rooms were obtained at enrollment and follow-up. Over the 3-month study period, 2087 swab specimens were collected (1896 COVID-19 patient rooms, 191 common areas). SARS-CoV-2 positivity was 28.4% (538/1896 swabs) on patient room surfaces and 3.7% (7/191 swabs) on common area surfaces. Nearly 90% (93/104) of patients had SARS-CoV-2 contamination in their room at least once. Environmental detection of viral RNA from surfaces in the rooms of COVID-19 patients is nearly universal and persistent; more investigation is needed to determine the implications of this for infectiousness.

22.10.2021	From wave to wave: a Dutch national study on the long-term impact of COVID-19 on well-being and family visitation in nursing homes	BMC Geriatrics / Study	<ul style="list-style-type: none"> • The aim of the study was to assess the long-term effects of the pandemic on residents, family members, and staff, and their preparedness for the next coronavirus wave. • Although in October 2020, daily life in nursing homes was more “back to normal,” more than one-third of the respondents indicated that they still applied restrictions. Compared to the situation before the pandemic, fewer volunteers were working in the nursing homes, grandchildren visited their relative less often, and visits differed.
22.10.2021	Experiences of Long-term Care and Supportive Living Residents and Families during the COVID-19 Pandemic: “It’s a lot different for us than it is for the Average Joe”	Geriatric Nursing / Study	<ul style="list-style-type: none"> • Highlights of this study include: <ul style="list-style-type: none"> ○ COVID-19 policies severely impacted the daily life of LTC/SL residents ○ COVID-19 policies impacted the psychosocial health of LTC/SL residents ○ COVID-19 policies focused on residents’ physical health without considering their social needs ○ Residents and families should be consulted during future pandemic planning
25.10.2021	Implementing lateral flow devices in long-term care facilities: experiences from the Liverpool COVID-19 community testing pilot in care homes— a qualitative study	BMC Health Services Research / Study	<ul style="list-style-type: none"> • For these [lateral flow device] tests to be implemented successfully, an understanding of the real-world contextual factors that allow them to be integrated into the workplace is vital. To address this gap in knowledge, we aimed to explore staff’s experiences of integrating LFDs into routine practice for visitors and staff testing with a view to understand implementation facilitators and barriers. • Following Semi-structured interviews and thematic analysis, themes were identified. The main themes included: visitor-related testing factors and staff-related testing factors. • Authors conclude: Our study demonstrates that the real-world implementation of LFDs to test visitors and staff faces significant challenges as a result of several contextual factors negatively affecting the work practice and environment.

27.10.2021	Changes in psychosocial factors among community-dwelling older adults before and after Japan's declaration of a state of emergency over coronavirus disease 2019	Psychogeriatrics / Study	<ul style="list-style-type: none"> • This was a longitudinal cohort questionnaire study. A baseline survey was conducted in March 2020, and a follow-up survey was conducted in August 2020. • Changes in psychosocial factors before and after the state of emergency declaration were analysed by gender using the McNemar–Bowker test. • Authors conclude: None of the examined psychosocial factors worsened, except for the increase in the number of women living alone. However, many of the study subjects refrained from engaging in certain activities.
27.10.2021	P-51 Anticipatory care planning in Scottish care homes during COVID-19	BMJ Supportive & Palliative Care / Poster Presentation	<ul style="list-style-type: none"> • Reports on a 14-week quality improvement partnership project undertaken with care/nursing homes in the most deprived area of Scotland during the COVID-19 crisis • Care home staff were trained to use the internationally recognised Supportive and Palliative Care Indicators Tool (SPICT) to identify patients who would benefit from anticipatory care plans (ACP) and then care plans were developed for identified individuals • A calculated 134 hospital bed days were saved due to developed ACPs, and an estimated £159,460 saved from avoided admissions for local NHS. • This also upskilled care home staff to recognise palliative conditions and reduced pressure on hospital beds at a time when these were crucially required for COVID-19 patients.
27.10.2021	P-67 Community palliative care response to support care home residents and staff during the COVID-19 pandemic	BMJ Supportive & Palliative Care / Poster Presentation	<ul style="list-style-type: none"> • Authors presented on a review of their response to support residents and staff in Bromley Care Homes during the COVID-19 pandemic (April 2020–March 2021), reflect on learning, and joint working with colleagues, and identify good practice to inform future models of care. • Senior clinical leadership, cross-boundary flexible working and willingness to learn together were vital.
27.10.2021	P-68 Introducing a care home project to support end-of-life care during a pandemic	BMJ Supportive & Palliative Care / Poster Presentation	<ul style="list-style-type: none"> • Reports on project to enable care homes to identify residents who were in the last year of life through weekly support either by phone or video conferencing platforms using an empowerment approach.

			<ul style="list-style-type: none"> • Once residents were identified the facilitators prompted care home staff to consider the following; Do Not Attempt Cardiopulmonary Resuscitation orders, emergency care plans, anticipatory medications and any communications which may be needed with the GP, resident or resident's family. • Overall, the care home project supported a number of care homes and their staff to provide good quality end-of-life care during unprecedented times using learning from across the project to inform all homes.
27.10.2021	P-198 Care home staff experiences of palliative and end-of-life care in care homes during COVID-19	BMJ Supportive & Palliative Care / Poster Presentation	<ul style="list-style-type: none"> • Study aims To examine the experiences of care homes in England of providing palliative and end-of-life care during the COVID-19 pandemic and make recommendations for policy. • This is the first national survey to explore provision of palliative and end-of-life care in care homes during the COVID-19 pandemic. The results will be used to inform policy to ensure high-quality provision of palliative and end-of-life care during future pandemics. • Interim analysis of 66 respondents found that most staff felt confident to provide palliative care, as measured by the self-efficacy. 51% of respondents identified issues with staff shortages during the pandemic; 38% experienced changes in staff responsibilities; 18% experienced challenges in recognising that residents may be dying. • 18% of care homes did not allow visitors at the end-of-life, and 39% experienced difficulties in accessing help from other services. 51% experienced challenges in providing bereavement support to relatives. • Free-text comments identified staff shortages and exhaustion
27.10.2021	P-199 About you, for you, with you – supporting care homes throughout a pandemic	BMJ Supportive & Palliative Care / Poster Presentation	<ul style="list-style-type: none"> • Reports on the use of Project Echo® in response to the COVID-19 pandemic at Ayrshire Hospice. Project Echo® is a widely used model for education, aiming to 'improve care by gathering a community of practice together for learning and support with the goal of improving decision making by collaborative problem solving'. It was implemented as a ten-week, live online supportive education programme. • Local care homes were asked what educational support they needed, and the hospice responded, using the multidisciplinary team, to specific topic requests. This gave participants an opportunity to build links,

			increase knowledge, share practices and experiences through supportive facilitation
28.10.2021	Cellular and humoral response, six months after two doses of BNT162b2 mRNA Covid 19 vaccination, in residents and staff of nursing homes for the elderly	Journal of Infectious Diseases / Study	<ul style="list-style-type: none"> • A total of 274 subjects participated in this multicentric prospective observational study (151 residents and 123 staff). • Three months after vaccination, humoral responses were low in 25 (20.3%) of staff members. • At six months, the fall in humoral response was greater, especially in residents (9.3% without humoral response). Only 54.5% of staff and 65.6% of residents maintained a good humoral response at 6 months. • Our study confirms the safety and efficacy of the vaccine, especially in elderly residents. As shown previously, age appears to influence the immune response, at least for humoral responses.
29.10.2021	Characteristics, hospital referrals and 60-day mortality of older patients living in nursing homes with COVID-19 assessed by a liaison geriatric team during the first wave: a research article	BMC Geriatrics / Study	<ul style="list-style-type: none"> • A retrospective observational study was performed during March and April 2020 of institutionalized patients assessed by a liaison geriatric hospital-based team • 419 patients were included in the study (median age 89 years old, 71.6 % women, 63.7 % with moderate-severe dependence, and 43.8 % with advanced dementia). 31.1 % were referred to the emergency department in the first assessment, with a higher rate of hospital referral in those with better functional and mental status. • 36.9% had died in the 60 days following the first call. • No mortality differences were found between those referred to the hospital or cared at the nursing home.
29.10.2021	Emotional distress among older adults during the COVID-19 outbreak: understanding the longitudinal psychological impact of the COVID-19 pandemic	Psychogeriatrics / Study	<ul style="list-style-type: none"> • Older adults took part in a longitudinal online survey collected in April 2020 (during the lockdown restrictions) and at two subsequent time points 3 and 9 months after baseline (without lockdown restrictions and during the third wave of the pandemic respectively). • Older adults did not evidence higher emotional distress than during the initial lockdown. Furthermore, depression remained stable and anxiety significantly decreased.

			<ul style="list-style-type: none"> Older participants showed less anxiety than younger ones. Furthermore, being a male, resilience, and acceptance were related with the decrease of anxiety.
01.11.2021	Infection Prevention and Control in Nursing Homes During COVID-19: An Environmental Scan	Geriatric Nursing / Study	<ul style="list-style-type: none"> To examine processes and programmatic elements of infection prevention and control (IPC) efforts and identify themes and promising approaches in nursing homes (NHs), an environmental scan was conducted. Three thematic areas emerged which have the potential to improve overall IPC practices in the long-term care setting: staffing and resource availability, training and knowledge of IPC practices, and organizational culture.
01.11.2021	Antibody Responses 3-5 Months Post-Vaccination with mRNA-1273 or BNT163b2 in Nursing Home Residents	Journal of the American Medical Association / Study	<ul style="list-style-type: none"> Data are reported as a ratio of observed optical density to the determined assay cutoff optical density, with ratios above 1 considered positive. Neutralization capacity of these antibodies was assessed by cell culture assays with live SARS-CoV-2 virus, with data reported as geometric microneutralization titers at 50% (MNT50), which ranged from below detection (MNT50 = 10) to MNT50 = 1280. The majority of residents (97.1%) produced antibodies to the spike (S) protein post vaccination; however, fewer residents (87.68%) produced immunoglobulin G (IgG) to the receptor-binding domain (RBD) domain (Table 1). There were no differences between vaccine groups with respect to IgM/A to either S protein or RBD. No neutralizing antibodies were detected in ~20% of residents to the wild-type virus (30/155; 19%) or beta variant (27/134; 20%).
02.11.2021	Evolution of SARS-CoV-2 immune responses in nursing home residents following full dose of the Comirnaty® COVID-19 vaccine	Journal of Infection / Study	<ul style="list-style-type: none"> Real-world experience has shown mRNA COVID-19 vaccines to be effective in reducing incidence of both asymptomatic and symptomatic SARS-CoV-2 infections and related deaths in nursing home residents, congruent with their ability to elicit robust virus-specific T and B cell immune responses in this population group. Nevertheless, maintaining seemingly protective immune responses in these individuals over time

			may be compromised by the concurrence of older age, frailty and co-morbidities. To shed light on this issue, here we assessed SARS-CoV-2-Spike (S)-targeted antibody and functional T cell responses at around 6 months after vaccination with Comirnaty® (Pfizer–BioNTech) in a previously recruited cohort.
--	--	--	---

Preprints

Publication Date	Title / URL	Preprint Source	Digest
26.10.2021	Outbreak of SARS-CoV-2 B.1.617.2 (Delta) variant in a Nursing Home 28 weeks after two doses of mRNA anti-Covid-19 vaccines: evidence of a waning immunity	medRxiv	<ul style="list-style-type: none"> • Description of a SARS-CoV-2 B.1.617.2 (Delta) variant outbreak among residents (N=69) and Health Workers (HWs: N=69) of a small Nursing Home in Northern-East Italy, with full vaccination coverage of 91 and 82%, respectively. • 0/20 HWs and 14/59 (24%) residents fully vaccinated and without a previous SARS-CoV-2 infection showed anti-Spike IgG lower/equal to 50 BAU/mL (1-sided Fisher exact p=0.011). • Authors conclude: Low levels of SARS-CoV-2 neutralizing anti-Spike IgG in serum 28 weeks after the administration of the second dose parallels the waning of vaccine protection.

Reports and other publications

Publication date	Title / URL	Author(s)	Digest
October 2021	Under-paid and under-valued: assessing mandatory vaccination for care home workers in England	Tom Hunt	<ul style="list-style-type: none"> • From November 2021 it will be mandatory for care home workers in England to be fully vaccinated against COVID-19. Many care workers and organisations representing them oppose this policy. This paper assesses the reasons why there is strong opposition; why it is forecast to exacerbate chronic staff

			shortages in care, and what its introduction says about attitudes to care home workers and care work.
October 2021	Caring from a Distance: using new and familiar means of keeping in touch with family and friends in care homes during COVID-19	Caroline White, Jane Wray & Clare Whitfield	<ul style="list-style-type: none"> Keeping in touch with people in care homes can be important both for family carers/friends and care home residents. However, our distance carer research demonstrated that maintaining contact between visits can be challenging. This project is exploring how carers have responded to the challenges of the care home closures during the COVID-19 pandemic, the approaches they have adopted to stay in touch, and how care homes have worked to support this.

Guidance

Publication date	Title / URL	Author(s)	Digest
26.10.2021	Public Health & Infection Prevention & Control Guidelines on the Prevention and Management of Cases and Outbreaks of COVID-19, Influenza & other Respiratory Infections in Residential Care Facilities	Irish Health Protection Surveillance Centre	<ul style="list-style-type: none"> This document replaces a previous document that focused exclusively on COVID-19. It seems increasingly likely that the winter of 2020/2021 will be characterised by circulation of respiratory viruses other than SARS-CoV-2 including Influenza virus. The clinical features caused by infection with respiratory viruses are often difficult to differentiate and the public health and infection prevention and control management is very similar. For these reasons it has been considered appropriate to revert to a general guidance document for this group of infections.
Updated 01.11.2021	Coronavirus (COVID-19) testing for adult social care settings	UK HSA	<ul style="list-style-type: none"> Outlines the COVID-19 testing available for testing staff, residents and visitors for all adult social care settings.

Statistics

Publication date	Title / URL	Author(s)	Digest
26.10.2021	Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 20 October 2021	Welsh Government	<ul style="list-style-type: none"> 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.
02.11.2021	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.
02.11.2021	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.
03.11.2021	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.