



UK Health Security Agency

Weekly Care Homes Evidence Digest

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

31st December 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.

At the close of another turbulent year this week's digest includes; from Singapore, reflections on a nursing home's prevention and control measures in response to the COVID-19 pandemic; from Spain, a powerful critique of the response to the COVID-19 pandemic in care homes in Spain with lessons learned; and experience from hospital based liaison geriatric units in improving co-ordination between nursing homes and hospitals; from the USA, reflections on the response to the COVID-19 pandemic in US care homes with a call for a move toward a culture of safety and away than regulatory sanctions; recommendations for re-imagining and improving family involvement in residential long-term care; and recommendations for improving infection control in long-term care following the COVID-19 pandemic; from Turkey, a cross-sectional community based study of the impact of the COVID-19 pandemic on the physical and mental health of older people; from Israel, an evaluation of the impact of a COVID-19 vaccine booster programme in long-term care facilities.

From the UK, an exploration of the complexities of the impact of an ageing population on future health and social care needs, and another publication arising from the ongoing Vivaldi study in care homes describing the benefits of COVID -19 booster vaccination in enhancing SARS-CoV-2-specific antibody and cellular responses in the elderly.

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/>.

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
22.12.2021	Nursing Home's Measures during the COVID-19 Pandemic: A Critical Reflection	International Journal of Environmental Research and Public Health / Study	<ul style="list-style-type: none"> • Study examined the pandemic measures taken by nursing leaders to cope with COVID-19 at a nursing home in Singapore using Morley's (2014) three-stage critical reflection method to review meeting minutes, organizational emails, and government advisories on the COVID-19 pandemic measures undertaken by nursing leaders at a nursing home in Singapore between January and June 2020. • The pandemic measures were broadly classified into four groups: (1) infection surveillance and containment measures; (2) ensuring continuity in clinical care and operational support; (3) resource and administrative coordination; and (4) staff training and development. • Nurses have played a vital role in the fight against COVID-19 by ensuring continuity in patient care and demonstrating clinical leadership in pandemic efforts. • This study proposes a useful nursing pandemic structure that outlines a set of functions and measures required for handling a pandemic and that can be applied to various medical emergencies and contingencies
22.12.2021	Care Homes in Spain in the COVID-19 Pandemic: Lessons Learned from an Intervention by Médecins Sans Frontières	Journal of Humanitarian Affairs / Study	<ul style="list-style-type: none"> • The first case of COVID-19 was detected in Spain on 31 January 2020, and as of August 2021 there have been more than 4,500,000 cases and over 80,000 COVID-19 deaths in the country. • From the outset of the COVID-19 pandemic, one of the few certainties was that the risk of serious disease increased with age and comorbidities, therefore older residents in care homes would be particularly vulnerable. • The risks to those living in care homes is reflected in the alarming statistics. During the first weeks of the pandemic in Spain, more than 6 per cent of the overall care home population (333,920) died due to COVID-19 or with symptoms consistent with the disease. • Older people in care homes were particularly hard hit with an unacceptably high mortality. MSF were first-hand witnesses to this

			<p>situation and found a system that was unprepared and ill-equipped to reach the needs of care home residents.</p> <ul style="list-style-type: none"> • Structural and technical issues aside, one of the weakest aspects of the COVID-19 response was not adequately people-centred. Public health measures neglected to consider the human impact that a deadly virus would have on people. • Care home residents were not prioritised in the response, and many residents either died alone, terrified or witnessed their neighbours dying of asphyxiation and deprived of human touch and warmth, without access to qualified medical care. • A humanitarian approach that contemplates care provision based on needs and prioritises the most vulnerable and neglected – in this case, older people, especially those living in care homes – proved to be adequate to respond to the actual circumstances. • Alleviating human suffering and treating people with dignity is essential for their survival. The COVID-pandemic has demonstrated the need to ensure that the most at risk are not left behind.
24.12.2021	<p>Proactive Geriatric Comanagement of Nursing Home Patients by a New Hospital-based Liaison Geriatric Unit: A New Model for the Future</p>	JAMDA / Study	<ul style="list-style-type: none"> • During the SARS-CoV-2 pandemic, hospital-based liaison geriatric units (LGUs) were created in Spanish hospitals with the aim to improve health care coordination between nursing homes (NHs) and hospitals. • One university hospital created a comprehensive, proactive LGU serving 31 public and private NHs of different sizes and characteristics to offer support to more than 2500 residents. • In the first 3 months of 2021, this LGU performed 1252 assessments (81% as outpatients, 12% at the emergency department, and 7% during hospitalization), avoiding an estimated 49 hospital transfers and 29 hospitalizations. Other activities included giving NHs support and advice during COVID-19 outbreaks, comanagement of selected residents with other hospital-based specialists (implementing telemedicine), and implementation of a protocol that allowed using drugs only approved for hospital use in selected NHs. • This model of LGU has been shown to be feasible, to improve residents' health care, and avoid hospital referrals.

			<ul style="list-style-type: none"> • Long-term care needs to be re-imagined, and hospital geriatric departments need to prove that they are able to offer expertise to support NH health care professionals.
25.12.2021	Integrating Principles of Safety Culture and Just Culture Into Nursing Homes: Lessons From the Pandemic	JAMDA / Study	<ul style="list-style-type: none"> • The current regulatory strategy often places nursing home teams and government agencies at odds, hindering their ability to build a culture of safety in nursing homes that is foundational to health care quality. • Imbuing safety culture into nursing homes will require nursing homes and regulatory agencies to acknowledge the high-risk nature of post-acute and long-term care settings, embrace just culture, and engage nursing home staff and stakeholders in actions that are supported by evidence-based best practices. • The response to the COVID-19 pandemic prompted some of these actions, leading to changes in nursing survey and certification processes as well as deployment of strike teams to support nursing homes in crisis. • These actions, coupled with investments in public health that include funds earmarked for nursing homes, could become the initial phases of an intentional renovation of the existing regulatory oversight from one that is largely punitive to one that is rooted in safety culture and proactively designed to achieve meaningful and sustained improvements in the quality of care and life for nursing home residents.
28.12.2021	How did the COVID-19 pandemic affect older adults? Investigation in terms of disability, state–trait anxiety and life satisfaction: Samsun, Turkey example	Psychogeriatrics / Study	<ul style="list-style-type: none"> • Aim of this study was to investigate the effect of the COVID-19 pandemic on older adults in terms of disability, state–trait anxiety and life satisfaction. • The mean age of participants was 70.88 years. There was a significant difference between the participants' pre- and post-pandemic health status and quality of life levels. • A significant result of the study is that the older adults' perceptions of health status and quality of life were adversely affected by the pandemic. • Another significant result is that disability increased the level of anxiety. • The other significant result of the study is that socioeconomic status was an important determinant of anxiety.

29.12.2021	Reimagining Family Involvement in Residential Long-Term Care	JAMDA / Study	<ul style="list-style-type: none"> • During facility lockdowns and visitor restrictions of the COVID-19 pandemic, residents experienced social deprivation that may have resulted in significant and adverse health outcomes. • As with many other issues in residential long-term care (RLTC), the COVID-19 pandemic has magnified the need to determine how families can remain most effectively involved in the lives of residents. • This article seeks to better understand the state of the science of family involvement in RLTC and how the COVID-19 pandemic has expedited the need to revisit, and reimagine, family involvement in RLTC.
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Preprints

Publication Date	Title / URL	Preprint Source	Digest
20.12.2021	Booster Vaccination Strongly Enhances SARS-CoV-2-Specific Antibody and Cellular Responses in Elderly Residents of Care Homes	SSRN	<ul style="list-style-type: none"> • Third dose 'booster' COVID-19 vaccines can increase SARS-CoV-2 specific immune responses and are being deployed widely to control the impact of omicron variant infection. However, the efficacy of booster vaccines has not been assessed in the most vulnerable demographic groups such as the elderly and frail. • This is important as elderly residents in care facilities who have not had a prior natural SARS-CoV-2 infection exhibit suboptimal antibody and cellular responses following dual vaccination. • Authors studied immune responses in 134 staff and residents in long term care facilities (LTCF) who had received an mRNA booster vaccine following initial dual homologous vaccination with either Pfizer mRNA or ChAdOx1 vaccine. • Booster vaccination strongly increased antibody responses irrespective of prior infection status. Amongst staff and residents with serological evidence of prior infection these were 4.1-fold and 3.2-fold higher than following dual vaccination. Furthermore, these were increased by 6.4-fold and 12.3-fold within infection-naïve donors such that elderly donors achieved a similar antibody level to younger staff.

			<ul style="list-style-type: none"> • Cellular immune responses were boosted only in older donors and achieved equivalence across the life course. • The immunogenicity of the mRNA booster vaccine was equivalent in donors who had received either mRNA or adenovirus baseline vaccination. As such, booster vaccination can overcome the negative influence of age on immune responses to dual COVID-19 vaccination in the LTCF setting. • These findings reveal strong immunogenicity after the 3rd booster vaccine dose in one of the most vulnerable clinical groups and endorse an approach for rapid delivery across this population.
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Reports and other publications

Publication date	Title / URL	Author(s)	Digest
December 2021	Our ageing population: How ageing affects health and care need in England	Raymond, Ann; et al.	<ul style="list-style-type: none"> • England's population is ageing. In the next 25 years, the number of people older than 85 will double to 2.6 million. An ageing population might lead to the presumption that there will be an increased need for health and social care services. But the reality is more complicated. • The proportion of older people who need social care support at any given age has fallen. This means a higher proportion of older people are now able to live independent lives. Although demand is still increasing overall, this fall in the proportion of older people needing social care has counterbalanced some of the increase driven by our ageing population. • However the proportion of older people aged above 75 with a long-term condition has risen, and their needs are likely to become more complex, leading to increased demand for NHS services. • These findings suggest that older people are living with an increased number of long-term conditions, typically managed through the NHS, without on average needing more support with social care. But those who do have social care needs may also be managing an increased number of long-term conditions.

			<ul style="list-style-type: none"> As government seeks to reform adult social care, policymakers need to be aware of the complexities involved in predicting future demand – rather than assuming social care demand will increase in correlation with increased prevalence of long-term health
22.12.2021	Infection Control in Long-Term Care: An Old Problem and New Priority	Baker, Natalie R.; et al.	<ul style="list-style-type: none"> Infection prevention and control in Nursing Homes (NH) is an ongoing problem, brought to new and dangerous light with the outbreak of the COVID-19 pandemic. The COVID-19 death toll of NH residents has ignited a growing demand for ensuring education in geriatric care competencies for all NH staff. Authors note that a crucial need for urgent action to protect and care for older adults in LTC settings has been demonstrated during the current pandemic. They argue a collective new priority and responsibility must be enforcement of regulations and policies that enhance infection control and geriatric education, improved reimbursement, and federal mandated staff-to-resident ratios to successfully prevent and manage future infectious disease threats
22.12.2021	Effects of BNT162b2 Covid-19 Vaccine Booster in Long-Term Care Facilities in Israel	Muhsen, Khitam; et al.	<ul style="list-style-type: none"> On July 30, 2021, the Israeli Government’s Ministry of Health approved the administration of a BNT162b2 booster vaccine (third dose) for persons 60 years of age or older who had received the second vaccine dose at least 5 months earlier; the approval was later extended to persons under 60 years of age. This approval prompted an immediate nationwide 3-week campaign of administering the BNT162b2 booster to residents in long-term care facilities between August 1 and August 22, 2021. Authors evaluated the changes in the incidence of Covid-19 among such residents during the 5 weeks before and 6 weeks after the initiation of this campaign and compared the results with those in the general population. During the booster period, the dynamics of Covid-19 incidence differed among the groups. Among the residents of long-term care facilities, significantly lower rates of SARS-CoV-2 infection and hospitalization for severe Covid-19 were observed starting at week 34 as compared with week 31 (the first week of the booster program). By week 36, the incidence rate ratio had reached 0.29 for overall infection and 0.20 for

			<p>hospitalization, which corresponded to a relative rate reduction of 71% and 80%, respectively.</p> <ul style="list-style-type: none"> • Among persons who were 60 years of age or older in the general population, the decline after booster vaccination was of lower magnitude and was observed for all SARS-CoV-2 infections during weeks 35 and 36 only, with no significant decrease in the risk of hospitalization for severe disease • Among persons who were younger than 60 years of age, no significant decreases were observed in the incidence of either infection or hospitalization during the study period. Generally, mortality was higher among residents of long-term care facilities than among other groups.
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Guidance

Publication date	Title / URL	Author(s)	Digest
22.12.2021	Infection Prevention and Control COVID-19 Living Guideline – Mask use in community settings	WHO	<ul style="list-style-type: none"> • This first edition of the Infection Prevention and Control COVID-19 Living Guideline – Mask use in community settings provides the most up to date technical guidance on mask use in community settings in the context of COVID-19. • In this edition, new information includes: <ul style="list-style-type: none"> ○ updated mask recommendations for the general public, ○ a statement on policies for appropriate adherence to a comprehensive package of preventive measures to reduce severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission, ○ a statement on the type of mask to be used by higher-risk individuals, and ○ implementation considerations for the type and minimum essential parameters of masks used in community settings.
Updated 22.12.2021	COVID-19: Normalising Visiting in Long Term	Health Protection Surveillance Centre	<ul style="list-style-type: none"> • New guidance updated to include changes to background and context reflecting emergence of Omicron variant

	Residential Care Facilities (LTRCFs)		<ul style="list-style-type: none"> For the purpose of this guidance ‘fully vaccinated’ should mean primary vaccination and booster if eligible for booster People with COVID-19 in the previous 9 months should be encouraged to avail of vaccination as soon as eligible If, in exceptional circumstances, people do congregate outdoors masks should be worn as per current public health guidance
Updated 22.12.2021	COVID-19 contacts: guidance for health and social care staff	Welsh Government	<ul style="list-style-type: none"> Sets out requirements for staff who come into direct contact with patients or service users. Describes the process for employers to follow to protect vulnerable people.
Updated 24.12.2021	Coronavirus (COVID-19) testing service for extra care and supported living settings	UKHSA	<ul style="list-style-type: none"> Guidance on regular retesting for extra care and supported living settings that meet the eligibility criteria.

Statistics

Publication date	Title / URL	Author(s)	Digest
30.12.2021	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.
30.12.2021	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.