



Public Health
England

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Weekly Care Homes Evidence Digest

Prevention and control of COVID-19 in home care/care homes settings
11th February 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: emerging evidence from the delivery of COVID-19 vaccination in the USA; psychosocial predictors of U.S. adults' willingness to get a future COVID-19 vaccine; the need for equitable access to COVID-19 vaccination for older adults with limited English proficiency; reasons underlying vaccine hesitancy in early prioritised at-risk groups; and evidence of reduction in COVID-19 infection in nursing homes following the first dose of vaccine. Also from the USA, use of a stepped wedge study design to assess transitional care from skilled nursing facilities to home; and lessons from the design and implementation of skilled nursing facility COVID-19 units to support patients with COVID-19 discharged from hospital. From the UK, experience from English care homes in developing a resilient response to the COVID-19 pandemic; and a link to another in the PHE series of rapid evidence reviews to inform the COVID-19 response, "*What interventions are effective in supporting mental health of vulnerable people living in institutions (care homes, refuges, and prisons) following infectious disease outbreaks ?*"

<https://phelibrary.koha-ptfs.co.uk/covid19rapidreviews/>. Finally, summaries of other recently published reports, guidance and statistics.

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
01.02.2021	Prediction of SARS-CoV Interaction with Host Proteins during Lung Aging Reveals a Potential Role for TRIB3 in COVID-19	Aging and Disease / study	<ul style="list-style-type: none"> • Old individuals are more likely to develop pneumonia and respiratory failure due to alveolar damage, suggesting that lung senescence may increase the susceptibility to SARS-CoV-2 infection and replication. • Considering that human coronavirus (HCoVs; SARS-CoV-2 and SARS-CoV) require host cellular factors for infection and replication, Genotype-Tissue Expression (GTEx) data was analysed to test whether lung aging is associated with transcriptional changes in human protein-coding genes that potentially interact with these viruses.
01.02.2021	The COVID-19 Pandemic as a Traumatic Stressor: Mental Health Responses of Older Adults With Chronic PTSD	American Journal of Geriatric Psychiatry / study	<ul style="list-style-type: none"> • Individuals with post-traumatic stress disorder (PTSD) who experience additional traumas or stressful life events may undergo symptomatic worsening, but no data exist on whether exposure to the COVID-19 pandemic in a high infection area worsens mental health among older adults with chronic PTSD.
01.02.2021	Willingness to get the COVID-19 vaccine with and without emergency use authorization	American Journal of Infection Control / study	<ul style="list-style-type: none"> • This study assessed psychosocial predictors of U.S. adults' willingness to get a future COVID-19 vaccine and whether these predictors differ under an emergency use authorization (EUA) release of the vaccine.
04.02.2021	"There Was No 'That's Not My Job'": New York Area Agencies on Aging Approaches to Supporting Older Adults During the COVID-19 Pandemic	Journal of Applied Gerontology / study	<ul style="list-style-type: none"> • The COVID-19 pandemic has disrupted many older adults' traditional sources of formal and informal supports, increasing demand for Area Agency on Aging services (AAAs). • AAAs rapidly expanded capacity and dramatically modified program offerings, communications activities, and service delivery protocols to address emergent needs and minimize COVID-19 exposure risk for clients. • AAAs' trusted relationships with older adults and community partners improved their capacity to identify priority needs and coordinate appropriate supports.
05.02.2021	Age and frailty are independently associated with increased COVID-19 mortality and	Age and Aging / study	<ul style="list-style-type: none"> • Age and frailty are independently associated with adverse outcomes in COVID-19. Risk of increased care needs was also increased in survivors of COVID-19 with frailty or older age.

	increased care needs in survivors: results of an international multi-centre study		
05.02.2021	Care homes, their communities, and resilience in the face of the COVID-19 pandemic: interim findings from a qualitative study	BMC Geriatrics / study	<ul style="list-style-type: none"> From late February 2020, English care homes rapidly adapted their practices in response to the COVID-19 pandemic. In addition to accommodating new guidelines and policies, staff had to adjust to rapid reconfiguration of services external to the home that they would normally depend upon for support. This study examined the complex interdependencies of support as staff responded to COVID-19. The aim was to inform more effective responses to the ongoing pandemic, and to improve understanding of how to work with care home staff and organisations after the pandemic has passed.
05.02.2021	Transitional care from skilled nursing facilities to home: study protocol for a stepped wedge cluster randomized trial	BMC Trials /Study Protocol	<ul style="list-style-type: none"> Skilled nursing facility (SNF) patients are medically complex with multiple, advanced chronic conditions. They are dependent on caregivers and have experienced recent acute illnesses. Among SNF patients, the rate of mortality or acute care use is over 50% within 90 days of discharge, yet these patients and their caregivers often do not receive the quality of transitional care that prepares them to manage serious illnesses at home.
05.02.2021	SARS-CoV-2 Antibody Detection in Skilled Nursing Facility Residents	Journal of the American Geriatrics Society / study	<ul style="list-style-type: none"> The objective of the study was to describe the frequency and timing of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibody detection in a convenience sample of skilled nursing facility (SNF) residents with and without confirmed SARS-CoV-2 infection.
06.02.2021	Design and Implementation of a Skilled Nursing Facility COVID-19 Unit	JAMDA / study	<ul style="list-style-type: none"> Coronavirus disease 2019 (COVID-19) has challenged the healthcare system's capacity to care for acutely ill patients. In a collaborative partnership between a health system and a skilled nursing facility (SNF), we developed and implemented a SNF COVID-19 unit to allow expedited hospital discharge of COVID-positive older adults who are clinically improving, and to provide an alternative to hospitalization for those who require SNF care but do not require or necessarily desire aggressive disease-modifying interventions.

07.02.2021	Hip fracture care and mortality among patients treated in dedicated COVID-19 and non-COVID-19 circuits	European Geriatric Medicine / study	<ul style="list-style-type: none"> • This was a study on the effects of the COVID-19 pandemic and patient cohorting on the mortality and care provided for patients with hip fractures • Mortality due to COVID-19 infection was higher before patient cohorting, and no nosocomial infections were detected after cohorting. • Survival of patients treated in the COVID-19 circuit was similar to non-COVID-19 controls, in spite of longer surgical delay and length of stay.
08.02.2021	COVID-19 and dementia: experience from six European countries	International Journal of Geriatric Psychiatry early view / study	<ul style="list-style-type: none"> • The International Dementia Alliance is a group of dementia specialists from six European countries and this paper is a summary of their experience of the effects of COVID-19 on their populations. • Experience from England, France, Germany, the Netherlands, Spain and Switzerland highlight the differential response from health and social care systems and the measures taken to maximise support for older people and those with dementia.
08.02.2021	Impact of COVID-19 'Stay Home, Stay Healthy' Orders on Function among Older Adults Participating in a Community-Based, Behavioral Intervention Study	Journal of Aging and Health / study	<ul style="list-style-type: none"> • Early mitigation orders for COVID-19 halted participation in community-based programs. • The study examined the early impact of "Stay Home, Stay Healthy" orders on functioning in older adults participating in a behavioral intervention study involving community-based exercise.
08.02.2021	Older Adults with Limited English Proficiency Need Equitable COVID-19 Vaccine Access	Journal of the American Geriatrics Society accepted articles / study	<ul style="list-style-type: none"> • A population that requires special attention is older adults with Limited English Proficiency (LEP), who often experience the intersections of geriatric syndromes, racial or ethnic minority background, lower socioeconomic status, multiple chronic conditions, need for family caregiver involvement, and cultural, neighborhood, or legal influences that affect access to healthcare.
09.02.2021	Clinical characteristics and outcomes of critically ill COVID-19 patients in Tokyo: a single-center observational study from the first wave	BMC Infectious Diseases / study	<ul style="list-style-type: none"> • Many studies have been published about critically ill coronavirus disease 2019 (COVID-19) during the early phases of the pandemic but the characteristic or survival of critically ill Japanese patients have not yet been investigated. We sought to investigate the characteristics, inflammatory laboratory finding trends, and outcomes among critically ill Japanese patients who were admitted to the intensive care unit (ICU) with the first wave of COVID-19.

09.02.2021	COVID-19 Vaccination Intent, Perceptions, and Reasons for Not Vaccinating Among Groups Prioritized for Early Vaccination — United States, September and December 2020	Centers for Disease Control and Prevention / report	<ul style="list-style-type: none"> From September to December 2020, intent to receive COVID-19 vaccination increased from 39.4% to 49.1% among adults and across all priority groups, and nonintent decreased from 38.1% to 32.1%. Despite decreases in nonintent from September to December, younger adults, women, non-Hispanic Black adults, adults living in nonmetropolitan areas, and adults with less education and income, and without health insurance continue to have the highest estimates of nonintent to receive COVID-19 vaccination.
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Preprints

Publication date	Title / URL	Journal / Article type	Digest
10.02.2021	Susceptibility and risk of suffering SARS-COV-2 infection by demographic characteristics and pre-existing medical conditions among middle-aged and older adults in Tarragona, Spain: results from the COVID19 TARRACO Cohort Study, March-June 2020	BioRxiv	<ul style="list-style-type: none"> Reports on population-based cohort study including 79,083 people aged 50+ in Tarragona, Southern Catalonia Key findings are that in a setting with relatively low incidence of COVID-19 in the first wave of pandemic period, age, nursing-home residence and multiple comorbidities appear predisposing for COVID-19 among middle-aged/older adults Conversely, statins, angiotensin-receptor blockers/inhibitors and influenza vaccination were related with decreased risk

Reports and other publications

Publication date	Title / URL	Author(s)	Digest
02.02.2021	Updated international report: Mortality associated with	Long-Term Care Responses to COVID-19	<ul style="list-style-type: none"> Despite the difficulties arising from differences in definitions, in almost all countries where there have been deaths linked to COVID-19, a

	COVID-19 in care homes, data up to 26th January 2021		substantial proportion of those deaths were among care home residents.
05.02.2021	Emerging evidence on reduction in COVID-19 infections in nursing homes with the first dose of vaccine (US)	Center for Health Policy Evaluation in Long-Term Care	<ul style="list-style-type: none"> The Center for Health Policy Evaluation in Long-Term Care have published a report comparing the weekly rate of new COVID infections among staff and residents in nursing homes that had held a first vaccine clinic, compared to nursing homes in the same county that had not held a vaccine clinic yet
05.02.2021	Role and Impact of Interdisciplinary Rehabilitation in an Acute COVID-19 Recovery Unit	Gustavson, Allison M.; et al.	<ul style="list-style-type: none"> The ongoing coronavirus-2019 (COVID-19) pandemic has challenged healthcare systems to create innovative models of care to maximize bed availability and provide stepped-down care for patients who are medically stable with continued acute care needs. Older adults are disproportionately hospitalized and die from COVID-19 and are more vulnerable to greater hospital-associated declines in function. To address these needs, the Minneapolis Veterans Affairs (VA) Healthcare System converted an inpatient unit into a 12-18 bed COVID-19 Rehabilitation Unit (CRU) similar to that described by Sohn et al.

Statistics

Publication date	Title / URL	Author(s)	Digest
09.02.2021	Number of deaths in care homes notified to the Care Quality Commission, England	Office for National Statistics, Care Quality Commission	<ul style="list-style-type: none"> Provisional counts of deaths in care homes caused by the coronavirus (COVID-19) by local authority.
10.02.2021	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.

Editorials and News

Publication date	Title / URL	Author(s)	Digest
01.02.2021	Promoting Resilience in the Age of COVID-19 Pandemic: A New Era of Strategic Foresight	Hanna Lu et al.	<ul style="list-style-type: none"> • Hong Kong has had a good record on controlling the COVID-19 outbreak, a third wave is starting to spread across the whole city. • In the context of the age-specific distribution potential vulnerable individuals may be overlooked behind the third-wave surge. • Based on the available residency data (https://chp-dashboard.geodata.gov.hk/covid-19/en.html), we found 69.4% of patients lived in public housing and 33.7% lived in private housing.
01.02.2021	Age in the Time of COVID-19: An Ethical Analysis	Sorin Hostiuc et al.	<ul style="list-style-type: none"> • Despite using a myriad of methods to combat the spread of COVID-19, the healthcare systems (especially the intensive care units) have been overwhelmed, showing an outpaced capacity of available beds and ventilators. • Choosing the right criteria to allocate the scarce ICU seems very challenging, one such criterion, which generates intense debates, is age. • The main advantage of this approach is the potential for long-term survival. • We will show that age should never be used as a unique criterion for withholding/not initiating life-saving procedures, even in pandemics or cases in which healthcare resources are extremely scarce. • This approach is based on fundamental Codes of Ethics, such as the WMA Code of Ethics or the Oath of Hippocrates and all physicians treating patients should obey them.
03.02.2021	SARS-CoV-2: the “Uncensored” Truth about Its Origin and Adipose-Derived Mesenchymal Stem Cells as New Potential Immune-Modulatory Weapon	Pietro Gentile	<ul style="list-style-type: none"> • In this second return of the pandemic, January 2021, it appears to be clear that a Nano-sized organism, the SARS-CoV-2, has rendered the human race helpless, made the global health status decline, and drowned the world economy. However, it does not appear clear the real origin of the SARS-CoV-2 and the aim of this work is to report and discuss, the scientific data published in this specific field, analyzing the potentially available weapons against the SARS-CoV-2.

<p>08.02.2021</p>	<p>Concerns regarding the sensitivity of the OptiGene direct SARS-CoV-2 LAMP assay and its suitability for use in at-risk groups and hospital staff</p>	<p>Eleri S.W. Wilson-Davies</p>	<ul style="list-style-type: none"> • The COVID-19 pandemic has triggered an unprecedented demand for diagnostic tests. Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is highly contagious in the pre-symptomatic period, when the viral load is high. In the effort to reduce transmission, for the first time in infection diagnostics history, testing is being aimed not only at symptomatic, but also at asymptomatic individuals, both in the health care setting and in the community. • The testing of saliva by OptiGene direct ORF1ab LAMP (with no RNA extraction), in newly built laboratories under the management of acute NHS Trusts, is costing the taxpayer over 400 million British pounds and has resulted in the movement of key staff away from essential roles in acute NHS Trust diagnostic laboratories, at short notice. • The OptiGene assay on saliva samples is intended for the testing of asymptomatic NHS staff, to help prevent hospital acquired outbreaks. The assay however, failed to detect more than 50% of saliva positive cases in a pilot in Greater Manchester, when compared to a “gold standard” qPCR (polymerase chain reaction) assay.
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