



Public Health
England

Protecting and improving the nation's health

Weekly Care Homes Evidence Digest

Prevention and control of COVID-19 in home care/care homes settings 18th March 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 the USA and UK, further evidence on factors contributing to the mortality from Covid-19 in care homes; also from the USA, effectiveness of the Pfizer-BioNTech COVID-19 vaccine for residents of skilled nursing facilities; from Turkey, a scoping review of the effect of social isolation and loneliness on the quality of life of older people during the Covid-19 pandemic; from Japan, benefits of genetic testing and serological screening in nursing facility outbreaks of Covid-19; and the impact of prioritisation and dosing intervals on the effects of Covid-19 vaccination in Europe. From the UK, latest evidence of the effectiveness of the Covid-19 vaccination programme in the over 70s. Finally, summaries of recently published reports, guidance and statistics.

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

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
11.03.2021	COVID-19 infection and attributable mortality in UK care homes: Cohort study using active surveillance and electronic records (March–June 2020)	Age and Ageing / study	<ul style="list-style-type: none"> • Epidemiological data on COVID-19 infection in care homes are scarce. • The study analysed data from a large provider of long-term care for older people to investigate infection and mortality during the first wave of the pandemic.
11.03.2021	COVID-19 Mortality Rates Among Nursing Home Residents Declined From March To November 2020	Health Affairs / Study	<ul style="list-style-type: none"> • Study examines changes in thirty-day mortality rates between March and November 2020 among 12,271 nursing home residents with COVID-19 • Authors found adjusted mortality rates significantly declined from a high of 20.9 percent in early April to 11.2 percent in early November. • Mortality risk declined for residents with both symptomatic and asymptomatic infections and for residents with both high and low clinical complexity. • The mechanisms driving these trends are not entirely understood, but they may include improved clinical management within nursing homes, improved personal protective equipment supply and use, and genetic changes in the virus.
12.03.2021	Life in lockdown: Social Isolation, Loneliness and Quality of Life in the Elderly During the COVID-19 Pandemic: A Scoping Review	Geriatric Nursing / Scoping Review	<ul style="list-style-type: none"> • Articles since December 2019 to March 2021 published on PubMed, Scopus, ProQuest, Cochrane Library, CINAHL databases with the following MeSh terms ('COVID-19', 'coronavirus', 'quality of life' 'aging', 'older people', 'elderly', 'loneliness' and 'social isolation) in English were included in this scoping review to to evaluate the social isolation, loneliness and quality of life of elderly individuals during the COVID-19 pandemic • Authors identified 7 studies for full reading and concluded mental and physical health in older people are negatively affected during the social distancing for COVID-19. Therefore, a multi component program with exercise and psychological strategies are highly recommended for this population during the confinement. Future investigations are necessary.

15.03.2021	Genetic testing and serological screening for SARS-CoV-2 infection in a COVID-19 outbreak in a nursing facility in Japan	BMC Infectious Diseases / study	<ul style="list-style-type: none"> • The Pandemic of coronavirus disease (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has critically impacted the spread of infection within nursing facilities. • The study evaluated the usefulness of genetic and serological tests conducted during a COVID-19 outbreak in a nursing facility in Japan.
15.03.2021	Effectiveness of the Pfizer-BioNTech COVID-19 Vaccine Among Residents of Two Skilled Nursing Facilities Experiencing COVID-19 Outbreaks — Connecticut, December 2020–February 2021	CDC / study	<ul style="list-style-type: none"> • Skilled nursing facility (SNF) residents, generally older and with more underlying medical conditions than community-dwelling adults, were not included in COVID-19 vaccine clinical trials. Little is known about COVID-19 vaccine effectiveness in SNF residents. • A retrospective cohort analysis in two Connecticut SNFs found partial vaccination with Pfizer-BioNTech COVID-19 vaccine (from >14 days after dose 1 through 7 days after dose 2) to be 63% (95% confidence interval = 33%–79%) effective against SARS-CoV-2 infection.

Preprints

Publication date	Title / URL	Journal / Article type	Digest
10.03.2021	The Impact of Prioritisation and Dosing Intervals on the Effects of COVID-19 Vaccination in Europe: An Agent-Based Cohort Model	The Lancet – SSRN / Preprints	<ul style="list-style-type: none"> • Studies impact of different population prioritisation and dose intervals on infections, hospitalisations, mortality, and public health restrictions • rioritising vulnerable people, rather than the most contagious groups, led to higher COVID-19 prevalence, but clear reductions in mortality, hospital admissions, and restrictions. At a realistic vaccination speed of $\leq 0.1\%$ population/day, separating doses by 12 (instead of 3) weeks reduced hospitalisations, mortality, and restrictions for vaccines with similar first- and second-dose efficacy (e.g., the Oxford-AstraZeneca and Moderna vaccines), but not for those with lower first-dose efficacy (e.g., the Pfizer/BioNTech vaccine). • Mass vaccination should dramatically reduce the effect of COVID-19 on Europe's health and economy. Early vaccination of vulnerable populations will reduce mortality, hospitalisations, and public health restrictions compared to prioritisation of the most contagious groups. The choice of interval between doses should be based on expected

			vaccine availability and first-dose efficacy, with 12-week intervals preferred over shorter intervals in most realistic scenarios.
15.03.2021	Associations among anxiety, risk perception, preventive behaviors, and personality in Japanese older adults aged 78 to 99 years during the COVID-19 pandemic	PsyArXiv / Preprint	<ul style="list-style-type: none"> • Studies understanding of processes underlying older adults' behavior during the COVID-19 pandemic, we investigated associations among affective (anxiety about the coronavirus), cognitive (perceived risk of infection and fatality), and behavioral (engagement in preventive behaviors) variables, and how these variables were predicted by personality traits measured before the pandemic • Most participants felt anxious, engaged in preventive behaviors, and overestimated infection and fatality risks. Older age was associated with low anxiety, a low perception of infection risk, a high perception of fatality risk, and a little engagement in preventive behaviors. • Women were more susceptible to the pandemic than men were, demonstrated by higher scores on all four items. Partial correlation analysis controlling for age and sex demonstrated positive associations among all four items except for infection risk perception and preventive behaviors. Anxiety and perceived infection risk were positively predicted by neuroticism and conscientiousness, respectively. • Engagement in preventive behaviors was positively predicted by extraversion, openness to experience, and conscientiousness.
15.03.2021	Telephone-based Behavioral Activation with Mental Imagery for depression: a pilot randomized clinical trial in isolated older adults during the Covid-19 pandemic	PsyArXiv / Preprint	<ul style="list-style-type: none"> • The aim of this study was to investigate the feasibility, acceptability and preliminary efficacy of telephone-delivered Behavioral Activation with Mental Imagery for the treatment of depressive symptoms in individuals 65 years and older living in isolation during the covid-19-pandemic • Depressive symptoms decreased more in the treatment condition compared to the control condition. At post treatment 2 out of 16 participants in the treatment condition met diagnostic criteria for depression compared to 9 out of 13 in the control condition. Most participants in the treatment condition were satisfied with the treatment and few adverse effects were observed. • This pilot study suggests that behavioral activation with mental imagery delivered over the telephone is feasible, acceptable and potentially efficacious for the treatment of depressive symptoms in older individuals living in isolation.
17.03.2021	Age specific COVID-19 undercount in Spain from the	MedRxiv / Preprint	<ul style="list-style-type: none"> • Spanish Nomenclature of Territorial Units for Statistics region records (NUTS3) of age specific weekly deaths since the year 2020

	regional breakdown of 52-week accumulated mortality rates		<ul style="list-style-type: none"> Records of age specific COVID-19 deaths and age specific population since the year 2020 are used to estimate first age specific all-cause death rates and age specific COVID-19 undercount. Results shows a statistically significant impact of the pandemic in excess deaths for population aged 40 and elder. Statistically significant COVID-19 undercount is identified only for population aged 80 and elder. It is likely this is the result of the impact of the pandemic in institutionalized population at the early stages of the pandemic.
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Reports and other publications

Publication date	Title / URL	Author(s)	Digest
17.03.2021	Public Health England vaccine effectiveness report: March 2021		<ul style="list-style-type: none"> Analysis of routine testing data continues to show a vaccine effect against symptomatic COVID-19 from either vaccine in those aged 70 year and over, for whom the vaccine effectiveness (VE) of a single dose reaches ~60%. This analysis includes additional weeks' of data which gives us increased confidence in the levels of protection the vaccines are offering SIREN continues to show high protection against any COVID-19 infection in healthcare workers with no decline in protection after a single dose beyond 56 days (which is the length of time people have been studied) Additional effect against hospitalisation continues to be seen when linking pillar 2 testing data linked to emergency admissions. As before, we find that among those who develop symptomatic infection, risk of hospitalisation is reduced by 35-45% after one dose of either vaccine. Combined with the reduced risk of becoming a case, this is consistent with a vaccine effectiveness against hospitalisation which is similar to previously reported value of 80%. Data continue to show encouraging effects from a single dose of the Pfizer vaccination on risk of mortality in symptomatic cases over 80 who have been vaccinated, where the risk of death is reduced by 54%. Combined with the reduced risk of becoming a case, this is

			consistent with a vaccine effectiveness against mortality which is similar to previously reported value of 85%.
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Guidance

Publication date	Title / URL	Author(s)	Digest
04.03.2021	Care home visiting in a COVID-19 world	Care Provider Alliance	<ul style="list-style-type: none"> A new iteration of the Government guidance on visiting in care homes was issued on 4.3.21.
17.03.2021	Adult Social Care Infection Control Fund: round 2	UK Department of Health and Social Care	<ul style="list-style-type: none"> Sets out the infection control measures that the new infection control fund will support, including information on the distribution of funds and reporting requirements.

Statistics

Publication date	Title / URL	Author(s)	Digest
02.03.2021	Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 26 February 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.
16.03.2021	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).
16.03.2021	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.

17.03.2021	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.
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Editorials and News

Publication date	Title / URL	Author(s)	Digest
13.03.2021	Smart moves for an aging population	Josephsen, S.R.	<ul style="list-style-type: none"> Commentary examines ways in which US healthcare system could change and adapt to better support over 65s in wake of the COVID-19 pandemic