Weekly Care Homes Evidence Digest

Prevention and control of COVID-19 in home care/care homes settings
9th July 2020

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.

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### Peer-reviewed

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<tr>
<td>02.07.2020</td>
<td>High Proportion of Asymptomatic SARS-CoV-2 Infections in 9 Long-Term Care Facilities, Pasadena, California, USA, April 2020</td>
<td>Emerging Infectious Diseases / Dispatch</td>
<td>• The authors’ analysis of coronavirus disease prevalence in 9 long-term care facilities demonstrated a high proportion (40.7%) of asymptomatic infections among residents and staff members.</td>
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| 02.07.2020       | Nursing Home in the COVID-19 Outbreak: Challenge, Recovery, and Resiliency   | Journal of Gerontological Social Work / Letter | • Qinggang nursing home, China’s first nursing home approved by the national development and reform commission, was set up by a first-class tertiary hospital, as the vanguard and pilot base of a nursing care institution in China.  
• We declared a “state of alert” and adopted a series of resilient strategies when the COVID-19 pandemic was first declared and achieved “zero infection” among 335 residents and 276 health-care personnel. The following are some general strategies that can be used for reference:  
• Emergency management: launch public health emergency plans; establish quarantine sections; release a formal notice of quarantine and obtain the understanding and cooperation of the older adults and their families.  
• Staff management and training: screen epidemiological history and track activity and physical health status of employees in the two weeks before commencing employment; give priority to online training for all personnel in the organization; managers should provide support, such as humanistic scheduling, mindfulness training, or psychological counselling.  
• Care of older adults: highlight psychological support; patients suspected of having COVID-19 should be isolated in a single room immediately to avoid close contact. At the same time, cases should be reported to local community health agencies and disease control agencies. |
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| 02.07.20  | Long term care settings in the times of the COVID-19: Challenges and future directions | International Psychogeriatrics / Article    | - Recent estimates of the Centre for Disease Control suggest that LTC residents constitute about 27% of all COVID-19 deaths in the United States. In Europe, deaths of LTC residents constitute 50% of all COVID-19 deaths. A recent estimate in Quebec, Canada, suggests that LTC residents constitute as many as 88% of COVID-19 deaths.  
- Looks at the contributing factors such as communal living making self-isolation difficult, care providers providing assistance to multiple care recipients, understaffing.  
- Discusses additional concerns - emotional threats such as physical isolation, elder abuse, anxiety.  
- Looks at staffing issues such as anxiety and stress, fear of catching the disease, isolation from families, increased workload.  
- It is clear that additional funding should be directed to support LTCS and ensure the ability of staff to protect themselves and their residents. They should receive the exact same protective gear and training as medical settings.  
- Ongoing testing is required in order to facilitate the return of the residents to a routine which allows them to socially engage and prosper even with the COVID-19 impending risk at the background.  
- It also is important to identify particularly good and poor case examples in order to learn about adequate and inadequate strategies to address the COVID-19 outbreak.  
- Emotional assistance is required in order to help staff to process the experiences during the pandemic. It is our duty to ensure that the status and benefits associated with direct paid elder care work are improved so that staff is adequately trained and rewarded for its work. |
| 03.07.20  | Asymptomatic SARS-CoV-2 infection in Belgian long-term care facilities | The Lancet Infectious Diseases / Correspondence | - In early April, the Ministry of Health decided to implement a mass testing campaign in long-term care facilities in Belgium.  
- Did a cross-sectional analysis of data received from the laboratories between Apr 8, and May 18, 2020. 280 427
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| 03.07.2020 | Hospital affiliated long term care facility COVID-19 containment strategy by using prevalence testing and infection control best practices | - We instituted a structured prevalence testing programmatic protocol and infection control best practices for a facility during the pandemic in hard hit area. We did so by implementing strict infection control measures as well as periodic prevalence testing of residents and staff for COVID-19 by collection of a NP swab specimen for RT-PCR for SARS-CoV-2 at 14-day intervals.
- Over six weeks we were able to contain the spread of the disease shown by the prevalence decreasing from 5.4% to 3.6% to 0.41%.
- We also worked closely with our local EMS agencies to track daily transports of long term care patients and emergency department encounters to identify potential outbreaks early. Hospital leadership communicated directly with facility administration when COVID-19 positive patients were encountered. This allowed timely intervention, tracing and focused testing at these long-term care facilities to identify asymptomatic carriers, both residents and staff.
- By following specific testing protocols and strict infection control guidelines as well as close involvement of the regional acute care ED leadership, this model has proven to slow the spread of COVID-19 in a facility to less than local community conversion percentages. |
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| 06.07.2020 | COVIDApp: A Health Application as an Innovative Strategy for the Management and Follow-Up of the COVID-19 Pandemic in Long-Term Care Facilities in Catalonia | JMIR Public Health and Surveillance / Article               | - COVIDApp is a mobile application for the management of institutionalized individuals in long-term care facilities (LTCF).  
- COVIDApp was implemented in 196 care centers in collaboration with 64 primary care teams.  
- Data were recorded from ≥10,000 institutionalized individuals and up to 4,000 healthcare workers between April 1st and 30th, 2020.  
- A rapid increase in suspected cases was seen until day 6 but decreased during the 2 last weeks (from 1,084 to 282 cases). Confirmed cases increased from 419 cases (day 6) to 1,293 cases (day 22), remaining stable during the last week. Around 50% remained asymptomatic ≥14 days. A total of 854 (8%) deaths were reported (383 in suspected/confirmed cases).  
- COVIDApp could help clinicians to rapidly detect and remotely monitor suspected and confirmed cases of COVID-19 among institutionalized individuals, thus limiting the risk of spreading the virus. The platform shows the progression of infection in real time and can help us to design new strategies. |
| 07.07.2020 | Mortality and the use of Antithrombotic Therapies among Nursing Home Residents with COVID -19 | Journal of the American Geriatrics Society / Article       | - This study aimed to investigate whether the use of oral antithrombotic therapy (OAT) was associated with a lower mortality in NH residents with COVID-19.  
- Overall mortality was 47.5% in NH residents from 14 NH facilities. Age, comorbidity and medication use were comparable among NH residents who survived and who died.  
- OAT was associated with a lower mortality in NH residents with COVID-19 in the univariable analysis (OR 0.89 95%CI 0.41-1.95).  
- However, additional adjustments for sex, age and comorbidity, attenuated this difference. Mortality in males was higher compared with female residents (OR 3.96 (95%CI 1.62-9.65)). Male residents who died were younger |
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<td>04.07.2020</td>
<td>The Impact of COVID-19 on Adjusted Mortality Risk in Care Homes for Older Adults in Wales, United Kingdom: A retrospective population-based cohort study for mortality in 2016-2020</td>
<td>MedRxiv / Article</td>
<td>• Study analysing the mortality of older care home residents in Wales during COVID-19 lockdown.</td>
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<td>• Survival curves show an increased proportion of deaths between 23rd Mar and 14th June 2020 in care homes for older people, with an adjusted HR of 1.72 (1.55, 1.90) compared to 2016.</td>
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<td>• Compared to the general population in 2016-2019, adjusted care home mortality HRs for older adults rose from 2.15 (2.11,2.20) in 2016-2019 to 2.94 (2.81,3.08) in 2020.</td>
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<td>08.07.2020</td>
<td>Atypical Presentations of COVID-19 in Care Home Residents presenting to Secondary Care: A UK Single Centre Study</td>
<td>MedRxiv / Article</td>
<td>• Atypical presentations of COVID-19 are being reported in older adults and may pose difficulties for early isolation and treatment, particularly in institutional care settings.</td>
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<td>• We aimed to characterise the presenting symptoms and associated mortality of COVID-19 in older adults, with a focus on care home residents and older adults living in the community.</td>
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<td>• Care home residents were less likely to experience cough (46.9% vs 72.9%, p=0.002) but more likely to present with delirium (51.6% vs 31.4%, p=0.018), particularly hypoactive delirium (40.6% vs 24.3%, p=0.043).</td>
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Mortality was more likely in the very frail (OR 1.25, 95% CI 1.00, 1.58, p=0.049) and those presenting with anorexia (OR 3.20, 95% CI 1.21, 10.09, p=0.028).

COVID-19 in those over 80 does not always present with typical symptoms, particularly in those admitted from institutional care. These individuals have a reduced incidence of cough and increased hypoactive delirium. Individuals presenting atypically, especially with anorexia, have higher mortality.

**Guidance**

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<td>03.07.2020</td>
<td>The Health Service and Social Care Workers (Scrutiny of Coronavirus-related Deaths) Directions 2020</td>
<td>Department of Health &amp; Social Care</td>
<td>These directions ensure that NHS trusts and NHS foundation trusts seek and prioritise the services of medical examiners to scrutinise the deaths of health service and adult social care staff from coronavirus.</td>
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<td>Updated 06.07.2020</td>
<td>Coronavirus (COVID-19) advice for the health and aged care sector</td>
<td>Australian Government Department of Health</td>
<td>Specialist resources and advice for aged care providers and care workers who deliver services in residential aged care and in-home care settings.</td>
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<td>Updated 07.07.2020</td>
<td>Steps to take following the death of a person who worked in adult social care in England</td>
<td>Department of Health &amp; Social Care</td>
<td>In the event of the death of a worker in adult social care from coronavirus (COVID-19), there are several actions that employers may need to take which are detailed in this guidance.</td>
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<td>Updated 08.07.2020</td>
<td>COVID-19: guidance for care of the deceased</td>
<td>Public Health England</td>
<td>This advice is designed to assist people who are required to manage the bodies of deceased persons during the coronavirus (COVID-19) pandemic. This guidance includes information for staff in residential care settings including care homes and hospices.</td>
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This is a guide to help care staff and personal assistants supporting adults with learning disabilities and autistic adults through the COVID-19 crisis. Its aim is to assist high-quality care and support during the pandemic in areas such as:

- Helping the person to understand the changes
- Social distancing and going out
- Maintaining relationships
- Staying well
- Healthcare

### Statistical Reports

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| Updated 03.07.2020 | Impact of coronavirus in care homes in England: 26 May to 19 June 2020 | Office for National Statistics | First results from the Vivaldi study, a large-scale survey which looked at coronavirus (COVID-19) infections in 9,081 care homes providing care for dementia patients and the elderly in England.

Across the care homes included in the study, we estimate that 56% reported at least one confirmed case of coronavirus (staff or resident).

Across the care homes that reported at least one case of coronavirus, we estimate that 20% of residents and 7% of staff tested positive for COVID-19, as reported by care home managers, since the start of the pandemic.

These emerging findings reveal some common factors in care homes with higher levels of infections amongst residents including prevalence of infection in staff, some care home practices such as more frequent use of bank or agency nurses or carers, and some regional differences (such as higher infection levels within care homes in London and the West Midlands).
| Updated 03.07.2020 | Deaths involving COVID-19 in the care sector, England and Wales: deaths occurring up to 12 June 2020 and registered up to 20 June 2020 (provisional) | Office for National Statistics | • There is some evidence that in care homes where staff receive sick pay, there are lower levels of infection in residents.  
• Since the beginning of the coronavirus (COVID-19) pandemic (between the period 2 March to 12 June 2020, registered up to 20 June 2020), there were 66,112 deaths of care home residents (wherever the death occurred); of these, 19,394 involved COVID-19, which is 29.3% of all deaths of care home residents.  
• Since mid-April 2020, we have seen a slowdown in both the total number of deaths and deaths involving COVID-19 in care home residents.  
• England had a statistically significantly higher age-standardised mortality rate for deaths involving COVID-19 (1,182.9 deaths per 100,000 care home residents) compared with Wales (822.3 deaths per 100,000 care home residents).  
• Of deaths involving COVID-19 among care home residents, 74.9% (14,519 deaths) occurred within a care home and 24.8% (4,810 deaths) occurred within a hospital.  
• From 2 March 2020, of all deaths in hospital involving COVID-19, 15.5% could be accounted for by care home residents.  
• Between the period 2 March to 12 June 2020, registered up to 20 June 2020, COVID-19 was the leading cause of death in male care home residents, accounting for 33.5% of all deaths, and the second leading cause of death in female care home residents, after Dementia and Alzheimer disease, accounting for 26.6% of all deaths.  
• Dementia and Alzheimer disease was the most common main pre-existing condition found among deaths involving COVID-19 and was involved in 49.5% of all deaths of care home residents involving COVID-19.  
• The Care Quality Commission (CQC) collects information on recipients of domiciliary care in England and between 10 April and 19 June 2020, there were 6,523 deaths of |
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| 03.07.2020| Vivaldi 1: COVID-19 care homes study report    | Department of Health & Social Care / Official Statistics | - The results are based on analysis of the survey responses from 5,126 out of 9,081 care homes for the over 65s in England. Care home staff were asked to report on the total number of confirmed cases among staff and residents since the start of the pandemic.  
- The survey provided data on denominators (staff and residents) as well as estimates of infections, mortality, and risk factors for infection since the start of the pandemic, to provide figures for prevalence.  
- Regular use of 'bank' staff (healthcare professionals who do temporary work in different settings as needed) is an important risk factor for infection in residents and staff.  
- Infections in staff are a risk factor for infection in residents and infections in residents are a risk factor for infection in staff.  
- Emerging data suggests that the number of new admissions, and return of residents to the care home from hospital, may be important risk factors for infection in residents and staff. |
| Updated   | COVID-19: Care Homes in England                | Oxford COVID-19 Evidence Service / Briefing | - Data from care homes shows that 6,608 out of 15,507 care homes (42.6%) in England have confirmed or suspected outbreaks of COVID reported up to the week commencing the 22nd of June.  
- The dataset is from PHE infectious disease outbreaks in care homes.  
- Week ending 29th June: The South East has the highest number of COVID outbreaks (1,238); the North East the highest proportion (54%). |
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| 03.07.2020       | Regular retesting rolled out for care home staff and residents | Department of Health & Social Care, The Rt Hon Matt Hancock MP, and Helen Whately MP / Press Release | - Care home staff to be given coronavirus tests every week and residents monthly from Monday to identify anyone with the virus and reduce transmission.  
- Repeat testing will be initially prioritised for care homes primarily looking after over 65s or those with dementia before being rolled out to all adult care homes.  
- The government’s Vivaldi 1 care home study highlights the importance of regular staff testing while there is a higher prevalence in care homes. |
| Aug 2020         | Editorial: COVID-19 pandemic: urgent need for action in care homes and senior citizens’ homes from a medical-ethics perspective | Current Opinion in Anaesthesiology / Editorial | - There are four main problems that need to be overcome in order to assist the residents of senior citizens’ homes:  
  - Firstly, the introduction and spread of the coronavirus must be prevented as far as possible;  
  - Secondly, the social isolation that can result from residents being prevented from receiving visitors or leaving the buildings needs to be countered in imaginative ways. Particularly toward the end of life, aspects of medical care are important but they are not always the most important consideration;  
  - Thirdly, it needs to be clarified for each individual resident of homes whether in the hypothetical case that they develop more serious Covid-19 disease they would like to be transferred to a hospital and receive intensive medical care;  
  - Fourthly, precautions have to be taken for a situation in which a very large number of patients in some institutions might fall ill and die of Covid-19 pneumonia simultaneously. For this, they require reliably provided care that is of good medical quality and shows human sensitivity. |