

Controlling the spread of COVID-19 in care home settings

Context and international evidence

1. While data indicates that the UK may be reaching the peak of the epidemic and that there has been a slowdown in the rate of new infections, this trend has not been replicated in care homes, where the rate and number of outbreaks continues to increase. The latest data shows that 3084 homes had reported an outbreak as of the 15th April an increase of 191 from 14th April. There is also regional variation with 27.4% of care homes reporting an outbreak in the North West and 14.3% of care homes reporting an outbreak in the South West.
2. Care home residents are a high-risk group for respiratory infections due to the combined effect of old age and underlying health conditions which make them more susceptible to infection and worse outcomes. Further, based on the available data, there are risks of high levels of mortality in these settings, based on the case fatality rate in hospitalised older age groups and those with co-morbidities.
3. Current care home advice is to isolate both residents and staff who have symptoms of COVID-19. However, there is growing international evidence of asymptomatic transmission of COVID-19 in care homes, which demonstrates that by the time a single symptomatic case is identified in a home, the virus will already be circulating in the home amongst residents and staff. For example, a study carried out by the Centers for Disease Control and Prevention (United States) tested 76 (93%) residents in a skilled nursing facility. Twenty-three (30%) residents tested positive, of these, 10 (43%) had symptoms on the date of the test and the remaining 13 (57%) were asymptomatic. Seven days after testing, 10 out of 13 of the asymptomatic residents had developed symptoms. This study suggests that symptom-based screening in long-term care facilities could fail to identify approximately half of residents with COVID-19 ¹.
4. Among countries that appear to have had success in preventing COVID-19 entering care homes, such as Singapore and South Korea, there have been very strict processes to isolate and test all care home residents and staff who not only have symptoms, but who may have had contact with people who have COVID-19². Meanwhile in countries where there have been large numbers of deaths in care homes, such as Spain, initial guidance was similar as UK advice which is based on only isolating residents and staff with symptoms. Following many deaths in Spain, new guidance now requires isolation of all possible, probably and confirmed cases among staff and residents. Possible and probably

¹ Kimball A, Hatfield KM, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. MMWR Morb Mortal Wkly Rep. ePub: 27 March 2020. DOI: <http://dx.doi.org/10.15585/mmwr.mm6913e1>external icon.

² Tan, L.F. and Seetharaman, S. (2020), Preventing the Spread of COVID-19 to Nursing Homes: Experience from a Singapore Geriatric Centre. J Am Geriatr Soc. doi:10.1111/jgs.16447

cases are defined as those having potentially been in close contact with someone with COVID-19³.

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5. Currently, there is limited understanding of the spread and mortality in care homes, to fill this gap, PHE has undertaken a rapid enhanced outbreak investigation to describe the epidemiology of COVID-19 in these settings, estimate the incidence, mortality and morbidity, from COVID-19 among care home residents to inform infection control strategies and public health interventions in the UK.
6. Findings from the PHE enhanced outbreak investigation, combined with international evidence demonstrates that COVID-19 is introduced to care homes through three main routes – staff, visitors and transfers or new admissions into the home. Therefore, the focus should be on preventing the introduction of COVID-19 into the care home environment through these three areas. Therefore, PHE recommends additional measures to mitigate against further outbreaks in care homes, which are outlined in table 1 below.

Table 1: Three initial policy interventions to reduce the spread of COVID-19 in care homes	
Staff	Strict adherence to established infection control practice Testing and isolating of all symptomatic staff.
Visiting	Stopping all routine visits for a defined period and utilising digital approaches for family and friends to keep in touch with residents Note: This will not include visits for residents at the end of life or bereavement support.
Residents	Testing of all new admissions or transfers back to care homes from hospital or the community

Recommendation

7. Given the rapid spread of outbreaks in care homes, additional measures such as isolating and cohorting residents, similar to that used by NHS hospitals should be considered. This might involve separating severely vulnerable groups and/or moving particular groups out of care homes and into other facilities.

³ Davey V (2020) Report: The COVID-19 crisis in care homes in Spain, recipe for a perfect storm. Article in LTCcovid.org, International Long-Term Care Policy Network, CPEC-LSE. Available at <https://ltccovid.org/2020/03/30/report-the-covid19-crisis-in-care-homes-in-spain-recipe-for-a-perfect-storm/>