



Cohorting in Long-term Care

Disclaimer:

This *Quick Response Report* was published on April 26, 2020. Given the rapidly changing nature of the coronavirus pandemic, some of the references included in this report may quickly become out-of-date. We further caution readers that researchers at the Newfoundland & Labrador Centre for Applied Health Research are not experts on infectious diseases and are relaying work produced by others. This report has been produced quickly and it is not exhaustive, nor have the included studies been critically appraised.

Original Inquiry

Is cohorting of residents in long-term care facilities who test positive for COVID-19 recommended?

Key Definitions

Cohorting: Assignment of patients known to be infected with the same microorganisms to the same room or assignment of infected and non-infected patients to separate wards or areas.

From [Public Health Agency of Canada, 2012](#).

Summary

We were able to find several guidelines and recommendations from provincial and federal governments, government agencies, and international agencies. Unfortunately, we were unable to find published primary or systematic review research. We found one pre-print rapid review of clinical practice guidelines, one editorial, and one special article from experts in the field.

Guidance

Alberta Health Services. **Recommendations for Cohorting Inpatients on Additional Precautions in Acute Care Facilities.** Revised April 17, 2020 ([LINK](#))

- “COVID-19: If cohorting is necessary, only patients who are lab confirmed to have COVID-19 should be cohorted. Treat each bed space like a private room. Patients with signs and symptoms and exposure criteria consistent with COVID-19 should maintain at least a 2 meter separation between all other inpatients.”

Centers for Disease Control. **Preparing for COVID-19: Long-term Care Facilities, Nursing Homes - Dedicate Space in the Facility to Monitor and Care for Residents with COVID-19.** Updated April 15, 2020 ([LINK](#))

- “Dedicate space in the facility to care for residents with confirmed COVID-19. This could be a dedicated floor, unit, or wing in the facility or a group of rooms at the end of the unit that

will be used to cohort residents with COVID-19. Assign dedicated Health Care Providers to work only in this area of the facility.”

Ministry of Health, Ontario. **COVID-19 Outbreak Guidance for Long-Term Care Homes**. Version 2 - April 15, 2020 ([LINK](#))

- “Outbreak Control Measures: Cohort or “group together” all residents in the outbreak area as much as possible, and staff should use Droplet and Contact precautions for all resident interactions in the outbreak area.” See “Additional Outbreak Control Measures” subsection “Cohorting” on page 14.

Shared Health Manitoba. **COVID-19 Specific Disease Protocol (Winnipeg) – Acute & Community Settings**. Issued April 14, 2020 ([LINK](#))

- “Do not cohort COVID-19 suspects. Cohorting is only possible for patients with confirmed COVID-19 infection. If cohorting is necessary, consult Infection Prevention and Control.”
- “Maintain a 2 metre separation between patients with signs/symptoms and exposure criteria consistent with COVID-19 infection and all other patients and/or visitors.”

Department of Health and Human Services (USA). **2019 Novel Coronavirus (COVID-19) Long-Term Care Facility Transfer Scenarios**. Issued April 13, 2020 ([LINK](#))

- “These actions [to prevent transmission of COVID-19] include separating residents based on COVID-19 status (i.e., positive, negative, unknown/under observation). This may mean facilities will need to transfer residents within the facility, to another long-term care facility, or to other non-certified locations designated by the State.”
- “To facilitate cohorting of residents based on COVID-19 status, CMS issued [blanket waivers](#) for certain CMS requirements of participation for LTC facilities.”

Public Health Agency of Canada. **Infection Prevention and Control for COVID-19: Interim Guidance for Long Term Care Homes**. Updated April 8, 2020 ([LINK](#))

- Infection prevention and control preparedness:
 - “Single rooms and dedicated bathrooms are preferred, and separation of 2 metres must be maintained between the bed space of ill resident and all roommates with privacy curtains drawn”.
 - “Strategies are developed to manage a high volume of residents with COVID-19 (e.g. cohorting staff to work only with suspect or confirmed COVID-19 residents, potential need for cohorting of residents with confirmed COVID-19)”.
- Resident placement and accommodation:
 - “A resident with suspect or confirmed COVID-19 infection, or who is a high-risk contact of a confirmed COVID-19 positive person, should be cared for in a single room if feasible, with a dedicated toilet and sink designated for their use. If this is not possible, a separation of 2 metres must be maintained between the bed space of the affected resident and all roommates with privacy curtains drawn. The resident should be restricted to their room or bed space”.
 - “Roommates of symptomatic residents should not be moved to new shared rooms, and instead should be moved to a new single room for isolation and monitoring for

symptoms, or maintained in place if a 2 metre separation and privacy curtains can be implemented”.

- Outbreak Management
 - “LTCHs in consultation with jurisdictional public health authorities should consider resident and staff cohorting”.

American Health Care Association & the National Centre for Assisted Living. Cohorting Residents to Prevent the Spread of COVID-19. Issued April 4, 2020 ([LINK](#))

- “All nursing homes and assisted living communities should make plans for cohorting residents now, even before COVID-19 enters the building per [CMS guidance](#). Cohorting is imperative to increase the [chance] of controlling the spread of the virus. If possible, nursing homes and assisted living facilities should also begin preparing wings, units or floors as “isolation units”. Isolation unit should be a separate, well-ventilated area, ideally with a separate entrance. In preparing, nursing homes and assisted living communities should refer to CDC guidelines on [Preparing for COVID-19 in Nursing Homes](#) and [procedures for droplet precautions among residents and staff](#). To ensure transparency and comfort, it is absolutely necessary to have clear communication with residents and families explaining the rationale for cohorting (minimizing exposure risk) and need for transfer or a move to another location in the building.”

Public Health England. Admission and Care of Residents during COVID-19 Incident in a Care Home. Published April 2, 2020 with note: “This guidance is being reviewed following the publication of the adult social care action plan on 15 April 2020. We will publish updated guidance soon.” ([LINK](#))

- Annex C: Isolation of COVID-19 Symptomatic patients (Please see document for further details).
 - Cohorting of all symptomatic residents (see page 11): “Symptomatic residents should ideally be isolated in single occupancy rooms. Where this is not practical, cohort symptomatic residents together in multi-occupancy rooms. Residents with suspected COVID-19 should be cohorted only with other residents with suspected COVID-19.”
 - Isolation and cohorting of contacts (see page 11): “Careful risk assessment of the duration and nature of contact should be carried out, to put in place measures such as isolation and cohorting of exposed and unexposed residents”.

WHO. Infection Prevention and Control guidance for Long-Term Care Facilities in the context of COVID-19. Issued March 21, 2020 ([LINK](#))

- Source control (care for the COVID-19 patient and prevention of onward transmission; see page 3).
 - “If a resident is suspected to have, or is diagnosed with, COVID-19, the following steps should be taken: “...If possible, move the COVID-19 patient to a single room. If no single rooms are available, consider cohorting residents with suspected or confirmed COVID-19. Residents with suspected COVID-19 should be cohorted only with other residents with suspected COVID-19; they should not be cohorted with residents with confirmed COVID-

19. Do not cohort suspected or confirmed patients next to immunocompromised residents.”

Communicable Diseases Network Australia. **Coronavirus Disease 2019 (COVID-19) Outbreaks in Residential Care Facilities**. Revised March 13, 2020 ([LINK](#))

- From section: 5.4.1. Isolation and Cohorting (see page 18):
 - “A resident with an ARI (Acute Respiratory Illness) should be placed in a single room with their own ensuite facilities, if possible, while a diagnosis is sought.”
 - “If a single room is not available, the following principles should be used to guide resident placement (See page 18 for more detail): Place residents together in the same room (cohort) with similar signs and symptoms or infected with the same pathogen (if known) and assessed as being suitable roommates.”

WHO. **Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care**. Published in 2014 ([LINK](#))

- This is an update to “*Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care*” (WHO Interim Guidelines, 2007). It incorporates the emergency guidance from “*Infection prevention and control during health care for confirmed, probable, or suspected cases of pandemic (H1N1) 2009 virus infection and influenza-like illness*” (2009). The revision is informed by: 1) evidence since the first edition was published; and 2) lessons learnt during the influenza pandemic in 2009.
- See Recommendation 2.2.2 “Cohorting and special measures” on page 18 for information on cohorting for all Acute Respiratory Infections (ARIs) and ARIs of potential concern.

Other Reviews

Rios et al. **Guidelines for preventing respiratory illness in older adults aged 60 years and above living in long-term care: A rapid review of clinical practice guidelines**. medRxiv, March 19, 2020 ([LINK](#))

- **This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice.**
- Comprehensive overview of existing clinical practice guidelines (CPGs) for long-term care facilities published across the globe and summarizes recommendations for infection prevention and management. CPGs of interest include: Buynder, 2017 (5.4.1 on page 196); CDC, 2020 (page 213-214); and Victoria State Government, 2018 (page 5.2.2.1 on page 241-242).
- **Abstract: Background:** The overall objective of this rapid review was to identify infection protection and control recommendations from published clinical practice guidelines (CPGs) for adults aged 60 years and older in long-term care settings **Methods:** Comprehensive searches in MEDLINE, EMBASE, the Cochrane Library, and relevant CPG publishers/repositories were carried out in early March 2020. Title/abstract and full-text screening, data abstraction, and quality appraisal (AGREE-II) were carried out by single reviewers. **Results:** A total of 17 relevant CPGs were identified, published in the USA (n=8), Canada (n=6), Australia (n=2), and the United Kingdom (n=1). All of the CPGs dealt with infection control in long-term care facilities (LTCF) and addressed various types of viral

respiratory infections (e.g., influenza, COVID-19, severe acute respiratory syndrome).
Conclusion: The recommendations from current guidelines overall seem to support environmental measures for infection prevention and antiviral chemoprophylaxis for infection management as the most appropriate first-line response to viral respiratory illness in long-term care.

Expert Opinion

D'Adamo, Yoshikawa, Ouslander. **Coronavirus Disease 2019 in Geriatrics and Long-Term Care: The ABCDs of COVID-19.** Journal of the American Geriatrics Society, March 25, 2020 ([LINK](#)).
(Update April 3, 2020: [LINK](#))

- **Abstract:** The pandemic of coronavirus disease of 2019 (COVID-19) is having a global impact unseen since the 1918 worldwide influenza epidemic. All aspects of life have changed dramatically for now. The group most susceptible to COVID-19 are older adults and those with chronic underlying medical disorders. The population residing in long-term care facilities generally are those who are both old and have multiple comorbidities. In this article we provide information, insights, and recommended approaches to COVID-19 in the long-term facility setting. Because the situation is fluid and changing rapidly, readers are encouraged to access frequently the resources cited in this article.
- “Any LTCF patient/resident who meets the criteria in [Figure 1](#) and/or develops symptoms consistent with COVID-19 should immediately be isolated in a separate room or a quarantine area in situations when multiple patients/residents meet the criteria, and strict infection prevention and control practices are implemented.”

Dosa, Jump, LaPlante, Gravenstein. **Long-Term Care Facilities and the Coronavirus Epidemic: Practical Guidelines for a Population at Highest Risk.** Journal of the American Medical Directors Association March 13, 2020 ([LINK](#))

- “We do not yet know how long individuals shed transmissible levels of virus, whether older individuals shed virus longer, nor whether cohorting confirmed cases can reduce risk of spread within a facility or contributes to disease severity among those cohorted.”

Methodology

Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) COVID-19 Quick Response reports are initiated by, and shared with, our partners in the provincial health system, including the four Regional Health Authorities, the Departments of Health and Community Services and Children, Seniors and Social Development, and public health officials.

NLCAHR staff work with topic submitters to clarify the research question. We then search for related systematic reviews, meta-analyses, other reviews, interim and other guidance statements, primary research, expert opinion and health and science reporting.

We use several search strategies, with a focus on the following databases:

- [CADTH](#)
- [Canadian Pharmacists Association](#)
- [Campbell Collaboration](#)
- [Cochrane Collaboration](#)
- [Centre for Disease Control](#) (CDC)
- [Centre for Evidence Based Medicine](#) (CEBM)
- [Evidence for Policy and Practice Information and Co-ordinating Centre](#)
- [European Centre for Disease Prevention and Control](#)
- [Health Canada](#)
- [Joanna Briggs Institute](#)
- [Johns Hopkins](#)
- [MedRxiv](#)
- [National Institutes of Health](#) (NIH)
- [National Institute of Allergy and Infectious Diseases](#) (NIAID)
- [National Library of Medicine](#)
- [Public Health Agency of Canada](#)
- [Trip Database](#)
- [World Health Organization](#)

This report was prepared by Sarah Williams, Colin Walsh and Pablo Navarro.

For more information, contact pnavarro@mun.ca.