

COVID-19 CADTH HORIZON SCAN

COVID-19 Infection Prevention and Control Guidance for Long-Term Care Facilities — Round-Up

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To produce this report, CADTH used a modified approach to the selection, appraisal, and synthesis of the evidence to meet decision-making needs during the COVID-19 pandemic. Care has been taken to ensure the information is accurate and complete, but it should be noted that international scientific evidence about COVID-19 is changing and growing rapidly.

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Key Messages

- Elderly residents of long-term care homes in Canada have been disproportionately affected by the COVID-19 pandemic.
- In general, COVID-19 infections in long-term care reflect the overall public health measures and disease prevalence in the local community.
- Much of the available guidance is based on existing infection prevention and control guidelines, and COVID-19 specific guidance from the Public Health Agency of Canada, US Centers for Disease Control and Prevention, and WHO.
- Several rapid reviews have also assessed the evidence on infection control practices in long-term care.

About This Document

This publication summarizes information identified through a limited literature search and is intended to provide an overview of guidance on infection prevention and control in long-term care residences during the COVID-19 pandemic. It is not a systematic review and has not included a critical appraisal of the guidance, nor has it been peer-reviewed. Care has been taken to ensure the information is accurate and complete, but it should be noted that international scientific evidence about COVID-19 is changing and growing rapidly. This document may be updated as additional evidence becomes available.

Information on available guidance for infection prevention and control to protect residents in long-term care may be useful to health care providers and decision-makers. In addition to Canadian guidelines, information from countries that may have had more success in preventing COVID-19 outbreaks among residents in long-term care was sought.

This roundup aimed to identify guidance on infection prevention and control measures for long-term care residences (including nursing homes, assisted living, personal care, and retirement homes) specific to the COVID-19 pandemic. Most of the COVID-19 infection prevention and control guidance is based on pre-pandemic guidelines, and local, provincial, and territorial regulations and policies, which are not listed here.

Literature Search Methods

A limited literature search using PubMed was conducted by an information specialist on June 9, 2020. The search strategy was comprised of controlled vocabulary terms (the National Library of Medicine's MeSH [Medical Subject Headings]) and additional keywords. The main search concepts were coronavirus or COVID-19 and long-term care. The search was restricted to English-language publications and guidance published in 2020. Additional searches for grey literature were conducted using the [CADTH COVID-19 Grey Literature Resources](#) checklist.

Context

Residents living in long-term care are at high risk for serious illness from COVID-19 because of their age, frailty, and multiple comorbidities.¹⁻³ Residents live in close proximity to one another² and residents who have dementia may have challenges following infection control measures, such as physical distancing.¹ Many Canadian long-term care facilities are understaffed⁴ and staff often work at multiple facilities, increasing the risk of disease transmission.^{3,5} An American Geriatrics Society policy brief on COVID-19 in nursing homes highlighted the widespread lack of personal protective equipment (PPE) and testing for long-term care staff and residents.¹ Long-term care facilities in Canada face similar obstacles.⁶ These factors have contributed to the high rates of COVID-19 infections among residents of long-term care facilities in Canada and elsewhere.

Canadian Experience

In Canada, more than 80% of COVID-19–related deaths have been residents of long-term care facilities.⁴ This is the highest proportion of deaths in the long-term care population worldwide.^{4,5,7} As of May 25, 2020, 5,324 Canadian residents in long-term care had died and more than 9,650 long-term care staff had been infected with COVID-19, nine of whom died.⁴

A recent Canadian commentary stressed that national standards for long-term care are needed.⁷ The authors of the commentary made several further recommendations for changes that could ensure the experience with COVID-19 in long-term care is not repeated.⁷ The recommendations from the commentary related to infection prevention and control are:

- Every long-term care facility should have an approved infection prevention and control plan for infectious disease outbreaks and a designated person responsible for implementing the plan. The plan should be developed with input from residents and their families, and measurable performance metrics should be publicly reported.
- All long-term care homes should be regularly inspected by the appropriate public health unit, with public reporting of results.
- Provincial governments should manage the procurement of PPE for long-term care residences and staff should have ongoing training in the use of this equipment.
- Long-term care workers should have full-time work with adequate salary and benefits, and the “one-site work policy” should be continued.
- Isolation units should be available in the long-term care home, in another facility, or in a hospital. Residents who are hospitalized with COVID-19 should not be discharged back to their residence until they have recovered and test negative for the disease.⁷

Other Canadian researchers have made further recommendations for broad changes in long-term care that could improve infection prevention and control.⁸ They note, for example, the link between private, for-profit facilities and lower staffing levels. In addition, the use of contracted out services, such as for food, cleaning, laundry, and security, means that more external people enter the homes each day, increasing the risk of introducing infection.⁸ The authors also stress the need for design changes to long-term care homes to enhance infection prevention; in particular, the need for private rooms and bathrooms, and additional space to accommodate physical distancing and to enable isolation units to be created when needed.⁸

A recent report from the Canadian Institute for Health Information (CIHI) found that other general public health policies that appear to have protected residents in long-term care include mandatory stay-at-home orders and closure of public places.⁴ In Canada, British Columbia's early implementation of protective measures for long-term care residents included restricting non-essential visitors, ensuring that PPE was mandatory for staff, and limiting staff to working in only one residence.⁹

In addition to general public health measures, the CIHI report identified specific long-term care policies that have reduced long-term care deaths including:

- visitor restrictions in long-term care homes
- guidance for long-term care homes
- hazard pay for long-term care staff
- surge staffing to ensure additional long-term care staff is available when needed
- funding for PPE
- the development of long-term care isolation wards
- broad testing for COVID-19 in long-term care residents and staff
- infection control training and audit in long-term care homes
- the use of rapid response infection control and prevention teams.⁴

The CIHI report highlighted a few countries (such as Australia, Israel, and Norway) that had less transmission of COVID-19 in their long-term care homes.⁴

International Experience

Australia

A key factor that may have enabled a more effective response to the pandemic in Australia was Australia's national regulation and standards for long-term care, which cover all public and private residential care facilities throughout the country and include requirements for pandemic planning.^{10,11} The CIHI report noted that Australia and other countries with centralized regulation of long-term care had fewer COVID-19 cases and deaths in long-term care.⁴

Hong Kong

Based on its experience with severe acute respiratory syndrome (SARS) in 2003, Hong Kong implemented early public health measures that appear to have protected its residents in long-term care.^{12,13} In addition to issuing early guidance to long-term care providers, the government provided funding to procure PPE and hire supplementary staff for additional cleaning and disinfection practices.¹² Further measures included restrictions on non-essential visits from family and volunteers, restrictions on non-essential medical appointments, daily screening of staff for signs of infection, requiring all staff to wear face masks at all times, strict hand hygiene practices, social distancing, and requiring residents to wear masks when not in their rooms.^{12,14}

Taiwan

Like Hong Kong, based on its experience with SARS in 2003, Taiwan implemented early public health measures that appear to have protected its residents in long-term care.^{12,13} The Society of Taiwan Long-term Care Infection Prevention and Control developed recommendations to prevent and mitigate COVID-19 in long-term care.¹³ In addition to standard infection control interventions (hand hygiene, environmental cleaning and

disinfection, staff training, PPE, active surveillance, etc.), the recommendations focus on “enhanced traffic control bundling.” The goal is to compartmentalize the facility, residents, and health care workers to minimize disease transmission. Enhanced traffic control bundling involves:

- screening everyone entering the facility and restricting entry to only essential personnel
- separating zones of risks within the facility, from a transition zone (which includes the isolation zone for all new residents during the COVID-19 incubation period, and for residents returning from hospital care) to a clean zone (which is further compartmentalized). Where possible, the different compartments should be in separate buildings but could otherwise be separate floors or wings of the building. If possible, all staff (including health care providers, laundry, cleaning, and other staff) should only work in one of the compartments. A quarantine zone, in the case of disease outbreak, is required for residents who are ill or who have been exposed to an individual with COVID-19. This may be in a separate facility or in a separate location. In the event of widespread infection within the facility, residents who are ill should be taken to hospital and other residents and health care workers should be segregated (i.e., those who test positive for COVID-19 are separated from those who test negative) and temporarily housed elsewhere (with strict infection control procedures in place) until the facility has been thoroughly disinfected.¹³
- The recommendations note that interventions are describes as being under “ideal conditions,” which may not be possible in long-term care facilities plagued by overcrowding, space limitations, and shortages of PPE and trained staff.¹³

United States

In addition to enhanced infection control measures and the restriction of non-essential visitors, the American Geriatrics Society policy briefs for assisted living facilities and nursing homes note the need for adequate supplies of PPE, access to testing and contact tracing for COVID-19, public health support for infection control measures, staff training, and the creation of dedicated alternative care sites (beyond the nursing home or hospital) for nursing home residents with COVID-19.^{1,15} The PSNet–Patient Safety Net primer on COVID-19 and on the safety of older adults notes that the recent Medicare coverage expansion of telehealth visits beyond only rural areas will also minimize the transmission of infection and improve nursing home residents’ access to care during the pandemic.¹⁶ Design aspects also play a role in infection prevention, and smaller long-term care residences, with private rooms and bathrooms for all residents, such as in the Green House Project, also offer advantages for infection control.¹⁷

Round-Up of Guidance Documents

The following is a list of publicly available guidance documents pertaining to long-term care. Other sources of information, such as rapid reviews of guidelines and of evidence related to COVID-19 infection control procedures, have also been included. They have not been critically appraised, but care has been taken to include reputable sources of guidance.

Canadian Guidance Documents — National

Volling C, Popalyar A, Defalco K, et al. [Infection prevention and control for COVID-19: interim guidance for long term care homes](#). Ottawa (ON): Public Health Agency of Canada; 2020 Apr 8.

- In general, recommendations to prevent or control the transmission of COVID-19 in long-term care residences are similar to infection prevention and control guidance for other acute respiratory infections and are based on guidance from Canadian and international agencies.
- The interim guidance includes the screening of staff, residents, and visitors (if allowed); hand hygiene; masking and training in the use of PPE; droplet and contact precautions; aerosol-generating medical procedures; obtaining nasopharyngeal swabs for testing; resident accommodations and activities; outbreak management; the handling of deceased bodies; limiting staff to work in one facility; and additional environmental cleaning and disinfection.

[COVID-19 guidance for long term care facilities and nursing homes in Indigenous communities](#). Ottawa (ON): Indigenous Services Canada; 2020 Apr 14.

- General guidance on the need for staff and resident education about COVID-19, hand hygiene, surface disinfection, visitor restrictions, the need for masks, screening, self-monitoring and self-isolation, and the use of PPE.

[The NIA's recommended 'iron ring' for protecting older Canadians in long-term care and congregate living settings](#). Toronto (ON): National Institute on Ageing, Ryerson University; 2020 Apr 21.

- The NIA–National Institute on Aging’s five principal recommendations are:
 - restricting all non-essential visits and screening all care providers and essential visitors
 - limiting care providers from working in multiple care settings
 - ensuring appropriate protective equipment for all care providers and visitors
 - implementing strict infection prevention and control policies, including testing and isolation procedures for staff and residents, and PPE training for care providers
 - allowing flexible admission and discharge policies for long-term care residences so that residents can defer a placement and so that those who leave the residence during the pandemic will not lose their place
- It includes a table showing the uptake of these recommendations across Canada.

Canadian Guidance Documents — Provincial

British Columbia

[Infection prevention and control for novel Coronavirus \(COVID-19\): interim guidance for long-term care and seniors assisted living](#). BC Centre for Disease Control / BC Ministry of Health / Provincial COVID-19 Task Group; 2020 May 19.

[Guidance on physical distancing in long-term care and assisted living facilities](#). Vancouver Coastal Health; 2020 Mar 31.

Alberta

[Guidelines for COVID-19 outbreak prevention, control and management in congregate living sites](#). Alberta Health Services; 2020 Jun 9.

Saskatchewan

[COVID-19 response framework cohorting within long-term care, affiliates and personal care homes](#). Saskatchewan Health Authority; 2020 Apr 19.

Manitoba

[COVID-19 infection prevention and control guidance for personal care homes](#). Shared Health Manitoba; 2020 Jun 10 (and summary: [COVID-19 highlights – long term care](#)).

Ontario

[COVID-19 guidance: long-term care homes](#). Ontario Ministry of Health; 2020 Apr 15.

[Outbreak guidance for long-term care homes \(LTCH\)](#). Ontario Ministry of Health; 2020 Apr 15.

[Reopening retirement homes](#). Ontario Ministry of Health / Ministry of Long-Term Care; 2020 Jun 12.

[Resuming visits in long-term care homes](#). Ontario Ministry of Long-Term Care; 2020 Jun 11.

[Screening tool for long-term care homes and retirement homes](#). Ontario Ministry of Health; 2020 May 6.

[COVID-19: infection prevention and control checklist for long-term care and retirement homes](#). Public Health Ontario; 2020 Apr 29.

[Prevention and management of COVID-19 in long-term care and retirement homes](#). Public Health Ontario; 2020 Jun.

[De-escalation of COVID-19 outbreak control measures in long-term care and retirement homes](#). Public Health Ontario; 2020 Jun 6.

Nova Scotia

[Coronavirus disease 2019 \(COVID-19\): infection prevention & control guidelines for long-term care settings](#). Nova Scotia Health Authority; 2020 May 6. (Note: the link needs to be copied and pasted to work.)

[COVID-19 management in long term care facilities. Directive under the authority of the Chief Medical Officer of Health](#). Government of Nova Scotia; 2020 Apr 11.

New Brunswick

[COVID-19 guidance for long-term care facilities \(LTCF\)](#). New Brunswick Office of the Chief Medical Officer of Health; 2020 Apr 22.

Prince Edward Island

[Prince Edward Island guidelines for infection prevention and control of COVID-19 in long term care facilities](#). PEI Department of Health and Wellness; 2020 Jun 11.

Newfoundland & Labrador

[Key messages: COVID-19 personal care homes and community care homes](#); Government of Newfoundland & Labrador; 2020 Mar 23.

International Guidance Documents

[Infection prevention and control guidance for long-term care facilities in the context of COVID-19. Interim guidance](#). World Health Organization (WHO); 2020 Mar 21.

[Surveillance of COVID-19 at long-term care facilities in the EU/EEA](#). European Centre for Disease Prevention and Control (ECDC); 2020 May 19.

[Infection prevention and control and preparedness for COVID-19 in healthcare settings](#). European Centre for Disease Prevention and Control (ECDC); 2020 Mar 31. (*Includes specific guidance for long-term care facilities.)

Australia

[CDNA national guidelines for the prevention, control and public health management of COVID-19 outbreaks in residential care facilities in Australia](#). Communicable Diseases Network Australia (CDNA); v. 3, 2020 Jun 10.

[Coronavirus disease \(COVID-19\). Environmental cleaning and disinfection principles for health and residential care facilities](#). Australian Government. Department of Health; 2020 May 16.

[COVID-19 infection prevention and control for residential care facilities](#). Australian Government. Department of Health; 2020 May 16.

Hong Kong

[Guidelines for residential care homes for the elderly or persons with disabilities for the prevention of COVID-19](#). Interim. Government of Hong Kong; 2020 Jun 5.

New Zealand

[Guidance for preventing and controlling COVID-19 outbreaks in New Zealand aged residential care](#). New Zealand Government. Health Quality & Safety Commission New Zealand; 2020 Apr 29.

[Guidance on cleaning aged residential care facilities following a suspected, probable or confirmed case of COVID-19](#). New Zealand Government. Health Quality & Safety Commission New Zealand; [n.d.]

Taiwan

Yen M-Y., Schwartz J., King C-C., Lee, C-M., Hsueh, P-R., Society of Taiwan Long-term Care Infection Prevention and Control. [Recommendations for protecting against and mitigating the COVID-19 pandemic in long-term care facilities](#). J Microbiol Immunol Infect 2020;53:447-453.

United Kingdom

[Admission and care of residents in a care home during COVID-19](#). UK Department of Health and Social Care; 2020 Jun 19.

[COVID-19: information and guidance for care home settings](#). Public Health Scotland; 2020 Jun 15.

[Interim public health and infection prevention control guidelines on the prevention and management of COVID-19 cases and outbreaks in residential care facilities and similar units](#). Health Protection Surveillance Centre [Ireland]; 2020 Jun 19.

United States

Centers for Disease Control and Prevention (CDC)

[Preparing for COVID-19 in nursing homes](#). CDC; 2020 Jun 22.

[Considerations for preventing spread of COVID-19 in assisted living facilities](#). CDC; 2020 May 29.

[Considerations for memory care units in long-term care facilities](#). CDC; 2020 May 12.

[Infection prevention and control assessment tool for nursing homes preparing for COVID-19](#). CDC; 2020 May 8.

Centers for Medicare & Medicaid Services (CMS)

[COVID-19 long-term care facility guidance](#). CMS; 2020 Apr 2.

[Nursing home reopening recommendations for state and local officials](#). CMS; 2020 May 18.

[Toolkit on state actions to mitigate COVID-19 prevalence in nursing homes](#). Version 3. CMS; 2020 Jun.

Rapid Reviews

Koshkouei M, Abel L, Pilbeam, C. [How can pandemic spreads be contained in care homes?](#) Oxford (UK): Centre for Evidence-Based Medicine; 2020 Apr 14.

[Rapid review of public health guidance for infection prevention and control measures in residential care facilities in the context of COVID-19](#). Dublin (IE): Health Information and Quality Authority; 2020 Jun 26.

[Rapid Review: What is the effectiveness of cohorting virus-positive residents to shared rooms in care facilities?](#) Hamilton (ON): National Collaborating Centre for Methods and Tools, McMaster University School of Nursing; 2020 Jun 12.

Rios P, Radhakrishnan A, Thomas SM, Darvesh N, Straus SE, Tricco AC. [Preventing respiratory illness in older adults aged 60 years and above living in long-term care: a rapid overview of reviews](#). *medRxiv*;2020 May 27:10.1101/2020.03.19.20039081. **[non-peer-reviewed preprint]**

Rios P, Radhakrishnan A, Thomas SM, Darvesh N, Straus SE, Tricco A. [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*;2020 May 27: 10.1101/2020.03.19.20039180. **[non-peer-reviewed preprint]**

Salcher-Konrad M, Comas-Herrera A. [International evidence on care home COVID-19 outbreak responses: summary of key findings](#). London (UK): LTCcovid, International Long-Term Care Policy Network, CPEC-LSE; 2020 Jun 12.

[Strategies to reduce the impact of a second wave of COVID-19 in long-term care facilities. \(COVID-19 quick response report\)](#). St. John's (NL): Newfoundland & Labrador Centre for Applied Health Research; 2020 Jun 17.

Tricco, A. [Preventing the transmission of Coronavirus \(COVID-19\) in older adults aged 60 years and above living in long term care: a rapid review](#). Toronto (ON): SPOR Evidence Alliance; 2020.

Williams S, Walsh C, Navarro P. [Cohorting in long-term care](#). (*COVID-19 quick response report*). St. John's (NL): Newfoundland and Labrador Centre for Applied Health Research; 2020 Apr 26.

Additional Sources

[Emergency preparedness and response in aging services: epidemics, pandemics, and outbreak response](#). Plymouth Meeting (PA): ECRI Institute; 2020.

[Aging services visitation guidelines in the COVID-19 pandemic](#). Plymouth Meeting (PA): ECRI Institute; 2020 Jun 2.

[COVID-19 aging services recovery plans for transitioning to normalized operations](#). Plymouth Meeting (PA): ECRI Institute; 2020 May 15.

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