

COVID-19 CADTH HEALTH TECHNOLOGY REVIEW

# Psychological and Social Effects and Implications of Isolation for Long-Term Care Residents: Synopsis of Reference Search Results

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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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## What are the psychological and social effects and implications of isolation for long-term care residents?

### Key Messages

- There is a lack of published research on the psychological and social implications of COVID-19–related isolation measures for residents of long-term care (LTC) facilities.
- Existing research on the effects of isolation in older adults in general has shown that:
  - Isolation is associated with anxiety, depression, cognitive decline, and malnourishment.
  - Isolation is associated with increased loneliness.
  - Isolation and loneliness are associated with cognitive decline, the progression of Alzheimer disease, and an increased risk for developing dementia.
- These associations do not necessarily indicate causation.

#### Psychological effects:

- Reports from LTC facilities in Canada and the US indicate that COVID-19–related isolation measures are associated with an increase in anxiety, depression, and feelings of frustration among residents.
- Failure to thrive may be a result of the isolation measures for some residents, which is thought to cause some residents to die sooner than they would have otherwise.
- Some sources suggest that there is an association between isolation and suicidal ideation and increased suicide rates.

#### Social effects:

- Much of the literature makes the assumption that, as social effects such as loneliness were common in LTC residents (and in elderly people in general) before the pandemic, the social isolation measures put in place as a result of the pandemic would increase these effects.
- Staff at LTC facilities in Canada have observed an increase in loneliness, “social isolation syndrome,” feelings of abandonment, and longing for human interaction and human touch among residents during the months of isolation.

#### Residents with dementia:

- Isolation measures might cause increased agitation, aggression, and delirium. This may be the residents’ ways of expressing confusion, anxiety, and distress resulting from the isolation measures, and it may also be a consequence of the lack of calming visits from loved ones.
- Guidance for caregivers of residents in LTC facilities who have dementia recommends that they monitor these residents for symptoms of anxiety and depression, as well as for risk-taking behaviours and talk of suicide.

## Purpose and Context

In the first months of the COVID-19 pandemic, more than 80% of COVID-19–related deaths in Canada were of residents in long-term care (LTC) facilities.<sup>1</sup> To help decrease the risk of COVID-19 transmission, isolation measures (used alongside other strategies) were quickly put in place in LTC facilities. These measures included restrictions on visitors (including family members) and volunteers, as well as restrictions on physical and social activities.<sup>2</sup>

Although these measures were put in place to protect residents from COVID-19, isolation may also be having a negative impact on residents' psychological health and their need for social interaction. Some LTC residents have been kept in their rooms since the beginning of the pandemic — a practice that was characterized in a recent editorial as residents being “held hostage by ill-conceived policies [that are] out of touch with the needs of residents and are causing emotional distress.”<sup>2</sup> Visitation restrictions are of particular concern. For example, family visits are thought to be important to residents' sense of being socially connected,<sup>3</sup> and some are more likely to eat their meals when a family member can help them.<sup>4</sup>

The purpose of this report is to provide a customized summary of the results of a literature search related to the psychological and social effects or implications of isolation for LTC residents. The information in this report is provided to help inform health care decision-making.

## Process

A limited literature search was conducted by a library information specialist on key resources including MEDLINE via OVID, PubMed, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused internet search using the [CADTH COVID-19 Grey Literature Resources checklist](#). The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were social isolation and LTC. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2014 and July 31, 2020.

Members of CADTH's Implementation Support and Knowledge Mobilization (ISKM) team screened the identified literature for inclusion (a standardized orientation was provided to ensure consistency of the screening approach and screening was divided among eight team members). After reviewing titles and abstracts, resources deemed relevant to the question of interest (including concepts related to LTC and social isolation) were selected for full-text review, data extraction, and inclusion.

The final selection of resources and extracted data were confirmed by two ISKM members and the resource and data were further reviewed by two other ISKM members who then developed a summary document with relevant information from each resource, as well as key messages to assist the reader with interpreting the information. Relevant information from each of these sources is summarized in the tables within this document. The first table contains statements on the effects of isolation on LTC residents in general, and the second table is focused on the effects on LTC residents with dementia.

Resources included in this report were not critically appraised for their quality.

## Evidence to Date

A total of 49 resources were retrieved through the literature search. After the initial screening of titles and abstracts for concepts related to LTC and social isolation, 43 potentially relevant documents were identified for full-text review. Of these potentially relevant documents, 11 documents (nine non-peer-reviewed articles and two guidance documents) that included information on the psychological and/or social effects of isolation on LTC residents were eligible. All 49 resources are available for review in Excel-based extraction charts (separate attachment).

### Bottom Line:

Isolation measures are associated with an overall decline in the mental health of long-term care residents. The strongest associations being reported are between isolation and increased depression and anxiety symptoms. Loneliness, which is already high among elderly residents in long-term care facilities, is reported to be exacerbated due to COVID-19 isolation measures. In residents with dementia, social isolation measures may cause further confusion, contribute to worsened symptoms of dementia, and result in responsive behaviours such as increased agitation, aggression, and delirium.

**Table 1: Information From Canadian and International Non-Peer-Reviewed Articles and Guidance Documents on the Psychological and Social Effects of Isolation on Long-Term Care Residents**

Title of document	Type of resource (jurisdiction)	Key messages
<b>COVID-19 Special Issue: Risk, Response, and Resilience in an Aging COVID-19 World<sup>5</sup></b>	Special research report — Simon Fraser University Gerontology Research Centre (Canada)	<p>One of the articles in this special research report discusses loneliness and depression among residents of LTC facilities. It suggests that these issues are commonly experienced by residents but could be worsened by visitation restrictions such as those implemented as COVID-19 infection and prevention control measures.</p> <p>(Title of article in this report: “Lifting the Curtain on Long-Term Care in the Face of COVID-19: Sobering Realities and a Time for Reform”)</p>
<b>Social Isolation: The Other COVID-19 Threat in Nursing Homes<sup>6</sup></b>	Journal article, opinion piece (US)	<p>This <i>JAMA</i> article states that staff working in US LTC facilities have reported an increase in anxiety and depression among residents since strict isolation were put in place.</p> <p>According to one geriatric psychiatrist interviewed by the journal, there has been a significant increase in requests from LTC providers for antidepressant, antipsychotic, and anxiolytic drugs since the beginning of the pandemic.</p> <p>An increase in failure to thrive has been reported among LTC residents who have been socially isolated as a result of the pandemic. This appears to have resulted in residents refusing to eat, losing weight, and dying sooner than they would have otherwise.</p> <p>The medical director of two nursing homes states that some LTC residents have become less interactive during her visits to their rooms, at times sleeping while she tried to speak with them, which she suggests is a result of the loss of stimulation from visits and group activities.</p>

Title of document	Type of resource (jurisdiction)	Key messages
<b>Competing Crises: COVID-19 Countermeasures and Social Isolation Among Older Adults in Long Term Care</b> <sup>2</sup>	Journal article, editorial (Canada)	This <i>Journal of Advanced Nursing</i> editorial cites research that suggests a correlation between social isolation and anxiety, depression, and cognitive decline. It also refers to a reported increase in the rate of suicide among LTC residents since COVID-19–related social isolation measures have been implemented.
<b>Long-Term Social Distancing During COVID-19: A Social Isolation Crisis Among Seniors?</b> <sup>7</sup>	Letter to the editor (Canada)	This letter in <i>CMAJ</i> discusses social isolation due to COVID-19 in the context of seniors (including those in residential facilities) and cites research that shows there is a strong association between social isolation and depression, anxiety, and suicidal ideation.
<b>COVID-19 and the Fears of Italian Senior Citizens</b> <sup>8</sup>	Journal article, commentary (Italy)	This commentary in the <i>International Journal of Environmental Research and Public Health</i> suggests that the already high rate of loneliness in LTC facilities in Italy probably worsened as a result of COVID-19–related social isolation measures.
<b>Social Isolation and Loneliness Among Older Adults in the Context of COVID-19: A Global Challenge</b> <sup>3</sup>	Journal article, commentary (US)	<p>This commentary in <i>Global Health Research and Policy</i> cites research demonstrating that social isolation and loneliness are major risk factors that have been linked to poor mental health status including depression, anxiety, poorer cognitive functioning, and increased risk of Alzheimer disease. It also cites evidence that social isolation is associated with an approximately 50% increased risk of developing dementia in older adults.</p> <p>The commentary argues that, while restrictions are necessary in LTC facilities to control the spread of COVID-19, the corresponding social isolation and loneliness that may result can have significant negative impacts on the mental health of residents.</p>
<b>Loneliness and Isolation in Long-term Care and the COVID-19 Pandemic</b> <sup>4</sup>	Journal article, editorial (Australia)	<p>The editorial published in <i>The Journal of Post-Acute and Long-Term Care Medicine</i> discusses the harms caused by loneliness in older adults. It cites research reporting that loneliness is related to an increased risk of depression, alcohol use disorder, suicidal thoughts, aggression, anxiety, and impulsivity. It also cites other studies that found loneliness to be a risk factor for cognitive decline and Alzheimer disease.</p> <p>The editorial acknowledges that restrictions on group activities will help decrease the spread of COVID-19 infection in LTC facilities but suggests they will also result in a significant increase in loneliness among residents.</p>
<b>Interim Guidance: Care of Residents in Long Term Care Homes During the COVID-19 Pandemic</b> <sup>9</sup>	Health Canada interim guidance (Canada)	<p>This Health Canada guidance acknowledges that measures to prevent and control the transmission of COVID-19 will impact many aspects of resident care in LTC facilities, including the psychosocial aspects of care.</p> <p>The guidance states that the visitor restrictions put into place to prevent and control the transmission of COVID-19 in LTC facilities could be potentially distressing for residents.</p>

LTC = long-term care.

**Table 2: Information From Canadian and International Non–Peer-Reviewed Articles and Guidance Documents on the Psychological and Social Effects of Isolation on Long-Term Care Residents With Dementia**

Title of document	Type of resource (jurisdiction)	Key messages
<b>COVID-19 Special Issue: Risk, Response, and Resilience in an Aging COVID-19 World<sup>5</sup></b>	Special Research Report — Simon Fraser University Gerontology Research Centre (Canada)	In one of the articles in this research report, it is mentioned that the majority of residents in care homes live with dementia. It suggests that these residents might become more anxious than others as a result of social isolation and a reduction in the number of social activities.  (Title of the article in this report: “Lifting the Curtain on Long-Term Care in the Face of COVID-19: Sobering Realities and a Time for Reform”)
<b>Mitigating the Effects of a Pandemic: Facilitating Improved Nursing Home Care Delivery Through Technology<sup>10</sup></b>	Journal article, editorial (US)	According to this article published in <i>JMIR Aging</i> , the loneliness caused by social isolation can be particularly problematic for LTC residents with dementia because they are likely not to understand why their routines have been changed and regular activities have stopped. Social isolation measures also leave cognitively impaired residents without the calming effect of visitors.
<b>Social Isolation: The Other COVID-19 Threat in Nursing Homes<sup>6</sup></b>	Journal article, opinion (US)	According to a medical director of two US LTC facilities interviewed for this <i>JAMA</i> article, social isolation has increased residents’ symptoms of dementia since the beginning of the pandemic. A senior advisor at the Institute for Healthcare Improvement, who was also interviewed for the article, states that, although communication with loved ones through a window or using video technology helped some residents feel connected, residents with dementia have been confused and frustrated by these interactions.
<b>Breaking Social Isolation Amidst COVID-19: A Viewpoint on Improving Access to Technology in Long-Term Care Facilities<sup>11</sup></b>	Letter to the editor (Canada)	In this letter to the editor of the <i>Journal of the American Geriatrics Society</i> , a Quebec physician who has patients who are residents of LTC facilities states that he believes isolation can cause worsening dementia.
<b>Interim Guidance: Care of Residents in Long Term Care Homes During the COVID-19 Pandemic<sup>9</sup></b>	Health Canada interim guidance (Canada)	This guidance states that people living with dementia might not understand why their routines and environment have changed, which may cause anxiety and distress expressed through responsive behaviours such as becoming aggressive toward staff and other residents.
<b>Coronavirus Disease (COVID-19) and People Living With Dementia: A Guide for Those Looking After Residents in Long-Term Care, Designated and Supportive Living<sup>12</sup></b>	Guidance document (Canada)	According to this guidance from Alberta Health Services, many of the measures implemented to address COVID-19 in LTC facilities can be confusing and disorienting for residents with dementia, which can cause social isolation and loneliness and then lead to or increase responsive behaviours or withdrawal.

Title of document	Type of resource (jurisdiction)	Key messages
		<p>The document cautions that persistent feelings of loneliness can cause depression, increase inflammatory response, and reduce the ability of the immune system to fight COVID-19.</p> <p>It recommends that caregivers look out for symptoms of anxiety and depression, such as a significant change in mood (e.g., loneliness, grief, or depression) or a loss of interest in activities that were previously enjoyed. In residents with cognitive impairment, anxiety and depression might be expressed as agitation and aggression. Severe symptoms such as risk-taking behaviours or talk of suicide require immediate assessment and intervention.</p>

LTC = long-term care.

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