

COVID-19 CADTH Health Technology Review

# CADTH Custom Request: Impacts of COVID-19 on First Nations, Inuit, and Métis Populations in Canada

**This report was completed on July 30, 2021.**

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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## Purpose and Context

The COVID-19 pandemic has had wide-reaching impacts for all populations. This pandemic has changed many aspects of our lives — from the way we go to work and school to how we socialize and access health care and services. With rising rates of illness and death came calls to implement public health measures, practice physical distancing, and to shelter in place. However, not all populations in Canada have experienced this pandemic in the same way. The purpose of this report is to provide a summary of resources and literature about the outcomes and impacts of COVID-19 on Indigenous populations in Canada based on a request for the information. In this report, the term “Indigenous populations” refers to First Nations, Inuit, and Métis.

Due to a history of, and ongoing current experiences of, systemic racism and colonization, First Nations, Inuit, and Métis populations may experience impacts of COVID-19 that are particularly harmful or challenging. Indigenous communities have experienced the devastating effects of past pandemics such as smallpox.<sup>1</sup> It can be challenging for those living in Indigenous communities to adhere to public health recommendations because they lack access to clean water, have inadequate housing, face food insecurity, and experience overcrowded living conditions.<sup>2</sup>

This request originated from the Public Health Agency of Canada’s Corporate Data and Surveillance Branch. The scope of the work was presented to CADTH and the information was consolidated into an overall approach to address the evidence request. The focus of the question is to support creating a better understanding of the impacts and burdens of COVID-19 on Indigenous populations in Canada. The report was shared with, and the author is grateful for, the insightful feedback provided by staff members of Inuit Tapiriit Kanatami, First Nations Information Governance Centre, Métis National Council, National Collaborating Centre for Indigenous Health, the Public Health Agency of Canada, and Indigenous Services Canada.

The examples and resources provided are current as of April 2021, the time of the literature and evidence search update. As this report is also in response to specific questions provided as part of a request, it may not be comprehensive as new information is made available or applicable in a different context (i.e., to Indigenous populations in other parts of the world or to other visible and ethnic minorities).

## Process

A limited literature search was conducted by an information specialist on key resources including MEDLINE, 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. 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 COVID-19 or other pandemics and Indigenous peoples (see Appendix 2 for the full search strategy). 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, 2000 and October 20, 2020. The search was updated on April 20, 2021 to capture results published after the initial search date. For the updated search, the search strategy was modified to include only the current COVID-19 pandemic.

It was within the scope of the report to collect information from both primary (e.g., peer-reviewed journal articles) and secondary sources (e.g., commentaries, blogs, editorials, policy briefs, and so forth). Data and information were retrieved from the articles and reports that were directly relevant to the requestor's questions. Bibliographic searches were not conducted.

Four members of CADTH's Implementation Support and Knowledge Mobilization team and 1 member of CADTH's Medical Devices team screened the literature and selected the published material for inclusion in this report that was deemed relevant to the questions posed. Literature was reviewed to assess the quality of the studies and resources included, but it was not critically appraised. CADTH's Implementation Support and Knowledge Mobilization team have provided a brief interpretation for each information source to assist the reader.

## Request-for-Information Questions

What is the evidence on the burden and impact of COVID-19 on Indigenous communities in Canada? Using a distinctions-based approach, what is the evidence specifically for Inuit, First Nations, Métis, and other Indigenous communities (e.g., urban Indigenous)?

1. a) What are examples of best practices or approaches taken by Indigenous governments or organizations, groups, or services during the COVID-19 pandemic?
1. b) What are areas of resilience and strengths related to COVID-19 among Indigenous communities?
2. What are the impacts of the COVID-19 pandemic on Indigenous communities in Canada related to health and health care services?
3. What mental health-related issues, needs, and challenges have affected Indigenous communities during the COVID-19 pandemic?
4. What issues, challenges, or opportunities have Indigenous communities faced during the COVID-19 pandemic in relation to food security, housing stability, community cohesion, social connectedness, and other social and cultural factors?

## Key Messages

The following are key messages based on the findings guided by the 4 request-for-information questions and presented in order of the questions.

1. Responses to the COVID-19 pandemic have varied between different Indigenous communities but often include restricted access to the communities, an emphasis on communication, accessing community and individual-level supports, thoughtful and culturally appropriate public health messaging, and emergency planning. Often, Indigenous communities implemented stricter bylaws than the surrounding provincial or territorial governments, with a larger focus on preventing any cases rather than containing them to a certain level. All levels of government and community leadership have a role in responding to the COVID-19 pandemic.
2. Indigenous populations are more vulnerable to pandemics than the general population because of existing social and economic inequities, and many Indigenous peoples and communities experienced poorer health outcomes prior to COVID-19. The current pandemic has exacerbated existing health inequities, which may result in increased illness and death from COVID-19. When outbreaks have occurred in Indigenous communities, case numbers have risen quickly and the lack of infrastructure and access to imperative health care services has left some communities relying on external help.
3. The COVID-19 pandemic has highlighted and exacerbated gaps in mental health services and in equitable access to resources to manage mental health-related crises. The evidence highlights an increased prevalence of mental health concerns such as anxiety, suicidal thoughts, and domestic violence within Indigenous communities. At the same time, there is a dire need for increased access to culturally appropriate resources, with existing Indigenous leaders and organizations offering what they can. A more comprehensive commitment and community-governed approach to mental health promotion across Canada with Indigenous peoples is needed.
4. Many Indigenous communities have been negatively impacted by the COVID-19 pandemic, with the inequity gap growing larger because of the pandemic. Conditions made worse by COVID-19 include, but are not limited to, inadequate health infrastructure, lack of clean water, food insecurity, job loss, and insufficient economic opportunities.

## Request-for-Information Question 1

**What are examples of best practices or approaches taken by Indigenous governments, groups, or services during the COVID-19 pandemic?**

**What are areas of resilience and strengths related to COVID-19 among Indigenous communities?**

Indigenous communities have responded in varying ways to the COVID-19 pandemic. Examples of these responses include developing or revising emergency plans,<sup>3-10</sup> implementing community-led shutdowns,<sup>3,5,11-14</sup> ensuring community support,<sup>3-5,15-21</sup> establishing and accessing economic initiatives,<sup>7,10,13,17,22-25</sup> enhancing communication,<sup>3,4,8,13,17,19-21,26-29</sup> enforcing strict bylaws,<sup>3-7,9,11-14,18,21,30</sup> and establishing collective leadership initiatives.<sup>3,21,28,30</sup> A return to the land,<sup>3,7,31</sup> emphasis on traditional medicines and foods,<sup>8,11,13,29,32</sup> and using cultural practices and arts<sup>3,7,12,22,32</sup> (e.g., making beaded face masks, conducting virtual pow wows) are important ways for communities to stay resilient in the face of COVID-19. Additional protective factors against COVID-19 include community strengths (e.g., leadership,<sup>5,8,9,14,18,29-32</sup> data sovereignty<sup>5,11,14</sup>), Indigenous knowledge and practices (e.g., traditional medicines<sup>5,13,14,29</sup>), caring for family and community members (e.g., paying special attention to Elders<sup>3,7,16,25,29</sup> and to those isolating<sup>16,29</sup>), community-centred communication (e.g., culturally appropriate messaging by trusted leaders and organizations<sup>15,17,19,21,29,33</sup>), and community-driven and controlled public health measures (e.g., contact tracing<sup>11,29</sup> and checkpoints<sup>5,9,13,18,25,29</sup>). Websites, posters, and digital tools have been developed, often by Indigenous leadership, to communicate strategies and provide different resources related to COVID-19, including sharing information on health promotion, health strategies, public health strategies, resource links (e.g., funding and support), and travel bans.<sup>15-17,19,21,28,33,34</sup>

### Bottom Line

Responses to the COVID-19 pandemic have varied between communities but often included restricted access to the communities, an emphasis on communication, accessing community and individual-level supports, providing thoughtful and culturally appropriate public health messaging, and emergency planning. Often, Indigenous communities implemented stricter bylaws than the surrounding provincial or territorial governments, with a larger focus on preventing any cases rather than containing them to a certain level. All levels of government and community leadership have a role in responding to the COVID-19 pandemic.

The following table explores a number of specific responses and areas of resilience based on the literature identified.

**Table 1: Responses by Indigenous Peoples in Canada to the COVID-19 Pandemic**

Reference	Type of evidence	Key messages
<p>Angela Mashford-Pringle; Christine Skura; Sterling Stutz; Thilaxy Yohathanan. (February 2021)<sup>3</sup></p> <p><i>What we heard: Indigenous Peoples and COVID-19</i></p> <p><a href="https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html">https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html</a></p>	Report	<p>This report is a summary of experiences of Indigenous community members throughout the COVID-19 pandemic, including some of the actions undertaken in response to the pandemic and demonstrations of strength and resiliency. Some key themes identified were:</p> <ul style="list-style-type: none"> <li>• community-led shutdowns</li> <li>• the need for Indigenous engagement in decision-making</li> <li>• initiatives supporting seniors and Elders, such as providing them with meals and groceries, and having virtual and remote visits</li> <li>• the engagement of youth, such as having them lead activities to support other children and using social media platforms to attend to the health of family and community members</li> <li>• initiatives to address food security, such as sharing supplies or food, returning to the land, and creating food delivery services</li> <li>• finding ways to engage in tradition, such as hosting virtual powwows and other online and distanced activities</li> <li>• working with local public health units to access testing kits, including going door to door to limit the potential spread of the virus</li> <li>• some Indigenous organizations introducing mobile testing units to ensure practices were as culturally safe as possible</li> <li>• some communities opening shelters for women and children during the pandemic to ensure their safety</li> <li>• many Indigenous peoples, communities, Elders, and organizations using social media platforms to transmit cultural knowledge.</li> </ul>
<p>City of Vancouver (January 2021)<sup>4</sup></p> <p><i>Populations Disproportionately Impacted by COVID-19: Current State Assessment</i></p> <p><a href="https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf">https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf</a></p>	Report	<p>The Indigenous communities across British Columbia have taken varying approaches to addressing the COVID-19 pandemic. Examples are, as follows:</p> <ul style="list-style-type: none"> <li>• The Musqueam, Squamish, and Tsleil-Waututh Nations restricted visitors and travel to on-reserve communities and provided physical and mental health supports, and assistance with basic needs.</li> <li>• The majority of Indigenous communities maintained stricter restrictions than the provincial government including lockdowns and shelter-in-place legislation.</li> </ul>
<p>Feltes E, Stacey J, Verhaeghe C (March 2021)<sup>5</sup></p> <p><i>Dada Nentsen Gha Yatast- † T̓silhqot̓'in in the Time of COVID: Strengthening T̓silhqot̓'in Ways to Protect Our People</i></p>	Report	<p>This resource summarizes the actions taken, and experiences of, the T̓silhqot̓'in Nation throughout the COVID-19 pandemic. Leaders undertook a rapid response including, but not limited to, issuing a state of emergency, implementing community bylaws, establishing checkpoints to monitor travel in and out of communities, transitioning to remote and virtual operations, coordinating food and supply distribution</p>

Reference	Type of evidence	Key messages
<p><i>Tsilhqot'in National Government.</i>  <a href="https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf">https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf</a></p>		<p>directly to communities, providing dedicated bilingual communications to Tsilhqot'in citizens, providing quick access to COVID-19 swab testing, and advocating for a data partnership with the province.</p> <p>Resilience and strengths demonstrated by the Tsilhqot'in Nation include a quick anticipation by community leaders of potentially devastating impacts of the pandemic, drawing on the long history of disease brought by settlers and the lived experience of colonialism. The Tsilhqot'in Nation drew on its knowledge, practices (including language, connection to the land, and traditional medicine), and self-determination in response to the pandemic.</p>
<p>Indigenous Primary Health Care Council (2021)<sup>15</sup></p> <p><i>Gashkiwidoon<sup>a</sup> Toolkit 'Able To Take, Carry It' COVID-19 Vaccine Implementation</i></p> <p><a href="https://www.iphcc.ca/publications/toolkits/Gashkiwidoon/">https://www.iphcc.ca/publications/toolkits/Gashkiwidoon/</a></p>	<p>Toolkit</p>	<p>A toolkit was created by the Indigenous Primary Health Care Council to support Indigenous populations with the planning and implementation of community-level COVID-19 vaccination clinics. The Indigenous Primary Health Care Council is made of members from 28 Indigenous community health care organizations across Ontario. The toolkit provides resources, checklists, and templates for Indigenous community agencies to use.</p>
<p>Indigenous Primary Health Care Council (2021)<sup>33</sup></p> <p>Engaging Indigenous Communities With COVID 19 Vaccine Implementation</p> <p><a href="https://www.iphcc.ca/publications/resources/COVID19/Engaging-Indigenous-Communities-with-COVID-19/">https://www.iphcc.ca/publications/resources/COVID19/Engaging-Indigenous-Communities-with-COVID-19/</a></p>	<p>Toolkit</p>	<p>A toolkit was created by the Indigenous Primary Health Care Council to provide guidance on communication and engagement strategies, as well as culturally safe practices for vaccine implementation for Indigenous peoples in Ontario. Areas of focus include environment, jurisdictional alignment, community outreach, communications, cultural safety, and data governance.</p>
<p>National Association of Friendship Centres (March 2021)<sup>16</sup></p> <p><i>Taking Care of Each Other Wherever We Are: A Friendship Centre Approach to COVID-19 Response in Urban Indigenous Communities</i></p> <p><a href="https://www.nafc.ca/downloads/interim-report.pdf">https://www.nafc.ca/downloads/interim-report.pdf</a></p>	<p>Interim report</p>	<p>This PowerPoint resource outlines how the National Association of Friendship Centres — a national Indigenous non-profit organization — responded to COVID-19. Examples of actions include:</p> <ul style="list-style-type: none"> <li>• Alberta: launching the Pikiskwetan Let's Talk program to address mental health, providing virtual services for communities, and creating hampers</li> <li>• Atlantic: delivering food and activity bags to families, holding social bubble picnics, and building affordable housing units</li> <li>• British Columbia: providing shelters for those experiencing homelessness, delivering food to Elders, increasing drug and alcohol supports, providing computer training for Elders, creating the Elders Phone Chain, and organizing online and/or outdoor youth groups</li> <li>• Manitoba: providing food hampers, initiating a Community Container Gardening Project, carrying out learning programs and adult education via distance learning, and offering counselling</li> <li>• The North: offering programs for doing yard work for seniors, providing family entertainment packages, providing critical stress debriefing and</li> </ul>

Reference	Type of evidence	Key messages
		<p>grief counselling, and increasing support for the local food bank</p> <ul style="list-style-type: none"> <li>• Quebec: setting up temporary shelters for the homeless, creating web platforms for information and workshops, setting up a meals-on-wheels service, and translating public health orders</li> <li>• Saskatchewan: altering services to be offered online, providing shelter for the homeless, providing food programs, and hosting virtual events to encourage resiliency</li> </ul>
<p>National Collaborating Centre for Indigenous Health (January to February 2021)<sup>6</sup></p> <p>Virtual Series on First Nations, Inuit, and Métis peoples, and COVID-19</p> <p><a href="https://www.nccih.ca/485/NCCIH_in_the_News.nccih?id=459">https://www.nccih.ca/485/NCCIH_in_the_News.nccih?id=459</a></p>	<p>Virtual online presentations</p>	<p>This 4-part series explores the experiences of First Nations, Inuit, and Métis peoples, and communities, with COVID-19. Notably, the first session is titled: Indigenous governance and self-determination in planning and responding to COVID-19.</p>
<p>Preparing our Home (April 21, 2021)<sup>7</sup></p> <p>Sharing practices: Indigenous communities respond to Covid-19</p> <p><a href="https://docs.google.com/document/d/1AXGrl-G4CHUsi7M4YUPCe1nyuthry2nfMVY_5N6HF/edit?fbclid=IwAR07OCYFoXAsneCCWwC5TPk3JWZgzL6PtQwQhKkECSgwHWtBYn20SnY2D4#heading=h.44i2vccpi78f">https://docs.google.com/document/d/1AXGrl-G4CHUsi7M4YUPCe1nyuthry2nfMVY_5N6HF/edit?fbclid=IwAR07OCYFoXAsneCCWwC5TPk3JWZgzL6PtQwQhKkECSgwHWtBYn20SnY2D4#heading=h.44i2vccpi78f</a></p>	<p>Resource hub</p>	<p>This document gathers resources, supports, and community measures taken to respond to COVID-19. Multiple First Nations communities are reported to have undertaken the following:</p> <ul style="list-style-type: none"> <li>• mandatory members registry (Maskekosak Enoch and Kehewin Cree Nation)</li> <li>• restricting access to outsiders (Mattagami First Nation, <i>Grand Council Treaty #3</i>, Takla Nation, The Haida Nation, Heiltsuk Territory, Mohawk Akwesasne, Fish River Cree Nation, Sandy Lake First Nation, Eabametoong First Nation, Ucluelet First Nation, and Peguis First Nation)</li> <li>• community curfew (White Fish Lake First Nation)</li> <li>• vehicle identification systems (Alexis Nakota Sioux Nation)</li> <li>• pandemic relief funds (Key Band First Nation, Haisla Nation, and Frog Lake First Nations 121 &amp; 122)</li> <li>• going out on the land (Dene Nation, Colville Lake, and Cold Lake First Nation)</li> <li>• care packages for the vulnerable (Enoch Cree Nation and Nihtat Gwich'in)</li> <li>• rent subsidies (Enoch Cree Nation)</li> <li>• state of emergency (K'atl'odeeche First Nation, Eskasoni First Nation, Siksika Nation, Blood Tribe, Miawpukek First Nation, Six Nations of the Grand River, Beausoliel First Nation, Federation of Sovereign Indigenous Nations, Opaskwayak Cree Nation, Berens River First Nation, Sandy Bay Ojibway First Nation, Nisichawayasihk Cree Nation, Alexander First Nation, Long Plain First Nation, Maskwacis Cree First Nation, and Kehewin Cree Nation)</li> </ul> <p>Communities have also demonstrated examples of strength and resilience such as:</p>

Reference	Type of evidence	Key messages
<p>Public Health Ontario (February 3, 2021)<sup>22</sup></p> <p><i>Environmental Scan: Health Protection Actions for People Experiencing Homelessness during the COVID-19 Pandemic</i></p> <p><a href="https://www.publichealthontario.ca/-/media/documents/ncov/he/2021/02/covid-19-homelessness-environmental-scan.pdf?la=en">https://www.publichealthontario.ca/-/media/documents/ncov/he/2021/02/covid-19-homelessness-environmental-scan.pdf?la=en</a></p>	<p>Environmental Scan</p>	<ul style="list-style-type: none"> <li>• implementing a National Day of Prayer (<i>Grand Council Treaty #3</i>)</li> </ul> <p>This environmental scan looked at actions that have been implemented since the start of the pandemic with a focus on those to support homeless individuals.</p> <ul style="list-style-type: none"> <li>• In Manitoba, Keewatinowi Okimakanak Inc. provided financial support to YWCA Thompson to provide shelter to First Nations people living off reserve, while abiding by physical distancing measures.</li> <li>• In London, Ontario, an Indigenous housing hub allowed those experiencing homelessness to gather, learn, and reconnect with their culture.</li> <li>• Anishnawbe Health Toronto turned a recreational vehicle into a mobile health unit for Indigenous people experiencing homelessness in the city.</li> </ul>
<p>Assembly of First Nations Yukon Region (November 2020)<sup>17</sup></p> <p><i>Novel Coronavirus Discussion Paper: COVID-19 Policy Analysis And Recommendations For Yukon First Nations</i></p> <p><a href="http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf">http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf</a></p>	<p>Discussion paper</p>	<p>This discussion paper describes pandemic decisions made by Yukon First Nations in response to the COVID-19 pandemic. The recommendations were informed through interviews with Chiefs and key staff members. Examples of actions undertaken by the 14 Yukon First Nations communities include:</p> <ul style="list-style-type: none"> <li>• providing economic support for rent payments and utility bills, and providing one-time payments to citizens for the unexpected costs of the pandemic</li> <li>• creating community-led guidelines for visitors to traditional territories and settlement lands, or limiting access to settlement lands altogether</li> <li>• ordering stockpiles of food for community use to ensure access to food and supplies.</li> </ul> <p>The Council of Yukon First Nations undertook specific actions to support local communities including:</p> <ul style="list-style-type: none"> <li>• creating a webpage for COVID-19 information locally, territorially, and nationally</li> <li>• providing communications materials in Yukon First Nations languages</li> <li>• providing \$15,000 worth of infant supplies to the Yukon First Nations communities.</li> </ul>
<p>Banning, J. (December 15, 2020)<sup>18</sup></p> <p>How One Indigenous Service Agency Is Fighting COVID and Winning</p> <p><a href="https://ppforum.ca/publications/how-one-indigenous-service-agency-is-fighting-covid-and-winning/?sf_data=all&amp;sf_paged=3">https://ppforum.ca/publications/how-one-indigenous-service-agency-is-fighting-covid-and-winning/?sf_data=all&amp;sf_paged=3</a></p>	<p>Article</p>	<p>This article describes actions undertaken by the Kenora Chiefs Advisory during the COVID-19 pandemic to help local First Nations communities. For example, the Indigenous-led service agency started taking inventory of community members' health as soon as COVID-19 hit, implemented travel restrictions, implemented security checkpoints, provided wholesales to buy in bulk to keep food in stock, purchased an air boat to bring supplies into hard-to-reach communities, and worked with physicians to get them to the communities that needed them.</p>

Reference	Type of evidence	Key messages
<p>Banning, J. (July 6, 2020)<sup>32</sup></p> <p>How Indigenous people are coping with COVID-19</p> <p><i>CMAJ</i>. 2020 Jul 6;192(27):E787-88. doi: 10.1503/cmaj.1095879 <a href="#">PubMed: PM32631914</a></p>	<p>Article</p>	<p>This article provides a narrative on how different Indigenous peoples have provided community supports to those at risk and isolating. The leadership of some communities recognized the need for food security and traditional foods during the pandemic, so they coordinated purchases, went on hunting expeditions, and found traditional medicines. In addition, some members used their skills in traditional arts to make masks for their communities.</p>
<p>Bayha M, Spring A. (May 2020)<sup>31</sup></p> <p>Response to COVID in Délīne, NT: reconnecting with our community, our culture and our past after the pandemic</p> <p><i>Agric Human Values</i>. 2020 May 13:1-2. doi: 10.1007/s10460-020-10059-z. Online ahead of print <a href="#">PubMed:PM32412542</a></p>	<p>Commentary</p>	<p>The authors highlight the importance of preserving and strengthening traditional ways of life, especially as an ability to survive and thrive on the land. In the context of the pandemic, the first instinct of many was to return to the land. More resources and programming are needed to support vulnerable persons in the community. To address these challenges, more mentorship, support, spiritual connections, opportunities to learn traditional skills, and ability to learn the language are needed. The traditional knowledge systems are able to support the mental, spiritual, physical, and emotional needs of the community.</p>
<p>British Columbia Assembly of First Nations and Union of British Columbia Indian Chiefs (May 21, 2020)<sup>23</sup></p> <p>FNLC COVID-19 Resource Information</p> <p><a href="https://d3n8a8pro7vhmx.cloudfront.net/ubcic/pages/4160/attachments/original/1590711110/Covid_Resources_V3_It17_Pages.pdf?1590711110">https://d3n8a8pro7vhmx.cloudfront.net/ubcic/pages/4160/attachments/original/1590711110/Covid_Resources_V3_It17_Pages.pdf?1590711110</a></p>	<p>Reports on funding</p>	<p>This report summarizes the resources made available to support Indigenous communities during the pandemic. The Indigenous Community Support Fund has been established to allocated funding (\$300M) to help Indigenous communities prepare for and respond to the pandemic. This funding is at the discretion of Indigenous community leaders. Several examples, but not an exhaustive list, follows.</p> <ul style="list-style-type: none"> <li>• Funding for Community Support: Some of this funding will be distributed to First Nations and Métis communities. Funds will include general community support, which will be a fixed sum; additional support per member population; additional support for remote location; and additional support by land.</li> <li>• Funding for Public Health: Public health funding has also been made available to support funding for First Nations, Inuit, and Métis public health needs.</li> <li>• Funding for PPE: Funding through the Emergency Management Assistance Program has been established so that communities can access the federal stockpile of PPE.</li> <li>• Funding for Homelessness: Funding for communities through the Reaching Home program has been established, which targets preventing and reducing homelessness.</li> </ul>
<p>British Columbia Ministry of Health (May 26, 2020)<sup>26</sup></p> <p><i>Rural, Remote, First Nations and Indigenous COVID-19 Response Framework</i></p>	<p>Provincial government report</p>	<p>This document provides a COVID-19 response framework for Indigenous and First Nations in British Columbia.</p> <p>The framework provides guiding principles, including descriptions of communities with respect to geography</p>

Reference	Type of evidence	Key messages
<p><a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/gdx/rural-and-remote-covid-19-response-framework.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/gdx/rural-and-remote-covid-19-response-framework.pdf</a></p>		<p>in remote and rural regions, as well as providing planning principles (e.g., clinical pathways, supporting informed community and member choices, implementing community cohort centres, and ensuring appropriate transportation).</p>
<p>British Columbia First Nations Health Authority (no date)<sup>34</sup></p> <p>Planning for Food Security: A Toolkit for the COVID-19 Pandemic</p> <p><a href="https://www.afn.ca/wp-content/uploads/2020/05/FNHA-Planning-for-Food-Security-A-Toolkit-for-the-COVID-19-Pandemic.pdf">https://www.afn.ca/wp-content/uploads/2020/05/FNHA-Planning-for-Food-Security-A-Toolkit-for-the-COVID-19-Pandemic.pdf</a></p>	<p>Toolkit</p>	<p>The British Columbia First Nations Health Authority created an online Food Security Toolkit that discusses access, availability, and utilization. This resource provides planning tools and recommendations for use during the COVID-19 pandemic.</p>
<p>The Firelight Group (April 3, 2020)<sup>27</sup></p> <p>Adapting to Uncertainty: First Nations Pandemic Planning</p> <p><a href="https://firelight.ca/2020/04/03/adapting-to-uncertainty-first-nations-pandemic-planning/">https://firelight.ca/2020/04/03/adapting-to-uncertainty-first-nations-pandemic-planning/</a></p>	<p>Web page</p>	<p>The Firelight Group provided some general background and guidance on pandemic preparedness, as well as a list of links to a number of First Nations emergency preparedness plans.</p>
<p>Flood C, MacDonnell V, Philpott J, Thériault S, Venkatapuram S. (2020)<sup>11</sup></p> <p>Vulnerable: The Law, Policy and Ethics of COVID-19</p> <p><a href="https://ruor.uottawa.ca/handle/10393/40726">https://ruor.uottawa.ca/handle/10393/40726</a></p>	<p>Book chapter</p>	<p>Chapter A-2 addresses a handful of First Nations responses to the COVID-19 pandemic.</p> <p>The actions of First Nations communities across Canada were varied and included:</p> <ul style="list-style-type: none"> <li>• enacting bylaws</li> <li>• invoking their sovereign rights of self-determination</li> <li>• implementing stricter measures than those of their associated provinces or adjacent municipalities</li> <li>• implementing lockdowns, curfews, 24-hour surveillance, checkpoints, and failure-to-comply fines</li> <li>• including traditional methods of cleaning, harvesting, and preparing traditional medicines and guidance on ceremonies in COVID-19 preparedness planning.</li> </ul> <p>In Manitoba, specifically, a data-sharing agreement between the province and First Nations has allowed more accurate tracking of COVID-19 Indigenous cases.</p>
<p>Hillier S, Chaccour E, Al-Shammaa H. (November 1, 2020)<sup>12</sup></p> <p>Indigenous Nationhood in the Age of COVID-19: Reflection on the Evolution of Sovereignty in Settler-Colonial States — Indigenous Nationhood in the Age of COVID-19</p> <p><a href="https://journalhosting.ucalgary.ca/index.php/jis/article/view/70736">https://journalhosting.ucalgary.ca/index.php/jis/article/view/70736</a></p>	<p>Observational study</p>	<p>This paper scanned policies and media to summarize actions that had been undertaken by Indigenous governments across Canada, the US, New Zealand, and Australia. Themes identified were:</p> <p><b>Imposition of boundaries</b></p> <ul style="list-style-type: none"> <li>• The Council of the Haida Nation restricting access to First Nations lands to Indigenous residents and essential service providers until testing, screening, and contact tracing protocols were in place</li> </ul>

Reference	Type of evidence	Key messages
		<ul style="list-style-type: none"> <li>• The Wiikwemkoong First Nation declared a state of emergency</li> <li>• The Nuu-chah-nulth Tribal Council opposed the opening of the Canadian borders in British Columbia</li> </ul> <p><b>Asserting self-governance</b></p> <ul style="list-style-type: none"> <li>• Chief Bobby Cameron of the Federation of Sovereign Indigenous Nations in Saskatchewan declared that government public health orders do not supersede First Nations law and treaties</li> </ul> <p><b>Traditions of identity and organization</b></p> <ul style="list-style-type: none"> <li>• The Beardy's and Okemasis' Cree Nation allowed the continuation of a sun-dance ceremony</li> <li>• The Assembly of First Nations provided guidelines for using tobacco in ceremony for First Nations to ensure traditional practices were conducted during the pandemic</li> </ul>
<p>Indigenous Services Canada (July 7, 2020)<sup>24</sup></p> <p>Update on COVID-19 in Indigenous communities</p> <p><a href="http://www.canada.ca/en/indigenous-services-canada/news/2020/07/update-on-covid-19-in-indigenous-communities.html">www.canada.ca/en/indigenous-services-canada/news/2020/07/update-on-covid-19-in-indigenous-communities.html</a></p>	<p>Federal government report (news release)</p>	<p>This news release summarizes efforts made by the Government of Canada and Indigenous Services Canada (e.g., increased funding to Indigenous communities, provision of PPE) to prevent and manage COVID-19. This includes a summary of COVID-19 cases in First Nations communities for July 7, 2020.</p>
<p>Institute of Public Administration of Canada (December 15, 2020)<sup>30</sup></p> <p>Indigenous Responses to COVID-19</p> <p><a href="https://www.youtube.com/watch?v=UTkgLAmbfZk">https://www.youtube.com/watch?v=UTkgLAmbfZk</a></p>	<p>Video panel</p>	<p>This video panel looks at the challenges and actions undertaken by the Squamish Nation during the COVID-19 pandemic, especially as they navigated and successfully managed a COVID-19 outbreak in its community. The panel discusses the importance of inter-governmental agency responses to emergency situations and highlights the experience of the Upper Nicola Indian Band. The panel also discusses economic aspects of the pandemic and how to navigate through the years to come.</p>
<p>Jones C, Monchalin R, Bourgeois C, Smylie J. (December 1, 2020)<sup>19</sup></p> <p><i>Kokums to the Iskwésisak: COVID-19 and Urban Métis Girls and Young Women</i></p> <p><i>Girlhood Studies</i></p> <p><a href="https://www.berghahnjournals.com/view/journals/girlhood-studies/13/3/ghs130309.xml?ArticleBodyColorStyles=full-text">https://www.berghahnjournals.com/view/journals/girlhood-studies/13/3/ghs130309.xml?ArticleBodyColorStyles=full-text</a></p>	<p>Article</p>	<p>This article discusses 2 examples of initiatives created to support urban Métis women in Toronto.</p> <p><b>Well Living House</b></p> <p>The Well Living House is a research hub that consists of Indigenous health researchers, health practitioners, and community grandparents. It works to improve the health and well-being of Indigenous infants, children, and their families. The House partnered with the National Association of Friendship Centres to produce accurate and Indigenous-specific COVID-19 information.</p> <p><b>Call Auntie: Indigenous COVID Pathways Hotline</b></p> <p>"Call Auntie" is a community-led resource set up at the beginning of the pandemic. It is headed by Métis/Cree midwife Cherylee Bourgeois, with support from a</p>

Reference	Type of evidence	Key messages
		group of Indigenous birth workers and harms reduction advocates (known as the Aunties). The hotline was set up to be accessible to the Indigenous community and to provide information, resources, advocacy, self-assessment, self-isolation information, and any other support necessary for COVID-19.
Kitatipithitamak Mithwayawin (2020) <sup>28</sup>  Indigenous-led countermeasures to coronavirus (COVID-19) and other Pandemics Then, Now, and into the Future  <a href="https://covid19indigenous.ca/">https://covid19indigenous.ca/</a>	Web page	Kitatipithitamak Mithwayawin is an Indigenous-led website that provides information on countermeasures to COVID-19.
Kyoon-Achan G and Wright L (July 15, 2020) <sup>8</sup>  Community-based pandemic preparedness: COVID-19 procedures of a Manitoba First Nation community  <i>Journal of Community Safety &amp; Well-Being.</i> 2020;5(2):45-50.  <a href="https://journalcswb.ca/index.php/cswb/article/view/131">https://journalcswb.ca/index.php/cswb/article/view/131</a>	Summary article	A summary of community practices and initiatives to prevent the spread of COVID-19 implemented by the Nisichawayasihk Cree Nation (northern Manitoba) is provided.  Initiatives included reviewing the community's emergency preparedness plan, food security planning, mental health supports, and general safety measures. This was accomplished through strong local and joint leadership, planning and decision-making based on evidence, understanding traditional medicines and practices, and clear and coordinated communications. Underlying these initiatives was ensuring the community could trust in the leadership and the information being provided.
National Collaborating Centre for Indigenous Health (2020) <sup>35</sup>  Podcast series: Voices from the Field  <a href="https://www.nccih.ca/495/Podcast_Series_Voices_From_the_Field.nccih?id=207">https://www.nccih.ca/495/Podcast_Series_Voices_From_the_Field.nccih?id=207</a>  <i>See: episodes 10 through 16</i>	Commentary (podcast)	Indigenous governments focused and relied on relationships in their communities, and on self-determination and respect for their communities, to control the spread of the virus and of information.  Some Indigenous communities established travel restrictions and enforced rules regarding entry into their communities.  All levels of government were asked to address the social determinants of health in order to help control the virus.  Indigenous self-determination, leadership, and knowledge have been successful in protecting Indigenous communities in Canada during the COVID-19 pandemic.
National Collaborating Centre for Methods and Tools and National Collaborating Centre for Indigenous Health (October 16, 2020) <sup>29</sup> Rapid Review: What factors may help protect Indigenous Peoples and communities in Canada and internationally from the COVID-19 pandemic and its impacts?	Rapid response	This report provides and summarizes the evidence of protective community initiatives for Canadian and international Indigenous communities. Overall, the report lists protective factors including: <ul style="list-style-type: none"> <li>• community strengths (e.g., leadership, chosen partnerships, data sovereignty)</li> <li>• Indigenous knowledge and practices (e.g., traditional medicines)</li> <li>• caring for family and community members (e.g., paying special attention to Elders, those isolating)</li> </ul>

Reference	Type of evidence	Key messages
<a href="https://www.nccmt.ca/uploads/media/media/0001/02/99c03498ac3fcd1a492be93846836aa4087e3aa7.pdf">https://www.nccmt.ca/uploads/media/media/0001/02/99c03498ac3fcd1a492be93846836aa4087e3aa7.pdf</a>		<ul style="list-style-type: none"> <li>• community-centred communication (e.g., culturally appropriate messaging by trusted leaders)</li> <li>• and community-driven and controlled public health measures (e.g., contact tracing and checkpoints).</li> </ul>
<p>Rounce A, Levasseur K. (November 2020)<sup>13</sup></p> <p><i>COVID-19 in Manitoba: Public Policy Responses to the First Wave</i></p> <p><a href="https://uofmpress.ca/books/detail/covid-19-in-manitoba">https://uofmpress.ca/books/detail/covid-19-in-manitoba</a></p>	<p>Book chapters</p>	<p>Chapter 10: Northern Manitoba’s First Nations and Métis communities implemented community lockdowns, restricted travel, installed roadblocks and checkpoints, and required self-isolation for anyone entering their communities, which delayed any spread of COVID-19 until fall 2020.</p> <p>Chapter 11: Manitoban First Nations communities have drawn from historical experience and traditional knowledge to remain resilient throughout the COVID-19 pandemic. It has been noted that Chiefs and organizations (e.g., Indigenous Vision for the North End) have spent time teaching people about traditional medicines and the science behind their uses. Communities have remained resilient through strengthening cultural ties and familial relationships, while asserting self-determination by declaring states of emergency and closing their borders to outsiders.</p> <p>Chapter 12: The MMF cabinet meetings started preparing a COVID-19 response plan after the first cases of COVID-19 were declared. The Métis government started wellness checks of at-risk individuals and assembling hampers of food and other important items, delivering 5,000 hampers by July 7, 2020. The MMF introduced the \$1M Health Action Plan to assist Métis workers, business owners, homeless organizations, and students facing financial pressure as a result of the pandemic, adding \$1.7M by July 2020. The action plan also included the conversion of work camps into health facilities, the purchase of tiny homes as quarantine spaces, and the conversion of an existing space into a COVID-19 testing site. The MMF enhanced communication measures on various platforms to adequately communicate with Manitoban Métis individuals.</p>
<p>Richardson L, Crawford A. (September 21, 2020)<sup>9</sup></p> <p>COVID-19 and the decolonization of Indigenous public health <i>CMAJ</i>. 2020 09 21;192(38):E1098-E1100. <a href="https://pubmed.ncbi.nlm.nih.gov/32958575/">PubMed:PM32958575</a></p>	<p>Commentary</p>	<p>This commentary provides a view of the COVID-19 pandemic with a lens of the social determinants of health and an emphasis on Indigenous rights of self-determination, leadership, and knowledge. Approaches to managing the COVID-19 pandemic must recognize the history of colonization and its impact on Indigenous communities.</p> <p>Most Indigenous communities have had pre-existing emergency preparedness plans. They have been updated and/or modelled after tuberculosis and H1N1 plans to manage the current pandemic.</p>

Reference	Type of evidence	Key messages
		Additionally, many Indigenous communities have implemented travel bans and checkpoints that were often stricter than those imposed by other municipalities or regions.
<p>Richmond C, Ambtman-Smith V, Bourassa C, et al. (December 2020)<sup>14</sup></p> <p><i>COVID-19 and Indigenous Health and Wellness: Our Strength is in our Stories.</i> RSC–Royal Society of Canada</p> <p><a href="https://rsc-src.ca/sites/default/files/pdf/IH%20PB_EN%20%281%29.pdf">https://rsc-src.ca/sites/default/files/pdf/IH%20PB_EN%20%281%29.pdf</a></p>	Report	<p>This report contains a collection of stories exemplifying accounts of resilience and strength during the COVID-19 pandemic from a variety of Indigenous communities. Overarching themes are self-determination, leadership, and place-based knowledge that protected communities throughout the pandemic. Methods of protection include closing off many First Nation, Inuit, and Métis communities to outsiders; imposing daily curfews; and cancelling social and cultural gatherings. A major gap highlighted was the lack of consistent and high-quality data regarding Indigenous-specific indicators and barriers in the COVID-19 pandemic, making it difficult for communities to understand the true impact.</p>
<p>Toronto Foundation (November 2020)<sup>20</sup></p> <p>The Toronto Fall Out report: Half a year in the life of COVID-19</p> <p><a href="https://torontofoundation.ca/wp-content/uploads/2020/11/Toronto-Fallout-Report-2020.pdf">https://torontofoundation.ca/wp-content/uploads/2020/11/Toronto-Fallout-Report-2020.pdf</a></p>	Report	<p>This report summarizes experiences of marginalized communities in Toronto during the COVID-19 pandemic.</p> <ul style="list-style-type: none"> <li>• The Alliance for Healthier Communities and the Indigenous Primary Health Care Council recommended improvements to Ontario’s COVID-19 testing strategy, including funding Indigenous-led health organizations.</li> <li>• Anishnawbe Health Toronto developed a mobile health unit to bring supports directly to Indigenous people around the city who need it.</li> <li>• Some Indigenous groups have found digital ways to connect: many Indigenous groups performed ceremonies online and many teachers have started sharing videos on Instagram.</li> </ul>
<p>Union of BC Indian Chiefs (June 19, 2020)<sup>25</sup></p> <p><i>UN Questionnaire: Impact of COVID-19 on indigenous peoples</i></p> <p><a href="https://www.ubcic.bc.ca/un_questionnaire_impact_of_covid_19_on_indigenous_peoples">https://www.ubcic.bc.ca/un_questionnaire_impact_of_covid_19_on_indigenous_peoples</a></p>	Report	<p>A United Nations survey (July 2020) of the impact of COVID-19 (summarized by this resource) found that First Nations across Canada utilized funds to support diverse community measures, including checkpoints to prevent outside entry to the community, creating support packages for Elders, and other targeted strategies (e.g., maintaining traditional food sources).</p>
<p>Weaver, H. (November 1, 2020)<sup>10</sup></p> <p>COVID-19 and the Indigenous Peoples of Turtle Island: Unusual and familiar times</p> <p><a href="https://journalhosting.ucalgary.ca/index.php/jis/article/view/70739">https://journalhosting.ucalgary.ca/index.php/jis/article/view/70739</a></p>	Article	<p>This article gives an overall description of the experience of Indigenous peoples across North America throughout the COVID-19 pandemic. It highlights the following:</p> <ul style="list-style-type: none"> <li>• In response to the \$216M pledge by the federal government (\$142 per person), the Congress of Aboriginal People in Canada filed a lawsuit alleging the government’s response was inadequate and discriminatory. An additional \$54M was added in response to support off-reserve peoples.</li> <li>• The Six Nations of the Grand River in Ontario implemented their own emergency response plan, which had been in place for decades and centres around limiting outsiders from entry into the community.</li> </ul>

Reference	Type of evidence	Key messages
<p>Yellowhead Institute (April 7, 2020)<sup>21</sup></p> <p><i>COVID-19 in Community: How are First Nations Responding?</i></p> <p><a href="https://yellowheadinstitute.org/2020/04/07/corona-in-community-the-first-nation-response/">https://yellowheadinstitute.org/2020/04/07/corona-in-community-the-first-nation-response/</a></p> <p>and</p> <p><a href="https://yellowheadinstitute.org/covid19/">https://yellowheadinstitute.org/covid19/</a></p>	<p>Policy Brief</p>	<p>The Yellowhead Institute has created a webpage with Policy Briefs, infographics, and toolkits related to COVID-19.</p> <p>This resource outlines examples of what Indigenous communities are doing in response to the COVID-19 pandemic. Key examples have been categorized and listed.</p> <p><b>Knowledge Mobilization Examples</b></p> <ul style="list-style-type: none"> <li>• The Nishnawbe Aski Nation, an organization of 49 First Nations communities in northern Ontario, produced their own handwashing posters written in multiple languages and writing systems.</li> <li>• The Beausoleil First Nation, which is an island community in Ontario, implemented daily video updates from the community's emergency response team.</li> </ul> <p><b>General Support</b></p> <p>Some communities have set up hotlines and food delivery programs for support:</p> <ul style="list-style-type: none"> <li>• The Siksika First Nation set up a Blackfoot coronavirus hotline to support its community.</li> <li>• The Beausoleil First Nation organized food deliveries and the Tlicho government distributed food hampers.</li> </ul> <p><b>State of Emergency</b></p> <p>It has been reported that the majority of First Nations had declared a state of emergency and enacted COVID-19 community protection bylaws.</p> <ul style="list-style-type: none"> <li>• For example, in some First Nations in Alberta, a state of emergency activates the medicine chest and famine and pestilence clauses of <i>Treaty 6</i> and requests help from the peoples' treaty partner.</li> </ul> <p><b>Travel Restrictions</b></p> <p>The state of emergency allowed First Nations to formally restrict non-residents and/or non-essential visitors from travelling into their communities. It also allowed them to set up road checkpoints and community gates with appropriate security. Some communities have implemented curfews to reduce visits and the spread of the virus. Examples include the following:</p> <ul style="list-style-type: none"> <li>• The Longpoint First Nation in Quebec asked the RCMP and the Canadian Armed Forces to help <a href="#">enforce</a> the restrictions at their borders as added security.</li> <li>• The Muskoday First Nation in Saskatchewan passed a law that imposes a fine of \$1,000 to individuals who enter the reserve unlawfully.</li> <li>• The Beausoleil First Nation, which is an island community, implemented prescreening on its ferry, together with social distancing measures and daily video updates from the community's emergency</li> </ul>

Reference	Type of evidence	Key messages
		<p>response team. It also delivered meals for community members who required them.</p> <p><b>Signals for Assistance</b> Some communities have implemented tools and methods to signal distress. Examples include the following:</p> <ul style="list-style-type: none"> <li>• The Curve Lake First Nation in Ontario developed a colour-coded flag system to help its families call for assistance. The flag, hung outside a window, lets health staff know if families need help.</li> <li>• Some communities have set up emergency health care teams and mobile testing units, as well as food delivery services.</li> <li>• The Siksika First Nation in Alberta launched a mobile testing unit and implemented a coronavirus hotline to support community members.</li> </ul>

MMF = Manitoba Métis Federation; PPE = personal protective equipment.

<sup>a</sup> Ojibway word for “able to take, carry it.”

## Request-for-Information Question 2

### What are the impacts of the COVID-19 pandemic on Indigenous communities in Canada related to health and health care services?

Systemic racism, and both the historical and current effects of colonization, have put Indigenous populations at an increased risk of poor outcomes and death from COVID-19. Some specific examples include poor living conditions, poverty, food insecurity, pre-existing high rates of respiratory illnesses (including tuberculosis) and other chronic diseases, household overcrowding, family violence, and limited access to health care, as well as discrimination and experiences of racism while accessing health care.<sup>3,5,9,13,36-41</sup> Overall, surveillance studies have reported that Indigenous cases make up a disproportionate amount of provincial COVID-19 cases and/or deaths.<sup>4,42,43</sup> During the first wave of the pandemic, many Indigenous communities were able to prevent outbreaks of COVID-19. For the communities that reported outbreaks in the fall of 2020 and onwards, case numbers often exploded quickly, with a lack of accessible testing, contact tracing, health care professionals, and hospitals within these communities.<sup>42</sup> The lack of data sovereignty has left gaps in knowledge about the impact of COVID-19 on Indigenous populations. Many sources report a lack of an assessment of outcomes based on distinctions-based data, or a complete disconnect with provincial data systems.<sup>4,9,37,44</sup> For example, opioid use in Indigenous populations during COVID-19 was identified as a data gap.<sup>45</sup> More and better research is needed, with particular attention to study approaches and data collection points that are tailored to and led by Indigenous populations. Coordination and collaboration between Indigenous community leaders and all levels of government is essential to ensure that communities have autonomy in decision-making so that they can consider the local context and cultural practices.

### Bottom Line

Indigenous populations are vulnerable to pandemics due to existing social and economic inequities, and many Indigenous peoples and communities experienced poorer health outcomes prior to COVID-19. The current pandemic has exacerbated existing health inequities, which may result in increased illness and death from COVID-19. When outbreaks have occurred in Indigenous communities, case numbers have risen quickly and the lack of infrastructure and access to imperative health care services has left some communities relying on external help.

The following table explores examples related to this request question from the identified literature.

**Table 2: Impact of COVID-19 on Health and Health Care Services in Indigenous Communities in Canada**

Author (year)	Type of evidence	Summary of evidence
<p>Mashford-Pringle A, Skura C, Stutz S, Yohathanan T. (February 2021)<sup>3</sup></p> <p><i>What we heard: Indigenous Peoples and COVID-19</i></p> <p><a href="https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html">https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html</a></p>	Report	<p>This report is a summary of experiences of Indigenous community members throughout the COVID-19 pandemic, including the impact of the pandemic on health care access. Some key themes identified were:</p> <ul style="list-style-type: none"> <li>• Some non-Indigenous individuals were tested at Indigenous organizations, increasing the backlog and reducing the number of Indigenous peoples being able to access testing.</li> <li>• Some Métis reported lacking access to testing altogether.</li> <li>• Nurse fly-in programs for remote communities were stopped and transitioned to remote services.</li> <li>• The transition to remote health care may have allowed for more flexibility in physician and nurse availability, but it also highlighted issues related to broadband and lack of virtual devices for remote and isolated individuals.</li> <li>• Because of previously experienced racism and a lack of culturally safe care, there was a distrust of telemedicine among some Indigenous peoples.</li> <li>• There are concerns that some Indigenous peoples may not be able to have private telemedicine calls and may not be able to afford the increased fees for internet use.</li> </ul>
<p>City of Vancouver (January 2021)<sup>4</sup></p> <p><i>Populations Disproportionately Impacted by COVID 19: Current State Assessment</i></p> <p><a href="https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf">https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf</a></p>	Assessment report	<p>The Indigenous communities across British Columbia have experienced differential impacts on health due to the COVID-19 pandemic. A lack of direct data on COVID-19 cases and race limits knowledge on the inequities experienced, but from the data reported, the following was found:</p> <ul style="list-style-type: none"> <li>• The First Nations Health Authority reported a lower rate of COVID-19 among First Nations communities compared with the overall British Columbia population.</li> <li>• First Nations persons made up 4.6% of the total COVID-19 cases and 3.1% of deaths in British Columbia.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
<p>Connolly M, Griffiths K, Waldon J, et al. (March 22, 2021)<sup>42</sup></p> <p>Overview: The international group for indigenous health measurement and COVID-19</p> <p><a href="https://content.iospress.com/articles/statistica-l-journal-of-the-iaos/sji210793">https://content.iospress.com/articles/statistica-l-journal-of-the-iaos/sji210793</a></p>	<p>Research article</p>	<ul style="list-style-type: none"> <li>• Within the Vancouver Centre North local health area, approximately 15% of all cases were First Nations peoples, while First Nation Status peoples make up only 4% of the population.</li> </ul> <p>This article provides data on COVID-19 cases and deaths for Indigenous populations in 4 countries, including Canada.</p> <ul style="list-style-type: none"> <li>• As of January 2021, there were 11,502 cases and 107 deaths for Indigenous peoples of all age groups in Canada.</li> <li>• During the first months of the pandemic, the infection rates were significantly greater in northern Saskatchewan than in the rest of the province. In northern Saskatchewan, approximately 80% of the 40,000 residents identify as First Nations or Métis.</li> <li>• Nunavut, which has a population that is more than 90% Inuit, avoided COVID-19 cases for the first 8 months of the pandemic. Between November 4, 2020 and December 7, 2020, the cases increased to 219 out of the population of 36,000. Most of the active cases (46 of 51) on December 6 were in Arviat.</li> <li>• The Shamattawa community in northern Manitoba had an externally introduced infection that exploded to 144 cases in a population of 1,300 — as of December 5, 2020 — with a test positivity rate of 68%.</li> <li>• 86% of on-reserve COVID-19 cases occurred in Alberta, Saskatchewan, and Manitoba despite having less than 40% of the First Nations population in Canada.</li> </ul>
<p>Feltes E, Stacey J, Verhaeghe C (March 2021)<sup>5</sup></p> <p><i>Dada Nentsen Gha Yatast-łg T̓silhqot'in in the Time of COVID: Strengthening T̓silhqot'in Ways to Protect Our People</i></p> <p>T̓silhqot'in National Government and University of British Columbia</p> <p><a href="https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf">https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf</a></p>	<p>Report</p>	<p>Chapter 2 outlines the T̓silhqot'in Nation's experience with COVID-19 testing and vaccination.</p> <p>Initially, most community nurses were not properly equipped to provide testing, forcing any individual with symptoms to self-isolate and travel alone to a testing centre, which took an average of 1 to 3 hours of travel. Testing is now available in all communities.</p> <p>Because of the close proximity of community health clinics to band offices, community health clinics were required to close their doors to respect social distancing guidelines. Implementing triage over the phone, screening, and physical barriers between citizens and staff was challenging for many.</p>
<p>Government of Manitoba (March 1, 2021)<sup>43</sup></p> <p><i>COVID-19 Infections in Manitoba: Race, Ethnicity, and Indigeneity</i></p> <p><a href="https://www.gov.mb.ca/health/publichealth/surveillance/docs/rei_external.pdf">https://www.gov.mb.ca/health/publichealth/surveillance/docs/rei_external.pdf</a></p>	<p>Surveillance report</p>	<p>This report analyzes surveillance data on COVID-19 infections across Manitoba. It was identified that 17% of cases between May 1, 2020 and December 31, 2020 were in North American Indigenous persons while, according to the 2016 census, only 13% of the Manitoban population self-identifies as North American Indigenous. Differentiated by sex, 17% of</p>

Author (year)	Type of evidence	Summary of evidence
<p>Hahmaan T, Statistics Canada (February 1, 2021)<sup>36</sup></p> <p>StatCan COVID-19: Data to Insights for a Better Canada Changes to health, access to health services, and the ability to meet financial obligations among Indigenous people with long-term conditions or disabilities since the start of the COVID-19 pandemic</p> <p><a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00006-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00006-eng.htm</a></p>	<p>Crowdsourcing survey</p>	<p>female cases and 17% of male cases were identified as North American Indigenous persons.</p> <p>This paper reports findings from a crowdsourcing survey that took place June 23, 2020 to July 6, 2020 and was completed by 13,000 participants of which 600 were Métis, First Nations, or Inuit. The survey investigated the impacts of the COVID-19 pandemic on the health, service access, and ability to meet basic needs of people with disabilities or long-term conditions.</p> <ul style="list-style-type: none"> <li>• Across all age groups, more Indigenous participants with disabilities or long-term conditions reported worsened health compared with non-Indigenous participants with disabilities or long-term conditions.</li> <li>• 57% of Indigenous participants with disabilities or long-term conditions reported that their overall health was “much worse” or “somewhat worse” since before the pandemic.</li> <li>• Worsened health was seen across all types of disability (examples from the report are “seeing, hearing, physical, cognitive, mental health-related or other health challenges or long-term conditions that are expected to last for 6 months or more”).</li> <li>• Service disruptions most likely to be reported by Indigenous participants due to the pandemic were medical or dental (54%); physiotherapy, massage, and chiropractic (40%); medical testing unrelated to COVID-19 (38%); and counselling (32%).</li> </ul>
<p>Assembly of First Nations (November 2020)<sup>37</sup></p> <p><i>A New Path Forward: AFN COVID-19 Discussion Paper – Summary for Input</i></p> <p><a href="https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf">https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf</a></p>	<p>Discussion paper</p>	<p>This paper highlights specific funding requests and requested actions of the government from the Assembly of First Nations in response to challenges faced during the COVID-19 pandemic, which are also outlined.</p> <p>First Nations have faced challenges in accessing timely and appropriate COVID-19 care, such as testing, isolation issues, and treatment.</p> <p>There have been delays in contract tracing and identifying available supports.</p>
<p>Richardson L, Crawford A. (September 21, 2020)<sup>9</sup></p> <p>COVID-19 and the decolonization of Indigenous public health</p> <p><i>CMAJ</i>. 2020 Sept 21;192(38):E1098-E1100. doi: 10.1503/cmaj.200852. <a href="https://pubmed.ncbi.nlm.nih.gov/32958575/">PubMed: PM32958575</a></p>	<p>Commentary</p>	<p>The rate of COVID-19 for First Nations, Inuit, and Métis communities in Canada is lower than that of the general population, despite often facing social inequities that typically result in poorer health outcomes.</p> <p>Attention to the social determinants of health is essential; Indigenous peoples need to be able to access and action public health measures.</p> <p>The effects of colonization need to be considered and addressed in actionable ways.</p>

Author (year)	Type of evidence	Summary of evidence
		Indigenous public health and the response to COVID-19 should be self-led, with information and data support provided by government, as appropriate.
<p>Wu DC, Jha P, Lam T, et al. (June 2, 2020)<sup>38</sup></p> <p>Determinants of self-reported symptoms and testing for COVID-19 in Canada using a nationally representative survey</p> <p>Non-peer-reviewed preprint. <i>medRxiv</i>. 2020;2020.05.29.20109090.  <a href="https://www.medrxiv.org/content/10.1101/2020.05.29.20109090v1">https://www.medrxiv.org/content/10.1101/2020.05.29.20109090v1</a></p>	Research article (preprint <sup>a</sup> )	<p>This preprint article<sup>a</sup> explores a population-based survey that polled adults in April 2020 about self-reported COVID-19 symptoms.</p> <p>8% of adults reported that they or someone in their household had reported symptoms suggestive of COVID-19 in March 2020.</p> <p>Symptoms were more common in younger than in older adults, and among visible minorities.</p> <p>Being tested was associated with having COVID-19 symptoms, identifying as Indigenous, and living in Quebec.</p>
<p>Lapointe-Shaw L, Rader B, Astley CM, et al. (May 26, 2020)<sup>39</sup></p> <p>Syndromic Surveillance for COVID-19 in Canada</p> <p>Non-peer-reviewed preprint. <i>medRxiv</i>. 2020;2020.05.19.20107391.  <a href="https://www.medrxiv.org/content/10.1101/2020.05.19.20107391v1">https://www.medrxiv.org/content/10.1101/2020.05.19.20107391v1</a></p>	Research article (preprint)	<p>This preprint (abstract only) summarizes a survey of self-reported information on COVID-19 symptoms and testing.</p> <p>Women; younger and middle-aged adults (versus older adults); and First Nations, Inuit, and Métis were more likely to report at least 1 symptom.</p>
<p>Lin SL. (September 24, 2020)<sup>40</sup></p> <p>Intersectionality and Inequalities in Medical Risk for Severe COVID-19 in the Canadian Longitudinal Study on Aging</p> <p><i>Gerontologist</i>. 2020 Sep 24;24:24.  <a href="https://pubmed.ncbi.nlm.nih.gov/32969470/">PubMed:PM32969470</a></p> <p>(This article has been retracted since its inclusion in this report).</p>	Non-randomized study	<p>This study looked at the relationship between income, education, and racial-nativity status, and the prevalence of having multiple medical conditions among Canadians (age older than 45 years) in order to provide insight into who may have higher susceptibility to poorer outcomes of COVID-19 illness.</p> <p>According to the study, Indigenous persons (as well as South Asian and Black immigrant populations) were more likely to have pre-existing comorbidities compared with White persons. The authors noted that these groups may have a higher risk of exposure due to social factors (e.g., certain occupations, such as retail positions, cleaners, cashiers; use of public transit rather than a personal vehicle; and crowded living conditions).</p> <p>The author listed possible policy solutions including:</p> <ul style="list-style-type: none"> <li>• implementing policy beyond the scope of the traditional health sector</li> <li>• expanding social welfare programs</li> <li>• redirecting health-enhancing resources to people living in lower-income and minority communities (e.g., community outreach, screening programs)</li> </ul>
<p>Rounce A, Levasseur K. (November 2020)<sup>13</sup></p> <p>COVID-19 in Manitoba: Public Policy Responses to the First Wave</p>	Book chapter	<p>Chapter 10:  For First Nations communities in Manitoba, access to health care has been a large barrier throughout the</p>

Author (year)	Type of evidence	Summary of evidence
<a href="https://uofmpress.ca/books/detail/covid-19-in-manitoba">https://uofmpress.ca/books/detail/covid-19-in-manitoba</a>		<p>COVID-19 pandemic. Most of the remote northern communities lack hospitals, extended care facilities, or ventilators. This has led to numerous Indigenous members needing to be flown to other locations. For example, dozens of people needed to be flown out of Little Grand Rapids — a community with only 1,368 people on reserve — before the government sent 2 special isolation tents and a Canadian Red Cross team. Most of the health workers in northern Manitoba communities are transient, which risks COVID-19 importation. With many Manitoban First Nations communities are on water advisories or are accessing water by hauling it from the water treatment plants on trucks to households, the public health handwashing guidelines are difficult to follow.</p>
<p>Savage DW, Fisher A, Choudhury S, et al. (September 17, 2020)<sup>41</sup></p> <p>Investigating the implications of COVID-19 for the rural and remote population of Northern Ontario using a mathematical model</p> <p>Non-peer-reviewed preprint. <i>medRxiv</i>. 2020;2020.09.17.20196949. <a href="https://www.medrxiv.org/content/10.1101/2020.09.17.20196949v1">https://www.medrxiv.org/content/10.1101/2020.09.17.20196949v1</a></p>	<p>Research article (preprint)</p>	<p>This preprint research article models the potential effect of COVID-19 on intensive care unit capacity and mortality in northwestern Ontario.</p> <p>The authors note that rural, remote, and Indigenous communities may experience more severe effects of COVID-19. From their model, they suggest that an increased rate in rural populations is likely to increase the required intensive care unit resources and mortality compared with urban populations. Rural areas will likely be disproportionately affected compared with urban populations.</p>
<p>Wendt DC, Marsan S, Parker D, et al. (February, 2020)<sup>45</sup></p> <p>Commentary on the impact of the COVID-19 pandemic on opioid use disorder treatment among Indigenous communities in the United States and Canada</p> <p><i>J Subst Abuse Treat</i>. 2020 Feb 9;121:108165. <a href="https://www.sciencedirect.com/science/article/pii/S0740547220304220?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S0740547220304220?via%3Dihub</a></p>	<p>Commentary</p>	<p>Colonization and systemic racism have contributed to increased substance use in Indigenous populations and the pandemic has likely exacerbated opioid use problems.</p> <p>The effects on opioid use within Indigenous populations in the context of COVID-19 is not well understood and exploration and research into this is needed.</p> <p>Some US and Canadian jurisdictions have shared their experiences and approaches, which include a few key suggestions:</p> <ul style="list-style-type: none"> <li>• relax policies (i.e., for prescribing and dispensing, and supply chain management)</li> <li>• increase the use of virtual care (but it should be noted that this will pose significant challenges around access and availability in rural or remote areas)</li> <li>• be cautious of limiting participation in traditional Indigenous healing practices.</li> </ul> <p>The adoption of innovative approaches is needed during the pandemic and successful changes should continue post-pandemic.</p>
<p>Slater M, Jacklin K, Sutherland R, et al. (September 15, 2020)<sup>46</sup></p>	<p>Research article</p>	<p>As communities plan for the health care needs of an aging population in the face of COVID-19, the study authors note that First Nations people in Ontario experience higher rates of frailty compared with the</p>

Author (year)	Type of evidence	Summary of evidence
<p>Understanding Aging, Frailty, and Resilience in Ontario First Nations</p> <p><i>Can J Aging</i>. 2020 Sep 15;1-6.  <a href="https://www.cambridge.org/core/journals/canadian-journal-on-aging-la-revue-canadienne-du-vieillessement/article/abs/understanding-aging-frailty-and-resilience-in-ontario-first-nations/CD7B5EEFF654F9ECAB100C3382BC5943">https://www.cambridge.org/core/journals/canadian-journal-on-aging-la-revue-canadienne-du-vieillessement/article/abs/understanding-aging-frailty-and-resilience-in-ontario-first-nations/CD7B5EEFF654F9ECAB100C3382BC5943</a></p>		<p>general Canadian population. First Nations communities also experience earlier onset frailty. COVID-19 can be more severe in persons with other existing health conditions, such as frailty.</p>
<p>Yellowhead Institute (May 12, 2020)<sup>44</sup></p> <p>Colonialism Of The Curve: Indigenous Communities &amp; Bad COVID Data</p> <p><a href="https://yellowheadinstitute.org/2020/05/12/colonialism-of-the-curve-indigenous-communities-and-bad-covid-data/">https://yellowheadinstitute.org/2020/05/12/colonialism-of-the-curve-indigenous-communities-and-bad-covid-data/</a></p>	Brief	<p>Disaggregated data — data that includes racial or ethnic identities — is often not collected by the public services accessed by Indigenous peoples. This lack of data information makes it difficult to seek accountability from leaders from all levels of government and to evaluate and measure outcomes and the efficacy of interventions. Because of this data gap, it is also challenging to account for poorer outcomes due to discrimination based on race.</p>

<sup>a</sup> This article has since been published and can be found here: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0240778>.

## Request-for-Information Question 3

### What mental health-related issues, needs, and challenges have affected Indigenous communities during the COVID-19 pandemic?

Request question 3 explored resources related to mental health issues, needs, and challenges affecting Indigenous communities during the COVID-19 pandemic. First Nations, Inuit, and Métis people — particularly women<sup>19,47,48</sup> — are experiencing worse mental health consequences as a result of COVID-19 than non-Indigenous people.<sup>5,13,36,48-51</sup> Notably, there has been a reported increase in substance use and addictions,<sup>5,17,37,47,50</sup> and concern for domestic violence, in many communities.<sup>5,19,52</sup> Barriers in accessing mental health care, such as a lack of privacy<sup>5</sup> and a lack of technological tools,<sup>5</sup> have further exacerbated mental health concerns within communities. Access to culturally and contextually appropriate care is essential for Indigenous communities and is highlighted in the examples from the literature.<sup>5,17,51,53</sup> Provision of mental first aid to Indigenous communities who have been impacted by the COVID-19 pandemic is critical, in addition to the establishment of universal protocols or guidelines to support best practices.

#### Bottom Line

The COVID-19 pandemic has highlighted and exacerbated gaps in mental health services and equitable access to resources to manage mental health-related crises. The evidence highlights an increased prevalence of mental health concerns such as anxiety, suicidal thoughts, and domestic violence within Indigenous communities. At the same time, there is a dire need for increased access to culturally appropriate resources, with existing Indigenous leaders and organizations offering what they can. A more comprehensive commitment and community-governed approach to mental health promotion across Canada with Indigenous peoples is needed.

The following table explores resources related to the topic of mental health.

**Table 3: Mental Health-Related Issues, Needs, and Challenges**

Author (year)	Type of evidence	Summary of evidence
<p>Feltes E, Stacey J, Verhaeghe C (March 2021)<sup>5</sup></p> <p><i>Dada Nentsen Gha Yatast-† T̓silhqot̓'in in the Time of COVID: Strengthening T̓silhqot̓'in Ways to Protect Our People</i></p> <p><i>T̓silhqot̓'in National Government.</i>  <a href="https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf">https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf</a></p>	<p>Report</p>	<p>Many homes lack phones or computers, limiting access to counselling sessions. For those who have had access, counsellors have reported increased anxiety, distractedness, and hyperactivity among children, and a lack of adherence to pandemic legislation by teens and youth. There were also challenges with privacy concerns because of trouble finding confidential spaces from which to engage in counselling.</p> <p>T̓silhqot̓'in communities observed an increase in mental health concerns such as substance use and addiction, violence, depression, anxiety, and suicidal ideation.</p> <p>The lack of safe space in the T̓silhqot̓'in communities has raised concerns for intimate partner violence on women, children, and 2SLGBTQQIA community members.</p> <p>Checkpoints also became a source of stress and anxiety because of the separation of friends and family, and the position the staff were put in when dealing with conflict, abuse, and aggression.</p> <p>Notably, the one Indigenous trauma treatment centre in the province was required to close its doors to anyone outside of Vancouver Island in response to the pandemic and capacity concerns.</p>
<p>Hrabok M, Nwachukwu I, Gusnowski A, et al. (January 2021)<sup>49</sup></p> <p>Mental Health Outreach via Supportive Text Messages during the COVID-19 Pandemic: One-week Prevalence and Correlates of Anxiety Symptoms</p> <p><a href="#">PubMed: PM33131318</a></p>	<p>Non-randomized study</p>	<p>This study reported the prevalence of anxiety among participants of a Text4Hope program 1 week after its launch on March 23, 2020. Univariate analyses indicated that respondents who identified as Indigenous had a higher likelihood of presenting with moderate to high anxiety compared with respondents with other characteristics within the same demographic group.</p>
<p>Hahmaan T, Statistics Canada (February 1, 2021)<sup>36</sup></p> <p>StatCan COVID-19: Data to Insights for a Better Canada            Changes to health, access to health services, and the ability to meet financial obligations among Indigenous people with long-term conditions or disabilities since the start of the COVID-19 pandemic  <a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00006-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00006-eng.htm</a></p>	<p>Crowdsourcing survey</p>	<p>This paper reports findings from a crowdsourcing survey conducted June 23, 2020 to July 6, 2020 by 13,000 participants, of which 600 were Métis, First Nations, or Inuit. The survey investigated the impacts of the COVID-19 pandemic on the health, service access, and ability to meet basic needs of people disabilities or long-term conditions.</p> <ul style="list-style-type: none"> <li>• 64% of Indigenous participants with disabilities or long-term conditions reported that their mental health was “much worse” or “somewhat worse” since before the pandemic.</li> <li>• Compared with non-Indigenous participants, Indigenous participants with seeing, cognitive, and mental health-related disabilities reported worsened mental health during the pandemic.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
<p>Strudwick G, Sockalingam S, Kassam I, et al. (March 2, 2021)<sup>53</sup></p> <p>Digital Interventions to Support Population Mental Health in Canada During the COVID-19 Pandemic: Rapid Review</p> <p><a href="https://pubmed.ncbi.nlm.nih.gov/33650985/">PubMed: PM33650985</a></p>	<p>Rapid review</p>	<p>This rapid review looked at digital interventions offered during the pandemic that targeted supporting the mental health of Canadians throughout the pandemic. In total, 10 web-based resources such as virtual peer support groups, discussion forums, and telemedicine were identified that targeted rural communities and were adapted for Indigenous peoples. Barriers identified were cost, connectivity, language, and access. Notably, some of the resources were only available in English. Overall, it was reported that there is a lack of resources specific to Indigenous peoples and communities.</p>
<p>Assembly of First Nations (November 2020)<sup>37</sup></p> <p>A New Path Forward: AFN COVID-19 Discussion Paper – Summary for Input</p> <p><a href="https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf">https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf</a></p>	<p>Discussion paper</p>	<p>This paper highlights challenges faced by First Nations communities as reported by the Assembly of First Nations during the COVID-19 pandemic.</p> <p>It was reported that COVID-19 has exacerbated existing mental health concerns and substance use and addictions.</p>
<p>Assembly of First Nations Yukon Region (November 2020)<sup>17</sup></p> <p>Novel Coronavirus Discussion Paper: COVID-19 Policy Analysis And Recommendations For Yukon First Nations</p> <p><a href="http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf">http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf</a></p>	<p>Discussion paper</p>	<p>This discussion paper provides insight into challenges faced by the Yukon First Nations during the COVID-19 pandemic through interviews with Chiefs and key staff members.</p> <p>Yukon First Nations reported that there has been an increase in substance abuse within their communities, which they claim to be partially tied to payments from the Canadian Emergency Response Benefit and a lack of opportunity to spend the money constructively.</p> <p>The main challenge reported was having enough mental health supports.</p>
<p>Canadian Mental Health Association, University of British Columbia, et al. (December 2020)<sup>50</sup></p> <p><i>Summary of Findings: Mental Health Impacts of COVID-19: Wave 2</i></p> <p><a href="https://cmha.ca/wp-content/uploads/2020/12/CMHA-UBC-wave-2-Summary-of-Findings-FINAL-EN.pdf">https://cmha.ca/wp-content/uploads/2020/12/CMHA-UBC-wave-2-Summary-of-Findings-FINAL-EN.pdf</a></p>	<p>Cross-sectional survey</p>	<p>This report outlines self-reported findings on the mental health impacts of the second wave of COVID-19:</p> <ul style="list-style-type: none"> <li>• 54% of Indigenous peoples reported deteriorating mental health (compared with 41% in wave 1).</li> <li>• 20% of Indigenous peoples reported suicidal thoughts or feelings (compared with 16% in wave 1).</li> <li>• 29% of Indigenous peoples reported increased alcohol use.</li> <li>• 24% of Indigenous peoples reported increased cannabis use.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
<p>First Nations Education Administrators Association (October 23, 2020)<sup>51</sup></p> <p>Report of Survey Findings: First Nations Administrators and the Impact of COVID-19</p> <p><a href="https://www.fneaa.ca/common/Uploaded%20files/Report%20of%20Survey%20Findings%20Gathering%20Place%20Best%20Practices%20November%202024%20V2.pdf">https://www.fneaa.ca/common/Uploaded%20files/Report%20of%20Survey%20Findings%20Gathering%20Place%20Best%20Practices%20November%202024%20V2.pdf</a></p>	<p>Report on survey findings</p>	<p>This study examined the impact of COVID-19 on First Nations schools and communities. Regarding mental health challenges:</p> <ul style="list-style-type: none"> <li>• During the pandemic, access to mental health support has been limited.</li> <li>• Increased stress and demands on staff have led to tension and conflict.</li> <li>• Parents are overwhelmed providing education support to their children; in particular, parents of special needs children.</li> <li>• The pandemic has further exacerbated mental health concerns for some and services have been suspended.</li> <li>• Isolation and lack of structure has led to an increase in rebellious behaviour and the number of incidents among youth.</li> </ul>
<p>Goodwill A, Morgan J (June 22, 2020)<sup>1</sup></p> <p>Pandemic experiences and impacts of COVID-19 on the mental health of Indigenous communities: Preliminary Knowledge Synthesis</p> <p><a href="https://cihr-irsc.gc.ca/e/documents/GOODWILL-Initial-Knowledge-Synthesis-2020-06-22.pdf">https://cihr-irsc.gc.ca/e/documents/GOODWILL-Initial-Knowledge-Synthesis-2020-06-22.pdf</a></p>	<p>Draft knowledge synthesis</p>	<p>This evidence synthesis highlights data from various sources that provide insights into trends and patterns in the literature examining mental health and substance use in Indigenous communities.</p> <p>The authors observed that, typically, research focuses on the study of infectious diseases rather than on mental health and substance use concerns in pandemic contexts.</p> <p>There is an existing literature gap regarding how to address the gendered experiences of mental health and substance use issues in Indigenous communities.</p> <p>There are increased demands on telehealth, given physical distancing measures and public health policies; however, the effects of such policies, both in the short- and long-term, are unknown.</p>
<p>Jones C, Monchalin R, Bourgeois C, Smylie J. (December 1, 2020)<sup>19</sup></p> <p>Kokums to the Iskwêsisak: COVID-19 and Urban Métis Girls and Young Women</p> <p><i>Girlhood Studies</i></p> <p><a href="https://www.berghahnjournals.com/view/journals/girlhood-studies/13/3/ghs130309.xml?ArticleBodyColorStyles=full-text">https://www.berghahnjournals.com/view/journals/girlhood-studies/13/3/ghs130309.xml?ArticleBodyColorStyles=full-text</a></p>	<p>Article</p>	<p>This article discusses how the COVID-19 pandemic is impacting Métis women and girls living in urban homelands across Canada. Impacts include the following:</p> <ul style="list-style-type: none"> <li>• Public health guidelines have separated or distanced young Métis women and girls from the social kinship systems that typically provide safety and security.</li> <li>• There have been reports of a sharp increase in violence against Métis and First Nations girls and women due to the public health measures.</li> <li>• Métis women and girls are unable to partake in important cultural ceremonies and rites of passage.</li> <li>• Métis youth and children in government care are currently unable to have supervised visits with biological family members and in-person private visits with social workers, which might exacerbate impacts on the health and well-being of Métis youth, as they already lack culturally relevant services.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
<p>Júnior JG, Moreira MM, Pinheiro WR, et al. (July 2020)<sup>47</sup></p> <p>The mental health of those whose rights have been taken away: An essay on the mental health of indigenous peoples in the face of the 2019 Coronavirus (2019-nCoV) outbreak</p> <p><i>Psychiatry Res.</i> 2020 07;289:113094. <a href="https://pubmed.ncbi.nlm.nih.gov/32405114/">PubMed: PM32405114</a></p>	<p>Commentary</p>	<p>This commentary summarizes the state of mental health of Indigenous populations globally in the context of the COVID-19 pandemic.</p> <p>Racial and ethnic disparities in mental health services use have increased, especially in the context of the pandemic and worsened pre-existing mental health problems (e.g., depression, suicidal ideation, smoking, and binge drinking).</p> <p>Colonialism continues to have gender-specific impacts on access to Indigenous networks and communities that are critical for many Indigenous peoples' well-being.</p>
<p>Rounce A, Levasseur K. (November 2020)<sup>13</sup></p> <p><i>COVID-19 in Manitoba: Public Policy Responses to the First Wave</i></p> <p><a href="https://uofmpress.ca/books/detail/covid-19-in-manitoba">https://uofmpress.ca/books/detail/covid-19-in-manitoba</a></p>	<p>Book chapter</p>	<p>Chapter 10: The authors report that the mental health of Indigenous peoples is at high risk due to COVID-19. Findings from a national survey conducted by the Canadian Mental Health Association found that 16% of Indigenous people (18 years of age and older) have had suicidal thoughts since the outbreak of COVID-19.</p>
<p>Royal Society of Canada (October 2020)<sup>52</sup></p> <p><i>Easing the Disruption of COVID-19: Supporting the Mental Health of the People of Canada</i></p> <p><a href="https://rsc-src.ca/sites/default/files/MH%20PB_EN_1.pdf">https://rsc-src.ca/sites/default/files/MH%20PB_EN_1.pdf</a></p>	<p>Policy brief</p>	<p>The COVID-19 pandemic has had a detrimental effect on the mental health of Indigenous peoples, who face pre-existing structural inequities.</p> <p>Many Indigenous communities have reported increases in child welfare–related issues (e.g., abuse, neglect), domestic violence due to suspending of residential treatment facilities and shelters for women, and acute withdrawal episodes as a result of disruptions in illicit substance supply chains (due to community checkpoint screening), combined with limited access to medically assisted withdrawal services.</p> <p>The document indicated that many rural and Indigenous communities have not had mental health services despite the added stress of the pandemic.</p>
<p>Arriagada P, Hahmann T, O'Donnell V; Statistics Canada (June 23, 2020)<sup>48</sup></p> <p>StatCan COVID-19: Data to Insights for a Better Canada Indigenous people and mental health during the COVID-19 pandemic</p> <p><a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00035-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00035-eng.htm</a></p>	<p>Crowdsourcing survey</p>	<p>Approximately 1,400 First Nations, Métis, and Inuit completed an online questionnaire administered by Statistics Canada about the impacts of COVID-19 on mental health.</p> <ul style="list-style-type: none"> <li>• Six in 10 Indigenous participants reported that their mental health has worsened since physical distancing measures have been in place.</li> <li>• Indigenous women reported higher stress and anxiety than did Indigenous men.</li> <li>• Indigenous peoples reported higher stress and anxiety than did non-Indigenous people.</li> <li>• It was not possible to report findings separately for First Nations, Métis, or Inuit, or for diverse subpopulations within the Indigenous population; therefore, caution should be exercised when interpreting the findings.</li> </ul>

## Request-for-Information Question 4

### What issues, challenges, or opportunities have Indigenous communities faced during the COVID-19 pandemic in relation to food security, housing stability, community cohesion, social connectedness, and other social and cultural factors?

Request question 4 explores issues related to social and economic factors, and how COVID-19 is impacting Indigenous communities in this way. Indigenous peoples are facing higher inequities, including overcrowded housing,<sup>3,17,54,55</sup> food insecurity,<sup>2,13,37,54,56</sup> job loss,<sup>4,20,57-62</sup> and barriers to remote education<sup>3,5,17,37,51,63</sup> compared with non-Indigenous individuals, with existing inequities being exacerbated by the COVID-19 pandemic.<sup>3-6,54,64</sup> Current public health practices and messaging from non-Indigenous health authorities may need to incorporate more Indigenous traditional health practices. This could help Indigenous individuals better engage with Indigenous leadership and result in better health outcomes for Indigenous communities, not only during the COVID pandemic but also afterward, by addressing the other ongoing inequities that these communities face. Additionally, not all responses are designed to be equal or are contextually appropriate; policy-makers need to consider the situation of rural communities and/or homelessness in Canada and increase funding supports.<sup>65,66</sup> Pandemic responses must be designed for rural communities rather than simply being extensions of existing urban strategies.

#### Bottom line

Many Indigenous communities have been negatively impacted by the COVID-19 pandemic, with the inequity gap growing larger because of the pandemic. Conditions made worse or exacerbated by COVID-19 include, but are not limited to, inadequate health infrastructure, lack of clean water, food insecurity, job loss, and insufficient economic opportunities.

The following table explores examples related to social and economic impacts of COVID-19 on Indigenous communities.

**Table 4: The Socioeconomic Impact of COVID-19 on Indigenous Peoples in Canada**

Author (year)	Type of evidence	Summary of evidence
Mashford-Pringle A; Skura C, Stutz S; Yohathanan T. (February 2021) <sup>3</sup>  What we heard: Indigenous Peoples and COVID-19 Public Health Agency of Canada's Companion Report  <a href="https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html">https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report.html</a>	Report	This report is a summary of experiences of Indigenous community members throughout the COVID-19 pandemic, including the impact of the pandemic on issues such as housing and lack of internet access. Some key themes identified were, as follows: <ul style="list-style-type: none"> <li>• Many remote and isolated First Nations and Inuit communities face barriers, as the internet bandwidth is inadequate for the heavy demands of virtual schooling, work, and health care services.</li> <li>• Some community members do not have cell phones or internet-ready devices, which makes it challenging to access many resources.</li> <li>• For those who do have cell phones or internet-ready devices, there have been no changes to the internet access despite increased needs.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
		<ul style="list-style-type: none"> <li>• Individuals who previously couch-surfed must now choose between urban shelters or tent cities.</li> <li>• Those who must be flown out of communities for health reasons must quarantine without family or friends and are served food they would not eat normally and at times of day they would not normally eat.</li> <li>• There has been an increase in the use of homeless shelters in some Inuit and remote communities.</li> <li>• Economic measures have led to increases in prices for renovations and maintenance, while many are living in overcrowded homes.</li> <li>• There is an extreme concern regarding the lack of safe drinking water in many communities and the inability to follow safe cleaning protocols for COVID-19.</li> </ul>
<p>Social Policy and Projects Research and Data Team, City of Vancouver (January 2021)<sup>4</sup></p> <p><i>Populations Disproportionately Impacted by COVID 19: Current State Assessment</i></p> <p><a href="https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf">https://vancouver.ca/files/cov/pdi-covid-current-state-report-january-2021.pdf</a></p>	<p>Assessment report</p>	<p>This report from the City of Vancouver examines the various types of impact COVID-19 has had on individuals, with the recognition that not all populations are equally affected by this pandemic.</p> <ul style="list-style-type: none"> <li>• Indigenous respondents to a crowdsourced survey were slightly more likely to report experiencing job loss and difficulty meeting financial obligations or essential needs than non-Indigenous respondents.</li> <li>• Crowdsourced data also demonstrated that Indigenous survey respondents had perceived an increase in violence since the start of the pandemic, with a lower rate of adults feeling safe walking in their neighbourhood at night than non-Indigenous and racialized groups.</li> </ul>
<p>Feltes E, Stacey J, Verhaeghe C (March 2021)<sup>5</sup></p> <p><i>Dada Nentsen Gha Yatast-† T̓silhqot̓'in in the Time of COVID: Strengthening T̓silhqot̓'in Ways to Protect Our People</i></p> <p><i>T̓silhqot̓'in National Government.</i></p> <p><a href="https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf">https://www.tsilhqotin.ca/wp-content/uploads/2021/03/TNG-COVID-REPORT-FINAL.pdf</a></p>	<p>Report</p>	<p>The COVID-19 pandemic amplified struggles previously experienced by the T̓silhqot̓'in communities, as revealed by interviews with Chiefs, Councillors, the T̓silhqot̓'in Women's Council, emergency operations centre staff, health directors, health care providers, other community staff, and representatives from Indigenous Services Canada and the Ministry of Indigenous Relations and Reconciliation (British Columbia).</p> <p>Due to a lack of infrastructure, T̓silhqot̓'in communities were required to renovate a community-owned business space to have an interim location large enough to bring emergency operations centre staff together.</p> <p>Many homes in the communities are overcrowded, amplifying the risk for the transmission of COVID-19. Many off-reserve members wanted to move back to the community due to pandemic-related job loss but had nowhere to go.</p> <p>In some communities, housing units reserved for outside essential workers or teachers had to be converted to self-isolation housing units due to a lack of housing, making these locations unavailable to the outside essential workers.</p>

Author (year)	Type of evidence	Summary of evidence
		<p>Many community members lack phones and computers, limiting their ability to work or attend school remotely or to receive or access emergency information.</p>
<p>National Collaborating Centre for Indigenous Health (January-February 2021)<sup>6</sup></p> <p>Virtual Series on First Nations, Inuit and Métis peoples and COVID-19</p> <p><a href="https://www.nccih.ca/485/NCCIH_in_the_News.nccih?id=459">https://www.nccih.ca/485/NCCIH_in_the_News.nccih?id=459</a></p>	<p>Webinar</p>	<p>This 4-part series explores the experiences of First Nations, Inuit, and Métis peoples and communities with COVID-19. Notably, the second session explores the socioeconomic impacts of COVID-19 on the health and well-being of First Nations, Inuit, and Métis populations.</p>
<p>Statistics Canada (March 11, 2021)<sup>57</sup></p> <p>COVID-19 in Canada: A One-year Update on Social and Economic Impacts</p> <p><a href="https://www150.statcan.gc.ca/n1/pub/11-631-x/11-631-x2021001-eng.htm">https://www150.statcan.gc.ca/n1/pub/11-631-x/11-631-x2021001-eng.htm</a></p>	<p>Report</p>	<p>This report outlines the socioeconomic impacts of the COVID-19 pandemic on a variety of population groups. Impacts specific to Indigenous groups identified were, as follows:</p> <ul style="list-style-type: none"> <li>• The impact of the pandemic on unemployment rates was similar between Indigenous peoples (increased by 6.6 percentage points) and non-Indigenous people (increased by 6.2 percentage points) for the first 3 months.</li> <li>• Unemployment rates remained higher among Indigenous groups than non-Indigenous groups by the end of 2020, at 12% and 11% for Indigenous men and women, respectively, and 8% for both non-Indigenous gender groups.</li> </ul>
<p>Assembly of First Nations (November 2020)<sup>37</sup></p> <p><i>A New Path Forward: AFN COVID-19 Discussion Paper – Summary for Input</i></p> <p><a href="https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf">https://www.afn.ca/wp-content/uploads/2021/01/res-1268-7773.pdf</a></p>	<p>Discussion paper</p>	<p>This paper highlights specific funding requests and requested actions of the government from the Assembly of First Nations in response to challenges faced during the COVID-19 pandemic.</p> <p>The reopening of First Nations schools posed a greater risk compared with provincial schools because of the smaller classroom sizes, larger class numbers, long periods of travel to and from school on a communal bus, and increased number of repairs and maintenance needed to align with COVID-19 protocols. For online remote learning, challenges were faced due to limited internet connectivity, a lack of technological resources, and lack of adequate space in homes to focus on schoolwork. Notably, the First Nations schools temporarily closed more frequently and for longer durations than provincial schools across Canada, increasing disparities in education outcomes for First Nations students.</p> <p>Many First Nations communities that closed their borders experienced challenges with food supply, leading local band offices, health care centres, or other community organizations to incur costs not normally a part of their budgets.</p> <p>First Nations women were disproportionately affected by the pandemic, as many had to leave work to take care of</p>

Author (year)	Type of evidence	Summary of evidence
<p>Assembly of First Nations Yukon Region (November 2020)<sup>17</sup></p> <p><i>Novel Coronavirus Discussion Paper: COVID-19 Policy Analysis And Recommendations For Yukon First Nations</i></p> <p><a href="http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf">http://afnyukon.ca/wp-content/uploads/2020/11/COVID-19-Discussion-Paper.pdf</a></p>	<p>Discussion paper</p>	<p>children without childcare or school availability, and to enable them to provide care for elders and the disabled.</p> <p>This discussion paper provides insight into the challenges faced by the Yukon First Nations throughout the COVID-19 pandemic via interviews with Chiefs and key staff members.</p> <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>• The internet infrastructure throughout the territory was insufficient to support the increased internet usage resulting from people working and schooling from home.</li> <li>• Compared with 85.7% of Canadians having access to broadband, only 40% of those in rural areas have access.</li> </ul> <p><b>Housing</b></p> <ul style="list-style-type: none"> <li>• Due to overcrowding and homes in need of repairs, public health guidelines were impossible to follow in some Yukon First Nations.</li> </ul>
<p>Alberta Health Services (April 29, 2020)<sup>54</sup></p> <p>COVID-19 Scientific Advisory Group Response Report</p> <p><a href="https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-sag-priority-groups-for-asymptomatic-testing-rapid-review.pdf">https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-sag-priority-groups-for-asymptomatic-testing-rapid-review.pdf</a></p>	<p>Rapid review</p>	<p>The COVID-19 pandemic, in the context of both historical and contemporary colonization, has amplified the equity gap for Indigenous peoples, with many basic needs not easily being met (e.g., because of food insecurity, inaccessible health care needs, crowded housing, unsanitary conditions, and so forth), which inadvertently makes Indigenous populations more vulnerable to COVID-19 infection. These social inequities are recognized factors in adversely affecting the health and well-being of individuals.</p> <p>The key research question posed was: are there populations of asymptomatic individuals (e.g., in population sampling or in congregate living scenarios including long-term care, vulnerable populations; patients being hospitalized, those associated with outbreaks, health care workers) that should be considered a priority for screening for COVID 19 infection (with real-time reverse transcription polymerase chain reaction), with the goal of surveillance and preventing spread within these populations?</p> <p>To prevent a community outbreak while repatriating members of their communities, many Indigenous communities requested COVID-19 testing for asymptomatic persons returning. Evidence and guidance gaps exist regarding the testing of asymptomatic persons for the purpose of repatriation and the prioritization of these persons for testing.</p>
<p>Association for Canadian Studies (June 1, 2020)<sup>58</sup></p> <p>Indigenous population of Canada faces severe economic challenges in COVID-19 era</p>	<p>Report</p>	<p>Data was collected from May 1, 2020 to May 10, 2020 via a web-based survey given to more than 1,959 Canadians (including an Indigenous oversample of 450 individuals). Key findings from the survey included the following:</p>

Author (year)	Type of evidence	Summary of evidence
<p><a href="https://acs-aec.ca/wp-content/uploads/2020/06/Indigenous-Population-Faces-Severe-Economic-Challenges-June-2020.pdf">https://acs-aec.ca/wp-content/uploads/2020/06/Indigenous-Population-Faces-Severe-Economic-Challenges-June-2020.pdf</a></p>		<ul style="list-style-type: none"> <li>• Since the beginning of the COVID-19 pandemic, and at the time of the survey, one-third of Indigenous people had lost their jobs.</li> <li>• Indigenous persons were more likely to commute to work during the pandemic compared with the majority of visible minorities who worked from home.</li> <li>• Compared with non-visible minorities, Indigenous persons, especially young males, were twice as likely to have difficulties meeting their financial needs.</li> </ul>
<p>Bergman F, Atlantic Provinces Economic Council (June 17, 2020)<sup>67</sup></p> <p><i>COVID-19 Magnifies Socio-Economic Challenges Facing Atlantic Indigenous Communities and Businesses</i></p> <p><a href="https://www.apcenc.ca/wp-content/uploads/2020/06/APEC_Briefing_Note_June_2020.pdf">https://www.apcenc.ca/wp-content/uploads/2020/06/APEC_Briefing_Note_June_2020.pdf</a></p>	Briefing note	<p>Indigenous communities in Atlantic Canada are likely to face economic hardships as a result of COVID-19. Industries such as fisheries and tourism are a major source of income but have suffered in light of the pandemic. The Atlantic Policy Congress of First Nations Chiefs estimated that Nova Scotia First Nations may lose \$100M in income due to COVID-19.</p>
<p>Thompson S, Bonnycastle M, Hill S; Canadian Centre for Policy Alternatives Manitoba (May 2020)<sup>68</sup></p> <p><i>COVID-19, First Nations and Poor Housing: “Wash hands frequently” and “Self-isolate” Akin to “Let them eat cake” in First Nations with Overcrowded Homes Lacking Piped Water</i></p> <p><a href="https://www.policyalternatives.ca/sites/default/files/uploads/publications/Manitoba%20Office/2020/05/COVID%20FN%20Poor%20Housing.pdf">https://www.policyalternatives.ca/sites/default/files/uploads/publications/Manitoba%20Office/2020/05/COVID%20FN%20Poor%20Housing.pdf</a></p>	Policy paper	<p>This paper explores the challenges in meeting public health recommendations in light of social inequities faced by First Nations people, particularly in health, health care, and infrastructure. The article offers a special focus on the conditions experienced by northern Manitoba First Nations, in particular Wasagamack and Garden Hill First Nations in Island Lake. The COVID-19 pandemic highlights the need for adequate housing and clean water for First Nations communities.</p>
<p>Canadian Council for Aboriginal Business (no date)<sup>69</sup></p> <p>COVID-19 Indigenous Business Survey</p> <p><a href="https://www.ccab.com/wp-content/uploads/2020/06/COVID19-Indigenous-Business-Survey-KEY-FINDINGS-ENG.pdf">https://www.ccab.com/wp-content/uploads/2020/06/COVID19-Indigenous-Business-Survey-KEY-FINDINGS-ENG.pdf</a></p>	Report	<p>The COVID-19 pandemic has serious and negative outcomes for businesses.</p> <ul style="list-style-type: none"> <li>• 91% of Indigenous businesses were negatively impacted by COVID-19.</li> <li>• 76% of businesses experienced a decrease in revenues.</li> <li>• 65% of businesses experienced a decrease in demand for products or services.</li> <li>• 59% experienced the cancellation of meetings, gatherings, or events.</li> <li>• Inuit-owned businesses experienced the highest rate of a revenue drop of 50% or more (38%), compared with Métis- (27%) and First Nations-owned businesses (31%).</li> </ul>
<p>Cherubini L. (August 7, 2020)<sup>56</sup></p> <p>Education in the Post-Pandemic Era: Indigenous Children And Youth</p> <p><i>International Indigenous Policy J.</i> 2020;11(3).</p>	Editorial	<p>The school closures due to the COVID-19 pandemic have resulted in more significant negative outcomes for Indigenous students, who may rely on health-related services and nourishment by attending school compared with other students.</p>

Author (year)	Type of evidence	Summary of evidence
<a href="https://ojs.lib.uwo.ca/index.php/iipj/article/view/10679">https://ojs.lib.uwo.ca/index.php/iipj/article/view/10679</a>		
Conference Board of Canada (June 15, 2020) <sup>59</sup>  <i>The impact of COVID-19 on Canada's Indigenous Tourism Sector: Insights From Operators</i> <a href="https://indigenoustourism.ca/corporate/wp-content/uploads/2020/06/CBOC_ITAC_COVID-19_FINAL-DRAFT.pdf">https://indigenoustourism.ca/corporate/wp-content/uploads/2020/06/CBOC_ITAC_COVID-19_FINAL-DRAFT.pdf</a>	Report	This report, commissioned by the Indigenous Tourism Association of Canada, provides an assessment of the impact COVID-19 has had on the Indigenous tourism sector in Canada.  COVID-19 has resulted in losses in direct employment (loss of 59.4% of jobs, down to 14,624 jobs) and gross domestic product (estimated 65.9% decline in GDP, down to \$555 million), resulting in a negative impact on the Indigenous tourism sector.
First Nations Education Administrators Association (October 23, 2020) <sup>51</sup>  <i>Report of Survey Findings: First Nations Administrators and the Impact of COVID-19</i>  <a href="https://www.fneaa.ca/common/Uploaded%20files/Report%20of%20Survey%20Findings%20Gathering%20Place%20Best%20Practices%20November%2024%20V2.pdf">https://www.fneaa.ca/common/Uploaded%20files/Report%20of%20Survey%20Findings%20Gathering%20Place%20Best%20Practices%20November%2024%20V2.pdf</a>	Report	This report examined the impact of COVID-19 on First Nations schools and communities. Findings that were highlighted include the following: <ul style="list-style-type: none"> <li>• Many students at home don't have adequate access to the internet or devices.</li> <li>• Some children have been forced to compete for computer access with siblings or with parents who have had to work from home.</li> <li>• A lack of information from health authorities led to an increase in the responsibilities and workloads of administrators.</li> <li>• The isolation of Elders not only raises concerns for their well-being but also over the loss of access to valuable knowledge keepers of the community.</li> <li>• The lack of internet and devices has meant that some students have not had any learning for nearly 6 months.</li> </ul>
First Nations Technology Council (no date) <sup>60</sup>  What We Heard: Survey Results on the Impact of COVID-19 on First Nations Communities in British Columbia  <a href="http://technologycouncil.ca/wp-content/uploads/2020/07/V3_COVID19-and-its-impact-on-First-Nations-communities-in-BC_compressed.pdf">http://technologycouncil.ca/wp-content/uploads/2020/07/V3_COVID19-and-its-impact-on-First-Nations-communities-in-BC_compressed.pdf</a>	Survey	Indigenous communities have been facing a variety of issues since the beginning of the COVID-19 pandemic, including social isolation; lack of accessible or reliable internet; and a decline in mental health, job security, and band office access.
Indigenous Business and Investment Council (no date) <sup>61</sup>  <i>IBIC COVID-19 Indigenous Business Survey</i>  <a href="https://www.bcibic.ca/wp-content/uploads/2020/05/IBIC_COVID19-Indigenous-Business-Survey-Final-Report-2020504.pdf">https://www.bcibic.ca/wp-content/uploads/2020/05/IBIC_COVID19-Indigenous-Business-Survey-Final-Report-2020504.pdf</a>	Report	In British Columbia, the impacts of COVID-19 are deeply felt by Indigenous businesses, with 91% of businesses currently being impacted. <ul style="list-style-type: none"> <li>• 84% of businesses have seen a decrease in revenue, with 89% anticipating even more of a decrease in revenue in the near future.</li> <li>• Nearly a quarter of businesses anticipate a decrease of 100% in revenue, with 70% of businesses anticipating a 50% or more decrease in revenue; 60% of seasonal businesses are negatively impacted by mass cancellations.</li> <li>• 39% of businesses are shutting down their offices, at least temporarily.</li> </ul>

Author (year)	Type of evidence	Summary of evidence
		<ul style="list-style-type: none"> <li>• Almost half (49%) of business will reduce their staff by over 50%, with 18% of businesses laying off all their staff.</li> <li>• Businesses are implementing public health measures (e.g., increased sanitation), but are also experiencing challenges due to the difficulty of or inability to shift to virtual or digital services.</li> <li>• While most Indigenous businesses are aware of federal and provincial support (94%), only 34% of businesses are actively accessing this support; existing support may not fully address the needs of businesses.</li> </ul>
<p>Inuit Tapiriit Kanatami (June 2020)<sup>63</sup></p> <p>The potential impacts of COVID-19 on Inuit Nunangat</p> <p><a href="https://www.itk.ca/wp-content/uploads/2020/06/itk_the-potential-impacts-of-covid-19-on-inuit-nunangat_english.pdf">https://www.itk.ca/wp-content/uploads/2020/06/itk_the-potential-impacts-of-covid-19-on-inuit-nunangat_english.pdf</a></p>	<p>Research paper (research briefing)</p>	<p>This paper discusses the potential impacts of COVID-19 on Inuit Nunangat.</p> <p>Inuit living in Inuit Nunangat are at higher risk of the spread of COVID-19 and more severe illness because Nunavummiut are disproportionately impacted by social and economic inequities compared with other Canadian populations.</p> <p>Specifically, concerns include poor living conditions, poverty, food insecurity, pre-existing high rates of respiratory illnesses, household overcrowding, tuberculosis, tobacco use, family violence, and difficulty accessing health care.</p> <p>Education is also a concern; many teachers have left communities and returned to southern Canada because of the pandemic. As well, limited digital infrastructure makes remote learning particularly challenging.</p>
<p>Rounce A, Levasseur K. (November 2020)<sup>13</sup></p> <p><i>COVID-19 in Manitoba: Public Policy Responses to the First Wave</i></p> <p><a href="https://uofmpress.ca/books/detail/covid-19-in-manitoba">https://uofmpress.ca/books/detail/covid-19-in-manitoba</a></p>	<p>Book chapter</p>	<p>Chapter 10: Challenges faced by First Nations communities in Manitoba include:</p> <ul style="list-style-type: none"> <li>• increased difficulty accessing COVID-19 relief charitable donations compared with non-First Nations communities</li> <li>• the inability for remote and rural students to complete their education when they returned home because of a lack of reliable online access and overcrowding in homes.</li> </ul> <p>Food insecurity has worsened within Manitoban First Nations communities. According to a post-COVID-19 Canadian Community Household Survey, 100% of households in 2 remote First Nations communities experienced food insecurity compared with 14.6% of households across Canada.</p>
<p>Levi E, Robin T. (April 29, 2020)<sup>2</sup></p> <p>COVID-19 Did Not Cause Food Insecurity In Indigenous Communities But It Will Make It Worse</p>	<p>Report</p>	<p>The COVID-19 pandemic has exacerbated the issue of food insecurity for many Indigenous communities. This highlights how a pandemic can compound an already existing crisis. Currently, half of First Nations households experience food insecurity. There is currently not enough support for this issue; there is a need for long-term</p>

Author (year)	Type of evidence	Summary of evidence
<a href="https://yellowheadinstitute.org/2020/04/29/covid19-food-insecurity/">https://yellowheadinstitute.org/2020/04/29/covid19-food-insecurity/</a>		solutions to food insecurity, including addressing infrastructure issues.
Saint-Girons M, Joh-Carnella N, Lefebvre R, Blackstock C, Fallon B. (July 2020) <sup>64</sup>  <i>Equity Concerns in the Context of COVID-19 A Focus on First Nations, Inuit, and Métis Communities in Canada</i>  <a href="https://cwrp.ca/sites/default/files/publications/COVID-19%20Equity%20Research%20Brief.pdf">https://cwrp.ca/sites/default/files/publications/COVID-19%20Equity%20Research%20Brief.pdf</a>	Research brief	This research brief explores how COVID-19 has highlighted existing health inequities for First Nations, Inuit, and Métis peoples and communities. It applies a social justice lens, while recognizing the current context and how it has been shaped by racial discrimination and colonialism. Pre-existing inequities can leave Indigenous peoples more susceptible to health and social and economic outcomes from COVID-19.
Schiff R, Buccieri K, Schiff JW, Kauppi C, Riva M. (September 24, 2020) <sup>66</sup>  COVID-19 and pandemic planning in the context of rural and remote homelessness  <i>Can J Public Health</i> . 2020 Sep 24;24:24. <a href="https://pubmed.ncbi.nlm.nih.gov/32974859/">PubMed: PM32974859</a>	Commentary	Many Indigenous communities are rural or remote and are more isolated and vulnerable than urban areas. Infrastructure to address the issue of homelessness and related health concerns has not been sufficient to respond to the homelessness crisis in the context of the COVID-19 pandemic. Rural and remote communities and individuals are particularly underserved.
Bleakney A, Masoud H, Robertson H; Statistics Canada (November 2, 2020) <sup>62</sup>  StatCan COVID-19: Data to Insights for a Better Canada Labour market impacts of COVID-19 on Indigenous people: March to August 2020  <a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00085-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00085-eng.htm</a>	Survey	The Labour Force Survey was examined to explore the labour market impacts of the COVID-19 pandemic on Indigenous people from March to August 2020. <ul style="list-style-type: none"> <li>• The employment rate among Indigenous peoples living off reserve lowered from 57.0% to 50.7% between the periods of December 2019 to February 2020 and March 2020 to May 2020.</li> <li>• The employment losses were comparable to non-Indigenous people, declining from 61.2% to 54.2% for the same time periods.</li> <li>• While the Indigenous employment rate recovered to only 51.9% between June 2020 to August 2020, the non-Indigenous employment rate recovered to 58.0%.</li> <li>• Much of the increase in unemployment among Indigenous peoples was driven by workers being temporarily laid off.</li> <li>• At the beginning of the pandemic, the impact was similar between male and female Indigenous peoples.</li> <li>• By June 2020 to August 2020, the employment rate had rebounded to 96.5% of the pre-pandemic level for Indigenous males but to only 88.4% of the pre-pandemic level for women.</li> <li>• Unemployment rates for Indigenous youth went up by 11.3 points for the May to August period of 2020 compared with the same period in 2019, with a similar trend seen in non-Indigenous youth.</li> <li>• Between May 2020 and August 2020, employment among Indigenous people declined the most for those in trades, transport, and equipment operation and related operations (–16%); sales and service (–11%);</li> </ul>

Author (year)	Type of evidence	Summary of evidence
<p>Statistics Canada (April 17, 2020)<sup>65</sup></p> <p><i>First Nations people, Métis and Inuit and COVID-19: Health and social characteristics</i></p> <p><a href="https://www150.statcan.gc.ca/n1/en/daily-quotidien/200417/dq200417b-eng.pdf?st=hzeXqyDx">https://www150.statcan.gc.ca/n1/en/daily-quotidien/200417/dq200417b-eng.pdf?st=hzeXqyDx</a></p>	<p>Report</p>	<p>and education, law, and social, community, and government services (-18%).</p> <p>Several risk factors exist that may put First Nations, Inuit, and Métis communities at risk of exacerbated COVID-19 issues compared with non-Indigenous populations.</p> <ul style="list-style-type: none"> <li>• Isolated or remote areas, or smaller communities with limited resources, may require individuals to travel to seek health care. For example, 82% of Inuit living in Inuit Nunangat reported that they did not have a family doctor.</li> <li>• Inadequate housing can have negative health outcomes and lead to an increased risk of infection or virus transmission. For example, 44.1% of homes on First Nations reserves are in need of major repairs.</li> <li>• Intergenerational living arrangements can increase the chance of exposure to older adults, who are at higher risk for severe COVID-19 symptoms.</li> </ul>
<p>Arriagada P, Frank K, Hahmann T, Hou F; Statistics Canada (July 14, 2020)<sup>70</sup></p> <p>The key research question posed was: are there populations of asymptomatic individuals (e.g., in population sampling or in congregate living scenarios including long-term care, vulnerable populations; patients being hospitalized, those associated with outbreaks, health care workers) that should be considered a priority for screening for COVID 19 infection (with real-time reverse transcription polymerase chain reaction), with the goal of surveillance and preventing spread within these populations?</p> <p><i>Economic impact of COVID-19 among Indigenous people</i></p> <p><a href="https://www150.statcan.gc.ca/n1/en/pub/b/45-28-0001/2020001/article/00052-eng.pdf?st=RXjdTqAx">https://www150.statcan.gc.ca/n1/en/pub/b/45-28-0001/2020001/article/00052-eng.pdf?st=RXjdTqAx</a></p>	<p>Crowdsourcing survey</p>	<p>Compared with non-Indigenous participants, Indigenous participants were more likely to report that COVID-19 had a detrimental impact (strong or moderate) on their ability to meet essential needs or meet financial obligations (e.g., rent or mortgage payments, groceries, utilities). 44% of Indigenous participants who reported a strong or moderate financial impact of COVID-19 applied for federal income support.</p> <p>22% of Indigenous participants (compared with 9% of non-Indigenous participants) contacted non-police resources (e.g., counsellor, social worker, psychologist) for reasons related to crime. Some participants expressed concerns for their safety and limited access to support services during the pandemic.</p>
<p>Arriagada P, Frank K, Hahmann T; Statistics Canada (August 14, 2020)<sup>55</sup></p> <p><i>StatCan COVID-19: Data to Insights for a Better Canada</i> <i>Perceptions of safety of Indigenous people during the COVID-19 pandemic</i></p> <p><a href="https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00071-eng.htm">https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00071-eng.htm</a></p>	<p>Crowdsourcing survey</p>	<p>This analysis is based on 2 crowdsourcing data collection initiatives: the online collected responses from the questionnaires “Impacts of COVID-19 on Canadians: Mental Health” between April 24, 2020 and May 11, 2020 and “Impacts of COVID-19 on Canadians: Perceptions of Safety” between May 12, 2020 and May 25, 2020.</p> <p>Shelter-in-place recommendations, in addition to the mental health impacts of COVID-19 and higher rates of overcrowding in Indigenous communities, could lead to increased victimization of individuals.</p>

Author (year)	Type of evidence	Summary of evidence
		<p>Indigenous participants were more likely to be concerned about violence in their homes and the impact of COVID-19.</p> <p>11% of non-Indigenous participants and 17% of Indigenous participants believed that there was an increase in crime in their neighbourhoods since the start of the pandemic.</p>
<p>Spence N, Chau V, Farvid M, et al.<sup>71</sup> (October 1, 2020)</p> <p>The COVID-19 Pandemic: Informing Policy Decision-Making for a Vulnerable Population</p> <p><i>International Indigenous Policy J.</i> 2020;11(3).  <a href="https://ojs.lib.uwo.ca/index.php/iipj/article/view/10859">https://ojs.lib.uwo.ca/index.php/iipj/article/view/10859</a></p>	<p>Article</p>	<p>This is a non-research manuscript that provocatively makes the case that policy-makers are challenged in making strong and effective policy decisions. Not all decisions serve vulnerable populations well. The article outlines why and how policy-makers could use an existing social diagnostic tool (the Community Well-being Index) in order to ensure decisions they make maximize impact and minimize harm. This index is thought to recognize and measure, and classify, the vulnerability of Indigenous peoples. It is based on the social determinants of health.</p>
<p>Toronto Foundation (November 2020)<sup>20</sup></p> <p><i>The Toronto Fall Out Report: Half a year in the life of COVID-19</i></p> <p><a href="https://torontofoundation.ca/wp-content/uploads/2020/11/Toronto-Fallout-Report-2020.pdf">https://torontofoundation.ca/wp-content/uploads/2020/11/Toronto-Fallout-Report-2020.pdf</a></p>	<p>Report</p>	<p>This report summarizes experiences of marginalized communities in Toronto during the COVID-19 pandemic.</p> <ul style="list-style-type: none"> <li>• The executive director of Miziwe Bilk Aboriginal Employment and Training reported that the organization is extremely busy providing training because there is a lack of jobs.</li> <li>• Statistics Canada noted that the employment rate for non-Indigenous individuals was recovering much more quickly than for Indigenous individuals.</li> <li>• Aboriginal Legal Services reported that remote court has made it difficult to connect with individuals who may need assistance at the courthouse. The fact that many of its clients lack cell phones or computers exacerbates the barriers they face in the judicial system.</li> </ul>

## Conclusion

This report highlights findings from the body of resources, research, and reports that explore the impact of COVID-19 on First Nations, Inuit, and Métis populations. Four questions framed the structure of this custom report: best practices and areas of strength and resiliency; impacts of COVID-19 related to health and health care services; mental health-related issues and needs; and the impact of COVID-19 on other issues such as food security, housing stability, and other social determinants of health. Of the resources that took a distinctions-based approach, many resources were specific to First Nations communities, but there is a gap in Métis- and Inuit-specific information.

The COVID-19 pandemic has exacerbated existing inequities faced by Indigenous communities and peoples who already face the impacts of systemic racism and colonialism. This is relevant not only for physical health needs but also mental health and other factors such as access to clean water, adequate and safe housing, job loss and economic hardship, and food insecurity — all of which are made worse by the pandemic.

Responses to the COVID-19 pandemic vary, just as each community and individual is unique. Therefore, a one-size-fits-all approach is unlikely to succeed. All levels of government, as well as Indigenous organizations and leadership, have a role in responding to the pandemic. Communities and individuals have responded in various ways, including revisiting pandemic plans, developing thoughtful and culturally appropriate public health messaging, and enhancing community supports, such as food security and mental health supports. There is also a focus on engaging with traditional medicines and knowledge, and using cultural practices and art as a means of staying resilient.

COVID-19 has impacted all populations and has touched almost all aspects of daily living, from how people access health care and go to school or work, to how people socialize and interact with others. The pandemic is ongoing and it is likely the impact of this global event will be felt in the months and years to come.

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## Appendix 2: Literature Search Strategy

OVERVIEW	
Interface:	Ovid
Databases:	MEDLINE All (1946-present)
Date of Search:	October 20, 2020
Study Types:	No filters were applied to limit the retrieval by study type.
Limits:	Publication date limit: 2000-present Humans Language limit: English-language

  

SYNTAX GUIDE	
/	At the end of a phrase, searches the phrase as a subject heading
MeSH	Medical Subject Heading
exp	Explode a subject heading
"	Searches for the exact term within quotations; used to prevent the database from treating certain words or numbers as database commands
*	Before a word, indicates that the marked subject heading is a primary topic; or, after a word, a truncation symbol (wildcard) to retrieve plurals or varying endings
\$	A truncation symbol (wildcard) to retrieve plurals or varying endings
#	Truncation symbol for one character
?	Truncation symbol for one or no characters only
adj#	Requires terms to be adjacent to each other within # number of words (in any order)
.ti	Title
.ot	Original title
.ab	Abstract
.kf	Author keyword heading word (MEDLINE)
.ox	Organism supplementary concept (MEDLINE)
.rx	Rare disease supplementary concept (MEDLINE)
.px	Protocol supplementary concept word (MEDLINE)
.mp	Mapped term
.nm	Name of substance word (MEDLINE)

MULTI-DATABASE STRATEGY	
Line #	Search Strategy
1	(coronavirus/ or betacoronavirus/ or coronavirus infections/) and (disease outbreaks/ or epidemics/ or pandemics/)
2	(nCoV* or 2019nCoV or 19nCoV or COVID19* or COVID or SARS-COV-2 or SARSCOV-2 or SARSCOV2 or Severe Acute Respiratory Syndrome Coronavirus 2 or Severe Acute Respiratory Syndrome Corona Virus 2).ti,ab,kf,nm,ox,rx,px.
3	((new or novel or "19" or "2019" or Wuhan or Hubei or China or Chinese) adj3 (coronavirus* or corona virus* or betacoronavirus* or CoV or HCoV)).ti,ab,kf.
4	((coronavirus* or corona virus* or betacoronavirus*) adj3 (pandemic* or epidemic* or outbreak* or crisis)).ti,ab,kf.
5	((Wuhan or Hubei) adj5 pneumonia).ti,ab,kf.

**MULTI-DATABASE STRATEGY**

Line #	Search Strategy
6	SARS virus/ or Severe Acute Respiratory Syndrome/ or Middle East Respiratory Syndrome Coronavirus/
7	(SARSCOV* or Severe Acute Respiratory Syndrome* or sudden acute respiratory syndrome* or SARS like or MERSCoV* or Middle East Respiratory or camel flu or EMC 2012 or swine flu).ti,ab,kf.
8	((SARS or MERS) adj5 (virus* or coronavirus* or betacoronavirus* or CoV or CoV2 or HCoV or pandemic or epidemic or outbreak* or infect* or respiratory or pathogen*)).ti,ab,kf.
9	*pandemics/
10	pandemic*.ti.
11	((flu or influenza* or H1N1 or H1N2) adj3 (pandemic* or epidemic* or outbreak*)).ti,ab,kf.
12	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11
13	Arctic Regions/
14	Health Services, Indigenous/
15	Indigenous Peoples/
16	Indians, North American/
17	exp American Native Continental Ancestry Group/
18	Inuits/
19	Nunavut/
20	Shamanism/
21	Oceanic Ancestry Group/
22	(Aboriginal? or aborigine? or american indian? or (alaska* adj native*) or indigene* or indigenous* or tribe? or tribal* or maori or tangata whenua* or torres straight islander?).ti,ab,kf.
23	(Aamjiwnaang or Abenaki? or Abitibiwinni or Ahtahkakoop or Aishihik or Aklavik or Akuliarmiut* or Akwesasne* or Alert Bay or Aleut* or Alexandra Fiord or Algonqui?n* or Amadjuak or Amerind* or Amisk or Anish?na?b?e* or Aquiatulavik Point or Arctic or Armstrong settlement or Aroland or Arviat or Asimakaniseekan or Assabaska or Assiniboine or Athabasca? or Athapaskan or Atikamek* or Attawapiskat or Aundeck-Omni-Kaning or autochtone*).mp.
24	(Baffin Island or Baker Lake or Barriere Lake or Batchewana or Bathurst Inlet or Beardy or Bearfoot Onondaga or Beaver Creek or Behochoko or Belcher Islands or Beothuk* or Berens River Bloodvein or Betsiamite* or Bibigo?ining or Biinjitiwabik Zaaging or Bimose or Bingwi Neyaashi or Birch Portage or Bittern Lake or Bkejwanon* or Blackfoot or Bois-brule* or Brochet or Budd's Point or Buffalo River or Bungee or Bunibonibee or Bylot Island).mp.
25	(Cacouna or Cambridge Bay or Canoe Lake or Canupawakpa or (Cape adj1 (Dorset or Dyer or Smith)) or Carcross or Carmacks or Carrot River or Carry the Kettle or Cayuga or Charlton Depot or Chesterfield Inlet or Chipewyan or Chipp#wa* or Chisasibi or Clyde River or Coal Harbour or Colville Lake or Coral Harbour or Coucoucache or country food* or Craig Harbour or Cree or Cypress Health).mp.
26	(Dakelh or Dauphin River or Dawson City or Day Star or Deh Cho or Deline or Dene or Denesuline or Destruction Bay or Devon Island or Dipper Rapids or Dogrib* or dokis or Dopitciwa* or Dundas Harbour or Dunne?za).mp.
27	(Eabametoong or (Eagle adj (Plains or village)) or Eastmain or Eeyou Istchee or Ehdiitat or Ekuanitshit* or Elak Dase or Ellesmere Island or Ennadai or eskimo* or Esquimau* or Essipit*).mp.
28	(first nation? or first people? or Firstnation? or Fisher River or Fond du Lac or (Fort adj1 (Conger or Good Hope or Hope or Liard or McPherson or Providence or Ross or Selkirk or Simpson or Smith)) or Four Portages).mp.
29	(Grandmother's Bay or Gespeg or Gesgapegiag* or Ginoogaming or Gits#an or Gjoa Haven or (God's adj1 (river or lake)) or Grise Fiord or Gwi?ch?in or Gwichya).mp.
30	(Haida or Haines Junction or Haisla or Hall Beach or (Hare adj1 (boy* or girl* or men or man or woman or women or people* or person or persons or band? or native* or tribe or tribal)) or Hatchet Lake or Haudenosaunee or Hay River or Hazen Camp or Heiltsuk or Huron or Huron-Wendat or Huronne-Wendat).mp.

MULTI-DATABASE STRATEGY

Line #	Search Strategy
31	(Igloodik or Igluligaarjuk or Ikaluit or Ils a la Crosse or ((indian or council) adj3 band) or Innu? or Inuit* or Inuk* or Inupiat* or Inuvik or Inuvialu* or Inuinnaqtun or Iqaluit or Iqaluktuttiaq or Iroquois or Isachsen or Island Lake or Itivimiut* or Ivujivik).mp.
32	(James Bay or Joseph Bighead).mp.
33	(Kabapikotawangag or Kalaallit* or Kahkewistahaw or Kahnawa?ke or Kanesatake or Kasabonika Lake or Kashechewan or Kaska? or Kawacatoose or Kawawachikamach* or Kebaowek or Keeseekoowenin or Kekerten or Keno City or Keewaytinook or Kee?Way?Win or Kelsey Trail Health or Kiashke Zaaging or Kimmirut or Kingnaitmiut* or King William Island or Kinistin or Kinonjeoshtegon or Kipawa or Kipisa or Kitchenuhmaykoosib or Kitcisakik or Kitigan Zibi or Kitikmeot or Kitimat or Kitsakie or Kivalliq or Kivitoo or Konadaha Seneca or Koocheching or Ktunaxa or Kugaaruk or Kugluktuk or Kutchin* or Kuujuaq or Kwakiutl or Kwakwaka?wakw).mp.
34	(La Plonge or (Lac adj (Brochet or Romanie or John or Simon or La Hache or La Ronge)) or Lake Manitoba or Lean Man or Lenape or (Little adj (Black Bear or Saskatchewan or Red River or Salmon)) or Listuguj* or Long Point First or Lucky Man).mp.
35	(M?Chigeeng or MacDowell Lake or Mackenzie River Basin or MacKenzie Valley or Magnetawan or Maguse River or Makaw or Makao or Malecite* or Maliotenam or Maliseet or Mamawetan or Mamit Innuat or Mamuiton or Manawan or Mani-Utenam or Manitoulin or Manto Sipi or Mashteuiatsh or Matachewan or Mathias Colomb or Matimekosh* or Matimekush* or Mattagami or Mawiomi or (medicine adj (man or men or woman or women)) or Metchif or Metif or Metif or metis or Miawpukek or Michif or Mic?mac or mic mac or Migmaw or Mig maw or Mi?gmaq or Mi?gmawei or Mi?kmaq or Mi#chif or Mingan or Ministikwan or Minoahchak or Mirond Lake or Mishkeegogamang or Missanabie or Mistawasis or Mistissini* or Mitaanjigaming or Mixed-blood* or Mo?hawk or Mocrebec or Montagnais or Moos-Toosis or (moravian adj2 thames) or Moraviantown or Morin Lake or Mosquito-Grizzley Bear* or Muscowpetung or Mushkegowuk or Muskoday or Muskowekwan).mp.
36	("Nacho Nyak Dun" or Naicatchewenin or Nain or Nako#a or Namaygoosisagagun or Nan#sivik or Naongashiing or Naotkamegwanning or Naskapi* or Natashquan* or (native adj2 (group? or health or community or communities or person\$ or people\$ or population* or america* or canad* or Nation or band or bands)) or (Native* adj1 (man or men or women or woman or boy* or girl* or child* or adolescent* or youth? or adult*)) or Nekaneet or Nelson House or Nemaska* or Nemiscau or Neskantaga or Netsilik or New Thunderchild or Nibinamik or Nigigoonsiminikaaning or Nihtat or Nipissing or Nisga?a or Nisichawayasihk or Nlaka?pamux or Norman Wells or Northlands Nursing Station or North Slave or (northern adj1 (Saskatchewan or Manitoba or Quebec or Alberta or British Columbia or Ontario)) or Norway House or Nottingham Island or Nugumiut* or Nunatsiavut or Nunav* or Nutaqqavut or Nuwata or Nuxalk or Nu-chah-nulth).mp.
37	(ob?djiwan or Obashkaandagaang or Ocean Man or Ochapowace or O-Chi-Chak-Ko-Sipi or Ochiichagwe or Odanak or off-reserve or Oji-Cree or Ojibw* or Okanagan or Okanese or Okemasis or Oki or Old Crow or One Arrow or Oneida or Onion Lake or Onigaming or Onkwehonwe or Onodaga or on-reserve or Opaskwayak or Opawakoscikan or O-Pipon-Na-Piwin or Opitciwa* or Oqomiut* or Original people? or Ouj?-Bougoumou or Ouje?Bougoumou or Oweenkeno).mp.
38	(Padlei or Padloping Island or Pakua Ship* or Pakuaship* or Pangnirtung or Parmachene or pasqua or Passamaquoddy or Pauingassi or Pauktuutit or Paulatuk or Peepeekisis or Peguis or Pelly or Perry Island or Pessamit* or Peter Ballantyne or (People adj2 (premier or racine or natif*)) or Pheasant Rump or Piapot or Pikogan or Pikwakanagan or Pinaymootang or Pine Bluff or Pond Inlet or Port Burwell or Potato River or Potawatomi or Prairie North Health or premiere nation or Prince Albert Parkland Health or Pukatawagan).mp.
39	(Qaumauangmiut* or Qayuqtuvik or Qikiqtarjuaq or Qikqta* or Qingaumiut* or Qoloqtaaluk).mp.
40	(Rankin Inlet or Rapid Lake or Read Island or Red Pheasant or red road or Red Sucker Lake or Repulse Bay or Resolute Bay or Resolution Island or Roseau River).mp.
41	(Sabaskong or Sachs Harbour or Sagamok or Sagkeeng or Sahtu or Sakimay or Salish or Sa?lteaux or Sandy Narrows or Sanikiluaq or Sanikiluarmiut* or Sapotawayak or Saulteaux or Saumingmiut* or Sayisi Cree or Schefferville or Sec wepmc or Seekaskootch or Sekani or Sekon or Seneca or Sept-Iles or shaman* or Shamattawa or Shawanaga or Sheguiandah or Shesheep or Shesheganing or Shoal Lake or Shubenacadie or Sikusilaamiut* or Sioux or Siphik or Six Nations or Skownan or Slave Lake or Slavey* or Southend or South Indian Lake or South Slave

**MULTI-DATABASE STRATEGY**

Line #	Search Strategy
	or Sunrise Health or Standing Buffalo or Stanjikoming or Starblanket or Stl?atlimc or St Theresa Point or Sturgeon or Subarctic or Sucker River or Sweetgrass).mp.
42	(Tadoule Lake or Tagish or Tahltan or Takuaikan or Talirpingmiut* or Talo?yoak or Ta?an Kwach?an or Tanana? or Tanquary Camp or Tarramiut* or Tasttine or Tataskweyak or Tavani or Taykwa Tagamou or Temagami or T#mis#aming or Teslin or Tetlith or Thom Bay or Tlingit or Tliche or Tli Cho or Tootinaowaziibeeng or Tr?ondek Hwech?in or Trout Lake or Tsilgehtchic or Tsilhqot?in or Tsimshian or Tsuu T?inia or Tulita or Tuktoyaktuk or Tumor Lake or Tungasugit or Turtle island or Tuscarora or Tutchone* or Tuttarvingat).mp.
43	(Uashat or Ulukhaktck or Umingmaktok or Unamen Shipu or Ungava or Upper Liard or Uqqurmiut*).mp.
44	(Victoria Island or Vuntut).mp.
45	(Waban-Aki or Wabaseemoog or Wabauskang or Wabigoon Lake or Wager Bay or Wahgoshig or Wahnapietae or Wahpeton or Wakashan or Wapachewanak or Wapekeka or Wa-Pii or Wasagamack or Wasauksing or Washagamis Bay or Waskaganish or Waswanipi or Waterhen or Watson Lake or Wauzhushk or Wawakepewin or Waywayseecappo or Webequie or Weenusk or Wemindji or Wemotaci or Wendake or Wendat* or Wet?suwet?en or Whale Cove or Whapmagoostui or (White adj (Bear or Cap)) or Whitehorse or Wikwemikong or Willow Bunch or Winneway or Witchekan or Wolastoqiyik or Wolinak or Wood Mountain or Woody Lake or Wrigley or Wuskwi or Wyandot).mp.
46	(Yellowkni* or Yellowquill or Yellow Quill or York Landing or Yukon).mp.
47	((apache not (apache ii or apache iii or (apache adj2 score*))) or navajo or hopi or cherokee or cheyenne or choctaw or comanche or shawnee or shoshone or paiute or mission indian* or seminole).ti,ab,kf.
48	13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47
49	12 and 48
50	*influenza, human/ or (flu or influenza* or H1N1 or H1N2 or coronavirus).ti.
51	(Aboriginal? or aborigine? or american indian? or (alaska* adj native*) or indigene* or indigenous or first nation* or first people* or metis or inuit or native people* or tribe? or tribal* or maori or tangata whenua* or torres straight islander?).ti.
52	50 and 51
53	49 or 52
54	exp animals/
55	exp animal experimentation/ or exp animal experiment/
56	exp models animal/
57	nonhuman/
58	exp vertebrate/ or exp vertebrates/
59	or/54-58
60	exp humans/
61	exp human experimentation/ or exp human experiment/
62	or/60-61
63	59 not 62
64	53 not 63
65	limit 64 to yr="2000 -Current"