



Self-isolation in an overcrowded house?

How overcrowded homes in Indigenous communities impact health and prevent families from following COVID-19 public health advice.

**Dr. Lloyd Douglas MBBS, CCFP, MPH, FRCPC
December 2, 2020**

FNH Community Housing Webinar Series

NO DISCLOSURES

Objectives

- Briefly outline how housing and health are related;
- Briefly demonstrate how housing inequities lead to health inequities.
- Define housing suitability of private household.
- Discuss the reasons why overcrowded homes are associated with higher COVID-19 infection rates.
- Discuss how a lack of housing in Indigenous communities prevents families from following public health advice.



Learning Objectives

Image: <https://thepeakperformancecenter.com/wp-content/uploads/2015/08/Learning-Objectives-target.jpg>

Housing and Health – Healthy Housing



“Healthy housing is shelter that supports a state of complete physical, mental and social well-being.”

WHO Housing and health guidelines. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

Image: <https://www.nhlp.org/initiatives/healthy-housing/>

Acceptable Housing – Adequate housing – Suitability Housing

- **Acceptable housing** is “adequate in condition, suitable in size, and affordable”
- **Housing is adequate** if it does not require any major repairs
- **Housing suitability** refers to whether a private household is living in suitable accommodations according to the National Occupancy Standard (NOS);



Image: <https://www.brooksmacdonald.com/~media/Images/B/Brooks-Macdonald-V4/content-images/insight/seven-tips-suitability-report.jpg?h=554&la=en&w=1252>

National Collaborating Centre for Aboriginal Health (2017). Housing as a Social Determinant of First Nations, Inuit and Métis Health. Prince George, BC: National Collaborating Centre for Aboriginal Health.

Household Crowding

Household crowding is a condition where the number of occupants exceeds the capacity of the dwelling space available, whether measured as rooms, bedrooms or floor area, **resulting in adverse physical and mental health outcomes**

WHO Housing and health guidelines. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO



shutterstock

IMAGE ID: 216844372
www.shutterstock.com

Image: <https://image.shutterstock.com/image-vector/house-overcrowded-by-unhappy-inhabitants-600w-216844372.jpg>

Measures of crowding

The Canadian National Occupancy Standard (CNOS) assesses the bedroom requirements of a household based on the following criteria:

- There should be no more than 2 persons per bedroom;
- Children less than 5 years of age of different sexes may reasonably share a bedroom;
- Children 5 years of age or older of opposite sex should have separate bedrooms;
- Children less than 18 years of age and of the same sex may reasonably share a bedroom; and
- Single household members 18 years or older should have a separate bedroom, as should parents or couples.

Using this measure, households that require at least one additional bedroom are considered to experience some degree of overcrowding.

<https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=100731>

Key health risks related to housing



Poor housing conditions are associated with a wide range of health conditions, including

- respiratory infections,
- asthma,
- lead poisoning,
- injuries,
- and mental health.

Image: <https://www.cph.co.nz/wpcontent/uploads/Housing-300x225.jpg>

Krieger, J., & Higgins, D. L. (2002). Housing and health: time again for public health action. *American journal of public health*, 92(5), 758–768

Housing Inequities Lead to Health Inequities

Figure 1: How are Housing and Health Related?¹

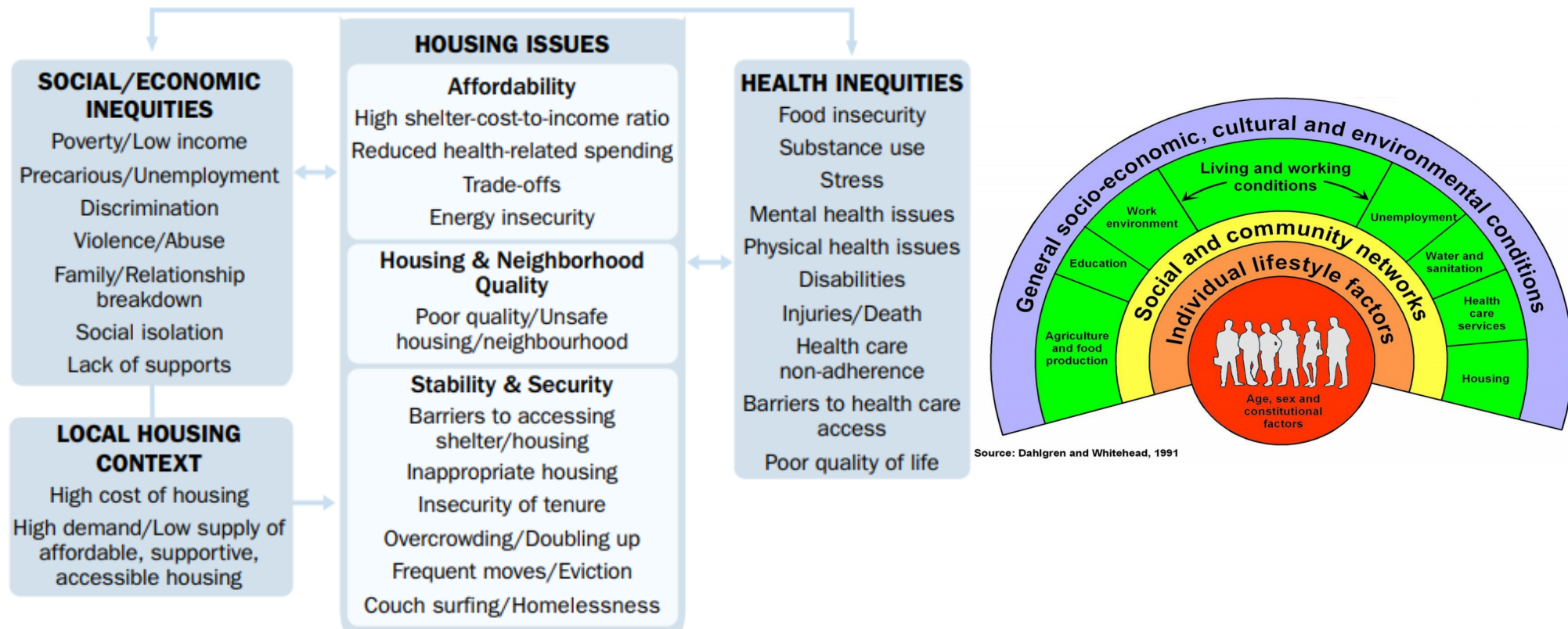


Figure1 from <https://www.toronto.ca/legdocs/mmis/2016/hl/bgrd/backgroundfile-97428.pdf>

Housing Inequities Lead to Health Inequities



https://i.cbc.ca/1.2456902.1432678153!/fileImage/httpImage/image.jpg_gen/derivatives/16x9_780/pikangikum-housing-crisis-northern-ontario.jpg

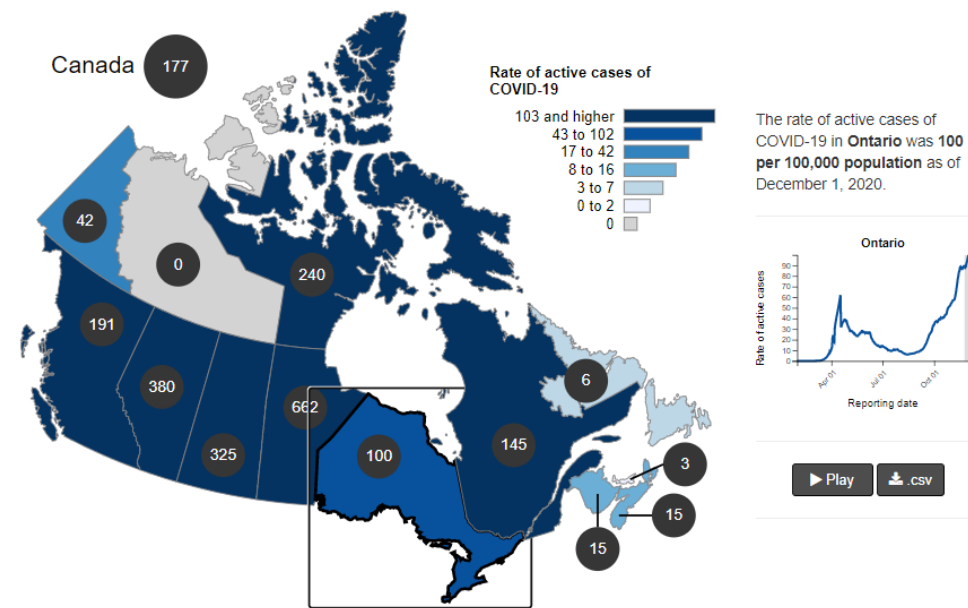
COVID-19 Pandemic - Current Situation

Current situation

Rate of active cases of COVID-19 in Canada as of December 1, 2020

Last data update 2020-12-01 19:01 EST

Hover over provinces and territories to see total cases, active cases, recovered cases, number of people tested or deaths in Canada over time. Click the play button to animate the map.



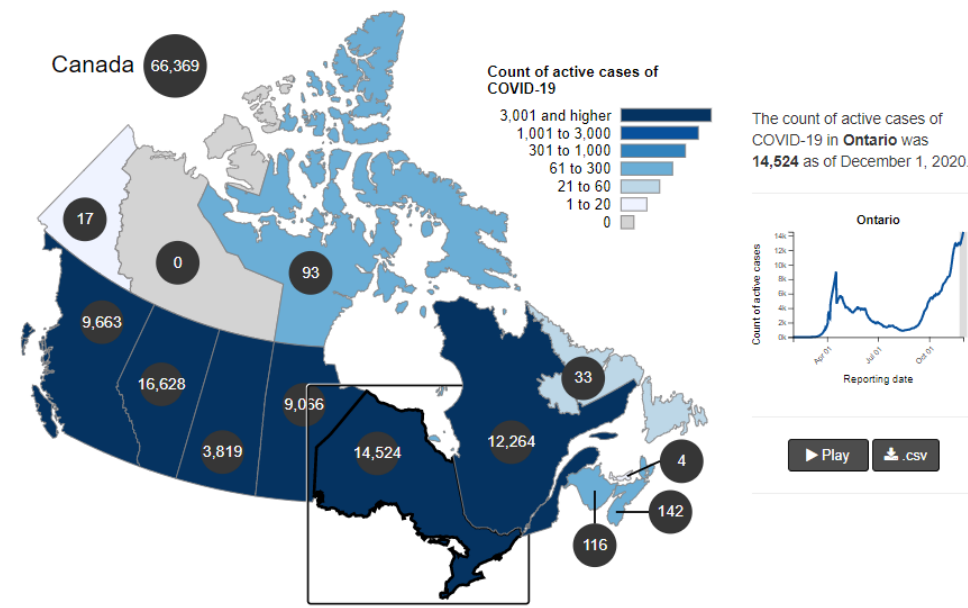
This information is based on data from our provincial and territorial partners. It is current as of December 1, 2020, 7 pm EDT. For the most up to date data for any province, territory or city, please visit their web site.

Current situation

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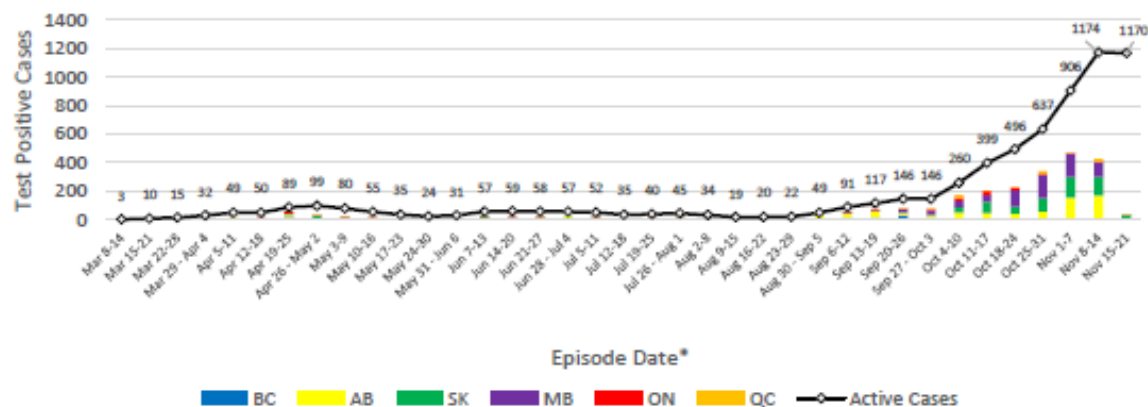
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Fig. 1

Number of newly reported and active COVID-19 cases in First Nations communities by FNIHB region and episode date*



November 17, 2020 FNIHB COVID-19 Epi Update

<https://www.sac-isc.gc.ca/eng/1589895506010/1589895527965#cmv>

Fig 2

COVID-19 Cases
Rate per 100,000

COVID-19
% Hospitalizations

COVID-19 Death
Case Fatality Rate

Can

803.9

7.8%

3.6%

FN

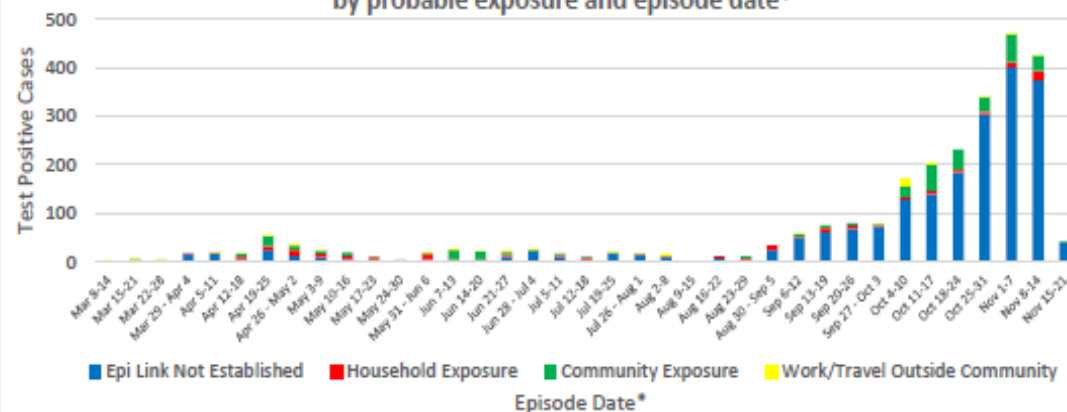
503.5

4.6%

0.8%

Fig. 3

Newly reported COVID-19 cases in First Nations communities in the provinces by probable exposure and episode date*



Measures to control COVID

Take steps to reduce the spread of the coronavirus disease (COVID-19):

- follow the advice of your local public health authority
- wash your hands often with soap and water for at least 20 seconds
- use an alcohol-based hand sanitizer containing at least 60% alcohol if soap and water are not available.
- try not to touch your eyes, nose or mouth
- avoid close contact with people who are sick and practice physical distancing
- cough and sneeze into your sleeve and not your hands
- stay home as much as possible and if you need to leave the house practice physical distancing (approximately 2m)

If you have symptoms of COVID-19 you should **“ISOLATE AT HOME TO AVOID SPREADING ILLNESS TO OTHERS”**

- Stay in a separate room and use a separate bathroom from others in your home, if possible.

<https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/coronavirus/help-reduce-spread-covid-19/help-reduce-spread-covid-19-eng.pdf>

HELP REDUCE THE SPREAD OF COVID-19

TAKE STEPS TO REDUCE THE SPREAD OF THE CORONAVIRUS DISEASE (COVID-19):

- follow the advice of your local public health authority
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- use an alcohol-based hand sanitizer containing at least 60% alcohol if soap and water are not available
- try not to touch your eyes, nose or mouth
- avoid close contact with people who are sick and practice physical distancing
- cough and sneeze into your sleeve and not your hands
- stay home as much as possible and if you need to leave the house practice physical distancing (approximately 2 m)

SYMPTOMS

Symptoms of COVID-19 can:

- take up to 14 days to appear after exposure to the virus
- be very mild or more serious
- vary from person to person

IF YOU HAVE SYMPTOMS

- isolate at home to avoid spreading illness to others.
- Avoid visits with older adults, or those with medical conditions. They are at higher risk of developing serious illness.
- Call ahead before you visit a health care professional or call your local public health authority.
- If your symptoms get worse, contact your health care provider or public health authority right away and follow their instructions.

FOR INFORMATION ON COVID-19:

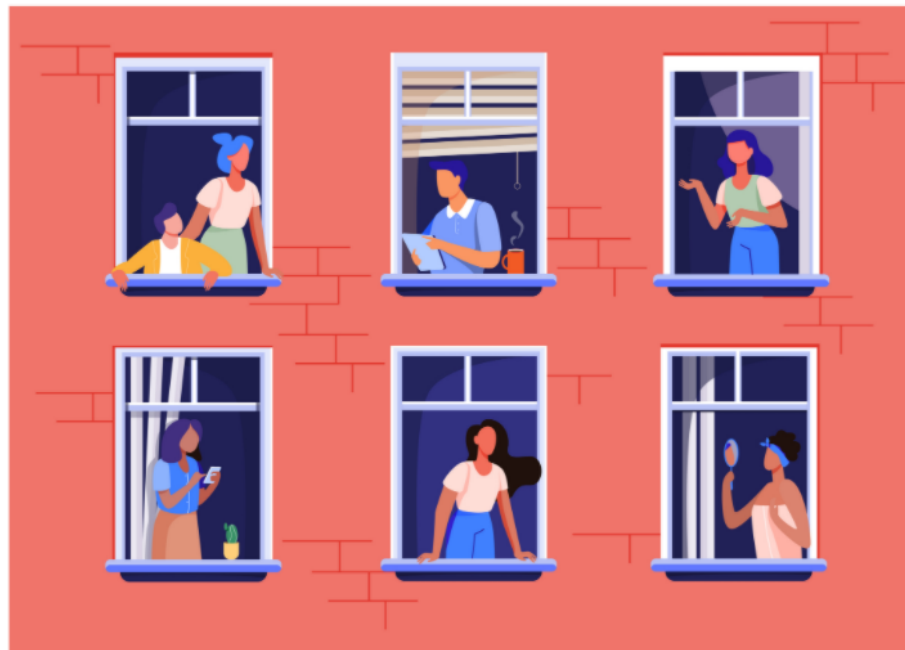
1-833-764-4397 | canada.ca/coronavirus

Public Health Agency of Canada | Santé Canada

Canada

Urban Centre – COVID and Overcrowding Report

Crowded housing and COVID-19: Impacts and solutions

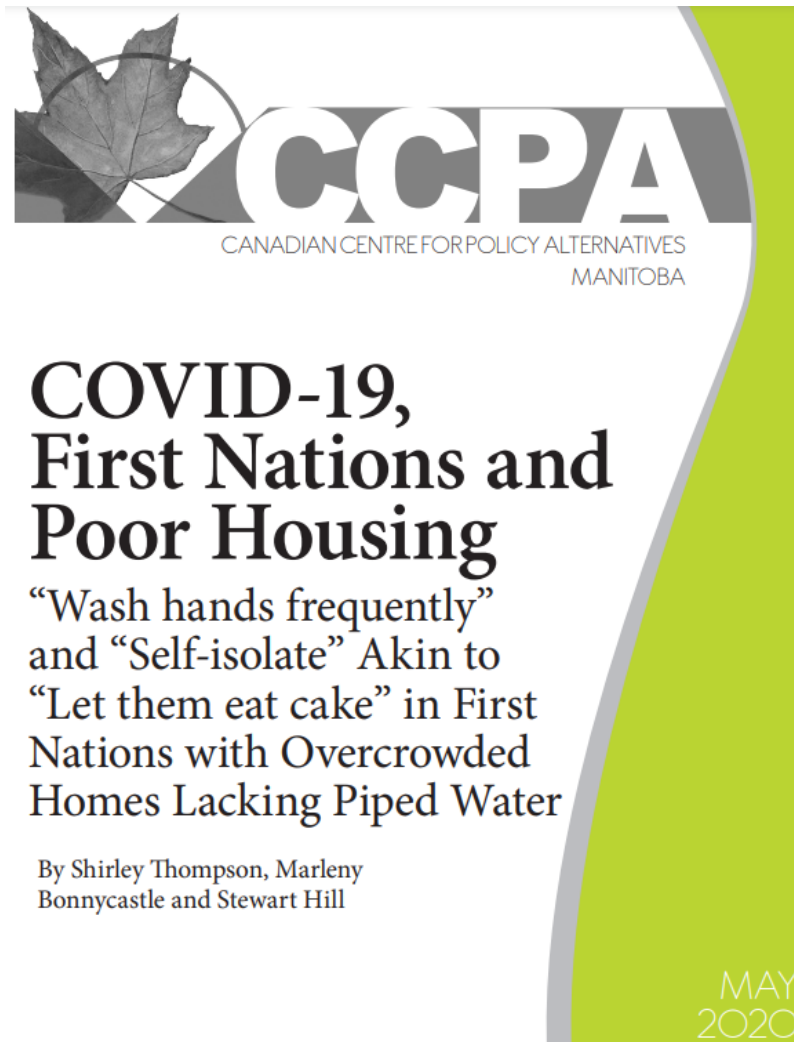


<https://www.wellesleyinstitute.com/healthy-communities/crowded-housing-and-covid-19-impacts-and-solutions/>

“...with the COVID-19 pandemic;
however, we do need to pay
attention to the lack of housing as
it directly impacts our ability to
follow public health advice
designed to mitigate the impacts
of the virus on the vulnerable
citizens in our communities”

Grand MKO Chief Garrison Settee

<https://www.policyalternatives.ca/sites/default/files/uploads/publications/Manitoba%20Office/2020/05/COVID%20FN%20Poor%20Housing.pdf>



“Asking people to wash their
hands and isolate in
overcrowded homes without
running water is like asking
people, unable to afford bread,
to eat cake.”

“The First Nation infrastructure
crisis is more than a building
problem or a health problem
for COVID-19 transmission and
health care. It is a colonial
systems’ problem.”

COVID-19 could be 'devastating' for First Nations, says Matawa First Nations CEO



Overcrowded housing could make self-isolation impossible, says Neskutanga chief



Jorge Barrera · CBC News · Posted: Mar 11, 2020 5:57 PM ET | Last Updated: March 11



David Paul Achneepineskum, CEO of Matawa First Nations Management, says staff who attended a Toronto mining conference linked to a case of the COVID-19 illness have been asked to work from home. (Gord Ellis / CBC)

<https://www.cbc.ca/news/indigenous/covid19-first-nations-housing-overcrowding-1.5494077>

**“Overcrowded housing
could make self-
isolation impossible,”**

Chief Moonias

**“preventative measures
may not be enough
in many remote First
Nations which face a
shortage of housing.”**

Chief Moonias



Indigenous Services Minister Marc Miller says his department's health branch is engaged with the COVID-19 preparations at the community level. (Adrian Wyld/The Canadian Press)

Remote First Nations Main Response to the Pandemic.



Image: https://330pay2z6wxh3dnglq18hnqs-wpengine.netdna-ssl.com/wp-content/uploads/2020/11/23409362_web1_201125-UWN-Tla-o-qui-aht-Lock-down_1.jpg

Sioux Lookout	Dryden / Red Lake	Kenora	Thunder Bay	Winnipeg
Note: Travel Advisory is based on the number of positive cases in each location.				

<https://www.sifnha.com/covid/>

Alternative COVID care sites

NEGATIVE PRESSURE ISOLATION SYSTEM



Meets CDC guidelines set by the Healthcare Infection Control Practices Advisory Committee

<https://blu-med.com/>

Sioux Lookout First Nations
Health Authority
COVID-19 Regional Response
Team
(SLFNHA CRRT)

Alternate COVID-19 Care Sites

June 14, 2020



Manitoba

Shamattawa First Nation seeking military aid for COVID-19 outbreak



A COVID-19 rapid response team is already on the reserve 745 kilometres northeast of Winnipeg

 [Nicholas Frew](#) · CBC News · Posted: Nov 30, 2020 10:37 PM CT | Last Updated: November 30



"I truly believe that if we had adequate housing and were able to keep safe distance from one another, then it wouldn't be as bad,"

Chief Eric Redhead

<https://www.cbc.ca/news/canada/manitoba/shamattawa-first-nation-manitoba-covid-19-outbreak-military-1.5822877>

**Government of Canada Announces Funding for New Voluntary
Self-Isolation Centre in Toronto**

From: [Public Health Agency of Canada](#)

News release

September 11, 2020 Toronto, ON Government of Canada

<https://www.canada.ca/en/public-health/news/2020/09/government-of-canada-announces-funding-for-new-voluntary-self-isolation-centre-in-toronto.html>

**Government of Canada Announces Funding for New COVID-19
Safe Voluntary Isolation Centre in Peel, Ontario**

From: Public Health Agency of Canada

News release

November 26, 2020 | Region of Peel, ON | Government of
Canada

<https://www.canada.ca/en/public-health/news/2020/11/government-of-canada-announces-funding-for-new-covid-19-safe-voluntary-isolation-centre-in-peel-ontario.html>

Conclusion





INDEPENDENT FIRST NATIONS ALLIANCE | IFNA.CA

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13. <https://www.cbc.ca/news/canada/manitoba/shamattawa-first-nation-manitoba-covid-19-outbreak-military-1.5822877>
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