

## **Infectious Questions EP 22: Public health measures for COVID-19 in northern and remote communities**

Shivoan: Welcome to Infectious Questions, a Public Health podcast produced by the National Collaborating Centre for Infectious Diseases. I am Shivoan Balakumar. We are now onto the seventh episode of our COVID-19 series and on this episode, you'll get to hear our conversation with Dr. Michael Isaac, Medical Officer of Health in the Northern Health Region of Manitoba. NCCID's Margaret Haworth-Brockman spoke to Dr. Isaac about Public Health roles, measures and considerations for northern and remote communities in Canada. Here is her conversation with Dr. Isaac.

Margaret: Thank you for joining us Dr. Isaac. Can you tell us a bit about how northern and remote communities differ from larger urban centres when thinking about the risk for transmission and severe outcomes from COVID-19?

Michael: I think it's important to think about some of the key differences between the north and the south and the context obviously is different in the north and especially in Manitoba, approximately 70% of Northern Manitobans are indigenous. We also have a fair amount of development and industry in the north. It brings people, workers and travellers into the north and that plays a part in transmission for sure. When I think about our northern First Nations communities, due to effects of colonization and systemic racism, many of those communities experience differences in the social determinants of health. So things like overcrowded housing certainly potentiate or increase the risk of spread of COVID-19 for any contacts of a confirmed case for example.

I think you also have to think about income, security and an individual's ability to buy supplies. For example, cleaning supplies or hand sanitizer may not be as available in some communities or individuals may not have the necessary means to purchase those supplies, which may increase the risk of transmission as well. Those are a couple of key differences. I also think there are certainly strengths in many northern First Nations communities, which may reduce the risk of transmission, so currently I know many northern First Nations communities have taken a very active role in planning and updating their emergency preparedness plans. Many of them have closed travel into their communities to try and insulate themselves from the introduction of COVID-19 into their community.

There's a lot of planning going on right now between indigenous partners and communities to try and reduce the risk. Another example is healthcare workers. Communities have expressed that they're worried that healthcare workers, who do not live in the community but fly up into the community or drive in, may actually bring COVID with them. So, they've advocated for themselves and many people have collaborated to try and come up with other solutions which have included using virtual visits rather than in-person visits in

certain communities. I think there's certain factors that increase the risk and certain factors that would decrease the risk in certain communities.

Margaret: Thank you. So, how would the differences that you're speaking of, the strengths and the challenges, affect your role and others in Public Health Planning and Response?

Michael: Yeah we really need to consider the local context, and interventions that we may put into place in a large urban population for example just won't work in a northern and remote population. When thinking about Public Health and Public Health measures for COVID-19, one of the key ways that we can try and contain the virus is to do really good painstaking case and contact management. For contacts of cases, it's important that they're able to self-isolate for 14 days after exposure from the case. So, when thinking about the northern context for individuals who are living in very crowded housing, that housing may not be the perfect place for them to self-isolate. We need to think about other locations where they may be able to do that. That might mean flying certain individuals out of the community who may be at higher risk for serious complications of COVID to do their self-isolation in another location.

It may be identifying other locations within the community, for example a school or a local hotel, where people could self-isolate rather than stay in the home. Those are some considerations around overcrowding. I mean, I think for disease modelling in northern populations, you need to take into account the differences in health gaps. Communities in northern populations may have very high prevalence of diabetes or hypertension, which have been identified as being risk factors for more serious illness with COVID-19. It's important to ensure that you put those risk factors in any modelling that's done and think about how people move in smaller communities or smaller work camps. Obviously, it's different than in larger urban centres, so models need to take into account how people move and how people interact in those smaller spaces.

Margaret: We know that many people in the north rely on local resource industries, are there additional Public Health concerns about the camps near mines or hydro dams that come to mind?

Michael: With respect to other northern locations like work camps, of course development in northern locations in Canada's mid-north, often require that workers live and work on site. Some of these work camps can be quite large but may also have confined spaces, so a lot of planning needs to go into thinking about how those people live, who's coming onto the site at the work camp, who's leaving and what communal spaces that they have. So, work camps likely are higher risk than a smaller community in a southern location because of the amount of people that are congregating in the same space. For example, it's necessary to think about closing communal spaces like gyms, places where people eat, dining halls and that type of thing to really get across the message of social distancing when individuals are not working together.

We've been meeting with industries in the north to make sure that they understand what our Public Health measures mean, how to approach social distancing, and a big topic that seems to change almost daily now is around screening of people coming in and going out of camp. The criteria for screening always has included people who are symptomatic or who are a contact of a COVID case; those people would essentially be screened out before they leave home and not make it up to the north, but the travel histories have changed. Originally, it was international travel that was identified as the risk factor, so those individuals were screened out and did not come up to the north, and now we've added domestic travel onto that.

There is a fair amount of screening going on. We try and work with industry to put into place all of the different Public Health measures that they can and try and, you know, trying to go over and above what's recommended. They are recognizing that they also need essential staff on site that may not exist locally. So, there are times when individuals may need to come from out of province to provide some specialized work at a site, so we try and make provisions for that and are very careful about those individuals introducing COVID into a camp.

Margaret: Well that's great. Is there anything else you would like to comment on about the Public Health role in managing COVID-19 right now in northern and remote communities?

Michael: I think one of the key roles, Margaret, is to collaborate as much as possible, with all the different stakeholders. That's with the communities themselves and the health directors in communities. Also, with Tribal Councils and in Manitoba. For example, we also have regional indigenous partners like MKO and Southern Chiefs' Organization, so it's important to think about the local indigenous partners and ensure that we plan in a way that incorporates their views and hears what they have to say. We want to get a lot of good feedback and really have a tight relationship so that we can all help prevent the number of COVID cases in community together.

Shivoan: That was Margaret Haworth-Brockman's phone conversation with Dr. Michael Isaac. If you have other Public Health question on COVID-19 please reach out to us. The production of this podcast has been made possible through a financial contribution from the Public Health Agency of Canada but the views expressed here do not necessarily represent those of the agency. The host organization of the NCCID is the University of Manitoba. Learn more at [nccid.ca](http://nccid.ca).