WHAT WE HEARD

ABOUT COVID-19 VACCINE BEHAVIOUR FROM CITIZENS OF THE MÉTIS NATION OF ONTARIO

PART I

Métis Nation of Ontario

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Taanshi/Hello and welcome to this community report on information gathered on COVID-19 vaccine intentions from Citizens of the Métis Nation of Ontario (MNO). We would first like to thank the thousands of Citizens who filled out the first MNO COVID-19 Survey in February and March of 2021 and the 16 Citizens who spent some time sharing their thoughts and opinions on the COVID-19 vaccines with us in interviews in April and May of 2021. Your participation in this research is truly invaluable and we could not have done it without you.

We would also like to thank the Métis Nation of Alberta, including their Health Director Reagan Bartel and their research partners at the University of Alberta, including Dr. Maria Ospina, for sharing the draft survey tool they had co-developed, and Dr. Shannon MacDonald who shared her draft survey tool on COVID-19 vaccine hesitancy from a national-level project. This made sure we could do this research quickly, which was needed as the COVID-19 vaccines were rolling out across Canada. We also give thanks to the MNO Leadership, Senators, and Staff members who reviewed the survey to determine what was most relevant in Ontario and how best to connect with Citizens. Last, we would like to acknowledge Indigenous Services Canada for providing funding for this research along with the in-kind funding from the MNO. This was a community effort and has set the foundation for ongoing research to benefit MNO Citizens. The information we gathered from this project has already been used to inform MNO vaccine communications such as the #MétisVacciNation campaign.

This report is divided into two parts. Part 1 is a summary of the survey results from the section on COVID-19 vaccination and Part 2 is a summary of the one-on-one interviews. The overall project's goal was to understand the COVID-19 vaccine behaviour of MNO Citizens. If you have any questions or comments about the research please do not hesitate to reach out to the research team through this email: **research@metisnation.org**.

The COVID-19 pandemic has been challenging and stressful for Métis Nation of Ontario communities, bringing with it new changes, disruptions, and isolation. Until recently, little was known about the unique experiences of Metis people in Ontario and beyond its borders. Therefore, it proved essential that the MNO and its partners collect timely data on citizens' experiences in order to better understand COVID-19, its impacts, and the various influences on vaccine behavior in MNO citizens. This high quality and timely data collected would also prove useful in informing the development of MNO programs, services and strategies to improve the overall health and wellbeing of MNO citizens.

This newly released *Community Report - What We Heard about COVID-19* vaccine behaviour in MNO citizens was the first Metis-specific study to explore COVID-19 vaccine behaviour in Ontario. In February of 2021, the MNO launched a study that focused on:

- (1) collecting population-based survey data on MNO citizens' plans to be vaccinated and
- (2) in-depth interviews to explore thoughts, attitudes and beliefs related to the COVID-19 vaccines.

> *"Over 4405 citizens participated in the ground-breaking study."*

Initial data collected in March 2021 revealed that 71% of the citizens who participated planned to be vaccinated, 18% were unsure, and 11% did not plan to be vaccinated. By June 2022, data showed that 87% of MNO citizens had received the vaccine.

Common areas MNO citizens talked about factoring into their vaccine decision included:

- influence from their family, friends and kin networks,
- interaction with health professionals, and
- trust in the vaccine

Research also showed that MNO citizens who planned to be vaccinated were more likely to believe:

- COVID-19 vaccines were **safe** [*confidence*]
- vaccination was a [***collective action***] to prevent the spread of disease, and
- COVID-19 disease was **severe** [*complacency*]

- How does the MNO measure vaccine hesitancy?
  Vaccine hesitancy is measured by what are called the "5Cs". These are five aspects that have been shown to influence an individual's attitude and decision on vaccination: **Confidence, Complacency, Constraints, Calculation, and Collective responsibility.** "Odds Ratios" are applied, which evaluate the strength of association between two measures, one being an "outcome" or health behaviour.

  *For example, what are the odds/likelihood of planning to be vaccinated when citizens agreed they were **confident** the COVID-19 vaccines were completely safe (OR shows 19x more likely than opposed, 6x more likely than unsure).*

Thanks to citizen participation in this ground-breaking new research opportunity, researchers established key insights into how Métis communities have coped with and responded to the pandemic. We hope that by returning this Community Report to the community, the data shared within provides you with the tools and knowledge to inform and shape your own understanding of COVID-19, vaccination, and the overall impact of both on Métis communities.

Thank you and marsii

The MNO will continue to share the Métis experiences related to the vaccine roll out and government messaging with partners in the provincial and federal government, and healthcare system to improve vaccine confidence and future vaccine roll outs to our community. This research will also inspire future research questions that will support the health and wellbeing of Métis citizens in Ontario and across Canada. The study was funded by Indigenous Services Canada and led by the MNO.

SUMMARY

High quality and timely data on Métis Nation of Ontario (MNO) Citizens' thoughts, attitudes and beliefs related to COVID-19 vaccines was crucial to inform communication and develop Métis-specific messaging as the new COVID-19 vaccines rolled out across Canada in early 2021. The MNO launched a study that focused on (1) collecting population-based survey data on MNO Citizens' plans to be vaccinated and (2) in-depth interviews to explore thoughts, attitudes, and beliefs related to the COVID-19 vaccines.

The first part of this report shares the results from the population-based survey that asked if MNO Citizens planned to be vaccinated with a COVID-19 vaccine. Overall, 71% of the Citizens who participated planned to be vaccinated, 18% were unsure, and 11% did not plan to be vaccinated. MNO Citizens who planned to be vaccinated were more likely to believe the COVID-19 vaccines were safe, think that vaccination was a collective action to prevent the spread of disease, and believe COVID-19 disease was severe compared to MNO Citizens who were unsure or not planning to be vaccinated.

The second part of this report shares results from in-depth interviews in Métis Citizens in Ontario who planned, were unsure, and didn't plan to be vaccinated with a COVID-19 vaccine. Overall, the decision to accept a COVID-19 vaccine or not was very complex for MNO Citizens. Some of the most common areas MNO Citizens talked about factoring into their vaccine decision included influence from their family, friends, and kin networks, interaction with health professionals, and trust in the vaccine. There were significant differences between MNO Citizens who planned and didn't plan to be vaccinated in what they shared around perceived alternatives to the vaccine, trust in the vaccine, and knowledge related to the COVID-19 vaccines.

Overall, this is the first study to explore COVID-19 vaccine behaviour in Métis people. And only the second in a decade to look at vaccine behaviour in Métis people. This information shared through the survey and interviews was used throughout 2021 and early 2022 to inform Métis-specific COVID-19 related public health messaging. We focused our health promotion and messaging to support vaccine uptake. The MNO will continue to share the Métis experiences related to the vaccine roll out and government messaging with partners in the provincial and federal government, and healthcare system to improve vaccine confidence and future vaccine roll outs to our community. This research will also inspire future research questions that will support the health and wellbeing of Métis citizens in Ontario and across Canada. The study was funded by Indigenous Services Canada and led by the MNO.

PART 1: **OVERVIEW**

This study is the first to explore COVID-19 vaccine behaviour in Metis in Canada. Between February 8th and March 8th, 2021, MNO Citizens were invited to complete an online survey and a total of 4,405 responded. The survey was created based on a survey developed by the Métis Nation of Alberta with additional questions developed by researchers to measure vaccine hesitancy. Vaccine hesitancy exists on a continuum and individuals can move across the continuum as their vaccine-related knowledge, attitudes and behaviour change as seen in **Figure 1** below. For example, a person can refuse a COVID-19 vaccine despite being pro-vaccination or a person may prefer to wait a few months to get the vaccines despite being eligible to do so sooner. Vaccine hesitancy can take many forms.

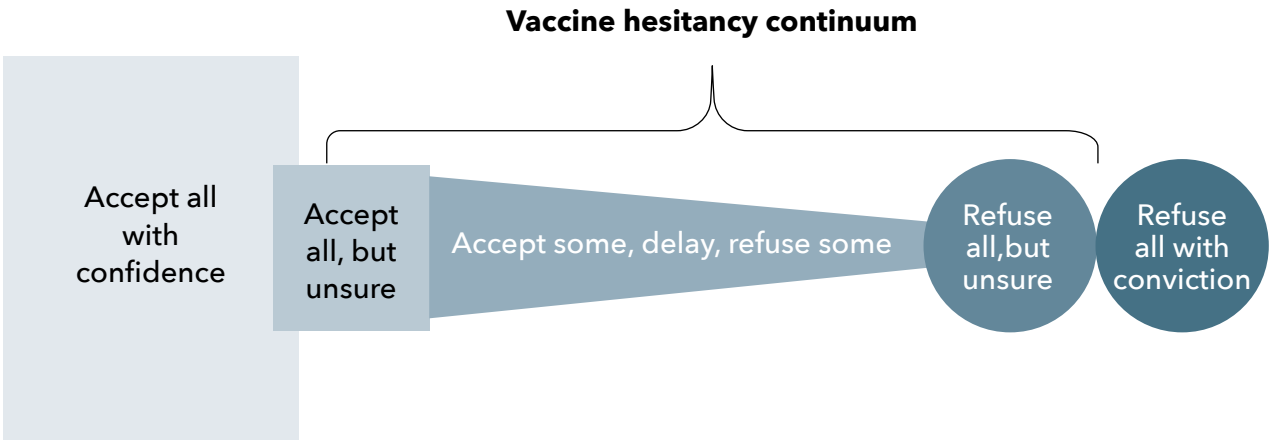


Figure 1. From Government of Canada's Addressing vaccine hesitancy in the context of COVID-19: A primer for health care providers which was adapted from MacDonald and the SAGE Working Group on Vaccine Hesitancy (2015)

Measuring Vaccine Hesitancy: The "5Cs"

Vaccine hesitancy is measured by what are called the "5Cs" [1]. These are five aspects that have been shown to influence an individual's attitude and decision on vaccination and include: Confidence, Complacency, Constraints, Calculation, and Collective responsibility. The statement questions used to measure the 5Cs in MNO Citizens in the COVID-19 Survey are presented in **Table 1** below.

TABLE 1**. SHORT ANSWER STATEMENTS ASSOCIATED WITH THE 5CS (OPTIONS: STRONGLY AGREE, AGREE, NEITHER[1] AGREE OR DISAGREE, DISAGREE, STRONGLY DISAGREE)**

Confidence	"I am completely confident that the COVID-19 vaccine (s) that will be available in Canada will be safe"
Complacency	"The COVID-19 disease is severe"
Constraints	"Everyday stress (such as competing priorities or many demands on my time) will prevent me from getting the COVID-19 vaccine"
Calculation	"When I think about getting the COVID-19 vaccine, I will weigh benefits and risks to make the best decision possible"
Collective responsibility	"COVID vaccination is a collective action to prevent the spread of disease"

[1]Betsch C, Schmid P, Heinemeier D, Korn L, Holtmann C, Böhm R. Beyond confidence: Development of a measure assessing the 5C psychological antecedents of vaccination. Vol. 13, PLoS ONE. 2018. 1–32 p

Summary of Results

Overall, 71% of the Citizens who completed the survey planned to be vaccinated, 18% were unsure, and 11% did not plan to be vaccinated. And since early 2021, we have seen that shift as 87% of MNO Citizens have chosen to receive a COVID-19 vaccine as of June 2022.

In this report, we will present odds ratios (ORs) as the measure of the "5Cs". An OR is a measure of association between an exposure and an outcome. If you would like to learn more about ORs, please see **Appendix B**. In addition to the ORs, you will also see Confidence Intervals (CI) in this report. A CI is a range of values that describes the uncertainty of an estimate like for the OR that we present. Since our ORs are based on a sample of MNO Citizens (N = 4,405) and we are using these to make conclusions about the whole population of MNO Citizens (currently >29,000), we include a CI as a measure of how "good" our estimates are. The larger the CI for an OR, the more cautious we have to be when using it to make conclusions about the wider population.

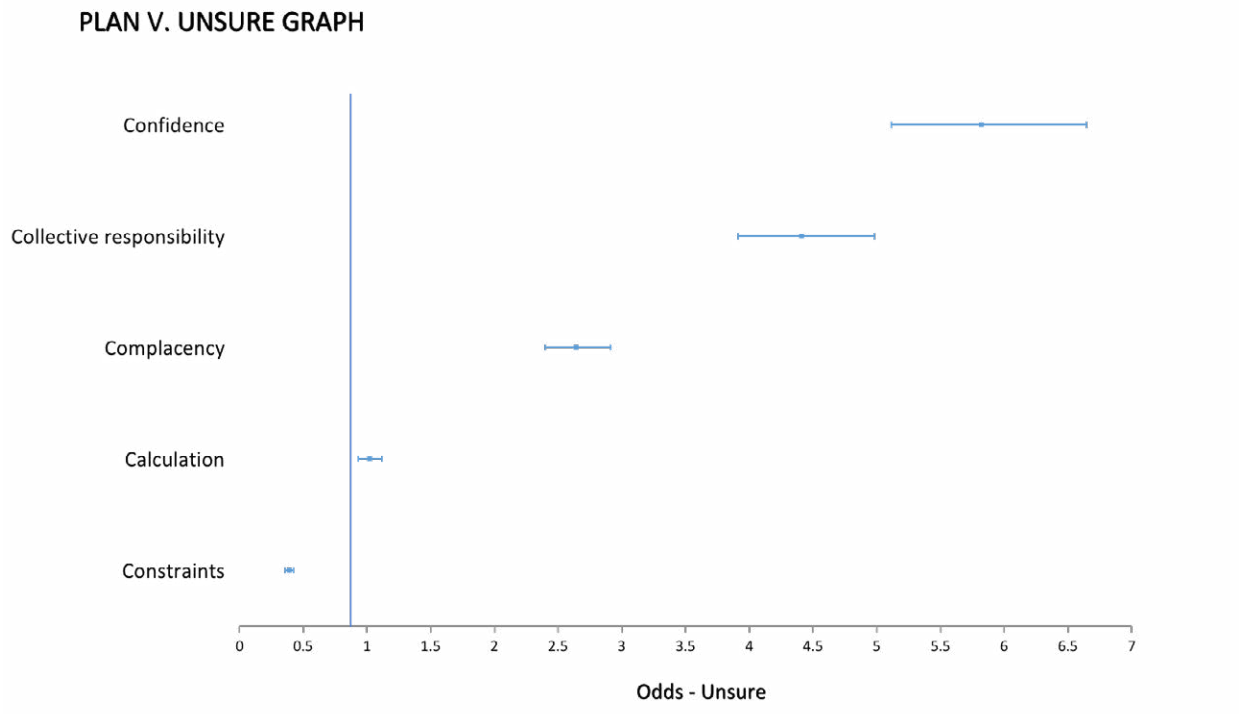


Figure 2. Odds of Plan vs Unsure (to receive vaccination). The purple dot represent the OR and the green error bar represent the CI

Figure 2 illustrates that the Citizens that plan to receive vaccination are almost 6 times more likely than Citizens that are **unsure** about vaccination to believe the COVID-19 vaccines are safe; 4.5 times more likely to think that vaccination is a collective action; 2.6 times more likely to think that the COVID-19 disease is severe and less as likely to let everyday barriers keep them from receiving the COVID-19 vaccines. In addition, they are just as likely as respondents that are unsure to weigh the pros and cons of receiving the COVID-19 vaccines.

Figure 3 illustrates that the Citizens who plan to receive vaccination are more than 19 times more likely than Citizens that **do not plan to receive vaccination** to believe the COVID-19 vaccines are safe; 10 times more likely to believe that vaccination is a collective action; 6 times more likely to think that the COVID-19 disease is severe and a slightly more as likely to weigh the pros and cons of receiving the COVID-19 vaccines. Furthermore, they are less likely to let everyday barriers keep them from receiving the COVID-19 vaccines.

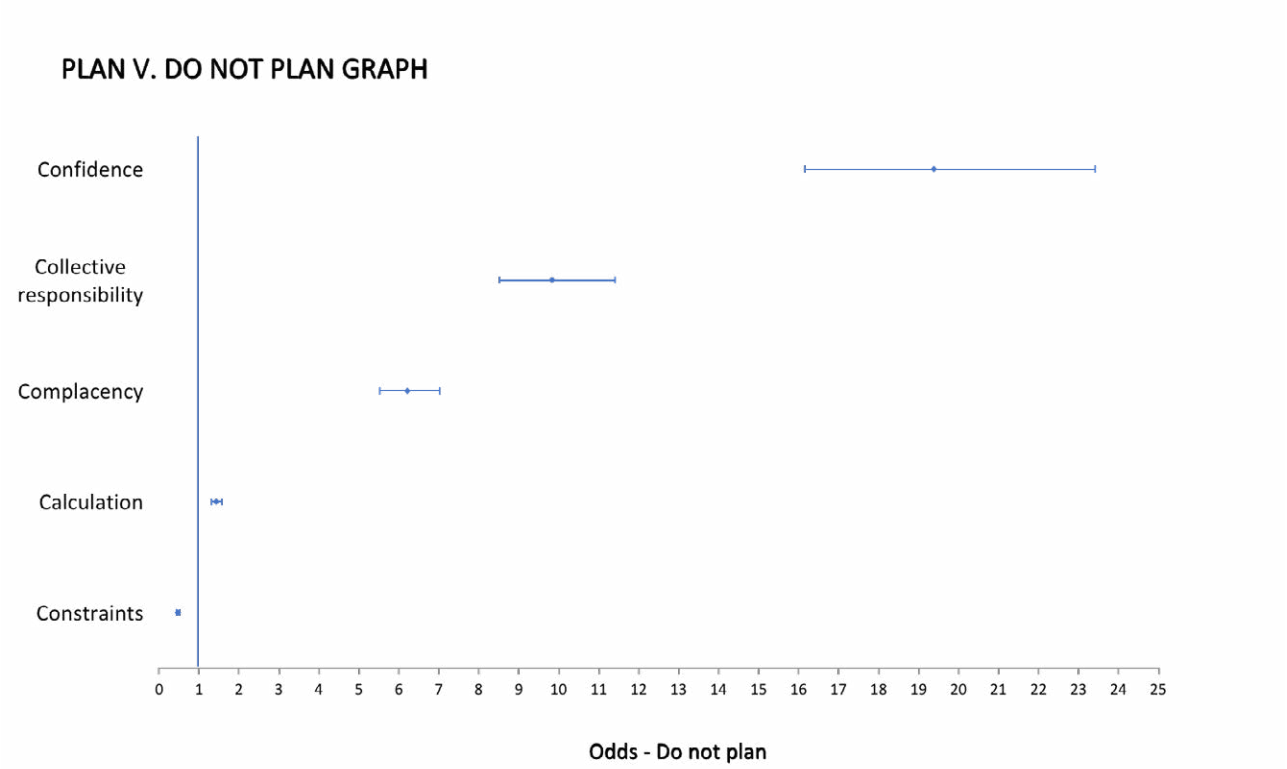


Figure 3. Odds of Plan vs Do not plan (to receive vaccination). The purple dot represent the OR and the green error bar represent the CI

PART 2: **OVERVIEW**

In the Spring (April-May) of 2021, Citizens of the Métis Nation of Ontario (MNO) volunteered to share their thoughts, feelings, and attitudes toward the COVID-19 vaccines in one-on-one interviews. At that time, vaccine roll-out was underway, and MNO citizens were able to get their first dose of a COVID-19 vaccine as one of the first groups prioritized in Ontario. The work was funded by the Public Health Agency of Canada. This community report tells the story of those interviews and what Citizens told us. You are getting this report because you were a person who shared your story with us.

You might remember that before you were interviewed, you told us whether you were planning on getting a COVID-19 vaccine, or if you weren't sure. In the report you'll see our understanding of how each of these groups of people were thinking and feeling about the vaccinations at the time (referred to as a 'yes', 'no', or 'unsure' participant). For a refresher on what the main questions were from the interviews, there is a table at the end of the report called **Table 2**, in **Appendix A** at the end of this community report.

In research like this where Citizens share their thoughts, feelings, and attitudes, we first take the recordings of our conversations and create a written record of it, called a transcript. This is the "data" we collected. You would have had a chance to check your transcript for errors during the summer of 2021 and let us know if you wanted to change it. Then, to make sense of all the participants' transcripts, we as researchers organized it into groups and subgroups to try and interpret it. For this study we used a framework (explained below) with already defined groups and subgroups to organize your stories. Subgroups are more specific groups that relate closely to one another and fit under one bigger group. We spent a long time looking over your stories to understand where each fit into the framework we chose. After organizing your stories into groups and subgroups we then organized each subgroup into stories that negatively or positively influenced COVID-19 vaccine behaviour. In this study, two researchers, both Métis, organized and checked each other's work to make sure that they were on the same page, and that we hadn't missed anything.[Driedger MS, Maier R, Furgal C, & Jardine C. Factors influencing H1N1 vaccine behavior among Manitoba Metis in Canada: a qualitative study. BMC Public Health. 2015; 15: 128. Available from: DOI 10.1186/s12889-015-1482-2] This made the study more rigorous and hopefully more balanced and useful. In this instance, we used a Social Ecological Model (SEM) Framework on vaccine behaviour, which is basically just a system for organizing the stories according to previous research in Métis people that took place in Manitoba with the H1N1 outbreak back in 2011 [2]. This made it easier to understand the stories and organize them in a meaningful way. If you look at **Figure 4**, the SEM framework has four levels to organize the ideas we heard:

1. Individual or "intrapersonal" level - looking at how each person's unique experiences influence their thinking and doing.
2. Our immediate social circle or "interpersonal" level - the way our relationships with family, friends, co-workers, and professionals influenced thinking and doing.
3. Our local "community" level - including the ways media and other things in our community influenced thinking and doing; and
4. The vaccine delivery system or "programmatic level" - exploring the way vaccine services and rollout influenced thinking and doing.

[2]Driedger MS, Maier R, Furgal C, & Jardine C. Factors influencing H1N1 vaccine behavior among Manitoba Metis in Canada: a qualitative study. BMC Public Health. 2015; 15: 128. Available from: DOI 10.1186/s12889-015-1482-2

The four levels of the SEM framework work together to influence the health decisions we make in both positive and negative ways.

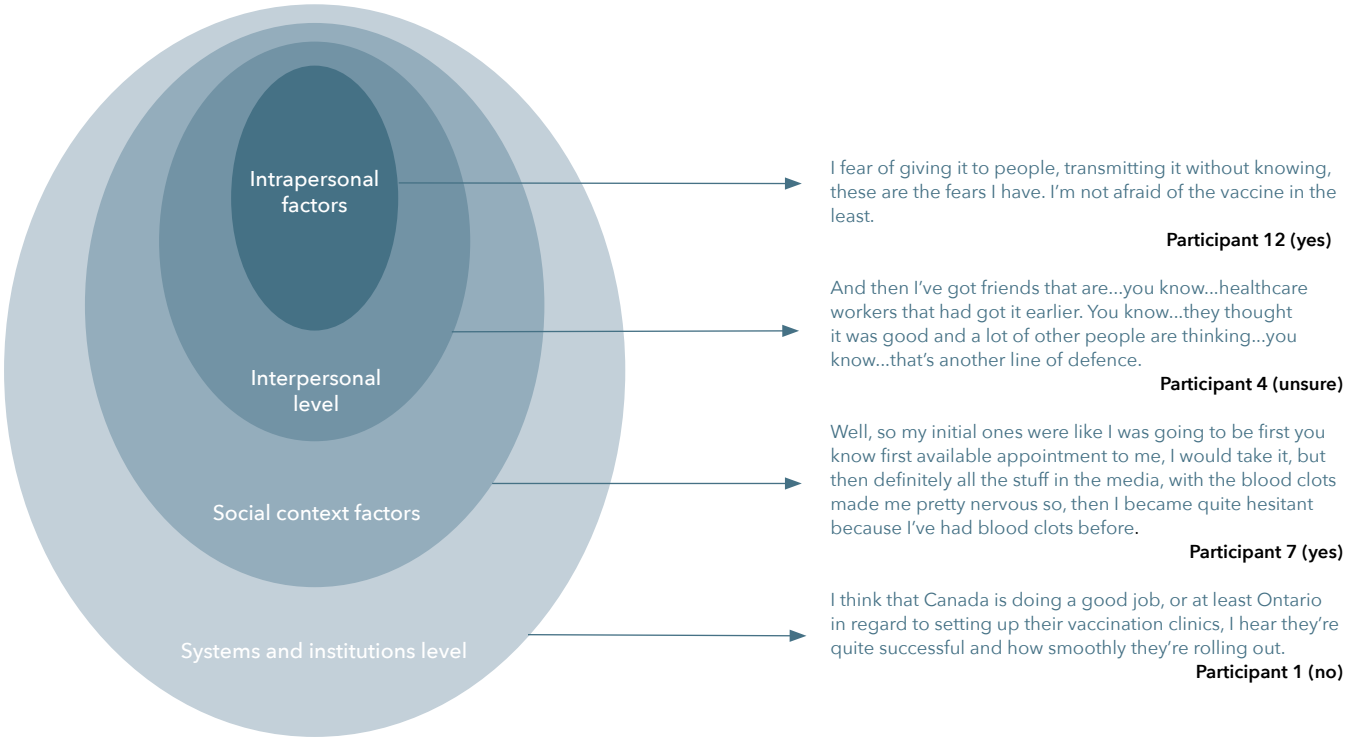


Figure 4: Diagram showing the different levels of a social ecological model (SEM) framework using participant quotes as examples for each level.

Summary of Results

A summary of each subgroup organized by group is provided below. The subgroups are listed in a sidebar and align with the paragraph summary for that subgroup. Two subgroups, "*Bandwagoning*" and "*Freeloading*" were not discussed much by participants and are not included in this community report.

"PROGRAMMATIC LEVEL" (SYSTEM AND INSTITUTIONAL LEVEL FACTORS)

Vaccine Roll-Out and Availability

Participants from the 'yes', 'no', and 'unsure' groups expressed frustration with Ontario's COVID-19 vaccine roll-out. Vaccine roll-out and availability within Ontario and Canada was described by participants as slow. Some thought that Canada had worse access to vaccines than other nations because COVID-19 vaccines were not being produced within Canada. Feelings of uncertainty about the long-term plans for COVID-19 vaccines were expressed by 'yes' and 'no' participants. 'Yes' and 'unsure' participants discussed various barriers present in Ontario's COVID-19 vaccine roll-out and these include lack of access to technology, a confusing COVID-19 vaccine booking system, and concerns for older adults who may not have access to the internet or technology.

"I think I am someone that is tech savvy so the fact that it was hard for someone that works with computers every day all day to get an appointment." *Participant 11 (yes)*

One participant described needing to help an older family member book their COVID-19 dose because they were not tech savvy and struggled to access the booking platform. In these interviews, 'no' participants did not discuss barriers to COVID-19 vaccination. This may be because they were not interested in receiving a COVID-19 vaccination and had not looked into how to get one. 'Yes' and 'unsure' participants also described the differences in how First Nations versus Métis were prioritised as confusing. At one point in the vaccine roll-out, status First Nations living on reserve in Ontario were able to receive their second dose of a COVID-19 vaccine 28-days after their first dose. However, this change did not apply to Métis people who were still required to wait 16 weeks between their first and second doses. Overall, vaccine roll-out and availability was discussed more often as negatively influencing participants' COVID-19 vaccine behaviour.

Organization of the Public into Priority Groups

Participants from all groups expressed feelings of gratitude that Métis were prioritized for the COVID-19 vaccine roll-out.

"I'm tickled pink. I'm Métis. Yeah. It's a good move for the government to prioritize Indigenous. I mean if they weren't ever prioritized before. This is a great first step." *Participant 10 (no)*

A number of 'yes' participants found the eligibility criteria for vaccination between the different health units confusing. For example, in only some regions non-Indigenous people could be vaccinated sooner if they lived in a house with an Indigenous person. Additionally, one 'yes' participant was concerned individuals who are non-Indigenous may self-identify as Indigenous to get vaccinated sooner. Also, a number of 'yes' and 'unsure' participants thought that the organization of the public into priority groups was not fair. Not all Métis are affected the same way by the COVID-19 pandemic. Others, such as essential workers, may be more likely to catch COVID-19 and need a COVID-19 vaccine sooner.

"I thought they were prioritizing essential workers, but it seems like it was later than I thought. Yeah, I can't believe that that's not higher on the priority list. When people who can stay home should just be able to just stay home and wait. If they're able and healthy. That's my opinion." *Participant 7 (yes)*

Because of this view, these participants felt guilty for being able to get a COVID-19 vaccine before someone else they believed needed it more. Some 'yes' participants shared they experienced vaccine envy from others. Most 'no' participants shared they did not understand why Métis were prioritized. They also did not trust this decision. At least one participant from each group feared Métis people were prioritized to be used as guinea pigs.

Institutional Prevention Activities

Participants from the 'yes' and 'unsure' groups appreciated the efforts of the MNO to advocate for the needs of MNO Citizens during the COVID-19 pandemic. Participants thought the MNO had good engagement on their social media platforms. The MNO Town Hall hosted by President Margaret Froh on COVID-19 and COVID-19 vaccination was described as well done and very informative.

"The MNO actually did a really good Town Hall on COVID. And so, President Froh actually did a really nice presentation on COVID vaccines in general. I was very impressed by that to be honest with you. It didn't sway me one way or the other because I had already made my decision long before that." *Participant 12 (yes)*

Local MNO Councils were described as active in sharing COVID-19 vaccine information over email. A couple of 'yes' participants found out they were eligible to be vaccinated from an email sent by their Regional MNO Council. A couple of participants would have liked for the MNO to have pushed for Métis vaccine clinics and for Métis to be eligible to receive the second dose of a vaccine 28-days from their first dose. 'No' participants did not share stories related to the *Institutional prevention activities* subgroup.

Government Communication

Participants from all groups visited a government website for COVID-19 vaccine information. Participants from the 'yes' group thought the government provided a lot of in-depth information on COVID-19 vaccinations. However, they also thought it was complex and hard to understand. 'Yes' participants mentioned a need for more consistent messaging from the province, more clear information on where to get vaccinated, and more information about COVID-19 vaccination specific to Indigenous Peoples. Internet access and technology were also mentioned as barriers for accessing information communicated by the government. 'No' participants described government communication as inconsistent with "fear-based" messaging. These same participants believed the government was not communicating the "full picture" concerning COVID-19 vaccination. Thus, they advocated for a need for more consistent government communication, like 'yes' participants, but based on mistrust of government and politicians. Overall, participants from the 'yes' group seemed to discuss government communication in more detail than both participants from 'no' and 'unsure' groups.

COVID-19 Public Health Measures

The *COVID-19 public health measures* subgroup was added to the SEM framework by the research team to better interpret the uniqueness of the COVID-19 vaccine behaviour. A couple of 'yes' and 'unsure' participants shared personal experiences where others around them were not following COVID-19 public health measures. They found these experiences frustrating because they believe everyone should be following COVID-19 public health measures. Two 'yes' participants shared personal experiences of needing to isolate due to having a suspected or confirmed case of COVID-19. Needing to isolate made the importance of COVID-19 public health measures more obvious for these two participants.

"And it was when we had just started testing and they said no to me and no to me and no to me and then two weeks later, said yeah come in for testing. And it took me weeks to get my test results and I quarantined, wore a mask the whole time with a three and a six-year-old at home, and it was so hard and so devastating and so upsetting." *Participant 14 (yes)*

Because of this view, 'yes' and 'unsure' participants shared they supported stricter public health measures, such as 'vaccine passports'. In contrast, participants from the 'no' group did not agree with the COVID-19 public health measures in place. They believed these measures had an unacceptable negative impact on mental and physical health as well as violated their 'rights and freedoms'. Even so, one 'no' participant shared they chose to accept a COVID-19 vaccine so they could travel.

"I'm not for it and I did something that I never thought I would do. Because I wasn't going to get it. And so, I'm traveling, I'm really thinking about where Canada's going to be and I'm heading to [country name]. And their first question was, you know, have you been vaccinated?" *Participant 5 (no)*

"LOCAL COMMUNITY LEVEL" (SOCIAL CONTEXT FACTORS)

Public Discourse

Participants from all groups felt media coverage of the COVID-19 vaccines increased their fear and anxiety. A number of 'yes' participants shared that they second guessed their decision to get a COVID-19 vaccine because of the media coverage on potential side effects. This coverage was particularly distressing for one 'yes' participant who had developed blood clots in the past. Concerns were raised about not enough reporting on what to do if you experience a potential side effect.

"Well, so my initial ones were like I was going to be first you know first available appointment to me, I would take it, but then definitely all the stuff in the media, with the blood clots made me pretty nervous so, then I became quite hesitant because I've had blood clots before." *Participant 7 (yes)*

"I'm scared because all the things you see online are all like if they're talking about side effects are talking about really negative things that have happened. Like that doctor in Florida that died, and all of a sudden, he saw these weird things on his skin and he went to the hospital and there's nothing they could do to save him. I'm scared that those things are going to happen to me." *Participant 6 (unsure)*

Media reporting about COVID-19 vaccines was also used as a reason 'no' and 'unsure' participants were not confident in getting a COVID-19 vaccine. Participants from all groups described the amount of media coverage surrounding COVID-19 as overwhelming and confusing due to a lack of consistent reporting and misinformation.

"I think if I would even look up anything in the online, I could find anything to support any position. I found the information very confusing. And it wasn't clear and it changed. So, I didn't have a lot of clear understanding of all aspects of COVID and the vaccine because I was getting bombarded with a lot of information that they just weren't congruent." *Participant 10 (no)*

Participants from all groups shared they stopped paying attention to COVID-19 vaccine media coverage to protect their mental health. A number of participants felt some media reporting on COVID-19 vaccines was not being done to simply inform the public but to push a specific political opinion about COVID-19 vaccines. COVID-19 health literacy skills were discussed by participants. These skills were used to help determine whether a source was reliable for COVID-19 vaccine information. 'Yes' participants were more focused on the validity of the science. Whereas, 'unsure' and 'no' participants seemed to be more concerned about politics when evaluating sources. This resulted in a different interpretation of what was or was not deemed a reliable source between groups.

"IMMEDIATE SOCIAL CIRCLE LEVEL" (INTERPERSONAL LEVEL)

Interface with Healthcare Professionals

Participants from all groups either talked to or considered talking to a healthcare professional to get more information about COVID-19 vaccines. Some participants shared they did not have a family doctor. These participants tended to be from the 'no' or 'unsure' groups. Some participants shared they had difficulty booking an appointment to discuss COVID-19 vaccines with their family doctor because their doctor was too busy. One 'no' participant decided to get a COVID-19 vaccine after speaking with a nurse practitioner. They felt this nurse practitioner heard their concerns and was able to explain why it was important to get a COVID-19 vaccine:

"And so, like I say, I listen to the nurse practitioner's position after she heard mine. And there was one sentence that changed my mind. And before that I was still not thinking that I was going to sign up for one. And the one sentence you said was if, in fact, you were my mother I would beg you to get it. And she gave me some information as well that I wasn't aware of." *Participant 10 (no)*

One 'yes' participant with a history of blood clots was able to get more information about COVID-19 from a friend who was also a family physician. Two other participants from the 'yes' group shared they worked in healthcare or had someone in their kinship circle who did. These individuals were someone other people came to for information about COVID-19 vaccines. Overall, interacting with healthcare professionals positively influenced many participants' COVID-19 vaccine behaviour.

Interpersonal Influences

Participants in the 'yes' group shared they actively promoted the acceptance of a COVID-19 vaccine in their kin networks:

"A lot of family and friends tend to be a little bit more hesitant about the vaccine. I find with a lot of family and friends I'm normally the one that's telling them like 'Oh, you know they'll open the restrictions, in the province.' I feel like I'm the one that tends to pass along the information onto a lot of family members or friends." *Participant 11 (yes)*

'No' and 'unsure' participants shared they avoided discussing COVID-19 vaccinations because they believe accepting a COVID-19 vaccine is a personal choice:

"Well, my family all got it and so yeah, like okay, and everybody. So, I thought what we have a path to go by and I feel people lying about it. Some people are against it, and you can't listen. Everybody got to go with your heart and how do you feel. Personal thing, right?" *Participant 15 (unsure)*

Additionally, they did not want to be judged for not wanting to get a COVID-19 vaccine.

One 'yes' participant explained they trusted the judgement of family members who accepted a COVID-19 vaccine because they would not encourage others to get vaccinated if the vaccine had affected them badly.

"INDIVIDUAL LEVEL" (INTRAPERSONAL FACTORS)

Altruism

Stories making up the *Altruism* subgroup most often came from 'yes' group participants. The stories in this subgroup also positively influenced COVID-19 vaccine behaviour overall. Most 'yes' participants wanted to accept a COVID-19 vaccine to protect others, specifically older family members, Elders, and immunocompromised individuals. A major fear for these participants was accidentally passing COVID-19 to a loved one:

"I haven't seen my parents who live in Saskatchewan in over a year. And it's not even the fear of me getting it as much as me giving it to them and having to live with that." *Participant 12 (yes)*

It was commonly expressed by 'yes' group participants that COVID-19 vaccination was necessary for everyone's safety and viewed as a collective responsibility. As well as needed to get back to normal quickly and safely. One 'unsure' participant and one 'no' participant shared they got a COVID-19 vaccine once they understood it would keep those around them safe:

"I feel like now my decision is based more on…it would make me, as my understanding is, as I was told more information from a nurse practitioner, is that it would make me safer for the people I come in contact with. Okay, so it would be better for them and I'm around the elders right." *Participant 10 (no)*

"But I thought for my sake I'd rather get the needle because I have grandkids and husband and family. So, I thought, hey, let's protect me and the other people that I'm working with." *Participant 15 (unsure)*

A young 'no' participant shared that young people in their kin network did not want to get a COVID-19 vaccine. And those who did made the decision to please their parents.

Habitual Behaviour

The *Habitual behaviour* subgroup positively influences the COVID-19 vaccine behaviour for 'yes' participants. But negatively influenced the COVID-19 vaccine behaviour of 'no' participants. 'Unsure' participants did not comment on what they normally do about vaccines. A few 'yes' participants referenced childhood vaccinations, annual influenza vaccinations, and other vaccines needed to travel as reasons why they chose to get a COVID-19 vaccine. For these participants, vaccines were viewed as a normal part of healthcare:

"I get my flu shot every year and so I would much rather be confident that I'm not going to become seriously ill or die from COVID. And get the vaccine and maybe chance that I'd be sick for a week." *Participant 16 (yes)*

In contrast, most 'no' group participants did not view vaccines as important for their regular healthcare. Specifically, one 'no' participant shared they had never gotten vaccinated before, and another said they had not gotten their children vaccinated. Moreover, another 'no' participant indicated they had received other vaccines in the past but just did not want to get a COVID-19 vaccine. This participant explained they did not trust the COVID-19 vaccines for a variety of reasons.

Knowledge State

Participants from the 'yes' group believed they had an average to high level of knowledge about COVID-19 vaccines. Many 'yes' participants looked up information until they felt comfortable with getting a COVID-19 vaccine. Specifically, these participants focused their knowledge gathering on potential side effects. A couple of 'yes' participants shared they did very little research on COVID-19 vaccines before deciding they would get one anyway. They trusted Health Canada would not approve a vaccine if it was not safe. One 'yes' participant explained they were hesitant to get a COVID-19 vaccine because they did not know much about them. After doing some knowledge gathering, they felt more confident and decided to get vaccinated against COVID-19:

"I think I was a bit hesitant just not knowing what kind of research was behind it… But I would say now more so…I would say I have kind of like a moderate to high level of understanding just based on research that I've done." *Participant 16 (yes)*

Some 'yes' participants thought they knew a lot about COVID-19 vaccines because of being a healthcare worker or having a healthcare worker in their close kin network. 'Yes' group participants thought those who were unsure of getting a COVID-19 vaccine may not know enough about them. The COVID-19 pandemic was described by these participants as a developing situation with a lot of missing information that cannot be helped. A lot of misinformation about COVID-19 vaccines were presented as facts by 'no' participants. This misinformation was being used to make COVID-19 vaccination decisions by these participants who gathered information like 'yes' participants but also considered some misinformation as fact like 'no' participants. The *Knowledge state* subgroup positively influenced the COVID-19 vaccine behaviour of 'yes' participants but had the opposite effect for 'no' participants and a couple of 'unsure' participants.

Past Experiences

All stories shared by 'yes' group participants for the Past experiences subgroup positively influenced supported COVID-19 vaccine behaviour. These participants reflected on the normality of getting vaccinated to protect against infectious diseases. One 'yes' participant shared a personal experience about how the first dose of a COVID-19 vaccine protected their young family when they all contracted COVID-19:

My husband came home with it, the baby ended up getting it right away from my husband, I tested negative and then I ended up getting it from the baby because I'm 24/7 care of baby. But it right it protected me. Even the doctor at the hospital told me that it was a great decision that I made for my family. Right, and that 100% made me feel even better because he was like, how come you don't have symptoms, that the baby's got symptoms, so I told them I said I've got the first short of Moderna and he was like okay, because that's the best decision you made.
Participant 8 (yes)

No negative past experiences with vaccines were mentioned by 'yes' group participants. In contrast, 'no' group participants only shared negative past experiences with vaccines. One participant shared that they have had numerous reactions to vaccines in the past and that this history is a reason they did not want to get a COVID-19 vaccine:

"I am a person who I strongly believe should not be getting this vaccine, based on my health history and my reactions with vaccines." *Participant 1 (no)*

Another 'no' participant shared they have gotten vaccinated in the past but just did not want a COVID-19 vaccine. One 'unsure' participant shared they had a phobia of medications and needles so it difficult to get a COVID-19 vaccine:

"I'm scared. I might not be the norm of the people that you're talking to, but I do have a phobia of medication." *Participant 6 (unsure)*

The stories shared as part of the Past experiences subgroup negatively influenced COVID-19 behaviour for a couple participants from the 'no' and 'unsure' groups.

Perceived Alternatives

None of the stories shared by 'yes' group participants were considered part of the *Perceived alternatives* subgroup. Only one comment made by a 'no' participant was considered a positive influence on COVID-19 vaccine behaviour. This participant shared they were booked to receive the first dose of a COVID-19 vaccine even though they preferred natural remedies. This is because they viewed the COVID-19 pandemic as a crisis and so their views on the necessity of getting a COVID-19 vaccine changed:

"I do believe nature, food, better things are our medicine. That's what we should look for first and not something man-made. I think there's a place for that, but that's why I'm signed up for it [first dose of COVID-19 vaccine]. Because I think we're in a dire situation." *Participant 10 (no)*

Even so, all 'no' participants talked about perceived alternatives. These participants considered perceived alternatives to getting a COVID-19 vaccine to be: young age, natural remedies, not having comorbidities, taking vitamin D, exercising regularly, COVID-19 having a high recovery rate, not viewing themselves as "at-risk", and self-rated good health. One 'unsure' participant believed wearing a mask with many layers was a reasonable alternative for not getting a COVID-19 vaccination. The *Perceived alternatives* subgroup negatively influenced COVID-19 vaccine behaviour 'no' group participants.

Personal Risk Perception

Overall, 'yes' participants believed catching COVID-19 was a greater threat to their health than getting vaccinated against COVID-19:

"Oh, I'm terrified of getting infected with COVID and I have no fear of the vaccine. The numbers are clear that literally a handful of people will have negative reactions of millions of people vaccinated. I have no fear of the vaccine, but I do of getting COVID." *Participant 12 (yes)*

On the other hand, 'no' participants believed getting a COVID-19 vaccine was a greater threat to their health than catching COVID-19. This may be because they did not think they were likely to get severely sick from the COVID-19 virus:

"I know more people who've had side effects or adverse health reactions I should say from vaccines than I do from COVID-19 itself… And I guess one more reason why I will rush up to get is because I'm not in a risk category." *Participant 1 (no)*

Stories from the *Perceived alternatives* subgroup influenced 'no' participants' *Personal risk perception*. 'Unsure' participants had a mixed view regarding their *Personal risk perception* but favoured getting a COVID-19 vaccine. Although they often did not seem confident about this decision.

Protected Values

As a whole, 'yes' group participants shared they were 'pro-vaccination' and believed in science. One 'yes' participant avoided others who had 'anti-vax' views. Another 'yes' participant believed getting a COVID-19 vaccine was important to get back to Métis traditional ways of life quickly and safely:

"That highlights, I guess the importance of vaccination from the standpoint of culture and how culture is somewhat ceased in a situation like this. You know that means a grandson can't go fishing with his grandfather and things like that, so it has a profound effect on our culture." *Participant 9 (yes)*

Both 'unsure' and 'no' participants viewed getting a COVID-19 vaccine as a personal choice. 'No' participants seemed to feel strongly that COVID-19 public health measures were violating their rights and freedoms. And those choosing not to accept a COVID-19 vaccine were being discriminated against. Political views influenced where 'no' and 'unsure' participants looked for information about COVID-19 vaccines. These participants would look at sources across the political spectrum when gathering information. Some participants weighed politics more heavily than others when making COVID-19 vaccination decisions.

Vaccine Risk Perception

Concerns about COVID-19 vaccine safety were shared by participants from all groups. Some 'yes' participants were concerned about how quickly the vaccines were produced and about the lack of long-term studies. These concerns were magnified by the over-reporting of rare potential adverse outcomes by the media. 'No' and 'unsure' participants shared similar concerns. They also shared other concerns that were linked to known misinformation about COVID-19 vaccines. Altogether a couple 'no' and 'unsure' participants had already got their first dose or were planning to before their interviews. These participants who changed their COVID-19 vaccination intentions described the need for more detailed and easier information about vaccines. As well as what to expect when you go to get your vaccine in a clinic.

"I think one thing is, we need some assurances around the testing was adequate given the timelines. I think there's concern about that it's not made in our own country. I think there's a concern around that we need to have two of them and that varies as well with the timelines between the two." *Participant 10 (no)*

Gathering information helped 'yes' participants get over any doubts they had about getting a COVID-19 vaccine. These participants also trusted that the government and pharmaceutical companies knew what they were doing. Also, some 'yes' participants did not have an issue around getting a COVID-19 vaccine because of their trust in science and government.

"We need to reach that herd immunity as fast as we can, so any vaccine is a good vaccine at this point." *Participant 13 (yes)*

Trust

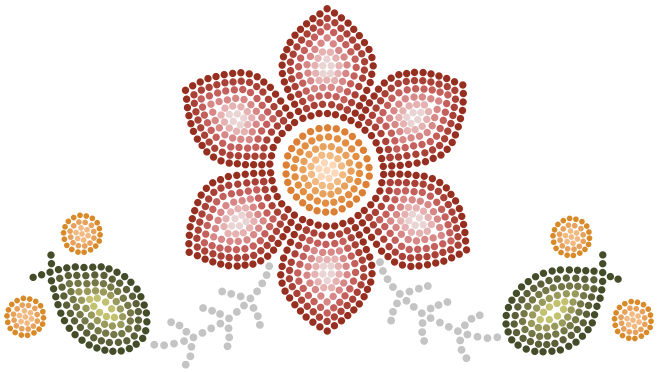
'Yes' and 'unsure' participants named many more reputable and trusted sources for COVID-19 vaccine information than 'no' participants. Many 'yes' participants viewed themselves as 'pro-vaccination' and trusting of science and government. In contrast, a couple of 'no' participants shared they did not trust the government, politicians, and pharmaceutical companies. This seems to have impacted their COVID-19 vaccination decisions. Some sources used by 'no' and 'unsure' participants for information gathering were not trusted by 'yes' participants. Social media was discussed by participants from all groups as having both positive and negative effects on trust. First, participants were not inherently trusting of all COVID-19 vaccine information shared on social media – it really depended on the source and whether the participants believed that source was reliable. Notably, information shared by the MNO was considered trustworthy by a number of 'yes' participants. Views on what a reliable source was, differed between 'yes' and 'no' and 'unsure' participants. Second, many participants felt social media, news media, and other forms of mass media were causing greater feelings of anxiety and fear. And they felt overwhelmed because of over-reporting and misinformation.

"I would not go back to Facebook and listen… it's all that bs okay. Because if you fall for it…like I fell for some of this stuff. No way am I getting it. There's someone on YouTube saying this, and someone on YouTube thing. That people are just saying that to scare you that's what I feel. Because they're against it and they're making everybody afraid of it by saying lies." *Participant 15 (unsure)*

On the other hand, some 'yes' participants found people sharing their experience getting a COVID-19 vaccine on social media to be reassuring. This also boosted their confidence in accepting a COVID-19 vaccine themselves. 'Unsure' and 'yes' participants also trusted the decisions of family and friends to accept the vaccine and considered their experiences when making their own COVID-19 vaccination decisions.

"Yeah, I guess some. Like my sister is older. There was a big age gap between us. So, I consider her, I guess, an elder and with her having the vaccine and no side effects. So, I took her experience pretty highly." *Participant 4 (unsure)*

Marsee, Miigwetch, Merci, Thank you to the 16 participants who shared their thoughts, feelings, and stories about the COVID-19 vaccines with us and to the MNO Citizens who filled out the survey! This work truly could not have been done without your participation and it benefits all Métis in all communities and across the Homeland. The MNO Leadership and IC/ES research team look forward to working with Citizens on many more research projects in the future.



APPENDIX A

INTERVIEW GUIDE QUESTIONS
1. What are your initial thoughts about the COVID-19 vaccines rolling-out in Canada?
2. How do you feel about the COVID-19 vaccines rolling-out in Canada?
3. How would you describe your level of knowledge about the COVID-19 vaccines?
4. If you were looking for information related to COVID-19 vaccines, who or what source would you turn to?
5. How much do you trust the information from these various sources and why?
6. What do you think people need to know in order to trust COVID-19 vaccination?
7. What concerns, if any, do you have about the COVID-19 vaccines?
8. What do you think about the risks of getting infected with COVID-19 being worse than the potential risks from the COVID-19 vaccines?
9. What would be the best or easiest way for you to learn more about COVID-19 vaccination?
10. How do you feel about Métis Citizens in Ontario being part of the priority group for COVID-19 vaccines?
11. How do your family, friends and community feel about the COVID-19 vaccines?
12. Is there information you don't have that would be important to your decision to be vaccinated or not?
13. Any last questions regarding this research?

Table 2. Main questions asked during interviews with Citizens of the Métis Nation of Ontario on their thoughts, feelings, and opinions of COVID-19 Vaccines in April-May 2021.

APPENDIX B

"Odds" is a measure of the likelihood. For this study we are looking at the odds of planning to be vaccinated and the direction and strength of association between the 5Cs and planning to be vaccinated. As an example, the odds/likelihood of planning to be vaccinated when Citizens' agreed they were confident the COVID-19 vaccines were completely safe (5C - Confidence). Two measures are independent or have no association if the OR is 1. If the OR is more than 1, then there is a positive association (i.e. more likely to plan to be vaccinated). If the OR is less than 1, then there is a negative association (i.e. less likely to plan to be vaccinated).

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