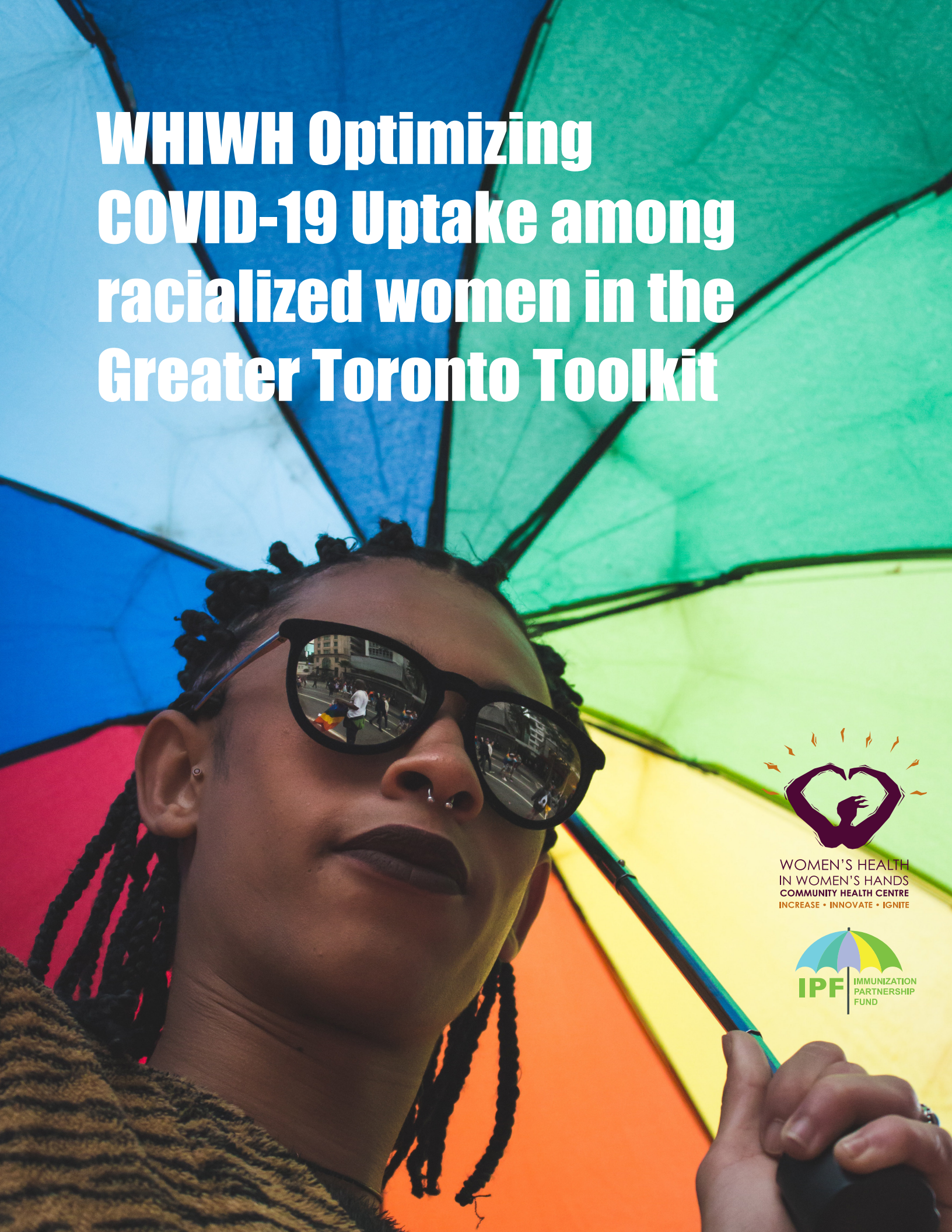


WHIWH Optimizing COVID-19 Uptake among racialized women in the Greater Toronto Toolkit



WOMEN'S HEALTH
IN WOMEN'S HANDS
COMMUNITY HEALTH CENTRE
INCREASE • INNOVATE • IGNITE





WHIWH Optimizing COVID-19 Uptake among racialized women in the Greater Toronto Toolkit

Women's Health in Women's Hands Community Health Center.
Immunization Partnership Fund (IPF)

Optimizing Covid-19 Vaccine Uptake among racialized women toolkit

By: Project Consultant, Maureen Owino

Reviewed by:
Candice Madakadze
IPF- project peer outreach workers.

Funded by
Public Health Agency of Canada

October 2022



WOMEN'S HEALTH
IN WOMEN'S HANDS
COMMUNITY HEALTH CENTRE
INCREASE • INNOVATE • IGNITE





PREFACE

The Optimizing COVID-19 Uptake among racialized women in the Greater Toronto project aims to increase Vaccine access and uptake among racialized women in the Greater Toronto Area. The project is funded by the Public Health Agency of Canada (PHAC) through the Immunization Partnership Fund (IPF) grants and contribution program. The IPF grants and contributions program aims to improve COVID-19 vaccine uptake and access across the country by supporting provinces, territories (PTs) and stakeholders to develop new or adapt/scale up existing interventions.

This project is led by Women's Health in Women's Hands Community Health centre (WHIWH) in partnership with several community organizations/leaders with extensive experience working with African, Caribbean, Black, South Asian, Latin American, and other racialized communities across the GTA. The organizations include

- **Primary Care and allied health providers**
- **Social Services Organizations**
- **AIDS Service organizations**
- **Faith and Settlement Services**

WHIWH CHC provides racialized women, trans and non-binary clients from the African, Black, Caribbean, Latin American and South Asian communities in Toronto and surrounding municipalities with culturally safe, relevant, and responsive primary healthcare. We are change-makers engaged in knowledge transfer and exchange, research, capacity building and advocacy within and across multiple systems..

WHIWH has been providing services for racialized women for more than 25 years. The organization services approximately 4500 women annually, of whom a fair number are at risk of acquiring COVID-19 because of the gendered nature of COVID-19 and social determinants of health. WHIWH is committed to working from an inclusive feminist, pro-choice, anti-racist, anti-oppression, and multilingual participatory framework in addressing the issue of access to healthcare for our mandated priority populations encompassing age, gender, gender identity, race, class, violence, sexual orientation, religion, culture, language, disability, immigration status and socio-economic circumstances.

The Main Objectives of the Project are:

- **Increase the capacity of health care providers (HCPs) to implement health promotion activities using gender-specific and culturally safe approaches**
- **Support stakeholder engagement in community-led women-centred COVID-19 education, promotion, and outreach.**

- **Promote evidence-based dissemination of vaccine information to increase vaccine confidence among racialized women**

To achieve this objective, the project team has engaged in several activities, including Community consultations, focus groups, recruitment, training, and retention of community health outreach workers from diverse racialized communities, infographics, digital stories, community outreach and information sharing and virtual townhalls with diverse populations of racialized women.

The project team extends a note of gratitude to the many community organizations and individuals supporting our work. We offer a special note of thanks to the following partners:

African in Partnership against AIDS
Black Coalition for AIDS Prevention
AIDS Committee of Durham

Moyo Health and Community Services
Alliance for South Asian AIDS Prevention
South Asian Women's Centre

The toolkit was tailored to meet the information needs of service providers and the racialized women targeted by the project. We adapted several COVID-19 Vaccination Information Resources and emerging evidence from multiple sources to develop this toolkit. We based it on collective information exchange gathered through community consultations, townhalls, outreach and community of practice sessions.

This Toolkit can be utilized by health care providers, community workers and racialized women to enhance knowledge on COVID-19 vaccines, accessibility, and availability.

We hope that the toolkit will provide the needed information for racialized women to make informed decisions and choices about the COVID-19 vaccines, improve vaccine confidence and increase vaccine uptake among racialized women in the GTA.



TABLE OF CONTENTS

SECTION 1: BACKGROUND	1
SECTION 2: RE-AIM MODEL	2
SECTION 3: VACCINE UPTAKE	5
SECTION 4: CONSULTATION THEMES	7
SECTION 5: SUMMARY OF CONCERNS AND SUGGESTED INTERVENTIONS	
SECTION 6: About Vaccines Approved vaccines in Canada	13
SECTION 7: COMMON FAQs	16
SECTION 8: MYTHS AND MISCONCEPTIONS	19
SECTION 9: VACCINE AVAILABILITY	21
SECTION 10: ADDITIONAL RESOURCES	22
SECTION 11: BIBLIOGRAPHY	22



SECTION 1: BACKGROUND

COVID-19 disproportionately impacts urban, racialized, and marginalized communities. Strikingly, 83% of all people with a positive COVID-19 test in Toronto self-identified as being from a racialized background. Further, racialized people account for 73% of hospitalizations while only representing 52% of the city's total population.^{1,2}

Even before COVID-19, Racialized women and girls in Canada have been experiencing significant public health challenges, leading to gendered impacts, poor health outcomes and challenges in everyday living. The compounded complexity and precarity caused by COVID-19 have significantly impacted racialized women, especially regarding social determinants of health^{3,4}.

Nationally, as of August 2022, women made up 54.2% of the COVID-19 cases. We can presume that one reason for the disproportionate rate of COVID-19 amongst women is that women comprise 81% of the health care and social assistance workforce in Canada. Additionally, 56% percent of these women workers are concentrated in occupations known as the 5Cs: caring, cashiering, catering, cleaning, and clerical functions, many of which are deemed essential services and therefore do not allow for remote work^{6,7}.

In Canada, racialized Women comprise most of the social service sector workforce, including in healthcare, homecare, and education. Women represent over 90% of nurses, 75% of respiratory therapists, and 80% of those working in medical labs, putting them at a higher risk of exposure to COVID-19 while carrying out these essential services at work⁸. Additionally, racialized women hold many jobs in retail, including food services, which employs close to 2 million Canadians and is the largest sector by employment., is another area of work hit extremely hard by the pandemic because they continued to work throughout these period due to the nature of these jobs^{9,10}.

Because Canada does not collect disaggregated data, it is difficult to determine the rates of COVID-19 among racialized women as well as the racial makeup of the labour market in its entire complexity. Nevertheless, we see there is an overrepresentation of Black, Indigenous, and racialized women, including recent immigrants in essential occupations^{11,12}. For example, a 2010 survey of personal support workers in Ontario found that racialized workers accounted for 42% of the personal support worker labour force, despite the rate of racialized communities in Ontario being 23%. Furthermore, women, and most specifically racialized women, perform most of the jobs that keep society healthy and functioning, they are seldom prioritized in the planning of health, safety, or economic well-being^{13,14,15}.

The COVID-19 crisis has had disproportionate economic, health and social impacts on women , most significantly, racialized women, especially newcomers, refugees, immigrants, and migrants. A disproportionate number of Black and racialized women, in low-wage and service occupations, lost

employment when the economy was severely disrupted during the pandemic. They were constantly exposed to COVID-19 through their precarious work in frontline public-facing services^{16,17}.

The COVID-19 prevention interventions, including those related to vaccine rollout and access, were not tailored to racialized women's complex intersectional identities and experiences. Additionally, these interventions did not consider the systemic issues that impact the day-to-day lives of racialized women. Racialized women experience multiple dimensions of systemic violence, stigma, and discrimination (i.e., racism, particularly anti-black racism, gender discrimination, homophobia, transphobia, etc.), determinants of health that impact their lives (i.e., poverty, unemployment/ underemployment), limited knowledge of and access to services including those that were developed to support vaccine promotion and rollout^{18,19,20,21}.

To meet the provincial and national COVID-19 vaccination goals, all stakeholders must aspire toward building vaccine equity and reducing health disparities. The Optimizing COVID-19 Vaccine Uptake Among Racialized Women project's primary goal is to do this by building stakeholder and community awareness of the disparities in COVID-19 positivity, hospitalization, and mortality rates; comprehensive Knowledge of various vaccines available and accessibility; tailoring available resources to address the needs of racialized women; and utilizing health promotion interventions and mechanisms that can reach a broad scope of racialized women^{22,23} .

The theoretical grounding of this project is based on the RE-AIM public health framework for health promotion impact. RE-AIM was conceptualized as an implementation framework to address how science is translated into practice, most explicitly concerning public health policy, impact, and equity issues. The RE-AIM dimensions include reach (R), effectiveness (E), and maintenance (M)—which operate at the individual level (i.e., intended beneficiaries), adoption (A), implementation (I), and maintenance (M)^{24,25} .





SECTION 2: RE-AIM MODEL

Dimension	Definition	Perspectives	Current issues/ outcomes	Future Directions
Reach	<p>How do we reach the target population?</p> <ul style="list-style-type: none"> -Absolute Number of individuals reached -Number of willing participants -Reasons for unwilling participation -Strategies for reaching target population 	<ul style="list-style-type: none"> -Demographic characteristics -Target audience description -Use of qualitative methods to understand phenomena 	<ul style="list-style-type: none"> -Recruitment and intervention strategies that address health inequities -Reach as an outcome -Implementation strategies to improve access, awareness, and appropriateness of intervention to meet target population 	<ul style="list-style-type: none"> -Use of implementation science to improve access, awareness, and appropriateness of intervention -focus of recruitment strategies to address health equity -Reach as an outcome
Effectiveness	<p>How do we measure the interventions effectiveness?</p> <ul style="list-style-type: none"> -Impact of intervention on important outcomes (quality of life, economic outcomes, improved health outcomes) -Measurement of intervention effectiveness and how to measure effectiveness Reasons for success 	<ul style="list-style-type: none"> - The reported subjective or objective measure related to the primary outcome 	<ul style="list-style-type: none"> -Reporting quality of life and unintended outcomes 	<ul style="list-style-type: none"> -Relationship among multiple outcomes and relationship of context

Dimension	Definition	Perspectives	Current issues/ outcomes	Future Directions
Adoption	How do we develop Partners and community support to deliver intervention?	-individuals including staff and organizations / settings willing to participate	-Use of qualitative measures	-Development of guides tools to help enhance adoption
Implementation	How to ensure the intervention is delivered properly? -Fidelity of project Adaptations made to intervention -Utilization of intervention	- Time, costs, and resources needed to complete intervention successfully	-emerging issues and improvements made	-Multiple levels and methods for assessment
Maintenance	How do we ensure the sustainability of the project? -How long can the change in behavior be sustained -Can the intervention be adopted onto routine practice or organizational policy and practice	-System level impact beyond project lifespan	-Increased engagement with target population -Linkage to care and services beyond intervention -Community of practice	-Increased collaborations with multiple stakeholders



SECTION 3: VACCINE UPTAKE

Vaccination programs became the most cost-effective public health interventions in the late 1900s. New vaccines were being hailed and welcomed by public health officials, decision-makers, and medical experts. Diseases such as smallpox, measles, polio, chickenpox, whooping cough and tetanus are some of the diseases that became eradicated through vaccination²⁶.

In recent years we have seen a rapid increase in public resistance to vaccines and the emergence of anti-vax groups. The anti-vax groups are swayed based mainly on myths, misconceptions, and limited understanding of vaccines, how they are developed and how they work. Therefore, when COVID-19 infections continued to soar in 2021, COVID-19 vaccines were lauded as the primary strategy for managing and controlling the virus and all its emerging variants²⁷. When they were developed and highly encouraged later that year, it was not surprising that anti-vaxers came up in arms^{28,29}.

In Canada, Vaccine uptake has been low in many communities, particularly racialized populations. Earlier research showed that only 56.6% of Black Canadians, 68% of Arab and 66% of Latin Americans surveyed were willing to be vaccinated^{30,31}. The term vaccine hesitancy is used to define those who are not willing to be vaccinated. While problematic in many ways, the term has been defined by many as the feeling of uncertainty/ambivalence about vaccines leading to vaccine refusal, delay in acceptance or rejection of vaccines despite their availability^{32,33}.

Vaccine hesitancy is the delay in acceptance or refusal of vaccines despite their availability. It is both complex and context-specific, varying across time, place, and vaccines. In the generalized population, vaccine hesitancy can be characterized by the three “C’s”: confidence, complacency, and convenience. Confidence is caused by the lack of trust in government and public health officials who mandate vaccinations. Confidence manifests itself, especially in communities with a historically negative experience with the health system due to racism, systemic violence, oppressions and/or marginalization. The second C is for complacency about the disease, specifically around COVID-19. Complacency leads to hesitancy in healthy people as they believe they don’t need to worry about getting sick. Additionally, complacency could be because even with the multiple doses of COVID-19 vaccines, people can still get sick, thus dissuading people from getting vaccinated^{34,35,36}. The final C for convenience is about the availability and accessibility of vaccines and vaccine related services and how they impact vaccine uptake.

The Optimizing Vaccine Uptake Among Racialized Women in the GTA project considered the complex and intersectional factors influencing an individual’s decision around vaccines. We chose to use the language increasing uptake rather than hesitancy to avoid the narrative of blame, shame, and punishment of these marginalized populations. This project is underpinned by intersectionality, anti-racism, anti-oppression, collective empowerment, collective resilience, self-determination, and feminist principles. The core objective was to provide unbiased, evidence-based, culturally respectful, accessible information to racialized women to facilitate informed decision-making regarding COVID-19 vaccines.

To increase vaccine uptake among racialized women in the GTA, we had to first and foremost understand the factors that influence uptake in this population. This was a multi-pronged process that involved multiple activities, including

- Recruitment, training, and retention of 15 community health workers from diverse racialized communities
- Collaboration with multiple stakeholders, including community health agencies, settlement agencies, women organizations, and researchers
- Targeted focus groups and interviews with diverse women across the GTA
- Community town halls
- Community Outreach
- Literature review

Through this process, we gained an explicit understanding of the factors influencing decision-making around vaccine uptake. We utilized the knowledge and information we collected to develop culturally and gender-responsive resources and interventions tailored to increase vaccine uptake among racialized women in the GTA.

Vaccine Hesitancy Conceptual model

Vaccine uptake or hesitancy though an individual choice is complex and must be contextualized and explicitly viewed across time, place and vaccines, influenced by factors such as complacency, convenience, and confidence.

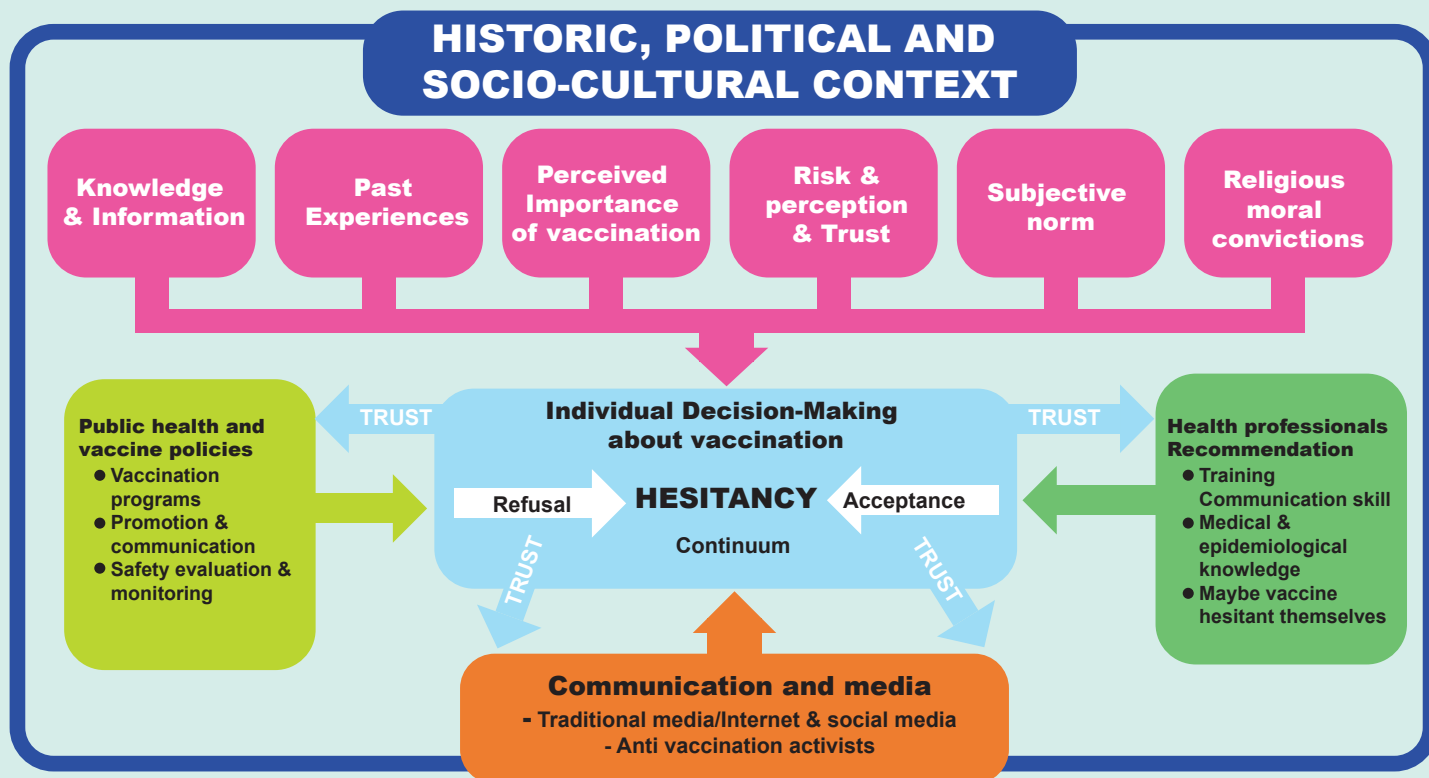


Figure 1. Conceptual model of Vaccine Hesitancy. Adapted from the Schema summary of discussions held during the Workshop on the cultural and religious roots of vaccine hesitancy: Explanations and implications for the Canadian healthcare. Accessible online: <http://www.usherbrooke.ca/dep-sciences-sante-communautaire/fileadmin/sites/dep-sciences-sante-communautaire/documents/HesitationVaccination/AfficheMG-anglais.pdf>



SECTION 4: CONSULTATION THEMES

While conducting the needs assessment we made sure to have a neutral (pro-choice?) approach, we kept the questions open and respectful of the diverse populations we engaged. The questions were quite simple: Can you share your experiences with COVID-19? Can you share your experiences with the COVID-19 Vaccines? What do you think are some of the barriers to getting vaccinated (specifically COVID-19 vaccines? What factors or things would motivate or encourage you to get vaccinated? As the vaccine protocols kept changing over the course of the project with the requirement for booster shots, we added a few more questions related to dose 3 and 4 of the vaccines.

Past experiences

Individuals past experiences:

Participants shared that their past experiences with vaccines, health services, family histories greatly affected their decisions around vaccines. Some shared they lost trust in the system as they had faced stigma and racism from healthcare providers before. There were also others who shared that they have had family members or friends who have had adverse side effects from vaccines therefore making them fearful of vaccines.

Communities' Historical trauma:

History exists and many of our participants had the awareness of historical injustices experienced by racialized populations in the name of science. Participants shared their fear of being used as guinea pigs' which manifests in mistrust of new medical or health treatments. Most of the mistrust is rooted in historical experimentation and racism, exemplified by Tuskegee experiments, HIV clinical trials and birth control experimentations in developing countries. Additionally, Participants shared that continued systemic racial discrimination in health care and barriers to accessing healthcare and essential medicines are a hindrance to vaccine uptake.

Lack of Race based Data:

The continued lack of race- based data was discussed as a critical factor in improving vaccine uptake. Participants shared concerns that it is challenging to understand the full impact of COVID-19 on racialized populations without race-based data. Questions arose about how many Black and racialized people had been affected by and died of COVID-19. Participants shared concerns that the lack of race-based data makes it futile to encourage vaccine confidence in racialized populations because racialized women have and continue to face systemic violence, especially within the health and social sectors. Having race-based data will help improve equity as there will be a platform from which to challenge the system. Participants asked that we continue to advocate for the collection of race-based data across all health institutions through community collaboration for data governance led by racialized people.

“We don’t know how many Black and racialized people have had COVID-19, been vaccinated, or died from COVID-19. Its concerning because without this numbers we can’t tell whether the vaccines are helping our communities health outcomes or are just unnecessary public health and government narratives.”

Social Determinants of Health:

Many participants expressed not getting vaccinated because they feared dealing with the side effects based on previous experiences. Participants shared that while the government and policymakers recommend staying at home when feeling unwell or sick, most of them do not have paid sick time. Most racialized women are essential workers unable to work from home during the COVID-19 pandemic despite considerable exposure risks during the pandemic. Even the few working from home face increased caring responsibilities and experience burdening domestic challenges. Furthermore, the mandates requiring that caregivers only work at one site meant that those who worked multiple jobs through agencies were forced to relinquish their second or third jobs resulting in lost income.

In this case, when faced with family illness, most struggled to survive financially and faced anxiety and uncertainty related to employment and financial security. The government-provided pandemic pay support did not provide significant financial stability for most as it was limited- not accessible to those with precarious immigration status. In these cases, participants shared having to make the difficult choice between getting vaccinated, getting COVID-19, or earning a living especially since most shared they were living cheque to cheque or “hand to mouth”

Knowledge of how vaccines have eradicated precious illnesses such as smallpox, polio:

Several participants shared that they were confident with the COVID-19 Vaccine as they had knowledge and awareness of how vaccines have helped eradicate or reduce previous illnesses such as smallpox, polio, measles etc. Several participants shared being vaccinated against many diseases as children and not feeling concerned about COVID-19 vaccine safety. Additionally, participants who had experienced COVID-19 infections and understood the full impact of COVID-19 on their health and those of family members did not need any persuasion to get vaccinated. These participants shared being very confident with the vaccines and their role in preventing COVID-19 and taking on the responsibility of convincing family members and friends to be vaccinated.

“I think that people should make decisions regarding their health based on practicality and not ideals. I am not against vaccinations because I know that they have supported people and their health for many years, however, everyone’s biological makeup is different and not everyone has the same reaction to the ingredients in vaccines. The heavy metals, and cells that I question the use of, however, I don’t fully understand the science behind vaccinations and so I know my thoughts are more based on my emotions than facts.”

Unanswered questions:

Many participants shared mistrust of the COVID-19 vaccine because it was developed very quickly. Additionally, questions arose about how the vaccine was clinically tested and what the results showed. In one group, the question was asked of how for 30 years, scientists have failed to develop HIV/AIDS vaccines or cure, and yet it took a few months to come up with COVID-19 vaccines. “Mistrust was also based on questions around ingredients and, most critically, why vaccinated individuals still get infected. For this reason, participants asked, why get vaccinated if I can still get infected? Participants also shared not having enough information about how the vaccines would affect children, pregnant women, and people with pre-existing conditions.

“One of my concerns is being triple vaccinated but still contracting the virus. Even with the second dose, it makes no sense to me. Scared of adverse reactions which could affect me long term as well. Afraid it would affect my fertility.”

“I was pregnant at the time, so being worried that the vaccine can affect me or my unborn child. I have had seen articles that woman took the vaccines and it led to miscarriages. It helps that I had a midwife and she really educated about it and made me feel comfortable.”

Mental Health:

Evidence from Canada indicates increased mental health issues among racialized individuals due to COVID-19. Furthermore, racialized Canadians experience poorer mental health outcomes when compared to non-racialized Canadians³⁷. Participants shared experiencing increased mental health concerns, including stress, anxiety, and depression. Some common themes identified as contributors of mental health issues were generational trauma, traumatization based on past experiences, social isolation, fear of the unknown, disconnection from family, friends, and social networks, including the inability to practice their faith and connect with their communities. Racialized women experience barriers accessing mental health and wellness services. They stated that these barriers existed before the pandemic but were more evident during the pandemic³⁸.

Additionally, racialized women face persistent inequities, disproportionate poverty levels, gender-based violence, micro-aggressions, racism, and higher levels of unemployment/underemployment, which precipitate mental health issues. Participants shared that mental health issues were an impediment to getting vaccinated.

Vaccine Information issues:

In recent years there has been an increased prevalence of anti-vaccine misinformation through the media, social media, and the internet. While traditional media such as newspapers, radio and television have processes for accountability and fact-checking, the Internet and social media do not. The Internet has become an essential source of information for most people, with information being easily accessible. Information on the internet is also user generated and allows individuals to create and share content on multiple platforms. Despite these advantages, the internet has allowed anti-vaccination activists to disseminate myths, misconceptions, disinformation, and misinformation.

Between the traditional media, social media and government announcements, participants shared experiencing information overload. An added concern was that government and public health officials continue providing contradictory information around COVID-19 vaccines. Some contradictions include how many doses one needs, whether you can mix vaccines and exactly how many doses one needs. An added concern was that government and public health officials continue providing contradictory information around COVID-19 vaccines. Some contradictions include how many doses one needs, whether you can mix vaccines and exactly how many doses one needs. Participants shared that this challenged distinguishing facts from misinformation thus inhibiting the ability to make informed decisions about vaccines.

Self-determination and informed decision making:

Participants shared feeling coerced or manipulated to get vaccinated, robbing them of their ability to make informed decisions about whether to get vaccinated. As racialized women who face multiple intersecting experiences, participants shared that their conversations or dialogues with health care providers were not created to strengthen efficacy but to direct and instruct. Additionally, participants felt like COVID-19 vaccines have become surveillance and punitive tools utilized by the government,

employers, schools, airlines, and other parties to control them. Also, participants shared concerns that the vaccine mandates were not informed by race and gender equity.

“Vaccination should be a personal choice and be left to do ask do tell like the rest of my medical information. this has created mass hysteria on top of an already bad situation and only after they forced everyone to get it did, they admit the cases were inflated the whole time”

“I think that people should make decisions regarding their health based on practicality and not ideals. I am not against vaccinations because I know that they have supported people and their health for many years however, everyone’s biological makeup is different and not everyone has the same reaction to the ingredients in vaccines. The heavy metals, and cells that I question the use of, however, I don’t fully understand the science behind vaccinations and so I know my thoughts are more based on my emotions than facts.”

“Pneumonia, flu, and such; has been around for very long and sadly killed people with underlying diseases. I feel that covid-19 is just a regular flu and for the flu shot, it’s your choice to get the shot. Just ridiculous how they impose people to get vaccinated to keep their jobs and that’s what I was faced with in order have my source of income.”

Structural Determinants of Health: Immigration Status:

Several participants shared not being able to access vaccines because they did not have a provincial health card. Although the government declared that vaccines were available for everyone, people were still required to show a health card and proof of address before getting vaccinated. The community pop-up clinics were the only places where undocumented or precariously insured people could access the vaccines without questions.





SECTION 5: SUMMARY OF CONCERNS AND SUGGESTED INTERVENTIONS

Concerns	Recommendations/Suggestions
Lack of Culturally diverse and relevant COVID-19/ vaccine information	<p>Partner with racialized communities to develop culturally relevant information.</p> <p>Support communities by hiring racialized service providers to support communities navigate the health system, provide relevant accessible information.</p>
Barriers accessing vaccines	<p>Partner with communities to plan, implement community vaccination.</p> <p>Invest in community led safe, equitable and accessible vaccine clinics.</p> <p>Provide training on gender, race, anti-oppression, and equity to all providers at vaccine clinics.</p> <p>Investments in community led responses within the communities including vaccine clinics, education, community development etc.</p>
Mental Health	<p>Addressing stigma around mental health supports and ensuring linkage to mental health supports.</p> <p>Invest in culturally relevant and safe mental health supports and care.</p> <p>Provide information and education on mental health to community members and service providers to reduce related stigma and fear.</p> <p>provide culturally responsive information to racialized Canadians on mental health and its impact on racialized women.</p> <p>Develop a resource listing on mental health providers best skilled to serve racialized women.</p>

Concerns	Recommendations/Suggestions
Mental Health	<p>Train and support community members to work as navigators to support and link community members to appropriate supports.</p> <p>Invest in responsive, safe, trauma and violence informed mental health services.</p> <p>Invest in and improve access to physical and mental health services that address long COVID.</p> <p>Develop Mental health systems that address racism, as well as the historical and contemporary contexts of colonialism.</p> <p>Provide adequate and sustained funding of community organizations that address the mental health and related needs of members of racialized populations.</p>
Information Overload: Misinformation/ Disinformation	<p>Develop culturally relevant outreach and community development activities to combat misinformation and disinformation.</p> <p>Develop a relevant community led information and resources and increase outreach via community events and spaces, social media and other relevant places to increase awareness.</p> <p>Building community capacity to understand and critically address vaccine misinformation and disinformation.</p> <p>Consistent identification, labeling and challenging of false and misleading information.</p>
Challenges navigating healthcare and linkage to supports	<p>Recruit and hire community workers/navigators to support communities by linking them to supports the health system</p> <p>Develop an accessible and culturally relevant resource listing to increase access.</p>
Systemic violence; Racism and gender inequity	<p>Inclusion and representation of populations with experiences of health disparities in planning, implementing and evaluation of health-related activities.</p>



SECTION 6: ABOUT VACCINES

COVID-19 vaccines continue to be our most important tool to reduce the risk of serious outcomes of COVID-19 in Canada. It's critical to ensure that safe and effective vaccines are available and widely accessible to ensure everyone gets vaccinated to protect against COVID-19.

The vaccines:

- were tested on a large number of people through extensive clinical trials
- have met all the requirements for approval, including safety
- are monitored by Health Canada and Public Health Agency of Canada for any adverse reactions that may occur after vaccination so that appropriate measures can be taken

Types of vaccines

mRNA vaccines teach our body to recognize and fight the virus that causes COVID-19, protecting us from getting sick all together or getting too sick. mRNA does not interact or change our DNA and mRNA COVID-19 vaccines do not contain any live virus so you cannot get sick with COVID-19 from these vaccines.

Viral-vector based Vaccines create a strong immune response in our body that will recognize and fight the virus that causes COVID-19. Like messenger RNA vaccines, the viral vector in the Johnson & Johnson COVID-19 vaccine does not interact or change our DNA and does not contain any live virus so you cannot get sick with COVID-19 from this vaccine.

Protein Subunit Vaccines contain harmless and purified pieces (proteins) of the virus, which have been specifically selected for their ability to trigger immunity. Subunit vaccines cannot cause COVID 19 because they only contain small, purified pieces of proteins and not the virus.

Plant Based Vaccines mimic the virus that causes COVID-19 making the body's immune system to respond in the same way it would if it encountered the real virus. Plant based Vaccines cannot make you sick.

Approved vaccines in Canada

Only vaccines that Health Canada has approved and determined to be safe and effective will be administered in Canada. After independent and thorough scientific reviews for safety, efficacy and quality, Health Canada has approved six vaccines for use in Canada.

	Vaccine Name	Type of Vaccine	Approved Age	Doses	Booster?
1	Moderna Spikevax®	mRNA	6 years or older	2 doses	Includes booster and ages 18 and older
2	Pfizer-BioNTech Comirnaty®	mRNA	5 years or older	2 doses	Approved as Booster for ages 5-17
3	AstraZeneca Vaxzevria®	Viral vector based	18 years and older	2 doses	N/A
4	Janssen Jcovden®	Viral Vector	18 years and older	1 dose	Approved as booster for ages 18 and over
5	Novavax Nuvaxovid®	Protein-Based	18 years and older	2 doses	N/A
6	Medicago Covifenz®	Plant-Based virus like particle	Ages 18-64	2 doses	N/A
7	Bivalent	mRNA		1 dose	Approved as Booster

Covid19 Variants and efficacy of vaccines of the different Variants:

Genetic variations of viruses, such as the one that causes COVID-19, are common and expected. SARS-CoV-2, the virus that causes COVID-19, has, and continues to develop mutations, which are changes to the genetic material in the virus over time. The significant mutation to the virus is called a variant. A variant is of concern when it affects:

- Spread of the pandemic
- The severity of the disease including the mildness or seriousness of the symptoms
- The effectiveness of the tests to detect the disease
- Protection from previous infection, vaccines, or treatments

It's critical that we monitor for genetic changes in the virus as it will enable us to have a clearer understanding of the potential impact of the mutations. The Public Health Agency of Canada works with the provinces and territories, and other partners to monitor and identify variants of concern in Canada.

Currently, Omicron and its sub-lineages are the primary variants of COVID-19 circulating in Canada. Evidence demonstrates that Omicron is more transmissible than previous variants of concern. Vaccination is one of the most effective ways to protect our families, communities, and ourselves against COVID-19. A booster dose following a primary series of mRNA vaccines offers better protection against Omicron infection and severe disease than the primary series alone.

WHAT IS A COVID-19 VACCINE BOOSTER?

A vaccine booster is an additional vaccine given after the original vaccine dose(s) to maintain the same level of immunity for a longer period of time. The Pfizer COVID-19 booster being recommended is the same exact one as the first two doses. Public health officials have reviewed available data on the Pfizer COVID-19 vaccine and have determined that a COVID-19 vaccine booster is beneficial for certain populations. Because immunity from the initial vaccine dose(s) naturally starts to wear off, a vaccine booster will strengthen your immunity.

Bivalent Vaccines

The virus that causes COVID-19 has evolved over time and some of these changes have created new variants of concern. Manufacturers have updated their vaccines to provide better protection against these variants. The updated vaccines are called “bivalent” because they target 2 strains of COVID-19 virus: the original strain and an Omicron strain. Bivalent vaccines are only approved for use as a booster dose.

COMMON VACCINE SIDE EFFECTS: THE TRUTH

Some people may experience side effects from the vaccine that will likely resolve after a few days. Some of these symptoms are part of the body’s response to developing immunity

Common side effects that have been reported include:

- **Redness, swelling and or pain at the injection site**
- **Headache**
- **Feeling tired**
- **Muscle or joint pain**
- **Fever or chills**
- **Swelling or tenderness under the armpit (only in Moderna vaccine)**
- **Nausea & vomiting (only in Moderna vaccine)**

Health Canada and Public Health Ontario are constantly monitoring vaccines for quality, continued effectiveness and adverse reactions.

Vaccines are not a cure for COVID-19 and building immunity within the wider community will take time. It is important to continue with public health measures such as wearing a mask or face covering, physical distancing, and regular handwashing/using sanitizer.



SECTION 7: COMMON FAQs

Q: How does the vaccine work?

A: All vaccines that are approved and available in Canada provide strong protection against COVID-19 and its variants, including the Delta variant and Omicron. Vaccines tell your body and immune system to start making antibodies. Antibodies are proteins that identify specific viruses so they can be cleared from our bodies. The antibodies help to protect us from getting sick if we are exposed to COVID-19. You cannot catch COVID-19 by getting the vaccine.

How Many Variants of COVID19 are there and do the Vaccines prevent from all the variants:

Q: Will I get COVID-19 from the vaccine?

A: The vaccines are not “live” – this means they do not have any active virus in them, so they cannot cause COVID-19.

Q: Will the vaccine change my DNA?

A: No. The vaccine does not change your DNA and cannot access where your DNA is stored in your cells. Vaccines work with your body’s natural defences to build protection. They teach your body how to recognize and fight the virus.

HOW VACCINES WERE MADE

Q: It usually takes 10 years for vaccines to be created and tested, why did this one only take 6 months?

A: mRNA technology used for the vaccine has been in development for over 10 years and has been used in other medical treatments like cancer. This combined with global funding and collaborations between governments and researchers allowed for the vaccine to be created much faster.

Q: Were Black people specifically in the trials for the vaccine?

A: Pfizer and Moderna trials had 30,000 – 40,000 participants, while typically vaccines have a test population of 6,000 people. Black participants were 9.3% of the population in the study. Both vaccines had 20% people of colour and other minorities in their studies.

Vaccine Safety

Q: Is the vaccine safe?

A: Yes. The vaccine has been tested for safety, and Health Canada has approved it for use in Canada. The vaccine is safe for people with diabetes, high blood pressure, heart disease and asthma.

Q: Has the vaccine been approved by Health Canada?

A: To be used in Canada, all drugs, including vaccines, must meet the regulatory requirements for safety, efficacy, and quality. Usually, this review process can take a long time because new drugs and vaccines get added to the bottom of the list and must wait their turn for review. However, these vaccines are so important that they went right to the front of the line, allowing the process to be much quicker than usual.

Benefits

Q: Why should I get the vaccine?

A: The vaccine does not prevent you from getting COVID-19, but it protects you from severe illness, hospitalization, and death if you do get COVID-19.

Q: Why are we encouraging our communities to get vaccinated?

A: When a large percentage of the population gets vaccinated, the spread of the virus (SARS-CoV-2) will slow down or stop. You can protect yourself, your loved ones and your community by getting the COVID-19 vaccine.

Side Effects

Q: Are there any side effects?

A: The studies that were done show good results, with few serious side effects. Most side effects happen between 2 – 3 days after getting the vaccine and up to 6 weeks after. When the studies were done, they checked people for up to 2 months after they got their vaccines.

The vaccine can cause pain or redness at the injection site, headache, fever, and muscle aches, but this doesn't mean you will get any or all of these side effects. Most side effects will go away in a few days. A nurse will monitor you for any reactions for 15 – 30 minutes after you get vaccinated.

Q: Are there any long-term side effects?

A: Health Canada has a system to monitor any identified side effects and takes any presenting side effects very seriously. Up to this point, no long-term side effects have been identified. If a new side effect does come up, it will be very rare and should not cause too much worry.

Previously Infected

Q: How long after contracting COVID-19 is it safe to get vaccinated?

A: People who are sick with COVID-19 should wait until they have recovered from acute illness and public health has told them they no longer need to self-isolate. It is important that you wait the full isolation period before getting the vaccine so that you do not expose people at your vaccination clinic to the virus.

Q: I had COVID-19 but now I am feeling better. Should I still get vaccinated?

A: If you had COVID-19 you should still get the vaccine once you have recovered. This is because you may not be immune to the virus that causes COVID-19 and you could get infected again. You do not need to get a COVID-19 antibody test before getting your vaccine.

ALLERGIES OR IMMUNOCOMPROMISED

Q: I have allergies. Can I get the vaccine?

A: The COVID-19 vaccine does not contain eggs, gelatin, preservatives or antibiotics. The nurse

will review the list of vaccine ingredients with you to make sure it is safe for you before you are vaccinated. If you have severe allergies, speak to a medical professional before getting your vaccine.

Q: Is it safe for me to get a COVID-19 vaccine if I am immunocompromised from treatment or illness? What if I have an autoimmune disease?

A: Nearly everyone will be able to safely receive the vaccine, although a very small number of people may need to avoid vaccination due to severe allergies. Vaccine manufacturers identify a number of precautions because these populations were not included in the original vaccine trials. In the context of the ongoing risk of COVID-19, most individuals can be offered vaccination. If you have questions and have a weak immune system or autoimmune disease, please speak to your healthcare provider about the COVID-19 vaccine.

PREGNANCY

Q: Do people who are pregnant, trying to get pregnant, or breastfeeding have safety concerns with the vaccine?

A: The Canadian Society of Obstetrics and Gynecology (SOGC), the National Advisory Committee on Immunization and public health experts in B.C. all advise that pregnant and breastfeeding women can be offered the vaccine. If you have questions and you are pregnant, planning to become pregnant or are breastfeeding, speak to your health care provider about COVID-19 vaccines.

SENIORS

Q: Do these vaccines work for people over the age of 65?

A: Pfizer and Moderna vaccinations showed similar protection in people over 65 years of age as they did in younger people: Pfizer provided 95% immunity, while Moderna had 86% immunity for patients over 65.

AFTER VACCINATION

Q: I'm not vaccinated but my family member/friend is, can we spend time together? Once I'm vaccinated, do I still have to worry about public health measures like wearing a mask and social distancing?

A: Yes. While the vaccines protect your family members or friends from becoming very ill if they get COVID-19, there is a small chance you can still get COVID-19 from them and then give it to others. After you get a vaccine, it will still be extremely important to continue to practice all the preventive measures that have been recommended, including washing your hands, maintaining a safe physical distance, wearing a mask, and staying home when sick.

Q: How long will I be protected after receiving the vaccine?

A: At this time, we do not know how long you will be protected after a vaccine. Right now, we know that the Pfizer vaccine offers protection for at least 6 months.



SECTION 8: MYTHS AND MISCONCEPTIONS

Myth 1: The vaccines were rushed. They're not safe.

Truth: mRNA vaccines are safe. The mRNA vaccines have been extensively researched, in diverse ethno-racial populations, for over 10 years and are the most advanced type of vaccine available right now. Health Canada and Public Health Ontario are constantly monitoring vaccines for safety, continued effectiveness and adverse reactions.

Myth 2: The vaccine contains microchips, fetal tissue, live viruses and/or animal-based ingredients/by-products.

Truth: The mRNA vaccines do not contain microchips, gelatin (pork), preservatives, formaldehyde, thimerosal, aluminum, latex, antibiotics, live or attenuated virus, animal or human (including fetal) cells/tissue.

Myth 3: You don't need to get the vaccine if you've already had COVID.

Truth: While most patients develop antibodies after contracting the virus, not all do. Even with the natural antibodies, they only last three to four months before you can become infected again. It is also recommended that you should wait 90 days before receiving the vaccine.

Myth 4: It changes DNA

Truth: mRNA does not come in contact with your DNA at any time. It cannot change or alter your DNA in any way.

Myth 5: You can get COVID-19 from the vaccine.

Truth: The vaccine does not contain the live virus. If you experience side effects after vaccination, that is your immune system developing a response if you are exposed to the actual virus. It is not because the vaccine has given you COVID-19. You cannot get COVID-19 from the vaccine.

Myth 6: The vaccine will cause infertility/sterility.

Truth: There is no evidence that mRNA has caused infertility or sterility.

Myth 7: You don't need the vaccine since the survival rate is high.

Truth: COVID-19 mainly affects the lungs, but it does impact other parts of the body and organs. While most people survive the disease, many survivors have long term complications such as continued joint and muscle pain, breathing difficulties, headaches, trouble concentrating ("brain fog"), depression and heart conditions.

Myth 8: The vaccine can lead to long term side effects

Truth: Side effects from the vaccine will appear within hours or days. There currently aren't reports of long-term side effects from the vaccine.

Myth 9: You shouldn't take the vaccine if you're pregnant or breastfeeding.

Truth: Breast milk provides your baby with protection against many illnesses. Breastfeeding is recommended even if you have COVID-19 as there is no evidence of the virus in breast milk. Talk to your health care provider if you are pregnant, planning to become pregnant or breastfeeding and want to get the vaccine.

Myth 10: You don't need a mask or to social distance after you get the vaccine.

Truth: Building immunity in the wider community (called 'herd immunity') will take time. You still need to wear a mask or face covering, disinfect common areas, keep a physical distance of 2 metres or 6 feet, and regular hand-washing or using hand sanitizer to protect yourself and others.





SECTION 9: VACCINE AVAILABILITY

How do I get Vaccinated

Vaccine Eligibility: To find out your eligibility please go to Vaccine eligibility
<https://www.toronto.ca/home/covid-19/covid-19-vaccines/covid-19-how-to-get-vaccinated/>

After confirming eligibility, you can get vaccinated by either booking an appointment or going to a pop-up vaccine clinic. Note that the eligibility at certain pop-up clinics might vary, so make sure to look carefully at the age, race, and risk factors the pop-up clinics are focused on.

For more information on available bookings, go to Ontario Vaccine booking
<https://www.ontario.ca/book-vaccine/>

Depending on where you stay there are located, vaccine bookings can also be made through the local public health run clinics, see the links below for the regional bookings sites.

<https://www.toronto.ca/home/covid-19/covid-19-vaccines/covid-19-how-to-get-vaccinated/>
<https://www.tehn.ca/covid19/covid-19-vaccine/mobile-and-pop-vaccine-clinics-east-toronto>
<https://stepstojustice.ca/questions/covid-19/i-dont-have-status-in-canada-or-a-health-card-can-i-get-a-covid-19-vaccine-or-proof-of-vaccine/>
<https://www.scarboroughcovidvaccineclinic.ca/pop-ups/>
<https://vaccinehunters.ca/oncentral>
<https://www.ontario.ca/page/go-vaxx-and-mobile-indoor-covid-19-vaccine-clinics>



SECTION 10: ADDITIONAL RESOURCES

- [https://www.torontoblackcovid.com/assets/faqs-covid-vaccine-\(1\).pdf](https://www.torontoblackcovid.com/assets/faqs-covid-vaccine-(1).pdf)
- [https://www.torontoblackcovid.com/assets/faqs-covid-vaccine-\(2\).pdf](https://www.torontoblackcovid.com/assets/faqs-covid-vaccine-(2).pdf)
- [https://www.torontoblackcovid.com/assets/faqs-pfizer-and-moderna-\(1\).pdf](https://www.torontoblackcovid.com/assets/faqs-pfizer-and-moderna-(1).pdf)
- <https://www.torontoblackcovid.com/assets/faqs-infertility-and-covid.pdf>

For resources in Spanish please go to <https://www.latinoscovid.org/Infographics>


CHILDREN, YOUTH, & COVID-19 VACCINES

CO= corona
VI = virus
D= disease
19= 2019





Children (5 to 11 years old), Youth (12 to 17 years old), and older can get a COVID-19 vaccine

Children and youth can get and spread the COVID-19 virus



Children and youth who have symptoms are recommended to be tested for COVID-19



  Public Health Agency of Canada  Agence de la santé publique du Canada

Women's Health: Debunking COVID-19 Vaccine & Fertility Myths

Myth: I shouldn't get the COVID-19 vaccine if I'm pregnant



Fact: The vaccine is recommended to protect you and your baby from COVID-19

Myth: I need to take a pregnancy test before receiving a COVID-19 vaccine



Fact: No, there are no ingredients in the vaccine harmful to a pregnant woman or developing fetus

Myth: The COVID-19 vaccine causes infertility in pregnant women

Fact: No, there is no live virus in the vaccine which interacts with your DNA in any way



Myth: I can't breastfeed before/after receiving the COVID-19 vaccine



Fact: No, in fact the vaccine can pass down protective antibodies from you to the baby

  Public Health Agency of Canada  Agence de la santé publique du Canada

Stay up to date with your COVID-19 vaccinations

Staying up to date with your COVID-19 vaccines, including boosters, remains the best way to protect against severe disease, hospitalization and death. It may also help prevent long-term complications from COVID-19 infection.

Protection from COVID-19 vaccines fades over time. If it's been longer than 6 months since your last dose, consider getting a booster dose to contacting your province or territory or a health care provider. If you have not had any COVID-19 vaccines, it's never too late to start.



You should get vaccinated even if you've been previously infected or think you may have been infected. While a previous COVID-19 infection can provide some protection against reinfection, that protection also fades over time. Up-to-date vaccination is recommended to help maintain effective protection, especially against severe outcomes.

It's recommended that you receive your booster dose 6 months after you tested positive or started having symptoms. A shorter interval of at least 3 months may be recommended in some circumstances.

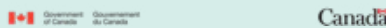
Help strengthen your defences against serious illness by staying up to date with all the COVID-19 vaccine doses recommended for you.

For more information on COVID-19 vaccination or to book an appointment, visit your provincial or territorial website.

Make informed decisions on using individual public health measures

In addition to staying up to date with your COVID-19 vaccinations, you're encouraged to consider using individual public health measures. This includes staying home when sick, wearing a well-fitting respirator or mask in public indoor settings, and improving indoor ventilation. It's most effective to use several measures at once, which is called layering. These are effective actions you can use every day to help reduce the spread of COVID-19.

Visit [Canada.ca/indigen-services-canada](https://www.canada.ca/indigen-services-canada) to learn more.



The facts about COVID-19 vaccines

Vaccination is one of the most effective ways to protect your health. Evidence shows that the COVID-19 vaccines used in Canada are very effective at preventing severe illness, hospitalization and death.

It's important to keep up to date on the vaccinations recommended for you, including booster doses. Over time, protection from COVID-19 vaccines will decrease. A booster reminds your immune system how to protect itself and helps improve vaccine effectiveness against severe illness.

While previous COVID-19 infection can provide some protection, up-to-date vaccination including booster doses is still recommended to provide longer-lasting protection and better effectiveness. Contact your health care provider or local public health authority for more information about the best time to be vaccinated after infection.

Post COVID-19 condition refers to the longer-term effects some people experience after their COVID-19 infection. We don't know what causes post COVID-19 condition, so the best way to prevent it is to take measures to avoid getting COVID-19, like getting vaccinated and following public health measures.

Approving vaccines

Manufacturers rigorously test COVID-19 vaccines during their development. Health Canada then carefully reviews each one.

Vaccines are only approved for use in Canada if tests meet the strict safety, effectiveness and quality standards of Health Canada. Health authorities continue to closely monitor COVID-19 vaccines once they are approved to help ensure their safe use.

Types of vaccines

mRNA vaccines are the recommended vaccines for most people in Canada.

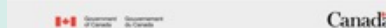
This type of vaccine provides the information your cells need to make a coronavirus protein. The protein triggers the body's immune response to help protect against getting infected with the virus that causes COVID-19, and from becoming severely ill. While vaccination reduces the chances of COVID-19 infection, you can still get infected even after COVID-19 vaccination.

If you are unable to receive an mRNA COVID-19 vaccine, Canada has also approved other types of COVID-19 vaccines, including viral vector, protein subunit and plant-based vaccines. Speak to a health care provider or public health authority about whether other vaccine options would be right for you.

Continue to layer individual public health measures

Vaccines and individual public health measures continue to be important to help protect your health and the health of others, especially those at risk of severe outcomes from COVID-19. These measures are most effective when layered together, including staying home when sick, wearing a respirator or mask, and improving indoor ventilation.

Get the facts. Visit [Canada.ca/indigen-services-canada](https://www.canada.ca/indigen-services-canada) to learn more.



CÓMO IDENTIFICAR CONTENIDO FALSO EN INTERNET

- ¿La información está en TikTok, Facebook u otra red social? Asegúrate que el contenido sea de una fuente confiable.
- Si no conoces la fuente, la sección "Acerca de" en la página te dará una mejor idea de la confiabilidad.
- El artículo está en una página que tiende a tener un tono humorístico.
- El formato del artículo es fuera de lo común o contiene varios errores ortográficos.
- Chequea si otras fuentes de noticias han cubierto esta historia. Si no la consigues es probable que la información sea falsa.
- ¿En qué fecha fue publicado?. Es posible que la información haya cambiado o actualizado desde que fue publicada.
- Mira la dirección de la página (URL). Asegúrate que no esté tratando de imitar una fuente conocida, con pequeños cambios, por ejemplo: usar .co en vez de .com.
- ¿Quién se beneficia con que la gente lea esta información y a quién le perjudica?

Fuente: www.canada.ca/indigen-services-canada

TYPES OF VACCINES APPROVED IN CANADA

- mRNA**: teaches your cells how to make a protein that will trigger an immune response. [more info](#)
- Viral Vector Based**: These vaccines use a harmless virus as a delivery system. It's not the virus that causes COVID-19. You can't get COVID-19 from the vaccine itself. [more info](#)
- Protein Subunit**: contain harmless and purified pieces (proteins) of the virus, which have been specifically selected for their ability to trigger immunity. [more info](#)
- Plant Based**: using the plant's natural cell process protein virus-like particles (VLPs) are produced. VLPs are injected into your body and they mimic the structure of the virus. [more info](#)



SECTION 11: BIBLIOGRAPHY

- Abji, S., Major, A., & Khemraj, R. (2021). Leading the settlement SHEcovery: Advancing an intersectional pandemic recovery by investing in women-serving-led organizations in Ontario's refugee and immigrant serving sector. [Research Report]. OCASI. https://ocasi.org/sites/default/files/Leading_The_Settlement_SHEcovery_2021_OCASI_0.pdf
- Black Health Alliance. (2020). Perspectives on Health & Well-Being in Black Communities in Toronto Experiences through COVID-19. Black Health Alliance. <https://blackhealthalliance.ca/wp-content/uploads/Perspectives-on-Health-Well-Being-in-Black-Communities-in-Toronto-Experiences-through-COVID-19.pdf>
- Butler, R. (2016). Vaccine Hesitancy: What it means and what we need to know in order to tackle it. *J. Vaccine*, 34, 1643–1649.
- Canadian Women's Foundation. (2020). GENDERED IMPACTS OF COVID-19 POLICY BRIEF. Canadian Women's Foundation.
- Dr. Akwatu Khenti. (2021). REPORT OF THE COVID-19 TOWN HALL SERIES THE BLACK SCIENTISTS' TASKFORCE ON VACCINE EQUITY | 2021. Black Health Alliance.
- Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., & Bettinger, J. A. (2013). Vaccine hesitancy: An overview. *Human Vaccines & Immunotherapeutics*, 9(8), 1763–1773.
- Glasgow, R. E., Harden, S. M., Gaglio, B., Rabin, B., Smith, M. L., Porter, G. C., Ory, M. G., & Estabrooks, P. A. (2019). RE-AIM planning and evaluation framework: Adapting to new science and practice with a 20-year review. *Frontiers in Public Health*, 7, 64.
- Goldenberg, M. J. (2016). Public misunderstanding of science? Reframing the problem of vaccine hesitancy. *Perspectives on Science*, 24(5), 552–581.
- Guttmann, A., Gandhi, S., Wanigaratne, S., Lu, H., Ferreira-Legere, L., Paul, L., Gozdyra, P., Campbell, T., Chung, H., Fung, K., Chen, B., Kwong, J., Rosella, L., Shah, B., Saunders, N., Paterson, J., Bronskill, S., Azimae, M., Vermuelen, M., & Schull, M. (2020). COVID-19 in Immigrants, Refugees and Other Newcomers in Ontario: Characteristics of Those Tested and Those Confirmed Positive, as of June 13, 2020. ICES. <https://www.ices.on.ca/Publications/Atlases-and-Reports/2020/COVID-19-in-Immigrants-Refugees-and-Other-Newcomers-in-Ontario>
- Hughes, B., Miller-Idriss, C., Piltch-Loeb, R., Goldberg, B., White, K., Criezis, M., & Savoia, E. (2021). Development of a codebook of online anti-vaccination rhetoric to manage COVID-19 vaccine misinformation. *International Journal of Environmental Research and Public Health*, 18(14), 7556.

James Iveniuk & Kwame McKenzie. (n.d.). Monitoring progress: Race and vaccine equity. Wellesley Institute. <https://www.wellesleyinstitute.com/wp-content/uploads/2021/05/Monitoring-progress-Race-and-vaccine-equity.pdf>

Jeremiah Rodriguez. (2021, April). Vaccine hesitancy: StatCan says Black, Latinx Canadians least willing to take COVID-19 shot. CTV News Online. <https://www.ctvnews.ca/health/coronavirus/vaccine-hesitancy-statcan-says-black-latinx-canadians-least-willing-to-take-covid-19-shot-1.5371783>

Nicholas Keung. (2020, April 13). Black, Latin American and South Asian Canadians face biggest financial problems caused by COVID-19, survey suggests. The Star. https://www.thestar.com/news/canada/2020/04/13/black-latin-american-and-south-asian-canadians-face-biggest-financial-problems-caused-by-covid-19-survey-suggests.html?fbclid=IwAR2mAwkEm8bnKgvTcLKgROCFLk5vnfbJz_3RmFcPmSee0cEu14Xy-8mT5Ok

Prescod, C., Brooks, D., Ngenzebuhoro, F., Garwe, F., Dias, K., Gebremikael, L., Walker, L.-A. G., Gebreyesus, P., Ahmed, S., Atungo, S., Obiorah, S., & Robertson, A. (2020, April 2). Statement from Black Health Leaders on COVID-19's impact on Black Communities in Ontario [Joint atatement]. <https://www.allianceon.org/news/Statement-Black-Health-Leaders-COVID-19s-impact-Black-Communities-Ontario>

Public Health Agency of Canada. (2020). Social determinants and inequities in health for Black Canadians: A snapshot. Public Health Agency of Canada. <https://www.canada.ca/content/dam/phac-aspc/documents/services/health-promotion/population-health/what-determine-s-health/social-determinants-inequities-black-canadians-snap-shot/health-inequities-black-canadians.pdf>

Samantha Edwards. (2021, March). 5 activists on the alarming impacts of the pandemic on BIPOC wome. CBC Online. <https://www.cbc.ca/life/culture/5-activists-on-the-alarming-impacts-of-the-pandemic-on-bipoc-women-1.5937360>

Stange, K. C. (2020). Commentary: RE-AIM planning and evaluation framework: Adapting to new science and practice with a 20-Year review. *Frontiers in Public Health*, 8, 245.

Statistics Canada. (2020). COVID-19 vaccine willingness among Canadian population groups. Statistics Canada. <https://www150.statcan.gc.ca/n1/en/pub/45-28-0001/2021001/article/00011-eng.pdf?st=Gll8d-dH>

Statistics Canada online. (n.d.). Delivering insight through data for a better Canada Impacts on Immigrants and People Designated as Visible Minorities.

Statistics Canada:Delivering insight through data for a better Canada Impacts on Immigrants and People Designated as Visible Minorities. (2020, October). [Static]. <https://www150.statcan.gc.ca/n1/en/pub/11-631-x/2020004/pdf/s6-eng.pdf?st=m1bq3TxQ>

The Chief Public Health Officer of Canada's Report & on the State of Public Health in Canada 2020. (2020). From Risk to Resilience: AN EQUITY APPROACH to COVID-19. Public Health Agency of Canada. <https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/cpho-covid-report-eng.pdf>

Timothy, Roberta. K. (2020). Coronavirus is not the great equalizer—Race matters. *The Conversation*.

<https://theconversation.com/coronavirus-is-not-the-great-equalizer-race-matters-133867>

Wendy Glauser. (2021). Changing the minds of the vaccine hesitant requires actually listening to them. Macleans.

¹ (Guttmann et al., 2020)

² (Nicholas Keung, 2020)

³ (Canadian Women's Foundation, 2020)

⁴ (Abji et al., 2021)

⁵ (Samantha Edwards, 2021)

⁶ (Statistics Canada: Delivering Insight through Data for a Better Canada Impacts on Immigrants and People Designated as Visible Minorities, 2020)

⁷ (Abji et al., 2021)

⁸ (The Chief Public Health Officer of Canada's Report & on the State of Public Health in Canada 2020, 2020)

⁹ (Samantha Edwards, 2021)

¹⁰ (Canadian Women's Foundation, 2020)

¹¹ (Prescod et al., 2020)

¹² (Dr. Akwatu Khenti, 2021)

¹³ (Black Health Alliance, 2020)

¹⁴ (Abji et al., 2021)

¹⁵ (Canadian Women's Foundation, 2020)

¹⁶ (Guttmann et al., 2020)

¹⁷ (Statistics Canada online, n.d.)

¹⁸ (Public Health Agency of Canada, 2020)

¹⁹ (James Iveniuk & Kwame McKenzie, n.d.)

²⁰ (James Iveniuk & Kwame McKenzie, n.d.)

²¹ (Timothy, 2020)

²² (Dr. Akwatu Khenti, 2021)

²³ (James Iveniuk & Kwame McKenzie, n.d.)

²⁴ (Glasgow et al., 2019)

²⁵ (Stange, 2020)

²⁶ (Goldenberg, 2016)

²⁷ (Goldenberg, 2016)

²⁸ (Butler, 2016)

²⁹ (Hughes et al., 2021)

³⁰ (Jeremiah Rodriguez, 2021)

³¹ (Statistics Canada, 2020)

³² (Dubé et al., 2013)

³³ (Goldenberg, 2016)

³⁴ (Hughes et al., 2021)

³⁵ (Wendy Glauser, 2021)

³⁶ (Dubé et al., 2013)

