

**City of Toronto
Toronto Public Health
Playbook for the
COVID-19 Vaccination Program**



January 2021 – Version 1.2
(Updated March 9, 2021)





Executive Summary

Ontario Public Health Standards require public health units to develop and implement an emergency management program consisting of emergency plans, training programs, exercises, and public education, as well as infrastructure to support emergency responses. Toronto Public Health's emergency planning aims to enhance the City of Toronto's resilience to emergency incidents, planned events and business disruptions.

In the fall 2016, as part of routine emergency response planning work, Toronto Public Health coordinated an internal emergency planning exercise called EpicTO. Through this exercise, staff simulated a public health immunization clinic that would be executed during a public health emergency or infectious disease pandemic.

EpicTO was the largest emergency exercise ever undertaken at Toronto Public Health. The exercise engaged staff from across the organization to help Toronto Public Health strengthen its ability to respond to a public health emergency. Following an evaluation of the exercise, staff reviewed the lessons learned and identified areas to continue to enhance Toronto Public Health's emergency responsiveness.

Toronto Public Health implemented many of the recommendations from this exercise that have been reflected throughout the City's COVID-19 response and are now being used to inform planning for the safe and efficient distribution of COVID-19 vaccines, when they are available.

Toronto Public Health is also using lessons learned from our annual influenza vaccine clinics, experiences from the H1N1 influenza pandemic in 2009 and current scientific evidence to inform this critical mass immunization planning work with our city, health sector, community and government partners.

This playbook represents the culmination of Toronto Public Health's experience and expertise and describes the policies and procedures, strategies and tactics that will be used to effectively and efficiently deliver a successful COVID-19 vaccination program.

While we aim to provide fully accessible content, there is no text alternative available for some of the content on this site. If you require alternate formats or need assistance understanding our maps, drawings, or any other content, please contact us at 416-338-7600 or publichealth@toronto.ca.



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Introduction

The COVID-19 pandemic emerged in late 2019 and began spreading around the world by early 2020. COVID-19 was declared a global pandemic in March 2020 due to its extraordinary viral transmission, and continues to pose a major public health threat, impacting the economic, social and emotional wellbeing of Canadians, Ontarians and Torontonians.

As a result, jurisdictions around the world, and provinces and municipalities in Canada, have intermittently imposed stringent non-pharmaceutical measures (NPIs), often termed “lockdowns”, that have impacted public administration and services, economies, and communal activities in an effort to stop the spread of the virus.

Approval of the first two of several vaccines to prevent COVID-19 in late 2020 provided another public health measure for pandemic response. At the time of writing, three vaccines had been approved in multiple countries around the world. Of these, Health Canada has approved the Pfizer-BioNTech and Moderna COVID-19 vaccines. More vaccines may be available in the future. Manufacturers are producing millions of vaccine doses, including over 40 million, which have been purchased for Canadians.

A safe and effective vaccine for COVID-19 offers protection against this novel coronavirus. All levels of government have a role to play in the effective and efficient delivery of COVID-19 immunization across the country. Figure 1 outlines the responsibilities for vaccines among the Government of Canada, Province of Ontario, and the City of Toronto.

Canada	Ontario	City of Toronto
<ul style="list-style-type: none"> • Approve vaccines for use in Canada • Procure vaccines nationally • Distribute vaccines to Provinces / Territories • Provide National Advisory Committee on Immunization (NACI) recommendations on prioritization of vaccine administration to the Provinces / Territories 	<ul style="list-style-type: none"> • Receive vaccine from Government of Canada • Prioritize roll-out and distribution across Ontario • Distribute vaccine to Local Public Health Authorities • Responsible for vaccine tracking and healthcare records management <p><u>NOTE:</u> Only in the City of Toronto, does the Province of Ontario distribute vaccine directly to both Toronto Public Health and healthcare providers, including physicians and pharmacies.</p>	<ul style="list-style-type: none"> • Receive vaccine from Province of Ontario • Administer vaccines in accordance with the Provincially mandated prioritization framework • Fulfill liaison role between Ministry of Health and Healthcare providers

Figure 1. Balance of responsibilities for vaccines among the three levels of government

As shown above, the Government of Canada is responsible for the approval and acquisition of vaccines; the Government of Ontario is responsible for prioritizing who should receive the vaccines and for distributing the vaccines to local public health units. Toronto Public Health is responsible for administering the vaccines in accordance with provincially mandated priorities.

Figure 2 shows the three-phased COVID-19 vaccine distribution plan developed by the Province of Ontario, which identifies:

- Priority populations;
- Varied vaccination sites and methods; and,
- Anticipated timelines and doses.

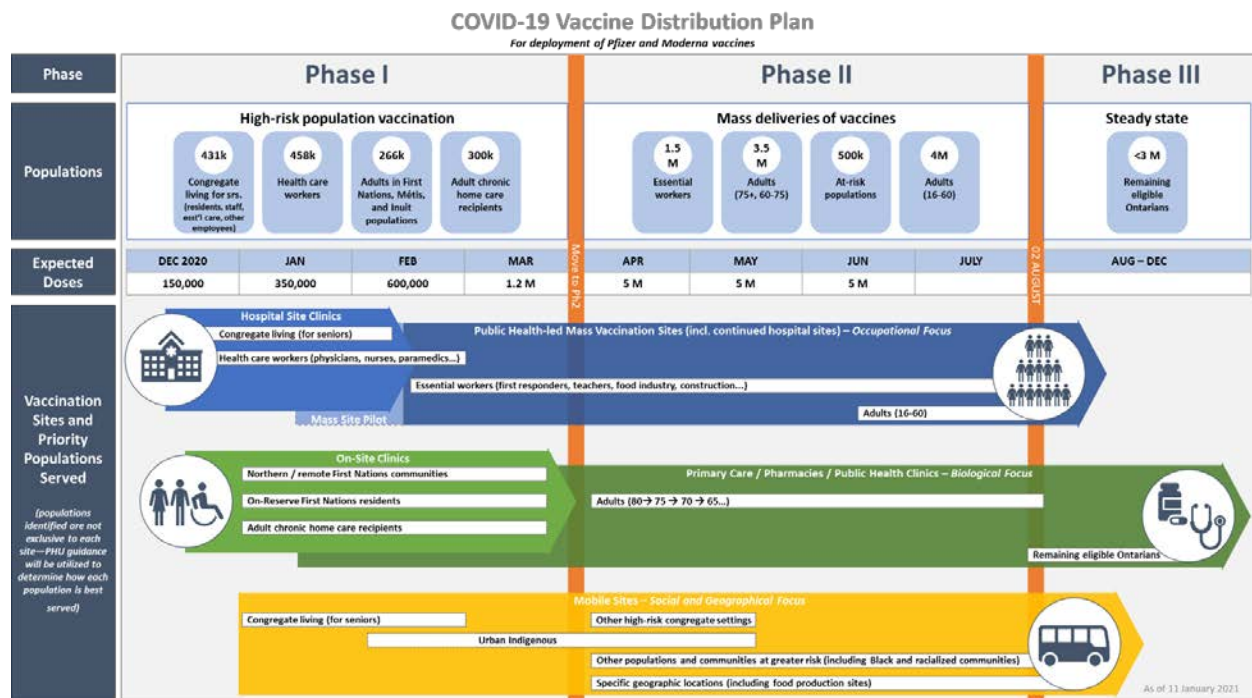


Figure 2. Ontario COVID-19 vaccine distribution plan

In alignment with Ontario’s COVID-19 vaccine distribution plan, the City of Toronto and Toronto Public Health have built a robust plan for the administration of vaccines. The City of Toronto’s COVID-19 Vaccination Program is founded on medical and clinical expertise and guidance, and is informed by engagement and collaboration with partners and diverse populations and communities. The plan is supported by a fulsome communications campaign.

The general Concept of Operations for the City of Toronto’s COVID-19 Vaccination Program builds on the Toronto Public Health 2016 Mass Immunization Clinic Plan, which was tested in 2017 through the EpicTO exercise. The Vaccination Program is also informed by Toronto Public Health’s longstanding success in delivering immunization clinics and supporting internal and external partners to deliver vaccinations within their communities. The Vaccination Program describes how the City of Toronto and Toronto Public Health will:

- Identify and support access to vaccines and vaccination information for resident and worker populations for which it is responsible;
- Operate immunization clinics to vaccinate members of these populations during the Province of Ontario’s phased approach to COVID-19 vaccine roll-out;



- Concurrently and intermittently operate mobile immunization clinics and specialized, targeted immunization teams;
- Implement interventions to address the specialized needs of vulnerable populations;
- Support ongoing vaccination of these populations as the Province of Ontario's healthcare system transitions into permanent vaccination for COVID-19, as may be required in the coming months and years; and,
- Collaborate and plan with community and health system partners.

This Playbook presents the City of Toronto's COVID-19 Vaccination Program, which has been developed by Toronto Public Health in collaboration with numerous City Divisions and in consultation with community partner agencies and organizations. The City's Vaccination Program is guided by Ontario's COVID-19 vaccine distribution plan. The successful implementation of the Program is dependent on receipt of vaccines in accordance with provincial priorities and successful engagement with health sector partners. The impact of the Program will be measured by the rate of immunization, population coverage, and the reduction and eventual elimination of community spread of COVID-19.



1. Governance

In March 2020, the City of Toronto activated its Emergency Operations Centre and created a city-wide COVID-19 Task Force to coordinate all aspects of the City's response to the COVID-19 pandemic. The primary aim of the COVID-19 Task Force is to reach across and manage City services, to ensure that both the safety and the needs of Torontonians remain top priorities.

With the impending announcement of COVID-19 vaccines, the COVID-19 Task Force directed its focus to immunization. The result was the establishment of the City of Toronto COVID-19 Immunization Task Force.

Immunization Task Force

The City of Toronto's Immunization Task Force (ITF) functions to plan for the mass immunization of residents and workers within the City of Toronto. The overarching structure of the COVID-19 ITF is shown in Figure 3.

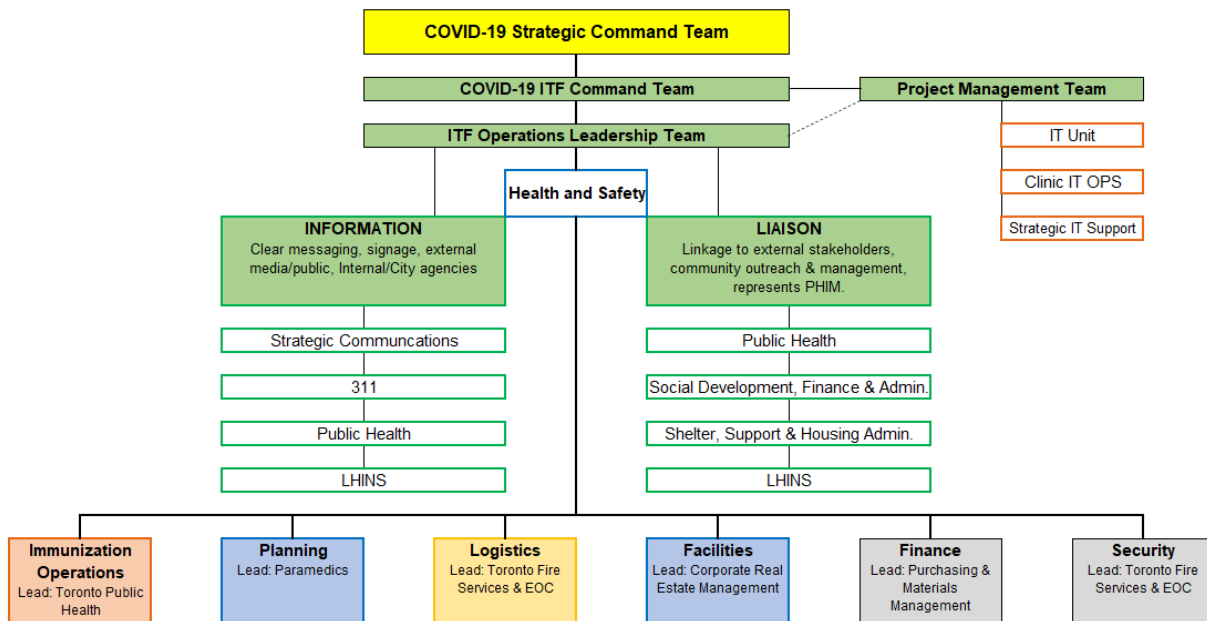


Figure 3. City of Toronto COVID-19 Immunization Task Force

The ITF's structure is based on a modified Incident Management System (IMS), which adopts a provincial standard for emergency management team building and operations, expanding on some functions and adding new functional areas as required to address the extraordinary and unprecedented demand that COVID-19 is placing on the City.

The ITF is a necessarily large structure, combining numerous functions, areas of expertise, skills, and experiences and knowledge from across the City. Information sharing and communication follow a "chain of command" through the IMS; at the same time, lateral communication is equally important and encouraged.



The ITF and its activities are not intended to replace nor impede existing healthcare systems and providers that expertly manage and provide care including vaccination.

The ITF is a temporary, short term, emergency response organization, operating with the primary mandate of expediency and in accordance with the overarching COVID-19 incident management system. The Task Force's IMS is subject to change as needed. If and when change is needed, the IMS and the ITF itself can and will be modified to ensure close coordination and a common operating framework for action. The ITF will be disbanded when the City of Toronto's leadership is confident that those residents and staff for which it is responsible have been or can be vaccinated through other means.

Roles and Responsibilities

The ITF's Command Team is comprised of the:

- Medical Officer of Health;
- COVID-19 Incident Commander;
- City Manager;
- City Solicitor; and,
- Chief Communications Officer.

Public health oversight and guidance are the main drivers of the activities of the ITF, and all activities are ultimately undertaken to support the public health outcome of vaccination. Various personnel supporting each of the roles identified on the ITF Command Team participate on an as-required basis. For example, Legal Services staff are consulted to provide opinions on many aspects of the work of the ITF, such as on employment, lease agreements, and privacy legislation, among others.

The ITF Command Team is supported by an Operations Leadership Team and a Project Management Team.

Additional supports within the ITF include the following, with responsibilities for:

- Health and Safety – development, guidance and implementation of training on policies that affect occupational health and safety, public health protection, and cleaning and disinfecting related to immunization clinic spaces and personnel.
- Information – (alternately "Communications") internal communications within the City of Toronto and external communications to the public and other stakeholders about the Vaccination Program, vaccine characteristics, and other COVID-19 vaccine related issues, relying existing or new channels and mediums of delivery.
- Liaison – sharing information on public health issues, social constructions of vulnerability, precarious housing and homelessness, and Provincial healthcare systems; gathering information and relaying it from subject matter experts and community partners in these areas; and, acting as the primary points of contact with their counterparts and serving as representatives of the City and the ITF in matters of immunization for these populations and communities.



ITF Roles and Responsibilities are differentiated from the City of Toronto and Toronto Public Health.

In the City of Toronto, the Medical Officer of Health, in collaboration with the Deputy MOH, Associate Medical Officers of Health, and supported by TPH staff, is responsible for providing oversight, support, and guidance on public health issues including COVID-19 pandemic response operations and policies, and for informing and guiding the ITF's program of activities. This responsibility includes receiving specific medical and health guidance from national and provincial health authorities, and for overseeing its implementation within the City of Toronto.

The ITF Command Team itself undertakes engagements with organizations that are external to the City of Toronto. For example, the Medical Officer of Health along with senior staff and others at Toronto Public Health are responsible for interfacing with their counterparts at the Ontario Ministry of Health, Public Health Ontario, other public health units, local hospitals, Local Health Integration Networks and others, as and when required.

In addition to existing health system linkages, the COVID-19 Incident Commander and the ITF Planning Chief are responsible for interfacing with the Province of Ontario's Vaccine Distribution Task Force and communicating non-privileged information to the ITF and the City of Toronto corporate leadership as appropriate.

ITF Functional Areas

The Task Force's IMS comprises multiple functional areas, or sections, that report to the ITF Command Team through the Operational Leadership Team. Each section is dedicated to specific activities in support of the City's COVID-19 Vaccination Program. Details about the contributors to each section are shown in Figure 4.

Participation within each section includes TPH medical doctors, nurses, and emergency management experts and the functional expertise of many staff from a variety of City Divisions. Accordingly, coordination with the City's wider operational and administrative structure is strong. The individual functional areas and tactical accountabilities for each are described as follows:

Immunization Operations

The ITF Operations Section is responsible for developing and operationalizing specific plans and tactics for the operation of mass immunization clinics, mobile clinics, and other interventions; seeking appropriate public health guidance; administration and management of vaccination operations; and, identifying resource needs in coordination with the ITF Logistics, Finance, and Facilities sections.

Planning

The ITF Planning Section is responsible for maintaining broad situational awareness and oversight on vaccine distribution; planning for distribution to priority groups and vulnerable populations based on public health guidance; and tracking resources and capabilities available to or required by the ITF. It is responsible for leading the development of the concept of operations and the comprehensive immunization plan, which includes TPH's updated MIC plan.

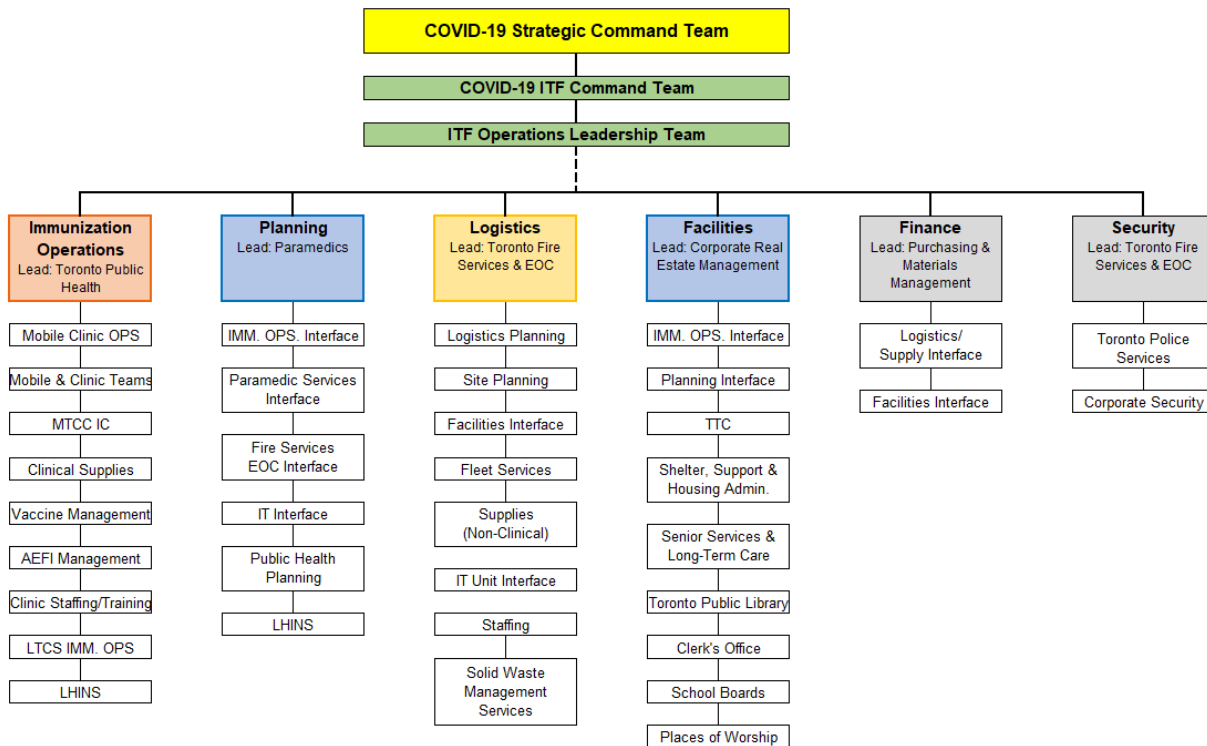


Figure 4. City of Toronto COVID-19 Immunization Task Force tactical accountabilities

Logistics

The ITF Logistics Section is responsible for vaccine inventory management; acquisition, storage, and deployment of medical and non-medical supplies, including personal protective equipment; transportation of resources and personnel; and, supporting the People & Equity Division in recruiting human resources needed for immunization operations.

Facilities

The ITF Facilities Section is responsible for siting and securing fixed sites through lease agreements or City real estate sharing options; siting and securing mobile clinic testing sites; and, siting and securing resting and staging areas as required.

Finance

The ITF Finance Section is responsible for planning and accounting for all workforce scheduling, procurement, compensation, and expenditures, in accordance with applicable regulations and standards; information management of all records of value except for the final immunization plan document; and, ensuring staff scheduling for clinics and other immunization operations.



Security

The ITF Security Section is responsible for the security of clinic sites, operations, information, and especially vaccines; risk mitigation for potential anti-vaccination or other protests and for enforcing public health guidance including physical distancing and wearing of appropriate masks in clinics; and, line management at all clinic sites.

Responsibilities and Accountabilities

All members at all levels of the ITF are responsible for adhering to its IMS, escalating emerging issues and risks to ensure safe and efficient vaccine delivery, and ensuring clear and open lines of communication are maintained.

Unity of Command

Unity of command is a key principle of emergency management. In the ITF, unity of command is exercised through its IMS: each section agrees to take instruction from and report to their Section Lead; and, Section Leads agree to take instruction from and report to the ITF Operations Leadership Team. The COVID-19 Incident Commander has overall accountability and responsibility for the ITF exercised through the ITF Operations Leadership Team; and is, in turn, accountable to the City's Strategic Command Team. At any time when information appears unclear or an emergent, potential or perceived risk is identified, ITF members are expected to use the IMS "chain of command" to escalate questions, problems, or concerns for collaborative and responsive resolution.

2. Communications and Community Engagement Approach

The City of Toronto's Strategic Communications Division's mission is to provide excellent communications services that ensure the public, employees, media, as well as local, national and international audiences have a clear understanding of the City of Toronto's policies, priorities and programs. The division is responsible for providing strategic and corporate communications planning and project management and media relations support to Council, committees, task forces, senior City staff and divisions. The goal of the division is to assist the Mayor, Members of Council and City divisions to inform the public about City programs, services and emerging issues of interest and to encourage civic participation in municipal government.

In the context of the COVID-19 Vaccination Program, the City of Toronto's Strategic Communications Division works in partnership with Toronto Public Health to ensure messages and published materials about the safety, efficacy and availability of the vaccines is accurate, timely, and broadly disseminated. The overall concept of the communications campaign is captured in Figure 5:



Figure 5. City of Toronto communications campaign concept

Guiding Principles

The communications plan to support roll-out of the COVID-19 vaccination program relies on a number of key guiding principles; specifically, the Communications plan is intended to:

- Reach every resident, in every community, in every corner of Toronto;
- Be agile, to allow for responsiveness and quick pivots;
- Be centralized and unified, so that there is consistent messaging through a single voice;
- Align to provincial and federal messages, including timing of announcements and direction; and,
- Be based on evidence-based research to promote trust in the safety and efficacy of the vaccines, address misinformation, and guide communications messages, spokespersons and campaign spending.

Strategy Overview

The City's COVID-19 Vaccination Program communications plan relies on the following proven strategies:

- Leveraging all communications channels (traditional, digital, in-person);
- Using consistent design and branding;
- Continuing to drive public to toronto.ca/covid19;
- Collaborating with the COVID-19 ITF Liaison team to connect with community leaders;
- Using multiple languages, share vital information with community leaders and City Councilors for dissemination;



- Monitoring and listening to public sentiment, using data and analytics to drive decision-making, and appropriately tailoring messages and tactics; and,
- Undertaking research to guide messages, ensuring use of the best sources of information, and proactively dispelling misinformation before it can be disseminated.

Audiences

Three main categories of audience have been identified and used to inform the City's COVID-19 Vaccination Program communications plan.

First, and foremost, the communications plan aims to reach all Toronto residents, with a focus on:

- The “moveable middle”, that is, those who may not understand the vaccine, or who may be hesitant for various reasons, but can be educated and persuaded to be immunized;
- Vulnerable and racialized communities, especially Black and Indigenous;
- Non-English-speakers and new Canadians;
- Youth; and,
- Seniors, who may need help to understand the logistics of accessing the vaccine.

Second, the communications plan envisages leveraging the work of the ITF Liaison team with community partners, third parties and others to:

- Educate and influence residents in specific communities, who may prefer to seek counsel from their own community leaders; and,
- Engage with the medical community, in response to data which shows that 80% of individuals are most influenced to receive a vaccine by their primary care physician.

The third audience is the Toronto Public Service, to provide:

- Regular updates and resources to staff and leadership
- Assist the City's People and Equity division with recruitment efforts
- Communicate City policies related to vaccination
- The materials to ensure an informed public service, which will in turn ensure an informed public.

Key Messages

Key messages have been and continue to be developed by the City's Strategic Communications team in collaboration with Toronto Public Health. The messaging will evolve in response to when vaccines become available:

- **Why and How:** leading up to the wider availability of vaccines, educating about why individuals should be vaccinated and how the City plans to deliver vaccines as they become available.
- **Come and Get It:** once vaccines become available, an explanation about why and how individuals can be immunized against COVID-19.



- **It’s Not Too Late:** at this stage, vaccines will have been widely available for several months, so this phase of the communications plan will invoke messaging to push individuals who are hesitant to take action and get the vaccine to help achieve the wider goal of “herd” immunity that contemplates at least 70% of the population being vaccinated.

Tactical Overview

The City of Toronto Communications Plan is founded on a **Pink Bandage Campaign** to brand the COVID-19 Vaccination Program. This social campaign aims to excite, promote and encourage immunization through a pink bandage.

A pink bandage icon is being used in all facets of communications materials associated with the COVID-19 Vaccination Program, such as on social media, for communications templates, and in advertising. At immunization clinics, there will be an opportunity for individuals to apply a pink bandage to their social media avatar once they have been vaccinated, and the City is working to provide a sticker of a pink bandage to vaccine recipients. Figure 6 shows the bandage along with an illustrative example of a social media avatar (the individual shown in the figure had not been vaccinated as at January 31, 2021).

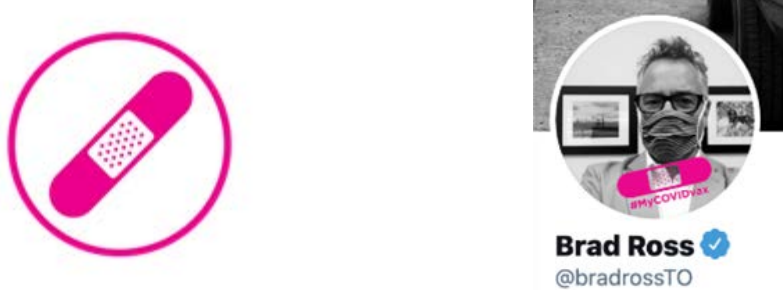


Figure 6. City of Toronto pink bandage icon and social media avatar example

Starting with the first Toronto Public Health immunization clinic, which initially operated on January 18 and 19, 2021 as a “proof of concept” clinic, there will be pink bandage “selfie stations” positioned near clinic exits. This tactic uses social influence to help address vaccine hesitancy. Clinic clients will be encouraged to take a selfie at the selfie station to show off that they were vaccinated via social media, as shown in the illustrative example in Figure 7.



Figure 7. Selfie station illustrative example

Communications Materials

A suite of templates with a consistent design will be used to further brand the City's COVID-19 Vaccination Program, and will be used for a range of communications vehicles, including:

- Key messages;
- FAQs (frequently asked questions, with answers);
- Tip sheets and brochures;
- Posters;
- On-site signage at immunization clinic locations;
- Videos about, for example, demonstrating the process to get vaccinated and testimonials on the ease of the vaccination process;
- Updating stakeholders, as well as regular updates to 311 and 211;
- Communications to City Council, whereby matter stories and other content can be created for information sharing with Councilors' constituents; and,
- Possible direct mail/householder flyers.

All key communications materials will be translated into multiple languages

The City's Strategic Communications team has developed communications products with a consistent branded look and feel as a means of ensuring easy public recognition of information about Toronto's COVID-19 Vaccination Program. Templates are being developed for use by the City, Toronto Public Health and by partners, such as hospital partners, for posters, pop-up banners and signage for immunization clinics. Examples are shown in Figure 8.



Figure 8. Vaccination program branding

Communication Modes and Media Platforms

The communications plan for Toronto's COVID-19 Vaccination Program involves a public education campaign that has been developed so as not to duplicate provincial and federal government efforts.

Advertising channels that are planned for use include:

- Transit shelters;
- Digital billboards;
- Multi-residential elevator screens;
- Digital media, which will be programmed based on geotargets and demographic targets;
- Social media, including TikTok, Facebook, Instagram and Twitter (geotarget and potentially demographic target);



- Multilingual and specialized media, to include traditional, digital and social in the top languages, as well as for communities identified in conjunction with the City's COVID-19 Vaccination Program Liaison team;
- Radio advertising, which is planned to be broad and targeted;
- Free advertising as is available and through in-kind partnerships; and,
- Leveraging space at properties of City Agencies and Corporations, such as TTC spaces.

The Communications plan is founded on effective and timely **Media Relations and Issues Management** that involves:

- Proactive outreach to media, including multilingual media;
- Spokespeople who are conversant in multiple languages to ensure target populations are reached;
- Anticipating issues that may arise and addressing them proactively;
- Social listening (on Twitter, Facebook, Instagram, WhatsApp, TikTok) to monitor for the spread of misinformation and address quickly;
- Use of a daily issue tracker to monitor, share information, and address issues;
- Media site tours and visits, such as for the opening of the Proof-of-Concept Immunization Clinic at the Metro Toronto Convention Centre, or supplied video when in-person visits are not possible; and,
- Regular updates via media briefings and news releases.

The communications team supporting Toronto Public Health will have an active **Social Media** presence. To be as effective as possible, the City's content will be visual, using multimedia, customized for each platform and will be both:

- Proactive: by delivering key messages and information, to persuade and motivate individuals to be vaccinated.
- Reactive: by monitoring for misinformation, confusion and related issues, and correcting these.

Customized content will be used for each platform so as to reach different audiences

The communications plan will also make use of the City's COVID-19 **Web** page to provide ticker updates showing how many people have been vaccinated in Toronto over time. The roll-out will highlight multimedia, visual and key web content and utilize Search Engine Optimization to ensure the public is directed to the relevant pages on the City of Toronto website.

Engagement and Communication to Diverse Audiences

Efforts continue to be expended on engaging with the full range of communities that make up the City of Toronto.

Working in partnership with advertising agencies and relying on vaccine experts, sector leaders, resident leaders, social marketing and communication professionals, and behavioral scientists, the City's engagement and communications efforts are intended to develop a Toronto For All communication campaign that will:



- Target an engagement and marketing campaign to specific groups, including Indigenous, Black and Senior populations;
- Reduce vaccine hesitancy among high-hesitancy population groups;
- Dispel vaccine hesitancy among healthcare workers and other primary caregivers, targeting hotspots; and,
- Collaborate on engagement and mobilization with behavioral scientists using their vaccine demand cognitive segments model.

Throughout the campaign, keen attention will be paid to the social determinants of health such as race, income and food security, housing, and disability, to drive a targeted equity engagement and mobilization strategy.



3. Partnership and Engagement

The City of Toronto recognizes that public health measures can only be effective if individuals and groups believe and accept that the information being presented to them is trustworthy and true. Establishing trust and confidence among the many populations that make up Toronto will enable the City to understand their different and unique needs so as to best support their participation in the COVID-19 Vaccination Program.

Community engagement efforts are built on the City of Toronto’s Council-approved [TOSupports: COVID-19 Equity Task Force on Vaccines](#), which is built on the 25 equity actions and targeted and enhanced equity measures that the City of Toronto, Toronto Public Health, and partners are taking to support Torontonians disproportionately impacted by COVID-19.

The City’s Social Development, Finance and Administration Division (SDFA) is at the forefront of building trust in communities across Toronto through its leadership and support to:

- Develop and implement a social inclusion and community safety agenda for the City;
- Foster safe and strong neighbourhoods and communities;
- Promote community engagement; and,
- Advance life skill opportunities for youth.

The City, through SDFA, recognizes the importance of community-driven and -implemented solutions to the success of the COVID-19 Vaccination Program. To that end, the Division is working within various communities to facilitate and promote vaccine uptake (Figure 9).

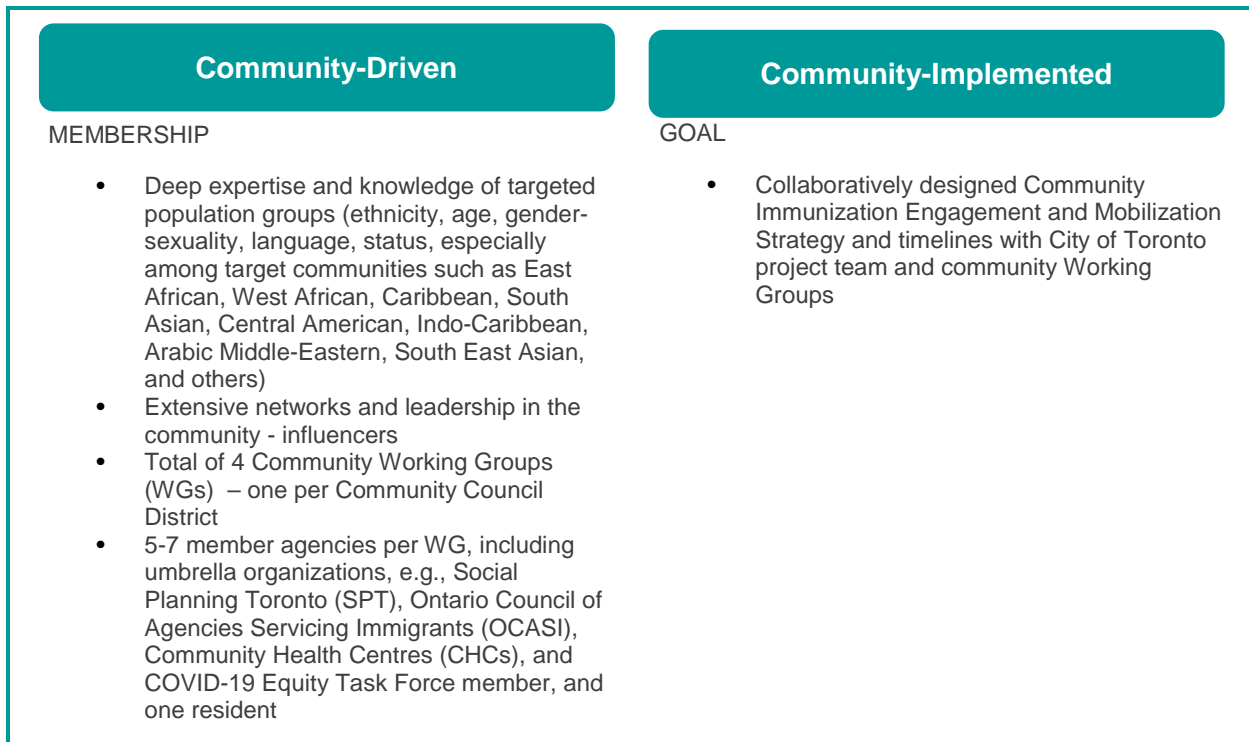


Figure 9. Community-centred approach to facilitate adoption of public health measures including vaccination



To support community efforts and achieve the intended outcomes of the Vaccination Program, the starting point is leveraging internal City resources and external partnerships. Figure 10 presents an overview of resources that are internal to the City, as well as the broad range of external groups that have come forward to work collaboratively to lend support to collective efforts to eradicate COVID-19 through vaccination efforts.

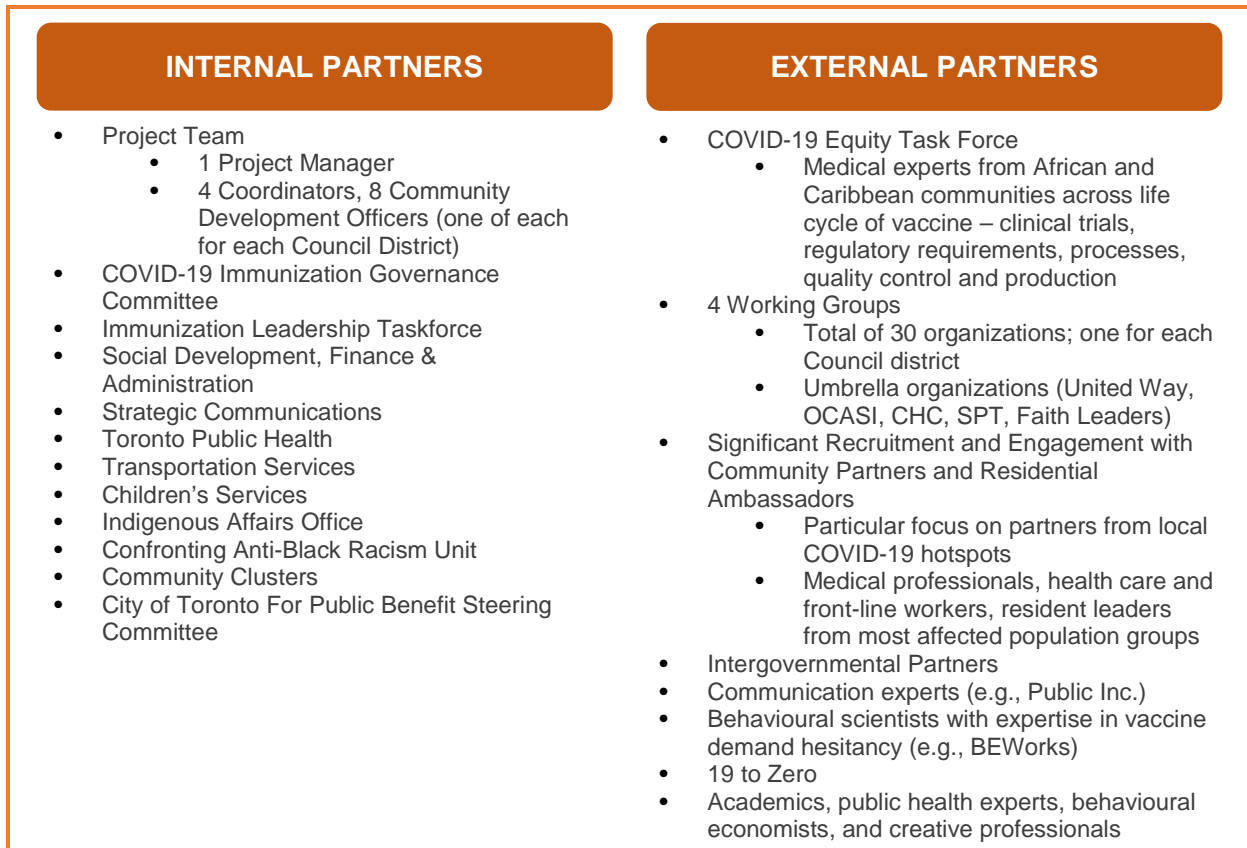


Figure 10. Project resourcing for engaging with Toronto's diverse communities

By working with internal stakeholders and community partners, Toronto is working to:

- Develop a community agency recruitment plan for each of the four Community Council districts that includes:
 - Indigenous community health experts
 - Black community health experts
- Identify and recruit Community Partners to participate in the development and implementation of the COVID-19 Vaccination Program
 - Targeting numerous organizations
 - Led by the City’s Social Development, Finance and Administration Division (Community Development Unit, Newcomer Office, Poverty Reduction Strategy, Confronting Anti-Black Racism and Community Funding Unit) with participation from each Community Council District Working Group



Specifically, Community Partners are being invited to team up with the City to:

- Implement immunization mobilization plans for their specific community;
- Recruit and support Resident Champions;
- Provide input into the City's COVID-19 Vaccination Program campaign strategy;
- Amplify City messaging about the safety of vaccines and the benefits to the individual and community of being immunized against COVID-19;
- Provide advice on roll-out of the Vaccination Program; and,
- Act as local/place-based point of contact for local residents.

Also under development is a Resident Ambassador recruitment plan, whereby Resident Champions from target population groups will be recruited and trained on community engagement:

- Front-line workers;
- Medical/health professionals;
- Foreign trained health professionals; and,
- Recognized community and grassroots leaders.

The target is to recruit numerous Resident Ambassadors throughout Toronto's 140 neighbourhoods, particularly in local hotspot communities, who will:

- Leverage the Toronto For All campaign within their population and community;
- Inform planning and provide information about community needs;
- Be deployed (medical professionals) on social media, ethnic radio/YouTube and other platforms for interviews; and,
- Act as local/place-based points of contact for local residents.

As shown in Figure 11, roll-out of the campaign to promote community engagement among Toronto's many diverse populations and residents who are ready and willing to be vaccinated began in January 2021 and is planned to continue throughout the year, in tandem with the City's overall timelines for the COVID-19 Vaccination Program; timing is subject to Provincial direction and the supply of vaccine from the Province.



Figure 11. Timelines for community engagement and resident mobilization readiness for immunization



4. Local Prioritization of Populations and Promotion of Vaccine Uptake

As shown earlier in Figure 2, Ontario has developed a three phase [COVID-19 immunization plan](#) that focuses first on high-risk populations, then moves toward mass vaccination, and eventually into a steady state for any remaining Ontarians who want the vaccine. Using the province's plan, Toronto Public Health has developed an approach to prioritizing local sub-populations within each phase of the City's COVID-19 Vaccination Program and is working toward promotion campaigns to encourage broad uptake among sub-population community members.

Local Adaptation – Provincial Oversight

Toronto Public Health's Role

Toronto Public Health's (TPH) primary role regarding the sequencing of the City's population including its local Indigenous people in the COVID-19 vaccination campaign is to be a collaborator. TPH will lead the integrated expansion of vaccine delivery channels, including mass vaccination clinics (TPH, primary care-led, pharmacy, hospital-led) on-site immunization and mobile clinics (including local Indigenous mobile healing units).

The Province has tasked Public Health Units (PHUs) with determining the optimal type of clinic to offer each sub-population within Toronto based on the population's health status, geography, accessibility and resources. One way that TPH will determine this is in close consultation with Toronto's health sector and Indigenous communities to better understand logistical and operational considerations in order to provide direction and guidance to support the community's and Indigenous people's vaccine uptake.

TPH has significant operational experience in running other types of vaccination clinics. TPH will follow up with sites to verify and coach on vaccine readiness and connect sites needing support with vaccination partners (primary care, pharmacists, hospital hubs, Toronto Paramedic Services, etc.).

Furthermore, TPH will support local Indigenous communities in the production and dissemination of communication materials tailored for their community members.

Toronto Public Health's Responsibilities

TPH is following the Province's Ethical Framework for Vaccine Distribution, shown in Figure 12, as well as the complementary Ontario Human Rights Commission's Policy Statement on a human rights-based approach to managing the COVID-19 pandemic.

As per Provincial guidance, TPH will prioritize supporting the COVID-19 vaccination of sub-populations such as Toronto's Indigenous people, particularly as it commences in Phase 1 and is completed in Phase 2 of the vaccine campaign. TPH support will be based on local need including the Indigenous communities' needs. As an example, with local Indigenous partners, TPH will assist with the development of promotional campaigns tailored to Toronto's Indigenous communities.

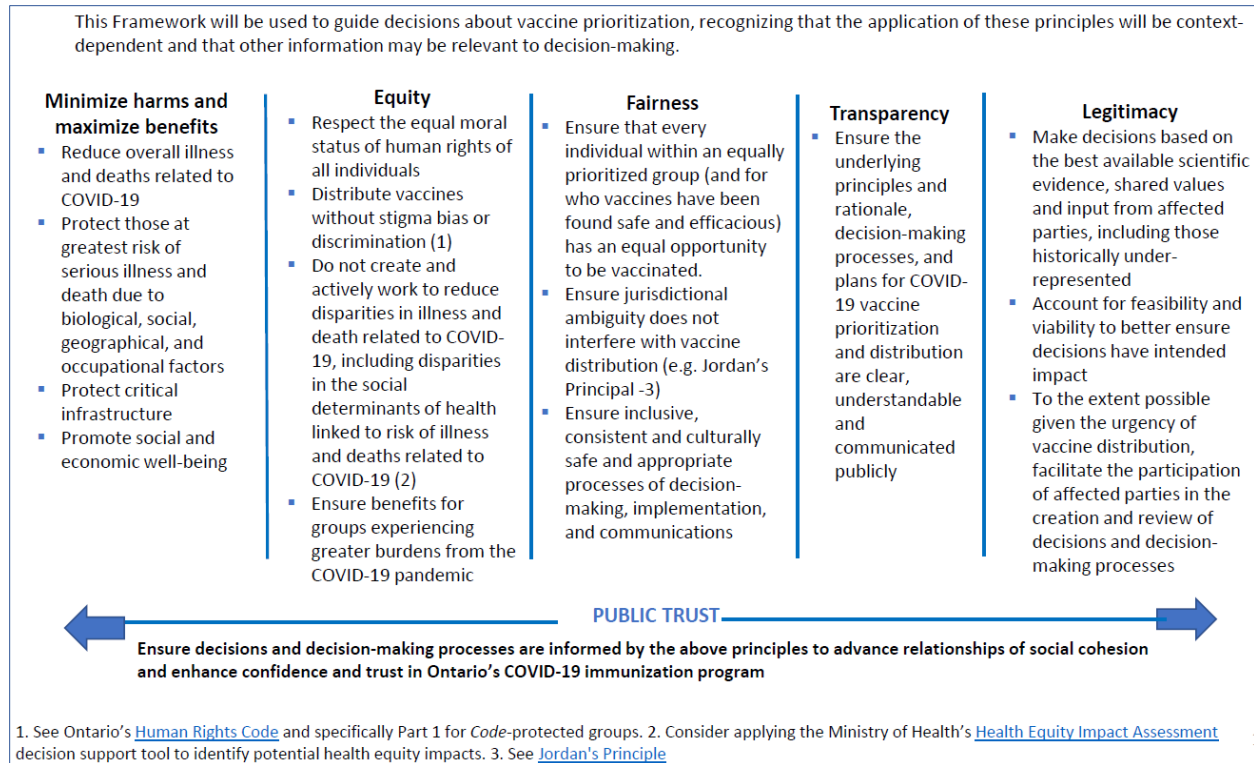


Figure 12. Province of Ontario ethical framework for COVID-19 vaccination distribution

TPH is also responsible for proactive engagement with local Indigenous communities in order to strengthen two-way communication and information-sharing. The benefits of strong partnerships include:

- Improved awareness of Toronto's Indigenous peoples and/or communities' needs regarding COVID-19 vaccination as well as TPH and the communities' leadership's complementary plans and shared responsibilities;
- Optimal support efforts to encourage Indigenous people's vaccination; and,
- The amplification of Indigenous community leaders' messaging to Indigenous residents regarding the COVID-19 vaccine campaign.

Promotion and Recruitment of Eligible Populations

Government of Ontario's Ethical Framework for Vaccine Distribution

Context

The Province's decision to identify key populations to be among the first to receive the vaccine, such as Indigenous communities, is based on the advice of medical experts and ethicists, recommended by the Ontario's COVID-19 Vaccine Distribution Task Force and is aligned with the federal National Advisory Committee on Immunization's recommendations.

The Province's COVID-19 Vaccine Distribution Task Force has a First Nations and Indigenous sub-table to more broadly engage First Nations on the approach to vaccination, including prioritization.



Ethical Framework for Vaccine Distribution

The Framework includes six key principles:

1. Minimize Harms and Maximize Benefits
2. Equity
3. Fairness, including considerations regarding the Indigenous community to:
 - Ensure jurisdictional ambiguity does not interfere with vaccine distribution (e.g., Jordan's Principle); and,
 - Ensure inclusive, consistent, and culturally safe and appropriate processes of decision-making, implementation, and communications.
4. Transparency
5. Legitimacy
6. Public Trust

Ontario Human Rights Commission Policy Statement

The Ethical Framework includes the statement that it should be read in conjunction with the Ontario Human Rights Commission's (OHRC) policy statement on a human rights-based approach to managing the COVID-19 pandemic.

The OHRC's policy statement acknowledges the human rights-impacts of the COVID-19 pandemic on vulnerable groups and that:

- The most vulnerable groups in Canadian society are disproportionately negatively affected by the COVID-19 pandemic, and;
- People with multiple, intersecting identities may be particularly vulnerable (for example, Indigenous women and girls).

The Policy statement further includes principles for a human rights-based approach to managing the COVID-19 pandemic that includes respecting the rights of Indigenous peoples.

- The OHRC specifies that this means adopting respectful, nation-to-nation engagements and partnerships with diverse Indigenous governments, communities, organizations and knowledge-keepers to ensure that the COVID-19 pandemic is addressed in a culturally appropriate and safe manner.
- To recognize that the impact of COVID-19 will be exacerbated by the ongoing negative impact of colonialism on Indigenous communities and will have a unique, intersectional impact on Indigenous women and children, people with disabilities, people with addictions and older persons.

Government of Ontario's COVID-19 Vaccination Priority Timeline

Phase 1

Starting in early 2021 the vaccination campaign will expand to include more than 20 hospitals and PHUs, including TPH, in hot-spot regions.

This part of Phase 1 includes vaccinations for front-line health care workers; essential caregivers; long-term care home and retirement home residents; First Nation communities and urban Indigenous populations.



As part of Phase 1, TPH will work with hospital partners and Long Term Care Home (LTCH) and Retirement Home (RH) licensees to ensure that vaccine is offered to the most vulnerable population in the province: residents of LTCHs and RHs. This population has suffered the most deaths and the highest proportion of severe outcomes from COVID-19. Hospital partners will also assist with the vaccination of staff and essential caregivers, which are the most likely sources of many of the outbreaks in these congregate settings. TPH will ensure that all LTCHs are visited or have the capacity to vaccinate their residents themselves. TPH staff will support ensuring COVaxON (the provincial COVID-19 immunization software) training and on-boarding occurs at all LTCHs/RHs through liaison with the province. TPH will encourage hospitals to enter information promptly if they are not entering information into COVaxON when doses are administered.

Once these populations have been vaccinated, TPH plans to work with health sector partners including Ontario Health Toronto Region and Ontario Health Teams (OHTs) to establish a plan to vaccinate other congregate care locations where seniors are housed. OHTs are well placed to conduct this work as they have close links with their community and partner organizations and often are key funders of these locations.

Phase 2

This phase will begin when more doses of vaccine become available to Ontario. This is expected to be later in winter/early spring of 2021. During Phase 2, vaccinations will include all members of the groups in Phase 1, such as Toronto's Indigenous residents who have not yet been vaccinated. Additional groups include essential workers (to be defined by the province), and at-risk populations such as the Black community. As well, older community-dwelling residents will also be sequenced in this phase as they have suffered more mortality and severe illness. When available, TPH will use provincially-developed software to foster pre-registering of these higher sequenced sub-populations so that they can be invited to mass immunization clinics offered by TPH or other health sector partners.

Phase 3

This phase will begin when vaccine is relatively freely available. All individuals who want to be vaccinated will have access to the vaccine through traditional channels (such as community pharmacies and primary care sites).

Enumeration of Sub-Populations

There are a number of priority sub-populations within Toronto that warrant attention, including Black communities, Indigenous communities, homeless/under-housed and others such as South Asian, Central American, Senior, LGBTQ, and individuals with disabilities. For each of these communities, a focus on the social determinants of health, such as race, income and food security, housing, and disability, contribute to the targeted equity engagement and mobilization strategy. These sub-populations tend to:

- Have a high degree of vaccine hesitancy, based on the most up-to-date research on predictors of vaccine willingness by age and gender;
- Live or work in COVID-19 hotspots;
- Be most impacted by COVID-19; and,
- May be difficult to reach, particularly in a two-dose regime.



With respect to the Indigenous community, TPH is responsible for quantifying this self-identifying population (the estimated approximate number of Indigenous people living in Toronto is 70,000, per the 2016 Census) to appropriately support a vaccination plan's logistics and operations, as well as communications efforts. As necessary, sub-populations within this population may be enumerated in order to better understand disproportionate vaccination rates among these groups. These data can then inform a strategic targeted outreach effort to increase vaccine uptake.

Fulsome engagement between TPH and local Indigenous community leadership is underway. TPH has staff who are in regular discussions with key Indigenous stakeholders, including leadership of:

- The Toronto Region Indigenous Health Table (including TPH having been invited to discuss its roles, responsibilities, and how best to support its community members);
- Anishnawbe Health Toronto;
- The Native Canadian Centre of Toronto; and,
- Toronto Aboriginal Support Services Council.

TPH is also in regular communication with Indigenous physicians at Women's College Hospital and St. Michael's Hospital who are trusted partners of the aforementioned stakeholders.

These discussions ensure that TPH is continuously informed about how best to perform its role and uphold its responsibilities in order to optimally support Toronto's Indigenous peoples' COVID-19 vaccination throughout Phases 1 and 2 in a safe, efficient, and culturally appropriate manner.



5. Supplies Management and Distribution

The safe and secure receipt, storage, and distribution of vaccine, clinical supplies and associated personal protective equipment (PPE) are fundamental components of the City of Toronto's COVID-19 Vaccination Program.

Distribution System (Delivery and Receiving)

Immunization clinic supplies and personal protective equipment (PPE) will be ordered on a biweekly basis from the province (or agreed upon frequency based on consumption and vaccine supply). The City of Toronto will also procure other clinical, and non-clinical supplies through their Purchasing and Materials Management Division to supplement the supplies that will be provided by the Province.

All immunization clinic supplies will be stored at, and distributed from a Central Distribution Warehouse, which is located within a City-owned secure facility.

Vaccine Storage and Cold Chain

Toronto Public Health (TPH) pays strict attention to maintaining cold chain requirements when vaccine is being transported, distributed and stored. All vaccines are stored and handled according to manufacturer and provincial storage and handling requirements, including cold chain and light sensitivity of the vaccine (as applicable).

Toronto Public Health (TPH) and Purchasing and Materials Management (PMMD) staff will be assigned to the Central Distribution Warehouse to coordinate the ordering, receipt, distribution and tracking of all supply inventories related to the City's COVID-19 Vaccination Program. An existing City-wide inventory management system will facilitate the ordering and receiving of inventory, storage and warehousing of materials, and distribution of supplies to the clinic sites.

The City of Toronto's Central Distribution Warehouse also has the capacity and capability to receive, store and distribute vaccines and is operationally ready. The area within the Central Distribution Warehouse dedicated to vaccine storage is appropriately secured.

COVID-19 vaccines are temperature sensitive, and must be stored and handled according to vaccine product monograph instructions. Toronto Public Health has developed clinical procedures and staff training to ensure the vaccine cold storage process is maintained at all times, by following the [Ministry of Health and Long-Term Care, Vaccine Storage and Handling Protocol, January 1, 2018](#) and [COVID-19: Vaccine Storage and Handling Guidance – Pfizer-BioNTech and Moderna COVID-19 Vaccines \(Version 1.0 – January 6, 2021\)](#).

Currently, the City of Toronto's vaccine storage capacity at the Central Distribution Warehouse includes the following equipment, which has been provided to the City by the Province of Ontario:

- 1 x [Thermo Fisher Scientific Freezer – TSX3030FA](#) (with expansion to 4 freezers in total, which have been promised for delivery to the City at a later date), which has an internal temperature range between -30 C and -15 C
- 1 x [PHCBI, 48.0 cu.ft Pharmaceutical Refrigerator - MPR1412-PA](#) (with expansion to 4 fridges total at a later date), which has an internal temperature range between +2 C and +8 C



All cold storage equipment has multiple layers of temperature monitoring redundancies. These include:

- Physical inspection of the equipment multiple times per day by the City's Corporate Security team; temperature information is logged, and any concerns are communicated to Toronto Public Health.
- Remote temperature monitoring and alarms (hardwire and cellular) are installed on all equipment to ensure temperature is operating within acceptable and programmed parameters.
- Inspection and calibration – All cold storage units are on a regular maintenance schedule whereby inspection and temperature calibration are performed by a qualified external contractor.

The Central Distribution Warehouse is equipped with an emergency generator, which provides uninterrupted power to the entire Warehouse, including the vaccine refrigerators and freezer, should a power outage occur. The generator is tested on a regular maintenance schedule to ensure the critical infrastructure within the building can maintain normal operations during all conditions. Furthermore, there is a secondary generator on-site in case the first unit fails to operate.

The area within the Central Distribution Warehouse that is dedicated to vaccine storage also has a large workspace to process incoming and outgoing vaccine, and associated supplies. The space is equipped with stainless steel tables, computer workstations for inventory management, and shelving for ancillary clinic supplies. A team of City staff who are appropriately trained in the handling of vaccines ensures all clinic supplies are ordered, packed, transported and returned each day (as needed). If required, there is a City staff member who is on 24/7 standby to triage any after-hours issue within the vaccine storage area of the Warehouse or at clinic sites.

Vaccine Storage and Handling at Clinics

COVID-19 vaccine will be transported to clinics sites in strict adherence with the Ministry of Health, [COVID-19: Vaccine Storage and Handling Guidance – Pfizer-BioNTech and Moderna COVID-19 Vaccines \(Version 1.0 – January 6, 2021\)](#).

Toronto Public Health acknowledges its responsibility for managing inventory for both the first and second doses of the currently approved COVID-19 vaccines that are administered at City-operated immunization clinics, mobile clinics and by City response teams. TPH will manage inventory in response to Ministry of Health guidance and directives, through the preparation of four-week inventory planning outlooks, updated weekly to the Ministry of Health to support effective and efficient provincial inventory and distribution management.



6. Vaccination Approaches

The Ontario COVID-19 Vaccination Distribution Plan (Figure 2) includes multiple vaccination site types, including hospital-based clinics, on-site clinics within specific communities, as well as pharmacies, and public health and mobile sites.

In response to the potential need to rapidly scale up the immunization effort, Toronto Public Health has focused on a whole-of-government approach using an effects-based operational planning lens. The ethical framework outlined by the Province of Ontario (Figure 12) will be used to guide COVID-19 vaccine distribution, to promote consistency, accountability, and public trust.

Effects-Based Strategies

The City of Toronto and Toronto Public Health COVID-19 Vaccination Program has identified four delivery models to effectively manage immunizations and administer vaccines to populations within the City of Toronto for which Toronto Public Health has both direct and indirect responsibility. The Vaccination Program contemplates mass vaccination clinics, community clinics, immunization response teams and mobile clinics, and aligns with the three phases identified by the province and shown in Figure 2, as follows:

- Effect 1 will be used across all three phases as identified by the Province; and,
- Effects 2, 3 and 4 will primarily be used in Phases 1 and 2 of the Ontario government vaccine distribution plan.

The COVID-19 Vaccination Program that has been developed by the City of Toronto and Toronto Public Health as described herein is reliant on the province to provide the vaccine, including associated clinical supplies and personal protective equipment (PPE).

Effect 1 – Advice, Education and Support to Vaccine Delivery Agents

Effect 1 carries on the mission of Toronto Public Health to reduce health inequities and improve the health of the whole population of Toronto by providing medical expertise, support and guidance including medical oversight to various vaccine delivery agents (VDA).

TPH will develop and share documents to support immunizations for specific vaccines and this information will be provided online through the TPH Health Professionals website, or via emailed communiqués. These documents are expected to include:

- Fact Sheets;
- Sample Medical Directives;
- Readiness Checklists; and,
- Other relevant documents, as required.

Toronto Public Health will work in collaboration and partnership with the five (5) Local Health Integration Networks (LHINs) and eleven (11) hospital corporations serving Toronto, to support immunizations in priority populations in accordance with and as outlined by Ontario's Ethical Framework for COVID-19 Vaccine (Figure 12).

Furthermore, TPH has a team of appropriately qualified personnel to support the reporting and investigation of all adverse events following immunization (AEFI).



Effect 2 – Stand Up of Immunization Clinics

Through data analytics and based on space availability, TPH has identified and sourced nine (9) sites to establish immunization clinics, five (5) of which are relatively large in size. The locations of these sites were chosen upon careful consideration of:

- Accessibility for all individuals who want to be vaccinated, by ensuring compliance with Accessibility for Ontarians with Disabilities Act, 2005 (AODA) requirements;
- Travel modes and times, to and from the site, by both private and public means;
- Overall interior space to stand up a mass immunization clinic in compliance with COVID-19 infection prevention and control (IPAC) measures, for example sufficient waiting and staging spaces that allow for required physical distancing;
- Round the clock (24/7) monitoring and security;
- Environmental services to support the clinic, including cleaning and disposal of medical waste;
- Ability to efficiently layout the clinic and provide clinic workflow to allow for physical distancing, sanitation stations, and compliance with IPAC measures; and,
- Indoor amenities, such as sufficient ventilation, toilets, secure storage and space for supplies and equipment.

It is anticipated that these large clinics can be scaled as necessary to meet vaccination demands within the community and to respond to changes in the quantity of vaccine delivered from the Province.

Effect 3 – Stand Up of Community-Based Immunization Clinics

Through data analytics, TPH will establish clinics in hot zone communities and priority neighbourhoods, in partnership with the City's Parks, Forestry and Recreation division.

These clinics will be smaller in size than the larger immunization clinics and will remain on-site to ensure that vaccination demands are met within the community. When vaccine demands have been met, the vaccination team will move to the next priority community and begin the same process. Presently, TPH will have the resources to establish four (4) of these small community clinics simultaneously. The locations for these clinics will be chosen with consideration to public access, including public transit and parking, and to ensure AODA requirements are addressed.

Effect 4 – Deployment of Response Teams and Mobile Clinics

Supporting immunization of vulnerable and Indigenous populations is a priority for TPH. Using the Provincial ethical framework, TPH will identify strategies to reach vulnerable populations. Additionally, at the time of a large response, dedicated response teams will work on immunization for vulnerable groups. The vulnerable population's immunization strategy includes five (5) mobile teams to provide vaccine clinics at shelters, food programs and drop-ins for homeless/street involved clients as well as high-risk clients living in Toronto Community Housing Corporation residential and senior's buildings.

Depending on vaccine availability and priority groups, vaccine can also be given to shelter Physicians, and Street Health nurses to immunize their clients. Toronto Paramedic Services is able to provide a response team comprised of 10 paramedics to support these plans.



Implementation Principles and Anticipated Throughput

TPH will implement the above effects in a staged approach based on staffing, vaccine availability and established agreements with the host facilities.

For Effects 2 and 3, an estimate of client flow through the immunization clinics has been developed, based on Toronto Public Health’s experience delivering flu vaccine clinics. For flu vaccine clinics, Toronto Public Health immunizers (typically a nurse) spends an average of 7.5 minutes with each client; this yields an average of 8 doses per hour per immunizer. During their time with each client, the immunizers are responsible for verifying client information, explaining the vaccine, obtaining consent and then explaining aftercare and AEFI.

The number of immunizers at a clinic site is based on the physical space (including areas for screening, registration, dosing and aftercare), IPAC considerations (safe physical distancing), and available staffing (both clinical and non-clinical).

When Effects 2 and 3 are implemented, the City expects to operate clinics with a range of sizes. Table 2 shows anticipated client throughput based on different clinic sites, ranging from sites that can accommodate only 5 immunizers, up to sites that can accommodate 40 immunizers. At this time, Toronto Public Health estimates a client would spend approximately 30 minutes in the clinic from arrival until departure. To achieve the rates of immunization, clinic management will take into consideration staff scheduling, such as for meal breaks and any Collective Agreement or other requirements, that can affect total flow through a clinic.

As the province transitions to a steady state of vaccine flow in Phase 3, Toronto Public Health will consider demobilizing the immunization clinic model while continuing to focus on Effect 1 and any residual response teams needs as described under Effect 4.

Table 2. Estimated Rates of Immunization

Number of Immunizers	Number of Doses per Day	Number of Doses per Week (7 days)	Number of Doses per Month (29 days average)
45	3,240	22,680	93,960
40	2,880	20,160	83,520
35	2,520	17,640	73,080
30	2,160	15,120	62,640
25	1,800	12,600	52,200
20	1,440	10,080	41,760
15	1,080	7,560	31,320
12	864	6,048	25,056
10	720	5,040	20,880
5	360	2,520	10,440

Immunization Clinic Proof of Concept

As part of its response to the pandemic, the City of Toronto has developed a robust, scalable plan for the provision of a network of immunization clinics across Toronto that will fill the time between the Phase 1 launch of hospital-administered clinics and the eventual roll-out of widespread, community-based vaccine distribution that includes primary care physicians and pharmacies in Phase 3.



The target date established by the Province of Ontario for launch of the immunization clinics was originally planned for April 1, 2021, which aligns with the provincial phasing of the COVID-19 vaccine roll-out and originally projected COVID-19 vaccine availability.

On December 31, 2020, the Province requested that the City accelerate implementation of one of its immunization clinics, in order to undertake a “proof of concept” to inform and refine the immunization clinic concept of operations, and all associated technologies and processes. The commencement date for the “proof of concept” requested by the Province was Monday, January 18, 2021. The launch of this clinic on January 18, 2021 represented a 10-week acceleration from the City of Toronto and Toronto Public Health’s original plans. The clinic was initially scheduled to operate for six to eight weeks to develop an immunization clinic playbook to be provided to the Province and used in establishing other immunization clinics in Toronto and across Ontario.

Current Situation

The “proof of concept” clinic was set up and began operations on Monday, January 18, 2021.

On Monday, January 18, the City was notified by the Province that the clinic would need to pause operations as of Friday, January 22, due to supply issues with the vaccine. The Province was clear that the clinic should proceed to continue operations so as to begin work on developing the playbook.

On Tuesday, January 19, the Province provided an updated directive, requiring the clinic to be paused at the end of operations on January 19, 2021, due to vaccine shortage.

The “proof of concept” COVID-19 immunization clinic at Metro Toronto Convention Centre is now closed until further notice. When vaccine is made available by the Province of Ontario, the “proof of concept” clinic can re-establish operations. When the “proof of concept” clinic resumes operations, the quantity of vaccine that is available to be administered will be determined by the Province.

The following sections provide details about the “proof of concept” clinic for the two days it was in operation and how it will be operated when the clinic resumes.

Location

The clinic was located inside the Metro Toronto Convention Centre (MTCC), in Exhibition Hall A, at 255 Front Street West. All appropriate protocols, such as physical distancing, use of personal protective equipment, masks, and frequent cleaning of touch surfaces, were implemented and observed in accordance with COVID-19 Infection Prevention and Control (IPAC) requirements.

This location was chosen in part because the space had already been secured by TPH for the purpose of operating another vaccination program. It is centrally located in downtown Toronto, is accessible by public transit and has parking on-site. The clinic set-up is being maintained at the site in anticipation of re-starting when vaccine is made available by the Province of Ontario.

Clinic Layout

Figure 15 shows the layout of the “proof of concept” immunization clinic at the MTCC.

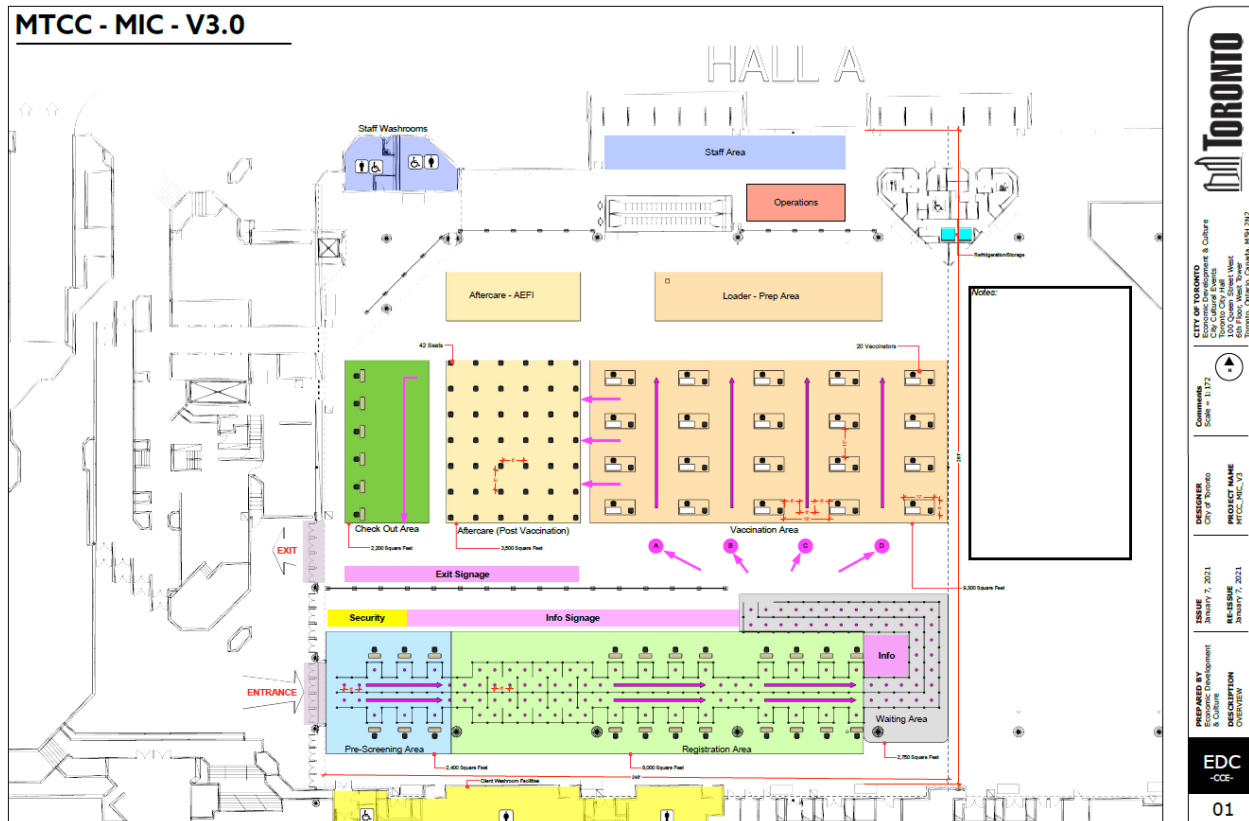


Figure 13. City of Toronto “proof of concept” clinic set-up with 20 immunization stations

The clinic is laid out with 20 immunization stations. Set up of the clinic was determined by Production staff from the Cultural Events Section of the City’s Economic Development and Culture Division. The set-up was created such that the number of vaccination stations operating each day could be scaled in accordance with the availability of vaccine and the scheduling of clients.

The “proof of concept” approach will be used to test the City’s ability to scale clinic operations (including scaling above 20 immunization stations at the MTCC location) in accordance with vaccine availability, when clinic operations resume.

Eligible Clients and Booking Appointments

Vaccination at the “proof of concept” clinic was based on scheduling healthcare workers who are on the frontlines of the response to COVID-19, specifically frontline shelter workers, including harm-reduction and Streets to Homes personnel, and frontline Toronto Public Health workers. This cohort was prioritized for vaccination by the Province of Ontario as detailed in the Ethical Framework for COVID-19 Vaccination Distribution (Figure 12). Determination of eligibility to participate in the “proof of concept” clinic was made by the healthcare workers’ respective supervisors. The clinic was not open to the public.



Both the choice to receive COVID-19 vaccine and the choice to participate in the “proof of concept” immunization clinic was on a voluntary basis, and this was communicated to all healthcare workers who were invited to participate.

Clinic Daily Operations and Staffing

Hours of operation for client immunization appointments were from 11:00 AM through 8:00 PM, and the clinic was planned to operate 7 days per week. Staff were on-site from 10:00 AM to 9:00 PM for daily set up and close-out each day.

Staff roles on-site included:

<u>Clinical Roles</u>	<u>Non-Clinical Roles</u>	
Clinic Manager	Screeener	Vaccine Clerk
Clinic Lead	Line Monitor	IT Support
Immunizer	Check-In Clerk	Aftercare Chair Cleaner
Vaccine Loader	Check-Out Clerk	Security
Aftercare Provider	Clinic Support	Custodian
	Supply Clerk	Data Entry Clerk (if required)

Staff were primarily from Toronto Public Health, supplemented by other City of Toronto staff and with support from the Province of Ontario.

Upon arrival at the clinic for their scheduled appointment, each client was screened for COVID-19 symptoms and registered. They were also registered in the Provincial COVaxON system, at which time the date and time of the appointment for their 2nd dose was confirmed, via the COVaxON system.

As part of the registration process, the client was given a vaccine fact sheet. The client was then directed to a vaccination station / dosing booth where a fully qualified immunizer (typically a nurse) reviewed their consent by asking if the client completed all the questions and confirming that that they had read the fact sheet. After confirmation was obtained, the immunizer administered the COVID-19 vaccination.

Next, the client was asked to move to an aftercare area where they were monitored for any adverse, post-immunization effects, for 15 to 30 minutes. Clients were monitored by trained and qualified personnel.

After the observation period, and so long as no adverse effects were observed, the client was then checked out from the clinic and received a receipt confirming they had received the 1st dose of the vaccine and with confirmation of the specific date and time for their 2nd dose appointment.

As stated above, the clinic set-up at the MTCC is being maintained at the site in anticipation of re-starting when vaccine is made available by the Province of Ontario.

The City fully expects to make adjustments and refinements to the different aspects of clinic operations in response to changing conditions, and has already begun to do so based on the preliminary findings from the first two days of operation, and will again when the clinic resumes.

At the end of the “proof of concept” clinic, an Immunization Clinic playbook will be produced and provided to the Province for use by public health units across Ontario.



In accordance with the City of Toronto's COVID-19 Vaccination Program, and following completion of the "proof of concept", Toronto Public Health will continue to operate an immunization clinic at the MTCC site.

7. Human Resources

Staffing models for the City's COVID-19 Vaccination Program were created based on the lessons learned from the 2009-2010 H1N1 influenza response. The current staffing models have been adapted in response to the COVID-19 infection control and prevention (IPAC) guidelines based on the epidemiology of the COVID-19 virus. Staffing models ensure that the recommended social distancing guidelines are followed to protect staff and clients.

Final decisions about staffing resources as required to fully support the City's COVID-19 Vaccination Program will be made in consultation with and under the direction of the City of Toronto Medical Officer of Health and the COVID-19 Strategic Command Team, in collaboration with the City's Senior Leadership Team.

Once the City of Toronto's COVID-19 Vaccination Program reaches full capacity, it is estimated that upwards of 1,300 individual positions will need to be filled. In order to support the Program from its initial stages through to full capacity, the People & Equity Division of the City of Toronto has organized and is carrying out a significant recruitment and redeployment drive to staff the clinics.

Recruitment of Human Resources

Filling the positions required to staff the immunization clinics will involve a combination of:

- Hiring new staff;
- Redeploying existing City of Toronto staff;
- Contracting with agencies to provide staff with specialized skills (e.g., nurses); and,
- Working with community organizations.

Clinical Roles

Clinical roles are being filled using the following approaches:

- Existing and newly hired nurses and registered practical nurses, as employees of the City;
- Nursing agencies, which can provide temporary staffing; and,
- Other healthcare providers, such as staff from Toronto Paramedic Services and students in medical programs.

Volunteers from the healthcare field, such as doctors, nurses, and other specially trained individuals may be considered, if warranted.

Non-Clinical Roles

Filling the non-clinical roles required at the immunization clinics will focus first on redeployment of City of Toronto employees who have the qualifications to undertake the range of non-clinical responsibilities.

In addition, the People & Equity Division will extend recruitment activities to include:

- New hires, both temporary and/or part-time; and,



- Staffing agencies, which can support and supply candidates to the City.

The City's People & Equity Division has begun to focus its hiring on communities that have been most impacted by COVID-19, such as racialized and low-income communities, to attract qualified individuals to fill openings through partnerships with community-based organizations.

The scope for volunteers in non-clinical roles is under development, with a view to providing opportunities for community volunteers to participate in and support the immunization clinics.

Orientation and Training

Providing thorough staff orientation and training is vital to the effective functioning of the immunization clinics.

Training for City of Toronto COVID-19 immunization clinics involves both on-line / in-person training, and on-site orientation.

For on-line / in-person training, the City of Toronto has developed training modules for all staff in both clinical and non-clinical roles. Confirmation of the completion of required training is done prior to allowing staff to attend the clinic.

For the "proof of concept" immunization clinic, the Ministry of Health provided training on the Province's COVaxON software program.



8. Documentation and Reporting

Key questions being addressed by TPH's COVID-19 vaccine surveillance and reporting strategy:

- What are the estimates for how many individuals meet the criteria for each priority population as defined by the Province?
- What is the current progress with vaccinating priority groups eligible to be vaccinated?
- What do we know about the people who are being vaccinated (priority group, vaccine delivery agent, sociodemographic characteristics, neighbourhood)?
- What do we know about any adverse effects from receiving the vaccine?
- Who is choosing to not receive the vaccine and why?
- What are attitudes and opinions related to receiving the vaccine and how are they changing?
- What is our current estimated immunity level (or how much further to herd immunity)?
- Are there any geographic areas that require access to vaccination at any given time to make the biggest impact?
- How effective is each vaccine?
- Are we meeting the City of Toronto's COVID-19 Targeted Equity Plan

Surveillance and Monitoring

The COVID- Vaccination Surveillance Plan

Vaccination related surveillance activities at Toronto Public Health (TPH) are designed to provide information to assist with planning, assess progress with overall vaccination implementation strategies and goals, and ultimately to provide evidence required for decision making.

The principles that frame this plan include:

- Transparency;
- Evidence based; and,
- Equity centered.

The target audiences include the City of Toronto's Immunization Task Force, TPH staff involved in planning for vaccination clinics, TPH decision-makers, Community partners, and the general public.



Goals of the Vaccination Surveillance Plan

Toronto Public Health's COVID-19 vaccination related surveillance will be focused on addressing the following key areas through the collection of timely, relevant and comprehensive data that can be summarized as indicators, illustrated through data visualization, and further analysed with forecasting tools:

- Vaccine roll-out planning and implementation supports
 - Sub-population estimates
 - Logistics supports;
- Vaccine inventory, distribution and wastage;
- Vaccine safety monitoring and reporting;
- Vaccination coverage, uptake monitoring and reporting;
- Vaccine effectiveness;
- Vaccination barriers, including attitudes, opinions, and hesitancy surveillance; and,
- Evaluation of vaccination efforts.

Reporting Plan

COVID-19 vaccination related surveillance is being planned to address the key questions. These questions reflect the needs, frequency, and format that primarily serve those leading the campaign within the City of Toronto. Reporting to external partners and the public is also considered.

What will be reported?

Specific reports will summarize data and indicators for the key areas, as relevant for situational assessment, decision making, and to inform communications. These may include the development and addition of an indicator for the TPH Monitoring Dashboard, to capture progress with vaccination goals as an indicator of how well the Vaccination Program is performing and the level of susceptibility within our community. If any vaccination uptake goals are defined for a given time, these will also be included.

Frequency of reporting

Reporting will be refreshed, as needed to understand the range of vaccine related information. This may range from daily, weekly, or reported at longer intervals to accrue data and/or get perspective on the broader questions (e.g., evaluation).

Any forecasting or modelling of scenarios that can inform the Vaccination Program will also be shared on an ad hoc basis, as relevant.

Methods for reporting

Where possible, data visualization tools such as dashboards will be utilized, including the built in feature in the provincial COVaxON system. Relevant indicators will also be shared and published on the TPH public facing dashboard.

Use of social media and other communications channels will also be considered for any important findings that may need to be conveyed, especially around vaccine safety.



Data Sources

The ability to link various sources will be instrumental in reporting on many of the key indicators listed. The following data sources will be accessed to support surveillance activities related to COVID-19 vaccination efforts

- COVax_{ON} (as per the section below titled, The COVax_{ON} Solution for Health Units)
 - For booking appointments at immunization clinics
 - TPH immunization clinic vaccine administration
 - Immunization clinic, hospital-based vaccine administration
 - Data from other vaccine delivery agents – e.g., pharmacies and primary care
- CCM/iPHIS/CORES – case and contact management systems used for COVID-19
 - AEFI
 - COVID-19 case activity
- Census data sets – 2016 population numbers collected and maintained by Statistics Canada
 - For planning clinics
 - For prioritization
- Institute for Clinical and Evaluative Sciences (ICES) – for the extensive repository of health administrative datasets
 - For estimating numbers across priority groups
- Hospital databases that may be used to track administration of vaccine on-site (prior to full use and access to COVax_{ON})
- Special ad hoc surveys or survey databases
 - To support additional social determinant data needs
 - For public opinion on vaccine hesitancy or barriers

Social Determinants of Health Collection and Reporting

Client based Socio-Demographic Data Collection

Collecting socio-demographic data helps to identify health inequities and better understand differences in health status and access to services among groups, which allows TPH to plan and allocate resources in a more equitable way. For example, TPH has collected information on ethno-racial identity and income from reported COVID-19 cases since May 2020, which have consistently shown that people from racialized communities and with lower income levels have higher rates of COVID-19.

Reporting on vaccination uptake with an equity lens is dependent on the data that are collected via the provincially-governed information system, COVax_{ON}. TPH has recommended to the province that several socio-demographic characteristics be collected, such as ethno-racial identity, household income, and occupation. TPH has also requested that these data elements be added to the information available to public health units via COVax_{ON}.



Geographical Mapping of Vaccine Uptake

Toronto neighbourhood characteristics including age structure, rates of chronic illness, and COVID-19 burden have already been summarized and used to inform priority strategies for vaccination.

Address information collected during the vaccination process will be used to map neighbourhood level coverage rates, to help assess and understand differences in vaccine uptake across the city. This information can be combined with neighbourhood case rates and activities, to help identify any gaps and opportunities in our vaccine priority groups and to inform any options for targeted vaccination (e.g. mobile vaccination).

Mapping by neighbourhood can help mobilize action, through City partners and community agencies, to ensure an equitable vaccination approach is achieved. This can inform deployment of the Neighbourhood Priority Response teams.

For indicators where individual level data are not available, a person can be linked to the geographic area where they live, using small geographical areas such as census tracts, and ecological analysis can be done. This has been effective in monitoring key equity indicators related to COVID-19 cases.

Vaccine Safety

Adverse Events Following Immunization (AEFI) Surveillance

TPH has assembled a team to investigate all AEFIs. Toronto Public Health is following the process for reporting of adverse events following immunization (AEFIs) for COVID-19 vaccines, which is the same procedure as AEFI reporting for all other vaccines. TPH will use the [Ontario AEFI reporting form](#) for initial reports of AEFIs and the relevant provincial information management system (iPHIS/CCM) for case management. The AEFI reporting form has been updated to include Adverse Events of Special Interest (AESI) for COVID-19 vaccine safety surveillance identified by the Brighton Collaboration. For questions about AEFI reporting or to notify Public Health Ontario (PHO) of a vaccine safety issue, Toronto Public Health will contact ivpd@oahpp.ca.

Active Vaccine Safety Surveillance

Toronto Public Health will be reviewing findings from Ontario, which will be conducting active vaccine safety surveillance for COVID-19 vaccines through the Canadian National Vaccine Safety Network (CANVAS) beginning in late January. CANVAS conducts active vaccine safety surveillance after implementation of new vaccine programs and will be used by multiple Canadian provinces to gather safety information on COVID-19 vaccines. Individuals who have given their consent to receive electronic communication (i.e. email) about research studies documented in the COVaxON system will receive an email providing information about CANVAS. Clients who consent to participate in CANVAS will complete online questionnaires following vaccination to elicit information about symptoms as well as medically attended events that require reporting as AEFIs. Any AEFIs identified by CANVAS will be referred to local public health agencies for further investigation and entry into the provincial surveillance system. Public Health Ontario will assist CANVAS in referring AEFI reports to the correct local public health agency.



Clinical Advice on Re-Immunization Following Complex AEFIs

Toronto Public Health will use existing relationships with clinical experts across Toronto and consult on re-immunization, as required. This effort will make use of the Canadian [Special Immunization Clinic](#) (SIC) Network, of paediatric and adult infectious disease specialists and allergists with expertise in the assessment and management of patients who have experienced a complex AEFI.

The COVax_{ON} Solution for Health Units

Toronto Public Health will be using COVax_{ON}, the information system that is being developed by the Province and is intended for use as the common solution for recording all administered doses of COVID-19 Vaccines and tracking of inventory in Ontario. For this to succeed, there has to be a health sector wide commitment to entering data into this system and robust linkages between COVax_{ON} and other data needed to determine coverage rates.

The COVax_{ON} solution has been planned to support the administration of all vaccine preparations (Pfizer, Moderna, others as licensed and available), in all settings including hospital-based clinics, LTCH and RH settings, mass immunization clinics, specialty clinics (e.g., workplaces) and individual settings (pharmacies and primary care). This system is also being designed for booking vaccination appointments and for registration at mass immunization clinics.

Toronto Public Health is committed to working with the COVax_{ON} development team to ensure the system can support a strong Ontario vaccination strategy. The areas still under development for COVax_{ON} include:

- Appointment scheduling module;
- Pathways for COVax_{ON} use with electronic medical record (EMR) systems supporting primary care, etc.;
- Digitalization of COVID-19 Vaccine AEFIs reporting;
- Reporting via an integrated dashboard; and,
- Integration with case and contact management (CCM).



9. Contingency Planning

City of Toronto Emergency Management

Contingency planning is critical to ensure that the City of Toronto's COVID-19 Vaccination Program is maintained, should elements of the primary plan face unforeseen challenges. Continuity of operations is crucial to success.

Toronto has a robust and proven emergency response plan, which has served the City and its residents and businesses well during previous emergencies, such as the 2003 Northeast Blackout and the 2013 ice storm. The emergency plan is governed by the following legal authorities and legislation:

- I. City of Toronto Municipal Code, Chapter 59 Emergency Management
- II. Provincial Emergency Management and Civil Protection Act

The emergency plan was most recently initiated in response to the COVID-19 pandemic.

The Plan identifies three major categories of hazards that may pose a threat to the City of Toronto:

- Natural hazards are those which are caused by forces of nature; human activity may trigger or worsen the hazard;
- Human-caused hazards are hazards which result from direct human action or inaction, either intentional or unintentional; and,
- Technological hazards are hazards which arise from the manufacture, transportation (including supply systems), and use materials, technology and/or infrastructure.

The City's Emergency Plan adopts the principles of the Incident Management System. The Incident Management System is a standardized approach to emergency management that encompasses personnel, facilities, equipment, procedures and communications operating within a common organizational structure. Incident Management System concepts and principles include comprehensive resource management, action planning, integrated communications, interoperability, a modular and scalable framework, standard terminology, and span of control.

The five major sections of the Incident Management System (Command Team, Operations, Planning, Logistics, and Finance and Administration) can be expanded or contracted to meet requirements as an event progresses.

The response to an emergency in the City is managed using the Toronto Emergency Plan, and its Emergency Support Functions and Risk Specific Plans.

The Toronto Emergency Plan is updated annually and revisions are made per the Municipal Code, Chapter 59 and upon Toronto Emergency Management Program Committee approval.

Vaccination Program Contingency Plans

Preventing Vaccine Wastage

Vaccine Storage, Handling and Transport

All vaccine freezers and refrigerators that will be used for storing COVID -19 vaccines are located in secure locations. Remote monitoring systems are in place to ensure continuous temperature monitoring for each refrigerator and freezer.



Each vaccine refrigerator and freezer is connected to back-up generators in the event of a power failure. In the event of an unusual power outage where the backup generator fails, Toronto Public Health will move vaccines in cold storage to predetermined locations, such as other vaccine depots or to local hospitals.

Vaccine will be transported to various clinic sites in accordance with Ontario Ministry of Health vaccine storage and handling guidelines, and will be done in a secure manner.

Vaccine Administration at Clinics

Vaccine quantity will be strictly determined by the number of daily appointments per clinic. Only the quantity of vaccines required for each day will be moved from the source location.

The Clinic Lead and Vaccine Clerk will determine the number of vials used per hour based on the appointment schedule.

In the event there are unused doses left in a vial, Toronto Public Health will rely on a pre-established stand-by list of individuals who will be called near the end of the clinic day, to ensure no doses of vaccine are wasted. TPH will ensure that the stand-by list adheres as closely as possible to those individuals that fall within the provincial framework for the Phase in which the clinic is operating.

Surge Capacity for Staff

As part of the clinic staffing plans, consideration has been given to the need for additional staff to allow for illness or absenteeism. In the event additional staff are required for clinic operations due to staff absenteeism, Toronto Public Health has established a list of staff who can be called upon as replacements.

Cancellation of Clinics

In the event clinics must be cancelled due to, for example, inclement weather or other circumstances, Toronto Public Health will notify clients via e-mail linked to their appointment. Furthermore, the City's Strategic Communications team, working in concert with Toronto Public Health, will use various social media platforms to ensure that clients are aware of clinic cancellation. Signage will be posted at clinic locations advising visitors that the clinic is closed.

Team Member tests positive for COVID-19

All staff working at TPH clinics will be actively screened daily, upon entry to the clinic. Any staff member who fails any of the screening components (questions, temperature check) will not be permitted to enter the clinic.

Should a clinic staff member test positive for COVID-19 or be identified as a close contact to another individual who has tested positive, TPH will immediately invoke and follow the [Ministry of Health's Management of Cases and Contacts of COVID-19 in Ontario](#) procedure to both deal with clinic staff and possible exposure to clients. The Clinic Lead will work in close collaboration with Toronto Public Health's Case and Contact Manager to ensure appropriate steps are followed.



Medical Emergency at Clinic

TPH has policies and procedures in place in the event of a medical emergency related to adverse events following immunization.

All nursing staff at the clinics will have up-to-date cardiopulmonary resuscitation (CPR) certification and will have completed the TPH training on treatment of anaphylaxis following immunizations (see Appendix 8 – TPH Medical Directive for the Treatment of Anaphylaxis and Severe Adverse Effects).

In the event of a medical emergency, the Clinic Manager will take action to determine the safety of other clients and staff to ensure continued operations of the clinic while attending to the emergency. Emergency kits containing epinephrine are readily available at designated areas within each clinic. In addition, each clinic will have support from Toronto Fire Services firefighters who carry defibrillators, oxygen and other equipment to assist in handling medical emergencies. In the event of other medical emergencies, nursing staff at the clinic will be trained to provide basic first aid and CPR and will consult with the Clinic Manager to escalate the emergency by calling 911, if required.

Clinic Security Plan

Security at the immunization clinic starts with a risk assessment and a security assessment, which are used to develop a Security Plan for the specific clinic location.

Security Plans are highly confidential and are only made available on a very restricted and need to know basis.



10. Evaluation Approaches

Evaluation of the COVID-19 vaccination campaign is important as it will assist in timely collection of feedback and identification of lessons learned. TPH is planning to evaluate three key areas of its vaccination efforts: 1) approach to priority populations (equity); 2) vaccine uptake in the general population (outcome); and 3) vaccine administration at the various clinic settings (implementation). The scope of our evaluation will pertain to how well the vaccination campaign worked for the population of Toronto.

These evaluations will be conducted during the implementation of the Vaccination Program. The objective of these evaluations is to identify what worked well, areas for improvement, emerging issues and any unintended outcomes (positive or negative) of various aspects of the Vaccination Program in a timely manner so that adjustments can be made to improve the success of the Program as it is being delivered. The evaluation results may also be leveraged to improve future campaigns. TPH has prioritized key evaluation questions and sub-questions, as illustrated in Table 7, based on their usability and evaluability.

Table 1. Areas of Evaluation and Key Questions

Areas	Evaluation Questions	Sub-questions
Priority populations/ Equity	How equitable was the vaccination campaign?	<ul style="list-style-type: none"> a) How did equity factors play a role in the identification of priority populations who are more severely impacted by COVID (e.g., health, job loss, economic impact, etc.)? Was the application of the priority population direction equitable, evidence-based and applied consistently? b) What was done to make vaccines accessible for the priority populations identified (e.g., access to booking system, vaccination location, AODA accessibility, translation services, etc.)? c) What factors contributed to vaccine hesitancy in the priority populations and what was done to address these factors (including building on community partnership, influential communication strategy, etc.)? d) What was the uptake and the factors that impacted the uptake of the vaccine in the priority populations? What were the demographics of priority populations who did and did not receive the vaccine? Did they receive it in a timely manner? (e.g., number of people who took single dose and double dose)
Outcome - Vaccine uptake in general population	What was the uptake of the vaccine in the general population and what factors impacted the uptake of the vaccine?	<ul style="list-style-type: none"> a) What was the uptake of the vaccine in the general population? (i.e., proportion of eligible people who received single dose and double dose) What were the demographic characteristics of the general population who took the vaccine? b) What are the demographic characteristics of those who are eligible to be vaccinated but don't get vaccinated? c) What were the barriers to vaccination (e.g., access to booking system, vaccination location, translation services, childcare, etc.)? Did these differ by priority group? d) How well did we address the barriers to vaccination for general population (e.g., communication, transportation, etc.)? How did the vaccination campaign impact the ability to achieve herd immunity? What was the campaign's impact on the healthcare system and disease transmission (e.g., hospitalizations, number of ICU beds occupied, number of outbreaks, etc.)?



Table 1. Areas of Evaluation and Key Questions

Areas	Evaluation Questions	Sub-questions
Implementation - Vaccine administration at the various clinic settings	What was the effectiveness of the vaccine administration process?	<ul style="list-style-type: none"> a) How effective was the use of various clinic settings for administering the vaccines (e.g., pharmacies, MD offices, mobile units, etc.)? How accessible were they (e.g., close to transit/ availability of parking)? b) How effective was the clinics' design/layout, set-up and space usage? c) How efficient was the execution/vaccine administration? (e.g., consent management, wait times, timeliness of services, coverage rates, ability to meet minimum/maximum vaccination rate thresholds) d) How efficient and effective was the staffing model for the clinics? (e.g., was there enough staff to meet needs) e) What were the frequency, intensity and characteristics (including types of vaccines) of the Adverse Events Following Immunization (AEFI)? Were communication and implementation plans adjusted accordingly? f) Were best practices for IPAC and OH&S followed at the clinics? g) How effective was the vaccine and supplies management and distribution? (e.g., timeliness of delivery and receiving, storage and handling, cold chain and wastage, allocation, inventory management, etc.) h) How effective was the internal communication in keeping clinics staff, management, and suppliers informed about clinics operations? i) How sufficient was the external communication? (e.g., general communication about vaccine and coverage to the public, specific pre-vaccine and post-vaccine communication for the clients) j) How well were the roles and responsibilities of the clinic management and staff implemented for the clinics, including support functions such as security, housekeeping, IT, etc.?

Data collection will be integrated into clinic practices where possible. The design of each evaluation activity will account for privacy protections and available resources. Evaluation reports, including evaluation methodologies, findings, lessons learned, and recommendations for refinements to the COVID-19 Vaccination Program and future vaccination planning, will be developed and disseminated to all relevant stakeholders.



Acknowledgments

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Toronto is also grateful for the work of the City's COVID-19 Immunization Task Force, done in conjunction with the Province of Ontario's Vaccination Task Force, led by General (Ret'd) Rick Hillier. The work of the Task Force has been, and continues to be, informed by the public health expertise of Ontario's Chief Medical Officer of Health, Dr. Williams and Toronto's Medical Officer of Health, Dr. de Villa, both leading figures in the City of Toronto's response to the COVID-19 pandemic.

Many individuals contributed to the development of the City of Toronto's COVID-19 Vaccination Program. The City of Toronto, and all Torontonians, thank-you.

Abbreviations

AED	Automated External Defibrillator
AEFI	Adverse Events Following Immunizations
AESI	Adverse Events of Special Interest
AMOH	Associate Medical Office of Health
AODA	Accessibility for Ontarians with Disabilities Act
BCP	Business Continuing Plan
CABR	Confronting Anti-Black Racism
CANVAS	Canadian National Vaccine Safety Network
CCAC	Community Care Access Centre
CCM	Case and Contact Management
CDC	Communicable Disease Control
CDU	Community Development Unit
CFU	Community Funding Unit
CHC	Community Health Centres
CPR	Cardiopulmonary Resuscitation
CNO	Certificate of Competence
CORES	Coronavirus Rapid Entry System



CRC	Community Recreation Centre
DMOH	Deputy Medical Officer of Health
EI	Emergency Information
ELI	Enterprise Learning Initiative
EMR	Electronic Medical Record
EMS	Emergency Medical Services
EOC	Emergency Operation Centre
ESP	Employee Services Portal
F+A	Finance and Administration
HEIA	Health Equity Impact Assessment
HR	Human Resources
ICES	Institute for Clinical and Evaluative Sciences
IMS	Incident Management System
ICU	Intensive Care Unit
IPAC	Infection Prevention and Control
iPHIS	integrated Public Health Information System
IRCC	Immigration, Refugees and Citizenship Canada
IT	Information Technology
ITF	Immunization Task Force
LHINs	Local Health Integration Networks
LMS	Learning Management Software
LTCH	Long Term Care Home
MD	Medical Doctor
MIC	Mass Immunization Clinic
MOH	Ministry of Health
MOHTLC	Ministry of Health and Long Term Care
MOU	Memorandum of Understanding
MTCC	Metro Toronto Convention Centre



NACI	National Advisory Committee on Immunization
OCASI	Ontario Council of Agencies Serving Immigrants
OGP	Ontario Government Pharmacy
OHRC	Ontario Human Rights Commission
OH&S	Occupational Health and Safety
OL	Operations Lead
PHAC	Public Health Agency of Canada
PHIM	Public Health Incident Manager
PHN	Public Health Nurse
PHO	Public Health Ontario
PHU	Public Health Unit
PIDAC	Provincial Infectious Diseases Advisory Committee
PMMD	Purchasing and Materials Management Division
PPE	Personal Protective Equipment
PRS	Poverty Reduction Strategy
RH	Retirement Homes
RN	Registered Nurse
RPN	Registered Practical Nurse
SD	Social Determinants
SDFA	Social Development, Finance and Administration
SIC	Special Immunization Clinic
SPT	Social Planning Toronto
TPH	Toronto Public Health
TPHEP	Toronto Public Health Emergency Plan
TTC	Toronto Transit Commission
VDA	Vaccine Distribution Agents
VPD	Vaccine Preventable Disease