

# MLHU 2022 Vaccine Preventable Diseases Operational Plan

APRIL 2022

VERSION 1.0

## Table of Contents

Summary .....	5
Background .....	5
Purpose and Objectives .....	5
Purpose .....	5
Objectives .....	5
Principles.....	6
Leadership and Governance .....	6
MLHU Structure for 2022 Vaccine Preventable Diseases Program .....	6
Planning Assumptions.....	6
Assumed 2022 priorities .....	7
Strategies to Address 2022 Priorities.....	7
Booster Dose Campaigns .....	7
Primary Series to Children Under 5 Years of Age .....	8
Long-Term Care and Retirement Homes .....	8
Ontario Publicly Funded Vaccines Catch-Up Clinics.....	9
Influenza Vaccines.....	9
Ongoing Mobile Clinics .....	9
Ongoing Support and Engagement of Primary Care.....	9
Pharmacy Engagement Working Group .....	10
Promotion of Vaccination and Addressing Vaccine Hesitancy .....	10
COVaxON Update.....	10
Data Quality .....	10
Social determinants of health data collection .....	10
Conclusion.....	10
Operational requirements .....	12
Mass Immunization Clinics.....	12
Staffing .....	12
Client Scheduling.....	12
Other Vaccines .....	12
Mobile Clinics .....	12
Staffing .....	12
Client Scheduling.....	13

Distribution to Primary Care and Long-Term Care Homes/Retirement Homes .....	13
Communications .....	13
Communication Platforms .....	13
Community Partnership and Engagement.....	14
First Nation, Métis, and Inuit populations .....	14
Racialized populations .....	14
Schools and Post-Secondary Students.....	14
Supplies Management and Distribution .....	14
Equipment.....	14
Receiving, Storing and Handling Vaccine .....	14
Cold Chain .....	15
Physical Security.....	15
Inventory Management .....	15
Vaccine Ordering.....	15
Inventory Reporting to the Ministry of Health .....	16
Distribution Program (Ordering).....	16
Logistics.....	16
Finance .....	16
Information Technology.....	16
Human Resources .....	16
Surveillance, Monitoring and Reporting.....	17
Internal Reporting.....	17
External Reporting .....	17
Mapping .....	17
Vaccine Safety.....	17
Out of Province Reporting .....	17
Contingency Planning .....	17
Evaluation and Quality Improvement.....	18
Conclusion.....	18
Appendix A – Stakeholder Roles and Responsibilities .....	19
Appendix B – Mass immunization sites .....	19
Appendix C - Staff positions at mass immunization clinic .....	20



## Summary

The **MLHU 2022 Vaccine Preventable Diseases Operational Plan** articulates the strategic vision and operational plan to guide Middlesex-London Health Unit's (MLHU) distribution and administration of the COVID-19 vaccine. It also outlines the integration of COVID-19 immunization operations with non-COVID-19 immunization operations.

This plan is a working document informed by the evidence and experience of the MLHU team. It will require revisions as new learnings are realized at the agency and local level, and as international, national and provincial guidance and directives related to the COVID-19 vaccine are modified.

## Background

The first laboratory-confirmed case of COVID-19 in Middlesex-London was reported to MLHU on January 24, 2020. Since that time, the impact on residents of the Middlesex-London community has been profound. Vaccines were introduced to Middlesex-London in December of 2020 and under the strategic and operational leadership of MLHU, by January of 2022 over 1,000,000 vaccines have been delivered in the region. Distribution of the vaccine started in December 2020 through the London Health Sciences Centre (LHSC) operated mass immunization clinic at the Western Fair Agriplex. In the months to follow, MLHU added 3 more mass immunization sites (Caradoc Community Center in Mt. Brydges, Earl Nichols Arena, North London Optimist Community Center), while also operated a significant number of mobile and pop up clinics. In October 2021, MLHU also took over operations of the Agriplex clinic. MLHU also created and is running a vaccine distribution program to onboard, train, and provide vaccine to long-term care homes, retirement homes and primary care clinics. Along with pharmacy partners, these strategies have resulted in very high vaccination rates in the region (over 91% of people 12 years of age or older have had 2 doses as of February 2022).

## Purpose and Objectives

### Purpose

The purpose of the **MLHU 2022 Vaccine Preventable Diseases Operational Plan** is to provide a framework that outlines a strategic, equity-oriented, coordinated and integrated approach to the ongoing provision of COVID-19 vaccine to all eligible residents. The plan also outlines the integration of COVID-19 immunization operations with non-COVID-19 immunization operations, specifically focusing on the annual influenza vaccine campaign and the distribution of vaccines for school-aged children.

### Objectives

The objectives of the COVID-19 immunization program are to:

1. Ensure prioritized and accessible administration and distribution of vaccine to minimize severe health outcomes and death associated with COVID-19, in keeping with provincial parameters.
2. Plan vaccine administration and distribution from a health equity lens.
3. Maintain staffing complement to meet human resource needs for the distribution of the COVID-19 vaccine.
4. Provide clear, consistent and transparent information and education about the vaccine.
5. Maintain and increase public confidence and uptake of COVID-19 vaccine.

## Principles

Consistent with the provincial Ethical Framework for COVID-19 Vaccine Distribution, MLHU's Vaccine Preventable Diseases program will be guided by the following principles:

- Minimize harm and maximize benefits
- Equity
- Fairness
- Transparency
- Legitimacy
- Public trust

## Leadership and Governance

The MLHU will provide leadership and direct the COVID-19 immunization program in the Middlesex-London region, collaborating closely with municipal, health, and non-health sector partners. Key stakeholders and their respective roles in the COVID-19 immunization program are articulated in [Appendix A](#).

### MLHU Structure for 2022 Vaccine Preventable Diseases Program

The Vaccine Preventable Diseases (VPD) team has been re-structured and is now responsible for the COVID-19 vaccine program and the immunization standards and protocols as per the Ontario Public Health Standards (OPHS). The new VPD structure consists of a Manager who will over-see all of operations. In addition, there are Associate Managers and Supervisors included in the structure assigned to various portfolios to ensure that the immunization standards per OPHS are being met, including COVID-19 immunization program requirements.

To successfully implement the immunization plan, the support from internal stakeholders, such as human resources (HR), information technology (IT), logistics, planning and evaluation are essential. The Vaccine Informatics and Planning team (VIP) is currently supporting the distribution program, planning, inventory, appointment management, data quality and COVaxON support.

## Planning Assumptions

- Local public health is responsible for the oversight and leadership of the COVID-19 immunization program including the distribution of vaccine to high risk settings e.g. Long-Term Care and Primary Care.
- Execution of the program will require close collaboration with other sectors.
- COVID-19 vaccines will be supplied by the province.
- Prioritization and eligibility of recipients will be determined by the province.
- Each vaccine has specific storage and handling requirements that require careful oversight and monitoring.
- COVaxON will continue to be available through the Province and will be used to track COVID-19 vaccine administration.
- COVaxON support will continue to be provided to clinics and distribution sites.
- Multiple doses of vaccine will be required, including booster doses.
- Mass immunization clinics will be required to allow for surge capacity.

- Additional human resources will be required to staff mass immunization clinics at times of increased vaccine demand.

#### Assumed 2022 priorities

- [Booster Dose Campaigns](#)
- [Primary Series to Children Under 5 Years of Age](#)
- [Long Term Care and Retirement Homes](#)
- [Ontario Publicly Funded Vaccines Catch-Up Clinics](#)
- [Influenza Vaccines](#)
- [Ongoing Mobile Clinics](#)
- [Ongoing Support and Engagement of Primary Care](#)
- [Pharmacy Engagement Working Group](#)
- [Promotion of Vaccination and Addressing Vaccine Hesitancy](#)
- [COVaxON Update](#)
- [Data Quality](#)

#### Strategies to Address 2022 Priorities

In the Middlesex-London region, mass immunization clinics, mobile clinics, pop up clinics, distribution to partners, and delivery by pharmacies will be key components of a rapidly scalable infrastructure for vaccine administration. At different points throughout the year and in different situations, different methods will be more heavily relied upon. The internally-oriented Vaccine Operations Committee (VOC) meetings have been designed to host these strategy conversations involving key internal stakeholders. The VOC meeting cadence is dependent on Middlesex-London community vaccine administration requirements.

#### Booster Dose Campaigns

The protection from the vaccine wanes over time and it is anticipated that additional booster doses will be required. When these doses become available, there will be a brief increase in demand for vaccine. This change in demand will require changes to the clinic operations and the COVID-19 immunization program.

The following items that need to be considered if a booster dose campaign is initiated:

- Staffing (re-deployment, hiring, bringing back temporary employees)
- Training
  - o If more staff are needed, training and re-training will be required (ex. COVaxON, clinic processes, etc.)
- Number of mass immunization clinics (MICs)
- Mobile clinics frequency
- Appointment numbers in Verto
- Vaccine inventory and the distribution of vaccine to appropriate sites
- Information needing to be shared with the public
- Impact on the distribution program – communication, orders, etc.
- Communication with pharmacies
- Internal reporting requirements (utilization report, clinic day numbers, etc.)

### *Increased demand - booster doses*

When a large number of doses are required, the main delivery strategy will be the utilization of mass immunization clinics (MICs). Additional sites, staff, appointments, training and inventory will be needed. Other vaccine programs, such as catch-up vaccine clinics for school-aged children and mobile clinics, may need to be put on hold. All changes need to be communicated to the public.

### *Decreased demand before and after the booster doses*

After an initial surge in vaccine demand, there tends to be a lower, steady period followed by an even lower maintenance level. When demand starts to reduce, appointments at MICs may need to be lowered and less staff may be required at each site. Decrease demand at MIC will enable MLHU to shift to more mobile/pop-up clinics and continue administration of catch up vaccinations to school-aged children. Typically, when demand at MIC slows down, so do the orders for distribution to primary care and long-term care homes.

### Primary Series to Children Under 5 Years of Age

There will be multiple options that will be employed to ensure there is equitable access to the vaccine for children under 5 years of age. The options used for previous age groups could be utilized with a combination of MICs, mobile clinics, pop up clinics and primary care.

If MICs, mobile clinics, and/or pop-up clinics will be used, the following must be considered:

- Changes to the appointment booking site
- Appointment types and numbers in Verto
- Ordering the new vaccine (if applicable)
- Staff training for a new and younger population
- Re-design clinics to support the new and younger population (child friendly working group)

Primary Care may be required to take on a larger role in COVID-19 vaccination when children under 5-year-old become eligible as these families are visiting their physicians for well-baby appointments. MLHU supports primary care through the [Vaccine Distribution Program](#) and engages them through Health Care Provider webinars and email-distributed newsletters and alerts. Additional recruiting and onboarding of primary care offices may be required to ensure that more families with children under 5 have various options available to them.

Pharmacies are also equipped to vaccinate this population and should be engaged in communication as a broader strategy is created.

### Long-Term Care and Retirement Homes

In 2021, MLHU mobile teams supported long-term care homes (LTCH) and retirement homes (RH) by going into the facilities to vaccinate their staff and residents. This is not a sustainable long-term method. Therefore, LTCH/RHs have been onboarded through the [Vaccine Distribution Program](#) and will need to be supported to deliver booster doses to their residents (including 5<sup>th</sup> doses) in the future. There are a few retirement homes who have not yet onboarded into COVaxON. They will be encouraged and supported to do this or to come up with an alternate strategy to ensure that they can reliably offer vaccination to all of their staff and residents. Going forward, COVaxON refreshers will be necessary with all agencies as they experience staffing changes and periodic use of the system.



### Ontario Publicly Funded Vaccines Catch-Up Clinics

When there is time between COVID-19 vaccine surges, the Ministry of Health has approved using the MICs to run catch-up vaccination clinics for school aged children. Specifically, the goal is to ensure that children are up to date for vaccines required in the *Immunization of School Pupils Act (ISPA)*. It is the Ministry's expectation that operational costs associated with the delivery of non-COVID-19 vaccines are reported separately. The immunization records for all school-aged children are currently being reviewed. The parent or guardian of any child that is not up to date will be notified and provided with the opportunity to submit updated records. If the child has not received all required vaccines, they will be provided with opportunity through clinics hosted at the MICs or in school. Staff from the MICs have been trained on the non-COVID-19 vaccine database called Panorama and will be able to assist and provide immunization services. The mass immunization catch-up clinics will be run for specific age groups by appointment only to ensure that all necessary vaccines are available.

### Influenza Vaccines

In the fall of 2021, the MICs piloted providing influenza vaccines at the same time as COVID-19 vaccines. This was successful and new processes were created that could be implemented for 2022. To provide influenza vaccine at MICs, approval and funding (base or extra-ordinary funding) will be required from the Ministry of Health.

### Ongoing Mobile Clinics

The objective of mobile clinics is to administer COVID-19 vaccines to groups who are unable to access the mass immunization clinic sites. Using a health equity lens, mobile and pop-up clinics are positioned in the community where individuals may live, work or attend school. Mobile clinic staff have reached out to shelters, group homes, schools, community centers, religious organizations, and other community organizations. Ongoing work is being done to identify communities for mobile clinics including leveraging [community partnerships](#), doing [mapping exercises](#) and using data provided by the Ministry of Health. There is a subcommittee of VOC designated to continue to identify targeted populations for mobile clinics which includes a representative from the Health Equity and Reconciliation Team (HEART) and from Communications.

Mobile teams need to be fluid and agile and staffed according to the expected turn out. If turn-out drops and small high-risk area clinics are provided, "micro teams" may be sent out to the same site for a one-week period. A homebound program has also been created to provide immunization for clients who are unable to leave their homes for health or other reasons. This program only requires one nurse to vaccinate the person in their residence. In the past for additional surge capacity, in collaboration with MLHU, the Middlesex London Paramedic Services (MLPS) have provided mobile clinics in the community and could be called upon if required in the future.

### Ongoing Support and Engagement of Primary Care

Primary Care practitioners have been supporting the efforts to immunize clients in the area through varying strategies. They have joined the Vaccine Distribution Program, responded to requests for immunizers at the MICs and run select cultural clinics. The MLHU meets routinely with the London Middlesex Primary Care Alliance (LMPCA) to discuss the ongoing role of primary care.

### Pharmacy Engagement Working Group

Pharmacies are large contributors to the local vaccine roll-out, and although they operate independent of the MLHU COVID-19 vaccine program, engagement would assist with creating a coordinated approach to ensure good COVID 19 vaccine coverage in the population. A working group would allow for a communication channel to be established to support surges in vaccine demand, transfer of product between MLHU AO (Authorized Organization) and the pharmacies when needed, and consistent public messaging. The working group would need to include various pharmacy models (franchises, chains, and independent pharmacies). MLHU partners with pharmacies on other important public health measures and these partnerships should be leveraged.

### Promotion of Vaccination and Addressing Vaccine Hesitancy

MLHU will continue to develop materials to support the immunization program, in addition to amplifying provincial messages through the Health Unit's social media channels. MLHU continues to use the website, social media, public service announcements (PSA) and media advisories to educate and promote the importance of the immunization program. These initiatives will continue to encourage vaccination in all populations including those groups with a lower vaccination rate.

Other strategies such as partnerships and Instagram live sessions with primary care, hospital partners, community groups, athletes, etc. have all been employed to continue to address vaccine hesitancy. School letters were sent out through the school boards that provided parents with the opportunity to speak to a public health nurse about any vaccine related questions.

### COVaxON Update

The Ministry of Health has announced that a new version of COVaxON will be released in early June. This will require new processes to be identified, job aids to be created, and training for all staff and Vaccine Deployment Program participants.

### Data Quality

The Vaccine Informatics and Planning (VIP) team has been responsible for reconciling outstanding inventory discrepancies and attempting to improve the data quality of what has been captured in COVaxON. Throughout 2022, attempts should be made to improve the completeness and accuracy of all COVaxON data in the MLHU health unit region and in our vaccination events. Additionally, the team will be exploring processes to collect even better data when future doses are required. This includes strategies to collect social determinants of health data and complete all other fields accurately.

### Social determinants of health data collection

The social determinants of health (SDOH) module is a secondary data collection form within COVaxON and can be utilized to collect data on every person being vaccinated. In 2021, when clinics were very busy, this practice was not being followed regularly and data is not complete. Training, accountability forms, and reminders are being used to encourage staff to gather this data on every client.

### Conclusion

The unpredictability of the pandemic and demand for the COVID-19 vaccine by the public has required flexibility and adaptability in planning. By being anticipatory and proactive, MLHU will be prepared to respond to increases or decreases in COVID-19 vaccine demand. Maintaining a minimum of two MICs

open throughout 2022 and utilizing the MICs as catch-up clinics during low demand periods, along with cross training VPD staff, positions MLHU well for episodic surges in demand. Screening all students and incorporating student catch up vaccinations at the MICs during low demand periods will enable MLHU to increase non-COVID-19 vaccination coverage in the region.

The strategies identified in this report will enable MLHU to continue to protect the community from COVID-19 and other vaccine preventable diseases.

## Operational requirements

### Mass Immunization Clinics

Mass immunization clinics (MICs) are purpose-designed to efficiently deliver vaccine to a large population in a short period of time. Mass immunization clinics rely on the compartmentalization of components of the vaccination process to ensure scalability and efficiency. They are an essential delivery strategy. Locations that have been used can be found in [Appendix B](#).

### Staffing

Each clinic site will have one designated associate manager. The program will be centrally supported with regards to human resources, scheduling, and client bookings. The staffing required daily for each mass immunization clinic is dependent on the projected throughput of the clinic and the process flow utilized to optimize efficiency (staffing positions can be found in [Appendix C](#)).

### Client Scheduling

Client scheduling takes place through a web-based system call Verto, using a gating webpage to ensure eligibility, or through a booking phone line. Regular maintenance of the gating webpage is managed by the VIP team in consultation with Communications. The gating webpage needs to be updated with any eligibility or operational change.

### Other Vaccines

The mass immunization clinics have been running with 3 different antigens with 4 different doses (Moderna full dose, Moderna half dose, Pfizer and Pediatric Pfizer). This has proven that the mass immunization clinics can be leveraged to deliver other vaccines including [school catch-up vaccines](#) and [influenza vaccines](#).

### Mobile Clinics

The purpose of these clinics is to administer COVID-19 vaccines to groups who are unable to access the mass immunization clinic sites. Locations where these clinics have taken place in the past are listed in [supplemental documents](#) and can be used again in the future. Locations are informed through consultation with community partners and assessment of vaccine coverage.

### Staffing

The mobile immunization program currently has one associate manager. This will be re-examined based on need and may be increased to two. The number of teams that will be functioning at any particular time, will fluctuate between 1 to 3 teams based on capacity and public demand/uptake.

Each mobile team will consist of:

- 1-2 Team Leaders
- 2-6 Vaccinators/re-constituters
- 2-6 Assistants (navigation and data entry)

The number of staff will vary in number depending on size of the clinic. Additional staff for re-constitution may be required, depending on product.

### Client Scheduling

All mobile and pop up clinics are walk-in only. When lines become too long, a ticketing system will be implemented to encourage people to return later. Once the clinic is full for the day, a social media post is sent out to reduce the number of clients coming to the clinic that day.

### Distribution to Primary Care and Long-Term Care Homes/Retirement Homes

A COVID-19 vaccine distribution program that has been developed to ensure that primary care and agencies in the community have access to ordering COVID-19 vaccine for distribution to their clientele. This program is a collaboration between VIP and VPD. It involves an expression of interest, signing a memorandum of understanding, training on COVaxON, ordering vaccine, recording vaccinations and inventory management in COVaxON. Information can be found on the website:

<https://www.healthunit.com/covid-19-vaccine-distribution-program>.

### Communications

A proactive and responsive communications strategy from a trusted local source is crucial to the success of the COVID-19 vaccine program. The MLHU is the central source of COVID-19 information locally and continues to leverage established relationships, communication channels and expertise throughout the vaccine rollout to increase awareness and confidence in COVID-19 vaccines.

### Communication Platforms

#### *Website*

MLHU has been keeping its website up-to-date with all the latest COVID-19 vaccine related information: <https://www.healthunit.com/covid-19-vaccine>

Information on the website includes the science of vaccines, information about who is eligible for vaccines, and more. This page is intended to be a “one-stop shop” for all vaccine-related information and will continue to be updated as more information becomes available.

#### *Social Media*

The Middlesex-London Health Unit also has a well-established social media presence, including active engagement with large audiences on Facebook, Twitter, Instagram, YouTube and TikTok. The use of multiple social media channels allows for MLHU content to be shared with a wider audience, increasing the overall reach of Health Unit messages.

#### *Traditional Media*

In addition to issuing periodic media releases and public service announcements, the Health Unit also hosts weekly virtual media briefings about COVID-19-related matters in London and Middlesex County. These media briefings will also serve as an important tool that will help inform the public about the COVID-19 immunization program. Local media will also be engaged to help deliver the vaccination message to a wider audience through interviews with key MLHU staff and appearances on local radio talk shows and television news.

#### *Non-Traditional Media*

MLHU partners with community, religious, and other leaders who have non-traditional distribution channels such as podcasts and large WhatsApp groups.

## Community Partnership and Engagement

Purposeful and respectful engagement and inclusion of diverse populations, including First Nations, Inuit, and Métis peoples, and other racialized populations has been essential to ensure equitable distribution of the vaccine.

### First Nation, Métis, and Inuit populations

The urban Indigenous population has been engaged through partnership with the Southwest Ontario Aboriginal Health Access Center (SOAHAC). MLHU will continue to support the distribution of vaccine to SOAHAC, as well as supplement resources as necessary.

The First Nations communities in the area include the Chippewa of the Thames First Nation (Anishinaabe), the Oneida Nation of the Thames (Haudenosaunee), and the Munsee-Delaware Nation (Leni-Lunaape). These communities have worked together to vaccinate their populations and will continue to have support from MLHU as requested.

### Racialized populations

MLHU is actively connecting with specific racialized populations to support vaccination efforts and offer mobile clinics in spaces that are appropriate and preferred by the community. The success of these clinics is dependent on strong partnerships with community leaders.

### Schools and Post-Secondary Students

MLHU has strong partnerships with all school boards in the region, as well as all post-secondary institutions. These relationships are critical for engaging younger demographics and encouraging vaccine uptake. The school boards have supported after-school COVID-19 immunization clinics at 35 different sites and have distributed information to parents.

Western University has been providing vaccination through the distribution program and has vaccinated over 9,000 people.

## Supplies Management and Distribution

The MLHU's Vaccine Preventable Disease team has extensive expertise in the storage, handling and cold chain maintenance requirements of vaccines. Vaccine distribution is managed as per the manufacturer requirements.

### Equipment

MLHU uses purpose-built or pharmaceutical-grade equipment to store vaccines.

### Receiving, Storing and Handling Vaccine

The MLHU Citi Plaza Site has a designated loading dock and Shipping and Receiving personnel with the expertise to receive, store and handle the vaccine per current Ministry of Health Vaccine Storage and Handling Protocol. All freezers, fridges and vaccination equipment are housed in a locked area adjacent to the loading dock to allow for ease of distribution.

MLHU receives and stores frozen vaccines and thaws the vaccines in accordance with guidelines and standards issued by the Ministry of Health or other industry or government agencies.

All Mass immunization clinic sites have the capacity to store large amounts of vaccine. Each site has a fridge and freezer, with one of the sites also having an ultra-low temperature (ULT) freezer. Security and monitoring set up as per Ministry guidelines.

#### Cold Chain

MLHU ensures an uninterrupted power supply for all freezers and fridges at all storage sites. Cold chain is monitored 24/7 through a live system (Blue Rover) which includes remote monitoring and notification to MLHU leadership if any temperature changes occur. This system is supplemented with an on-call answering service (Bearcom) to ensure temperature notifications will not be missed.

If there is a concern with the equipment, the vaccine will be moved to one of the other secure sites to be stored.

#### Physical Security

All vaccine product is secured behind multiple card access doors with card-controlled access. At the MLHU Citi Plaza Site, seventeen security cameras provide site surveillance. Additional cameras were added to increase surveillance to the vaccine area. These cameras are monitored by on-site security and the area is patrolled multiple times per day to ensure the vaccine area remains secure.

When vaccine is stored at the mass immunization sites, it is behind a card entry system that can only be accessed by the associate manager, site supervisor and team leader. Cameras as well as security personal are on site 24 hrs to ensure the vaccine remains secure.

#### Inventory Management

Each mass immunization clinic manages their inventory and reports supply levels daily to central inventory management (VIP team). The Informatics Support staff reconcile the numbers against what is in COVaxON to make sure that inventory is properly accounted for. The VIP team monitors inventory levels at each clinic, orders vaccine from the Province or surrounding health units and recommends movement of vaccine between clinic sites as required. The VPD ordering team actions the transfers between sites with the clinical teams and the courier.

When distributing vaccine to any distribution site all doses are accounted for. Any wastage is to be documented including numbers and reason.

#### Vaccine Ordering

##### *From the Ministry*

To order vaccine or vaccination supplies from the Ministry of Health, MLHU staff submit an order through the provincial Shopify Store. The Ministry typically delivers the vaccine that is ordered within a week. There is currently an ordering deadline of Monday at noon.

##### *From other Health Units*

In certain times, a process has been established to request vaccine from neighbouring health units (e.g. one site has vaccine that is expiring soon, a site is in desperate need for vaccine or sites have too much vaccine in their freezers or fridges). Southwestern Public Health (SWPH), Huron Perth Public Health (HPPH) and MLHU created a process for vaccine sharing arrangements of thawed or frozen vaccine between sites as required.

## Inventory Reporting to the Ministry of Health

Regular reporting will be communicated to the Ministry of Health as mandated. If disruptions to vaccination storage or administration occur, the Ministry will be notified as soon as possible.

## Distribution Program (Ordering)

Once a site has been onboarded with the distribution program, they can order COVID-19 vaccine through the vaccine ordering app. The order is reviewed by Program Assistants in the VPD team and approved, packed and sent with a courier. This ordering system is also being broadened to support all vaccines available through MLHU.

## Logistics

### Finance

The MLHU is committed to transparent and efficient use of public resources.

All program costs associated with the COVID-19 immunization program will be tracked separately from any other Board of Health approved cost-shared budget. These costs will also be tracked independently from those associated with case and outbreak management of COVID-19 and those of traditional publicly funded vaccines.

### Information Technology

The MLHU will oversee the integration of all IT solutions, with a focus on the provincial solution COVaxON with support from partners as applicable.

All teams who support the COVID-19 immunization clinics will be trained on COVaxON, as it is used for documenting the administration of each vaccine administered in the Middlesex-London region.

Paper-based contingency plans are in place should the digital solutions fail.

## Human Resources

### Recruitment

The MLHU Human Resources team will continually monitor staffing requirements and will ensure appropriate staffing to meet the evolving needs of the COVID-19 vaccine program.

### Staff Scheduling

A centralized staff scheduling process is being utilized to ensure the pool of human resources is optimized and operations is not compromised in the event of short-term absences. The existing MLHU Human Resources software platform, Dayforce, is being leveraged for its scheduling functionality including self-scheduling.

### Orientation and Training

The current COVID-19 team that will be integrated into the Vaccine Preventable Disease program has developed a training curriculum for new staff. This curriculum will be expanded to include training videos, and will include topics such as:

- Proper use of PPE
- COVaxON – Informatics Support can also provide hands on training or problem solving
- Vaccine and medical directive considerations
- Clinic processes



- Cultural safety
- Vaccine storage and handling
- Physical security of vaccine
- Information security
- AEFI reporting processes
- Out of Province and Out of Country submissions review and data entry
- Vaccination Exemption monitoring, review, and data entry
- Asking about Social Determinants of Health

### Surveillance, Monitoring and Reporting

Surveillance and monitoring are critical to the planning, oversight and management of the COVID-19 vaccine program, in addition to meeting provincial and local reporting requirements.

#### Internal Reporting

The Vaccine Informatics and Planning team collects and documents critical operational information, including vaccine availability and supply, daily and cumulative number of vaccines administered, and other key operational metrics.

#### External Reporting

The [MLHU COVID-19 Dashboard](#) provides a public-facing summary of the COVID-19 situation in the Middlesex-London region. Vaccine relevant metrics have been incorporated into this dashboard, in order to provide routine updates on the local vaccine distribution campaign. Key metrics include:

- Total cumulative doses administered to Middlesex-London residents
- Percentage of Middlesex-London residents who have completed vaccine series, stratified by relevant priority populations where possible

#### Mapping

The mapping of vaccine rates for all neighbourhoods is used to help determine where mobile/pop-up and micro clinics will be situated. Additionally, mapping data is being provided by the Ministry of Health to supplement the information available at the health unit level. Specific reports, such as the rate of vaccination in children age 5-11 or recipients of Social Assistance, are used for planning mobile clinic location and density.

#### Vaccine Safety

MLHU adheres to the provincially-mandated Adverse Event Following Immunization (AEFI) surveillance process.

#### Out of Province Reporting

An application was developed to make submitting out of Province doses of COVID-19 vaccines easier. It allows people to submit online and have MLHU staff to review and follow up if required. These doses were also reported in COVaxON when people came for future doses. This information is needed to ensure complete vaccination data.

#### Contingency Planning

In anticipation of potential disruptions to the vaccine distribution, redundancies are being incorporated in to all aspects of the vaccine plan, including but not limited to:

- Keeping a strategic number of mass immunization clinic sites open at basal levels to be able to ramp up in a timely way. (Agrimex, Mt. Brydges, Citi Plaza) Additional sites may be re-opened as necessary should demand increase and vaccine needs to be delivered quickly.
- Cross-training for all staff and positions
- Non-digital downtime processes
- Alternate storage for vaccine product if primary units are compromised

Contingency plans are constantly being considered in anticipation of potential disruptions to service, including:

- Severe weather events
- Labour disruptions
- Infectious disease outbreaks

Communications plans are key to ensuring public notification of disruptions and service changes.

### Evaluation and Quality Improvement

Various evaluations have taken place and will continue to take place for the vaccine roll out. Real time evaluations have been done to support continuous quality improvement in our processes and procedures, clinic set-up and broader strategic decision-making.

### Conclusion

The COVID-19 Immunization Program achieved its 2021 objective of vaccinating 75% of the population quickly (within 6 months). The plan for 2022 is to prepare for subsequent booster doses of COVID-19 vaccine, ensure access to vaccine for those who have had difficulties accessing COVID-19 vaccine to date, increase confidence in vaccine, and to increase uptake of non-COVID-19 vaccines amongst school-aged children.

## Appendix A – Stakeholder Roles and Responsibilities

Stakeholder Group	Roles & Responsibilities
Board of Health	Approve and support plan and financial considerations
Medical Officer of Health	As Incident Commander, the MOH leads the roll out of vaccines to the community
City Council	Support by providing municipal locations for mass immunization clinics, resources (human and physical) and assistance as required
County Council	Support by providing municipal locations for mass immunization clinics resources (human and physical) and assistance as required
Project team	Taking a leadership role in the local vaccination plan including, planning, coordinating, and executing.
General MLHU Staff	Be informed as the vaccination plan is rolled out and asked to support messaging as appropriate
<b>Partner Organizations</b>	
Hospitals	Onboarded with COVaxON and delivering vaccines within the hospital system and in clinics.
Middlesex London Paramedic Services (MLPS)	MLPS can run mobile clinics as required.
Community Health Centers	SOAHAC collaborated with MLHU to create an urban Indigenous vaccination strategy. Other Community Health Centers will be informed and assist with vaccine promotion and can get onboarded to provide vaccines
Long-Term Care Homes and Retirement Homes	Get onboarded to COVaxON and provide vaccines
Primary Care Providers	Stay informed, address vaccine hesitancy, assess and manage adverse events following immunization, encourage patients to attend clinics and provide vaccines
Pharmacies	Stay informed, address vaccine hesitancy and provide vaccines
Community agencies serving marginalized groups	Encourage community members to be vaccinated as prioritized Host mobile clinics as deemed appropriate by the MLHU
Police	Contribute to security assessments and planning. Consult on security resource requirements.
<b>Government</b>	
Provincial Government	Provide direction and oversight over the vaccine distribution Provide vaccine supply
Federal Government	Procure vaccines and distributes to the province

## Appendix B – Mass immunization sites

Name	Location	Number of vaccinator tables (max)	Number of registration tables (max)	Max number of vaccines given/day	Pros of site	Cons of site
Agriplex – New space as of March 2022	845 Florence St, London, ON N5W 6G6	18	10	2,000	Very large Central Room for expansion	Parking became an issue when hockey tournaments occur
Agriplex – Old space	845 Florence St, London,	40	20	3,000	Very large Central	Parking became an issue when hockey tournaments occur

	ON N5W 6G6				Room for expansion	
Mt Brydges	565 Lions Park Dr, Mount Brydges, ON N0L 1W0	7	4	500	Ensure County access; Lots of parking	Can get congested at higher levels No room for expansion
Citi Plaza	355 Wellington St, London, ON N6A 3N7	6	3	500	MLHU owned	Parking for clients No room for expansion
Earl Nichols	799 Homeview Rd, London, ON N6C 5J4	15	8	1,200	Good parking during the day	Parking in the evening is an issue if recreation center is open Entrance/Exit is cold in the winter City Owned – need agreement
North London Optimist Community Center	1345 Cheapside St, London, ON N5V 3N9	18	12	1,500	Good location	Parking lot is too small (limited to 1,500) Staff had to park offsite – bus was needed City Owned – need agreement

### Appendix C - Staff positions at mass immunization clinic

Position	Role	Description
Leaders	Associate Manager, VPD	Oversees the full clinic operations Clinic Operations Accountability - Performance management of immunizers and Team Leads Monitoring the reconstitution, vaccination and post care areas Clinical guidance to immunizers and Team Leads including orientation; implements and monitors practice changes Vaccine monitoring, cold chain, inventory and data reporting to informatics Complex client communication when consulted by immunizers or Team Leads
	Supervisor, VPD	Total Site Operations Accountability – site flow, building issues, ice, security, client incident

		<p>Performance manage/supervise program assistants and support staff with complex issues and clients</p> <p>Provide Supervision to the phone line staff, screeners, navigators, registration clerks and check out clerks</p> <p>Liaison with MLHU logistics, IT, informatics, community partners and/or subcontracted parties</p> <p>Monitoring supplies, inventory and oversee ordering</p>
	Team Leader, VPD	<p>Knowledge support for the immunizers and other staff (no performance management)</p> <p>Support immunizers and other staff by answering questions and problem-solving difficult practice/client situations</p> <p>Provide guidance on clinical practice and clinical support to immunizers and other staff as needed</p> <p>Collaborate with the Associate Manager-Clinical to maintain clinic practices, cold chain, supplies and inventory</p> <p>Identify areas for improvement</p>
Program Assistants	Phone Line staff, VPD	Monitor booking line and confirm eligibility
	Screeners	Confirming absence of COVID-19 signs and symptoms and verify eligibility to receive the vaccine
	Registration Clerks	Register client for vaccination in COVaxON system and confirming consent to share personal data and receive the vaccine
	Check-out clerks	Provide documented confirmation of receipt of vaccine
	Client navigators	Facilitate client flow through clinic, ensuring efficient throughput
Nurse or other health care professional	Vaccinator	Confirms consent, administers the vaccine, and provides post-vaccine instructions
	Re-constituters	Prepare vaccines for the immunizer
	Vaccine runner	Replenish immunizers vaccine supply
	Post-vaccine monitoring	Monitor clients following vaccination for any adverse events
	Security	Monitor crowds and vaccine storage; assess safety risks
	IT Support	Maintain critical IT infrastructure