MEMO / NOTE DE SERVICE



To/Destinataire	Mayor and Members of Council	File/N° de fichier:
From/Expéditeur	Anthony Di Monte, General Manager of	
	Emergency and Protective Services and	
	Dr. Vera Etches, Medical Officer of Health	
Subject/Objet	COVID-19 Vaccine Distribution Update	Date: January 4, 2021

The purpose of this memo is to provide Members of Council with an update on the current planning assumptions respecting the distribution and administration of COVID-19 vaccines in our community, as directed by the Province. The City of Ottawa and Ottawa Public Health (OPH) are taking a proactive planning approach, outlined below, to ensure readiness as additional vaccines are approved by Health Canada and more doses are received from the Province.

As you read through this document, please keep in mind that there are new developments emerging daily about vaccines and the federal and provincial distribution plans. The information below reflects a moment in time in an ongoing and evolving project. Please rest assured that staff are continually monitoring for updates and aligning our planning efforts in response to new developments.

Jurisdictional Framework

The federal government has taken the lead on the approval and procurement of COVID-19 vaccines in Canada. The federal government has stood up its National Operations Centre through the Public Health Agency of Canada (PHAC), led by Major-General Dany Fortin.

The provincial government receives COVID-19 vaccines from the federal government and is responsible for identifying priority population groups, as it distributes vaccines across Ontario. The Province is also responsible for vaccine tracking and healthcare records management and has established the provincial COVID-19 Vaccine Distribution Task Force, led by General (retired) Rick Hillier. The Provincial Emergency Operations Centre (PEOC) and the Ministry of Health's Emergency Operations Centre have also been stood up.

OPH will eventually receive vaccines from the Province to administer in accordance with the provincially mandated prioritization groups. The City has established a COVID-19 Vaccine Distribution Task Force with partners from OPH and The Ottawa Hospital and has also stood up the municipality's Emergency Operations Centre in support of these efforts.

Vaccine Approvals

Health Canada approved the Pfizer-BioNTech COVID-19 vaccine on December 9, 2020, and the Moderna COVID-19 vaccine on December 23, 2020. There are other potential vaccines expected to follow, including vaccine candidates from Janssen, AstraZeneca and

Novavax, among others. The Public Health Agency of Canada has announced that the federal government has negotiated agreements with seven vaccine manufacturers that would provide access to COVID-19 vaccines to everyone living in Canada by September 2021.

Both the Pfizer-BioNTech and Moderna vaccines require two doses. Currently, the Pfizer-BioNTech vaccine is approved for people aged 16 and older and the Moderna vaccine is approved for people aged 18 and older. Reports have indicated that the vaccines are close to being equivalent in efficacy. Based on the data from the vaccine trials, the Pfizer-BioNTech and Moderna vaccines are 95 and 94.1 percent effective respectively, at preventing symptomatic COVID-19 infection, following two doses of the vaccine.

There are different cold storage requirements for both vaccines. The Moderna COVID-19 vaccine must be stored at minus 20 degrees Celsius whereas the Pfizer vaccine must be stored at minus 70 degrees Celsius. For this reason, the Pfizer-BioNTech vaccine requires ultra-cold freezers that public health units, doctor's offices and most pharmacies do not have. As of today, only some hospitals are equipped to store and administer the Pfizer-BioNTech vaccine, whereas the Moderna vaccine may be administered by a wider range of health care providers with the acquisition of special freezers that can meet temperature storage requirements.

Vaccine Distribution

Overall, Canada has secured access to 20 million Pfizer-BioNTech doses and 40 million Moderna doses, with options to purchase more if needed. The total amount of vaccine that will be distributed to the City of Ottawa and precise delivery dates are not yet known. These decisions are made by the Province.

Various tactics will be used to distribute and administer vaccines across Ottawa based on the quantity and type of vaccines received throughout 2021. The main tactics that will be used include: hospital clinics, mobile vaccination teams, community clinics, pharmacies, primary health care providers like family doctors and by other health care professionals such as nurses working in congregate living settings, including long-term care homes and shelters.

Provincial Timeline

The table below outlines the three phases that the Province has announced for the rollout of vaccines in Ontario. The Province has also announced that public health units should be prepared to convert flu clinics under Phase 2 of the rollout. These timelines are subject to change based on the supply/availability of vaccines.

Phases	Phase 1:	Phase 2:	Phase 3
	Starting Dec. 15, 2020	Starting Winter 2021	When supply allows
Population Groups	Limited doses of the vaccine available for health care workers in hospitals, long- term care homes and retirement homes, other congregate care settings and remote Indigenous communities	Increasing stock of vaccines, available to all health care workers, residents in long- term care homes, retirement homes, home care patients with chronic conditions and additional Indigenous communities	Vaccines available widely across Ontario for anyone who wants to be immunized

Phase 1 and Pilot Phase

Canada expects to receive a combined total of six million doses of the Pfizer-BioNTech and Moderna COVID-19 vaccines for distribution in the first quarter of 2021 - enough for three million Canadians to be vaccinated with the recommended two-doses. The Ontario government previously announced that it expects to receive approximately two million doses by the end of March, which would amount to roughly one million people fully vaccinated.

If these vaccines were to be distributed on a per capita basis, Ottawa would see up to 160,000 doses by the end of March, enough to fully vaccinate 80,000 residents within the priority groups. However, given that there are areas in the province that have been more severely impacted by COVID-19, the large geographic size and remote areas of the province, and other factors, it is reasonable to assume that the number of doses received in Ottawa could fall below this optimistic projection.

The three main tactics that will be used in Phase 1 include hospital clinics, mobile vaccination teams and nursing staff working in congregate living settings for seniors.

On December 15, 2020, the Ontario government selected The Ottawa Hospital (Civic campus) and the University Health Network in Toronto to receive and administer a small amount of the Pfizer-BioNTech vaccine as part of a provincial pilot. The City and OPH have supported The Ottawa Hospital with their pilot clinic, and as of December 31, 2020, they have received 12,675 of the Pfizer-BioNTech vaccine. Currently, the Civic clinic has the capacity to inoculate up to 1,200 people per day.

The Province recently announced that 17 more hospitals in Ontario would be opening similar clinics (all outside of Ottawa) with more hospitals to follow. Each hospital will be responsible for the storage and administration of the vaccines they receive. Given the cold chain requirements of the Pfizer-BioNTech vaccine, and that it cannot currently be moved from the site where it is received, health care workers from long-term care and retirement homes, as well as essential caregivers, are receiving the vaccine at the Civic campus of The Ottawa Hospital. Additional essential health care workers, such as emergency room and intensive care unit staff, those working on COVID-19 wards, paramedics and others can also receive the vaccine at the hospital clinic.

With Health Canada's approval of the Moderna vaccine, the ability to immunize seniors living in specified congregate settings will exist once supply is received from the Province. Ottawa is not expected to receive the initial doses of Moderna, which will go to harder-hit areas of the province and remote northern communities. In the meantime, staff are working with long-term care and retirement homes to understand their needs and capacity to immunize their residents with the nurses working in those facilities, as applicable. There are 28 long-term care homes and 90 retirement homes in the City of Ottawa.

In addition to the availability of nurses working in congregate living settings that are delegated the authority to administer vaccines, OPH is designing mobile vaccination teams that can be deployed to long-term care and retirement homes to administer vaccines onsite. OPH is developing this model based on existing best practices that have been established as part of regular vaccination clinics, such as for influenza and meningitis (i.e., process, supplies, delivery practices, etc.). Other City services will support OPH with coordinating logistics and building resource capacity by identifying immunizers from other organizations and services like the Ottawa Paramedic Service and local hospitals, as well as providing non-clinical staff support.

Notwithstanding that the Province has indicated that the conversion of existing flu clinics will not be required until Phase 2 of the rollout, the City and OPH will be prepared to launch its four community clinics as soon as mid-January for the population groups targeted in Phase 1. These clinics have been identified as a contingency measure should more vaccine become available (or arrives sooner) than expected. The four clinic sites are identified as follows:

- 1. Horticulture Building, 1525 Princess Patricia Way
- 2. Eva James Memorial Centre, 65 Stonehaven Drive
- 3. Orléans Client Service Centre, 255 Centrum Boulevard
- 4. Nepean Sportsplex, 1701 Woodroffe Avenue

OPH will leverage its existing flu and meningitis vaccine clinic model to establish these COVID-19 community vaccine clinics with specific provisions set out by the Province, for such things as space requirements (15,000 square/feet), layouts/flow of the clinic, technology (e.g. registration system), etc. These four clinics have the capacity to administer 1,200 vaccines per day at each site, and to ensure enhanced access, they will operate 7-days a week from 8:00 am to 8:00 pm. The total capacity for these four clinics would be 134,400 vaccines per month.

If 160,000 vaccines are received in Q1 2021, the operation of hospital clinics, mobile vaccination teams, nurses working in congregate living settings and the potential to launch community clinics as a contingency will ensure that the City has the capacity required as part of Phase 1 of the Province's rollout plan.

Phase 2

For the second quarter of 2021, Ontario expects to receive a combined total of approximately 15 million doses. This is enough for an additional 7.5 million Ontarians to be fully vaccinated. On a per capita basis, an allocation model which has not been confirmed by the Province, Ottawa would receive approximately 1.2 million doses in Q2 2021. The Q1 2021 projections estimate that approximately 80,000 residents would be vaccinated, and another 600,000 residents would be vaccinated in Q2 2021. This means that up to 680,000 Ottawa residents, who are eligible, could be immunized by the beginning of July, based on current Provincial estimates and the availability of vaccine supply - two variables that are highly susceptible to change.

The four main tactics that will be used in Phase 2 include an expansion on hospital clinics, mobile vaccination teams, launching community clinics and pharmacies.

Distribution of vaccines to pharmacies across Ontario will be contingent on the Province. Pharmacies have existing infrastructure and capacity to immunize residents and are well distributed across the city to make a significant contribution to support vaccination efforts.

For Phase 2 of the vaccination rollout, the City will continue to deploy mobile vaccination teams to complete the Phase 1 population group that includes long-term care and

retirement homes, other congregate care settings and Indigenous communities. In addition, the City will be prepared to expand on the four community clinics noted as a contingency in Phase 1 above, with three additional community clinics for a total of seven mass immunization clinics. These locations have not yet been determined and staff are assessing various options that align with the guidance provided by the Province.

These new sites will require an additional 90 immunizers and 60 non-clinical support staff to operate. There will likely be other resources needed to support these sites to meet logistical needs as well. To staff these sites, the City is reviewing various options, such as redeployments and new recruitments. These options will also consider existing redeployments that are already in place with OPH for testing and contact tracing. Existing hospital clinics established under Phase 1 would also continue and potentially be expanded to other local area hospitals, as dictated by the Province.

If Ottawa receives 1.2 million vaccines in Q2 2021, immunization through pharmacies, mass immunization community clinics, hospital clinics, mobile vaccination teams and nurses in congregate settings will ensure that the City has the capacity required as part of Phase 2 of the Province's rollout plan.

Phase 3

If Ottawa receives the estimated doses from now until July 2021, by Phase 3 we could potentially return to a steady state with regular vaccination delivery mechanisms, such as through flu clinics, pharmacies, and primary health care providers.

Key Considerations

The Province has noted that this will be the "largest vaccine rollout in a generation". The vaccine logistics and distribution processes are complex, and the City is collaborating with public health experts and industry partners, such as the hospitals, to ensure vaccines are administered in a way that is timely, efficient and safe.

There are many logistical challenges to consider, including but not limited to:

- Staff scheduling
- Client booking
- Transportation
- Supply Management (e.g. clinical supplies, personal protective equipment, etc.)
- Clinic technology and data management
- Vaccine storage, handling and distribution
- Traffic and parking
- Security

The above-noted considerations will be factored into the different phases through the rollout of the vaccines.

The City's Vaccine Distribution Task Force was created on November 16, 2020 and began working with key stakeholders, like OPH and TOH. The Task Force quickly established its governance structure and has regularly met on a weekly basis. Various members on the Task Force have joined provincial roundtable discussions, while others are working closely with area hospital CEOs, Ontario Health and other public health units.

The Vaccine Distribution Task Force has proactively secured facilities to help convert OPH flu clinics into COVID-19 community clinics and has retrofitted sites to meet requirements set out by the Province relating to cold storage, security and inventory management, among others. As a result of the City's declaration of a state of emergency, staff were also able to quickly procure three additional freezers as a public safety contingency to proactively prepare to maintain its Moderna vaccine supply at total cost of less than \$20,000.

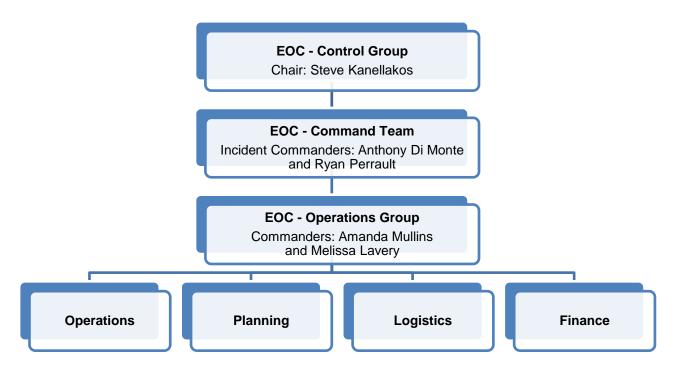
In addition, a robust communications and community engagement strategy is being rolled out to promote the safety and efficacy of the vaccine, along with ensuring alignment across the many partner organizations.

Part of this work will also include a comprehensive community outreach plan for populations that are marginalized, racialized and higher-risk across Ottawa and consider the mobilization of community clinics in areas that are most impacted by COVID-19.

Emergency Management

To ensure Ottawa is well prepared for what will be another historic year, the City's Emergency Operations Centre (EOC) is also evolving as part of our Incident Management System (IMS) model, which is a best practice for emergency management across North America. As such, the COVID-19 Vaccine Distribution Task Force is evolving into an Incident Command Team with key IMS functions that will be expanded in our Emergency Operations Centre.

2021 EOC Organizational Structure



The EOC Control Group is made up of the Senior Leadership Team along with other key leaders from across the city (Medical Officer of Health, Police Chief, Fire Chief, Paramedic Chief, etc.). This group will remain as is and continues to focus on developing strategies and setting corporate policy direction for the emergency response. The Command Team

has a focus on city-wide continuity of operations and consequence management, while the Operations Group manages the day-to-day operational needs of the services. Together, these three groups will ensure a well-coordinated city-wide response.

Since the onset of the pandemic, the City has had to respond quickly to new and changing information that continues to come at an unprecedented pace. Despite this challenge, we have adapted quickly to meet the needs of our residents and to support our staff during the COVID-19 response. We will continue to do so as we work to ensure our readiness to administer vaccines to communities across Ottawa to help bring an end to this pandemic.

Respectfully,

Anthony Di Monte GM, Emergency and Protective Services Vera Etches Medical Officer of Health

Cc: Senior Leadership Team Extended Senior Leadership Team