

COVID-19 Vaccine: Update #5 Efficacy of the First Dose of Pfizer-BioNTech Vaccine

Attention: Physicians, Emergency Departments, Infection Control Practitioners, Occupational Health Practitioners, Walk-In Clinics/Urgent Care Clinics, Nurse Practitioners, EMS, Designated Officers, Midwives, Family Health Teams, Pharmacies, Central LHIN, NSM LHIN, Beausoleil First Nation, Moose Deer Point First Nation, Rama First Nation, Wahta First Nation, Long-term Care Homes, Retirement Homes, Hospices

Date: February 1, 2021

Barrie COVID-19 Immunization Clinic and Mobile Clinic Update

As of January 31, we have successfully administered 16,143 doses of the Pfizer-BioNTech vaccine to priority groups in Simcoe Muskoka, including:

- 4,890 residents of long-term care homes (LTCH) and retirement homes (Rhome) through our mobile clinics
- 5,224 staff and essential caregivers of LTCH and Rhomes
- 5,022 hospital workers (HCW)

Our local vaccine supply continues to be impacted by the unexpected global interruption in delivery of the Pfizer-BioNTech COVID-19 vaccine. As such we are unable to provide first doses to those in the initial priority groups remaining at this time, as all of our current vaccine supply must be directed to completing the series for those who have received dose one. Planning for further priority groups is also proving to be difficult given the unpredictable supply. We have been told that vaccine supply will be more abundant and consistent in March.

Dose Two for LTCH, Rhome, Hospital Staff and Essential Caregivers

The Barrie COVID-19 Immunization Clinic will be reopening this week to begin to provide dose two to staff and essential caregivers. Those who received their first dose have started receiving email confirmations for appointments starting on Monday February 1st. Email invitations are being sent out daily for appointments at the Barrie COVID-19 Immunization Clinic to LTCH/Rhome/Hospital staff and essential caregivers, as supply permits. As directed by the province, we are booking appointments ~35 days from when each person received their first dose, and no later than 42 days which is the maximum interval supported by the National Advisory Committee on Immunization (NACI) at this time.

Dose Two for LTCH & Rhome Residents

Our mobile teams will begin providing dose two to residents of LTCHs starting February 5th. Each LTCH and Rhome that we have provided dose one to residents in, will receive their second dose visit ~25 days from when the first dose was received. This is within the 21 to 27 day window supported at this time for LTCH and Rhome residents. Our Immunization facility liaisons will be reaching out to each facility to confirm your clinic date in the coming days.



The remaining Rhomes that we have not yet been able to provide dose one in, will be prioritized as soon as more vaccine is available for us to resume providing dose one to people, which we hope to be in mid-to-late February.

Efficacy of the First Dose of the Pfizer-BioNTech Vaccine

Studies by [Public Health England](#)ⁱ and the [Quebec Public Health Institute \(Institut national de santé publique du Québec\)](#)ⁱⁱ estimate the first dose efficacy of the Pfizer-BioNTech vaccine to be **89%(95% confidence interval (CI): 52-97) and 92%(95%CI: 69-98) 14 days after dose 1 respectively**. Both studies indicate that the [New England Journal of Medicine \(NEJM\) Pfizer vaccine article](#)ⁱⁱⁱ underestimated the first dose efficacy at 52%(96%CI: 30 to 68), as the NEJM article included COVID-19 infections occurring in the first 10 days after the first dose, an interval within which this dose would not be expected to have had an effect (i.e. prior to the recipient mounting an immune response). Full protection (about 95%) starts at about 1 week after the second dose. If the second Pfizer-BioNTech dose is delayed beyond 21 days after the first dose, the first dose efficacy is still expected to be maintained until 42 days. As well, it is still expected that the second dose will give close to the full protection.

Planning Continues for the Next Phase of COVID-19 Vaccination in Simcoe Muskoka

As we look ahead in anticipation of more vaccine supply becoming available in the coming weeks and months, we are continuing to plan with our local partners to ensure that we are ready to rollout COVID-19 vaccine to our local communities.

As soon as more vaccine is available, we will be focusing on immunizing the following priority groups including:

- Remaining Rhome residents
- Remaining LTCH & Rhome staff and essential caregivers
- Remaining hospital HCWs
- Local First Nations communities

We are also using the provincial [COVID-19: Guidance for Prioritizing Health Care Workers for COVID-19 Vaccination](#)^{iv} to prioritize HCWs (outside of hospitals, LTCH, and Rhomes) as one of the next group of persons for vaccination.

Work is also underway to plan for community based COVID-19 Immunization Clinics in our 6 regional areas including Barrie & Innisfil area, North Simcoe, Orillia and area, South Simcoe, Muskoka, and the Southern Georgian Bay area. We are confident that in partnership with our local partners, we will be ready to provide COVID-19 vaccination in each of these areas as soon as vaccine becomes available.

For more information on the province's three-phased vaccine distribution implementation plan, please visit [COVID-19 vaccines for Ontario](#).^v

There are a number of COVID-19 resources and documents available through our Health Professional Portal at [www.smdhu.org/hportal](#) as well as through [Public Health Ontario](#)^{vi} and the [Government of Ontario](#).^{vii}

ⁱ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/949505/annex-a-phe-report-to-jcvi-on-estimated-efficacy-of-single-vaccine-dose.pdf

ⁱⁱ <https://www.inspq.qc.ca/en/publications/3098-vaccination-second-dose-context-shortage-covid19>

ⁱⁱⁱ <https://www.nejm.org/doi/full/10.1056/NEJMoa2034577?query=RP>

^{iv} http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/Guidance_for_Prioritizing_HCW_covid19_vaccination_2020-01-08.pdf

^v <https://covid-19.ontario.ca/covid-19-vaccines-ontario>

^{vi} <https://www.publichealthontario.ca/>

^{vii} http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019_guidance.aspx.