

TO: Healthcare Partners

FROM: Dr. Miriam Klassen, Medical Officer of Health

SUBJECT: HPPH Update – COVID-19 Vaccination and Pregnancy

DATE: Thursday October 6, 2022

Firstly, Huron Perth Public Health would like to thank you for continuing to provide information and support to your patients over the last few years of the pandemic and in the last year with the rollout of COVID-19 vaccines. This document will provide an update for COVID-19 vaccination, pregnancy, and breastfeeding as we head into the fall and winter.

The SOGC Statement on COVID-19 Vaccination in Pregnancy states that an unvaccinated pregnant woman remains at risk of COVID-19 infection and remains at heightened risk of severe morbidity if infected compared to non-pregnant counterparts. Severe infection with COVID-19 carries risks to maternal, fetal and neonatal health. Further, the National Advisory Committee on Immunization (NACI) finds that evidence continues to emerge about the disproportionate burden of COVID-19 disease in pregnant people compared to the non-pregnant population of the same age. SARS-CoV-2 infection in pregnancy is associated with increased risk of hospitalization and admission to an intensive care unit (ICU) in addition to an increased risk of preterm birth, low birth weight, and admission to a neonatal intensive care unit (NICU). Severe COVID-19 infection carries risks to maternal, fetal, and neonatal health. [[Updated guidance on COVID-19 vaccines for individuals who are pregnant or breastfeeding](#) | NACI (contains references with latest research for your interest)]

NACI continues to strongly recommend that individuals who are pregnant or breastfeeding be immunized with a primary series of an authorized mRNA vaccine and reiterates the existing recommendation for booster doses in these populations.

Booster dose(s) are recommended based on the ongoing risk of infection due to waning immunity after a primary vaccination series, the ongoing risk of severe illness from COVID-19, the societal disruption that results from transmission of infections, and the adverse impacts on health system capacity from the COVID-19 pandemic.

About the Bivalent Vaccine

The Moderna Spikevax Bivalent (50 mcg) is the first bivalent, Omicron containing mRNA COVID-19 vaccine authorized by Health Canada for use as a booster dose in individuals ≥ 18 years of age, and in immunocompromised 12-17 year olds with clinical discretion. This new formulation contains 25 mcg of mRNA encoding for the original SARS-CoV-2 virus and 25 mcg of mRNA encoding the Omicron BA.1 variant. There have been several different variants and subvariants of COVID-19 during the pandemic including Alpha, Delta and most recently Omicron. Omicron has been responsible for nearly all COVID-19 infections in Ontario in 2022.

The original monovalent COVID-19 vaccines were very effective against the original COVID-19 virus strain and against previous COVID Variants of Concern (VOCs). However, evidence has shown a reduced vaccine effectiveness against the Omicron variant. Research has shown that the bivalent Moderna vaccine is more effective than the original Moderna vaccine at protecting against the original COVID-19 virus strain, as well as Omicron strains Omicron BA.1 and the more recent variants in Ontario, Omicron BA.4 and BA.5. NACI states that the bivalent vaccine was more effective for all the age groups studied, including people 18-65 years of age and individuals over the age of 65 years [[Recommendations on the use of bivalent Omicron-containing mRNA COVID-19 Vaccines](#) | NACI].

While NACI recommends that the authorized dose of a bivalent Omicron-containing mRNA COVID-19 vaccine should be offered as a booster dose to the authorized age group (≥ 18 years of age), if the bivalent Omicron-containing mRNA COVID-19 vaccine is not readily available, an original mRNA COVID-19 vaccine should be offered to ensure timely protection.

After review of the latest evidence, NACI has reaffirmed that COVID-19 vaccination, including the authorized bivalent Omicron-containing mRNA vaccine, continues to be safe and important for individuals who are pregnant or breastfeeding. Further, NACI states that, “A booster dose in pregnancy has been shown to increase antibody levels in the umbilical cord blood at birth. This may indicate protection being passed on to the infant” [[Updated guidance on COVID-19 vaccines for individuals who are pregnant or breastfeeding](#) | NACI, p. 5].

Recommendations and Resources

NACI strongly recommends that individuals who are pregnant or breastfeeding should be offered a fall COVID-19 vaccine booster at any stage in pregnancy, regardless of the number of previously received booster doses. It is recommended for individuals at high risk of severe COVID-19 infection (including pregnant individuals aged 18 and over) receive a bivalent booster dose after the **minimum three-month** (84 days) interval from a previous dose or SARS-CoV-2 infection after consultation with their health care provider. For non-high risk, non-pregnant individuals, it is recommended that the booster dose be offered at an interval of six months from a previous COVID-19 vaccine dose or SARS-CoV-2 infection. They further elaborate that all individuals who are pregnant receive all the doses for which they are eligible during the course of their pregnancy. Additionally, COVID-19 vaccines may be administered concurrently with other vaccines recommended during pregnancy or while breastfeeding.

Pregnancy is a time where patients have many questions and anxieties and often seek the advice of their trusted physician or specialist.

Individuals may be hesitant to receive vaccines while pregnant or breastfeeding. Please discuss the COVID-19 vaccine to ensure they have access to reliable information and are able to discuss their questions and concerns. Consider their personal risk of exposure to COVID-19, the risks of severe COVID-19 during pregnancy, and the possible side effects and benefits of COVID-19 vaccination. You can also discuss vaccination of family members and partners as well to reduce the chance of exposure to the pregnant individual.

For more information, consider these useful resources when discussing vaccination with individuals who are pregnant:

- SOGC: [COVID-19 Vaccination in Pregnancy FAQ for Health Care Providers](#)
 - FAQ on vaccine safety, risks of COVID during pregnancy, benefits of COVID vaccination, risks of vaccination, and common patient concerns.
- [SOGC statement on COVID-19 vaccination and fertility](#)
- [SOGC Statement on COVID-19 Vaccination in Pregnancy](#)
 - The Society of Obstetricians and Gynaecologists of Canada (SOGC) recommends all individuals who are pregnant or those trying to become pregnant should receive the COVID-19 vaccination. The SOGC also recommends vaccination at any point during pregnancy and/or during breastfeeding.
- Association of Ontario Midwives: [COVID-19 Clinical FAQ](#)
 - Vaccination safety for pregnant or breastfeeding/chest feeding people, information for counselling clients about COVID-19 vaccination.
- COVID-19 Vaccination during Pregnancy in Ontario
 - [COVID-19 Vaccination during Pregnancy in Ontario](#) - BORN Infographic
 - [COVID-19 Vaccination During Pregnancy in Ontario - Report #2, Covering December 14, 2020 to June 30, 2021](#) - Better Outcomes Registry and Network (BORN)
 - Cumulative incidence rates of pregnancy and birth outcomes among vaccinated individuals based on this preliminary data do not suggest any pattern of increased risk.
- [Vaccine Hesitancy Guide](#) (for Providers)
 - Includes a guide on Pregnancy, Fertility, or Reproductive Concerns

Vaccination opportunities

- If you provide COVID-19 vaccinations in your office, you can offer this to your patient
- You can inform your patient about where they can get vaccinated in the community
 - Visit www.hpph.ca/VaccineBooking for walk-in opportunities and vaccine appointments.
 - Check www.ontario.ca/pharmacycovidvaccine or call your local pharmacy about vaccination opportunities.
- To book an appointment, patients can:
 - Call Provincial Vaccine Contact Centre (open 7 days/week, 8am-8pm): 1-833-943-3900
 - Call Huron Perth Public Health Booking Line (open Mon-Fri, 9am-3:30pm): 1-833-753-2098
 - Visit online at: <https://www.ontario.ca/book-vaccine/>

For more information on COVID-19 vaccinations:

- Visit our [COVID-19 Vaccine Information for Health Care Providers](#) webpage
- Ontario's [COVID-19 Vaccine Guidance | September 26, 2022](#)