When parents ask about the COVID-19 vaccine
LLLC-PLD January 1, 2021 Revision 1

**SUMMARY NOTES**

Information on COVID-19 vaccines is preliminary and much is unknown, particularly with respect to pregnancy and lactation. There is no data on the effects of the COVID-19 vaccines for pregnant and lactating women as they were not included in the trials. There is not across-the-board agreement on best practice. The situation is fluid and information continues to be gathered. Talk with your doctor, public health nurse or pharmacist if you have questions about the vaccine.

**General Information**

There are two vaccines, Pfizer-BioNTech and Moderna, that are available in Canada at the moment while others are currently undergoing review and approvals may happen soon. There are two types of vaccine: mRNA vaccines such as the Pfizer and Moderna vaccines; and a viral vector-based vaccine such as Astra/Zenica. None of the trials on any of the COVID-19 vaccines included pregnant or lactating women; therefore there is no trial data available on the use of these vaccines in these human populations at this time. In the absence of data, safety and efficacy opinions are based on knowledge of the structure of the vaccine and the mechanisms by which it is known or assumed to work. Following are some excerpts of statements and advisories from some of the expert sources the health care system is using to develop recommendations and protocols. To learn more, please click on the links and read the entire document. This information is current only to January 1, 2021. Updates will be made as new information becomes available.

*For specific Canadian provincial/territorial recommendations see links at end of this document.*

**Selected statements and advisories**

**Considerations for COVID-19 Vaccination in Lactation**

Academy of Breastfeeding Medicine (ABM)

ABM Statement re the Pfizer/BioNtech mRNA COVID-19 vaccine

December 14, 2020


“The vaccine is made of lipid nanoparticles that contain mRNA for the SARS-CoV-2 spike protein; the mRNA sequence only encodes this protein. These particles are injected into muscle, where the
nanoparticles are taken up by muscle cells. These muscle cells then transcribe the mRNA to produce spike protein. The spike protein made by the cell stimulates an immune response, protecting the individual from COVID-19 illness.”

“During lactation, it is unlikely that the vaccine lipid would enter the blood stream and reach breast tissue. If it does, it is even less likely that either the intact nanoparticle or mRNA transfer into milk. In the unlikely event that mRNA is present in milk, it would be expected to be digested by the child and would be unlikely to have any biological effects.”

“Although the biology is reassuring, for definitive information, we will have to wait for data on outcomes once the vaccine is used in lactating individuals and their children.”

COVID-19 Vaccine in Pregnancy and Breastfeeding
Infant Risk Centre At Texas Tech University Health Sciences Centre
Recommendations from several groups.
Last Updated: December 18, 2020

Re mRNA vaccines (Pfizer and Moderna)

Pregnancy
“At this point, since many of the new vaccines do not contain live viruses and are not infectious, the InfantRisk Center supports the opinion from the SMFM that most Covid-19 vaccines are probably safe for pregnant women. Ultimately, the risk of infection in that patient, must be weighted against the probable minimal risk of the vaccine.”

Lactation
“...little or none of these vaccine components would ever reach the milk compartment, or even be transferred into human milk. Even if they were, they would simply be digested like any other protein by the infant. It is our opinion, that the present group of vaccines are probably going to be quite safe for breastfeeding mothers. The infant may even gain a small amount of maternal IgG in the breastmilk, which may even be beneficial.”

“Unfortunately, the safety of these vaccines will only be determined after significant use in patients.”

Vaccinating Pregnant and Lactating Patients against COVID-19
American College of Obstetricians and Gynecologists Practice Advisory
December 21, 2020

Pregnancy
“ACOG recommends that COVID-19 vaccines should not be withheld from pregnant individuals who meet criteria for vaccination based on ACIP-recommended priority groups.”
Lactation

“COVID-19 vaccines should be offered to lactating individuals similar to non-lactating individuals when they meet criteria for receipt of the vaccine based on prioritization groups outlined by the ACIP.”

{New} Statement from the UK Chief Medical Officers on the prioritisation of first doses of COVID-19 vaccines
December 30, 2020

“The JCVI has also amended its previous highly precautionary advice on COVID-19 vaccines and pregnancy or breastfeeding. Vaccination with either vaccine in pregnancy should be considered where the risk of exposure SARS-CoV2 infection is high and cannot be avoided, or where the woman has underlying conditions that place her at very high risk of serious complications of COVID-19, and the risks and benefits of vaccination should be discussed. Those who are trying to become pregnant do not need to avoid pregnancy after vaccination, and breastfeeding women may be offered vaccination with either vaccine following consideration of the woman’s clinical need for immunisation against COVID-19. The UK Chief Medical Officers agree with this advice.”

{New} Interim Clinical Considerations for Use of mRNA COVID-19 Vaccines Currently Authorized in the United States
Centres for Disease Control and Prevention
December 30, 2020

Pregnancy

“Based on current knowledge, experts believe that mRNA vaccines are unlikely to pose a risk to the pregnant person or the fetus because mRNA vaccines are not live vaccines. The mRNA in the vaccine is degraded quickly by normal cellular processes and does not enter the nucleus of the cell. However, the potential risks of mRNA vaccines to the pregnant person and the fetus are unknown because these vaccines have not been studied in pregnant people.

If pregnant people are part of a group that is recommended to receive a COVID-19 vaccine (e.g., healthcare personnel), they may choose to be vaccinated. A conversation between the patient and their clinical team may assist with decisions regarding the use of a mRNA COVID-19 vaccine, though a conversation with a healthcare provider is not required prior to vaccination. When making a decision, pregnant people and their healthcare providers should consider the level of COVID-19 community transmission, the patient’s personal risk of contracting COVID-19, the risks of COVID-19 to the patient and potential risks to the fetus, the efficacy of the vaccine, the side effects of the vaccine, and the lack of data about the vaccine during pregnancy.”
**Lactation**
“There are no data on the safety of COVID-19 vaccines in lactating people or the effects of mRNA vaccines on the breastfed infant or milk production/excretion. mRNA vaccines are not thought to be a risk to the breastfeeding infant. A lactating person who is part of a group recommended to receive a COVID-19 vaccine (e.g., healthcare personnel) may choose to be vaccinated.”

**New** Government of Canada National Advisory Committee on Immunization (NACI): Statements and publications
December 23, 2020

**Pregnancy**
“NACI recommends that COVID-19 vaccine should not be routinely offered to individuals who are pregnant until after completion of pregnancy, until further evidence is available (Strong NACI Recommendation). However, a complete series with a COVID-19 vaccine may be offered to pregnant individuals in the authorized age group if a risk assessment deems that the benefits outweigh the potential risks for the individual and the fetus, and if informed consent includes discussion about the absence of evidence on the use of COVID-19 vaccine in this population. (Discretionary NACI Recommendation)”

**Lactation**
NACI recommends that COVID-19 vaccine should not be routinely offered to individuals who are breastfeeding, until further evidence is available (Strong NACI Recommendation). However, a complete series with a COVID-19 vaccine may be offered to individuals in the authorized age group who are breastfeeding if a risk assessment deems that the benefits outweigh the potential risks for the individual and the infant, and if informed consent includes discussion about the absence of evidence on the use of COVID-19 vaccine in this population. (Discretionary NACI Recommendation)

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**Provincial and Territorial Health Authorities Covid-19 Vaccination Information Links**

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