



COVID-19 Vaccination for Pregnant and Breastfeeding Individuals

Updated September 2021

Background

COVID-19 vaccinations continue to be underway in British Columbia and as of the end of September 2021, approximately 83% of British Columbians who are eligible to receive the vaccine (aged 12 and over) are fully vaccinated.ⁱ Since the beginning of the pandemic, information has emerged about the use of COVID-19 vaccines for pregnant and breastfeeding individuals, prompting the BC government to prioritize this group of individuals for vaccination. Pregnant and breastfeeding individuals are at increased risk of illness from COVID-19 and are three-times more likely to need intensive care if they contract COVID-19, compared to individuals who are not pregnant or breastfeeding.ⁱⁱ Evidence demonstrates that not only does COVID-19 vaccination protect the pregnant or breastfeeding individual from severe illness but may also extend to the child.

In September 2021, BC Provincial Health Officer Dr. Bonnie Henry provided an update on the necessity of COVID-19 vaccination for pregnant and breastfeeding individuals. Dr. Henry strongly recommended that all British Columbians including those who are pregnant and breastfeeding receive a COVID-19 vaccine, and further stated that COVID-19 vaccines do not affect fertility in any way.ⁱⁱⁱ Additionally, the Society of Obstetricians and Gynaecologists of Canada (SOGC), the Canadian National Advisory Committee on Immunization (NACI), and BC public health experts have all stated that as pregnant and breastfeeding individuals are at an escalated risk for contracting COVID-19, it is imperative that they become vaccinated as soon as possible, at any time throughout their pregnancy.^{iv}

In May 2021, Health Canada announced that people who are pregnant aged 16 and older would be considered a priority population to receive a COVID-19 vaccine.^v The Society of Obstetricians and Gynaecologists of Canada (SOGC) also shares this position, having first reported in December 2020, and reaffirming in May 2021 that 'pregnant individuals should be offered vaccination at any time during pregnancy or while breastfeeding if no contraindications exist.'^{vi}

Furthermore, Canada's [National Advisory Committee on Immunization \(NACI\) updated their recommendations](#) on the preferential use of mRNA COVID-19 vaccines for pregnant people.^{vii} NACI reported that there have been no signals of risk for pregnant people in receiving an mRNA vaccine, and that mRNA vaccines are preferred given the potential risk of developing blood clots from [viral vector](#) vaccines.^{viii} NACI has noted that pre-clinical studies focusing on developmental and reproduction have not identified any concerns with regards to female reproduction, fetal or embryonic development, or postnatal development up to and during gestation.^{ix} As well, the European Medicines Agency (EMA) has presented results from early-stage clinical trials in mammals, which did not indicate any risks associated with fertility, pregnancy, embryonic or fetal development, or postnatal development.^{x,xi}

International data also consistently demonstrates that pregnant individuals can safely receive a COVID-19 vaccine, and that the benefits of the vaccine may also extend to the child in utero. Results from a [US study published in the American Journal of Obstetrics and Gynecology](#) demonstrated that out of more than 100 pregnant or lactating people, all experienced beneficial antibody production equal to that of non-pregnant individuals, and the antibodies were also transferrable to their babies via the umbilical cord and breastmilk.^{xii} Furthermore, researchers found the antibody levels in pregnant people produced by vaccination were significantly higher than antibody levels caused by COVID-19 infection.^{xiii} Similarly, [another study published in the New England Journal of Medicine](#) reported preliminary findings on mRNA vaccination in more than 35,000 pregnant participants across the US who self-reported their experiences post-vaccination via a smartphone-based registry as well as a passive surveillance system called the Vaccine Adverse Events Reporting System (VAERS).^{xiv} The data demonstrated that, of those receiving an [mRNA vaccine](#), pregnant people were more likely to report pain at the injection site, however, this group reported other side effects such as headaches, chills, muscle tenderness and fever less frequently than non-pregnant people.^{xv} Overall, these preliminary findings did not demonstrate any noticeable risk of vaccination for those who are pregnant or breastfeeding.



In BC, Provincial Health Officer Dr Bonnie Henry announced that individuals who are pregnant are at a slightly higher risk of developing complications with their pregnancy as well as experiencing severe illness from COVID-19, similar to the risk level of people aged 50 years and older.^{xvi} She stated that pregnant individuals should register to become vaccinated and should take the COVID-19 vaccine that is first available to them. BC Women's Hospital and the BC Centre on Disease Control (BCCDC) both currently advise all pregnant people to register to receive the COVID-19 vaccine. BCCDC data states that there is currently no known risk of miscarriage or birth defect as a result of pregnant or breastfeeding individuals receiving the vaccine, and those who are lactating do not need to pause or discontinue their breastfeeding if they have recently received the COVID-19 vaccine.^{xvii,xviii} Additionally, Perinatal Services BC recommends that pregnant and breastfeeding individuals make an informed decision about COVID-19 vaccination and note that getting a vaccine is the safest choice when it comes to preventing pregnant and new parents from becoming ill from the virus.^{xix}

Nurses understand the complexity of physical health and disease prevention messaging in the COVID-19 context. They also know that current data shows that the benefits of COVID-19 vaccination significantly outweigh any potential risks in pregnant and breastfeeding persons. Nurses play a valuable role throughout an individual's pregnancy journey. From conception and first trimester support and education through to birth and lactation consulting, nurses in various settings provide fundamental ongoing care services. People who are pregnant and breastfeeding often rely on nurses' knowledge and expertise to guide them during this critical period in their health and family life. For nurses working with persons who are pregnant and breastfeeding, it is important to share confidence in these ongoing developments and to communicate the message that the safest and most effective way to protect against illness from COVID-19 is through vaccination. As pregnant individuals may be at a higher risk of experiencing severe illness or pregnancy complications from COVID-19, it is essential that these individuals obtain the support they need to become vaccinated. We know that global data in relation to the vaccination rollout is demonstrating that mRNA vaccines in particular have a 94-95% efficacy rate at preventing people from contracting COVID-19 or from experiencing severe illness leading to hospitalization.^{xx,xxi} This level of protection is highly promising for the health of those who are pregnant and breastfeeding as well as for the protection of their child.

Key Messages

- In September 2021, Provincial Health Officer Dr. Bonnie Henry strongly recommended that all pregnant and breastfeeding individuals become vaccinated with a COVID-19 vaccine, as COVID-19 vaccines are safe and highly effective for this population.
- As of May 2021, pregnant individuals aged 16 and older are considered a priority population to receive COVID-19 vaccination in BC.
- Research shows that mRNA vaccination is safe for people who are pregnant and breastfeeding, produces an equal level of antibodies compared to non-pregnant individuals, and may even extend antibodies to the child in utero and via breastfeeding.
- The BCCDC recommends that all pregnant and breastfeeding people receive a COVID-19 vaccine, and consult the BCCDC's [guide](#) on preparing for vaccination.
- Studies worldwide indicate no serious risks or adverse events associated with COVID-19 vaccination in pregnant and breastfeeding people with regards to fertility, pregnancy, embryonic or fetal development, or postnatal development.
- Nurses know that the safest and most effective way to protect people, including pregnant and lactating individuals, against illness caused by COVID-19 is by getting vaccinated.
- COVID-19 vaccines approved for use in Canada are safe, effective, rigorously tested and have been shown to markedly reduce the instance of severe illness and death from COVID-19.



Further Reading/Resources

- [BCCDC: COVID-19 Planning for your vaccine \[if you're pregnant or breastfeeding\]](#)
- [BCCDC: COVID-19 Vaccine Considerations – Pregnant or Breastfeeding](#)
- [First Nations Health Authority \(FNHA\): Just the Facts: COVID-19 vaccine for pregnant or breastfeeding women](#)
- [Immunize BC: COVID-19 and Pregnancy](#)
- [BC Women's Hospital: BC prioritizes pregnant women for COVID-19 vaccine and BC Children's physician describes her immunization experience](#)
- [Canadian COVID-19 Vaccine Registry for Pregnant and Lactating Individuals](#)
- [Society of Obstetricians and Gynaecologists of Canada: Statement on COVID-19 Vaccination in Pregnancy](#)

ⁱ Little, Noah. COVID-19 Tracker Canada: British Columbia Vaccination Data. 2021.
<https://covid19tracker.ca/provincevac.html?p=BC>

ⁱⁱ BC Centre for Disease Control (BCCDC). Vaccine Considerations – Pregnancy or breastfeeding. 2021.
<http://www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-vaccine/vaccine-considerations>

ⁱⁱⁱ Paterson, Shannon. CTV. September 21, 2021. B.C.'s provincial health officer pleads with pregnant women to get vaccinated. <https://bc.ctvnews.ca/b-c-s-provincial-health-officer-pleads-with-pregnant-women-to-get-vaccinated-1.5594197>

^{iv} BCCDC. *Vaccine Considerations – Pregnancy or breastfeeding.*

^v BC Ministry of Health. May 4, 2021. <https://news.gov.bc.ca/releases/2021HLTH0087-000842>

^{vi} Society of Obstetricians and Gynaecologists of Canada. SOGC Statement on COVID-19 Vaccination in Pregnancy. December 18, 2020 and May 4, 2021.
https://www.sogc.org/common/Uploaded%20files/Latest%20News/SOGC_Statement_COVID-19_Vaccination_in_Pregnancy.pdf

^{vii} National Advisory Committee on Immunization (NACI). Recommendations on the use of COVID-19 vaccines. September 28, 2021. <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines.html>

^{viii} NACI. *Recommendations on the use of COVID-19 vaccines.*

^{ix} Ibid

^x EMA Product Information. Comirnaty, INN-COVID-19 mRNA Vaccine. March 31, 2021.
https://www.ema.europa.eu/en/documents/product-information/comirnaty-epar-product-information_en.pdf

^{xi} EMA Product Information. COVID-19 Vaccine Moderna, INN-COVID-19 mRNA Vaccine. 2021.
https://www.ema.europa.eu/en/documents/product-information/covid-19-vaccine-moderna-epar-product-information_en.pdf

^{xii} Gray K, Bordt E, Atyeo C, et al. *American Journal of Obstetrics and Gynecology*. COVID-19 vaccine response in pregnant and lactating women: a cohort study. March 25, 2021. [https://www.ajog.org/article/S0002-9378\(21\)00187-3/fulltext](https://www.ajog.org/article/S0002-9378(21)00187-3/fulltext)



-
- ^{xiii} Cunningham J. *Harvard Gazette*. COVID-19 vaccine protects mothers – and their newborns. March 25, 2021. <https://news.harvard.edu/gazette/story/2021/03/study-shows-covid-19-vaccinated-mothers-pass-antibodies-to-newborns/>
- ^{xiv} Shimabukuro T, Kim S, Myers T, et al. *New England Journal of Medicine*. Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons. April 21, 2021. <https://www.nejm.org/doi/full/10.1056/NEJMoa2104983>
- ^{xv} Shimabukuro T, Kim S, Myers T, et al. *Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons*.
- ^{xvi} BC Ministry of Health. May 4, 2021. <https://news.gov.bc.ca/releases/2021HLTH0087-000842>
- ^{xvii} BC Centre for Disease Control. COVID-19 Planning for your vaccine. 2021. http://www.bccdc.ca/Health-Info-Site/Documents/COVID-19_vaccine/COVID19_Vaccine_Perinatal.pdf
- ^{xviii} BC Women's Hospital. COVID-19 Information for Patients. April 23, 2021. <http://www.bcwomens.ca/healthinfo-site/Pages/COVID-19-and-Information-for-Patients.aspx>
- ^{xix} Perinatal Services BC. Should you get a COVID-19 vaccine if you're pregnant or breastfeeding? Pregnant people can now book. May 4, 2021. <http://www.perinatalservicesbc.ca/about/news-stories/stories/covid-19-vaccine-if-you%E2%80%99re-pregnant-or-breastfeeding>
- ^{xx} Government of Canada. Moderna COVID-19 vaccine: What you should know. Updated April 8, 2021. <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/moderna.html>
- ^{xxi} Government of Canada. Pfizer-BioNTech COVID-19 Vaccine: What you should know. Updated May 5, 2021. <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/pfizer-biontech.html>