

This resource reflects the information available as of the date of issue. It is not intended to provide or take the place of medical advice, diagnosis or treatment. Talk to your healthcare provider if you have any questions about this resource.

I am pregnant or breastfeeding. Should I get the COVID-19 Vaccine?

Getting the COVID-19 vaccine as soon as possible is the safest choice.

Studies of hundreds of thousands of pregnant people who have received COVID-19 vaccines show it is safe and helps prevent COVID-19 and protect against severe illness. The information below will help you make an informed choice about whether to get the COVID-19 vaccine.

YOUR OPTIONS



Get a COVID-19 vaccine as soon as possible



Wait until your pregnancy and/or breastfeeding is complete

What are the risks related to COVID-19 in pregnancy?

COVID-19 infection is dangerous. It is more dangerous in pregnancy.

- Most pregnant people with COVID-19 will have mild symptoms and make a full recovery; however, 20-30% of pregnant people will develop moderate to severe COVID illness requiring hospitalization.
- If you are COVID positive and pregnant, your risk of hospitalization, intensive care unit admission and the need for life support is much greater than if you are COVID positive and not pregnant.
- Many people will have ongoing medical complications even after the COVID pneumonia has resolved.
- If you have any type of COVID infection in pregnancy, there is an impact on pregnancy outcomes: your risk of stillbirth, preterm birth, high blood pressure, caesarean delivery and low birth weight are significantly increased with a COVID infection in pregnancy.
- COVID infection in pregnancy increases your risk of medical complications and death.



What are the benefits of getting the COVID-19 vaccine?

The COVID-19 vaccines are highly effective in preventing infection and reducing spread.

- The mRNA COVID vaccines are effective at reducing the risk of getting a COVID infection caused by any of the variants of the virus (e.g., Delta variant) in both pregnant and non-pregnant people.
- Vaccination decreases the chance of having a symptomatic COVID infection, the severity of the COVID illness and the chance of being hospitalized because of COVID.
- Vaccination decreases the spread of the virus within your family and in your community.



The mRNA COVID vaccines are safe in pregnancy.

- Several studies with large numbers of pregnant people have shown that vaccination immediately before and/or during pregnancy has no impact on pregnancy outcomes (i.e., no change in the rate of miscarriage, preterm birth, stillbirth, growth restriction, high blood pressure during pregnancy, medical complications of pregnancy or death).

What are the **risks** of getting the COVID-19 vaccine?

Pregnant and breastfeeding individuals who receive the mRNA (Pfizer or Moderna) vaccine experience the same side effects of vaccination as non-pregnant individuals.

In a study of more than 35,000 pregnant and/or breastfeeding people who were monitored at the time of COVID-19 vaccination:

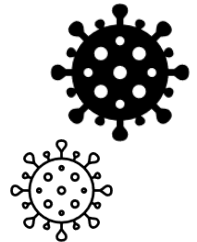
- The common side effects were:

PAIN AT THE INJECTION SITE · HEADACHE · FATIGUE · MUSCLE/JOINT PAIN

- Less than 10% of pregnant people experienced a fever.
- Allergic reactions/anaphylaxis (serious life-threatening allergic reaction) were RARE.
- Very rare cases of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining around the heart) following vaccination were reported and resolved without any complication.

The mRNA COVID vaccines:

- X Do NOT** contain any live virus.
- X Do NOT** contain any mercury, aluminum, formaldehyde or substances harmful to you and/or baby.
- X Do NOT** contain any human and/or animal blood or by product(s).
- X CANNOT** be measured in your bloodstream; thus, the baby is **NOT** exposed to the vaccine.



There are extremely few contraindications to taking the mRNA COVID vaccine.

- Pregnancy and/or breastfeeding is NOT a medical reason to not take the vaccine.
- People who have had a COVID infection remain at risk of re-infection or infection with a different variant of the virus; thus, should receive the vaccine for strong and long-lasting protection.

What do the **experts** recommend?

The **National Advisory Committee on Immunization (NACI)** strongly recommends that a complete vaccine series with an mRNA COVID-19 vaccine should be offered to people in the authorized age group who are pregnant or breastfeeding.

The Society of Obstetricians and Gynaecologists of Canada (SOGC) states that all pregnant people in Canada should be offered COVID-19 vaccination at any time during pregnancy or while breastfeeding if no contraindications exist.



In Ontario, all pregnant individuals in the authorized age group are currently eligible and recommended to be vaccinated as soon as possible, at any stage in pregnancy. The Ontario immunization strategy included pregnant people in the highest risk category of Phase 2 prioritization in the COVID-19 vaccination rollout because of their increased risk of severe illness.

What else should I think about to help me decide?

1

Make sure you understand as much as you can about COVID-19 and about the vaccine. Ask a trusted source, such as your obstetrician, midwife, family doctor or nurse.

2

Think about your own personal risk.

Look at the columns below and think about your risk of getting COVID-19 and having severe illness from COVID-19. Think about your safety and if you are able to stay safe. Would COVID-19 vaccination increase your safety?



The risk of getting COVID-19 is higher if:

- You live in a community with a lot of COVID-19 cases
- You have regular contact with people outside your home
- You live in a crowded housing situation
- You, or a member of your household, work in a high-risk environment (e.g., you are a front-line essential worker or healthcare worker)

The risk of developing severe illness from COVID-19 in pregnancy is higher if:

- You have medical problems (e.g., pre-pregnancy diabetes, pre-pregnancy high blood pressure, a compromised immune system, kidney disease, liver disease, heart disease and/or asthma)
- You are overweight
- You are a smoker
- You are 35 years of age or older
- You are in the last three months (third trimester) of your pregnancy



It's safer to get the vaccine as soon as possible, especially if you are at an even higher risk of getting COVID-19 and developing severe illness. The known risks of severe illness from COVID are greater than the known risks of the vaccine.

How can I protect myself and my baby from COVID-19?

- Wear a mask when out in public
- Wash your hands often
- Avoid crowds and practice physical distancing
- Self monitor for symptoms of COVID
- Continue receiving healthcare before, during and after your pregnancy
- Get a COVID-19 vaccine**



If you choose to wait, you need to know that without the vaccine, you are at higher risk of severe illness from COVID-19.

What about breastfeeding?

COVID-19 vaccines can be safely given to people who are breastfeeding; the vaccine is not detectable in your breast milk.

- Antibodies have been shown to pass in the breastmilk after maternal vaccination and may protect your baby against COVID-19.
- Receiving a COVID-19 vaccine while breastfeeding should not disrupt your breastfeeding and does not have an adverse impact on your baby.



What if I get pregnant after getting the vaccine?



If you are pregnant or become pregnant soon after getting the first dose of the vaccine, you should complete the full course and receive your second dose.

- Several studies show there is no impact of COVID vaccination prior to and at any time, in the first trimester on the risk of miscarriage or any adverse pregnancy outcome.

What if I am planning a pregnancy?

People who are planning to become pregnant are recommended to be vaccinated as soon as possible. There is no evidence to suggest that the COVID-19 vaccine causes fertility issues. Fertility treatment is not a medical reason that prevents you from receiving a COVID vaccine.

Summary

Getting a COVID-19 vaccine during pregnancy is your choice.

COVID causes more severe illness in pregnant people than in people of the same age who are not pregnant.

The vaccines are highly effective in preventing COVID-19 infection and protecting against severe illness.

Studies show that COVID-19 mRNA vaccines are safe for pregnant and/or breastfeeding people.



Do you have more questions?

Speak to your healthcare provider for more information.

Your feedback is important to us!

Please complete an online survey by scanning the QR code or by clicking [HERE](#).



Patient Information Sheet: “I am pregnant or breastfeeding. Should I get the COVID-19 Vaccine?”

Intended Use

This decision aid is intended for use by pregnant people or those breastfeeding who are considering getting the COVID-19 vaccine, as well as their healthcare providers, friends and family. This tool provides basic information only and is not intended to provide or take the place of medical advice, diagnosis or treatment. This decision aid is intended to help in making an informed choice about whether or not to get the COVID-19 vaccine before, during or after pregnancy or breastfeeding. This resource has been modified from the decision aid produced by the Massachusetts Shared Decision Making: COVID-19 Vaccination in Pregnancy working group at the [University of Massachusetts Medical School – Baystate Health](#).

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References

Allotey, J., Stallings, E., Bonet, M., Tap, M., Chatterjee, S., Kew, T., ... & PregCOV-19 Living Systematic Review Consortium. (2020). Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: Living systematic review and meta-analysis. *BMJ*, 370: m3320. Available at <https://www.bmj.com/content/370/bmj.m3320>

Better Outcomes Registry & Network (BORN) Ontario. (July 30, 2021). COVID-19 vaccination during pregnancy in Ontario. Surveillance Report #2, Reporting Interval December 14, 2020 to June 30, 2021. Ottawa, ON: BORN Ontario. Available at <https://www.bornontario.ca/en/whats-happening/resources/Documents/BORN-COVID-19-Vaccination-During-Pregnancy-in-Ontario-Report-2---FINAL.pdf>

Centers for Disease Control and Prevention. Updated October 7, 2021. COVID-19: Pregnancy or Breastfeeding. Available at <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html>

Centers for Disease Control and Prevention. Updated October 13, 2021. COVID-19: Frequently Asked Questions. Available at <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>

Centers for Disease Control and Prevention. Released November 2, 2020. Morbidity and Mortality Weekly Report (MMWR), Birth and Infant Outcomes Following Laboratory-Confirmed SARS-CoV-2 Infection in Pregnancy — SET-NET, 16 Jurisdictions, March 29–October 14, 2020. Available at: <https://www.cdc.gov/mmwr/volumes/69/wr/mm6944e2.htm>

Dagan, N., Barda, N., Biron-Shental, T., Majov-Assif, M., Key, C., Kohane, I. S., ... & Balicer, R. D. Effectiveness of the BNT162b2 mRNA COVID-19 vaccine in pregnancy. (September 7, 2021). *Nature Medicine*, 1-3. Available at <https://www.nature.com/articles/s41591-021-01490-8>

Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD). National Library of Medicine (US); 2006-. COVID-19 vaccines. [Updated 2021 Sep 20]. Available at https://www.ncbi.nlm.nih.gov/books/NBK565969/pdf/Bookshelf_NBK565969.pdf

Goldshtein, I., Nevo, D., Steinberg, D. M., Rotem, R. S., Gorfine, M., Chodick, G., & Segal, Y. (July 12, 2021). Association between BNT162b2 vaccination and the incidence of SARS-CoV-2 infection in pregnant women. *JAMA*, 326(8), 728-735. Available at <https://jamanetwork.com/journals/jama/fullarticle/2782047>

Government of Canada. Immunization in pregnancy and breastfeeding: Canadian Immunization Guide. Updated December 24, 2020. Available at <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-4-immunization-pregnancy-breastfeeding.html>

Figueiro-Filho, E. A., Yudin, M. & Farine, D. (November 26, 2020). COVID-19 during pregnancy: An overview of maternal characteristics, clinical symptoms, maternal and neonatal outcomes of 10,996 cases described in 15 countries. *Journal of Perinatal Medicine*, 48(9), 900-911. Available at <https://pubmed.ncbi.nlm.nih.gov/33001856/>

Gray, K. J., Bordt, E. A., Atyeo, C. et al. (March 25, 2021). Coronavirus disease 2019 vaccine response in pregnant and lactating women: A cohort study. *AJOG*. Available at: [https://www.ajog.org/article/S0002-9378\(21\)00187-3/fulltext](https://www.ajog.org/article/S0002-9378(21)00187-3/fulltext)

Jafari, M., Pormohammad, A., Sheikh Neshin, S. A., Ghorbani, S., Bose, D., Alimohammadi, S., ... & Zarei, M. (2021). Clinical characteristics and outcomes of pregnant women with COVID-19 and comparison with control patients: A systematic review and meta-analysis. *Reviews in medical virology*, e2208. Available at <https://pubmed.ncbi.nlm.nih.gov/33387448/>

Juncker, H. G., Mulleners, S. J., van Gils, M. J., de Groot, C. J., Pajkrt, D., Korosi, A., ... & van Keulen, B. J. (2021). The levels of SARS-CoV-2 specific antibodies in human milk following vaccination. *Journal of Human Lactation*. Available at <https://journals.sagepub.com/doi/full/10.1177/08903344211027112>

Khalil, A., Kalafat, E., Benlioglu, C., O'Brien, P., Morris, E., Draycott, T., ... & Magee, L. A. (2020). SARS-CoV-2 infection in pregnancy: A systematic review and meta-analysis of clinical features and pregnancy outcomes. *EClinicalMedicine*, 25, 100446. Available at [https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370\(20\)30190-5.pdf](https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(20)30190-5.pdf)

Kharbanda, E. O., Happala, J., DeSilva, M., Vasquez-Benitez, G., Vesco, K. K., Naleway, A. L., & Lipkind, H. S. (September 8, 2021). Spontaneous abortion following COVID-19 vaccination during pregnancy. *JAMA*. Available at <https://jamanetwork.com/journals/jama/fullarticle/2784193>

Knight, M., Ramakrishnan, R., Bunch, K., Vousden, N., Kurinczuk, J., Dunn, S... & Semple, C. (2021). Females in hospital with SARS-CoV-2 infection, the association with pregnancy and pregnancy outcomes: A UKOSS/ ISARIC/CO-CIN investigation. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/977287/s1171-ukoss-isaric-co-cin-covid-19-young-females-pregnancy-report.pdf

Mahajan, N. N., Pophalkar, M., Patil, S., Yewale, B., Chaaithanya, I. K., Mahale, S. D., & Gajbhiye, R. K. (October 1, 2021). Pregnancy outcomes and maternal complications during the second wave of coronavirus disease 2019 in India. *Obstetrics and Gynecology*, 138(4), 660-662. Available at <https://pubmed.ncbi.nlm.nih.gov/34233345/>

McLaurin-Jiang, S., Garner, C. D., Krutsch, K., & Hale, T. W. (2021) Maternal and child symptoms following COVID-19 vaccination among breastfeeding mothers. *Breastfeeding Medicine*, 16(9), 702-709. Available at <https://www.liebertpub.com/doi/pdfplus/10.1089/bfm.2021.0079>

Ontario Ministry of Health. Updated March 11, 2021. About COVID-19 Vaccines. Available at https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_about_vaccines.pdf

Ontario Ministry of Health. Updated September 29, 2021. COVID-19 Vaccination Recommendations for Special Populations. Available at

https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccination_rec_special_populations.pdf

Ontario Ministry of Health. Updated October 7, 2021. COVID-19 Vaccine Information Sheet. Available at https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_info_sheet.pdf

Ontario Ministry of Health. Updated April 27, 2021. COVID-19 Guidance for Prioritization of Phase 2 Populations for COVID-19 Vaccination. Available at https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_Phase_2_vaccination_prioritization.pdf

Money, D. (June 3, 2021). Canadian surveillance of COVID-19 in pregnancy: Epidemiology, maternal and infant outcomes. Report #4. Available at <https://ridprogram.med.ubc.ca/cancovid-preg/>

National Advisory Committee on Immunization (NACI). Updated September 28, 2021. Recommendations on the use of COVID-19 vaccines. Advisory Committee Statement. Available at: <https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines/recommendations-use-covid-19-vaccines-en.pdf>

Ontario COVID-19 Science Advisory Table. (September 13, 2021). The incidence, severity, and management of COVID-19 in critically ill pregnant individuals. Available at <https://covid19-sciencetable.ca/sciencebrief/the-incidence-severity-and-management-of-covid-19-in-critically-ill-pregnant-individuals/>

Shimabukuro, T.T., Kim, S. Y., Myers, T.R., Moro, P. L., Oduyebo, T., Panagiotakopolous, L., ... & Meaney-Delman, M. D.. (April 21, 2021). Preliminary findings of mRNA Covid-19 vaccine safety in pregnant persons. *New England Journal of Medicine*, 384(24), 2273-2282. Available at <https://www.nejm.org/doi/full/10.1056/NEJMoa2104983>

Society of Obstetricians and Gynaecologists of Canada (SOGC). Revised and reaffirmed May 25, 2021. SOGC Statement on COVID-19 vaccination in pregnancy. Available at: https://www.sogc.org/common/Uploaded%20files/Latest%20News/SOGC_Statement_COVID-19_Vaccination_in_Pregnancy.pdf

Society of Obstetricians and Gynaecologists of Canada (SOGC). Released April 20, 2021. SOGC Statement on the COVID-19 vaccines and rare adverse outcomes of thrombosis associated with low platelets. Available at: https://www.sogc.org/en/content/featured-news/SOGC_Statement_on_the_COVID-19_vaccines_and_rare_adverse_outcomes_of_%20thrombosis.aspx

Theiler, R. N., Wick, M., Weaver, A., Mehta, R., Virk, A., & Swift, M. (2021). Pregnancy and birth outcomes after SARS-CoV-2 vaccination in pregnancy. *American Journal of Obstetrics and Gynecology MFM*. Available at <https://pubmed.ncbi.nlm.nih.gov/34425297/>

Villar, J., Ariff, S., Gunier, R. B., Thiruvengadam, R., Rauch, S., Kholin, A., ... & Papageorgiou, A. T. (April 22, 2021). Maternal and neonatal morbidity and mortality among pregnant women with or without COVID-19 infection: The INTERCOVID multinational cohort study. *JAMA Pediatrics*, 178(8), 817-826. Available at <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2779182>

Wei, S. Q. Bilodeau-Bertrand, M., Liu, S., & Auger, N. (2021). The impact of COVID-19 on pregnancy outcomes: A systematic review and meta-analysis. *CMAJ*, 193(16), E540-E548. Available at <https://www.cmaj.ca/content/193/16/E540>

Zambrano, L. D., Ellington, S., Strid, P., et al. (2020). Update: Characteristics of symptomatic women of reproductive age with laboratory-confirmed sars-cov-2 infection by pregnancy status - United States, January 22- October 3, 2020. *MMWR Morb Mortal Wkly Rep*, 69(55),1641-1647. Available at <https://pubmed.ncbi.nlm.nih.gov/33151921/>

Zauche, L. H., Wallace, B., Smoots, A. N., Olson, C. K., Oduyebo, T., Kim, S. Y., ... & Ellington, S. R. (2021). Receipt of mRNA Covid-19 Vaccines and Risk of Spontaneous Abortion. *New England Journal of Medicine*. Available at <https://www.nejm.org/doi/full/10.1056/NEJMc2113891>