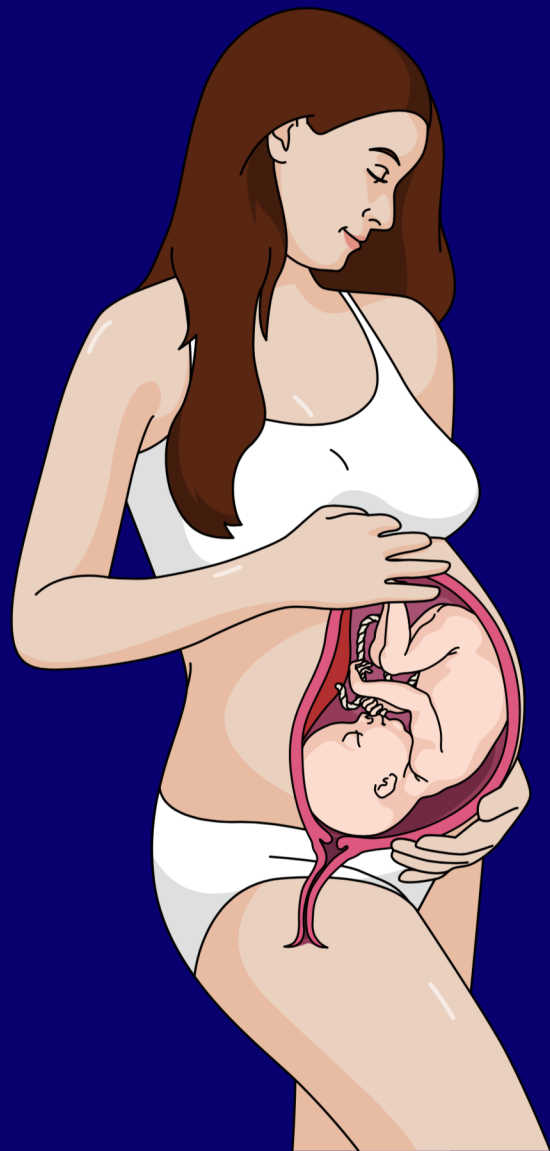
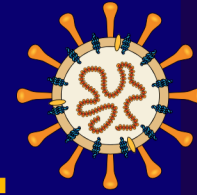


COVID-19 in Pregnancy

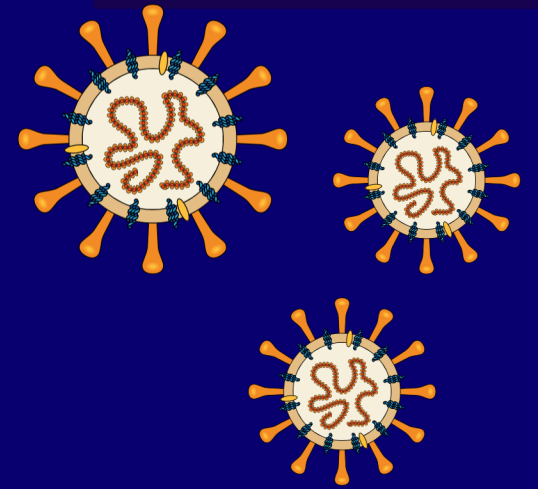
OBGYN
Academy

Vibhuti Aggarwal, BSc, Ala Essalah, BBA, Balsam Arwini, BSc, Leah Rusnell, BSc,
Nitasha Salim, BSc, Maria Giroux, BSc, MD



Coronaviruses are a family of viruses that cause disease in mammals and birds. An example of these are SARS and MERS.

COVID-19, or coronavirus disease 2019, is an infection caused by a virus called SARS-COV-2. This is a new type of coronavirus that causes respiratory like illness in humans. It was first identified in China in December 2019 and has spread worldwide. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic.



How is COVID-19 Spread?

COVID-19 is spread from person to person through droplets in the air that are created when a person coughs or sneezes or has a close, prolonged contact with someone who is infected with COVID-19 (ex. shaking hands, hugging, kissing). It can also be spread by touching contaminated surfaces and then touching their own mouth, nose, or eyes before washing hands. There is currently no evidence that COVID-19 can be transmitted to or from animals.

Signs & Symptoms

It can take up to 14 days after being exposed to COVID-19 to develop signs and symptoms.

Pregnant women do not have more severe illness than non-pregnant women.

More common: fever $>38^{\circ}\text{C}$, cough with or without sputum, difficulty breathing, fatigue, muscle aches, and joint pain

Less common: headache, sore throat, runny nose, nausea, and diarrhea

Severe symptoms: difficulty breathing, chest pain, confusion

Self monitor for symptoms and changes in body temperature daily. If symptoms develop, self-isolate. COVID-19 is tested using a nasopharyngeal swab, which is a swab of throat and nose. This is done at a testing centre. It is important to be familiar with testing criteria in your city.

Prevention of Infection

- Proper handwashing for at least 20 seconds with soap and water. If not available, use hand sanitizer with 60% or more alcohol.
- Cough and sneeze in a tissue and dispose of tissue immediately. If tissue is not available, cough and sneeze on the inside of your elbow.
- Wash hands immediately after coughing, sneezing, touching used tissues, masks, etc.
- Avoid touching your face, mouth, nose, or eyes.
- Wear a facemask if you have any symptoms or are caring for someone with known or suspected COVID-19. Otherwise face masks are not recommended.
- Practice physical distancing by staying at home as much as possible. If in public, maintain at least 6 feet between yourself and others. Avoid shaking hands or hugging.
- Clean and disinfect objects and surfaces that are frequently touched.
- Avoid sharing household items (ex. cups, eating utensils, etc.) unless they have been washed with soap and water.
- Avoid visiting long term care facilities and hospitals.
- Avoid leaving your home for non-essential services.
- Minimize in person meetings and group activities.

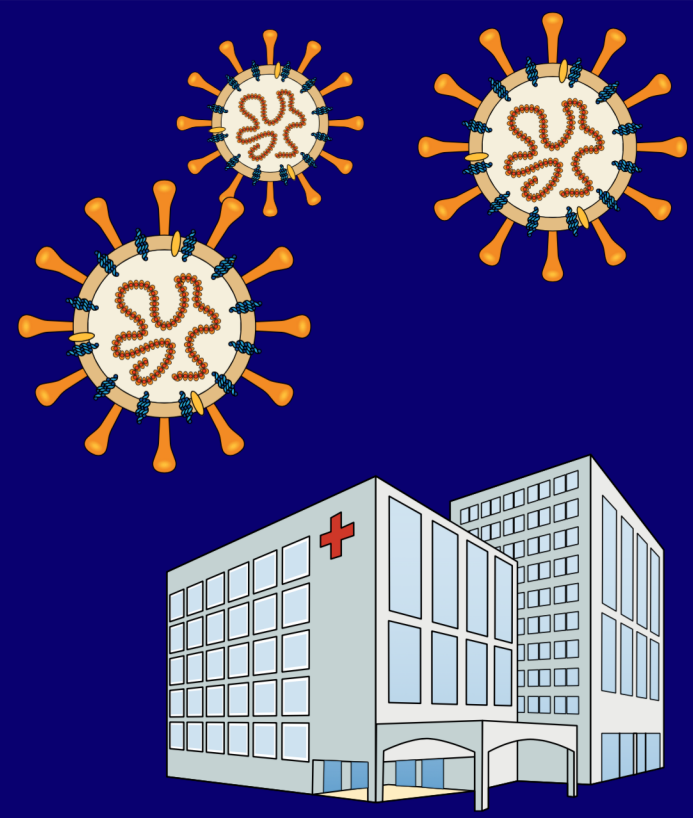


Stay at
home!



How is COVID-19 Treated?

80% of people have a mild self-limiting infection that resolves with symptomatic management at home. It is important to drink plenty of fluids and use Tylenol for pain. If you develop severe symptoms (ex. chest pain, shortness of breath, confusion) or problems with your pregnancy, it is important to seek medical care. People who develop severe symptoms or issues related to pregnancy may be hospitalized. While in hospital, both mother and baby are monitored for any complications and signs of preterm labour. Severe breathing difficulties may need oxygen and assisted ventilation in the intensive care unit (ICU). Other severe complications that would need admission to ICU include septic shock, kidney failure, and multi-organ failure. There is currently no specific antiviral medication or vaccination for the COVID-19 virus. Current therapies are being developed and investigated in Canada and worldwide.

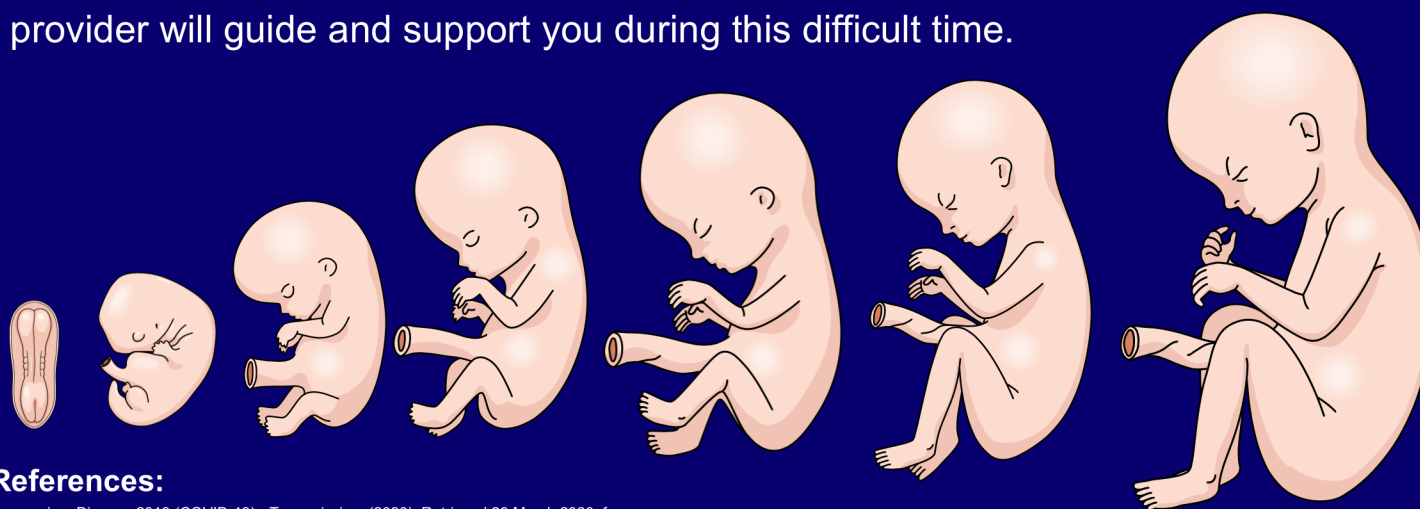


How Does COVID-19 Affect My Pregnancy?

There is very little research about COVID-19 in pregnancy. Pregnancy outcomes have generally been good. At this time, there is no evidence of virus being transmitted from mother to baby during pregnancy and no evidence that the virus causes birth defects. Most infants born to pregnant women with COVID-19 are healthy.

A pregnant woman who becomes infected with COVID-19 may be at increased risk of Cesarean section due to baby's heart rate becoming abnormal during labour. It is important to monitor baby's heart rate during delivery and for delivery to occur at the hospital. Some evidence suggests that COVID-19 is associated with preterm labour. There was 1 case of stillbirth, which occurred in a patient who was severely ill.

For women who develop COVID-19 in pregnancy, it is important to self-isolate and be treated by a multidisciplinary team. Prenatal care is done by an obstetrician and timing of delivery is individualized on a case-by-case basis. Diagnosis of COVID-19 itself is not an indication for delivery. Your healthcare provider will guide and support you during this difficult time.



Delivery in women affected with COVID-19

Epidural may be used to assist with pain. Cesarean section is done for routine obstetrical indications. Delayed cord clamping and skin-to-skin contact can be done. The newborn is tested for COVID-19 at birth.

There is no evidence of transmission of virus in breastmilk. Women may choose to breastfeed or feed with expressed breast milk. It is important to wash hands before touching baby or touching bottle and to wear a mask. Postpartum visit may be done virtually.



References:

Coronavirus Disease 2019 (COVID-19) - Transmission. (2020). Retrieved 29 March 2020, from https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Ftransmission.html

Coronavirus Disease 2019 (COVID-19) – Prevention & Treatment. (2020). Retrieved 29 March 2020, from https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html

McIntosh, K. (2020). Coronavirus disease 2019 (COVID-19). Retrieved 29 March 2020, from <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19#H1535074479>

Elwood C, Boucoiran I, VanSchalkwyk J, Money D, Yudin M, Poliquin V. (2020). Updated SOGC Committee opinion - COVID-19 in Pregnancy. Retrieved 29 March 2020, from https://www.sogc.org/en/content/featured-news/Updated-SOGC-Committee-Opinion_COVID-19-in-Pregnancy.aspx

Liu Y, Chen H, Tang K, Guo Y. Clinical manifestations and outcomes of SARS-CoV-2 infection during pregnancy. J Infect 2020; <https://doi.org/10.1016/j.jinf.2020.02.028>.

Clinical Guidelines for Testing and Report (March 21, 2020) | Information for Health Care Providers | Government of Saskatchewan. (2020). Retrieved 29 March 2020, from <https://www.saskatchewan.ca/government/health-care-administration-and-provider-resources/treatment-procedures-and-guidelines/emerging-public-health-issues/2019-novel-coronavirus/information-for-health-care-providers/clinical-guidelines>

COVID-19 Suggestions for the care of the perinatal population. (2020). Retrieved 29 March 2020, from https://capwhn.ca/wp-content/uploads/2020/03/CAPWHN_COVID-19_FINAL.pdf

Coronavirus Disease 2019 (COVID-19). (2020). Retrieved 29 March 2020, from https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fpregnancy-breastfeeding.html

Treatment of and Experimental Therapeutics for COVID | Information for Health Care Providers | Government of Saskatchewan. (2020). Retrieved 29 March 2020, from <https://www.saskatchewan.ca/government/health-care-administration-and-provider-resources/treatment-procedures-and-guidelines/emerging-public-health-issues/2019-novel-coronavirus/information-for-health-care-providers/treatment-of-and-experimental-therapeutics-for-covid>

SOGC Recommendations: COVID-19 and Pregnancy. (2020). Retrieved 29 March 2020, from https://www.sogc.org/common/Uploaded%20files/COVID-19_algorithm_VP_March%2017_EN2_rev.pdf

Poliquin, V. (2020). Flash Updates on Group B Strep and COVID-19 in the pregnancy patient. [Powerpoint slides]. Retrieved 29 March 2020, from <https://www.sogc.org/common/Uploaded%20files/POLYQUIN%20Updates%20on%20GBS%20and%20COVID-19.pptx>

Frequently Asked Questions for Managing Pregnant Patients in the COVID-19 Pandemic. (2020). Retrieved 29 March 2020, from https://www.sogc.org/common/Uploaded%20files/COVID_FAQFinalFINAL.pdf

Disclaimer:

This resource is based on information available at the time of its creation. Information about COVID-19 is rapidly evolving and all information presented is subject to change. This information is for education only, please use own judgement.

Disclaimer:

The information presented is designed as an educational resource. It is intended for educational or information purposes only; it is not intended to be a substitute for independent professional judgement of the treating clinician. The use of information is voluntary. The information presented should not be considered a statement of standard of care or all inclusive of proper treatments/care. Variations in practice exist and it is at the discretion of treating clinical to exercise clinical judgement. The OBGYN Academy team makes effort to present accurate and reliable information. The information is reviewed and updated, but publications may not reflect the most recent evidence. The information is provided "as is" without any warranty of accuracy, reliability, or otherwise, either expressed or implied. The OBGYN Academy does not warrant/endorse/guarantee products or services of any person/organization/firm. All authors have no conflicts of interest to disclose and the OBGYN Academy has no commercial involvement in the development of the information published. The OBGYN Academy is not liable for any loss, damage, or claim with respect to any liabilities, including direct, special, indirect, or consequential damages, incurred in connection with this publication or reliance on the information presented.