

COVID-19

Provincial Guidance on the Management of COVID-suspect and COVID-positive Obstetrical Patients and their Newborns

Note: latest updates will appear in blue

Information and resources are being regularly updated and staff are encouraged to refer to <https://www.gov.mb.ca/health/coronavirus/> and <https://sharedhealthmb.ca/health-providers/coronavirus-resources/> for up-to-date information and resources.

This evidence-informed guideline for the management of obstetrical patients who may be under investigation or identified as probable or positive cases of COVID-19, has been developed in consultation with representatives from obstetrics, neonatology, anesthesia and pediatric infectious diseases.

The epidemiology and evolution of information about COVID-19 is rapidly evolving and the relevance of the information contained herein should be reviewed considering the current clinical context.

The information herein should be considered and applied within the greater context of provincial definitions, recommendations and requirements (<https://sharedhealthmb.ca/files/IPC-acute-care-manual-provincial.pdf> and <https://sharedhealthmb.ca/files/IPC-acute-care-manual-winnipeg.pdf>).

[Public Health Agency of Canada Case definitions](#) are outlined in the provincial document and the following guidance is based on those definitions for suspect and positive case.

- Infection Prevention and Control must be notified when a patient is suspected to have COVID-19. The procedures to contact Infection Prevention and Control are also outlined in the provincial document.
- Guidelines for staff working at any entry point to the hospital have been developed to ensure that any patients and escorts are screened appropriately upon arrival at the site. There are no additional considerations related to entry points for obstetrical patients.
- Guidelines for management of visitors of suspect or positive cases of COVID-19 have been developed. The guidelines can be accessed at <https://sharedhealthmb.ca/files/covid-19-inpatient-visit-principles-level-red.pdf>

Clinical Pathways: the intention is to provide some evidence-informed guidance to assist with patient care, acknowledging that this is not an exhaustive list of all possible clinical scenarios that may occur.

Related Document: During the pandemic, there have been many changes that apply to the care of all obstetrical patients including changes to personal protective equipment, visitors and routine care. **The guidance herein should be referred to in conjunction with the guidance provided in the companion guideline, “[Provincial Guidance on Universal Precautions and Provisions for Obstetrical Care.](#)”**

Definitions: For the purposes of this document, definitions are used in agreement with [definitions](#) set out by Shared Health, specifically:

COVID-Suspect (orange zone patient) are those who meet exposure criteria OR as deemed by clinician judgment. In general these patients should be referred for testing or are patients who have been tested and the results are pending.

COVID-Positive (red zone patient) are those who have been tested and have a positive test result AND who have not been deemed “recovered” by Public Health or by Infection Prevention and Control (if an inpatient).

COVID Suspect/Positive Obstetrical Patients Presenting to Triage

1. Suspect or positive cases of COVID-19 should be cared for in a private room. The patient should wear a procedure mask wherever possible (e.g. if respiratory status allows).
2. COVID-19 testing should be done in accordance with the provincial guidelines. Indication for testing as well as pregnancy status should be indicated on requisition for appropriate prioritization at the laboratory.
3. Assessment by clinical staff will determine whether the patient is appropriate for discharge home or admission for medical or obstetrical indications:
 - a. A patient who is clinically well enough for discharge may be sent home to wait for COVID-19 testing results in accordance with provincial recommendations
 - b. A patient who requires admission should be transferred to the appropriate ward with appropriate enhanced contact/ droplet precautions during transport
4. For patients discharged home awaiting test results, appropriate telephone follow-up should be arranged and the patient should be educated about red-flags to represent to care (e.g. worsening respiratory status, feeling light-headed, inability to tolerate oral intake, decreased fetal movement, signs of preterm labour). Refer to: ["COVID Testing - Update Guidance for Individuals Awaiting Results"](#)
5. For COVID-positive patients being managed as outpatient, frequent contact with healthcare is encouraged to assess for worsening respiratory symptoms (e.g. telephone calls to be arranged at the discretion of the prenatal care provider).
6. Medical literature has suggested that pro-embolic coagulopathy may occur in pregnant patients with COVID-19. For COVID-positive and suspect patient being admitted for respiratory or obstetrical indications, consideration should be given to initiating prophylaxis for venous thrombo-embolism. The choice of anticoagulant and duration of therapy should be assessed on a case-by-case basis with input from a multidisciplinary team including, but not limited to, anesthesia and obstetrics.
7. If a COVID-Positive (red zone) patient requires admission to a Labour unit order a CBC.

COVID Suspect/Positive Obstetrical Patients on labour unit

1. If a suspect or positive case is being managed on labour unit, they should be cared for in a private room. Please note as per the provincial guidelines, the patient is not required to be in an Airborne Infection Isolation Room (AIIR) room. The patient should wear a procedure mask wherever possible (e.g. if respiratory status allows).
2. [An essential care partner may be required to provide physical, psychological and](#)

emotional support, and will be supported in accordance with the ["Essential Care Partner and Visitor Guidelines for Acute Care"](#)

3. In general, obstetrical management should be guided by routine indications.
4. Neuraxial anaesthesia is the preferred method of anaesthesia and analgesia in **COVID-suspect** and **COVID-positive** parturients.
5. Anesthesia and NICU should be notified of a COVID Suspect/Positive patient early in their admission and should also be made aware of deteriorating respiratory status.
6. Transfer out of the labour room to an OR should be dictated by obstetrical indications as for any other labouring patient.
7. While clean PPE is ideal for patient transfer down a common corridor, emergency situations may require that staff transfer the patient wearing the same PPE that was worn inside the labour room.
8. For **COVID-19 suspect or positive** patients, regardless of the type of anesthesia, partners are asked not to enter the OR for Cesarean Section.
9. For all Cesarean sections, surgical team members (i.e. anaesthesiologist, surgeon, assistant, nursing staff and neonatal team) should engage in a pre-operative discussion about the case. This discussion should include review of appropriate PPE for all team members.
10. Following delivery, delayed cord clamping should be facilitated unless obstetrical or newborn considerations prevent it, there are no different recommendations related to suspect or positive cases of COVID-19.
11. Skin-to-skin contact in the immediate postpartum period can occur, however a mother with suspect or positive COVID-19 should wear a surgical/procedure mask when near the baby, practice proper hand hygiene before close contact with the baby and thoroughly cleanse the chest/breast area before breastfeeding with soap and water. A clean blanket or gown over the mother's legs may also be helpful during skin-to-skin or breastfeeding.
12. For reasons of infection prevention and control, COVID-positive or suspect patients are not permitted to take their placentas with them when they leave hospital. [For COVID-positive patients, placentas should routinely be submitted for pathologic examination, for all deliveries \(live or stillborn\) regardless of gestational age of infection.](#)

Patient requiring enhanced care for respiratory deterioration

1. If a patient's respiratory status deteriorates at any point in her hospital stay, anesthesia and ICU should be notified early. Notification should include communication of COVID-status.
2. [In keeping with the RECOVERY trial, steroid therapy is indicated once supplemental oxygenation is required.](#)
 - Oxygen saturation (SpO₂) targets are modified in pregnancy to titrate supplemental oxygen to SpO₂ of at least 95%.
 - The majority of data support dexamethasone as the steroid of choice delivered in a ten-day course. However, given the passage of dexamethasone (Dex) across the placenta, modifications should be made to minimize fetal exposure as reasonable.
 - When antenatal corticosteroids are indicated, a routine two-day course of Dex (12mg BID) will benefit mother and fetus, followed by an 8 day course of Dex daily dosing (6mg daily). Bioavailability is equivalent between intramuscular, intravenous (IV) and oral (PO) dosing; route may be determined on the basis

- of IV access and PO tolerance. If fetal lung maturity is not of consideration, a 10 day course of Dex (6mg daily) is indicated.
- If there is maternal improvement after 4 days of dexamethasone in viable pregnancy (equivalent to fetal exposure demonstrated to be safe in antenatal corticosteroid trials) step down to a steroid which does not cross the placenta (ie: hydrocortisone) may be considered for the remainder of the 10 day course.
 - Respiratory deterioration while on a non-dexamethasone steroid regimen should prompt a switch to dexamethasone which showed modest superiority in the RECOVERY trial.
 - In the postpartum interval, steroid administration should mirror non-pregnant treatment with a 10-day course of dexamethasone.
3. A pregnant patient requiring oxygen supplementation for their COVID-related disease should prompt transfer to a tertiary care centre.

Testing of newborns

1. Infants born to a COVID-19 Positive mother should be considered COVID-suspect and managed with orange zone precautions. Formal consultation of Peds ID should be made at the discretion of neonatologist/pediatrician involved in the infant's care.
2. Test newborns within 2 hours from delivery of mothers who are COVID-positive only. Clean the infant's face well before doing the swab to avoid cross contamination of maternal fecal matter at delivery. A subsequent NP swab of the infant should be sent at 26-48h of life.
3. Currently, testing the newborn of a COVID-positive mother after delivery is to determine vertical transmission; therefore, if the test cannot be done in the first 2 hours after delivery, it is recommended to wait until 26-48h unless otherwise directed by a Pediatric Infectious Diseases specialist.
4. If a newborn were to develop respiratory symptoms, testing would be based upon the recommendations from Public Health, the Pediatric Healthcare provider or Pediatric Infectious Diseases.

Transfer of mother and infant

1. Following recovery from obstetric delivery patient should be transferred to the postpartum ward with appropriate enhanced droplet/contact precautions during transport
2. Following delivery, the infant should be transferred as per routine procedures. If transfer is undertaken with the infant skin-to-skin on the mother, appropriate precautions as outlined above should be observed.

Patient on the postpartum ward

1. Clinical care should take place in a single room with enhanced droplet/contact precautions.
2. Please refer to [current Essential Care Partner and Visitor Guidelines for Acute Care](#) for information related to visitors and COVID-suspect/COVID-positive patients on the postpartum ward.

3. Mother and infant pair may be roomed together unless the maternal or newborn medical condition prohibits this. **The infant bassinet should be positioned two meters from the maternal bed when the mother is not wearing a mask.** Patient requests for separate accommodations should be assessed on a case-by case basis.
4. **Following the initial 3-hour assessment period (assessment at minimum includes 30 minutes of life, 1 hour and 2 hours of life), routine infant monitoring should be increased to complete vital signs (heart and respiratory rate with temperature) every four hours of life for early identification of potential compromise. If the newborn remains on the postpartum ward after 48 hours this frequency should be reassessed with the most responsible provider (MRP).**
5. Breastfeeding and skin-to-skin contact should not be discouraged and education on the provincial guidelines should be provided to the mother and family.
6. In general, it is recommended to do infant care first and then maternal care. If additional infant care is required following maternal care, then PPE should be doffed and new PPE should be donned (as this would be considered moving from a COVID suspect/positive to an uninfected patient).
7. Discharge planning for the mother/infant pair should be done in collaboration with public health.

Newborns of Mothers with Suspect or Positive COVID-19 who Require NICU Admission

1. After initial newborn resuscitation and stabilization of the infant, any deterioration requiring intubation or institution of CPAP (AGMPs) requires airborne precautions in addition to enhanced droplet/contact precautions. Use of an N95 respirator is specifically indicated in this instance.
2. Precautions taken upon admission to NICU continue to be based on determination of suspect or positive COVID-19 status of the mother and/or infant.
3. **Infants born within 1 month of a mother's COVID-19 diagnosis will be managed as orange in the NICU until a negative swab result is obtained.**
4. Clinical care should take place in a single room with appropriate enhanced droplet/contact precautions.
5. Aerosol-generating medical procedures (AGMPs) such as intubation that are required during NICU care should be carried out under airborne precautions (<https://sharedhealthmb.ca/files/IPC-acute-care-manual-winnipeg.pdf>)

Management of obstetrical patients with suspect or positive COVID-19 in rural and remote centres and transfer to a tertiary centre

1. Each maternity care site should evaluate available human and physical resources to manage obstetrical patients with suspected or positive COVID-19 and their infants.
2. Decisions on when to transfer a pregnant patient to a higher acuity centre should be decided on a case-by-case basis depending upon maternal clinical status, gestational age and availability of resources at the peripheral site.
3. Indications for transfer of a pregnant patient with suspect or positive COVID-19 to a higher acuity centre may include deteriorating respiratory status (as indicated by increasing O2 requirements, persistent tachycardia, persistent tachypnea or other signs

and symptoms of sepsis), clinical concern for preterm delivery or potential of the clinical situation to overwhelm local resources (human and physical).

4. Consideration for transfer to a higher acuity centre should occur early in clinical disease course if resources for intensive care of mother or infant are limited. Care providers should be aware that multiple reports of respiratory deterioration in the post-partum period have been reported for patients of COVID-19 and this should be considered when deciding on the appropriate time to initiate a transfer to a higher acuity centre.
5. Pregnant women with suspect or positive COVID-19 should not be transferred if the risks of transfer outweigh the benefits (e.g. imminent delivery).
6. The numbers of transfers should be minimized, for instance, a single transfer to a tertiary care site is preferable to multiple transfer through progressively higher acuity rural and remote sites.
7. Each rural and remote centre should have a plan in place for how to safely deliver women who are unsafe to transfer, utilizing their existing hospital resources, until a time when safe transfer of mother and baby can occur.

Please see the [Shared Health Collaborative Statement on COVID-19 Pregnant Patients Requiring Transfer to tertiary care document](#).

General management principles for all pregnant patients with suspect or positive COVID-19

1. Counselling patient about the possible effects of COVID-19 on the parturient and pregnancy outcomes
 - a. Possible risk of maternal respiratory failure
 - b. Possible need for iatrogenic preterm delivery
 - c. Possible pregnancy complications including spontaneous abortion, intrauterine fetal demise, preterm rupture of membranes, preterm labour
2. Consideration for antenatal corticosteroids for fetal lung maturity if gestational age 23+0 to 34+6 weeks gestation.
3. Mode of delivery, timing of delivery, type of anesthesia, use of IV antibiotics, use of corticosteroids and possible perimortem Caesarean delivery in the case of maternal demise should be considered on a case-by-case basis.
4. If prolonged corticosteroids have been used for maternal benefit in the antepartum period, consider stress-dose corticosteroids at time of delivery or other surgical intervention to prevent Addisonian Crisis.
5. Neither epidural nor spinal anaesthesia are contraindicated and in some cases may be preferred over general anesthetic.
6. Psychological support should be a priority for any patients who have visitor restrictions in place, as the separation from support networks as well as anxiety over the unknown may be stressful for the patient.
7. If mother and infant must be separated, pumping should be encouraged and this breast milk should be offered to the newborn to facilitate resumption of breastfeeding once the pair are reunited. [Excellent hand hygiene should be performed prior to handling equipment for breast milk pumping or hand expression](#).
8. Breast pump equipment cleaning should be managed in accordance with site-specific guidelines.

Discontinuation of COVID-positive and COVID-suspect status

1. Discontinuation of precautions for someone who is COVID-positive should be done in consultation with an IP&C provider and in accordance with [provincial guidance](#).
2. Discontinuation of precautions for someone who is COVID-suspect with a negative test, but has ongoing symptoms should be undertaken in consultation with IP&C and in accordance with [provincial guidance](#). Consideration for local COVID-19 epidemiology, limitations of testing, exposure history and possibility of other seasonal respiratory viral etiology should be considered before discontinuation of precautions.

Discharge of mother and newborn

1. Postpartum discharge may be synchronous with mother and baby discharged together or dyssynchronous depending on maternal or infant condition and custody plans. Discharge process should be followed as outlined in the ["COVID-19 Specific Disease Protocol \(Provincial\) - Acute and Community Settings"](#) OR ["COVID-19 Specific Disease Protocol \(Winnipeg\) - Acute and Community Settings"](#) as applicable.
2. Postpartum Public Health Nursing (PHN) referrals should include maternal and newborn COVID-19 status, the date of diagnosis, and the dates and results of all newborn tests. This will guide PHN follow-up and plans regarding precautions. COVID-19 positive status is an indication for a priority PH follow-up, which should be marked on the Public Health Referral form.
3. COVID-19 positive mothers and COVID-19 positive infants are to isolate for a minimum of 10 days from the start of their symptoms until they are asymptomatic for 24 hours. Public health will advise when home isolation can be discontinued.
4. Newborns born to COVID-19 positive mothers should be isolated at home and on enhanced precautions for at minimum the first 14 days of life, regardless of infant discharge status into or out of maternal custody. Public health will direct the specific duration of quarantine for each individual infant based on the last date of exposure. During the period of quarantine, all infant caregivers at home should use a medical mask and eye protection when holding or feeding the infant. They should also use a clean receiving blanket or sheet when holding the infant (launder after each use). This information and further details regarding care at home should be provided using the following [resource](#).
5. Infant follow-up should be planned with their physician, NP or midwife as per newborn course in hospital, after isolation is complete. If there is a need for a face to face visit before isolation is complete the Primary Care Provider should be contacted for further instructions.
6. Patients should be counselled to anticipate that an infant nasopharyngeal swab is required if the infant becomes symptomatic at any time during the isolation period, AND on day 5-7 even if the infant is asymptomatic at that time.
7. Provide up to date discharge teaching and [print materials](#) for isolating at home and at-home [postpartum care](#) and Manitoba Health's recommendations for [mental health](#) care in the pandemic. For COVID-19 positive mothers provide this [resource](#) regarding isolation at home. For COVID-19 positive infants and infants who are within the isolation period who are discharged to caregivers other than the mother (e.g. other family members, CFS), the [resource](#) for caring for COVID-19 positive persons at home should be provided. Please refer to Appendix A for a complete list of relevant resources for postpartum discharge.

REFERENCES:

Shared Health Manitoba (2020) MEMO: COVID-19 UPDATE – Symptomatic Patients Returning from listed countries should be tested for COVID-19.

Shared Health Manitoba (2009) Enhanced Droplet Precautions.
https://www.wrha.mb.ca/extranet/ipc/files/manuals/acutecare/Enhanced_Droplet_CP.pdf.

Shared Health Manitoba (2020) 2019-nCoV Disease Protocol.
<https://www.wrha.mb.ca/extranet/coronavirus/files/ipc-ncov-specific-disease-protocol.pdf>.

RECOVERY Collaborative Group. (2020). Dexamethasone in hospitalized patients with Covid-19—preliminary report. *New England Journal of Medicine*. DOI: 10.1056/NEJMoa2021436

Appendix A. Summary of Resources for Postpartum Discharge – Mothers and Newborns

Resource	Purpose/Audience	Link/Additional information
COVID-19 Specific Disease Protocol (Winnipeg)	All COVID+/suspect discharges (Winnipeg)	Main link for discharge package – Wpg (see page 5 &6) https://sharedhealthmb.ca/files/IPC-acute-care-manual-winnipeg.pdf
COVID-19 Specific Disease Protocol (Provincial)	All COVID+/suspect discharges (Provincial)	Main link for discharge package – Provincial (see page 6) https://sharedhealthmb.ca/files/IPC-acute-care-manual-provincial.pdf
COVID-19 Discharge Information for Patients	All COVID+ discharges	https://sharedhealthmb.ca/files/covid-19-discharge-info-for-patients.pdf
Postpartum Care at Home for COVID-19 persons	All postpartum COVID+ discharges (addresses specific postpartum and infant issues)	https://sharedhealthmb.ca/files/covid-19-postpartum-care-at-home-eng.pdf
COVID-19 Alternative Isolation Accommodation	All COVID + discharges need alternate isolation accommodations	https://sharedhealthmb.ca/files/aia-hotel-guidance.pdf Referral for alternate isolation accommodation form https://sharedhealthmb.ca/files/aia-referral-form.pdf
<p><i>The following two resources are provided as links in the Postpartum Care at Home resource above. Consider providing hard copies if the family does not have wifi/data access or would benefit from a written resource. They are also available in multiple languages on the Manitoba Health COVID website, at: https://www.gov.mb.ca/covid19/updates/resources.html</i></p>		
Caring for someone at home with COVID-19	Caregivers of COVID+ persons	http://www.manitoba.ca/asset_library/en/coronavirus/factsheet-careforperson-withcovid-at-home.pdf
Isolation and self-care at home for Cases	COVID+ persons (mother, infant)	https://www.gov.mb.ca/asset_library/en/covid/factsheet-isolation-selfmonitoring-recoveringhome.pdf