COVID-19

Provincial Guidance on the Universal Precautions and Provisions for Obstetrical Care

Definitions

COVID-Non-suspect (green zone patient) are those who do not meet criteria for testing AND/OR those deemed "recovered" by Public Health or by Infection Prevention and Control (if an inpatient).

COVID-Suspect (orange zone patient) are those who meet criteria for COVID-19 testing 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).

Asymptomatic Screening of Obstetrical Patients during the COVID-19 Pandemic

For the purposes of surveillance, screening of asymptomatic individuals in the community has been introduced. The population of women presenting for labour and delivery provides a broad representation of the population. As such, this population is considered a valuable population to surveil for viral burden and transmission patterns.

1. Asymptomatic screening for COVID-19 should be offered to all pregnant patients being admitted for the indication of labour and delivery or for an elective Cesarean section.
2. This screening is voluntary and not required for admission.
3. Given the time required for explanation to the patient, gaining consent, taking the sample and completing the appropriate documentation, it is encouraged that this testing be done on the laboring unit as opposed to triage, however this may vary by site.
4. A patient's zone is not altered while results from an asymptomatic test are pending.

Personal Protective Equipment for use with *All* Obstetrical Patients during the COVID-19 Pandemic

Obstetrical care is an area of clinical care where intervention and admission to hospital cannot be reliably predicted or delayed to allow for self-isolation or screening for asymptomatic infection. There is an increasing number of reports globally of maternity care providers who have contracted COVID-19 as a result of asymptomatic and presymptomatic viral shedding throughout the peripartum period. As a result, in accordance with provincial PPE guidance, we recommend the following for health-care workers providing inpatient care in the antepartum, intrapartum and peripartum period.

These recommendations are for all obstetric patients, regardless of COVID-status:

Clinical Encounter	Recommended PPE
Routine patient care (antepartum/triage/labour/postpartum) and vaginal delivery	Please refer to the provincial guidance on COVID-19 Personal Protective Equipment https://sharedhealthmb.ca/files/covid-19-provincial-ppe-framework-guidance.pdf
Cesarean Section with low-risk of conversion to general anesthetic	Extended contact/droplet precautions (surgical mask) *unless* patient is **green zone**
Cesarean Section with high-risk of potential conversion to general anesthetic[1,2]: ▪ Concern for inadequacy of epidural top-up ▪ Insufficient time for epidural top-up ▪ Inadequate spinal block ▪ Concern for massive intraoperative blood loss (>1.5L) ▪ Transverse fetal lie	Extended contact/droplet precautions with N95 mask for all core surgical team (e.g. surgeon, anesthesiologist, assistant and scrub nurse)[1] *unless* patient is **green zone**
Aerosol generating procedure other than Cesarean Section (e.g. intubation for other indication)[3]	Extended contact/droplet precautions (N95 mask) *unless* patient is **green zone**
Newborn resuscitation	Please refer to the provincial guidance on COVID-19 Personal Protective Equipment https://sharedhealth mb.ca/files/covid-19-provincial-ppe-framework-guidance.pdf[4] Except if patient is **orange zone** or **red zone** WITH one of the following: (1) respiratory symptoms requiring oxygen, ventilatory or hemodynamic support; (2) immunocompromise, where an N95 will be donned by the staff in the room where the initial assessment and resuscitation of the newborn will be performed[5]

[1] For all personnel who are not immediately involved in the surgery, EDCP with surgical mask can be used at the outset of the case until/if anesthesia is converted to GA. If the patient is converted to GA, any staff who are not wearing an N95 mask must exit the room prior to intubation, doff and don with an N95 before re-entry. Every attempt should be made to re-enter prior to the intubation to avoid opening the door to the operating theatre following the AGMP.

[2] For deliveries in which the mother is placed under a general anaesthetic, local protocols for how to transfer the newborn from the surgeon to the pediatric team should minimize environmental contamination following an AGMP (e.g. if door to the operative room must be opened, it should remain open as briefly as possible).

[3] After initial stabilization of the infant and transfer to either the post-partum area or NICU, 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.

[4] Newborn resuscitation should typically occur under enhanced droplet/contact precautions using a procedure/surgical mask and NOT an N95 respirator. This extends to and includes intubation of the newborn. This recommendation is

based on a lack of definitive evidence that COVID-19 leads to vertical transmission to the newborn.

[5]For an orange zone or red zone mother who is demonstrating the clinical syndrome of severe viral pneumonia, staff resuscitating the newborn will don EDCP with N95 respirators. This is a conservative measure based on isolated reports of infant infection where vertical transmission could not be excluded in situations of severe/critical maternal illness. In this instance, location of newborn resuscitation should be guided by the available physical and human resources; however, if resuscitation will be performed *inside* the delivery suite, the entire delivery team should be prepared for aerosolizing procedures of the newborn (i.e. be wearing EDCP with N95 respirators).

Support Persons for Obstetrical Patients during the COVID-19 Pandemic

At this time, in order to reduce transmission of COVID-19, visitor restrictions have been imposed on health care facilities around the province. Labour, delivery and post-partum have been cited as an exception and regulations unique to these circumstances have been developed and are available at https://sharedhealthmb.ca/files/covid-19-inpatient-visit-principles.pdf.

Further recommendations about whether a support person can be present in the operating room if a Cesarean section is performed are outlined below:

Patient Zone	Support person in OR	Notes
Orange Zone	No support person	Medical staff should be aware of the psychological stress of being without a support person in this clinical situation. Use of virtual resources and other hospital resources may be considered to minimize this psychological stress.
Red Zone	No support person	Medical staff should be aware of the psychological stress of being without a support person in this clinical situation. Use of virtual resources and other hospital resources may be considered to minimize this psychological stress.
Green Zone	1 support person[1]	In case of a Cesarean section under neuraxial anesthesia, the support person is allowed in the operating room wearing gown, gloves and surgical mask. In case of a Cesarean section requiring General Anesthetic (GA), the partner is asked to exit the OR prior to GA.[2]

[1] The support person must pass screening at the point of entry into the facility to be admitted as a support person.
[2] Prior to a Cesarean section under neuraxial anesthesia, a team member should be designated to escort the support person out of the room and supervise their doffing of PPE in the event of conversion to GA.

Alterations to the Delivery of Routine Antenatal Care for Obstetrical Patients During the COVID-19 Pandemic

Depending on local epidemiology and the burden of circulating SARS-CoV-2 virus, it may be advisable to modify elements of prenatal care in order to reduce the risk of further viral transmission within the community and health-care environment. Modifications should be carefully

considered and weighed against the individual medical and obstetrical indications for care.

Specifically, modifications are most appropriate for low-risk obstetrical patients and may not be appropriate for all obstetrical patients. Medically indicated obstetrical assessment should not be obstructed on account of COVID-status *Nota Bene: at a low burden of disease similar to that seen in Manitoba at the time this version was edited (June 15th, 2020), it is advisable to resume care using pre-pandemic protocols, where possible.*

1. Consider spacing antenatal appointments for low-risk pregnancies according to the antenatal care model suggested by the WHO: 12, 20, 26, 30, 34, 36, 38 and 40 weeks gestation (WHO, 2016).
2. Consider virtual (telephone or online platform) appointments if patients have questions at more frequent intervals, but do not require physical exam.
3. Collaboration between multidisciplinary antenatal care providers (e.g. fetal assessment, endocrinology, obstetrics etc) should be encouraged to limit the number of visits to the healthcare office or facility.
4. A modified approach to screening for gestational diabetes *may* be considered depending on local laboratory availability and infrastructure:
   - At 26-28 weeks, offer screening with an HbA1c and non-fasting random plasma glucose:
     - Women with an A1c of < 5.7% and a random plasma glucose < 11.1 mmol/L require no further testing or treatment
     - Those with an A1c ≥ 5.7 or a random plasma glucose of ≥ 11.1 mmol/L are identified as having GDM and should be referred to the inter-professional diabetes and pregnancy health-care team"
5. A modified approach to screening for persistent dysglycemia in the post-partum period using a A1c alone may be considered.

Alterations to the Delivery of Routine Intrapartum Care for *All* Obstetrical Patients the COVID-19 Pandemic

1. A growing number of cases of COVID-19 have reportedly been diagnosed intrapartum. As such, especially if local epidemiology is suggestive of community transmission, COVID-19 should be on the differential diagnosis for any symptoms of COVID-19 developing during the intrapartum period (e.g. intrapartum fever) and testing for COVID-19 should be considered. This is most important if an alternate etiology of fever in labour (e.g. chorioamnionitis) is felt to be unlikely.
2. Use of nitrous oxide is permitted on laboring units for the duration of the COVID-19 pandemic provided that the appropriate single-use N95-N99 filter is used. ***Nota bene: This represents a change in practice since the outset of the pandemic. The use of nitrous oxide had temporarily been suspended early in the pandemic while further information about transmission was being acquired. Given that there is no positive-pressure involved in the nitrous oxide delivery system used on labour units, this form of analgesia is not considered an aerosol generating medical procedure. As such, the staff in the room need no additional PPE beyond what is routinely recommended (determined by patient zone). This recommendation applies to patients of all zones and regardless of type of exhaust scavenging system available on the laboring unit.***

Alterations to the Delivery of Routine Postpartum Care for Obstetrical Patients the COVID-19 Pandemic

1. Where feasible, consideration should be given to carrying routine post-partum visits over a virtual platform.
2. In anticipation of virtual post-partum visits, patient education during the peripartum period should be maximized. Topics that should be covered prior to discharge should include, but is not limited to, family planning, breastfeeding, and postpartum depression. Appropriate prescriptions and instructions on medication initiation/administration may be provided prior to postpartum discharge from care.

Management of Obstetrical Patients with Suspected or Confirmed COVID-19 (Orange Zone or Red Zone)

For specific management of obstetrical patients who are COVID-suspect (**orange zone**) or COVID-confirmed (**red zone**), please refer to Provincial Guidance on the Management of COVID-suspect and COVID-confirmed Obstetrical Patients and their Newborn.