

<b>WORK STANDARD</b>	 <b>Saskatchewan Health Authority</b>		<b>Title: Intrapartum Care Standard for COVID-19</b>  <b>Role performing Activity:</b>
	<b>Location:</b> Saskatchewan Health Authority	<b>Department/Unit:</b> Maternal and Children's Provincial Programs	
	<b>Document Owner:</b> Executive Director, Maternal and Children's Provincial Programs	<b>Date Prepared:</b> March 15, 2020	
	<b>Last Revision:</b> April 28, 2020	<b>Date Approved:</b> April 24, 2020	
	<b>Related Policies/Documentation</b> SHA OS-014 Obstetrics – Intrapartum Orders		

**Standard Work Summary:**

To reduce and contain the spread of influenza-like illness (ILI) (such as COVID-19) while supporting the direct and unique needs of maternal and child populations. The work standard outlines how best to protect patients and health care providers through the responsible evidence based utilization of personal protective equipment (PPE). The standard work provides principles to guide the practice within Saskatchewan, each clinical program/unit will be required to adopt the principles into established and monitored local plans and practices.

Essential Task	
1.	Visitor restrictions are in place - see Maternal and Children's Provincial Program <i>Visitor Restrictions</i> at: <a href="https://www.saskatchewan.ca/-/media/files/coronavirus/info-for-health-care-providers/clinical-practice-resources/maternal-childrens-health/visitor-restrictions-maternal-childrens-health.pdf">https://www.saskatchewan.ca/-/media/files/coronavirus/info-for-health-care-providers/clinical-practice-resources/maternal-childrens-health/visitor-restrictions-maternal-childrens-health.pdf</a>
2.	<p><b><u>Intrapartum Care of the COVID-19 suspected or positive patient</u></b></p> <p><b>Clinical Accountability</b></p> <ul style="list-style-type: none"> <li>• All COVID-19 positive patients and persons under investigation (PUI) will be managed in a site with access to specialist obstetrics and pediatric coverage.</li> <li>• Patients who meet the current criteria as having recovered from COVID-19 may continue under the care of their planned providers.</li> <li>• All symptomatic COVID-19 positive/PUI patients will be managed by an OBGYN.</li> <li>• Asymptomatic COVID-19 positive patients may deliver under the care of a family medicine obstetrical provider in accordance with site guidelines.</li> <li>• The presence of a COVID-19 positive patient in active labor should be communicated to obstetrics, anesthesia and the pediatric care team.</li> <li>• Midwifery will continue to provide home births following the screening guidelines. All patients who screen or test positive or are under investigation will be delivered in hospital.</li> </ul> <p><b>Considerations for Intrapartum Management of the COVID-19 Positive (or PUI) Patient</b></p> <ul style="list-style-type: none"> <li>• Patients should be encouraged by their MRP to call ahead to the birthing unit for telephone screening. This will ensure infection control precautions can be safely met for each patient.</li> <li>• Screen the patient for COVID-19 infection utilizing current SHA screening tools <a href="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">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</a> <ul style="list-style-type: none"> <li>○ Patients who are positive, under investigation, symptomatic, or positive verbal screen for COVID-19 will be triaged quickly and required to don a surgical/procedure mask immediately upon presentation to facility.</li> </ul> </li> </ul>

### Essential Task

- The patient will be transferred to a single-occupancy room.
- **Droplet/Contact Plus** precautions will be implemented including:
  - Surgical/procedure mask; Gown; Gloves; Protective eyewear/Face shield
- Complete COVID-19 testing if appropriate.
- All support persons will be verbally screened. Support persons with positive screen or symptoms will not be permitted onto the birthing unit.

<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>

- Elective, pre-booked caesarean sections, will be screened via phone 24-48 hours prior to booking – see SHA Infection Prevention and Control Protocol for Surgical Patients during the COVID-19 Pandemic; Adult, Older Adults, and Obstetrics
- The use of birthing pools should be avoided given question regarding transmission in faeces and the inability to use adequate personal protection equipment for healthcare staff during water birth.
- Under review - There is currently insufficient information regarding the cleaning, filtering and potential aerosolization of nitrous oxide in labour analgesia systems used for COVID-19 positive patients. Determination regarding safe use of nitrous oxide gas is to be at the unit/facility level, in consultation with local infection prevention & control and respiratory therapy experts, and with consideration to local equipment.
- Health care personnel in the room should be minimized to essential members only.
- **Droplet/Contact Plus** precautions are to be utilized for vaginal delivery.
- SHA COVID-19 Pandemic Practitioner Order Set [pregnant patient intrapartum] is in place to guide inpatient care
- Consider provision of empiric antibiotic therapy for superimposed bacterial pneumonia in confirmed COVID-19 infection or severe respiratory disease (see order set).
- Close monitoring or initiation of an modified obstetrical early warning score (e.g. MEOWS) is appropriate.
- The diagnosis of COVID-19 itself is not an indication for caesarean delivery.
- Consideration for the initiation of antenatal corticosteroids for fetal maturation if preterm delivery is indicated or anticipated.
- While available evidence supports routine newborn care, the risks and benefits of the following should be discussed with the parents:
  - Delayed cord clamping;
  - Skin to skin and infant feeding
    - mother completes hand hygiene prior to receiving infant
    - mother wears a surgical/procedure mask
    - mother to wash chest with warm soapy water prior to skin to skin
  - Bathing baby as per facility practice.

#### **Fetal Surveillance for COVID-19 Patient**

- Intrapartum fetal monitoring in the form of continuous electronic fetal monitoring (EFM) should be used given evidence showing potential abnormal fetal monitoring in labour.
  - Where sharing equipment is necessary, equipment will be terminally cleaned between patient use.
  - Internal fetal monitoring is not contraindicated.

## Essential Task

### Aerosol Generating Medical Procedures (AGMP)

- If an Aerosol Generating Medical Procedures (AGMP) is occurring, it is ideal for a patient to be placed in a negative pressure room
  - An AGMP is any procedure that may induce production of aerosols of various sizes (see SHA AGMP list) <https://pubsaskdev.blob.core.windows.net/pubsask-prod/116914/COVID19-Aerosol-Generating-Medical-Procedures-List-and-Risk-Stratification-Algorithm.pdf>
  - N95 respirators are to be used in the context of SHA AGMPs approved list exclusively.
  - Intubation, extubation, manual ventilation, non-invasive ventilation (e.g. CPAP, BiPAP) and high-flow oxygen are considered AGMPs.
  - **Droplet/Contact Plus Airborne** precautions will be employed during AGMPs. This includes a N95 respirator in addition to an isolation gown, gloves and eye/ facial protection for the duration of the AGMP.
- General anesthesia for caesarean birth is considered an AGMP.
- All team members assigned to the OR will be appropriately trained and mask fit tested for **Droplet/Contact Plus Airborne** precautions (including an N95 respirator).
- Air clearance time may not be possible to ensure safety of the maternal patient and neonate. Please refer to Infection Prevention and Control Guidance for Acute Health Care Settings for further details regarding air settle/clearance time at:  
<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>

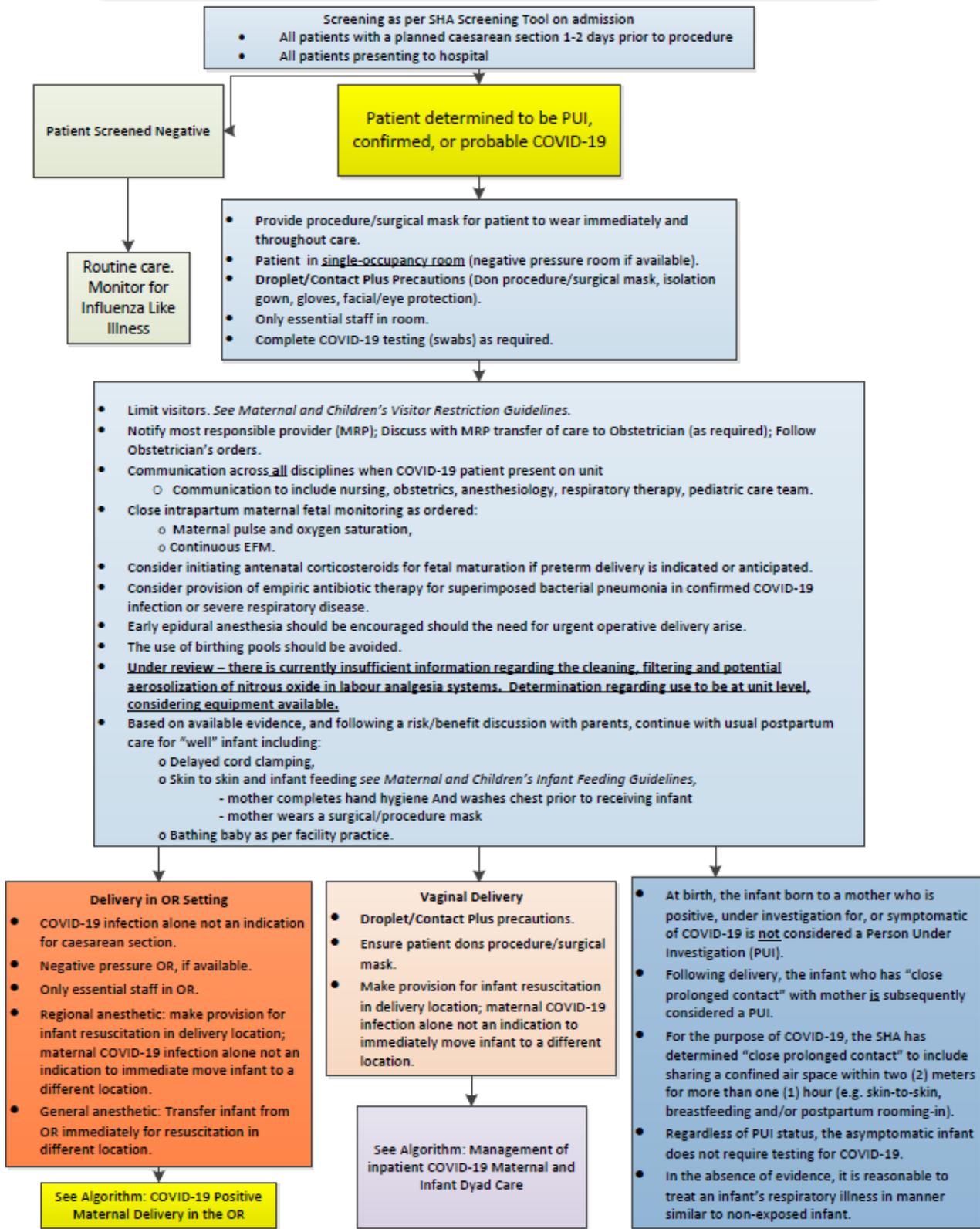
### Considerations for Operative Management of the COVID-19 Positive (or PUI) Patient

#### (See document: SHA Infection Prevention and Control Protocol for Surgical Patients during the COVID-19 Pandemic; Adult, Older Adults, and Obstetrics)

- All operative births will ideally occur in an OR with a negative pressure anteroom option due to potential need to convert from regional to general anesthesia (an AGMP).
  - OR Process for Covid-19 Presumptive/Positive Patients is available to guide this work
  - The standard work should be adapted to the clinical team approach at the local site
  - Simulations should occur in creating the adaptation and regularly throughout the pandemic
- All births occurring in an OR setting will be limited to essential health care providers only.
- Elective caesarean delivery may be delayed for those who are positive, under investigation, or positive verbal screen for COVID-19.
  - Determination is based on the clinical assessment of each individual patient
  - Patients will be considered no longer infectious in accordance with current SHA testing guidelines:  
<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>
- All efforts will be made to prevent the need for an urgent/emergent caesarean section and need for general anesthesia. General anesthesia for obstetrical cases will be reserved for situations such as maternal contraindication to regional anesthesia, severe maternal distress, and emergencies regarding the well-being of the fetus. Optimal anesthetic management of these cases will be decided upon by the obstetrician and anesthesiologist to optimize outcomes and protect health care providers. To support this outcome:
  - All patients with a planned caesarean section will be screened for COVID-19 by unit staff (utilizing SHA screening tool) one to two (1-2) days prior to their procedure.
  - Nursing staff will communicate with obstetrics and anesthesiology (as well as respiratory therapy and the pediatric care team) when a COVID-19 positive, PUI or verbal positive screen patient presents on the unit.

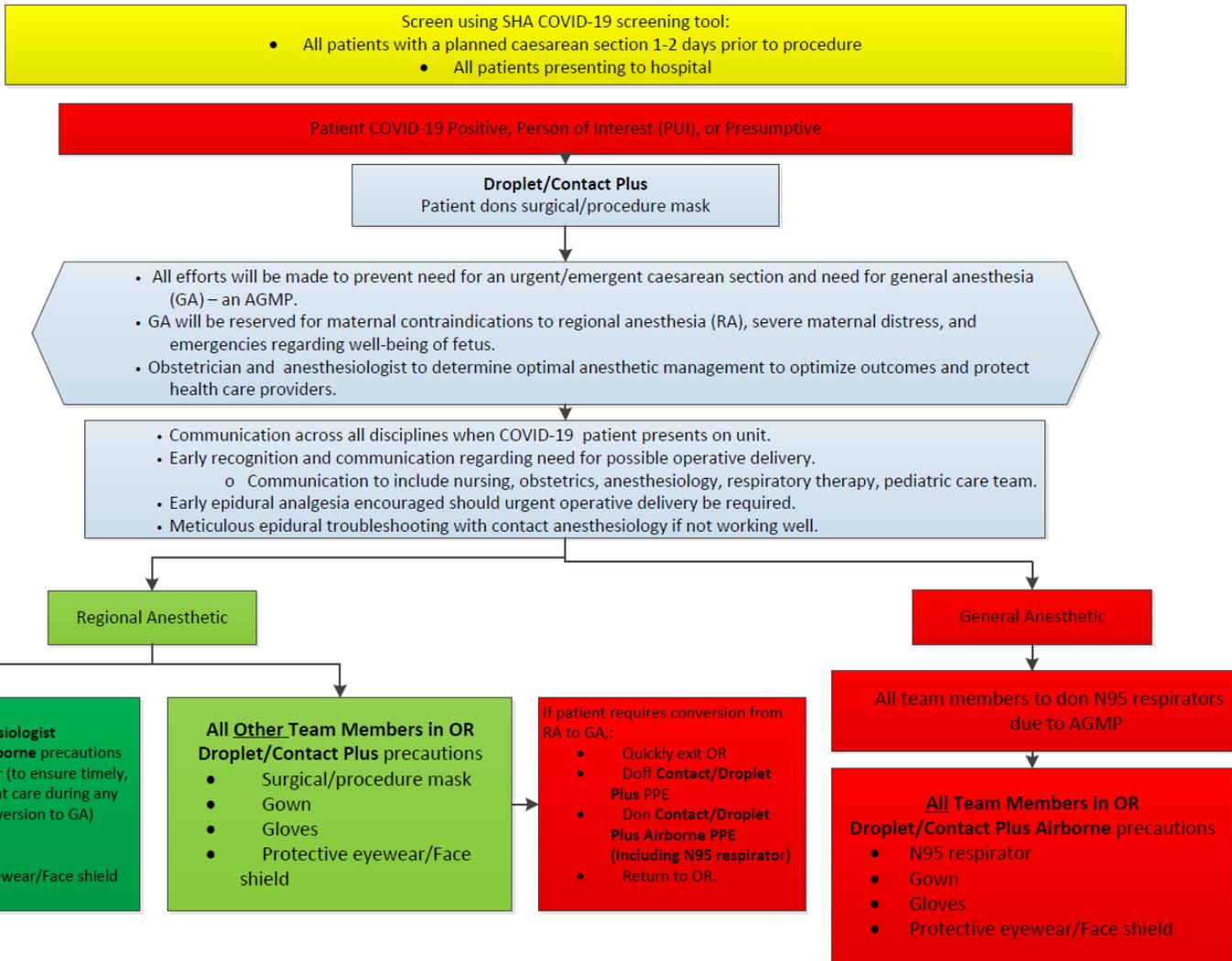
	Essential Task
	<ul style="list-style-type: none"> <li>○ Early recognition and communication between nursing, obstetrics and anesthesiology regarding the need for a possible operative delivery will occur as soon as possible.</li> <li>○ Early epidural analgesia should be encouraged should the need for urgent operative delivery arise.</li> <li>○ Efficacy of the epidural will be closely monitored and adjusted, contact anesthesiology if an epidural is not working well.</li> <li>● Given the potential that emergency conversion from regional to general anesthesia may be required, and recognizing the need to provide timely, continual care to the patient: <ul style="list-style-type: none"> <li>○ Obstetrician and anesthesiologist will conduct all caesarean sections initiated under regional anesthesia utilizing <b>Droplet/Contact Plus Airborne</b> precaution PPE (including N95 respirator).</li> <li>○ <b>All</b> other team members in the OR will employ <b>Droplet/Contact Plus</b> precautions (including surgical/procedural mask).</li> <li>○ Should a regional anesthetic need to convert to general anesthetic, the obstetrician and first anesthesiologist will remain with the patient while all other team members depart the OR to <b>doff dirty Droplet//Contact Plus precaution PPE and don clean Droplet/Contact Plus Airborne PPE</b> (including N95 respirators) before returning.</li> </ul> </li> </ul>

Management of Intrapartum Care for Person Under Investigation (PUI) or Confirmed COVID-19 Infection



**COVID-19 Positive Maternal Delivery in the OR**

April 11, 2020



## References

Breslin, N., Baptiste, C., Miller, R., Fuchs, K., Goffman, D., Gyamfi-Bannerman, C., & D'Alton, M. (2020). COVID-19 in pregnancy: early lessons. *American Journal of Obstetrics & Gynecology* MFM, 100111.

Canadian Association of Perinatal and Women's Health Nurses (CAPWHN). (Updated March 25, 2020). COVID-19: Suggestions for the care of the perinatal population. Retrieved March 26, 2020 from [https://capwhn.ca/wp-content/uploads/2020/03/CAPWHN\\_COVID-19\\_Mar-25-2020.pdf](https://capwhn.ca/wp-content/uploads/2020/03/CAPWHN_COVID-19_Mar-25-2020.pdf)

Centre for Disease Control (March 14, 2020). Interim considerations for infection prevention and control of Coronavirus Disease 2019 (COVID-19) in inpatient obstetric healthcare settings. Retrieved March 15, 2020 from

Government of Saskatchewan. COVID-19 Retrieved from <https://www.saskatchewan.ca/government/health-care-administration-and-provider-resources/treatment-procedures-and-guidelines/emerging-public-health-issues/2019-novel-coronavirus/~link.aspx?id=6C6BF971659346E0B8E9DE4AE3B2AFF9&z=z>

Government of United Kingdom. (Published 12 March 2020; Last updated 18 March 2020). Guidance COVID-19: guidance for households with possible coronavirus infection. Retrieved from <https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance>

Royal College of Paediatrics and Child Health. (Last modified 26 March 2020). COVID-19 - guidance for paediatric services. Retrieved from <https://www.rcpch.ac.uk/resources/covid-19-guidance-paediatric-services#working-in-neonatal-settings>

Royal College of Obstetricians and Gynecologists. (Version 3: Published Wednesday 18 March 2020). Coronavirus (COVID-19) Infection in Pregnancy. Guideline for Healthcare Professionals. Retrieved from <https://www.rcog.org.uk/globalassets/documents/guidelines/coronavirus-covid-19-infection-in-pregnancy-v3-20-03-18.pdf>

Saskatchewan Health Authority. (March 18, 2020). DrugLine 27 Interim Update (1.5).

Society of Obstetricians and Gynaecologists of Canada (n.d.). Updated SOGC Committee Opinion – COVID-19 in Pregnancy. Retrieved March 15, 2020 from <https://www.sogc.org/en/content/featured-news/Updated-SOGC-Committee-Opinion-%20COVID-19-in-Pregnancy.aspx>

Society for Obstetric Anesthesia and Perinatology (SOAP). Interim Considerations for Obstetric Anesthesia Care related to COVID-19. Retrieved from <https://soap.org/education/provider-education/expert-summaries/interim-considerations-for-obstetric-anesthesia-care-related-to-covid19/>