

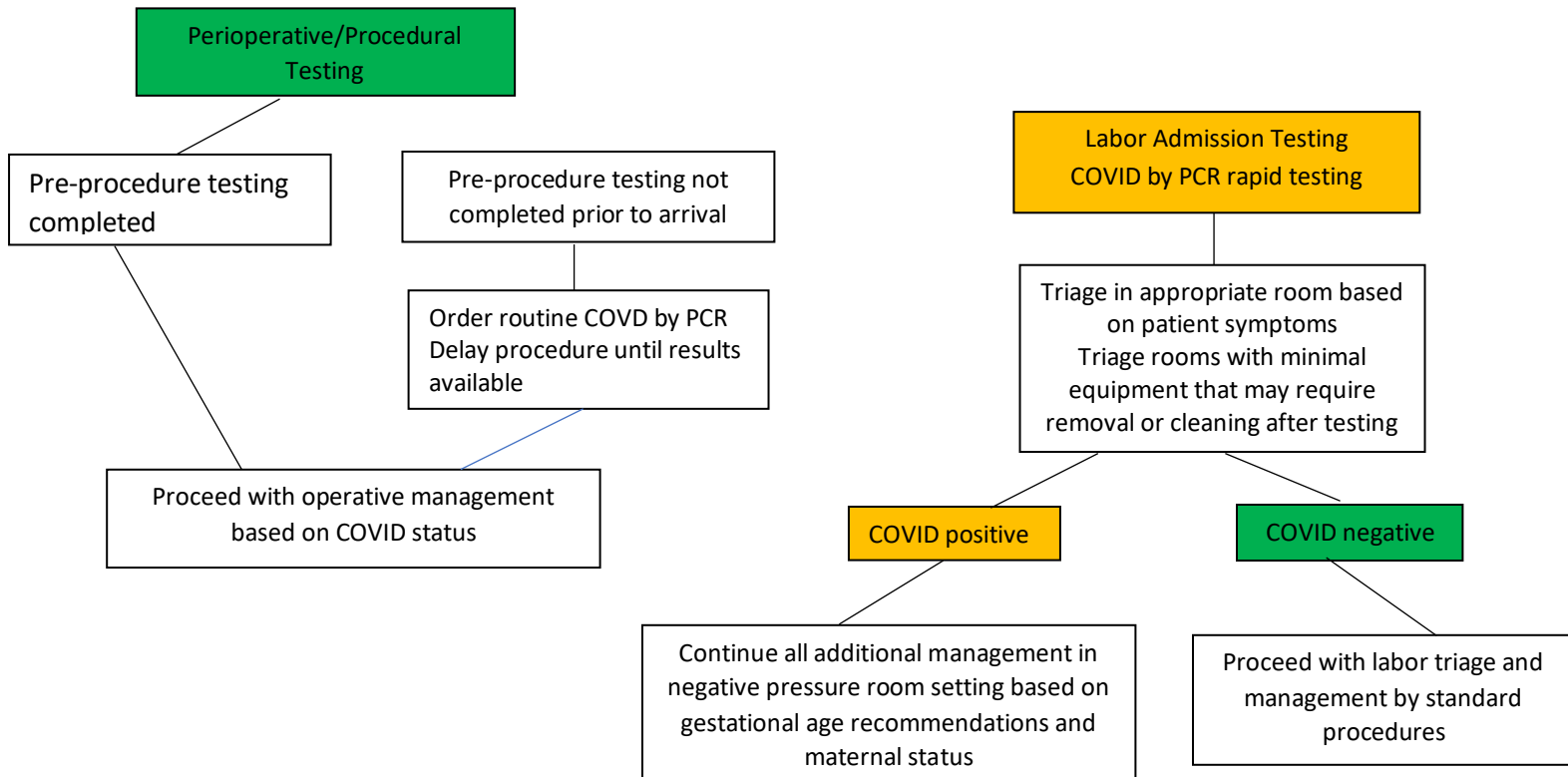
COVID-19 Obstetric Testing Guidelines

Updated: June 15, 2020

Nebraska Medicine is conducting universal testing of patients, transfers and admissions
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/universal-covid-testing-for-patients-final.pdf?date=05202020>

Accepted SARS-CoV-2 Testing
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/accepted-sars-cov-2-tests.pdf>

COVID-19 (SARS-CoV-2) positive patients will be managed utilizing Isolation Duration Guidance and Intermittent viral shedding documents:
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/guidance-on-repeat-testing-for-invasive-procedures.pdf>
<https://www.nebraskamed.com/sites/default/files/documents/covid-19/intermittent-viral-shedding.pdf>



Guidelines for Obstetric Care with COVID-19 Suspected or Confirmed Infection in Labor and Delivery

Updated June 15, 2020

- A. Initial Triage of patients presenting to labor and delivery based on current COVID-19 risk to the community. Negative pressure rooms on 4th floor of the University Tower are: 4422, 4424 on 4W and 4402-4409 on 4E.
 1. Nursing staff will initiate care patients wearing mask per institution guidelines. All patient will be screened for symptoms or respiratory illness.
 2. Patients with respiratory symptoms will be screened based on Nebraska Medicine guidelines. Triage of patients with respiratory symptoms will occur in a negative pressure room if one is available.
 3. All patients with respiratory symptoms will be managed as a Person Under Investigation (PUI – COVID test pending) until test results are available.
- B. All patients will be tested for COVID-19 on admission to Labor and Delivery.
 - a. Asymptomatic women will be admitted with standard precautions.
 - i. Masks will be worn on L&D during all patient encounters.
 - ii. Standard PPE will be donned for vaginal deliveries.
 - iii. In the event of a cesarean delivery PPE will be in compliance with Perioperative Guidelines, see NOW – COVID-19-Perioperative Guidance. This will require appropriate PPE for possible intubation.
 - b. Symptomatic women and women with exposure requiring self-quarantine will be treated as outlined in the remainder of this document.
- C. For patients with suspected COVID-19 (PUI - COVID test pending or COVID infections confirmed), will need to be assessed for obstetric status.
 1. Considerations for routine obstetrical care.
 - a. Triage will be based on room availability.
 - i. Triage will take place in a negative pressure environment. 4 East is currently the negative pressure environment for the 4th floor.
 - ii. Rooms 4422 and 4424 can be utilized as needed.
 - b. Don all standard COVID PPE before entering the patient room.
 - c. CBC with differential, will be ordered and ID consulted to determine if additional labs for COVID assessment and monitoring need to be ordered at or near the time of admission
 - d. Anesthesiology Consult is required even if peripartum analgesia is not desired; early epidural should be encouraged to avoid the need for general anesthesia in the event of an emergent cesarean.
 - e. A team briefing session will be conducted as early as possible after admission to outline care needs for the patient. **The team should consist of at a minimum the Obstetrician, Anesthesia, RN, Scrub tech, NNP**
 - i. Review of maternal medical status.

- ii. Oxygen requirements.
 - iii. Maternal monitoring needs: pulse oximetry, telemetry
 - iv. Review risk for cesarean should be assessed
 - v. Establish OR needs.
 - 1. Self-retaining retractors.
 - 2. Possible need for additional suture based on anticipated uterine closure technique, sub cutaneous fat closure.
 - 3. Anticipated extra equipment.
 - vi. If a cesarean is indicated, the attending OB will assure adequate coverage for L&D immediately at the time of the decision.
 - vii. Newborn separation will need to be discussed with the patient and if separation is recommended and desired, a newborn care-giver needs to be identified.
 - 1. It is recommended that the newborn care-giver should be someone other than the maternal support person and if possible this person will not be a PUI or someone that is currently quarantined due to exposure.
 - 2. If a prenatal consult is needed from the NICU team this should be done by phone or electronically (Zoom, Facetime)
 - viii. Establish likely Neonatal Response Level.
 - ix. Plan labor analgesia
 - x. Complete delivery planning checklist.
- f. Visitation/Support Person for delivery.
- i. Patients identified as positive after admission need to be counseled that the support person with them is in need of self-isolation. In an actively laboring patient, the support person will be allowed to stay until after delivery, as long as they comply with masking. After delivery they will be asked to leave the hospital for self-isolation at home.
 - ii. Family members who have been exposed to a positive patient should not attend as support person as they should be at home on 14 day home quarantine. Family members with known exposure to positive patient should not be support person.
 - iii. If a patient is identified as PUI (generally meaning symptomatic but testing pending) the support person can attend but can't leave room.
 - iv. Support person must comply with mask recommendations.
 - v. Any support person not complying with masking recommendations will be asked to leave.
2. Labor Management
- a. Labor admission completed including verification of fetal position by RN and provider
 - b. US machine should be draped if possible and is to be cleaned after use prior to removal from the room.
 - c. Orders to be placed by provider
 - d. The patient will identify one support person for herself and one for the newborn. The newborn support not be in the room with the PUI/COVID+ mother

- e. Once the L&D RN has donned PPE, there will need to be a limit number of times they exit and return to the room (the L&D RN should not be in the room in PPE for periods of greater than 4 hours continuous).
 - f. RN to maintain N-95 mask and face shield/eye protection. If a face shield (preferred) is in use, a procedure mask to protect the n-95 is not needed. If goggles are in use, a procedure mask may be used to protect the N-95. Extended use and reuse protocols for n-95 respirators, and reuse protocol for face shields should be practiced in order to preserve supply of PPE.
 - g. RN will assess the labor progress based on frequency recommendation by phase of labor
 - h. Physicians and CNM's will don PPE to enter the room for intrauterine resuscitation, decisions to proceed with cesarean and for delivery
3. Delivery/Recovery Management
- a. Delivery staff – one delivering provider, one maternal RN, one Stork support or 3 person NICU crew (Provider, Transport RN and RT).
 - b. Aerosolizing risk reduction – patient wearing mask, consider draping the anal area.
 - c. Uterotonic medications need to be in the room at the time of delivery.
 - d. Forceps/ Vacuum/supplies in cart outside of the room.
 - e. No delay in cord clamping.
 - f. NICU crew will be called for same indications as for non-COVID patients.
 - g. Recovery will take place in the same room.
 - h. Delivery cart and instruments to be cleaned in room by delivery team following current standard after vaginal delivery. The cart and instruments will be wiped off prior to exiting the room and be moved to soiled utility.
 - i. Disposition after initial postpartum recovery will be based on maternal status. Deterioration in maternal status after delivery has been documented.
 - j. Roles with delivery and recommended PPE.**
 - i. Labor nurse - Don PPE when entering room, manage patient labor, exit and Doff PPE when immediate PP care completed.
 - ii. Stork support – Don PPE, receive newborn, dry, place hat, assess APGAR score, call NICU to room if needed, present covered newborn to the Newborn nurse in PPE at the door for transfer to Newborn care area, remain in delivery to assist labor nurse, exit and Doff PPE.
 - iii. Newborn nurse – Don PPE and prepare to accept newborn from stork support and transfer to assigned care area
 - iv. Delivery provider – Don PPE plus water barrier for delivery, clamp cord without delay, hand newborn to Stork support, complete delivery with all needed management for lacerations/hemorrhage, exit and Doff PPE
4. Cesarean Delivery – OR 4338 on the 4th floor will be prepared for cesarean delivery of COVID positive and PUI patients. This OR has an adjoining resuscitation room to allow for immediate separation of the infant.
- a. The patient will be transported by Airway/OR Management guidelines to 4338.
 - b. The RN/Provider team in the labor room to hand off the patient to donned team at the patient room door.

- c. The transport team will enter the OR and assist with transfer to the OR bed, placement of Foley catheter and cautery grounding pad.
 - d. PPE including N-95 mask, procedure mask and face shield will be donned prior to entering the OR and a procedure gown and gloves be donned after scrub and entry to the room.
 - i. A new member of the team should only enter the OR after intubation/extubation in an emergency. Ideally, they will wait 15 minutes after intubation/extubation and don PPE prior to entry into the OR.
 - ii. Surgical PPE will be made available directly outside the OR door in this situation.
 - e. Once the procedure is started the doors will remain closed as much as possible.
 - f. If the patient requires intubation the doors must remain closed for 15 minutes to allow for air exchange.
5. Cesarean management.
- a. When the decision is made for cesarean, the attending OB will assure adequate coverage for L&D immediately at the time of the decision.
 - b. Limit OR personnel – one surgeon if possible, one scrub, one circulator, one anesthesia provider (two required for GETA or anticipated placement of neuraxial block), one NICU. The support person will not be allowed to accompany the patient to the OR.
 - c. The newborn will be taken to the adjoining resuscitation room by the Stork support nurse to admit or hand off to NICU team and not return to the OR.
 - d. Once an intubated cesarean starts, the doors must stay closed for 15 minutes. The patient will be managed based on current Guidelines for the Parturient with COVID-19 Suspected or Confirmed Infection in the Perioperative Environment.
 - e. The RN/Provider team in the labor room to hand off the patient to donned team at the patient OR door to move to recovery.
 - f. **Roles for transport and cesarean management and recommended PPE.**
 - i. Labor nurse
 - 1. Don PPE when entering room, prepare patient for transfer (clean blanket over patient, maintain patient mask), transfer patient – covered and masked – wipe cart as it exits the door and is received by stork support and transfer nurse, Doff PPE.
 - 2. Don PPE, prepare to accept patient at OR door at completion and prepare to accept patient at OR door, move to designated recovery site.
 - ii. Stork support
 - 1. Don PPE and accept patient on wiped cart and transfer to OR.
 - 2. Maintain PPE in OR, add water resistant/sterile barrier to accept newborn from operating field, Doff PPE and Exit OR.
 - iii. Transport nurse
 - 1. Get uterotonic medications, glue and ice cup, Don PPE and accept patient on wiped cart from labor nurse and transfer to OR.

2. Maintain PPE and assist with spinal placement, remove cart from OR and clean, Doff PPE. Serve as support outside OR if additional supplies need to be brought to the circulating nurse.
 3. Don PPE, prepare to accept patient at OR door at completion and prepare to accept patient at OR door, move to designated recovery site.
- iv. Circulating nurse
1. Don PPE in the OR prior to patient arrival, complete count with scrub, assure Foley catheter and cautery pad placement, place safety belt.
 2. Complete OR documentation, accept cleaned cart for patient from transport nurse in corridor, assist in moving patient to cart, wipe cart as exiting and hand off to transport and labor nurse at OR door, Doff PPE and Exit OR.
- v. Scrub tech
1. Don surgical PPE in the OR prior to patient arrival, complete count with circulating nurse, complete procedure.
 2. Assist in moving patient to cleaned cart, Doff PPE and Exit OR.
- vi. Anesthesia
1. Don PPE and prepare planned anesthesia prior to patient entry, complete anesthesia process.
 2. Assist in moving patient to cleaned cart, Doff PPE and exit the OR.
 3. Don new gown and gloves and assist with transport to designated recovery site
- vii. Attending OB physician
1. Make decision regarding cesarean (recommend this done remotely), assess if assistant is required
 2. Don surgical PPE in the OR prior to patient entry, complete case, Doff PPE and exit the OR.
 3. If patient in room prior to surgeon entry, surgical PPE will be made available directly outside the OR door.
- viii. Resident OB
1. Don surgical PPE in the OR prior to patient entry if needed, complete case with attending, assist with moving patient to cleaned cart, Doff PPE and exit the OR.
 2. If patient in room prior to surgeon entry, surgical PPE will be made available directly outside the OR door.
- ix. Newborn Resuscitation Team
1. Don PPE and prepare to receive newborn from OR, complete newborn care in resuscitation room.
 2. Place newborn in transport, clean all external surfaces and transfer newborn at door to Newborn transfer, exit resuscitation room and Doff PPE.

3. If PPV is given, once infant leaves the room the doors to the room must be closed after leaving.
 - x. Newborn transfer
 1. Don PPE, accept wiped newborn transport from Newborn Resuscitation Team.
 2. Transfer to Newborn care area, Doff PPE.
 - xi. Newborn nurse
 1. Don PPE, prepare to accept newborn and transfer to assigned care area.
 2. Transfer to Newborn care area (covering infant face and head), Doff PPE.
 - xii. Dofficers
 1. A Dofficer will be present at doffing sites.
 2. A second Dofficer will be responsible for following the transport team to the OR and assure any touch points of the patient bed on walls and doorways.
6. Cesarean recovery management.
 - a. Regional anesthesia
 - i. Return to negative pressure room for recovery.
 - ii. Disposition after initial postoperative recovery will be based on maternal status.
 - b. General anesthesia
 - i. Patients that are to extubated will be moved to negative pressure room for extubation and initial postoperative recovery based on maternal condition.
 - ii. Disposition after initial postoperative recovery will be based on maternal status.
 - iii. Patients that remain intubated will be transported to a critical care area
 - iv. If a negative pressure room is unavailable, patient will emerge and extubate in the operating room and be subsequently moved to an appropriate negative pressure room based on maternal condition.
 - v. Deterioration in maternal status after delivery has been documented.
7. Postpartum Care – the postpartum period is a time of risk for significant hemorrhage especially in the first 24 hours. The 4th floor of University Tower is uniquely equipped to handle these situation with immediate availability to Ob and Anesthesia providers, nursing and medications. Continued care for the delivered patient after this immediate time frame is from 1 to 4 days based on route of delivery complications.
 - a. Asymptomatic COVID+/PUI (test pending)
 - i. Patients with estimated length of stay approximately 24 hours may remain on 4UE until discharge
 - ii. Transfer to a COVID unit after this period of time should be based on estimated length of stay >24 hours, newborn status and availability of beds on the COVID units.
 - b. Postpartum patients with COVID symptoms

- i. Patients who become symptomatic after delivery will be assessed and transferred to the appropriate COVID unit and discharge planning will be based on patient status. The newborn will remain in appropriate newborn care based on gestational age but will not be transferred with the mother to a COVID unit.
 - ii. Patients that require transfer in the first 24 hours after delivery will have a L&D nurse accompany the patient to the COVID unit for appropriate postpartum/postoperative care.
 - iii. L&D staff will collaborate in the COVID unit staff as needed for postpartum care, breastfeeding assistance and postpartum discharge planning.
8. Newborn Care will be conducted based on the NICU/Newborn COVID+/PUI Working Guidelines for Nebraska Medicine