Nebraska Medicine
COVID-19 Obstetric Screening Guidelines

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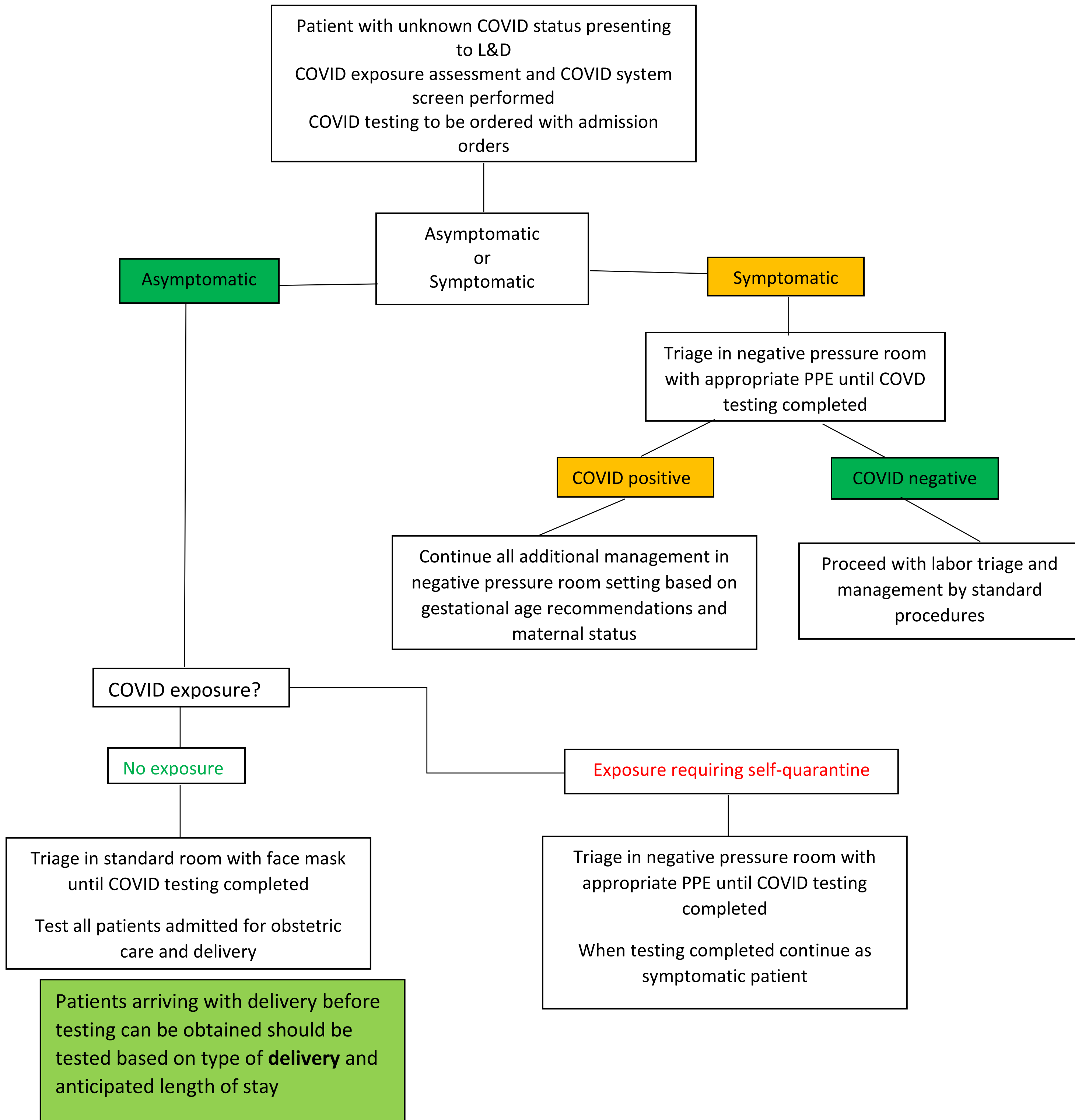

Guidelines for Obstetric Care with COVID-19 Suspected or Confirmed Infection in Labor and Delivery

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A. Initial Triaging 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. Rooms 4422 and 4424 can be utilized are needed. If these rooms are not available triage will take place on 4E rooms.
      b. Visitors will be limited to one support person that will remain the same throughout the entire stay. Visitors will remain masked through the entire hospitalization.
      c. Don all standard COVID PPE before entering the patient room.
      d. 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
      e. 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.

f. 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.

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 googles 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 existing 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 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, Exit OR and Doff PPE.
        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.
            4. Circulating nurse
                a. Don PPE in the OR prior to patient arrival, complete count with scrub, assure Foley catheter and cautery pad placement, place safety belt.

    b. 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, Exit OR and Doff PPE

5. Scrub tech
    a. Don surgical PPE in the OR prior to patient arrival, complete count with circulating nurse, complete procedure.
    b. Assist in moving patient to cleaned cart, Exit OR and Doff
6. Anesthesia
    a. Don PPE and prepare planned anesthesia prior to patient entry, complete anesthesia process.
    b. Assist in moving patient to cleaned cart, Exit OR and Doff PPE.
7. Attending OB physician
    a. Make decision regarding cesarean (recommend this done remotely), assess if assistant is required
    b. Don surgical PPE in the OR prior to patient entry, complete case, Exit OR and Doff PPE.
    c. If patient in room prior to surgeon entry, surgical PPE will be made available directly outside the OR door.
8. Resident OB
    a. Don surgical PPE in the OR prior to patient entry if needed, complete case with attending, assist with moving patient to cleaned cart, Exit and Doff PPE.
    b. If patient in room prior to surgeon entry, surgical PPE will be made available directly outside the OR door.
9. Newborn Resuscitation Team
    a. Don PPE and prepare to receive newborn from OR, complete newborn care in resuscitation room.
    b. Place newborn in transport, clean all external surfaces and transfer newborn at door to Newborn transfer, exit resuscitation room and Doff PPE.
    c. If PPV is given, once infant leaves the room the doors to the room must be closed for 60 minutes after leaving.
10. Newborn transfer
    a. Don PPE, accept wiped newborn transport from Newborn Resuscitation Team.
    b. Transfer to Newborn care area, Doff PPE.
11. Newborn nurse
    a. Don PPE, prepare to accept newborn and transfer to assigned care area.
    b. Transfer to Newborn care area (covering infant face and head), Doff PPE.
12. Dofficers

a. A Dofficer will be present at doffing sites.
b. 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. Newborn Care
    a. Vaginal delivery
        i. Newborn will be placed on the warmer in the delivery room for initial assessment and evaluation.
        ii. With planned separation the newborn will be moved to another room with appropriate covering to comply with transport guidelines.
        iii. If separation is not desired by the mother after counseling, the newborn will be kept 6 feet away from the mother unless she has a mask on.
    b. Cesarean delivery
        i. The newborn will be taken to the recovery room adjacent to the OR for immediate assessment and evaluation.
        ii. With planned separation the newborn will be taken from the OR resuscitation room to another room with appropriate covering to comply with transport guidelines.
        iii. If separation is not desired, the newborn will be taken to the mother's recovery room and kept 6 feet away from the mother unless she has a mask on.
    c. Circumcision will not be completed prior to discharge for the COVID/PUI male newborn.
    d. Neonatal response levels
        i. Level 0 – A call that would typically require NICU presence but very low risk of intervention or admission – NICU team waits in the hall – no use of PPE.
        ii. Level 1 – A call that will typically require NICU to manage infant with minimal interventions – NICU team of 3 (Provider, Transport RN and RT) enter the room – two additional team members (resuscitation RN and an

additional provider (resident)) await outside the room, no use of PPE for those outside.

iii. Level 2 – A call that will typically require complex NICU management in the OR. (Extreme prematurity, poor strip, HIE) 4-5 NICU staff will enter the resuscitation room (Original 3 plus resuscitation RN and an additional provider (resident or neonatologist).

iv. Level 3 – CODE Blue whenever there is an infant in distress the code button MUST be pushed and all team members will respond (all must use PPE).

e. Transportation

   i. Plan to resuscitate in the negative airflow room in which the patient delivers.

      1. One NICU team member in N95 PPE will enter mother's room and receive the infant.
      2. A blue towel will be placed over the infant including head and face.
      3. Infant will be walked directly to resuscitation room where additional two NICU team members await in PPE.

   ii. The infant will be resuscitated on a warmer and transported to NICU in the transport incubator **OR** infant will be resuscitated on an open OMNI bed and transported to NICU in the closed ONMI Bed.

   iii. When the infant is ready for transport - Incubator will be shut and major external surfaces will be wiped down near the closed door then the door will be opened and an external team member in PPE will take the infant to the NICU for admission.

   iv. Remaining resuscitation team will then follow doffing procedures saving N95 masks for reuse and UV sterilization at the end of the shift.

   v. If the infant is to be a PUI in insolation in Newborn / Post-Partum one member of the resuscitation team will pass the infant to a donned N95 protected person in the hall and the infant will be covered with a blue towel and walked to the isolation room.

   vi. All team member to follow PPE doffing and PPE conservation protocols per Nebraska Medicine current practice.

f. Admission to NICU

   i. Same indications for admission as non-PUI and non-COVID-19 infants.
   ii. Negative airflow rooms will be utilized.
   iii. One nurse will cohort with these PUI infants.
   iv. One provider (Neonatologist) will enter the room.
   v. Back up of one NNP will be identified to enter in an emergency.

g. Newborn bath should not be delayed to 24 hours, but should be performed after infant's temperature has stabilized shortly after delivery.