Cincinnati Wide Guidance for the Newborn Care of Infants Born to COVID-19 Positive or Suspected Mothers (5/5/20)

PROCEDURES AND KEY POINTS

As more cases of the novel coronavirus (COVID-19) are identified in our community with increased testing, we are providing the following guidelines of care related to the infant(s) and their healthcare providers. These guidelines will be subject to change based on changing dynamics of the pandemic regionally. These recommendations are based on expert opinions and we understand that resources may dictate changes from this guideline. Current evidence suggest that infants are not having vertical transmission or are critically ill at birth. Each institution is encouraged to have a maternity guideline for the care of the positive COVID-19 and PUI mother.

1. **Newborn Delivery Team for COVID 19 positive or PUI:**
   - Only **essential personnel** shall be in the room at the time of delivery, including the number of resuscitation personnel based on NRP recommendations.
   - The neonatal resuscitation team should **NOT routinely** attend deliveries solely due to the concern for COVID-19 as the vast majority of babies born to mothers with COVID-19 have been healthy. Only notify the neonatal resuscitation team if resuscitation is anticipated based on standard indications (maternal/fetal distress, prematurity, congenital anomalies, etc.).
   - Although the likelihood of infection of the newborn and risk of aerosolization are considered to be low, consistency of protection with **Aerosolized Precautions (face shield, goggles, N95/PAPR, gown, gloves)** is advised during delivery attendance of a positive or PUI mother. If N95/PAPR masks are limited, it is acceptable to wear Aerosolized Precautions with surgical masks.
   - **Do not** perform delayed cord clamping in those infants ≥ 32 weeks.

2. **Maternal/Infant Immediately Following Delivery:**
   - The many benefits of mother/infant skin-to-skin contact are well understood for mother-infant bonding, increased likelihood of breastfeeding, stabilization of glucose levels, and maintaining infant body temperature and though transmission of COVID-19 after birth via contact with infectious respiratory secretions is a concern, the absolute risk of transmission and the clinical severity of COVID-19 infection in infants are not clear.
   - The determination of whether or not to separate a mother with known or suspected COVID-19 and her infant should be made on a case-by-case basis using **shared decision-making** between the mother and the clinical team. Considerations in this decision include:
     - The clinical condition of the mother (symptomatic vs. asymptomatic) and of the infant.
     - COVID-19 test results of mother (confirmed vs. suspected) and infant (a positive infant test would negate the need to separate).
     - Desire to breastfeed.
     - Facility capacity to accommodate separation or co-location.
     - The ability to maintain separation upon discharge.
     - Other risks and benefits of temporary separation of a mother with known or suspected COVID-19 and her infant

- If the decision is for **co-location**, measures to reduce the risk of transmission from mother to infant should be performed using shared decision-making including the following:
    - Keep the **newborn ≥6 feet away from the mother**, and also using controls like physical barriers (e.g., a curtain between the mother and newborn) if possible.
    - Mothers who **choose to breastfeed** should put on a face mask and practice hand hygiene before each feeding. These measures should be utilized for bottle feeding as well.
    - The facemask should remain in place during contact with the newborn and staff members.
- If the decision is for **separation**:
    - Infants with suspected COVID-19 should be isolated from other healthy infants.
    - If another healthy caregiver or staff member is present to provide care such as diapering, bathing and feeding for the newborn, they should use droplet precautions (gown, gloves, face mask, and eye protection). Currently, we recommend avoiding admitting asymptomatic, otherwise healthy infants to the NICU due to concerns of transmission to fragile preterm neonates.
- **Bathe** the infant as soon as he/she is stable. Do not wait until 12 hours of age.
- Opiate-exposed babies at risk for NOWS born to mothers with confirmed COVID-19 may be considered to be admitted to the SCN/NICU during their observation period so they remain in a single room in the event they require opiate-replacement therapy.

3. **Newborn Care:**
    - **Droplet precautions** should be used for routine care.
    - **Aerosolized Precautions** should to be used during events at high risk for aerosolization. These include:
        - **Patient actively receiving nebulizer therapy**
        - **Patient receiving non-invasive ventilatory support (high flow nasal cannula, CPAP) or any other form of invasive mechanical ventilation**
        - **Code events**
        - **Endotracheal intubation/extubation.**
        - A Healthcare Provider that has not had fit testing in the past 12 months for the specific N95 mask that they are donning SHOULD NOT consider a N95 mask fully protective. In cases where aerosolized droplets are likely (above), a Powered Air Purifying Respirator (PAPR) should be worn.
    - Well newborns should receive all indicated care, including circumcision if requested

4. Infant Testing: during times of limited availability, testing will be as directed by Infection Prevention/Control in conjunction with the State Board of Health.

- Consider nasopharyngeal swab collected after 24 hours of age to avoid detection of transient viral colonization and to facilitate detection of viral replication.
- Families should continue with stringent hand washing and precautions at home, as test results are only indicative of the infant's status at the time of testing.

5. NICU/SCN Visitation:

- **No visitor with confirmed or suspected** COVID-19, nor possible exposure to confirmed or suspected COVID-19 infected person, shall be permitted to enter the NICU.
- **Asymptomatic partner** may visit after 14 days of last exposure to the positive mother, or after 2 negative tests 24 hours apart.
- During this time for all patients, NICU visitation will be restricted to the two bracelet holders.
- For a **COVID 19 Positive or PUI Mother**, she will be encouraged to identify a non-household, non-PUI, healthy individual to be the well caregiver for her infant.
- Encourage use of telemedicine for those parents not allowed to visit.
- If the newborn is uninfected but requires prolonged hospital care for any reason, the mother will not be allowed to visit the infant until she meets the CDC recommendations for suspending precautions.
- **Mothers with COVID-19 and symptomatic or positive household partner** should not visit infants requiring neonatal intensive care until:
    - Resolution of fever without the use of antipyretics for at least 72 hours *and*
    - Improvement (but not full resolution) in respiratory symptoms *and then*
    - Negative results of a molecular assay for detection of COVID-19from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart.
    - If testing is not available as an outpatient, then mother may return if no fever for 72 hours, and improvement in respiratory symptoms, and no symptoms for greater than 7 days.

6. Breast Feeding:

- Mothers should be encouraged to provide breast milk for her infant. Whether and how to start or continue breastfeeding should be determined by the mother in coordination with her family and healthcare providers. A mother with confirmed COVID-19 or who is a PUI should take all possible precautions to avoid spreading the virus to her infant.
- During temporary separation, mothers who intend to breastfeed should be encouraged to express their breast milk to establish and maintain milk supply. If possible, a dedicated breast pump should be provided. If expressing breast milk, the mother should wash her hands before touching any pump or bottle parts and follow manufacturer recommendations for proper pump cleaning after each use. If possible, consider having someone who is well feed the expressed breast milk to the infant.
- If a mother and newborn co-locate and the mother wishes to feed at the breast, she should put on a face mask and practice hand hygiene before each feeding.

7. Infant Discharge:

- **Infant shall be discharged when otherwise deemed medically ready.**
- A healthy individual designated to care for the infant shall be identified when possible. Both infant and mother shall remain in droplet isolation while leaving the building: Infant shall be placed in an infant carrier and a loose blanket placed over the seat while in the hallway (to be removed once in the vehicle).
- **Direct physician to physician contact should occur prior to discharge so appropriate precautions can be taken upon patient's arrival.**

- **Consider telehealth if necessary, for discharge instructions with the mother and the designated care giver if the mother is positive.**
- Symptomatic mothers who were separated from their infants in the hospital should continue separation until (a) she has been afebrile for 72 hours without use of antipyretics, and (b) she has improvement in respiratory symptoms, and (c) at least 7 days have passed since symptoms first appeared; OR she has negative results of a molecular assay for detection of COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart.
- Symptomatic mothers and infants who co-located in the hospital should continue protective measures including limited contact (>6 ft away) and continue to wear masks until (a) she has been afebrile for 72 hours without use of antipyretics, and (b) she has improvement in respiratory symptoms, and (c) at least 7 days have passed since symptoms first appeared; OR she has negative results of a molecular assay for detection of COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart.
- Asymptomatic mothers who tested positive COVID-19 who were separated from her infant in the hospital, should continue separation for 7 days since the date of her first positive COVID-19 diagnostic test and has had no subsequent illness. She should continue to limit contact (>6ft away) and wear a facemask for an additional 3 days.
- Asymptomatic mothers who tested positive for COVID-19 who co-located with her infant in the hospital should continue protective measures including limited contact >6ft away and wearing a facemask for a total of 10 days from the date of her first positive diagnostic test.

8. Infant Readmission:

- Infants born to mothers with confirmed COVID-19 infections or infants that remain under investigation for COVID-19 at the time of discharge and remain **asymptomatic** (afebrile without respiratory symptoms) may be considered for readmission.
- If needed, the same precautions should be exercised as in the initial stay (droplet isolation in private room).
- If infants have fever or respiratory symptoms, they should be admitted to the NICU at Cincinnati Children's Hospital.
- Infants without known or suspected exposure to COVID-19 that do not have respiratory symptoms or fever may be readmitted as typically indicated (hyperbilirubinemia, poor feeding, etc.).

The Neonatal Provider is on call is available 24 hours a day to assist with assessment and decision-making regarding SCN/NICU admission and Newborn Care and Discharge.

References:

- American Academy of Pediatrics (AAP) Management of Infants Born to Mothers with COVID-19 Date of Document: April 2, 2020
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