SSM Health and SLUCare Neonatology and Newborn COVID-19 Guidelines for COVID-19 Positive patients or Patients under investigation (PUI)

These guidelines are based on current CDC guidelines with the Royal College of Pediatrics and Child Health with input from SLUCare neonatology, early informal AAP guidelines (not yet published), and SSM Glennon Care pediatric group. ***They are subject to change as recommendations change and are being routinely revised twice weekly.***

Mother with confirmed COVID-19 infection or PUI admitted for delivery:

1. Limit personnel to those needed to resuscitate a baby.
    - For a routine, term newborn it may not be necessary for physician attendance. (unchanged from current NRP recommendations).
    - For resuscitations needing an advanced provider, please limit to those needed. For example:
        - a meconium delivery will likely need only one physician or NNP.
        - a high-risk delivery (extreme prematurity, OB STAT, etc.) will likely require more than one provider.
2. For lower risk deliveries and for ALL low-risk deliveries expected to extend PPE (such as scheduled caesarian deliveries or those for failure to progress), consider having the advanced provider standby on high droplet exposure level of protection (respirator, gloves, isolation gowns and googles/face shield).
3. Limit the equipment brought into the room to only what is expected to be needed. Additional equipment can remain outside the room to be brought in if needed.
4. Delayed cord clamping can be conducted per standard practice
5. Transport baby on moderate droplet exposure level of protection (surgical mask, gloves, isolation gown & googles/face shield) to NICU, if needed, in closed incubator.
6. Personnel present, equipment needed in the room, and transport of baby should be discussed in the team huddle prior to delivery.

Provider PPE for mothers with confirmed COVID-19 infection or PUI:

1. Moderate droplet exposure level of protection (surgical mask, gloves, isolation gown & eye protection) is recommended for routine care and infant stabilization.
2. If resuscitation is expected or initiated (intubation or CPAP), all persons in the room should use high droplet exposure level of protection (respirator, gloves, isolation gown & eye protection) during the procedure and until the time safe for reentry without needing a high droplet exposure level of protection determined by the Plant Ops for the specific room.
3. If PPV is delivered, utilize an inline HEPA filter appropriate for neonates (if available).
4. PPE to be donned and precautions taken should be discussed in the team huddle prior to delivery

Reference: https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html)

For infants admitted to a NICU or Special Care Nursery:

1. Negative pressure rooms are ideal after admission, but if not available, use a single patient room with the door closed, and use moderate droplet exposure level of protection (surgical mask, gloves, isolation gowns & eye protection) if no aerosolization risk.
2. All infants should be placed inside closed incubators.
3. If an aerosolizing procedure occurs (intubation, open suctioning, CPAP or HHNC flow) in the room, all persons in the room should use high droplet exposure level of protection (respirator, gloves, isolation gown & eye protection) during the procedure and until the time safe for reentry without needing a high droplet exposure level of protection determined by the Plant Ops for the specific room.
4. Breast milk pumping using a surgical mask and hand hygiene by the mother is encouraged.

5. Because visitor policies may prevent discharged mothers who are COVID-19 positive or their close contacts from visiting the hospital, each ministry needs to have a process where breast milk can be collected by staff at the hospital entrance and delivered to the infant's room.
6. At the current time, neonates presenting to the ED from home and who need hospital admission are not being admitted to the NICU or SCN. This may change depending on the number of COVID+/PUI cases being admitted to the hospital and bed capacity.

Regarding testing, isolation and feeding for patients with suspected or confirmed maternal COVID-19 infection:

1. In general, do not test asymptomatic full term babies for the virus. If the otherwise normal full-term baby develops respiratory symptoms with no alternative explanation, consider testing. Testing in suspected cases should be done at 24 hours of age and 48 hours. Testing is currently available in St. Louis through the St. Louis SSM Network Microbiology lab. The test takes 7 hours to run and will be run twice a day. Testing is currently available in the WI state lab and has a projected 36-hour turnaround time.
2. It does not appear that infants born to women with COVID-19 infection are at increased risk for severe complications. Transmission after birth via contact with infectious respiratory secretions is a concern.
3. Colocation (sometimes referred to as "rooming in") of the newborn with COVID-19 positive or PUI mother in the same hospital room should occur. This includes a PUI with symptoms, that but does not meet the current threshold for COVID-19 testing.
4. **Infants born to COVID-19+ mothers/PUIs are considered PUI.**
5. The infant should be cared for 6 feet away from the mother by a healthy caregiver (another family member or nurse). A curtain or another barrier should be placed between the mother and infant. The caregivers should use low droplet exposure level of protection (surgical mask and gloves). If the mother is unable to care for the baby and there is no other care giver, the baby may be transferred, as a boarder, to an isolation capable room (single room or cohorted area with multiple PUI infants).
6. Breastfeeding**:** During the temporary colocation 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. Prior to expressing breast milk, mothers should practice hand hygiene. This expressed breast milk should be fed to the newborn by a healthy caregiver.
7. If a mother and newborn do room-in and the mother wishes to feed the infant at breast, the unknown risks of virus transmission should be discussed with her. If she still desires to breastfeed, she should put on a facemask and practice hand hygiene before each feeding.
8. If a mother is a PUI but does not meet criteria for COVID-19 testing, the infant should be cared for 6 feet away from the mother by a healthy caregiver as described above, until a risk-based assessment can be made. This should be done in conjunction with local newborn medical leadership, with consultation with infection prevention, as appropriate. This decision could be made prior to delivery, if time allows.
9. If mother is a PUI or is COVID-19 positive, isolation may be discontinued when mother is
    a. fever free (<100.0F) for >72 hours without taking medications for purpose of treating a fever, AND
    b. symptom free, AND
    c. at least 7 days after onset of symptoms (whichever criteria occurs last).

    Given the risk of prolonged shedding, it is recommended that mother don a mask when handling infant until 14 days after onset of symptoms.

https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html
https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html

Regarding newborn discharge:

1. For infants with pending testing results or who test negative for the virus that causes COVID-19 upon hospital discharge, caretakers should take steps to reduce the risk of transmission to the infant, including following the Interim Guidance for Preventing Spread of Coronavirus Disease 2019 (COVID-19) in Homes and Residential Communities.
2. Infants can be discharged home when clinically indicated (even if maternal testing is still pending or is positive). An asymptomatic, healthy term newborn, therefore, can be discharged with normal discharge timing.

3. If COVID-19 test results on mother are pending or are confirmed newborn hearing screening should be done with low droplet exposure level of protection (surgical mask, gloves).

https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html

Visitation policy for SCN/NICU :

1. For all infants, both parents (or one person+ mother) allowed to visit for 3 days after delivery. After that it is one pre-identified individual. Exceptions can be made at the discretion of the nursing leadership/medical provider under extenuating circumstances (e.g. mental health/capacity of the mother). A process should be developed at each ministry.
2. For infants of PUI or COVID-19+ mother, it is unclear how long COVID-19+ mothers shed the virus after becoming asymptomatic. They should be allowed to visit as explained in #9 in previous section wearing a surgical mask for 14 days from onset of symptoms. More guidance is awaited from infection prevention.
3. Some hospitals allow mothers to remain under “self-care” or “boarding” following discharge if their baby is in SCN/NICU. They should be screened daily before entering the NICU like all visitors.