This guideline applies to care of infants 35.0 weeks gestation and older who meet criteria for admission to the UAB Newborn Nursery / Mother Baby Unit.

As data and guidelines change rapidly, these guidelines will be replaced or changed on an ongoing basis. Also check https://www.oneuabmedicine.org/coronavirus for most recent update.

See also: PPE Guidelines for High Risk Infant Care and Pediatric Delivery Team @ https://www.oneuabmedicine.org/coronavirus

**Background information:**

It is not currently known if a pregnant woman with COVID-19 can pass the virus to the fetus or baby during pregnancy or delivery. We do not know what if any risk is posed to infants of a pregnant woman with COVID-19. We do not know if mothers with COVID-19 can transmit the virus via breast milk, although limited studies indicate that the virus was not detected in breast milk. The major issue is that the mother’s respiratory secretions pose an infection risk after birth to the baby as well as healthcare workers. Women are currently tested for COVID-19 prior to scheduled C Section deliveries or inductions. Women who present in labor who have not had a scheduled test are tested on admission.

**Definitions:**

**Confirmed COVID-19:** Mother has a positive test for Sars-Co-V-2 / COVID-19.

**Person Under Investigation (PUI):** Mother has at least 1 symptom of COVID-19 (objective or subjective fever, cough, shortness of breath or myalgia) or has had a close contact with a COVID-19 patient in the last 14 days; but, her COVID-19 test has not yet resulted.

**COVID-19 Pending:** Asymptomatic patient with no known contact with COVID-19 patient. Maternal test result pending.

**COVID-19 Negative:** Mother had a negative COVID-19 test

**Infants > 35 Weeks Gestation Expected to be Admitted To Newborn Nursery:**

**COVID-19 Positive Mother or PUI in Labor or planned C/S:**

- OB and L & D staff should notify the mother of recommendation to separate mother and infant at birth.
- If mother declines separation or requests more information
  - The mother should be provided with a copy of *Patient Handout for Mothers with COVID-19 Infection*.
  - The Newborn Nursery attending on call should be notified and assisted in having a phone conversation with mother.
  - If the mother has a cough that cannot be controlled or other respiratory symptoms including shortness of breath, separation should again be strongly recommended.
  - At the end of the phone conversation the Newborn Nursery attending should notify L & D staff and Mother Baby shift leader of the mother’s final decision re: infant care and document the conversation and the mother’s decision in a communication note in the mother’s medical record.
Newborn Care for Infants Born to COVID-19 + or PUI Mothers:

- L & D staff should notify Peds Delivery team (if they are indicated at delivery) and DCT of maternal status.
- **Infant will be treated as a PUI.**
- Healthcare staff to follow current PPE guidelines posted at [https://www.oneuabmedicine.org/coronavirus](https://www.oneuabmedicine.org/coronavirus)
- Vaginal deliveries: infant initial evaluation should take place on warmer in delivery room, mother should be wearing a mask.
- C/S deliveries: initial infant evaluation should take place in the resuscitation hall.
- When infant is deemed stable for admission to NBN the infant will be transported to NBN Isolation Nursery (room 6334/6333) by DCT to complete admission.

**If COVID-19 + or PUI Mother has declined separation from infant:**

- The Peds Delivery team and / or the DCT should confirm that the Newborn Nursery attending has spoken to the mother and documented her decision declining separation from the infant.
- **Before the infant is placed Skin to Skin** the mother should wear a mask covering her mouth and nose, perform hand hygiene with hand sanitizer, put on a clean hospital gown, and wipe her chest with a bath wipe. (Note: L & D Staff will need to assist her with this).
- The infant will go to MBU with the mother and Room in with Precautions:
  - Mother should continue to wear a mask covering her mouth and nose at all times. She should perform hand hygiene, clean any parts of her chest that have not been covered with a gown with a bath wipe and put on a clean gown each time before handling or breastfeeding the infant.
  - MBU staff will continue to provide education for and reinforce these precautions.
- When mother is not providing direct care to her infant the infant should be in the bassinette placed at least 6 feet away from the head of mother’s bed.
- If the mother is unable to participate in the care of her infant because of medical complications, medication side effects, or extreme fatigue or if she develops a cough that cannot be controlled or shortness of breath, the infant should be taken to the Newborn Isolation Nursery (room 6334 / 6333).

**PUI Mother who subsequently has a negative COVID-19 test:**

- If a mother who is a PUI is determined to be negative for COVID-19 and precautions are removed; the infant may room in with mother.
- Note: if during a work up for respiratory illness another pathogen is identified on rapid flu testing or VRP, please manage the infant according to recommendations for the identified pathogen. Example: if Mom is influenza + then maternal / infant separation would continue per influenza guideline but the infant may go to the Newborn Nursery rather than the room for infants who are PUI for COVID-19.

**Women w/ COVID-19 Test Pending at delivery** (asymptomatic women w/ no COVID-19 contacts):

- While the mother’s test result is pending she should follow the same precautions for skin to skin and other contact with the newborn as for COVID-19+ women (i.e. mask at all times, hand hygiene, chest hygiene, and clean gown before infant contact) – including the initial skin to skin contact in L & D.
- Once on the Mother Baby Unit, if the infant requires care that would normally take place in the Newborn Nursery, this care should be provided in the Newborn Isolation Nursery, room 6334 / 6333 until the mother’s test result is known.
Infant testing for perinatal viral acquisition

1. Test all infants born to confirmed COVID-19 positive women
2. Molecular assay testing recommended on 2 consecutive sets of nasopharyngeal swabs collected at least 24 hours apart
3. To avoid detection of transient viral colonization and to facilitate detection of active viral replication the first test should not be collected until the infant is at least 24 hours of age
4. Asymptomatic infants born to women who are PUI will not be tested unless the mother’s test subsequently confirms COVID-19 infection.

5. Ordering and collecting COVID-19 test at UAB:
   a. Order test as COVID-19 (SARS CoV-2) Inpatient/ER only
      i. This is a restricted test, a mandatory questionnaire will open
      ii. Asymptomatic infants will not be approved for testing via the questionnaire page the hospital epidemiologist on call for test approval, enter the approving epidemiologist’s name in the form
   b. After the order is placed, an MBU staff member will need to print the patient label and walk to lab on the 2nd floor of Spain Wallace to pick up a collection kit
   c. Follow all instructions included in the kit regarding specimen collection and proper use of PPE during collection
   d. Label the specimen and walk it to the 2nd floor lab in Spain Wallace.
   e. **DO NOT SEND COVID-19 specimens through the TUBE SYSTEM** (this is an infection hazard)

Breast feeding for mothers with confirmed COVID-19 or who are PUI

- Breast milk is the best source of nutrition for most infants. However, much is unknown about COVID-19. Whether and how to start or continue breastfeeding should be determined by the mother in coordination with her family and healthcare providers. If expressing breast milk with a manual or electric breast pump, the mother should wash her hands before touching any pump or bottle parts and follow recommendations for proper pump cleaning after each use. (From: https://www.cdc.gov/coronavirus/2019-ncov/prepare/pregnancy-breastfeeding.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fpregnancy-faq.html)
- The bottle containing expressed breast milk should be wiped down with an alcohol based disinfecting wipe before storage. This expressed breast milk should be fed to the newborn by the nursing staff.

What to do if mother develops symptoms of COVID-19 during post-partum period:
- Newborn Nursery physicians should be notified of mother’s symptoms.
- Infant management to be determined on case by case basis.
- At minimum Mom should follow the precautions outlined above for mothers who decline separation; however, the baby’s physician should discuss the option of separation to reduce risk of further exposure.

Visitation:
Follow current UAB Hospital visitor policy. Currently no visitors for COVID19 + patients or PUI.

For questions or comments contact djackson@peds.uab.edu
Duration of Maternal Infant Separation / Precautions:

- The infant should remain separated from the mother and any other ill or exposed family members; or, if the mother declined separation she and any other ill or exposed family member should continue to follow precautions (mask, hand hygiene, clean gown, breast hygiene) until all of the following criteria are met:
  - At least 7 days since onset of illness and
  - At least 72 hours afebrile without antipyretics and
  - Other symptoms (cough, respiratory symptoms etc) are improving
- For asymptomatic women with a + COVID-19 test who never develop symptoms, separation should continue until 10 days after the positive test.

Discharge:

Infant will be eligible for discharge when otherwise medically appropriate for newborn discharge. If infant’s COVID19 test is positive or pending but the infant has no signs of COVID-19, discharge will be done with appropriate precautions and plans for outpatient follow-up on a case-by-case basis.

- Discharge to a healthy caregiver recommended if possible
- If there are no well / non-exposed family members to care for the infant after discharge and the infant has been separated from the mother in the hospital; the mother should be educated on precautions as noted above for women who decline separation (mask, hand hygiene, breast hygiene). These precautions apply to ALL symptomatic or exposed family members.
- The family should receive training on proper mask use, good hand hygiene. If mom is breastfeeding she should also be instructed in breast hygiene and safe handling of expressed breast milk.
- The Newborn Nursery MD should confirm that mom has receive a copy of CDC Patient Handout: Steps to help prevent the spread of COVID-19 if you are sick. [https://www.cdc.gov/coronavirus/2019-ncov/communication/factsheets.html](https://www.cdc.gov/coronavirus/2019-ncov/communication/factsheets.html) (choose: What to do if you are sick) and the UAB Patient Handout for Mothers with COVID-19. (both should be available in the NBN MD work area file cabinet). Review this information with the mother prior to discharge.
- Instructions have been created for COVID-19 patients and are available in the Patient Education section of Depart in IMPACT.
- Mother will be allowed to take her surgical mask (placed on her on admission) with her at discharge. She should be provided with an additional mask if available (cloth masks are acceptable for this purpose if available during shortage of medical masks). As of 4-21-20 there are donated masks available in the NBN attending office for this purpose.

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Further Information for Healthcare Providers to Guide Discussion with COVID-19+ women and PUI:
- The Centers for Disease Control and Prevention (CDC) recommend that mothers make the decision about how to care for their baby along with their medical team through shared decision making. (4/4/2020) [https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html)

Most of our current information about newborns exposed to COVID-19 comes from the outbreak in China where they separated newborns from the mother and other family members who had the infection. Most children infected with the virus had mild symptoms, but some became sick and needed hospitalization. There are few deaths reported in children.

The CDC recommends considering the following in your decision:

**Mother/Baby Contact**

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 through the transmission of SARS-CoV-2 after birth via contact with infectious respiratory secretions is a concern, the risk of transmission and the clinical severity of SARS-CoV-2 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:

1. **Clinical condition:** Is baby well enough to be cared for in the mother’s room, and is the mother feeling well enough to participate in the care of her infant?

2. **Desire to breastfeed.** If a mother is separated from her infant, she would need to express breastmilk to be fed to the infant by the nursing staff. This can lead to difficulty in establishing breastmilk supply, and the baby may need to be given some formula if no breastmilk is available.

   If the mother and baby are rooming in, then the baby may feed directly at the breast; the mother must wear a mask and wash her hands before picking up the baby. The American Academy of Pediatrics also recommends washing your breasts before breastfeeding.

   In either case, if a mother is expressing or pumping breastmilk, she should wear a mask and wash her hands. The pump should be cleaned thoroughly after each use and the bottles used to store milk should be wiped down with a sanitizing wipe before giving milk to the baby.

3. **Hospital ability to provide care of mother and baby separately or rooming in.** At UAB, we can offer both options; however, we are not able to offer a physical barrier between mother and baby in her room or an isolette. The baby will be in an open crib in mother’s room that can be placed 6 feet from the mother when she is not caring for the baby.

4. **The ability to keep the baby separated from anyone infected with COVID-19 after discharge.**

   People sick with COVID-19 continue to spread the virus until after all three of the following conditions are met:

   - at least 7 days after their first symptoms
   - AND at least 3 days (72 hours) since the last fever without taking fever-reducing medicine
   - AND all other symptoms (cough, breathing trouble, etc.) are improving

   People who test positive for COVID-19 but never had symptoms can spread the virus for up to 14 days from the time of the positive test.

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Some providers do not feel that it is helpful to separate a mother with COVID-19 infection from her baby in the hospital if she is not able to continue separation from all sick or closely exposed family members after discharge.

If separation is not undertaken, other measures to reduce the risk of transmission from mother to infant could include the following, again, utilizing shared decision-making:

- Using engineering controls like physical barriers (e.g., a curtain between the mother and newborn) and keeping the newborn ≥6 feet away from the mother. We do not currently have physical barriers available at UAB.
- Mothers who choose to feed at the breast should put on a face mask and practice hand hygiene before each feeding.
- If the mother is not breastfeeding and no other healthy adult is present in the room to care for the newborn, a mother with known or suspected COVID-19 should put on a face mask and practice hand hygiene before each feeding or other close contact with her newborn.
- The facemask should remain in place during contact with the newborn. These practices should continue while the mother is on Transmission-Based Precautions in a healthcare facility.
- Patients who have clinically recovered and are able to be discharged from the hospital but who have not met criteria to discontinue temporary separation and who wish to reduce the risk of transmission to the newborn should continue separation at their place of residence until cleared as described in the Discontinuation of Home Isolation for Persons with COVID-19 (Interim Guidance).
  - For more information regarding implementation of care at home, please see Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for Coronavirus Disease 2019 (COVID-19), and Preventing the Spread of Coronavirus Disease 2019 in Homes and Residential Communities.

Breastfeeding

- If temporary separation is undertaken, 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. After each pumping session, all parts that come into contact with breast milk should be thoroughly washed and the entire pump should be appropriately disinfected per the manufacturer’s instructions. This expressed breast milk should be fed to the newborn by a healthy caregiver.
- If a mother with known or suspected COVID-19 and her infant do room-in and the mother wishes to feed at the breast, she should put on a face mask and practice hand hygiene before each feeding.

Footnote:

1 Hand hygiene includes use of alcohol-based hand sanitizer that contains 60% to 95% alcohol before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves. Hand hygiene can also be performed by washing with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to alcohol-based hand sanitizer.