Interim Guidelines for Suspected and Confirmed COVID-19 in the Neonatal ICU
April 20, 2020 (replaces Interim Guidance April 3, 2020)

RATIONALE

The COVID-19 pandemic is widespread throughout the United States, including New York City. This updated guidance is for Neonatal Intensive Care Units. It is based on current information and resources available from the Centers for Disease Control and Prevention, New York Health Departments, and the American College of Obstetricians and Gynecologists (ACOG).

Vertical transmission of SARS-CoV-2 has not been conclusively documented. Thus far, SARS-CoV-2 has not been recovered from amniotic fluid or vaginal secretions. Studies have detected IgM in newborns, but the sensitivity and specificity of these tests are unknown and only a small number of infected newborns have been reported. Newborn infants have been described with pneumonia associated with detection of SARS-CoV-2. So far, SARS-CoV-1 and SARS-COV-2 have not been detected in breast milk.

However, infants could become infected during labor and delivery from contact with maternal secretions. It is unknown currently if newborns with COVID-19 are at increased risk for severe illness. It is unknown how long infected infants can shed virus.

MANAGEMENT OF NEWBORNS REQUIRING NICU CARE

Newborn infants born to mothers with confirmed or suspected COVID-19 (while awaiting test results) are Persons under Investigation (PUIs) and require isolation and testing as described below.

Transport and room placement of PUI infant

- Transport infant to NICU in isolette to single room (if available) on contact/ droplet precautions
- If infant requires CPAP, place infant in isolette prior to initiating CPAP and place filter on expiratory side of circuit to reduce aerosols.
- Airborne isolation in negative pressure room (if available) if aerosol-generating procedures are performed, e.g., intubation, open suctioning, or CPAP
- Keep infant in isolette for at least 14 days and until tests are negative for SARS-CoV-2 (see below)
- Consult with IP&C if there is a need to remove the infant from the isolette for a clinical indication, e.g., to document maintenance of body temperature prior to discharge
- Consult with IP&C if exceed single room capacity to assist with cohorting of PUI infants.
Transmission Precautions and PPE for Health Care Personnel (HCP)

- Place all PUI infants on Droplet and Contact Precautions.
- In addition, place infants receiving aerosol-generating procedures on Airborne Precautions in negative pressure room.
- HCP must wear a gown, gloves, eye protection, and surgical face mask when caring for an infant with confirmed or suspected (PUI) COVID-19
- N95 respirators are required for aerosol-generating procedures
- N95 respirators can be used when providing direct patient care to patients with confirmed or suspected COVID-19.

Testing Newborn Infant for SARS-CoV-2

- All infants born to COVID-19-positive mothers should have an NP swab specimen for SARS-CoV-2 obtained at 24 hours of age, regardless of when in pregnancy mother was diagnosed with COVID-19.
- Repeat testing guidance is provided below

<table>
<thead>
<tr>
<th>Result at 24 hours of age</th>
<th>Follow-up Testing</th>
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<tbody>
<tr>
<td>Negative</td>
<td>If infant remains asymptomatic and subsequent tests are negative, PUI status cleared at DOL 14 days&lt;sup&gt;2&lt;/sup&gt; Repeat testing should be performed on a case-by-case basis according to symptoms&lt;sup&gt;3&lt;/sup&gt; and local testing resources, e.g., ~ DOL 5 and DOL 14</td>
</tr>
<tr>
<td>Positive</td>
<td>Repeat testing and duration of transmission precautions determined in consultation with IP&amp;C on a case-by-case basis</td>
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</tbody>
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<sup>1</sup>Perform testing to assess if vertical transmission of SARS-CoV-2 occurred, regardless of when in pregnancy mother was diagnosed with COVID-19  
<sup>2</sup>Clearance of PUI status in exposed asymptomatic patients has generally been the SARS-CoV-2 incubation period of 14 days.  
<sup>3</sup>Common symptoms in older children and adults include fever, cough, shortness of breath, sore throat, fatigue, myalgia, congestion/ stuffy nose, OR diarrhea. The presentation of COVID-19 in newborns is not fully described.

Discontinuing Transmission Precautions

- Contact IP&C to discontinue Transmission Precautions for PUI infants whose tests remain negative at 14 days of life
- If an infant in the NICU was exposed to a COVID-19-positive person after birth, contact IP&C to discuss testing of newborn (e.g., 5 and 14 days after exposure and/or if infant has consistent symptoms) and to discontinue transmission precautions 14 days after exposure if the infant’s SARS-CoV-2 tests are negative.
• For infants with a positive SARS-CoV-2 test, discontinuation of Transmission Precautions will be decided on a case-by-case basis, in consultation with IP&C. See Discontinuing Hospital Isolation for COVID-19 Patients

Visitors (Parents/ Guardians)
• ONLY one asymptomatic, designated visitor is permitted (can be mother if criteria below are met) See Pediatric Visitor Guidance
  o Only one designated visitor for all infants in multiple gestation
• Provide visitors Letter for Parents/ Guardian of Pediatric Patients Explaining COVID-19 Policies
• All visitors must be screened prior to entry into the hospital and prior to entry into the NICU for symptoms consistent with COVID-19 including subjective or measured fever $\geq 100^\circ$, cough, shortness of breath, sore throat, congestion/runny nose, muscle aches, fatigue, diarrhea, or loss of taste or smell.
• Every 12 hours, all visitors will be screened as above for symptoms and fever.
• If the visitor develops symptoms or temperature $\geq 100^\circ$, they must leave and cannot serve as the designated visitor.
• Visitors with symptoms can be replaced by another visitor who will then be screened as above.
• All visitors must wear a surgical face mask throughout the facility and during their entire visit in the NICU. Visitors must practice hand hygiene before and after donning and doffing their PPE. Visitors’ gowns and gloves must be donned before entering the infant’s room or bed space and doffed before leaving the infant’s room or bed space.

MOTHER’S SARS-COV-2 TEST RESULT AND CLEARANCE AS VISITOR

Mother is COVID-19-positive and has symptoms
Mother cannot visit the NICU until cleared by IP&C and following criteria are met:
• At least 72 hours without fever and without taking medicines that treat fever, e.g., Tylenol, ibuprofen, or aspirin
• At least 14 days have passed since symptoms started
• Other symptoms have resolved

If mother is COVID-19-positive and never had symptoms
Mother cannot visit the NICU until cleared by IP&C and following criteria are met:
• At least 7 days have passed since the date of the positive test
• Has remained asymptomatic during the 7 days since date of the positive test

Mother COVID-19-negative
• If asymptomatic, can serve as designated visitor
Breast feeding
Studies to date have not detected the COVID-19 virus in breast milk. Risks and benefits of breast-feeding should be discussed with COVID-19-positive mothers who are considering breast feeding. Options include:

- Mother can express breast milk after performing appropriate breast and hand hygiene. The breast pump and components must be cleaned between pumping sessions as per hospital protocol.
- Preparation of breast milk for feeding should be performed as per hospital protocol for expressed breast milk.
- Mothers who request direct breastfeeding should wear a mask, perform hand hygiene, and breast hygiene.

Kangaroo Care
- Kangaroo care can be initiated when mothers who were COVID-19-positive are cleared to visit the NICU.

Discharging Infants
- Infants born to COVID-19-positive mother can be discharged home as per usual NICU practices. When relevant, provide mother with Discharge Instructions for Postpartum Patients.
- Infants do not need to remain hospitalized for repeat testing.
- If the baby needs medical care within the first 14 days of life, e.g., well baby care or pediatric emergency room for urgent medical issue, the mother should call in advance and explain that she was diagnosed with COVID-19 and that her baby was exposed to COVID-19 so that appropriate isolation precautions can be arranged.

Congregate events and vendors
- These events should be canceled until further notice.
- Vendors are not permitted in the hospital.

References