HCH NICU Management of Infants born to Mothers with Confirmed COVID-19 disease or who are PUIs

Subject to change pending new data / recommendations

All infants born to a mother with COVID-19 or who is a PUI

- Limit entry/exit from isolation area.
- Wear surgical mask with face shield over N95 mask so that N95 mask can be reused.
- All staff who enter isolation area should sign staff tracking sheet for each entry.

1) Place in isolation room with negative pressure
   - If on respiratory support use airborne precautions
   - If no respiratory support use droplet precautions
2) Bathe infant as soon as possible

PUI = symptomatic person under investigation for COVID-19

Note: If a parent becomes a PUI after delivery:
1) Place infant in isolation pending investigation
2) Notify NICU medical director

Test results found in same place as newborn screens:
Notes Review → Health records → External lab documents

What is the mother’s COVID test status?

Positive
1. Notify NICU Medical Director
2. Test infant for COVID-19:
   - At 24 hours and 48 hours of life send nasopharyngeal swab for COVID-19 pcr. Kit provided by lab. MD orders: Miscellaneous Lab Test “Coronavirus (COVID-19/SARS-CoV2)”
   - Call lab and ask for charge tech to pick up, do not use tube system.

Negative
Maintain isolation until mother’s COVID-19 test result is available.

VISITORS: Mother/partner with COVID-19 or who are PUI may not visit infant in NICU. Consult infection control about when the mother/partner may come off COVID-19 precautions and may visit the NICU (depending on hospital policies at the time).

PARENT UPDATES: Parents on COVID precautions will be updated by phone, not in person.

BREAST MILK: Is safe for consumption. Mothers must be instructed in proper hygiene to use when pumping. Bags and bottles should be cleaned when entering NICU. See nursing process.

DISCHARGE: Provide family instructions based on CDC guidance about how to keep their baby safe at and when to discontinue home isolation practices.
BACKGROUND INFORMATION
1) At this time, there are few data on vertical transmission to infants during pregnancy. Two reports support no vertical transmission. ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30360-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30360-3/fulltext); [https://www.frontiersin.org/articles/10.3389/fped.2020.00104/full](https://www.frontiersin.org/articles/10.3389/fped.2020.00104/full)). On March 26, 2020 case reports again raised the spectre of vertical transmission, but the data are not conclusive ([https://jamanetwork.com/journals/jama/fullarticle/2763851](https://jamanetwork.com/journals/jama/fullarticle/2763851)).

2) With regard to breast milk, CDC currently says: “In limited case series reported to date, no evidence of virus has been found in the breast milk of women with COVID-19. No information is available on the transmission of SARS-CoV-2 (the virus that causes COVID-19) through breast milk. In limited reports of lactating women infected with SARS-CoV (the virus that caused SARS), virus has not been detected in breast milk; however, antibodies against SARS-CoV were detected in at least one sample.”

3) A study of children (published Feb 14, 2020) with the virus who had an affected family member showed that none of the infants required ICU care and most had mild or no symptoms. ([https://jamanetwork.com/journals/jama/fullarticle/2761659](https://jamanetwork.com/journals/jama/fullarticle/2761659)). There is a preliminary report that when children do become ill with COVID-19, infants may be at highest risk of severe disease ([https://pediatrics.aappublications.org/content/pediatrics/early/2020/03/16/peds.2020-0702.full.pdf](https://pediatrics.aappublications.org/content/pediatrics/early/2020/03/16/peds.2020-0702.full.pdf)).

4) The CDC website is constantly evolving with new information: [https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/pregnancy-guidance-breastfeeding.html](https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/pregnancy-guidance-breastfeeding.html). Current guidance is to recommend separation of mom and infant. At this time, we are recommending separation of mom and infant for any COVID+ or PUI mom. PUI is currently defined as fever, cough, SOB, muscle ache, or sore throat. Mothers who are PUIs will be tested as soon as possible, and if the test is negative, both will come out of COVID-19 isolation.

GUIDANCE
• **Bathing:** Infant should be bathed soon as possible after birth per CDC recommendations to prevent spread of disease through bodily fluids from birth and to help ensure COVID testing accurately reflects infant disease.
• **Breast Milk:** Currently CDC states: “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. 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.” Please refer to nursing process for breast milk handling.
• **Infant Testing for COVID-19:** See Guideline on NICU Management of Infants born to Mothers with Confirmed COVID-19 or those who are PUIs. Infants require 2 tests (1 each at 24 hours and 48 hours of life) to be considered preliminarily not infected. The incubation period is up to 14 days, so a negative test at 48 hours does not completely rule out disease. We will continue to manage infants born to COVID-19+ mothers with droplet precautions until 14 days. Infants may require a COVID test on day 14 to be removed from droplet precautions. Please note, the recommendations on this are changing frequently.
• **Discharge or Transfer:** Infants should be discharged or transferred out of the NICU when NICU care is no longer required. Current CDC guidelines recommend that “caretakers should take steps to reduce the risk of transmission to the infant.” Instructions for preventing home spread can be found here: [https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html)