

## Standard Operating Procedure

<b>Interim COVID-19 Guidance: Obstetrics and Newborn Areas</b>	Effective Date	Sept. 2021
	Approval Date	
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### I. Purpose:

To provide guidance for care of obstetric patients with suspected (“person under investigation” [PUI]) or confirmed COVID-19 infection and their newborn infants (PUI infant) or infants with confirmed COVID-19 infection.

This is a rapidly evolving situation and contents of this document may become outdated; the websites below may be referenced for the most up-to-date recommendations:

- <https://www.vumc.org/coronavirus/information-vumc-employees-and-patients>
- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html>

### II. Specific Information:

#### A. Infection prevention-general considerations

1. In order to minimize the risk of transmission and ensure the safety of healthcare workers, current CDC and OSHA recommendations emphasize the importance of PPE when providing clinical care to patients on contact or droplet precautions such as a patient with suspected or proven COVID-19. Current PPE recommendations for all patient contact if patient is COVID-19 positive or being evaluated for COVID-19 (PUI) are an N95 mask, approved eye protection, gown and gloves. For patients that are not COVID-19 positive or not under evaluation for COVID-19, a surgical mask should be worn.
2. Emphasis is placed on delivering standard of care and not deviating from established clinical behavior.
3. For COVID exposed neonates, please send staff message to Kathryn Garguilo, infectious disease case manager, to enable post discharge tracking.

#### B. Universal screening of pregnant women admitted to labor and delivery

- a. Universal screening for COVID-19 of women admitted to labor and delivery, whether symptomatic or asymptomatic, has been established. The turnaround time for testing is variable, meaning some women will deliver prior to test result being available. The following guidelines are intended to help triage care based on maternal symptoms and testing status:

- i. Symptomatic mother, COVID+ or COVID pending (PUI) or testing refused: follow SOP for COVID + mother or PUI mother.
- ii. Asymptomatic mother, COVID+ or testing refused: follow SOP for COVID+ mother.
- iii. Asymptomatic mother, COVID negative prior to delivery, or it has been greater than 10 days since a positive COVID-19 admission test and mother is asymptomatic and fever free for > 24 hours: routine newborn or NICU care
- iv. Asymptomatic mother, COVID result pending at the time of delivery: initial care should follow isolation status until resulted . If maternal test is negative after delivery, continue routine newborn or NICU care. If maternal test is positive after delivery:
  1. For Stahlman NICU infants: transfer infant to closed, individual room in VCH NICU and follow SOP for infant of COVID+ mother.
  2. For newborn patients: infant can continue to room in with mother. Mother will practice masking, hand hygiene and follow breast feeding guidelines. When mother unmasked for any reason, the infant should be placed in their bassinet at least 6 feet from the mother.

**C. Care of mothers (pregnant women) with suspected or confirmed COVID-19**

1. When possible, pregnant patients who have suspected (PUI) or confirmed COVID-19 should notify Labor and Delivery (L&D) triage prior to arrival so the facility can make appropriate infection prevention preparations (e.g., identifying the most appropriate room for labor and delivery, ensuring infection prevention supplies and PPE are correctly positioned, and informing all healthcare personnel who will be involved in the patient's care of infection prevention expectations). (Source: CDC Prehospitalization, Inpatient Obstetric Healthcare Settings .)
2. The L&D team will notify NICU and 4 East shift leader, who will communicate with their team members including attending on-call. If there are infection prevention (IP) questions or concerns, a team member should contact IP at pager 615-835-1205.
3. All patients are assessed immediately upon arrival for clinical signs concerning for COVID-19 (e.g., acute onset cough, acute shortness of breath, acute loss of smell, with or without fever). Additionally, COVID-19 testing is being performed on all patients at the time of admission (as discussed above). For women who are symptomatic:
  - a. Place mother on contact, droplet, and eye protection precautions. Mother to remain masked at all times. Door signage placed.
  - b. Limit the number of healthcare personnel who enter the patient's room.
  - c. If mother is clinically unable to remain on post partum unit and requires transfer to the COVID unit, then immediately after delivery the infant will be taken to radiant warmer for drying

and assessment. After 5-minute APGARS, infant will be placed in incubator (room air) and taken to designated area within Newborn Nursery (circ room) or VCH NICU. The decision of where to place infant is determined by their clinical needs.

- d. If mother is clinically able to remain on post partum unit, then immediately after delivery (after delayed cord clamping), infant will be taken to radiant warmer to be dried and assessed until mother's face/chest can be cleaned and clean mask and clean gown applied. Infant then can breastfeed while mother wearing PPE (See Section 8-Breastfeeding below). Mother should be masked for any transports and infant should be transported in incubator.

4. Support Person:

- a. Visitation policy is subject to change at any time without notice. Two support persons who have been screened may be present in room with mother. Support persons will be screened daily on the unit or on entrance to the hospital.
- b. A support person is instructed to wear a face mask at all times while in patient room. A support person must be masked when leaving room. If a support person needs to leave the room for any reason, hand hygiene is performed upon exiting and entering the room.
- c. If a support person becomes symptomatic with fever, new respiratory symptoms (cough, shortness of breath) they should not have contact with infant and should leave the hospital.

**D. Care of Infants**

- 1. Infants born to mothers with confirmed COVID-19 and admitted to the nursery should be considered PUIs during entire hospital admission (for clearance of infants admitted to the NICU see D.11 NICU Logistics below). Infants born to PUI mothers are PUIs until maternal testing results are reported. Providers must wear PPE, including gloves, gowns, N95 mask and eye protection.
- 2. ATTENDANCE AT THE DELIVERY OF A PUI INFANT (mother is COVID-19 positive or PUI): Even routine neonatal resuscitation at delivery potentially involves the need for open suctioning of oral secretions resulting in an aerosol generating procedure (AGP).
  - a. Every attempt will be made to minimize the number of infant resuscitation team members, including having additional support personnel wait in the hallway until/unless needed.
  - b. PPE recommendations for the pediatric resuscitation team: Regardless of mode of delivery (vaginal or C-section), the resuscitation team will wear full PPE, including N95 masks, gowns, gloves, and eye protection

- (face shields or goggles), to guard against any potential aerosolization from respiratory secretions.
3. ATTENDANCE AT DELIVERY OF INFANT WITH COVID-19 NEGATIVE MOTHER: PPE recommendations for the pediatric resuscitation team, regardless of mode of delivery (vaginal or C-section), are surgical mask, gloves, gowns and eye protection (face shields or goggles).
  4. Asymptomatic infants of PUI mothers or COVID-19-positive mothers should have newborn care per standard of care.
  5. COVID-19 TESTING OF ASYMPTOMATIC INFANTS
    - a. The asymptomatic infant of a PUI mother does not need COVID-19 testing unless the mother tests positive
    - b. Infants born to COVID-19-positive mothers will have testing at 24 hours and again 24-48 hours later. Healthy infants who meet discharge criteria may have second swab collected at their newborn followup visit if their pcp office is able to collect the sample. This testing may be omitted if the pcp is unable to perform testing.
    - c. Infants of mothers who become COVID-19-positive after the infant is 24 hours of age will have COVID-19 testing sent as soon as mother's test is reported positive.
  6. ROOM IN, Asymptomatic infants born to PUI or COVID-19 positive mother who is able to remain on post partum unit. Risk and benefits of rooming in should be discussed with family.
    - a. Admit infant to an incubator in mother's room or may remain in open crib if able to establish 6 foot distancing from the maternal bed and implement measures to reduce exposure of the newborn to the virus.
    - b. Infant stays in open crib with 6 foot spacing when mother or support persons are not masked i.e. for meals or medications
    - c. A support person (defined as someone without fever and able to control respiratory symptoms) to provide care for infant while utilizing appropriate PPE is required for infant to room in with COVID + or PUI mother if mother is unable to care for infant independently.
    - d. If mother requires transfer to COVID unit, infant will be separated from mother as 7 below.
  7. SEPARATE ROOM: Asymptomatic infant born to PUI or COVID-19 + mother will be placed in incubator for transport immediately after APGARS assigned and transported to designated NBN or NICU if:
    - a. Mother is admitted to another unit outside of the HUGS system monitoring area (i.e. COVID unit)
    - b. Mother refuses masking or hand hygiene
    - c. Mother prefers infant to not room-in
    - d. Infant with any difficulty with transition requiring closer observation

In this scenario, mother pumps milk for infant and infant may be fed expressed breastmilk by support person or staff (see 9 ii Pumping below).

8. Concerns of maternal status, support person, staffing or patient rooms that impact infant placement, then nurse leadership, newborn providers and NICU team discusses options for newborn care location and duration on a case by case basis with infection prevention team.
9. BREASTFEEDING: Currently, there is no evidence of COVID-19 transmission via breastmilk. Maternal breast milk may be provided to infant and maternal milk supply should be protected with early (within first hour) and frequent (q 3 hours) pumping if mother and baby require separation. If mother does not plan to breast feed or is unable to due to their health status, infant will receive formula.
  - i. If PUI or COVID+ mother wishes to breastfeed, she should perform hand hygiene, wear a mask and a clean gown, before each feeding, while holding infant.
  - ii. If a PUI or COVID+ mother prefers not to do direct breastfeeding, infant will be bottle fed with expressed breastmilk or formula by another caregiver. Infant caregiver should perform hand hygiene and wear PPE (gown, gloves, surgical mask, and eye protection) and maintain maximum distance from mother that the room setup will allow, and mother should remain masked if infant is out of incubator or closer than 6 feet.

Pumping: Prior to expressing breast milk, mother 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. Pump should remain in mother's room
10. SYMPTOMATIC INFANT or PUI INFANT with other significant clinical concern (such as desaturations, apnea, etc.):
  - a. Provider to obtain NICU consult for consideration of transfer to higher level of care and management in NICU .
  - b. Send COVID-19 testing and consult pediatric infectious diseases as recommended, and
  - c. Contact Infection Prevention (on-call pager 615-835-1205) if questions or concerns develop.
11. NICU LOGISTICS:

- a. Inborn infants admitted to the VUH or VCH NICU whose mother is known to be COVID negative do not require testing for COVID-19 at 24 hours of life following admission to the NICU.
- b. All outborn infants admitted to the VUH or VCH NICU should be tested for COVID-19, whether maternal status is COVID-19 positive, negative, or unknown, at 24 hours of life, or on admission if greater than 24 hours old, and a second time 24 hours later.
- c. PUI infants should be admitted to single occupancy rooms in VCH NICU.
- d. PUI infants born to mothers confirmed COVID-19 positive OR PUI with pending maternal testing for COVID-19:
  - a. All such infants will be tested for COVID-19 at 24 hours of life with a repeat test obtained at least 24 hours later.
  - b. All such infants will be managed in closed isolettes unless procedures require an open isolette (Giraffe)
  - c. All providers should wear PPE including N95 mask, approved eye protection, gown and gloves while infant COVID-19 testing is pending.
  - d. In the NICU if infant COVID-19 testing is negative at 24 and 48 hours, PPE may be de-escalated to surgical mask.
  - e. If infant COVID-19 testing is positive at 24 and/or 48 hours:
    - i. Remain in single occupancy NICU bed if, in the judgement of the NICU care team, the infant still requires neonatal intensive care.
    - ii. Consider transfer to VCH 5C if, in the judgement of the NICU care team, the infant no longer requires neonatal intensive care. Any transfers to VCH 5C should be discussed with the 5C care team and any other subspecialty teams involved prior to the final decision to transfer.
    - iii. For COVID + infants who will need surgery for congenital heart disease, please see the separate SOP for those infants (NICU SOP Management of Infants with Critical Congenital Heart Disease Born to COVID Positive or Suspected COVID Positive Mothers)
    - iv. Clearance of COVID-19 positive infants can be by 1) time-based strategy: 10 days have passed since the date of their first positive COVID-19 diagnostic test, assuming they have not subsequently developed symptoms since their positive test or 2) symptom-based strategy: at least 10 days have passed

since symptoms first appeared **and** at least 24 hours have passed since last fever without the use of fever-reducing medications **and** symptoms have improved.

- f. NICU infants not COVID-19 positive at the time of birth but who become COVID-19 positive during the course of their hospital admission should be managed the same as 11.d.e.i – 11.d.e.iv in the above sections.

#### 12. NICU VISITATION

- a. Only 2 parent approved visitors (including the parents) are allowed to visit a NICU patient. Visitors must be screened daily for fever or other symptoms or exposure to COVID-19. Visitors must wear masks in all indoor public areas and must wear a mask when staff are present in the patient's room.
- b. No visitation by known COVID-19 positive mothers or support persons unless cleared for visitation as in 12 e. below.
- c. Visitation is allowed for asymptomatic and symptomatic COVID-19 + infants. Visitors must wear PPE, including surgical mask and gown.
- d. Under certain circumstances, exceptions to the visitation policy may be granted. These should be obtained through the nursing management team.
- e. Clearance of COVID-19 positive mothers or support persons can be by time-based strategy: 10 days have passed since the date of their first positive COVID-19 diagnostic test, assuming they have not subsequently developed symptoms since their positive test or symptom-based strategy: at least 10 days have passed since symptoms first appeared **and** at least 24 hours have passed since last fever without the use of fever-reducing medications **and** symptoms (e.g. cough, shortness of breath) have improved. The 10 day period is extended to 20 days if the parent or support person is immunocompromised or had severe illness. Please consult with infection prevention if there are questions or concerns regarding visitation.

#### 13. NICU SPECIAL CIRCUMSTANCES

Evaluation of the NICU patient with respiratory deterioration: for all such infants, workup should include an RPP to evaluate for viral etiology and simultaneous COVID-19 testing.

### III. Discharge:

- A. Infants who have ongoing exposure to a COVID+ caregiver, either while rooming in or after infant discharge, are considered to be PUI. The infant remains a PUI until 10 days after the caregiver is out of their isolation period. When making followup appointments for these infants, this timeframe should be taken into account so that appropriate PPE can be used at any follow up appointments.

- B. Infant who is asymptomatic and otherwise meeting other discharge criteria (including access to outpatient care) may be considered for hospital discharge even prior to maternal discharge readiness. Infant discharge may proceed to guardian as listed on birth certificate or if no second guardian is listed, then Social Work should be consulted to assist mother in identifying a caregiver to care for infant. Infant should meet usual discharge criteria per AAP guidelines.
- C. Discharge for postpartum women should follow recommendations described in the CDC: [Interim Considerations for Disposition of Hospitalized Patients with COVID-19](#).
- D. COVID-19 + Mothers: For infants with pending test results or who test negative 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](#). Discharge teaching should include reinforcement of education about reducing spread.

**IV. Follow-Up:**

- A. It is imperative that a newborn receive appropriate follow-up visits with their healthcare provider as recommended by American Academy Pediatrics Policy. When making follow-up plans, the medical home primary care provider should be called by the inpatient team and arrangement for safe followup coordinated. The specifics of this care plan will likely vary by practice and should be coordinated on an individual patient basis.
- B. Caregiver who will be caring for infant at home should continue to practice hand hygiene and if that caregiver is PUI or COVID-19 + then should do masking along with hand hygiene for care.

**V. Lead Author and Content Experts**

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**VI. Endorsement:**

Children’s Policy and Practice Committee	Month Year
Clinical Practice Committee	Month Year
Executive Policy Committee	Pending

**VII. References:**

Interim Considerations for Infection Prevention and Control of Coronavirus Disease 2019 (COVID-19) in Inpatient Obstetric Healthcare Settings. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric->



[healthcare-guidance.html](#).