

**Evanston Hospital and Highland Park Obstetrics  
COVID-19 Workflow**

**General Guidelines**

- Contact COVID-19 Team when discussion regarding whether or not COVID-19 testing should take place is required. Attending physician at both EH and HP will call the COVID-19 hospitalist team pager 1870 at Evanston if evaluation for testing is needed.
  - If COVID-19 swab is indicated, hand deliver specimen to micro. Anticipate receiving results in 24 hours.
- Contact Infection Control when evaluation of precautions is required. Notify Infection control: 9:00 – 5:00pm by using pager: EH 772-2420 HPH 779-2624. After 1700 and on weekends, Evanston Hospital and Highland Park Hospital, will call operator and request that On Call Infection Preventionist be paged.
- Pregnant patients who have confirmed COVID-19 or who are Persons Under Investigation (PUIs) should notify the obstetric unit prior to arrival so the facility can make appropriate infection control preparations.
- Patients scheduled for procedures should be called by a staff member prior to their arrival to be screened via phone.
- At Highland Park (HP) LDRP, if COVID-19 or PUI patient is expected or presents at HP LDRP, attending physician should notify MFM on call. During the day, MFM will be on Evanston L&D (847-570-2222).
- Attending physicians caring for HP patients who are PUI or COVID-19 positive at HP, consult with EH MFM early to determine if potential transfer to EH may be appropriate. Decision to transfer from HP LDRP to EH will be made on an individual basis. MFM will communicate with EH charge nurse per current practice.
- Suspected and confirmed COVID-19 patients of gestational age less than 35 weeks will be transferred to Evanston Hospital.

**Before Patient Arrives**

- At EH when a COVID-19 or PUI is expected in L&D, a multidisciplinary huddle will take place to designate a care team (Provider, RN, Assisting RN) should be assigned who will be free of other responsibilities and will be available at the time of patient arrival.
- Attending physician will request that patient park at the Women's Hospital entrance and remain in the vehicle until a staff member in appropriate PPE escorts them to L&D/LDRP. Valet should not park car.
- Place stop sign and signs specifying precautions on door. Signs kept at UC desk.
- Designate room for patient. Room G640 at EH and room 1356B at HP are negative airflow rooms).
  - Activate negative pressure in room. Room is kept at neutral pressure until negative pressure is required. G640 will alarm locally when negative pressure malfunctioning (ex: door is left open).
- Notify/assign the following people:
  - Screeners/Public Safety at Entrance
  - Charge Nurse
  - Primary Nurse
  - Attending (residents will not be asked to evaluate or care for known or suspected COVID-19 patients). On call MFM will be on site during the day, and on call overnight per current protocol.
  - At HP, the attending physician will consult HP hospitalist if needed.
    - If patient develops an oxygen requirement and/or new shortness of breath, patient will be transferred to EH.
  - ISCU Charge Nurse or HP Nursery Nurse (ISCU/Nursery Nurse will attend all deliveries)
  - OB Tech
  - Anesthesia
  - Housekeeping
  - Keep adjacent rooms available for additional COVID-19 patients.
- Obtain an isolation cart including the following supplies and place it outside of the patient room.
  - Log to record of all persons (staff and visitor) entering the patient's room. (The log can be found on the Infection Prevention and Control Pulse page).
  - Hand gel if there is no dispenser on the wall outside the patient room.

- Isolation gowns
- Green gloves
- Standard masks
- Disinfectant wipes
- Staff member's personal N95 and face shield in zip top bag for each care provider entering room.
  - N95 mask should be kept in a zip top bag – do not completely seal the bag. Face shield should be wiped prior to placing in a separate plastic bag after each use, and both bags should be kept in a large zip top bag with the staff member's name on it – do not completely seal outer zip top bag. Face shields and masks should be kept by each individual staff member. N95 masks can be reused until visibly soiled, torn, or does not pass the fit check test.
- See pink and green chart: "Admission of COVID/Respiratory Infection Patient".
- Confirm PAPR is available, in case intubation is required. See attached perioperative workflow for PAPR use.
  - If a PAPR is not available, a N95 mask covered with a surgical mask will be allowed. The N95 mask must be reused (unless visibly soiled, torn, or no longer passes the fit-check).

### Upon Patient Arrival

At time of registration, ask ALL patients AND support person presenting to L&D if they have the following symptoms:

- All patients presenting to L&D and their selected support person need to be asked whether or not they have any of the following symptoms:
  - Fever  $\geq 100^{\circ}\text{F}$  and/or chills
  - Cough
  - Shortness of breath (new/different from dyspnea related to pregnancy)
  - Sore throat
  - Muscle/body aches
  - Loss of sense of smell or taste
  - GI symptoms: nausea/vomiting/diarrhea
- Please document the answer to these screening questions in the chart:
- If "NO", process/register as usual.
- If "YES"
  - Symptomatic partners/support people should not be permitted to accompany the patient.
    - If support person displays or reports any of the above symptoms, they will leave the hospital.
  - Hand patient and asymptomatic support person an isolation mask and ask them to put it on.
    - Instruct the patient to ensure the mask covers the nose and mouth and pinch the mask over the bridge of the nose.
  - Notify Charge Nurse immediately.
  - Move the patient and support person to a room (G640 at EH and 1356B at HP, if patient is in labor)
    - Do not allow patient to remain in waiting room.
  - Charge Nurse will assign a primary RN to immediately triage patient
    - Follow steps outlined in first section, "Before Patient Arrives"
    - See Pink and Green chart: "Admission of COVID/Respiratory Infection Patient" for appropriate PPE
  - If the patient is SYMPTOMATIC (responds yes to any of these questions), please call the COVID pager (#1870) to discuss whether COVID testing is indicated (not infection control)
  - Utilize clinical judgement and evaluation of more likely alternative explanation
    - If testing is indicated the patient will be treated as a PUI
- When notified of patients' upcoming arrival, receiving staff will wear face shield, N95 mask if they have been fit tested or a standard mask, gown, and gloves when meeting patient at Women's Hospital entrance ante room.
- Valet should not re-park patient cars. Support person will wear standard mask while parking and reentering hospital.
- Follow steps outlined in first section, "Before Patient Arrives"
- See Pink and Green chart: "Admission of COVID/Respiratory Infection Patient" for appropriate PPE

- If COVID Team indicates testing for COVID-19 is indicated, L&D and LDRP RNs will collect COVID-19 and specimen will be hand delivered to the lab.
  - HP will courier specimen to EH. Inform lab that swab was completed on laboring patient to expedite results.
- Document .covidvisitor epic note to document that patient understands visitation policy.
- ISCU attending or fellow will conduct prenatal consultation via phone explaining expected postnatal management.
 

**For cases in which ISCU admission is not expected based on gestational age or fetal concerns**, physician will engage in shared decision-making with mom regarding separation of mom and baby at birth (recommended) versus keeping mom and baby together (acceptable following informed discussion and provided that the infant remains stable following delivery). See

  - ISCU physician will communicate the agreed-upon postnatal management plan to the ISCU and L&D staff

### **Transportation of Persons with Suspected COVID-19 (Obstetrics):**

#### **From outside hospital**

- Patients will be asked to wear a standard mask during transportation in the hospital and in an ambulance.
- Intra-facility transport will be limited to movements essential for patient care (e.g. from ED to ICU) through pre-defined routes. Superior Ambulance has agreed to provide transportation of these patients between facilities.
- Patients who drive themselves will be advised to enter at the Women's Hospital entrance at both EH and HP. See section "Upon Patient Arrival" below.

#### **Within the hospital**

- Movement of a suspect COVID-19 patient within the hospital should be minimized as far as possible
- The patient should wear a standard mask and be transported using the shortest route possible and to avoid public movement areas where possible.
- Transport will be done by the healthcare provider looking after the patient and not transport services.
- The healthcare worker should wear PPE including a N95 respirator if they have been fit tested or a standard mask, face shield, gown and gloves.
- Public safety personnel should accompany the healthcare worker to help with securing an empty elevator and help avoid contact with the public, other patients or healthcare workers.
- The public safety officer should wear a standard mask.

### **During Hospitalization**

- In the Epic flowsheet, document in "Isolation" row the type of precautions patient is on (ex: airborne and contact plus).
- Patients will be allowed to have one support person. That person may not change during patient's stay (to minimize the number of people coming into the hospital). That person must remain in the patient room for the duration of the stay. That individual will have their temperature checked and monitor symptoms. If they develop a temperature or display new respiratory symptoms, they will be asked to leave. If they leave for this or any other reason, they may not return.
- Patient is not required to wear standard mask when in the presence of staff, because staff will be wearing PPE. The support person will wear a standard mask at all times.
- All patients who wish to ambulate in hallway will wear standard mask.
- Stop sign will remain on door as well as signs clearly indicating precautions (ie droplet, airborne, etc)
- Dedicated medical equipment (preferably disposable, when possible) should be used for the provision of patient care.
- All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and hospital policies.
- Procedures, and laboratory testing should be limited to the minimum necessary for essential diagnostic evaluation and medical care.

- Minimize movement of patient around the hospital. If required, see Transport Protocol in COVID-19 Preparedness Plan on Pulse.
- Minimize the use of specialty consultation services. Neonatologist, Perinatal Family Support, consults can be performed via phone.
- The nurse will perform all tasks, bringing tray, drawing labs, starting IVs, and housekeeping. Garbage bags should be tied and disposed of with regular trash.
- OB Techs and PCTs should not go into rooms.
- Instructions on daily cleaning of room within the NSUHS Preparedness Plan (page 16).
- Blood and respiratory samples should be obtained by the clinical staff caring for the patient.
  - At EH, hand deliver specimens to the lab. At HP courier to the EH lab.
  - At EH 2WH, phlebotomy will draw labs. If possible, phlebotomy dedicated to COVID-19 patients should be used. This phlebotomy team may not be available at all times.
- Any staff that enter patient's room must follow NSUHS donning and doffing procedures. Shower is not required prior to seeing non-COVID-19 patients and staff may continue to see non-COVID-19 patients.

### **Vaginal Delivery**

- Consider an early epidural in COVID-19 patients in case emergency cesarean is required.
- Oxygen via face mask will not be administered for fetal indications. Oxygen via face mask may be used for maternal indications.
- ISCU to attend all deliveries of confirmed COVID-19 and PUIs at EH. Nursery Nurse to attend at HP.
- Follow transfer protocol for transfer of infant to ISCU. See ISCU Workflow.
- Cleaning of room after patient transfer or discharge:
  - Room to be left empty with door closed for 25 minutes if negative pressure room, or 70 minutes for a standard room.
  - Designated housekeepers will need to clean the room, call EVS.

### **Highland Park LDRP Considerations**

- Patients will be kept in one room for entire stay. Negative pressure room will be used whenever possible.
- Adjacent rooms to be used for staff and extra equipment.
- Rooms should be cohorted to minimize exposure to unit.
- Newborns will follow colocation guidelines outlined by the CDC below because the rooms are large enough to accommodate 6 feet of separation. Infant will be placed in isolette.
- If HP newborns need additional care they may be transferred to ISCU. The decision to transfer will be made on an individual basis.

### **Scheduled Cesarean Section**

- Patient brought immediately to G625 for pre-op preparation at EH.
- Perform hand hygiene before and after patient contact
- Healthcare worker should wear PPE; N95 respirator if they have been fit tested or a standard mask, or PAPR, face shield, gown and gloves.
- Public Safety will secure an empty elevator as necessary for transport and wear a regular mask
- Patient will wear a mask during transport using the shortest route possible, avoiding public movement
- Transport will be done by the healthcare provider caring for the patient
- Patient will be transported from patient room directly to the OR suite
- If possible, the patient will be scheduled as last case of the day in an OR away from any other cases
- Remove all unessential equipment from room and cover remaining/unmovable with plastic. (i.e. monitors)

- Confirmed or suspected COVID-19 patients will be delayed or rescheduled as is clinically appropriate.
- **See “COVID-19 Obstetric OR Processes for EH and HP” for more detailed Operating Room Considerations**

### **Postpartum (2WH, 3WH) Care**

- See section **During Hospitalization** for general guidelines.
- Patient room assignment postpartum decision will be made on an individual basis.
  - If patient deemed appropriate by IPC for 2 Women’s, use rooms 2640 or 2644. Adjacent rooms 2642 and 2646 will be kept empty to be used for staff showers and equipment.
- Maintain 1:1 RN to patient ratio.
- If the patient needs to transfer to another floor due to an acuity change, the manager will evaluate each case to determine appropriate staffing.
- NorthShore’s system protocol for serving droplet patients is to use regular china and tray service. As a result of the COVID-19 pandemic, there has been a significant increase in requests for disposable trays & wares throughout our system. The usage of disposable trays in these instances is not in line with NorthShore’s policy (which aligns with CDC guidelines). As long as we are all using appropriate PPE, there should be no reason to request disposables.
- Blood and respiratory samples should be obtained by the clinical staff caring for the patient.
  - At EH, hand deliver specimens COVID-19 to the lab. At HP courier COVID-19 specimens to the EH lab.
  - At EH 2WH, phlebotomy will draw labs. If possible, use phlebotomy dedicated to COVID-19 patients should be used. This phlebotomy team may not be available at all times.
- See chart: “Admission of COVID/Respiratory Infection Patient” for appropriate PPE.
  - Showers in the L&D locker rooms as well as Highland Park room 1358 and Evanston rooms 3413 and 3417 are available for staff to shower. Individuals who have directly cared for a patient with COVID-19 or a PUI should place scrubs for laundering, shower, and change into clean clothes before going home.
- Turnaround time for room after patient discharge is included in NSUHS preparedness plan.

### **Antepartum Patients**

- If a PUI or confirmed COVID-19 patient presents to HP and is a risk for preterm delivery, please call Maternal Fetal Medicine. Presently, they are likely to be transferred to EH if less than 35 weeks.
- Highland Park antepartum patients prior to 35 weeks (not in labor) displaying severe symptoms of COVID-19 will be directed to EH Emergency Department for triage and potential admission after determination is made by COVID-19 team.

### **If patient develops symptoms which meet COVID-19 screening criteria after admission**

- Put a standard mask on the patient, close the door, put on Droplet precautions and contact attending physician who will contact COVID-19 team to evaluate if testing is appropriate for this patient. Do not notify infection control, they are automatically notified when this is documented in Epic.
- All patients may not meet criteria to be tested for COVID-19, but will remain on Droplet precautions.
- Contact pediatric hospitalist to determine appropriate placement of baby while awaiting test result, if ordered.
- If patient meets criteria for COVID-19 and the test returns negative:
  - Patient should remain on Droplet precautions for the duration of their hospitalization.
  - Follow instructions in “Infection Control Guidelines in Women’s Hospital” found on the Infection Control Pulse Page.
    - It is recommended that the newborn remain with the mother and not return to the nursery for the duration of the hospitalization, if possible. See Policy on Pulse for further guidance.
  - The COVID Hospitalist team in addition to the Infection Prevention and Control team may discontinue the Droplet and Contact Plus precautions and order Droplet precautions.

- Only Infection Prevention and Control or the COVID team can discontinue the isolation. If a patient is under isolation precautions, DO NOT Discontinue or select Not Applicable.
- Decision to transfer patient to another floor (ie 3WH to 2WH) will be made between provider and nurse manager based on patient acuity and appropriate staffing.

### **Mother/Baby Contact**

Transmission after birth via contact with infectious respiratory secretions is a concern. To reduce the risk of transmission of the virus that causes COVID-19 from the mother to the newborn, NSUHS recommends temporarily separating (e.g., separate rooms) the mother who has confirmed COVID-19 or is a PUI from her baby until the mother's transmission-based precautions are discontinued.

- At EH, upon patient admission/identification of PUI/COVID-19 status, RN will notify pediatrician or ISCU.
- ISCU attending or fellow will conduct prenatal consultation via phone explaining expected postnatal management. **For cases in which ISCU admission is not expected based on gestational age or fetal concerns**, physician will engage in shared decision-making with mom regarding separation of mom and baby at birth (recommended) versus keeping mom and baby together (acceptable following informed discussion and provided that the infant remains stable following delivery).
- ISCU physician will communicate the agreed-upon postnatal management plan to the ISCU and L&D staff
- Newborns should be bathed as soon as reasonably possible after birth to remove virus potentially present on skin surfaces and will be placed in an isolette.
- The risks and benefits of temporary separation of the mother from her baby should be discussed with the mother by the attending provider or midwife and documented in the electronic health record EHR.
- All newborns born to mothers with confirmed COVID-19 or are PUI, will be treated as PUI until two negative COVID-19 tests are resulted.
  - An initial COVID-19 test will be performed at 24 hours of life and repeated at approximately 48 hours of life unless the infant is discharged.
  - One swab will be used to sample the throat first and then the nasopharynx.
  - Place single swab in one viral transport media tube and send to lab for molecular testing.
  - For infants who are positive on initial testing, follow-up testing of combined throat/nasopharynx specimens should be done at 48 to 72-hour intervals until there are two consecutive negative tests.
- Newborn discharge and removal of precautions will be addressed on an individual basis.
- PUI newborns will be in droplet precautions or negative pressure rooms in the ISCU as long as space is available at EH.
  - If ISCU isolation rooms are full, discuss with IPC and Unit Manager, and prepare to use the 2WH nursery as overflow.
- At HP, newborns will be kept in patient's room in isolettes, following CDC guidelines.
- Mother and her support person cannot visit ISCU due to being a PUI.

### **Temporary Separation**

- NSUHS's recommendation is that mom and baby are kept separate, and that mom should not directly breastfeed. If refused by mother after discussion with attending provider, and consultation with a pediatrician/neonatologist, follow the below guidelines:
  - If colocation (sometimes referred to as "rooming in") of the newborn with his/her ill mother in the same hospital room occurs in accordance with the mother's wishes or is unavoidable due to facility limitations use physical barriers (e.g., a curtain between the mother and newborn) and keeping the newborn  $\geq 6$  feet away from the ill mother.
  - If necessary at EH, postpartum floor will obtain an isolette from ISCU and 2WH RN will provide couplet care.
  - If no other healthy adult is present in the room to care for the newborn, a mother who has confirmed COVID-19 or is a PUI should put on a standard 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 the hospital.

- The decision to discontinue temporary separation of the mother from her baby should be made on a case-by-case basis in consultation with clinicians, Infection Prevention and Control, and public health officials. The decision should take into account disease severity, illness signs and symptoms, and results of laboratory testing for the virus that causes COVID-19, SARS-CoV-2. Considerations to discontinue temporary separation are the same as those to discontinue transmission-based precautions for hospitalized patients with COVID-19 as outlined by the CDC.

### **Breastfeeding**

- Recommendation is that mom does not directly breastfeed.
- Obtain breast pump for the immediate postpartum period, patient encouraged to bring pump from home.
- During temporary separation, mothers who intend to breastfeed should be encouraged to express their breast milk to establish and maintain milk supply. 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.
- To transfer breastmilk:
  - Prepare clean area in patient room: wipe table, put paper towel down, and put clean open containers on paper towel.
  - Perform hand hygiene, don gloves, and take the bottles from the mom. Pour milk into clean containers. Dispose of used bottles, and perform hand hygiene.
  - Don fresh gloves, screw tops on bottles, and hand off clean bottles to staff member holding clean zip top bag in anteroom. Ensure bottles are labeled.
- The CDC has developed Interim Guidance on Breastfeeding for a Mother Confirmed or Under Investigation for COVID-19. There are rare exceptions when breastfeeding or feeding expressed breast milk is not recommended. Whether and how to start or continue breastfeeding should be determined by the mother in coordination with her family and health care practitioners.
  - Currently, the primary concern is not whether the virus can be transmitted through breastmilk, but rather whether an infected mother can transmit the virus through respiratory droplets during the period of breastfeeding.
  - A mother with confirmed COVID-19 or who is a symptomatic PUI should take all possible precautions to avoid spreading the virus to her infant, including washing her hands before touching the infant and wearing a face mask, if possible, while breastfeeding.
  - RN caring for baby will feed the expressed breast milk to the infant while wearing appropriate PPE until negative COVID-19 status is confirmed.
- In limited case series reported to date, no evidence of virus has been found in the breast milk of women infected with COVID-19; however, it is not yet known if COVID-19 can be transmitted through breast milk (i.e., infectious virus in the breast milk). Overall, given what we know today, the benefits of breastmilk for the newborn outweigh the risks.

### **Hospital Discharge**

- Discharge for postpartum women should follow recommendations described in NSUHS Preparedness Plan.
- 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 CDC's [Interim Guidance for Preventing Spread of Coronavirus Disease 2019 \(COVID-19\) in Homes and Residential Communities](#).

### Internal References

<http://pulse/ClinicalResources/InfectionControl/Pages/default.aspx>

NorthShore University HealthSystem 2019 Novel Coronavirus (CoVid-19) Preparedness Plan

### External References

ACOG Practice Advisory: Novel Coronavirus 2019 (COVID-19). Accessed March, 17 2020. <https://www.acog.org/Clinical-Guidance-and-Publications/Practice-Advisories/Practice-Advisory-Novel-Coronavirus2019>

American Academy of Pediatrics. INITIAL GUIDANCE: Management of Infants Born to Mothers with COVID-19. Accessed April, 2 2020. <https://downloads.aap.org/AAP/PDF/COVID%2019%20Initial%20Newborn%20Guidance.pdf>

AWHONN. Novel Coronavirus (COVID-19) resources. Accessed March, 17 2020. <https://awhonn.org/novel-coronavirus-covid-19/>

Coronavirus Disease 2019 (COVID-19) Pregnancy and Breastfeeding. Accessed March, 17 2020.

[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](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)

Interim Considerations for Infection Prevention and Control of Coronavirus Disease (COVID-19) in Inpatient Obstetric Healthcare Settings. Accessed March, 17 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html>

Society for Maternal-Fetal Medicine. Coronavirus (COVID-19) and Pregnancy: What Maternal-Fetal Medicine Subspecialists Need to Know.