

TITLE: THROUGHPUT GUIDELINE OF PREGNANT WOMEN WITH PROVEN OR SUSPECTED COVID-19

PURPOSE: To provide updated guidelines for the care of a pregnant patient with need for inpatient admission at University Hospital with confirmed COVID-19 or who has been tested (person under investigation [PUI])..
[Key Words: patients, labor, COVID-19]

APPLICABLE AREAS:

Women's Health Services

LEVEL OF RESPONSIBILITY:

Registered Nurses
Unlicensed Personnel
Obstetric Providers
Anesthesia Providers

DEFINITIONS

1. *PPE
 - a. Gown, gloves, goggles/face shield, and surgical mask
 - b. During any patient contact
2. #PPE
 - a. Gown, gloves, goggles/ face shield, N95 respirator, hair/shoe cover
 - b. Worn during vaginal delivery & cesarean section
3. UAP- unlicensed assistive personnel

BACKGROUND:

1. Newborns are at risk of infection from a symptomatic mother's respiratory secretions after birth, regardless of delivery mode

OUTCOMES:

Safe delivery of maternal patients with COVID-19 or PUI. Preventing or limiting exposure of COVID-19 to fetus. To prevent the spread of respiratory diseases including COVID-19 within the L&D setting.

ASSESSMENT AND PLANNING:

1. SCREENING

- a. During the initial contact with patient, if the patient meets PUI or +COVID criteria, based on the *UHS Treatment Guideline for Adult Patients with Suspected or Confirmed Covid-19*, located on UHS Infonet
 - b. See OB/GYN Triage Algorithm.
- ## 2. PPE Criteria & Isolation
- a. *Personal Protective Equipment (PPE) and Placement Guidelines for Suspected or Confirmed COVID-19 Patients*, located on UHS Infonet

INTERVENTION

1. OB TRIAGE

- a. Screener (Unlicensed Assistive Personnel (UAP) or RN)
 - i. STARS screener at screening table will call transport # 8-3481 of positive screen and will mask patient.
 - ii. Transport person to pick up patient at their stated location.
 - iii. Staff will follow the predetermined route of transport, E trauma elevator, 7480*
 - iv. Depending on answers to OB Screening Algorithm for OB patients, Charge RN will prepare for patient's arrival in LDR 4 or ob triage bed 9. If LDR 4 or ob triage bed 9 are occupied, place patient in LDR 5 or (10, 7, 8), door closed.
 1. If patient meets GYN criteria, patient will be transferred to any available private room in GYN EC, preferably bed 6.
 - v. If patient presents to OB or GYN triage and has not been screened, UAP or Intake RN will screen patient. If + COVID screen, immediately place a mask on the patient and screener should call Charge RN.
 - vi. Intake RN will triage the patient and take patient to private room **but will not go in**. Keep patient door closed. This will allow time for nurse to appropriately don PPE prior to entering room.
- b. Charge RN
 - i. Place Appropriate Isolation precautions signs on patient door. Obtain appropriate PPE and place outside door.
 1. *PPE for staff for exams and entering room (Gown, gloves, goggles/face shield, and surgical mask)
 2. #PPE for staff for vaginal delivery & cesarean delivery

(Gown, gloves, goggles/ face shield, N95 respirator, hair/shoe cover)

- ii. Will designate nurse to evaluate patient.
 - iii. Will assign gatekeeper
 - iv. Will notify Chief Resident, who will notify Faculty.
- c. Gatekeeper
- i. Gatekeeper is the designated observer for PUI or confirmed COVID-19 rooms.
 - ii. Logs all personnel going in and out of the room.
 - iii. Enforce visitation guidelines and escalate to PCC or charge nurse for any issues with personnel or guests attempting to enter the room.
 - iv. Gatekeeper ensure staff, patient and everyone's safety particularly with infection control practice. Gatekeeper/ observer must be **PRESENT AT ALL TIMES WHEN ANY PERSONNEL IS ENTERING, WHILE IN THE ROOM AND WHEN EXITING THE PATIENT'S ROOM.** In the event gatekeeper will leave the area, he/she will get coverage to act as gatekeeper.
 - v. Gatekeepers are trained on proper donning and doffing of PPE.
 - vi. Train, enforce proper PPE and guide personnel on Donning and Doffing.
 - vii. It is highly recommended that all personnel watch the NETEC COVID PPE video of Learning Central <https://netec.org/> and demonstrate proper handwashing, donning and doffing procedure.
 - viii. Must stop and correct the caregiver when infection control prevention is compromised.
 - ix. Assist Primary Nurse for possible supply needs while inside the room as needed.
 - x. Performs routine sanitation on frequently touched surfaces (i.e. door handles, light switches, tables, work stations badge scanners, etc.) Keep the area clutter free.
 - xi. Monitors staff on COVID-19 safety and hygiene precautions such as handwashing, no hanging accessories, 6 feet distance, and wearing scrubs only in hospital. Reports safety hazards when necessary.

- xii. Replenishes sanitation supplies when needed (sanicloth, hand sanitizers, soap, paper towels, etc.).
 - xiii. Monitor and protect individuals' medical records and other personal health information.
 - xiv. Prepare empty room for admission.
 - d. Faculty
 - i. Designate OB physician/provider to evaluate patient and notify ID.
 - e. Designated Nurse Evaluator
 - i. Vitals, Assess, Swab, transport patient (only if essential)
 - ii. Swab should be in room
 - f. Designated Physician Evaluator
 - i. Examine, formulate plan
 - g. Staff limit unnecessary traffic into room
 - i. For example consider use one nurse and one provider
 - h. No medical or nursing students to see patient
2. TRANSFER TO LABOR & DELIVERY FOR ADMISSION
- a. If patient not initially taken to an LDR, patient will transfer from OB triage to LDR 5. Once the patient is ready for transport following infection control protocol, have the patient wear the mask during transport as well as the transporter.
 - b. If LDR 5 unavailable, utilize LDR 10, 7 or 8
3. ANTICIPATED SPONTANEOUS VAGINAL DELIVERY (SVD)
- a. Staff (6): RN, (1-2) Physician, Pedi (1-Nurse, 1- respiratory therapist, and 1 neonatology provider (attending/NP/PA/fellow))—duplicate staff to be placed immediately outside the delivery room
 - b. See UHS Corporate Visitor Policy during COVID- 19
 - c. Pregnant patient will be cared for with:
 - i. *PPE for staff for 1st stage of labor and cervical checks (Gown, gloves, goggles/face shield, surgical mask)
 - ii. #PPE for staff during 2nd stage and vaginal delivery (Gown, gloves, goggles/ face shield, N95 respirator, hair/shoe cover)
 - d. Consider early epidural
 - e. Delayed cord clamping as appropriate per usual Obstetrical and Neonatal guidelines
 - f. Placenta placed in formalin and sent to Pathology in usual way.
 - g. See NICU Transport Guideline for care of newborn during vaginal

delivery

- h. Gatekeeper will have suture cart outside delivery room and will coordinate needed supplies from outside the room.
4. FOR ANTICIPATED CESAREAN SECTION (C SECTION)
- a. Staff (9): RN, (2-3) Physician (Faculty & Resident), Pedi (1- Nurse, 1- respiratory therapist, and 1 neonatology provider (attending/NP/PA/fellow)), Anesthesia (1-2 depending on regional/GETA) –duplicate staff immediately outside of the operating room.
 - b. See *UHS Operating Room Protocol for Obstetrical Patients With Known COVID-19 or Patients Under Investigation (PUI) for COVID-19, located on UHS Infonet*
 - c. #PPE for staff at delivery (Gown, gloves, N95 respirator, hair/shoe cover)
 - d. Anesthesia: bolus epidural in LDR if possible
 - e. Delayed cord clamping as appropriate per usual Obstetrical and Neonatal guidelines
 - f. Placenta placed in formalin and sent to Pathology in usual way.
 - g. See NICU Guideline for care of newborn during a C section
5. POST DELIVERY/ RECOVERY OF SVD & C SECTION
- a. If intubated, prepare pt for transfer to ICU
 - b. If pt not intubated. Patient will recover in designated COVID LDR. See *UHS Operating Room Protocol for Obstetrical Patients With Known COVID-19 or Patients Under Investigation (PUI) for COVID-19*
 - c. After 2 hour recovery pt will be transferred to AIRR on postpartum Rooms 448 or 450, Rooms 436-446 if AIRR already occupied, with priority to the higher number rooms.
 - d. Once the patient is ready for transport following infection control protocol, have the patient wear the mask during transport as well as the transporter.
 - e. Clean the wheelchair, stretcher or the patient's bed before transporting with germicidal disinfectant per standard protocol.
 - f. Refer to NICU Guideline regarding mother and infant temporary separation.
 - g. Mother able to express breast milk with dedicated breast pump and proper hand hygiene per usual protocol. See *Expressed Breast Milk Handling During COVID-19 Pandemic Guideline 5.15*

- h. OR/LDR to be cleaned per standard protocol.
6. TRANSFER TO POSTPARTUM/ANTEPARTUM FROM L&D
- a. Charge nurse to assign patient to Primary RN and Gatekeeper (tech) for entire shift
 - b. Assign to room 448, if not available 450, if not available 446, 444-436
 - c. Place appropriate isolation precaution signage on door (located in cabinet by 448)
 - d. Staff limit unnecessary traffic into room
 - i. For example consider use one nurse and one tech
 - e. Prepare supplies prior to patient arrival (dedicated breast pump if breast feeding, dedicated blood pressure machine, disposable thermometer, tele pack with pulse ox connected if needed clinically, yellow bin, sheet of patient and baby labels)
 - f. Dedicated digital blood pressure machine item # 38462 by materials management ext 33661
 - g. Tele pack will need MD order and call monitoring room ext #32798
 - h. Thermometer green (until we order the disposable)
 - i. Yellow bin (see OB checklist when admitting PUI or Covid patient) stored in anteroom cabinet
 - j. RN waiting in room with proper PPE gear on
 - k. RN receive patient in room and closes door immediately
 - l. Assess patient and obtain vitals (routine postpartum assessment/care)
 - m. When ready to exit the room, Primary RN to knock on door to alert gate keeper, gate keeper to observe doffing of PPE
7. DISCHARGE OF ANTEPARTUM/ POSTPARTUM PATIENT
- a. If discharged home with respiratory symptoms:
 - i. DAILY follow up phone calls x 48hrs
 - ii. CDC patient instructions for self-isolation and strict return precautions;
 - b. RN will provide patient handout from CDC with self- isolation education and strict return precautions
 - c. Pt is to be escorted by tech to their private vehicle at the MAIN EC entrance upon discharge. Please follow predesignated route to the MAIN EC.
8. LAB COLLECTION
- a. Take necessary supplies to collect specimen
 - i. Tube, tourniquet, vacutainer, alcohol wipes, biohazard bag,

printed order from sunrise etc.

- b. Place specimen in bag, clean outer bag and roll bag. Place bag in another biohazard bag.
 - c. Gate keeper to perform proper hand hygiene, don gloves and open bio hazard bag
 - d. Knock on door when ready to drop rolled biohazard bag into different clean biohazard bag
 - e. Gate keeper seals bag and cleans bag again.
 - f. The nasopharyngeal swab samples (COVID and RVP, for example) must be walked down to lab on 3rd floor.
 - g. All other non-respiratory lab samples may be tubed to the lab in the usual fashion.
9. EXPRESSED BREASTMILK COLLECTION
- a. Place breastmilk in bag, clean outer bag and roll bag
 - b. Gate keeper to perform proper hand hygiene, don gloves and open bio hazard bag
 - c. Knock on door when ready to drop rolled biohazard bag into different clean biohazard bag
 - d. Gate keeper seals bag and cleans bag again, calls NICU and lets them know about breastmilk delivery, walk ups milk to 5th floor
 - e. See *Expressed Breast Milk Handling During COVID-19 Pandemic Guideline 5.15*

EVALUATION:

1. The members of the patients care team will assess the patient as outlined above, as well as the fetal and maternal responses to any interventions performed.
2. The members of the patients care team will be evaluated on use of N-95 mask, donning personal protective equipment (PPE), safe removal of PPE, and knowledge of respiratory droplet precautions

PATIENT EDUCATION:

1. Patient will be informed of the reason for respiratory precautions and expected management while in OB EC and upon admission to L&D/ PP.
2. CDC COVID-19 Handout given to patient upon discharge.

DOCUMENTATION:

1. Documentation will follow normal documentation procedures and MEWS Triggers, Escalation of Care Protocols

REFERENCES

References: Ti, L.K., Ang, L.S., Foong, T.W. et al. What we do when a COVID-19 patient needs an operation: operating room preparation and guidance. *Can J Anesth/J Can Anesth*(2020), <http://doi.org/10.1007/s12630-020-01617-4>

CDC COVID-19 website- <http://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/index.html>

<https://www.universityhealthsystem.com/coronavirus-covid19/healthcare-protocols-and-guidelines>