

Workflow for Emergency Cesarean Section for Any COVID 19+/PUI Patients

***Also applicable to any urgent/non-urgent procedures on L&D**

General rules in management:

Threshold for c-section for these patients are modified

- If batch page called for fetal bradycardia → PROCEED with c-section
- Adhere strictly to normal labor curves (active phase arrest, arrest of descent)
- Triaging threshold based on pt's clinical status and if they are remote vs close to delivery to expedite delivery
- Conservatively manage Category II tracings to avoid emergency c-section

Other procedures that this workflow applies to:

1. Urgent postpartum D&C
2. Retained placenta extraction
3. Cervical laceration repair
4. Urgent forceps delivery
5. Elective/planned Cesarean section
6. D&E procedure

If there is a COVID positive patient who is admitted to the unit, the following measures need to be taken immediately:

Personnel – Call in back up teams for OB MD

- MFM back up/labor back up
- Separate OR resource nurse
- +/- Separate additional team nurse
- Separate 1:1 bedside nurse

Designate COVID OR – OR 3

- Go through COVID OR check list
- Call main OR to ensure that there is an adult OR available for non-urgent cases

Work flow for COVID pos or PUI patient admitted in preparation for possible C-section

1. Bedside RN alerts entire team when PUI/COVID 19+ patient is being admitted via Voalte.
 - a. OB team, OB Anesthesia, Charge RN, ICN, Scrub tech, HUSC, ICU attending/NP (via resource nurse Voalte x 20562)
 - b. Call in MFM/OB back up – to be assigned to COVID patient
 - c. Charge nurse will assign the nursing COVID team (OR Resource nurse and bedside nurse)
 - d. Review with HUSC the **91119 batch page code** (COVID batch)
2. Scrub Tech/RN will open OR 3
 - a. Ensure COVID OR check list completed
 - b. HUSC to call main OR to ensure additional OR available

Work flow for emergency cesarean section delivery:

1. **Fetal bradycardia noted**
 - a. Bedside nurse attempts resuscitative measures (turn patient & d/c oxytocin)
 - b. If persistent bradycardia, uses INTERCOM "00" to call for assistance (note PUI/COVID pt)
 - c. COVID/PUI OB MD and LDR Resource nurse enters room in PPE, performs SVE with sterile glove OVER blue glove → low threshold to place FSE
 - d. Charge RN call anesthesia resident (prepare to bolus epidural)
 - e. Confirms bradycardia and activates batch page at **3mins**
 - f. Give terbutaline, IV Fluids, Hands-and-knees or left lateral position

2. Uses intercom to activate COVID **91119** batch page for COVID-19+/PUI patients
 - a. "Batch page to OR 3, COVID patient"
 - b. HUSC and Charge RN to remind EVERYONE responding that Batch Page is for a COVID-19+/PUI patient
 - c. Hallway to be cleared of non-essential personnel
 - d. One RN & PCA needs to don droplet/contact PPE with bouffant and wait outside of isolation LDR (preferably Charge RN)- responsible for transporting patient out of Isolation LDR and into OR3

3. Simultaneously, the anesthesia team will go straight into OR with **Novel Respiratory PPE**
 - a. The full anesthesia cart needs to remain in the sterile core outside OR3
 - b. HUSC calls Peds surgical desk to have Anesthesia tech on standby
 - c. Anesthesia team starts drawing up meds and preparing for patient
 - d. OR RN will enter OR with **Novel Respiratory PPE**
 - e. Scrub tech/nurse will move surgical gown/gloves OR table (mayo stand/cysto table) to the sterile core. Scrub tech/RN will wait outside of OR to help others surgically gown/glove and await verbal "all clear" from anesthesia to enter OR post-intubation
*Anesthesia attg will decide if one team member will go to pt's room and start epidural bolus

4. The LDR team will confirm that the OR is ready to receive them using intercom/VOLTE with Chart nurse → **TRANSPORT**
 - a. Bedside RN, Provider and LDR Resource (who will be wearing contact/droplet PPE) will place mask on patient, then transport patient to the door.
 - b. One RN and PCA needs to don droplet/contact PPE and wait outside of isolation LDR (preferably Charge RN)- responsible for placing sterile ½ sheet on patient and transporting patient out of Isolation LDR and into OR3
 - c. OR Resource RN (scrub tech/RN PRN) need to be in OR3 ready to receive patient from transport team
 - d. Once patient is on OR table, LDR bed will remain in the OR (placed against side wall)
 - e. MD attending will don CONTACT/DROPLET PPE in sterile core and assess patient in the OR

5. Moving patient to OR table and placing EFM on patient to determine FHR (this will determine if C/S remains emergent, or can be demoted to urgent)
 - a. This is dictated by OB MD attending and OB anesthesia attending

- b. TIME OUT PERFORMED
6. Surgical team then leaves OR to scrub in
- a. Attending MD Doffs PPE and entire surgical team dons new NOVEL RESPIRATORY face PPE (N-95, eye protection) and sterile scrubs. Gowns and gloves with help of Scrub tech (Includes chief resident)
 - b. **If patient needs to be intubated:**
 - i. Only Anesthesia team and OR RN with **Novel Respiratory PPE** will be present in the OR and will give an “**all clear**” signal when it is safe for other personnel to enter room
 - ii. All other providers must enter room wearing Novel Respiratory PPE in this situation to adhere to aerosol precautions
 - c. OR RN will prep/splash the patient
7. C-section is performed
- a. Surgical team including scrub tech returns to the OR, sets up surgical drape
 - b. ICN team enters the OR in Novel Respiratory PPE, sets up neonatal warmer and prepares to receive neonate.
 - c. Performs c-section
 - d. At the end of the procedure, the team will clean patient, express contents of the uterus. KEEP the surgical drape on the patient (roll the drape up towards pt head)
 - e. TIME OUT Performed (call ICU attending +/- UCSF COVID attending PRN to discuss DISPO)
 - f. **Surgical team leaves the room for the anesthesia team to reverse anesthesia and extubate.** Surgical team doffs PPE in sterile core.
 - g. Wait for **15 mins** after extubation before transporting patient out of the room
8. Patient ready for transport after successful extubation
- a. RN will call out to desk with intercom by dialing “00” to alert the need for transporter to don PPE to assist with transferring patient from the OR
 - b. Transfer patient to clean gurney via white slider board (NOT hovermat). Patient will be transported and recovered on clean gurney in previously contaminated LDR room
 - c. Patient is to recover in Isolation LDR with portable vitals monitor (NOT in PACU).
 - d. Transfer patient from OR3 back into Isolation LDR for recovery with patient wearing a mask and new ½ sheet during transport
 - e. Hallways cleared by HUSC prior to transport
 - f. Bedside RN to receive patient in Isolation LDR in Respiratory Isolation PPE to recover patient
9. OR and Isolation LDR clean up
- a. HUSC to notify house cleaning that OR 3 needs 2 hour high impact clean
 - b. Should NOT clean LDR while pt is in the OR as that room will be used for recovery.