

MEMORANDUM

DATE: April 13, 2020

TO: Department of Obsterics and Gynecology

Deparmtment of Surgery Department of Anesthesia Department of Neonatology Sinai Health System Nurses

Department of Emergency Medicine

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 Adapted for OB from The Recommendations for COVID-19 Surgical and Procedural Patients Memorandum dated 4/10/2020 (updated 4/16/2020)

RE: Recommendations for COVID-19 OB Surgical Patients on Labor and Delivery

We are providing an updated set of recommendations and guidelines for handling COVID-19 surgical and procedural patients in Obstetrics.

In all cases, please be mindful of universal precautions to prevent the spread of COVID-19:

- Enforce and maintain proper social distancing of at least 6 feet
- **WASH YOUR HANDS!** Hand hygiene is more critical than ever.
- Wear your mask appropriately and make sure anyone around you is also wearing their mask appropriately. The mask should cover both the nose and mouth.
- N95 masks are required for all C Sections and the second stage of labor.

PROCEDURAL GUIDELINES

When caring for a patient with known or suspected COVID-19 infection



- Prior to scheduled surgery, all surgical cases, unless emergent, will have a COVID test performed to
 determine COVID status. All surgical cases and induction of labor will be postponed until COVID testing has
 been verified, unless there are strong obstetrical indications.
- Cesarean Sections for PUI or COVID-19 patients will be done in the OB OR room 2.
- Donning of Personal Protective Equipment (PPE) should be done prior to procedure. PPE to be worn includes:
 - Either an N95 mask (for which one has been properly fit-tested) or a powered air-purifying respirator (PAPR)
 - o A face shield or goggles
 - o A gown
 - o Gloves
- Please note the following rules for use of N95 masks: As per Mount Sinai Hospital PPE policy.
- Hand hygiene is essential before donning and after doffing PPE. Hand hygiene can be appropriately performed using alcohol-based hand rubs or by washing hands with soap and water.
- Use extreme caution when removing and disposing of PPE to minimize the risk of self-contamination. You should strongly consider observing and rehearsing the correct procedures for donning and doffing PPE to ensure you are comfortable with them prior to engaging in direct patient care.

When considering Labor Induction or C Section for a patient with known or suspected COVID-19 infection

- Postpone non-urgent surgical procedures until the patient is determined to be non-infectious or not infected.
- See published guidelines for appropriate usage of the rapid COVID test. This test may not be applicable for all patients:
 - Screen all patients for s/s of COVID-19. Postpone the procedure and obtain ALVERNO COVID TEST
 if the s/s screen is positive.
 - Obtain single **ALVERNO COVID TEST** for all planned procedures. Test to be done 48-72 hours preoperatively. ONLY ONE TEST. May be extended to 96 hours in special circumstance*
 - For **OB** Patients in need of **URGENT** and **EMERGENT** C Section and Patients presenting in labor or for medically indicated inductions of labor and no recent COVID 19 test results 96 hours prior to admission obtain the **ABBOTT IN-HOUSE RAPID COVID TEST – even if asymptomatic.**

If an **OB** patient presents **in active labor with no recent COVID 19 test 96 hours prior to admission**, obtain **ABBOTT IN-HOUSE RAPID COVID TEST** Theses tests are stored on the Labor Unit and should be walked to the chemistry lab as soon as they are collected. *For patients who present to Labor and Delivery in labor; RAPID test ONLY if there is no Alverno PCR test done within 96 hours.*



- If respiratory support is indicated, then planning ahead may avoid the need for rescue interventions (e.g., crash intubations), which have greater potential for infectious transmission due to mishaps during the use of barrier protections.
- In patient with acute respiratory failure, it may be prudent to proceed directly to endotracheal intubation, because non-invasive ventilation (e.g. CPAP or biPAP) may increase the risk of infectious transmission.
- A typical operating room is designed to provide positive-pressure relative to the surrounding area and incoming air is often flow-directed, filtered, and temperature and humidity controlled.
- All equipment and supplies removed from the OR room.
- Minimizing the amount of equipment and supplies, only take into the room what is necessary for the case.
- Minimized staffing, procedure should be done with fewest number of staff possible.
- The scrub tech and surgeons should be gowned and gloved in the operating room with appropriate PPE including N95 mask before the patient is brought into the room. If the surgeon prepares the patient for surgery after she is brought to the OR they should doff gown and gloves, exit the room to scrub and return to the room to gown and glove for surgery.
- No skin to skin for C-Sections or vaginal deliveries.
- No Delayed Cord Clamping in term and late preterm deliveries.
- Dedicated equipment, anesthesia and medication carts are to remain inside OR.
- Minimize traffic into and out of the OR room. All designated staff should remain in the room to minimize air flow outside the OR after intubation.
- Confirm that one door is closed during opening of other door to utilize air flow in OR to advantage.
- Runner located outside the OR for needs, medications, instruments and supplies. Runner is required to wear appropriate PPE at all times for urgent and emergent needs. Runner is not to enter room. Utilize portable phone for runner requests to eliminate opening of the doors, etc.
- Utilize smoke evacuator if applicable.
- Double bag all specimens
- Dedicated staff are to remain in the room during the procedure.
- During procedure scrub staff are to minimize bio burden by cleaning at point of use.
- Confirm and saturate instruments with enzymatic spray while staff is wearing appropriate PPE.
- Place instruments in closed case cart for transportation.



- ALL patients are to remain in the OR for at least fifteen minutes AFTER extubating.
- EVERYONE is to exit the OR suite during extubation.
- Remain close by your room if anesthesia needs you during extubation.
- All patients should be placed into the isolation room for entire recovery period until discharge to ensure appropriate level of care. Labor Rooms 11-13 have been designated COVID-19 Rooms. There is a portable EKG monitor that can be brought to the room with the patient.

When patients with known or suspected COVID-19 infection need to be transported:

- Transport patients directly from their room to OB OR 2 via the door across from Labor Room 13.
- Intubated patients should always be transported with the transport ventilator whenever possible to eliminate disruptions of the airway.
- Intubated patients should have a HEPA filter inserted between the bag-valve-mask breathing device and the patient if utilized.
- Patients who are not ventilated should wear a surgical mask.
- Health care professionals transporting the patient should wear the appropriate PPE per CDC COVID-19 guidance, and, ideally, be accompanied by an additional member of the transport team who is not wearing a gown and gloves. The person without gloves and gown can interact with the environment. Prior to transport, the PPE-clad person should perform hand hygiene and don a fresh gown and gloves to reduce potential contamination of environmental surfaces.

Neonatology Consideratrions:

- OB team will inform the Neonatology service as early as possible about the possibility of C-Section in a COVID-19 positive mother.
- Neonatology will be represented by the attendance of an RN and MD. They will be stationed in the connecting space between OR rooms 1 and 2.
- Entry and exit to the Neonatology space will be through the door to the hallway and not through the OR.
- After delivery the OB will place the infant into the bassinet covered with a sterile draping and bring it to the Neonatology team via the door to the connecting space.
- The bassinet will then be wheeled to the resuscitation area by the circulating nurse.
- RN and MD will receive the infant in the resuscitation area wearing complete PPE including N95 mask.
- After resuscitation the infant will be placed in a transport isolette and taken to the NICU.



When performing procedures on patients with known or suspected COVID-19 infection:

- Do not bring the patient to the Recovery room on the unit. The patient should go from their room to OR 2 via the entrance opposite room 13. Signs posted on the doors of the OR to alert staff and minimize exposure.
- If general anesthesia is not required, the patient should continue to wear a surgical mask.
- If general anesthesia is used:
 - Place a HEPA filter between the Y-piece of the breathing circuit and the patient's mask, endotracheal tube or laryngeal mask airway.
 - Alternatively, for pediatric patients or other patients in whom the additional dead space or weight of the filter may be problematic, the HEPA filter should be placed on the expiratory end of the corrugated breathing circuit before expired gas enters the anesthesia machine.
 - The gas sampling tubing should also be protected by a HEPA filter, and gases exiting the gas analyzer should be scavenged and not allowed to return to the room air.
- During laryngoscopy and intubation:
 - o Double gloves will enable one to shed the outer gloves after intubation and minimize subsequent environmental contamination.
 - o In each location where intubations take place, the most experienced professional for that location should perform the intubation. In the operating room, this should be the most experienced anesthesia professional available.
 - Avoid awake fiberoptic intubation unless specifically indicated. Droplets containing viral pathogens may become aerosolized during this procedure. Aerosolization generates smaller liquid particles that may become suspended in air currents, traverse filtration barriers, and inspired.
 - o Consider a rapid sequence induction (RSI) in order to avoid manual ventilation of patient's lungs and potential aerosolization. If manual ventilation is required, apply small tidal volumes.
 - o After removing protective equipment, avoid touching your hair or face and perform hand hygiene.
- Neptunes will be used for closed suction system during airway suctioning.
- Utilize disposable covers (e.g., plastic sheets for surfaces, long ultrasound probe sheath covers) to reduce droplet and contact contamination of equipment and other environmental surfaces when available and able.
- The patient should be recovered in the operating room or transferred back to their assigned room on the labor unit. Use OR door across the hall from room 13 to exit the OR hallway.



<u>Surgical OR cleaning after performing procedures on patients with known or suspected COVID-19</u> infection:

- After the patient has left the operating room, leave as much time as possible before subsequent patient care (for the removal of airborne infectious contamination). The length of time depends on the number of air exchanges per hour in the specific room or space.
- The air exchanges for our OR's is 20/minute, the minimum amount of time between cases should be no less than thirty minutes for a complete air exchange.
- After the case, clean and disinfect high-touch surfaces on the anesthesia machine and anesthesia work area with an EPA-approved hospital disinfectant.
- Contact Environmental and notify them that a COVID-19 positive patient was in the OR and to deep clean the room.

^{*} Testing window may be extended to 96 hours in circumstances when outpatient services are not available.