

Pre-Operative:

1. How does COVID+/PUI patient get from ED/ward/ICU to OR?

See Inpatient transport flowchart on Ether (COVID-19 OR Protocols)

2. My patient is in ED/ICU. Can I intubate the patient in ED, then transport to OR? If yes, who would help me intubate?

Yes, you can intubate an OR-bound patient in ED. Airway COVID team attending is in-house 24/7, and can help with intubation. If they are unavailable/busy, the next option is to call in Anesthesia attending back up. Use COVID protocol for intubation, including HME filter in circuit for transport to OR.

3. I have an inpatient/ED/ICU patient who is not COVID+/PUI, but I think the patient history is clinically suspicious for COVID and no COVID test has been done. How do I proceed?

Discuss your concerns with the primary team, explore the possibility of delaying surgery, and testing. If urgent/emergent case and your concerns are not addressed, please contact Dr. Pearl (?).

Our current practice is for intubating/primary attending to use N95, face shield, gloves, and gown for asymptomatic patients.

4. I am doing an asymptomatic-for-COVID case. Can I use CAPR even if I am fit-tested and able to use N95?

The recommendation is to wear N95 for asymptomatic cases, and reserve CAPR for COVID/PUI intubations. See Ether COVID-19 hot links (Stanford Health care intranet latest update on PPE).

5. If my patient is coming to OR from ward/floor/ED, not intubated, where can I start my anesthesia care/where can I intubate?

If patient is already in a negative pressure room on floor/ward, intubation can be done in that room, then transport to OR intubated.

In 500P, procedure room 34 is a negative pressure room, and can be used for intubation. Neg pressure in 500P: room 34 (500P), preop bays 5, PACU bay 61.

In 300P: Isolation/ante room next to the front desk. After intubation-Airway COVID team can help if available, if not consider calling in backup anesthesia

attending, for PPE guidelines see Ether COVID-19 hot links Remember to use an HME filter next to ETT, clamp ETT if disconnecting circuit.
500P OR 21 will be set up for COVID patients.

6. Can I take the Anesthesia machine still attached to the patient, to the OR for surgery, after having intubated the patient in a negative pressure room/bay? Can the Anesthesia machine still function if it is disconnected from the wall outlet?

Yes, the Anesthesia machine can run even when not plugged in to wall outlet, provided it was kept plugged in and the battery is charged beforehand. The Apollo machines can run for upto 30 minutes without battery and the Perseus machines for upto 60 minutes.

7. Where should I extubate my COVID+/PUI patient?

Preferably extubation should happen in a negative pressure room. If patient is ICU-bound, consider taking the patient intubated to ICU and extubation there.

8. Should I stay in PPE for transport?

Yes, for COVID+/PUI patients all patient contact including transport must be in PPE. It might be necessary to change outer gloves frequently if contaminated, with hand hygiene performed while keeping on inner gloves.

9. What about stroke/Interventional procedures in COVID+/PUI?

See Ether (OR Protocols) MAC/GA Guidelines for COVID/PUI.

10. Who will be my ‘runner’ to get me items when I am in PPE/intubating?

Anesthesia techs can be your runner for Anesthesia specific items.

11. What about a donning/doffing buddy?

For intubation if the Airway COVID team member is available that person and the MSD attending can be donning buddy. For doffing (under discussion) Resource RN.

12. I will bring an intubated ICU patient to the OR, using an ICU transport ventilator Is it possible to connect the ICU transport

ventilator also (in addition to the already connected OR anesthesia machine) to the wall gas outlets in the OR?

The wall gas outlet could be set up with a Y-connector to run the transport ventilator. This can be done, and Diane Alejandro-Harper will communicate this with the techs during their morning huddle.

Intra-Op:

1. Where would I obtain plastic sheets to drape the Anesthesia machine, Omnicell, etc? Who does the draping?

Anesthesia techs have drapes and will drape the machine and Omnicell.

2. Do we have dedicated Anesthesia machines for COVID+/PUI?

Yes, the anesthesia techs have prepared Anesthesia machines for such cases.

3. Do we have dedicated ORs for COVID+/PUI cases?

500P OR 21. 300P OR20. Avoid negative pressure room 34 for clean surgeries (ok to use for intubation and extubation).

4. Where do I obtain CAPRs?

Central Supply for OR cases. ED has their own CAPRs. (For Code Blues, Resource RN will come to Code with a backpack containing CAPRs, and other PPE).

5. Where do I don PPE for OR cases?

Donning can be done in OR or just outside, in Core. Have a red trash bag and hand sanitizer available nearby.

6. Where do I doff PPE for OR cases?

Do off everything except CAPR/N95/Face shield, just inside OR door, into a red plastic biohazard bag. Perform hand hygiene. Then step just outside and doff face CAPR hood, helmet, N95 and face shield, just outside the OR door into a red plastic biohazard bag. Have hand sanitizer placed just outside the door.

7. Donning/doffing buddy? Anesthesia techs have some basic training in CAPR assembly, donning, doffing, but having never done it before, they are not experienced. Ideally an RN/MD would be donning and doffing buddy. We have

requested Sam Wald for a Resource RN familiar with donning/doffing process, waiting to hear back.

8. Help! I don't know how to [organize the donning/doffing procedure to keep us all safe.](#)

Workflow suggestions below -

In room:

- portable hand sanitizer that can be near door for the person who is doffing one at a time to hand hygiene but not be turning around in the room to the sanitizer mounted on the wall
- glove box at the doorway
- red trash bag/bin to collect discarded gowns/gloves

Outside room:

- 2 red trash bins
- nearby wash station and hand sanitizer
- for OR 34 since there is a little ante-hallway, one option is to have the CAPR helmet outside the mini-hallway so we could keep people sequentially exiting. In positive pressure room this would also just be outside the OR.
- stand/shelf/table with chucks on it and Sani wipe container
- after person doffs shroud into the red trash bin, they do hand hygiene, re-glove.
- Then step down the "assembly line" to the table with shucks, each user then takes off their helmet and wipes it down with Sani wipes and let sit on table for 2 min to dry
- after drying, in order to keep the CAPR unit together, place each CAPR helmet/belt/battery back in a brown bag, which was then carried down to SPD for re-processing. (ORA can carry CAPRs back to central supply)
- need a spotter to help people DOFF and read DOFF checklist. (We are trying to arrange for this with OR administration).
- ideally, another "watcher" to help watch/instruct the process of wiping down the CAPR helmet with Sani wipe and placing in brown bags properly as everyone is doing this for first time and we want to make sure the units are appropriately processed and sent back so we have them to use again the next time.
- IF this is done in a regular, positive pressure OR, the "watcher" who is helping the wipe down might need to help direct hallway traffic round this process during the critical time of exiting the room to avoid extra foot traffic at this time.

9. What if I need to go to the restroom during a COVID+ case?

Ask for relief. Relieving anesthesiologist dons PPE, enters OR, and takes over. Exiting anesthesiologist doffs PPE as detailed above. Entire process repeats upon return of the anesthesiologist responsible for the case.

10. Can the CAPR shroud be reused if the primary anesthesiologist returns to OR after a break?

CAPR shroud is designed for one-time use. It is difficult to take off the shroud without ripping it and difficult to prevent self contamination if you were to try to re-don same shroud.

Post-Op:

1. Where should COVID+/PUI be extubated?

Current hospital recommendation is that extubation may occur in a negative pressure room or negative pressure PACU bay. Please see After Case Flowchart on Ether: Ether-COVID Resources- OR Protocols- After Case Flowchart.

2. How should I transport my intubated post-op patient back to ICU?

Transport intubated patient back to the ICU with an ICU ventilator. Extubate in ICU, if appropriate. Ensure that the HME filter is connected to the ETT. Please see After Case Flowchart on Ether: Ether-COVID Resources- OR Protocols- After Case Flowchart.