

Suspected or Diagnosed COVID-19 Airway Management Protocol

When called for intubation for COVID-19 suspected/diagnosed patient- Take isolation glidescope and Airborne Isolation Airway Management Kit.

Preparation for Intubation:

- Take only necessary supplies in patient room. All unused supplies must be discarded in the patient's room.
- DO NOT take Airborne Isolation Airway Management Kit to patient's room
- Suggest 4 people **maximum** in room during intubation (bedside RN, respiratory therapist, anesthesiologist, CRNA/resident). If possible, have only anesthesia personnel in room to avoid unnecessary exposure.
- **ICU/ED/Floor:** Before entering the room, discuss with treating team existing IV access, need for vasopressor drips, IV fluid.
- **Respiratory therapist:** Ask to set up in-line waveform capnography (prefer). If not available, need color change capnography.

Recommended equipment checklist before entering (only for reference, use your judgement):

- Non-rebreather mask (for preoxygenation)
- Glidescope
- Glidescope stylet
- DL blade and handle
- ETT 7,8 or any other appropriate size needed
- 10 cc syringe
- Color change capnography
- LMA 4,5
- HEPA filter
- Oral airway x1- 90,100; tongue depressor
- Bougie
- Induction agent, paralytic, push-dose vasopressors, any other meds.

Take only necessary items in the room to decrease waste

PPE Process: Applicable to all intubations.

Goal is to minimize all exposed skin/hair. **Follow most current guidance, as this is rapidly changing!**

- Minimum recommended before entering the room: bouffant cap, footwear, gown, N95, eye protection, face shield, DOUBLE GLOVES
- N95 is recommended mask for these patients along with face shield. PAPR (Powered Air Purifying Respirators) should be considered for intubating provider if available especially if you have failed N95 test or have facial hair that prevent proper seal of N95. DO NOT TAKE PAPR BIN IN PATIENT ROOM.
- 1-2 PAPR hoods along with machine will be available in Anesthesia workroom. PAPR hoods are reusable. Ensure you have all equipment at start of your shift.
- Anesthesia owned PAPR machine will be placed in the anesthesia workroom cabinet under the refrigerator (use only as BACK-UP)

PLEASE DO NOT WAIT FOR PAPR IN EMERGENT SITUATION

Recommended Intubation Procedure:

Pre-induction:

- Assemble Ambu bag with viral filter, color change capnography for back-up use.



- Respiratory therapist to program ventilator prior to induction
- Viral filter to be placed on ventilator circuit ahead of time
- Preoxygenation: Avoid positive pressure for preoxygenation, if possible. Recommend 100% via NRB. Avoid BiPAP and High flow nasal cannula for preoxygenation if possible.

Induction/Intubation:

- RSI, No mask ventilation.
- If BMV is absolutely needed, consider two hand BMV with tight seal and filter in place between Ambu bag and mask.
- Hold chest compressions while intubating to 1.) Increase first-pass success 2.) reduce exposure of HCWs to body fluids
- The most experienced provider should intubate. Consider video laryngoscopy to maximize distance between provider and patient.
- Ideally: Connect ETT directly to ventilator with waveform capnography. May not be able to auscultate (ie PAPR).
- If waveform capnography not available, ventilate with Ambu bag with HEPA filter and color change capnography attached. Once color change is confirmed, disconnect after complete exhalation and connect directly to ventilator.
- Secure ETT

- Give rocuronium to prevent self- extubation- ensure adequate sedation by primary team.

Decontamination:

- All disposable equipment to be disposed off in patient's room.
- Doffing in room and ante room per protocol. Hand hygiene per protocol.
- If you use PAPR hood, clean with bleach wipes or Sani wipes once while you are wearing the hood while PAPR machine is still on, turn off machine, do hand hygiene, change gloves, and clean hood 2nd time inside and then outside. Place in brown paper bag, label the bag with your name and keep it with you for reuse.
- **IMPORTANT:** The Glidescope is to be wiped thoroughly two times with bleach wipes. Once when in the room after removal of outer gloves and 2nd time in the ante room while still wearing N95 masks and clean gloves. Bring cleaned glidescope out and cover with yellow plastic bag.
- PAPR Machine must be cleaned with bleach wipes with clean gloves in ante room and place in yellow bag,
- Leave cleaned glidescope and PAPR machine in soiled utility and that will be cleaned again by anesthesia tech and kept in workroom.

Airborne Isolation Airway Management Kit Contents (DO NOT TAKE WHOLE BAG IN PATIENT'S ROOM):

- Non-rebreather mask (for preoxygenation)
- Disposable Glidescope stylet X1
- Glidescope cover blade #3, #4
- DL blade 3,4 and handle
- ETT 6,7,8
- Color change capnography
- LMA 4,5
- HEPA filter X 1
- Oral airway x1- 90,100; tongue depressor
- Bougie
- Boot covers x 4
- Faceshield x2
- Bouffant cap x2
- PAPR Hood X 1
- Impermeable gown X 2

- Small biohazard bag x2
- Large biohazard bag X2
- Yellow bag X 2 - cover clean glidescope, cover clean PAPR machine
- Medication Bag- Propofol X2, Etomidate, Succinylcholine X2, Rocuronium X2, phenylephrine X2, Suggamadex X2, glycopyrrolate X 1, 10 cc syringe X5, 20cc X1, twin pack needles-5, 10cc flush X 2, alcohol swabs- 4.

Availability of N- 95 mask (one size fits all) will be managed by the code blue senior staff. Take brown paper bag with you for storage of PAPR hood.

Please do not add extra supplies to kits.

The protocols will be printed, laminated and kept in workroom.

CODE BLUE TEAM SHOULD CHECK THE AIRWAY MANAGEMENT KIT AT THE START OF THEIR SHIFT

References:

1. American society of Anesthesiologists recommendations for COVID-19 patients.
<https://www.asahq.org/about-asa/governance-and-committees/asa-committees/committee-on-occupational-health/coronavirus>
2. APSF Perioperative Considerations for the 2019 Novel Coronavirus (COVID-19).
<https://www.apsf.org/news-updates/perioperative-considerations-for-the-2019-novel-coronavirus-covid-19/>

The recommendations and guidelines around the management of a patient with COVID are rapidly changing, and thus this document will be updated and recirculated when new information is available.