

APRIL 2020

# POINTS ON PRACTICE, POLICY, AND PROCEDURE

CLEVELAND CLINIC NURSING INSTITUTE

## Critical Response and Resuscitation Committee Recommendations for Resuscitation of COVID-19 Positive or Suspected Positive Patients (v 4.07.20)

Purpose: To provide recommendations for high quality resuscitation to patients positive or suspected of COVID-19 while minimizing exposure risk to caregivers and the environment

**These recommendations pertain to patients positive or suspected of COVID-19**

**experiencing cardiac arrest only**

### Caregiver Safety Considerations

- ◆ Minimize the number of caregivers in the room
- ◆ All attendees need to be actively participating with an assigned code role
- ◆ PPE must be properly applied *before participating* in the code **even if this delays care**
- ◆ N95 mask, eye protection, gown, & gloves **are mandatory**
- ◆ Caregivers assigned to code teams should have a bag with PPE immediately available and should verify availability at the start of a shift
- ◆ Place a covering (cloth, towel, plastic barrier, or mask) over the patient's face **before** chest compressions begin



### Initiation of Resuscitation:

- ◆ Follow the **decision tree (page 3)** for pulseless VT/VF versus PEA or asystole
- ◆ Follow standard ACLS/BLS protocols
- ◆ **No rescue breaths** should be administered during this time

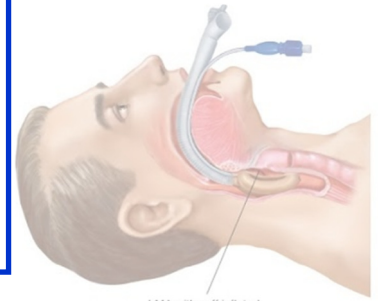
### Support of Circulation:

- ◆ Chest compression only CPR should be administered by the **first responder** for non-shockable rhythms. Place pads and **shock first for pulseless VT/VF**
- ◆ The **second responder** should apply defibrillation pads for non-shockable rhythms.
- ◆ An automated compression device is recommended if available (e.g. Lucas Device or Zoll Autopulse)
- ◆ Intraosseous (IO) access should be established early if no central line is present or Peripheral IV is inadequate
- ◆ Cardiopulmonary arrest patients are not candidates for ECMO

## Recommendations: Resuscitation of COVID-19 Positive or Suspected Positive Patients

### Support of Breathing:

- ◆ **BMV should not be administered**
- ◆ Consider placement of a supraglottic airway (LMA) if BMV unavoidable
  - Place an HEMF or HEPA **filter between** the LMA and the bag
  - **Place a covering** over the face and LMA **before** ventilating



LMA with cuff inflated over larynx

### Airway Management Considerations During a Code (Advanced Practitioners):

- ◆ Securing the airway is a high priority. **Intubate** as soon as possible.
- ◆ The most experienced provider will manage the airway
- ◆ **Chest compressions must stop while intubating**
- ◆ Rapid sequence intubation techniques are recommended
- ◆ A video laryngoscope is the first-line intubating device
- ◆ Fiberoptic bronchoscopy is highly discouraged due to aerosolization risk. If absolutely unavoidable, disposable video bronchoscopes should be used
- ◆ If difficulty is encountered: Temporize with an LMA until the code is over and give early consideration to a surgical airway
- ◆ After the endotracheal tube is inserted: Give the **first breath after** HEMF or HEPA filter is in place between the tube and the bag or ventilator
- ◆ **Avoid disconnecting the breathing circuit:**
  - ✓ Turn ventilator to standby before disconnections
  - ✓ Consider clamping tube before disconnection if no HMEF is directly attached
  - ✓ Consider using the capnograph on the defibrillator instead of a color changing device to avoid additional disconnects

### Ventilator Settings during chest compressions:

- ◆ Set FiO<sub>2</sub> to 100%
- ◆ Set mode to volume control
- ◆ Set tidal Volume 500 ml
- ◆ Set rate to 10 b/min
- ◆ Set PEEP to 0 (zero)

All patients should be transferred to the ICU by ventilator. If a patient must be hand bagged, two people need to verify the appropriate filter is properly placed directly between the endotracheal tube and bag, to minimize disconnections and reduce aerosolization.

### Termination of Resuscitative Efforts:

- ◆ Physicians are **NOT ethically obligated** to deliver care that, in their best professional judgment, will not have a reasonable chance of benefiting patients
- ◆ Prolonged or heroic resuscitative efforts are not recommended



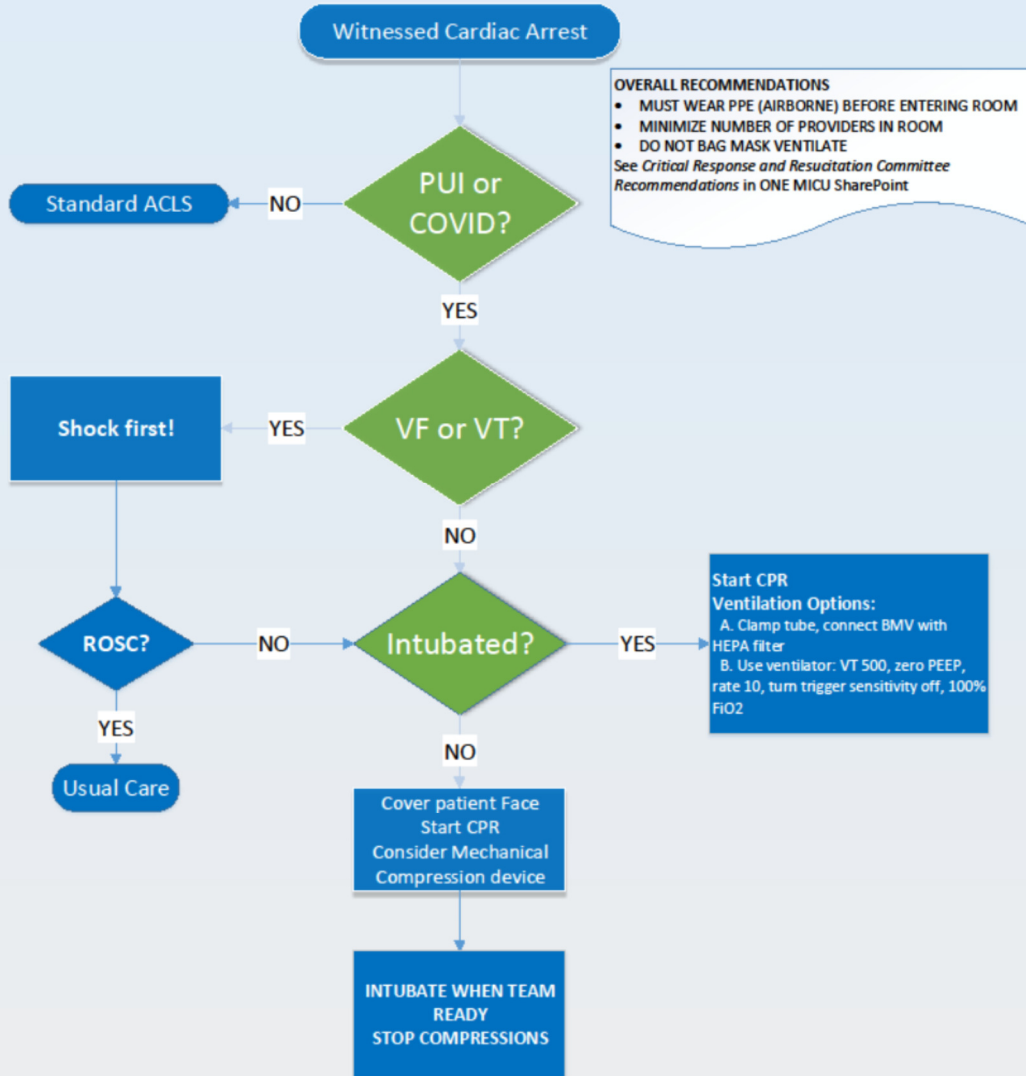
Special Considerations for patient with a VAD: Confirm the VAD is not working (no VAD noise, low, EtCO<sub>2</sub>, clinical signs of malperfusion), then provide compressions via mechanical compression device

### Source:

Critical Response and Resuscitation Committee Recommendations for Resuscitation of COVID-19 Positive or Suspected Positive Patients v 4.07.20

# Decision Tree of COVID-19 Positive or Suspected Positive Patients v. 4.7.20

## Cardiac Arrest in COVID surge



**OVERALL RECOMMENDATIONS**

- MUST WEAR PPE (AIRBORNE) BEFORE ENTERING ROOM
- MINIMIZE NUMBER OF PROVIDERS IN ROOM
- DO NOT BAG MASK VENTILATE

See *Critical Response and Resuscitation Committee Recommendations* in ONE MICU SharePoint

**Start CPR**  
Ventilation Options:  
A. Clamp tube, connect BMV with HEPA filter  
B. Use ventilator: VT 500, zero PEEP, rate 10, turn trigger sensitivity off, 100% FIO2

Revised 3/31/2020