Guidance for HCWs Performing CPR on a Patient with Confirmed or Suspected COVID-19

Adapted for use at Beaumont Health

Last updated: 3/19/2020

These guidelines are meant to reduce the risk of transmission of COVID-19 (Coronavirus) and provide guidance for healthcare workers (HCWs) at Beaumont Health for patients with suspected or confirmed COVID-19 during inpatient cardiopulmonary resuscitation. This guidance will be updated as knowledge of COVID-19 continues to evolve.

The biggest emphasis in reducing the transmission of COVID-19 is on good hand hygiene and other preventive measures as outlined by the CDC. Other standard principles of infection control and droplet/airborne precautions should be followed rigorously.

*** PLEASE NOTE THAT THE ADULT CPR TEAM CONSISTS OF 10 MEMBERS. ONLY 7-8 WILL NEED TO ENTER THE PATIENT'S ROOM. ***

The adult CPR team has the following essential members:

- **CPR Captain**: Senior medicine resident or house physician: Runs the code
- **Two residents (PGY 1-3)**: Alternate for Chest Compressions, assist as needed (defibrillation, line access backup)
- **General Surgery Resident (PGY 1-6) if available**: Central line access and surgical airway backup ***MAY REMAIN OUTSIDE ROOM ON STANDBY UNTIL NEEDED***
- **Attending Anesthesiologist or CRNA**: Intubation/Airway management
- **Respiratory Therapist/Technician**: Bag-mask ventilation (BMV) with filter on BMV
- **1st RN from patient care unit**: Initiates CPR pending team arrival, records and logs CPR event details
- **2nd RN from patient care unit**: Brings CPR crash cart, prepare all IV infusions and solutions, and draw up IV meds as needed ***WILL REMAIN OUTSIDE ROOM TO MANAGE CRASH CART AND MEDICATIONS***
- **Critical Care (ICU) RN**: Administer Meds as needed, manages defibrillator, accompany patient on transport to ICU post CPR
Pharmacist: ***WILL REMAIN OUTSIDE ROOM*** Works with RN to manage crash cart and prepare meds as needed

1. Whenever possible, patients with confirmed or suspected COVID-19 who are at risk of acute deterioration or cardiac arrest should be identified as early as possible

2. Addressing and documenting CPR status as early as possible and taking proactive steps to prevent cardiac arrest and avoid CPR should be taken

3. All Health Care Workers (HCW) responding to patients with confirmed or suspected COVID-19 must follow Beaumont guidelines for infection control and the use of PPE.

4. The nurse manager (***WILL REMAIN OUTSIDE ROOM) on the unit or his/her designee should be designated as the "CPR team Co-Captain" whose responsibilities and authorities include:
   a. Making sure no one is allowed in the room without proper PPE
   b. Crowd control: This is of utmost importance during a CPR to avoid unnecessary HCW exposures. Only essential personnel with proper PPE are allowed into the room. The co-captain has the authority to dismiss non-essential individuals or allow additional people as requested by the CPR captain.
   c. Making sure all proper personnel, equipment, resources and medications are available as needed.
   d. Identifying any exposures that may occur and ensuring proper exposure protocols are followed.
   e. Ensure proper communication is taking place with the patient family, and avoiding exposure to any incoming family members/visitors.

5. The CPR crash cart must remain outside the room to avoid contamination with the virus.

6. The RN managing the crash cart (2nd RN above) will stay outside the room and hand off meds by dropping them onto a disposable tray held by the critical care RN who stays inside the room (without touching the tray- similar to a operating field concept). The disposable trays should be made available from inventory control to each unit asap.

7. CPR team members must be trained to put on and remove PPE expeditiously and safely to avoid self-contamination, and to avoid delays to initiating effective CPR. Training and practice will help minimize any delays.

8. There should be no mouth-to-mouth ventilation of any kind. If the patient is already receiving supplemental oxygen therapy using a face mask, the mask should remain on the patient’s face during chest compressions until the respiratory therapist (RT) is available to perform bag to mask ventilation pending intubation.

9. Airway interventions must be carried out by experienced individuals only (RT for bag-mask ventilation and Anesthesia personnel for tracheal intubation). General surgery residents provide the back-up in case the need for tracheostomy arises. Video Laryngoscopy is the preferred method for intubation to avoid very close proximity to the patient’s airway.
10. Ensure equipment used in airway interventions (e.g. laryngoscopes, face masks) are not left lying on the patient’s bed/pillow, but is instead placed in a tray. Put the contaminated end of the Yankauer inside a disposable glove.

11. Disposing of and/or cleaning of all equipment used during CPR will follow hospital guidelines.