Kettering Health Network Emergency Medicine
Out-of-hospital Cardiac Arrest Guideline

Increasing evidence suggests that COVID-19 often presents with cardiac arrest in all age groups, whether through respiratory failure or myocarditis-induced mechanisms. Patients can present in any rhythm; thus VF/VT does not preclude COVID-19 as a culprit. We must ensure safety of providers during resuscitation events.

Staffing:

1. Patient contact personnel to manage codes should be kept to **5 people at MAXIMUM**. While well-intended, others should not be within 6 ft to protect themselves.

2. HOT ZONE personnel: FULL airborne PPE

1 attending (team management)
1 nurse (line and meds)
1 tech/NA (CPR and LUCAS as available)
1 respiratory therapist (ventilator)

3. COLD ZONE personnel- outside of room at doorway

1-2 nurses or techs (runners staying outside room, charting)
(pharmacist)
(resident)

Protection:

1. HOT ZONE (<6 ft from patient): All personnel in full airborne protocol per KHN standard. Assumption must be that patient is positive for COVID.

2. Airway and CPR provider must wear PAPR- if arrest is immediately started with mask in place, HCW should switch out as soon as possible to PAPR

3. COLD ZONE (>6 ft from patient); Standard ED PPE

Equipment:

1. Code, difficult airway carts, and ultrasound should stay outside resuscitation bay/room. Bring defibrillator into the room. Other items can be brought from cart by runner to bedside. Imperative to keep code carts clean from COVID.

2. If EMS LUCAS in place, don't switch LUCAS (if available), continue with EMS LUCAS. If LUCAS is available, apply campus unit to minimize manual CPR and personnel exposure.

3. LUCAS and defibrillator will require careful cleaning following operator manuals. Cleaning by personnel from resuscitation event who are still in PPE.

4. After resuscitation, all equipment must be cleaned carefully, including monitor leads, monitor, defibrillator, and ultrasound, when used. Staff should do 5 minute "time out" to carefully identify and all equipment used and ensure proper cleaning.

ACLS:

1. Early/immediate intubation. ETT preferred over LMA. Avoid bag valve mask as much as possible, but when used, must use viral filter. PEEP valve should be used with BVM.

2. Hold compressions for intubation or other oral access- must decrease aerosol risk.

3. Be aware- COVID patients can have VF/VT as well as non-shockable rhythms. Be prepared for defibrillation. Do not use double defibrillation.

4. Data suggest that unwitnessed arrests with asystole as initial rhythm have <2% chance of survival to hospital discharge. Recommend rapid decision after 6 min of resuscitation care to cease efforts on unwitnessed, asystolic events. Medical control to approve no transport in this situation.