



COVID-19

ED Management of Out-of-Hospital Cardiac Arrest During the COVID-19 Pandemic

Introduction: Increasing evidence suggests that COVID19 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 COVID19 as a culprit. Pre-COVID data from MWHC suggest that survival among patients with an initial non-shockable rhythm who arrive to the ED pulseless despite EMS resuscitation is < 1%. Consider the safety of providers and the likelihood of resuscitation when determining how long to attempt resuscitation. Minimize personnel in the room.

Staffing: 1. In Room: 1 Attending (team management and airway) 1 Resident, if present (airway) 2 Nurses (IV access, meds, pads, & defibrillator) 1 Tech (CPR and LUCAS) 1 Respiratory Therapist (ventilator) 2. Outside Room: 1 Nurse (meds) 1 Nurse (charting) \*family, police, registration, decedent affairs all stay outside of room

Protection: 3. Place patient into a negative pressure room if available 4. All personnel In Room must wear N95 mask, gown, gloves and eye protection for every arrest. Assumption must be that patient is positive for COVID19.

Equipment: 5. Attach virus filter on Ambu-bag 6. Place mayo stand/table just inside the room to serve as the "Warm" handoff zone 7. Code carts should stay outside room. Bring defibrillator into the room. 8. All meds and equipment placed onto mayo stand/table by Med Nurse 9. Continue with EMS LUCAS if in place. If not, apply our LUCAS to minimize exposure. 10. LUCAS and defibrillator will require careful cleaning following operator manuals. Cleaning by personnel from resuscitation event who are still in PPE. 11. After resuscitation, all equipment must be cleaned carefully, including monitor leads, monitor, defibrillator. Staff should do 5 minute "time out" to carefully identify any and all equipment used, much like "sponge count" in operating rooms.

ACLS: 12. Except for delivering first shock if VF/VT – prioritize intubating or LMA (with viral filter) 13. Hold compressions for intubation 14. Consider termination of resuscitation early for patients with initial non-shockable rhythm, pulseless on ED arrival despite EMS resuscitation - Pre-COVID MWHC Data suggest survival < 1%

If on Vent: 15. Keep on the ventilator and use the following settings for most adults: Mode = AC PEEP = 0 cm H2O TV = 400 ml Sensitivity (Pressure) = 20 cm H2O Rate = 10 Peak Pressure Alarm = 100 cm H2O FiO2 = 100%