Dayton MMRS | Public Health - Dayton & Montgomery County | GMVEMSC

COVID-19 Bulletin 8A:

EMS Cardiac-Respiratory Arrest Resuscitation with Suspected or Confirmed COVID-19 Template Plan

The attached templates are intended for use by EMS agencies in Greater Miami Valley EMS Council. THIS IS NOT A Just in Time Standing Order (JITSO) but a template that can be used by individual agencies at their discretion. Use of all or any part of this template is at the discretion of each agency and requires the approval of both the Agency Chief and the Agency Medical Director.

It is the responsibility of each agency to use appropriate quality management when utilizing the protocols in this template. After moving to crisis standards of care (a point where a substantial change in usual healthcare operations and level of care are required due to a pervasive or catastrophic disaster), each case be treated as a sentinel event requiring review.

Cardiac-Respiratory Arrest Resuscitation with Suspected or Confirmed COVID-19 Template Plan

Level 1 – Implementable Now

- Providers must protect themselves and colleagues from unnecessary exposure.
- With evidence of community spread, it is reasonable to suspect COVID-19 in all out-of-hospital cardiac arrests (OHCAs) by default. Risks are increased by PPE shortages and having multiple rescuers working in close proximity. The high stress of OHCAs increases the risk for lapses in infection control practices.
- Before entering the scene, don PPE, even if that delays resuscitation. Limit the number of personnel in the room to only those essential for patient care.
- For patients in cardiac or respiratory failure, try to prevent arrest using CPAP, and if unsuccessful, early intubation.
- Ask if the patient has a DNR. Do not attempt resuscitation on patients with DNR-CC or DNR-CCA.
- The risk of aerosol-generating procedures (AGPs) is increased in the close quarters of an ambulance. Attempt to perform resuscitation in larger, well-ventilated locations. If it must be performed in an ambulance, the vehicle should be stopped with doors open.
    - At long-term care facilities, resuscitative efforts should be performed in the facility if permitted.
- CPR, including chest compressions and ventilations, along with CPAP, intubation, and other airway interventions, are AGPs. All personnel involved or within six feet of the patient must be in PPE to include gown or coveralls, gloves, eye protection, and N95 masks or preferably PAPRs.
- In cases of adult cardiac arrest, initial resuscitation (not more than two minutes) should be hands-only/device-only CPR, with a non-rebreather mask on the patient for passive oxygenation, and the NRB covered by a surgical mask.
- Minimize the number of individuals in close proximity by using only two or three rotating persons as compressors.
- Use of automated compressor device (e.g., LUCAS or AutoPulse) is preferred.
- While intubating carries a high risk of aerosolization, once the patient is intubated with a cuffed endotracheal tube and connected to a ventilator with a HEPA filter in the path of exhaled gas and an in-line suction catheter, the

resulting closed circuit carries a lower risk of aerosolization than any other form of positive-pressure ventilation.

- After assessing rhythm and defibrillating if appropriate, intubate with a cuffed tube, at the earliest feasible opportunity. Inflate the cuff, and connect the endotracheal tube to a ventilator with a HEPA filter, when available.
- If intubation is unavailable or delayed, use a supraglottic airway.
- Minimize the likelihood of failed intubation attempts by using the provider and approach with the best chance of first-pass success to intubate. Pause chest compressions to intubate.
- Use video laryngoscopy under a transparent plastic poncho if available.
- Place a sheet over the patient including patient's head once airway is captured to decrease aerosol. Perform compressions through the sheet.
- If call is to a facility where the patient is on a ventilator, try to keep the patient on that vent to the extent possible (vent may not be compatible for transport).
- Use great care to prevent disconnecting the ET tube unnecessarily, to reduce aerosolization.
- **Strongly consider** field termination consistent with current GMVEMSC Standing Orders.

Cardiac-Respiratory Arrest Resuscitation Template Plan During COVID-19
Crisis Standards of Care, Levels 2 and 3

Level 2 – Implementable Only When Triggers Reached

The trigger for activation of Level 2 requires two things: approval by the duty commander and call volume which has forced the agency's dispatch center to begin stacking calls.

- No resuscitation of unwitnessed cardiac arrest if patient in asystole or in PEA with a rate less than 40 and no bystander CPR.
- No resuscitation of recurrent cardiac arrest (on the same call)
- No resuscitation if patient is known to have any of the following:
    - Malignant disease with a life expectancy of less than 12 months
    - End-stage neurodegenerative disease
    - Severe and irreversible neurological event or condition
    - Severe dementia
- Patients in continuous cardiac arrest WILL NOT BE TRANSPORTED, even with a mechanical CPR device. If no ROSC, call to request field termination order, BEFORE moving the patient to the patient compartment of a vehicle.
- For witnessed arrests inside the ambulance, pull vehicle to the side of the road and perform resuscitation in full PPE, with doors OPEN. If patient has mechanical CPR device in place and has lost ROSC, the device may be resumed with continued transport to the hospital, as long as all personnel in the patient compartment have sufficient respiratory PPE in place.

Level 3 – Implementable Only When Triggers Reached

The trigger for activation of Level 3 requires two things: approval by the duty commander and call volume is such that the agency's dispatch center has not only begun stacking calls but now has numerous calls in que with no available apparatus to send even for higher priority calls.

- Resuscitative efforts only for shockable rhythms.
- If no response after three defibrillation attempts, contact MCP and request field termination.