

EMS Treatment Guidelines (for high community spread)

In order to protect crews from exposure, and subsequent illness and/or quarantine, diligence and a measured approach to evaluation and treatment of suspected COVID-19 cases is needed. At the current state when community spread is prevalent, and as many patients are asymptomatic or pre-symptomatic with SARS-CoV-2 infection, prehospital providers should approach any patient as potentially infected. As such, screening questions have limited utility in the approach to these patients.

For all patients, assessment should begin from a distance of more than 6 feet unless appropriate PPE is worn (see PPE guidelines), and ideally should be performed by a single provider.

- 1. If the patient is exhibiting priority symptoms (e.g. altered level of consciousness, respiratory distress, cardiac arrest), providers essential to the care of the patient will don appropriate PPE and initiate patient care according to the applicable protocol.
- 2. If the patient is alert, does not exhibit priority symptoms, and is able to speak, providers should ask screening questions to include:
 - a. Have you had a fever? (body temp >100.4)
 - b. Do you have a cough or shortness of breath?

Receiving facilities will then be notified, relaying answers obtained to the questions above. This information helps the accepting facility to triage, cohort, and room suspected COVID-19 patients.

Personal Protective Equipment (PPE) Guidelines

- 1. It is recommended that all EMS crews wear masks when in the vehicle with one another, (even when not on a call), or when at the station (or other locations). If patient care is not being performed, a personal cloth mask is acceptable. Cloth masks are not acceptable PPE for patient care.
- 2. When community spread is prevalent, EMS providers should treat all patients as potentially infected. For all patients (regardless of complaint), providers should at a minimum wear an earloop mask, eye protection (goggles or face shield), disposable exam gloves.
- 3. For known positive patients or for patients presenting with symptoms consistent with COVID-19, the following PPE guidelines should be utilized:
 - a. NIOSH N95 or higher mask is recommended. PAPR's may also be utilized if available. If there are shortages or N95's or the supply chain for N95 masks is disrupted, an earloop mask may be worn, with N95 respirators being reserved for aerosol-generating procedures.
 - b. Eye protection (i.e., goggles or disposable face shield that fully covers the front and sides of the face).
 - c. A single pair of disposable patient examination gloves. Change gloves if they become torn or heavily contaminated.



- d. Disposable isolation gowns: If there are shortages of gowns, they should be prioritized for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of EMS providers (e.g., moving patient onto a stretcher).
- 4. Drivers of ambulances should wear all recommended PPE to help move the patient onto the stretcher or into the hospital. Prior to entering an isolated driver's compartment, the driver should remove and dispose of PPE and perform hand hygiene to avoid soiling the compartment.
 - a. If the transport vehicle does **not** have an isolated driver's compartment, the driver should remove the face shield or goggles, gown and gloves and perform hand hygiene. An earloop mask should continue to be used during transport.
- 5. All personnel should avoid touching their face while working.
- 6. After the patient is released to the facility, EMS clinicians should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with routine procedures. Earloop masks may continue to be used/reused as long as they are in serviceable condition and unsoiled or wet.

Aerosol Generating Procedures requiring N95 masking/PAPR use

In order to reduce risks of transmission to personnel and others, aerosol generating procedures should be avoided unless deemed absolutely necessary. These procedures include: Administration of nebulizers, CPAP/BiPAP, use of a BVM, intubation, CPR, suctioning, and insertion of airway adjuncts. (Intranasal administration of medications is not considered aerosol generating). If it is necessary to perform these procedures, full PPE (Face Shield, N95 mask/PAPR, gown, gloves) need to be worn by all personnel directly caring for the patient.

Effective this update, CPAP and nebulizer administration may be utilized if needed with the following guidelines. It is recommended that if a patient has respiratory symptoms felt to be infectious in nature (e.g., fever, cough, runny nose, sore throat), or the patient has respiratory symptoms and is coming from an extended care facility known to have COVID-19 outbreaks, that these procedures be avoided.

CPAP: If CPAP is deemed necessary, treatment should ideally be limited to one provider only (if possible), with that provider in full recommended PPE (Face Shield, N95 mask, gown, and gloves). If additional personnel are needed to care for the patient, they also must be in full PPE. The patient compartment of the ambulance *must* be sealed and isolated from the driver's compartment, and the exhaust fan should be on during transport. An inline HEPA filter is highly recommended.

Nebulizer Administration: If a nebulizer treatment is deemed necessary, and no other alternative treatment is feasible or safe, efforts should be made to administer the treatment in the patient's home prior to transport. Alternatively, if weather permits, the nebulizer may be administered outside in open air prior to transport. If absolutely necessary, nebulizers may be administered in the back of the ambulance while the ambulance is on scene, with the doors/windows of the patient compartment open to the outside and exhaust fans on. Administration of nebulizers during transport should be avoided, and should be looked upon as a last resort treatment option. In all cases, personnel should be limited to those absolutely necessary for care of the patient, and all recommended PPE should be utilized. A HEPA filtration device is highly recommended.



IM Epinephrine may also be considered according to protocol (ALS only) for severe bronchospasm. A Medical Control order is required for epinephrine administration for any patient over the age of 50.

If a more definitive airway is required, consider the following:

- If intubation is necessary, a video laryngoscope is preferred. If a video laryngoscope is unavailable, consider use of an iGel. Direct laryngoscopy is to be avoided.
- Use of an inline HEPA filter on BVM's is highly recommended, and should be used if available.

Note on Steroid Administration

Previous Restriction of Steroid administration (Solu-Medrol/Decadron) administration has been lifted.