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## Advisory

### Procedural Guidelines for COVID-19 EMS Response (V 4.0)

Date: March 16, 2020

#### Background:

This document is designed to provide responders with guidance regarding the outbreak of 2019 Novel Coronavirus (COVID-19) that begun in Wuhan City, Hubei Province, China on December 2019.

This guidance does not constitute a response protocol but rather a reference for general considerations and the protection of responders.

For questions regarding information in this advisory please contact the Departments Infection Control Officer/EMS Coordinator.

As this is a rapidly evolving situation, please visit the Center for Disease Control and Prevention (CDC) for the most up-to-date information:

Center for Disease Control and Prevention (CDC), 2019 Novel Coronavirus, Wuhan, China  
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

#### Clinical Criteria:

The CDC clinical and epidemiologic criteria for a COVID-19 Patient Under Investigation (PUI) have been developed based on what is known about the MERS-CoV and the SARS-CoV and are subject to change as additional information becomes available.

#### Assessment and Screening:

- 1) Public Safety Answering Points (PSAP) and other emergency call centers should implement modified caller queries and immediately communicate pertinent information to EMS practitioners before arrival on scene.
- 2) If PSAP telecommunicators advise that the patient is suspected of having COVID-19, EMS practitioners should don appropriate PPE before entering the scene.
- 3) If information about potential for COVID-19 has not been provided by the PSAP, EMS practitioners should exercise appropriate precautions when responding to any patient with consistent signs of fever AND/OR lower respiratory infection (ie. Cough, difficulty breathing, shortness of breath)
  - a) Initial assessment should begin from a distance of **at least 6 feet** from the patient, if possible.

b) Initial assessment should be limited to either the primary patient care provider, or the ambulance crew

c) If COVID-19 infection is suspected, all PPE as described below should be used.

4) If COVID-19 is not suspected, EMS practitioners should follow standard procedures and use appropriate PPE for evaluating a patient with a potential respiratory infection.

5) If COVID-19 is suspected, emergency responders should limit the number of response personnel entering the scene and/or having close contact with the patient.

### **Infection Control:**

To expedite public health containment strategies, EMS providers should implement appropriate infection control measures, including Standard, Contact, and Airborne Precautions plus eye protection when COVID-19 is suspected.

### **Personal Protective Equipment (PPE):**

1) PPE carried by EMS agencies shall be utilized to provide protection from a patient suspected to have COVID-19.

2) EMS practitioners should use PPE appropriately for all interactions with PUI patient contacts, including contact with the patient's environment.

3) EMS practitioners should don PPE prior to patient contact and properly remove and discard PPE immediately after patient contact to contain pathogens. Hand hygiene should be performed after removing PPE.

4) EMS providers should institute Standard, Contact, and Airborne Precautions plus eye protection when treating a patient with suspected COVID-19. Recommended PPE includes:

a) A single pair of disposable patient examination gloves;

b) Disposable isolation gown; due to a limited supply of gowns – gowns should be prioritized for aerosol generating procedures only or cases where splashes or sprays are anticipated.

c) NIOSH-approved, fit tested respiratory protection (N95 or higher-level respirator); during periods of low supply, facemasks are an acceptable alternative. **A single N95 may be reused until visibly soiled. They should be stored in a paper or ziplock bag during times of non-use.**

d) Eye protection (goggles or disposable face shield that fully covers the front and side of the face). Plastic eye goggles have been issued to each EMS member. They may be decontaminated and reused. In cases where confirmed COVID-19 exists, goggles should then be discarded.

5) Drivers, if they provide direct patient care (e.g., moving patients onto stretchers), should wear all recommended PPE.

a) After completing patient care and before entering an isolated driver's compartment, the driver should remove the face shield or goggles, gown and gloves and perform hand hygiene.

b) A respirator should continue to be used during transport.

c) The isolation window between the cab and patient compartment is to remain closed at all times

6) All personnel should avoid touching their face while working

7) Provide a surgical mask (N95 is not recommended) for all patients; Ambulance personnel shall also don a surgical mask or N95 anytime they are within the confines of the Emergency Department. The ER will replace surgical masks on a 1:1 basis, when available.

8) Provide tissues to patients for secretion control and encourage patient hand hygiene and cough etiquette practices.

9) On arrival, after the patient is released to the facility, EMS practitioners should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with routine procedures

#### **Precautions for Aerosol-Generating Procedures:**

1) In addition to the PPE described above, EMS clinicians should exercise caution if an aerosol generating procedure is necessary.

a) e.g., bag valve mask (BVM) ventilation, oropharyngeal suctioning, endotracheal intubation, nebulizer treatment, continuous positive airway pressure (CPAP), bi-phasic positive airway pressure (biPAP), or resuscitation involving emergency intubation or cardiopulmonary resuscitation (CPR).

2) BVMs, and other ventilator equipment, should be equipped with HEPA filtration to filter expired air.

3) EMS organizations should consult their ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive-pressure ventilation.

4) If possible, the rear doors of the transport vehicle should be opened, and the HVAC system should be activated during aerosol-generating procedures. This should be done away from pedestrian traffic.

5) MDIs will be considered the most appropriate treatment method, when available. Approx. 5 puffs are equal to one nebulizer treatment.

6) All cardiac arrests and Level 1 trauma will require full PPE. In instances where advanced airway is required, Igel will be considered the most appropriate treatment method. Intubation should be avoided.

#### **Transport Considerations:**

1) Standard transportation to appropriate hospital receiving facility.

2) Isolate the ambulance driver from the patient compartment and keep pass-through doors and windows tightly shut.

a) It is recommended to have the patient compartment exhaust vent on high and to isolate the driver compartment from the patient compartment. It is also recommended to have the driver compartment ventilation fan set to high without recirculation.

b) If driver/pilot compartment is not isolated from the patient compartment, the vehicle operator should don a NIOSH-approved, fit-tested respirator.

3) Family members and other contacts of COVID-19 PUI patients should not ride in the transport vehicle.

4) During transport, limit the number of providers in the patient compartment to essential personnel to minimize possible exposures.

5) EMS personnel must notify the receiving hospital before arrival if they are transporting a patient with suspected COVID-19, to their facility, by requesting “**respiratory isolation**” when making an entry note.

a) For transport to UMASS University Campus ER; the shift officer should attempt to contact the UMMMC Univ. Flow Nurse: **508-816-8133**

6) When providing hospital notification, please indicate if any family or support persons are accompanying the patient, as they too may need to be isolated. EMS agencies should have a plan for family members wishing to accompany the patient that prevents crew exposures.

7) A hospital may not refuse patients with suspected coronavirus infection unless a municipal response plan designed to do so has been activated.

#### **Decontamination Considerations:**

1) After transporting the patient, leave the rear doors of the transport vehicle open to allow time for sufficient air changes to remove potentially infectious particles. Consideration must be given to ensuring vehicle and equipment security if staff is not able to stay with the vehicle.

2) The time to complete transfer of the patient to the receiving facility and complete all documentation should provide sufficient time for air changes.

3) When cleaning the vehicle, EMS clinicians should wear a disposable gown and gloves. A face shield or facemask and goggles should also be worn if splashes or sprays during cleaning are anticipated.

4) Any visibly soiled surface must first be cleaned then decontaminated using an approved disinfectant wipe, or 10% Bleach solution

5) Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly, to include the provision of adequate ventilation when chemicals are in use. Doors should remain open when cleaning the vehicle, and allowed to air dry for a minimum of 5 minutes

6) Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product’s label) are appropriate for COVID19 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.

7) Clean and disinfect the vehicle in accordance with standard operating procedures. All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected using an EPA-registered hospital grade disinfectant in accordance with the product label.

8) Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer's instructions.

9) Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.

10) Follow standard operating procedures for containing and laundering used linen. Avoid shaking the linen.

11) Remove and dispose of contaminated PPE and perform hand hygiene prior to transporting patients. Don clean PPE to handle the patient at the transport location.

12) All EMS equipment (Monitor, First in Bag, Oxygen Bag, etc) is to remain inside of the roll up cabinets when not in use

#### **Documentation of Patient Care:**

1) Documentation of patient care should be done after EMS clinicians have completed transport, removed their PPE, and performed hand hygiene.

2) Any written documentation should match the verbal communication given to the emergency department providers at the time patient care was transferred.

3) EMS documentation should include a listing of EMS clinicians and public safety providers involved in the response and level of contact with the patient (for example, no contact with patient, provided direct patient care). This documentation may need to be shared with local public health authorities.

4) Use of ESO Influenza Form and ESO Travel Form is required for service tracking.

#### **Follow-up and Reporting:**

1) EMS personnel who have been exposed to a patient with suspected or confirmed COVID-19 should notify their chain of command to ensure appropriate follow-up.

2) Only providers that have had an unprotected exposure (e.g., not wearing recommended PPE) should be reported to a shift officer and designated infection control officer for evaluation, and fill out an Unprotected exposure form

3) EMS clinicians should be alert for fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat). If symptoms develop, they should self-isolate and notify occupational health services and/or their public health authority to arrange for appropriate evaluation.

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