EMS PPE Guidance - Updated CDC 3/10/2020

- Facemasks are an acceptable alternative until the supply chain is restored. Respirators (i.e., N-95 masks) should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest risk exposure to personnel.
- Eye protection, gown, and gloves continue to be recommended. Consider double-gloving so that the outer pair can be shed after the transfer of care, leaving one pair on for decontamination. 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 personnel.
- When the supply chain is restored, fit-tested EMS providers should return to the use of respirators for patients known or suspected of COVID-19.

Aerosol/ droplet generating procedures (All Patients)

- If possible, consult with medical command before performing aerosol-generating procedures for specific guidance.
- An N-95 or higher-level respirator, instead of a facemask, should be worn in addition to the other PPE described above, for EMS clinicians present for or performing aerosol-generating procedures.
- EMS providers should exercise caution if an aerosol-generating procedure (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) is necessary. BVMs, and other ventilatory equipment, should be equipped with HEPA filtration to filter expired air.
- EMS organizations should consult their ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive-pressure ventilation.
- 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.

During Transport (suspected, presumed, or confirmed COVID-19 patients)

- Drivers, if they provide direct patient care (i.e., moving patient onto stretcher), should wear all recommended PPE. After completing patient care and before entering an isolated driver's compartment, the driver should remove and dispose of PPE and perform hand hygiene to avoid soiling the compartment.
- 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. A respirator or facemask should continue to be used during Transport.
- Minimize the number of providers in the back of the ambulance.
- Minimize equipment needed in the patient compartment.
- Minimize the time that the ambulance doors are closed.
- Close partition from the driver's compartment if possible.
- Vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle.
- If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient care area, and out the back of the vehicle.
- If the driver and patient care compartments cannot be isolated, open the outside air vents in the driver area and turn on the rear exhaust ventilation fan to the highest setting.
The family should not accompany the patient in the ambulance (may be waived for pediatrics). If a family must accompany, place family only in front of the ambulance and have them wear a facemask.

Notify receiving hospital, preferably by cellphone of that the patient has an exposure history and signs and symptoms suggestive of COVID-19. Request room assignment, if possible.

Obtain any special patient transfer procedures from the receiving facility.

- **Transfer of care (suspected, presumed, confirmed COVID-19 patients)**
  - Leave rear ambulance doors open on patient removal to allow for air exchange
  - Proceed directly to the assigned room
  - After the patient is released to the facility, gather equipment and doff PPE inpatient room, or another designated area as per hospital staff.
  - Remove and discard PPE (see attached CDC guide)
  - Complete immediate hand hygiene with soap and water for 30 seconds

- **Post Call - Equipment Decontamination (suspected, presumed, confirmed COVID-19 patients)**
  - After transporting the patient, leave the rear doors of the transport vehicle open to allow for sufficient air changes to remove potentially infectious particles. The time to complete the transfer of the patient to the receiving facility and complete all documentation should provide adequate air changes.
  - 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.
  - 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.
  - Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces before 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 severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.
  - Products with EPA-approved emerging viral pathogens claims are recommended for use against SARS-CoV-2. Refer to List N on the EPA website for EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.
  - Clean and disinfect the vehicle following 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 following the product label.
  - Clean and disinfect reusable patient-care equipment before use on another patient, according to the manufacturer's instructions.
  - Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.
  - Follow standard operating procedures for containing and laundering used linen. Avoid shaking the linen.
  - Don't forget to decontaminate: radio, cell phone, door handles, pens, etc….
  - You are not in service until your unit and equipment are decontaminated.
• Documentation
  o Documentation of patient care should be done after completion of Transport, removal of PPE, and performed hand hygiene.
  o Any written documentation should match the verbal communication given to the emergency department providers at the time patient care was transferred.
  o Documentation should include a listing of EMS providers and public safety personnel involved in the response and level of contact with the patient (for example, no contact with the patient, provided direct patient care).
  o This documentation may need to be shared with local public health officials.

• Post-Call Follow up
  o EMS agencies should develop policies for assessing exposure risk and management of EMS personnel potentially exposed to SARS-CoV-2 in coordination with state or local public health authorities. Decisions for monitoring, excluding from work, or other public health actions for HCP with potential exposure to SARS-CoV-2 should be made in consultation with state or local public health authorities. Refer to the Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19) for additional information.
  o EMS agencies should develop sick-leave policies for EMS personnel that are non-punitive, flexible, and consistent with public health guidance. Ensure all EMS personnel, including staff who are not directly employed by the healthcare facility but provide essential daily services, are aware of the sick-leave policies.
  o 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. Any unprotected exposure (e.g., not wearing recommended PPE) should be reported to occupational health services, a supervisor, or a designated infection control officer for evaluation.
  o 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.

• EMS Employer Responsibilities
  o The responsibilities described in this section are not specific for the care and Transport of PUIs or patients with confirmed COVID-19. However, this interim guidance presents an opportunity to assess current practices and verify that training and procedures are up-to-date.
  o EMS agencies should have infection control policies and procedures in place, including describing a recommended sequence for safely donning and doffing PPE.
  o Provide all EMS providers with the job- or task-specific education and training on preventing transmission of infectious agents, including refresher training.
  o Ensure that EMS providers are educated, trained, and have practiced the appropriate use of PPE before caring for a patient, including attention to the correct use of PPE and prevention of contamination of clothing, skin, and environment during the process of removing such equipment.
  o Ensure EMS providers are medically cleared, trained, and fit-tested for respiratory protection device use (e.g., N95 filtering face piece respirators), or medically cleared and trained in the use of an alternative respiratory protection device (e.g., Powered Air-Purifying Respirator, PAPR) whenever respirators are required. OSHA has several respiratory training videos.
- EMS units should have an adequate supply of PPE.
- Ensure an adequate supply of or access to EPA-registered hospital-grade disinfectants (see above for more information) for appropriate decontamination of EMS transport vehicles and their contents.
- Ensure that EMS providers and biohazard cleaners contracted by the EMS employer tasked to the decontamination process are educated, trained, and have practiced the method according to the manufacturer's recommendations or the EMS agency's standard operating procedures.