Recommendations for Emergency Medical Providers and Medical First Responders

Updated: 3/12/2020

Emergency Medical Service (EMS) providers should use universal precautions on every call. The COVID-19 outbreak serves as a clear reminder that provider safety is paramount on every call.

Initial assessment of every patient with respiratory illness should begin from a distance of at least 6 feet from the patient, if possible. Patient contact should be minimized to the extent possible until a surgical type facemask is on the patient. EMS providers should follow standard procedures and use appropriate personal protection for evaluating a patient with a potential respiratory infection.

Considerations for Modified Caller Queries

The Iowa Department of Public Health has asked PSAPs to consider questioning callers about their symptoms and risk factors for COVID-19 infection. Suggested queries include:

Fever (subjective or confirmed) or respiratory illness (cough or shortness of breath)
AND

A history of travel from China, Iran, Japan, South Korea, most of Europe within 14 days of symptom onset
Please check the following link for current Travel Advisory Information
https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html

AND

Close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset

If PSAP call takers advise that the patient is suspected of having COVID-19, based on the signs and symptoms and risk, EMS providers should put on appropriate personal protection equipment (PPE) before entering the scene.

Based on local and regional situational analysis of PPE supplies, facemasks are an acceptable alternative when the supply chain of respirators cannot meet the demand. During this time, available respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to HCP.

- EMS Providers who will directly care or transport/transfer a patient with possible COVID-19 infection or who will be in the compartment with the patient should follow Standard, Contact, and Airborne Precautions and procedures, and wear the following PPE:
    - Wear a single pair of disposable patient examination gloves. Change gloves if they become torn or heavily contaminated;
    - Wear a disposable isolation gown;
    - Wear respiratory protection (i.e., N-95 or higher-level respirator see direction above); and
    - Wear eye protection (i.e., goggles or disposable face shield that fully covers the front and sides of the face).
    - All personnel should avoid touching their face while working.
    - Notify the receiving healthcare facility that the patient has an exposure history and signs and symptoms suggestive of COVID-19 infection so that appropriate infection control precautions may be taken prior to patient arrival.
    - On arrival, after the patient is released to the facility, EMS providers should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with routine procedures.
    - Documentation of patient care should be done after EMS providers have completed transport, removed their PPE, and performed hand hygiene.
    - 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.
    - When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area.
    - 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 end of the vehicle.
    - During transport, limit the number of providers in the patient compartment to essential personnel to minimize possible exposures.
    - If possible, consult with medical control before performing aerosol-generating procedures for specific guidance.
    - 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 providers should wear respiratory protection (i.e., N-95 or higher-level respirator) when conducting these type of procedures.
    - Use BVMs and other ventilatory equipment, equipped with HEPA filtration to filter expired air if possible.
    - Consult 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.

- Drivers:

- Drivers that provide direct patient care (e.g., moving patients onto stretchers) should wear all above recommended PPE. After completing patient care and before entering the 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, an N-95 or higher-level respirator could be used during transport unless the supply chain of respirators cannot meet the demand, in that case, facemasks are an acceptable alternative.
- If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust ventilation fans to the highest setting. This will create a negative pressure gradient in the patient area.
- During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle.

- Patients:
  - A facemask should be worn by the patient for source control.
  - Family members and other contacts of patients with possible COVID-19 infection should **not** ride in the transport vehicle, if possible. If riding in the transport vehicle, they should wear a facemask.
  - If a nasal cannula is in place, a facemask should be worn over the nasal cannula. Alternatively, an oxygen mask can be used if clinically indicated. If the patient requires intubation, see below for additional precautions for aerosol-generating procedures.

Follow-up and/or reporting measures by EMS Providers after caring for a potential case of COVID-19 a or patient with confirmed COVID-19

EMS providers should be aware of the follow-up and/or reporting measures after caring for a potential case or patient with confirmed COVID-19:

- EMS programs should consult with the receiving health care facility and local public health to assess exposure risk and management of EMS providers potentially exposed to COVID-19.
- EMS providers should assure that the receiving health care facility is in contact with local public health authorities and notified about the patient so appropriate follow-up monitoring of the EMS provider can occur.
- Decisions for monitoring, excluding from work, or other public health actions for EMS providers with potential exposure to COVID-19 should be made in consultation with local and state public health authorities.
- EMS programs are encouraged to develop sick-leave policies for EMS personnel that are non-punitive, flexible, and consistent with public health guidance.
- EMS providers who have been exposed to a patient with potential 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 program administration, the receiving health care facility and local public health.
  - EMS providers 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 local or state public health to arrange for appropriate evaluation.

Cleaning EMS transport vehicles after transporting a potential case of COVID-19 or patient with confirmed COVID-19

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment:

- 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 transfer of the patient to the receiving facility and complete all documentation should provide sufficient air changes.
- When cleaning the vehicle, EMS providers 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 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 COVID-19 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 COVID-19. These products can be identified by the following claim:
    - "[Product name] has demonstrated effectiveness against viruses similar to COVID-19 on hard non-porous surfaces. Therefore, this product can be used against COVID-19 when used in accordance with the directions for use against [name of supporting virus] on hard, non-porous surfaces."
    - This claim or a similar claim, will be made only through the following communications outlets: technical literature distributed exclusively to health care facilities, physicians, nurses and public health officials, "1-800" consumer information services, social media sites and company websites (non-label related). Specific claims for "COVID-19" will not appear on the product or master label.
- If there are no available EPA-registered products that have an approved emerging viral pathogen claim, products with label claims against human coronaviruses should be used according to label instructions.
- 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.
- Clean and disinfect reusable patient-care equipment before use on another patient, according to 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.

Other EMS program recommendations

The responsibilities described in this section are not specific for the care and transport of patients with potential or confirmed COVID-19. However, this guidance presents an opportunity to assess current practices and verify that training and procedures are up-to-date.

- EMS units should have infection control policies and procedures in place, including describing a recommended sequence for safely donning and doffing PPE.
- Provide all EMS providers with job- or task-specific education and training on preventing transmission of infectious agents, including refresher training.
- Ensure that EMS providers are educated, trained, and have practiced the appropriate use of PPE prior to caring for a patient, including attention to correct use of PPE and prevention of contamination of clothing, skin, and environment during the process of removing such equipment.
- Ensure EMS providers are medically cleared, trained, and fit tested for respiratory protection device use (e.g., N95 filtering facemasks), 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.
- 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 adequate 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 process according to the manufacturer's recommendations or the EMS program's standard operating procedures.

Find additional state and federal references at the following websites:
https://idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus
https://www.cdc.gov/coronavirus/2019-ncov/index.html
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html