



Dear EMS Partner,

As the Coronavirus pandemic continues to evolve I wanted to provide you with some updates on both our preparation as well as EMS specific information to help you to prepare and respond. Currently over 353,000 worldwide have contracted the virus with 15,000 people who have died from the disease. In the US, there are over 35,000 who have contracted the virus with 473 who have died from the disease. Yesterday, the US saw 12,000 new cases. Much of this is a result of expanded access to testing, but this does show the large prevalence of the virus in the US.

Communications with EMS

In addition to email, postings in EMS rooms, and our bi weekly news blast, we continue to post updates our EMS Partners at www.steward.org/EMS

Recommended Personal Protective Equipment (PPE) (per CDC)

- EMS clinicians who will directly care for a patient with possible COVID-19 infection or who will be in the compartment with the patient should follow Standard, Precautions and use the PPE as described below. Recommended PPE includes:
 - **N-95 or higher-level respirator or facemask** (if a respirator is not available),
 - N95 respirators or respirators that offer a higher level of protection should be used instead of a facemask when performing or present for an aerosol-generating procedure
 - **Eye protection** (i.e., goggles or disposable face shield that fully covers the front and sides of the face). **Personal eyeglasses and contact lenses are NOT considered adequate eye protection.**
 - **A single pair of disposable patient examination gloves.** Change gloves if they become torn or heavily contaminated, and **isolation gown.**
 - 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 clinicians (e.g., moving patient onto a stretcher).
- When the supply chain is restored, fit-tested EMS clinicians should return to use of respirators for patients with known or suspected COVID-19.
- Vehicle Operators, if they provide direct patient care (e.g., moving patients onto stretchers), should wear all recommended PPE. After completing patient care and

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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.
- All personnel should avoid touching their face while working.
- On arrival, 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.
- Other required aspects of Standard Precautions (e.g., injection safety, hand hygiene) are not emphasized in this document but can be found at:
<https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>

It is strongly recommended that EMS providers train on acceptable donning and doffing procedures.

Precautions for Aerosol-Generating Procedures

- If possible, consult with medical control 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 clinicians 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.

EMS Transport of a PUI or Patient with Confirmed COVID-19 to a Healthcare Facility (including interfacility transport)

If a patient with an exposure history and signs and symptoms suggestive of COVID-19 requires transport to a healthcare facility for further evaluation and management (subject to EMS medical direction), the following actions should occur during transport:

- EMS clinicians should notify the receiving healthcare facility that the patient has an exposure history and signs and symptoms suggestive of COVID-19 so that appropriate infection control precautions may be taken prior to patient arrival.
- Keep the patient separated from other people as much as possible.
- Family members and other contacts of patients with possible COVID-19 should **not** ride in the transport vehicle, if possible. If riding in the transport vehicle, they should wear a facemask.
- Isolate the ambulance driver from the patient compartment and keep pass-through doors and windows tightly shut.
- When possible, use vehicles that have isolated driver and patient compartments that can provide separate ventilation to each area.
 - Close the door/window between these compartments before bringing the patient on board.
 - 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.
 - 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.
 - Some vehicles are equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle. Such a unit can be used to increase the number of air changes per hour (ACH) (<https://www.cdc.gov/niosh/hhe/reports/pdfs/1995-0031-2601.pdf> pdf icon).
- 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.
- Follow routine procedures for a transfer of the patient to the receiving healthcare facility (e.g., wheel the patient directly into an examination room).

Additional information is available at:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>

Clinical Management and Treatment

Treatment continue to be aimed at managing the presenting symptoms and in accordance with accepted EMS treatment protocols for your region. **Early and clear notification to the emergency department of a suspected COVID-19 case is extremely important.** The use of clear language to indicate isolation will be needed on arrival is critical. This will allow the ED Team to prepare for your arrival and rapid transition to a secure space for patient hand-off. Steward Hospitals are prepared to accept and care for these patients.

Arrival at the ED

- On arrival, EMS should assure the suspect patient has a surgical mask in place. If there is not one available, and the patient's clinical status will allow, one member of the EMS

Team should enter the ED and request a mask from staff prior to moving the patient into the ED.

- For all aerosolizing procedures initiated or continued by EMS during transport, please make sure you notify the ED of these ongoing procedures during your initial notification. On arrival at the ED, the EMS team should consider pausing this procedure until the patient is transitioned into a hospital room. This does not apply to any lifesaving/life-sustaining procedures such as BVM ventilation and Ventilator driven respirations, etc.

Visitor Restrictions

To enhance the health and safety of our patients and staff, Steward Hospitals are restricting all visitors for admitted patients. Exceptions may be made in certain circumstances, such as end of life. All exceptions must be approved by the patient's care team.

Survey Results

Last week I sent out a two question informal survey for review for our EMS leaders nation-wide. Those questions were specific to whether EMS agencies were restricting family/friends from riding along with patients and whether EMS services were conducting shift evaluations of staff. I received hundreds of responses from our community EMS Leadership. I have summarized the most common answers below to highlight some "best practices":

Question: *Is your department/service restricting family members/friends from accompanying patients during transport?*

Answer: Most services are restricting any family/friends from riding. Exceptions are being made for parents/guardians of minors and other case by case situations.

Question: *Is your department performing daily start of shift checks on EMS staff evaluating for fever, cough, SOB?*

Answer: Most all services are performing Staff Wellness Checks at the beginning of each shift. An example of the questions being asked include:

- a) Temperature is not higher than 100.4
- b) Cough?
- c) Runny/Stuffy Nose?
- d) SOB?
- e) Sore Throat?
- f) Exposure to someone with, or under investigation for COVID-19

EMS Rooms

Recently, Steward Cafeterias have removed all "open air" food items such as salad bars, pizza stations, soup, or buffet style offerings. We are now following the same practice in our EMS

rooms. We will still have prepackaged food items in the EMS rooms, but all open air items, including fruit, will be removed.

I will continue to provide updated information as it become available through email, postings in each Steward Hospital EMS Room/Area, through the bi-weekly Steward Email news blast, and at www.steward.org/EMS . Please feel free to email me with any questions at the below email address. You can also contact your local Steward Hospital EMS Manager for information and assistance.

Respectfully,



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