Interim Guidance for Kentucky Emergency Medical Service Agencies For COVID-19 Response

Release Date: March 13, 2020

CONTENTS PAGE

BACKGROUND

Emergency Medical Service (EMS) agencies play a vital role in responding to requests for assistance, triaging patients, and providing emergency medical treatment and transport for ill persons. However, unlike patient care in the controlled environment of a healthcare facility, patient care rendered by EMS frequently presents unique challenges due to the setting in which our patients are encountered, enclosed space during transport, the frequent need for rapid medical decision-making, interventions with limited information, and varying ranges of patient acuity and available healthcare resources.

When preparing for and responding to patients with confirmed or possible coronavirus disease 2019 (COVID-19), close coordination and effective communications are important among 911 Public Safety Answering Points (PSAPs) — commonly known as 911 call centers, the EMS system, healthcare facilities, and the public health system. Each PSAP and EMS system should seek the involvement of the local EMS medical director to provide appropriate medical recommendations relating to call screening, medical instructions provided by telecommunicators to callers, and dispatch information provided to emergency responders. For the purposes of this guidance, "EMS clinician" means any individual providing prehospital EMS or medical first response. When EMS is summoned to provide transport for a suspected COVID-19 patient ,medical first responders, prehospital care providers and the identified receiving healthcare facility should be notified in advance that they may be encountering and caring for, transporting, or receiving a patient who may have COVID-19 infection.

ACKNOWLEDGEMENT

This guidance is adapted from the ***Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety Answering Points (PSAPs) for 2019-nCoV in the United States*** published by the Centers for Disease Control and Prevention, and also includes Kentucky-specific guidance and "best practices" as well.

We would also like to extend our appreciation to the administration and staff at Harrison County EMS for sharing their "lessons learned" as this situation has evolved.

The "interim" label on this guidance is due to the dynamic nature of COVID-19 and the information that is regularly updated as we learn more about the novel coronavirus. The most current information from the Kentucky Board of EMS can be found at: ***http://bit.ly/KBEMSCoronavirusUpdate***. This link will also include the most recent guidance from the CDC and other trusted resources.

KBEMS Agency Planning Best Practices

Planning and preparing your agency for a COVID-19 patient encounter will protect your staff, minimize down time of your resources, and assure that patients are appropriately cared for and transported to an appropriate facility for care. Based on experiences from Harrison County EMS we have assembled a list of "things to consider" when you are creating your plan and other things to consider as you strive to maintain essential operations following a COVID-19 patient encounter.

Immediate Actions:

- Review your PPE Policy keeping this interim guidance in mind. Evaluate and modify your policy as necessary. Keep in mind that the situation with COVID-19 is quite dynamic, and frequent review and modification of your policy will be necessary.

- Communicate with staff regularly by conference call to review policy, procedure or protocol changes. If it is necessary to have a face-to-face meeting adhere to "social distancing" recommendations.

- Take inventory of PPE on-hand – If additional quantities are needed and not available through your normal supply chain(s), additional PPE may be requested at **https://ky.readyop.com/fs/4fvC/b8d6 or by contacting your local emergency management agency**.

- If your agency has adequate PPE on-hand:
  - fit staff for personal PPE kits, specifically N95 masks; and
  - place additional PPE kits on ambulance.

- Suspend outside "ride-along" and internship programs.

- Suspend the conduct of public meetings. Consider suspending agency participation in all non-essential public meetings, suspending non-essential face-to-face training programs, and suspending all non-essential agency funded travel.

- Establish a relationship with your local health department , if one does not already exist. LHDs will be a tremendous resource to your agency, particularly as it relates to securing additional PPE.

On-going Considerations

- Share information via social media to reassure the public that your agency is prepared. Also educate your audience to not be alarmed if they encounter or see your crew members wearing PPE when responding to a request for assistance.

- We have already experienced hoarding of various items including cleaning supplies and surgical masks. Thus, it is recommended that EMS agencies identify a plan to secure their inventories of PPE – both at their facilities and on the ambulance. In our current environment, we must realistically consider the risks associated with theft of unsecured essential operational equipment.

- Immediate care of COVID-19 patients is supportive. Identify and treat the patient's signs and symptoms pursuant to your local protocol.

- Consider alternative methods when taking a patient's temperature that will prevent them from having to remove their mask.

RECOMMENDATIONS FOR 911 PSAPs (Dispatch Centers)

PSAPs or Emergency Medical Dispatch (EMD) centers (as appropriate) should question callers and determine the possibility that a call for assistance is related to a person who is exhibiting signs or symptoms and has identified risk factors for COVID-19. The query process should never supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., CPR or the Heimlich maneuver) are indicated. Patients in the United States who meet the appropriate criteria should be evaluated and transported as a person under investigation (PUI).

Information on a possible PUI should be communicated immediately to EMS clinicians before arrival on scene in order to assure the use of appropriate personal protective equipment (PPE). PSAPs should utilize medical dispatch procedures that are coordinated with the local EMS medical director and with the local health department.[1]

Modified Caller Query Protocol for COVID-19

Calltaker:

- Do you have any of these symptoms?
    - Fever
    - Coughing
    - Difficulty Breathing[2]
    - Have you had close contact with someone who has had the coronavirus?

If NO, dispatch according to local protocol.

If YES, inform all emergency response personnel being dispatched to that request for assistance that they are responding to a patient that meets the criteria for a patient under investigation for novel coronavirus (COVID-19). Advise the responding EMS unit, and other dispatched emergency responders of the symptoms that led to classifying this patient as a "Patient Under Investigation"(PUI) .

Upon encountering a PUI, EMS personnel will perform a secondary screening in conjunction with the primary and secondary assessment of the patient to assess for the possibility of COVID-19 illness. If it is determined that the patient warrants continued status as a PUI, EMS will communicate with and inform the receiving facility that a PUI is being transported to their facility. EMS should coordinate with the receiving facility to ensure that the patient is transported to an appropriate holding/treatment area of the healthcare facility.

[1] https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html

[2] https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fclinical-criteria.html

Recommendations and Best Practices for Kentucky EMS and Medical First Response Personnel

- Kentucky EMS administrators, providers, and medical directors can find the most current COVID-19 recommendations at http://bit.ly/KBEMSCoronavirusUpdate.

- Crew members should ALWAYS wear gloves when in the patient compartment of ambulance, including routine, non-patient care related activities.

- If at all possible, use the two-way radio to transfer patient information to receiving facility. Use of personal cell phones or tablets should not be used to call report or document the call, as this can potentially expose family members of responding EMS crews or other emergency response personnel to a secondary exposure. It is not definitively known how long the virus survives on an object.

- All equipment should be stored in a cabinet or compartment. Items should not be left exposed in the action area or on the squad bench. If an item cannot be secured in a closed compartment or cabinet, it should be cleaned with an approved disinfectant after every patient exposure.

- Cabinet doors (sliding or hinge) should be remain closed with a patient in the ambulance.

PATIENT ASSESSMENT

- If PSAP telecommunicators advise that a patient is a PUI , EMS providers should don the appropriate PPE before entering the scene. When determining the appropriate level of PPE to be utilized, EMS providers should consider the signs, symptoms and risk factors of the patient they are encountering based on information provided by telecommunicators. (See “Recommended Personal Protective Equipment”)

- If information regarding potential risks for COVID-19 are not provided by the PSAP, EMS clinicians should exercise appropriate precautions when responding to any patient exhibiting signs or symptoms of a respiratory infection. Initial assessment of the patient should be conducted from a distance of at least 6 feet away from the patient, if possible. Patient contact should be minimized until a facemask is placed on the patient. If COVID-19 is suspected, all recommended PPE should be utilized. If COVID-19 is not suspected, EMS clinicians should follow standard procedures for use of PPE when evaluating any patient with a potential respiratory infection.

- A facemask should be worn by the patient for droplet source control. 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, please reference “Precautions for Aerosol-Generating Procedures” found later in this Guidance.

- At the scene and during transport, every effort should be made to limit the number of EMS clinicians and other persons who enter the patients’ residence and who are present in the patient compartment to minimize possible exposures to COVID-19.

KBEMS Patient Assessment Best Practices

- Not every call that requires PPE will require utilization of all PPE. Local protocols and supply chain availabilities/shortage should be taken into consideration when choosing PPE

- Each EMS clinician should keep on their person at all times, , gloves, an N95 mask and eye/face shield when on a call.

- It should be noted that EMS clinicians should utilize the following PPE when responding to any request for service that involves an individual identified as a PUI

    - Nitrile gloves,
    - N95 mask, and
    - Eye protection (does NOT include prescription eyeglasses or contacts)

- The EMS clinician should use additional precautions (gown for crew, and N95 mask for patient) if it is confirmed (pre-arrival or on-scene) that any of the following symptoms are present*:*
    - *Fever >100*
    - *Non-productive cough*
    - *Mask is removed for ANY reason, including intubation or nebulizer*
    - *Confirmed COVID-19 patient*
    - *Patient previously self-isolated or quarantined who is now symptomatic*

Coronavirus (COVID-19): Medical Spanish Terminology for EMS Providers

Do you have a fever?	¿Usted tiene fiebre?
Are you experiencing a cough?	¿Usted tiene tos?
Are you having any difficulty in breathing?	¿Usted tiene alguna dificultad en respirar?
Have you had close contact with someone who has had the coronavirus?	¿Ha estado en contacto con alguien cercano que ha tenido el coronavirus?
I'm going to provide medical care for you.	Voy a proporcionarle atención médica.
I'm going to place a mask on your face.	Voy a colocarle una máscara en la cara.
I'm going to give you oxygen.	Le voy a dar oxígeno.
I'm going to start an IV for you in your arm.	Voy a ponerle un suero intravenoso en el brazo.
I'm going to give you a breathing treatment.	Le voy a dar un tratamiento respiratorio.
We are going to take good care of you. Do not worry.	Vamos a cuidarle bien. No se preocupe.

The Kentucky Board of Emergency Medical Services
118 James Court, Suite 50, Lexington, KY 40505
(859) 256-3565 | Kyems.com
Visit www.kycovid19.ky.gov to get the latest information on COVID-19.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE)

- EMS clinicians who are in direct contact with a patient classified as a PUI or who will be in the patient compartment with a patient classified as a PUI should follow Standard Precautions and utilize 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
  - ❖ An 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).

- EMS clinicians driving the ambulance, if they provide direct patient care (e.g., moving patients onto stretchers), should wear all recommended PPE. After completing patient care and before entering an isolated (walk-through door shut) 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 receiving facility, EMS clinicians should remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with local procedures.
- Other required aspects of Standard Precautions (e.g., injection safety, hand hygiene) are not emphasized in this document but can be found in the guideline titled Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.

** When the N95 supply chain is restored, fit-tested EMS clinicians should return to use of respirators for patients with known or suspected COVID-19.*

KBEMS PPE Best Practices

- EMS clinicians should always bring an extra duty uniform when reporting for duty in the event contact is made with a PUI or known COVID-19 patient.

- If a PUI or known COVID-19 patient is transported, the EMS crew should remove and wash clothing immediately, and shower (if available).

- If clothes washing and/or shower facilities are not available, the EMS crew should consider bagging contaminated duty uniform(s) and changing into clean clothing at the end of their shift just prior to leaving their duty facility. When washing duty clothing at home, duty clothes should be washed separately from other family clothing.

PRECAUTIONS FOR AEROSOL-GENERATING PROCEDURES

- If available and time permits, 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 PPE described in this guidance ("Recommended Personal Protective Equipment"), 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 persons having a relationship with patients identified as a PUI should not ride in the transport vehicle. If there is no alternative but for a non-patient, non-EMS clinician to ride in the transport vehicle, they should be required to 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.pdfpdf 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.
- Unless otherwise specified by the receiving facility, follow routine procedures for the transfer of the patient to the receiving healthcare facility (e.g., patient enters through the routine emergency room entrance, wheel the patient directly into an assigned examination room, etc.).

KBEMS Transport of a PUI or Confirmed COVID-19 Patient Best Practices:

- Keep gloves for driver in an outside compartment of ambulance in addition to gloves that may be routinely kept in the driver's compartment. For a PUI or known COVID-19 patient, the driver should change gloves prior to entering the driver's compartment of the vehicle.

- After transfer of a PUI or known COVID-19 patient to the hospital bed, all crew members should remove PPE (gloves being the last PPE removed) and thoroughly wash their hands and any exposed skin below the shirt sleeve if no gown was worn.

- Fresh gloves, as well as face and eye protection should be worn when cleaning equipment. All non-disposable items that may have been exposed should be cleaned with an approved disinfectant. (See "Cleaning EMS Transport Vehicles After Transporting a PUI or Patient with Confirmed COVID-19)

- All trash and bio-hazard bags should be removed from ambulance after every run and disposed of properly. Consider purchasing or utilizing an outside storage container for biohazards used when transporting suspected or diagnosed COVID-19 patients.

DOCUMENTATION OF PATIENT CARE

- Documentation of patient care should be completed after EMS clinicians have completed transport, removed their PPE, and performed hand hygiene.
  - ❖ Any written documentation should match the verbal communication given to the emergency department providers at the time patient care was transferred.
- EMS documentation should include a listing of EMS clinicians and other emergency responders involved in the response including information regarding their 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.
- EMS Clinicians should ensure documentation of each crew member's use of personal protective equipment (PPE).

CLEANING EMS TRANSPORT VEHICLES AFTER TRANSPORTING A PUI OR PATIENT WITH CONFIRMED COVID-19

- The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a PUI:
  - ❖ After transporting the patient, leave the vehicle parked outside of a building with the rear doors (and side door – if possible) of the transport vehicle open to allow for sufficient air exchange 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 exchange.
  - ❖ 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. Clean the vehicle outside of an enclosed building, if at all possible.
  - ❖ 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 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 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.

FOLLOW-UP AND REPORTING MEASURES BY EMS PROVIDERS AFTER CARING FOR A PUI OR PATIENT WITH CONFIRMED COVID-19

- EMS clinicians should be aware of the follow-up and/or reporting measures they should take after caring for a PUI or patient with confirmed COVID-19:
  - ❖ Local public health authorities should be notified about the PUI or confirmed patient so appropriate follow-up monitoring can occur.
  - ❖ EMS agencies should develop policies for assessing exposure risk and management of EMS clinicians potentially exposed to SARS-CoV-2 in coordination with local public health authorities. Decisions for monitoring, excluding from work, or other public health actions for EMS clinicians with potential exposure to SARS-CoV-2 should be made in consultation with 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.
  - ❖ EMS agencies should develop sick-leave policies for EMS personnel that are nonpunitive, flexible, and consistent with public health guidance. Ensure all EMS personnel are aware of the sick-leave policies.
  - ❖ 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.
    - 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

- 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.
  - ❖ EMS agencies/organizations should have practical, realistic infection control policies and procedures in place, including describing a recommended sequence for safely donning and doffing PPE.
  - ❖ Provide all EMS clinicians with job or task-specific education and training on preventing transmission of infectious agents, including refresher training.
  - ❖ Ensure that EMS clinicians 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 clinicians are medically cleared, trained, and fit tested for respiratory protection device use (e.g., N95 filtering facepiece 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 a number of **respiratory training videos**.
  - ❖ EMS agencies/organizations should have an adequate supply of PPE. Quantities should allow personnel to maintain at least one of each item on their person at all times while on duty:
    - Gloves,
    - Eye protection; and
    - N95 respirator or other respiratory protection.
  - ❖ Ensure an adequate supply of or access to EPA-registered hospital grade disinfectants for adequate decontamination of EMS transport vehicles and their contents.
  - ❖ Ensure that EMS clinicians 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 agency's standard operating procedures.

ADDITIONAL RESOURCES

The EMS Infectious Disease Playbook, published by the Office of the Assistant Secretary for Preparedness and Response's Technical Resources, Assistance Center, Information Exchange (TRACIE) is a resource available to planners at https://www.ems.gov/pdf/ASPR-EMS-Infectious-Disease-Playbook-June-2017.pdf