Virginia Beach Department of Emergency Medical Services

Operations

Infectious Respiratory Illnesses

PURPOSE: This purpose of this Standard Operating Guideline (SOG) is to establish guidelines for response to infectious respiratory illness CoVID-19. This guidance is based on information from the Virginia Department of Health (VDH) and the US Centers for Disease Control and Prevention (CDC).

APPLICABILITY: This SOG applies to all emergency responders within the Emergency Response System.

DEFINITIONS: **High Risk, Full PPE Advised -** Don full PPE (N-95 mask, proper eye protection, fluid resistant gown, non-latex gloves, hair cover). Full PPE protects against CoVID-19 **and proper use of full PPE does not constitute an exposure to the provider.**

PPE Advised - Don PPE (N-95 mask, proper eye protection, non-latex gloves).

Aerosolized Generating Procedure (AGP) – Any nebulized medication administration process (Hand-held nebulizer, non-rebreather or simple facemask nebulizer, etc.), or CPAP usage.

PROCEDURES:

1. **Dispatch Criteria – Expanded Tiered PPE Guidance**

VBEMS has activated Infectious Respiratory Disease screening during the 911 call-taker process at Emergency Communications and Citizen Services (ECCS) with EMS Supervisory personnel supporting. The screening provides expanded advisement to crews by creating “high-risk full PPE advised” and “PPE advised” categories. Assigning the “high-risk full PPE advised” category indicates the patient has concerning symptoms and a known exposure or travel history; or, resides in a location with confirmed CoVID-19 case(s). The “PPE advised” category will be recommended for all patients with fever or a suspected respiratory illness. While the question set provided to ECCS may change based on new details, the basis for the questions is as follows:

A. Determine Symptoms:
   - Does the patient have a fever, cough, shortness of breath, or other flu-like symptoms?

B. Determine Exposure Risk:
   - Has the patient been in close contact with someone who has tested positive or presumed under investigation (PUI) by the health department for CoVID-19? This should not be assumed yes because a patient is in a long-term care or nursing facility that has CoVID-19 positive patients.
   - Has the patient traveled in the previous fourteen (14) days before symptom onset?

If the caller answers yes for the patient to questions (A) and (B) above, advise the responders of "High Risk Full PPE Advised"

If the caller answers yes for the patient to questions (A) or (B), advise the responders of "PPE Advised".

For all other calls, a surgical mask and eye protection are required for the crew and a surgical mask is appropriate for the patient.

For ALL calls that are flagged as "High Risk Full PPE Advised", the EMS Liaison should review the call and provide guidance prior to dispatching the call. A decision to modify the response to send a single (ambulance or zone medic) unit should be considered.

VBPD should not be routinely dispatched to medical calls. The EMS Liaison should evaluate critical medical calls where VBPD is normally dispatched. If they are close to the call (I.e. a few blocks away) and capable of providing emergency medical services (AED, Tourniquet, etc.) with the appropriate PPE, they can be dispatched. Otherwise, they should not be dispatched. Additionally, for calls where EMS has pronounced a patient deceased (I.e. cardiac arrest or death investigation), the PD response to this call should be prioritized over other non-emergent calls for service for the death investigation process to occur so as not to keep fire/EMS resources on the scene for an extended period of time.

Be alert for multiple patients with the same complaints, signs, or symptoms

2. Responder Actions

A. Responders will wear a surgical mask while on duty for the shift. A single surgical mask may be worn until it becomes soiled or you treat a patient with a suspected respiratory illness. Maximize the use of the surgical mask. Cleaning and re-using is not authorized at this time.

B. Response personnel should screen the all patients, initially from at least six feet away, if possible, by assessing information about:

- Fever (subjective)
- Respiratory symptoms (i.e. cough, shortness of breath, difficulty breathing)
- CoVID-19 exposure risk
- Travel history
- Residence location (skilled nursing facility, adult family home, assisted living, etc.)

C. For calls where the ECCS pre-arrival screening was not conducted (I.e. VBPD requesting a medical response), the first arriving unit should initiate the patient assessment as indicated above with a higher index of suspicion during the interview process.

D. High-Risk, Full PPE Advised.

1) In cases where "high-risk full PPE advised", the first arriving responders will limit the number of providers (1-2) for the initial assessment to determine risk and advise the rest of the crew regarding the level of PPE required. Patients who exhibit symptoms including fever and a respiratory illness should receive a surgical mask if one is available and not distressing to the patient. **Do not use a non-rebreather mask or simple face mask to substitute for a surgical mask.**

2) If units arrive on scene simultaneously, the ambulance crew and/or zone medic provider (preferably the Attendant-In-Charge) should initiate primary patient care to minimize personnel exposure. In ALL cases, the first contact appropriate level provider should transport patient to limit exposure to other providers.

3) Record details of risk profile to include specific locations of travel and nature of known or suspected virus exposure in the patient care report. Determine course of illness – specifically onset of symptoms, onset of fever, and highest measured temperature (if available).

E. **All hospitals are prepared to receive patients.** EMS should alert the hospital of the concern about COVID-19 infection. Upon hospital arrival, alert the ED that you have arrived before bringing the patient into the ED so that the patient can be appropriately directed upon hospital entry. The hospital will provide further assessment and is responsible for reporting the patient to the health department.

F. Hospitals may send patients home for self-isolation following a diagnosis of CoVID-19 or other respiratory illness. If the patient was sent home in quarantine or isolation and is in stable condition not requiring urgent care, the provider should reiterate aftercare instructions that include best practices for isolation, self-monitoring, and contact information for the Virginia Department of Health or Sentara.

3. Protocol Deviations

A. If the patient is acutely ill and requires urgent medical care, provide patient-specific care incorporating the goal to limit airborne droplet spread. You may provide airway treatment such as oxygen therapies, as clinically indicated. Based on CoVID-19 being community acquired, **DO NOT USE AN AGP on ANY patient in ANY currently approved protocol until further notice.** Additional protocol direction is provided below.

B. Full PPE must be used when working with the airway including conducting needle decompressions.

C. Use of video laryngoscopy is preferred over manual intubation.

D. On all calls where you are using a BVM (intubation or King LT), contact the emergency department when you arrive on the hospital campus and request the staff meet you in the ambulance to assess. Some hospitals may choose to place the patient on a portable ventilator in the ambulance prior to moving into the ED. Other hospitals should verify that you have or will place an in-line HEPA filter on the tube.

E. Bring all the patients personal MDIs with them to use in the ER in the event they need continued puffs from the MDI (potential shortage in the hospital).

F. Patients with a respiratory illness should have pulse oximetry and capnography. If the patient is in respiratory distress (CHF patients), provide supplemental oxygen via nasal canula, non-rebreather mask, or intubation observing the patient's work of breathing, SPO2 and ETCO2. With a non-rebreather mask at 15LPM and little to no relief, move to endotracheal intubation (with RSI, if needed). Use an in-line HEPA filter placed between the endotracheal tube (or King airway device), if available. PEEP valves have also been placed in ambulance intubation kits for use on the BVM, if needed.

1) For patients that are in severe respiratory distress, all RSI-certified Paramedics may conduct the RSI protocol on standing

order. A second ALS provider (EMT-Intermediate or above) is still required to support the intubation. Ensure your narrative documentation includes verbiage regarding the protocol deviation.
2) Open the windows and turn on the exhaust fan in the patient compartment.

G. For **overdose patients**, the following protocol deviation is approved:
1) Unconscious patients should receive Narcan per the current overdose protocol.
2) DO NOT USE A BVM. Instead, manually open the airway and provide supplemental oxygen via NRB mask at 15LPM.
3) If the patient goes into cardiac arrest, follow the guidance for cardiac arrest listed below under "Cardiac Arrest".

H. For known **asthmatic exacerbated** patients, the following protocol deviation is approved and is Standing Order for providers as listed:

1) Assist the patient with their albuterol MDI 2-4 puffs with supplemental oxygen via nasal canula. (EMTs and above).
2) If the patient still has SOB and wheezing, administer 0.5 mg of 1mg/ML (1/1000) epinephrine IM (Physician order for Advanced EMT / Standing order for EMT Intermediate / Paramedic).
3) If the patient shows no signs of improvement, administer Methylprednisolone (Solu-Medrol) 125mg IV and consider Magnesium Sulfate 50mg/kg in 100mL NS IV over 5 minutes, max dose of 2 grams (Standing Order for EMT Intermediate / Paramedic).

I. For known **COPD** patients, the following protocol deviation is approved and is Standing Order for providers as listed:

1) Assist the patient with their albuterol MDI 2-4 puffs with supplemental oxygen via nasal canula or NRB mask. (EMTs and above).
2) If the patient shows no signs of improvement, administer Methylprednisolone (Solu-Medrol) 125mg IV and consider Magnesium Sulfate 50mg/kg in 100mL NS IV over 5 minutes, max dose of 2 grams (Standing Order for EMT Intermediate / Paramedic).

J. **Congestive Heart Failure** patients should NOT receive CPAP.

K. **Cardiac arrests** should be managed with a higher index of suspicion. ALS providers should exercise critical thinking along with sound judgement in determining whether or not to work a cardiac arrest.

1) Unless the patient has a sustained return of spontaneous circulation or ROSC, after 20 minutes of working the arrest, contact on-line medical control prior to moving the patient on to a stretcher for consultation.
2) To reduce exposure of patient care providers, the following protocol deviation is authorized for cardiac arrest victims:
    i. Place the patient on supplemental oxygen at 15LPM via NRB mask in place of BLS BVM. Use of the BVM should commence following the placement of an advanced airway.
    ii. Placement of the LUCAS Device should be completed as soon as one is available vice waiting until completion of manual compressions for ten (10) minutes.

L. Engage in best practices for safe transport and decontamination for equipment and transport units.

4. Patient Care Documentation Guidelines for CoVID-19 Responses

Specific job-aids have been developed for documentation of patients with symptoms consistent with CoVID-19 and/or confirmed cases of the virus.

A. Based on certain signs/symptoms entered in Elite the CoVID-19 Screening Worksheet will be required. It is always available as an assessment tool, even if not required.

B. Guidelines for documentation, as recommended by the CDC, have been produced to help providers better document cases in such a way that data retrieval is more consistent.

C. PPE utilized should be documented in the ***Provider Safety*** field in Elite. It is also important, as always, to document all crew members present in the ***Crew Member*** field.

5. Virginia Beach EMS CoVID-19 Surveillance Activities

Virginia Beach EMS has implemented daily surveillance for COVID-19 to identify EMS responses that have treated a patient that is confirmed positive with CoVID-19.

6. Infection Control Officer – Role and Responsibilities

The Department of EMS maintains the designated Infection Control Officer. The Infection Control Officer is critical to ensuring your agency receives the most accurate information about the dynamic situation and updates about any respiratory illness and specifically, CoVID-19.

A. Guidance for personnel prior to coming on to shift
   1) All personnel MUST complete the wellness check using the APP on Department's website prior to coming on shift and again at the end of the shift. This APP will provide specific direction to the user based on the how the questions are answered. For any questions, contact the EMS Supervisor.

B. Guidance for personnel potentially exposed to CoVID-19
   1) Personnel who believe they have suffered an exposure to CoVID-19 should follow the standard health exposure reporting process. An exposure is defined as an event in which established processes, procedures, and protections failed to provide adequate protection to the member. Incidents involving a CoVID-19 patient in which health risks were successfully managed using FULL PPE will not be considered an exposure. If a potential provider exposure occurred, the Safety Officer will be in touch with the provider for follow-on guidance per the CDC.

7. Modified Responses

The Department of EMS will provide specific direction to all departments regarding changes to the CAD recommendations for dispatching units to medical calls associated with CoVID-19.

APPROVED:

4/2/2020

EMS Deputy Chief **Date**

4/2/2020

Operational Medical Director **Date**

Effective Date: 3/13/2020 **Revised: 4/2/2020**