3.3.1.5 RESPONSE TO COVID-19

Martinsburg Fire Department
STANDARD OPERATING
PROCEDURES/GUIDELINES

TITLE: Response to COVID-19
SECTION/TOPIC: Response to COVID-19 virus and other potentially infectious air-borne or fluid-borne pandemics.

NUMBER: 3.3.1.5
ISSUE DATE: 11 March 20
REVISED DATE: 24 March 20

PREPARED BY:
X
J.D. Hummingbird
Fire Chief

EFFECTIVE IMMEDIATELY – 24 Mar 20:
X
Mark Baldwin
City Manager

These SOPs/SOGs are based on FEMA guidelines FA-197

1.0 POLICY REFERENCE

Centers for Disease Control (CDC) Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety Answering Points (PSAPs) for COVID-19 in the United States.

2.0 PURPOSE

This policy is to establish risk assessment procedures, personal protective equipment requirements, patient treatment and transport guidelines, decontamination requirements, equipment disinfection/disposal recommendations, exposure reporting, and personnel monitoring and management for COVID-19 virus and other potentially infectious air-borne or fluid-borne pandemics.

3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

4.0 DEFINITIONS

See Martinsburg Fire Department list of definitions in SOP/SOG 1.1.99
5.0 PROCEDURES/GUIDELINES & INFORMATION

5.1 Background:

Emergency medical services (EMS) 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, care and transports by EMS present unique challenges because of the nature of the setting, enclosed space during transport, frequent need for rapid medical decision-making, interventions with limited information, and a varying range of patient acuity and jurisdictional 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), the EMS system, healthcare facilities, and the public health system. For the purposes of this guidance, “EMS clinician” means prehospital EMS and medical first responders. When COVID-19 is suspected in a patient needing emergency transport, prehospital care providers and healthcare facilities should be notified in advance that they may be caring for, transporting, or receiving a patient who may have COVID-19 infection.

High Risk populations such as those living in high rise apartments, nursing home facilities, long-term care facilities, etc. will be educated by EMS on treating patients within the confines of the facility. This will be dependent on the patient’s presentation and co-morbidities.

5.2 911 Public Safety Answering Points (PSAPs)

Berkeley County Central Dispatch has implemented the National Academy of Emergency Dispatch protocol and is questioning callers to determine the possibility that this call concerns a person who may have signs or symptoms and risk factors for COVID-19. The query process does not supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., CPR or the Heimlich maneuver) are indicated. This information will be provided on the Mobile Data Computers (MDC’s) in each ambulance before arrival on scene in order to allow use of appropriate personal protective equipment (PPE).

5.3 Patient Assessment

1) If PSAP call takers advise that the patient is suspected of having COVID-19, EMS clinicians should put on appropriate PPE before entering the scene. If the situation allows, only one (1) EMS clinician should enter the scene and manage the patient. EMS clinicians should consider the signs, symptoms, and risk factors of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/clinical-criteria.html).

2) If information about potential for COVID-19 has not been provided by the PSAP, EMS clinicians should exercise appropriate precautions when responding to any patient with signs or symptoms of a respiratory infection. Initial assessment 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 facemask is on the patient. If COVID-19 is suspected, all PPE as described below should be used. If COVID-19 is not suspected, EMS clinicians should follow standard procedures and use appropriate PPE for evaluating a patient with a potential respiratory infection.

3) Clinicians should prioritize placing a mask on patients prior to beginning any type of assessment that requires them to be within 6 feet of the patient. 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.

4) During transport, limit the number of providers in the patient compartment to essential personnel to minimize possible exposures.

5) EMS shall convey findings from the patient assessment to the ER prior to arrival and ascertain direction from the ER prior to entering the facility.

5.4 Personal Protective Equipment (PPE)

1) EMS clinicians who will directly care for a patient with possible COVID-19 infection (those who present with signs and symptoms of respiratory illness, fever, or have traveled to a high-risk area) should follow Standard Precautions and use the PPE as described below. Recommended PPE includes:
   a. N-95 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
   b. Surgical mask for the patient
   c. 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.
   d. A single pair of disposable patient examination gloves. Change gloves if they become torn or heavily contaminated, and isolation gown.

2) EMS clinicians who will directly care for a patient with confirmed COVID-19 infection should follow Standard Precautions and use the PPE as described below:
   a. N95 protective mask for the EMS clinicians
   b. Surgical mask for the patient
   c. Contact 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).
   d. Boot covers
   e. 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.
   f. A single pair of disposable patient examination gloves. Change gloves if they become torn or heavily contaminated, and isolation gown.
3) Drivers, 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 driver’s compartment, the driver should remove and dispose of PPE and perform hand hygiene to avoid soiling the compartment.
   a. 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.
   b. A respirator or facemask should continue to be used during transport.
4) All personnel should avoid touching their face while working.
5) On arrival, after the patient is released to the facility, EMS clinicians should properly remove and discard PPE and perform hand hygiene. Used PPE should be discarded in accordance with routine procedures.

5.5 Aerosol-Generating Procedures

Special consideration for additional PPE should be taken when patient treatment would increase the likelihood of aerosolizing respiratory droplets. These treatments and procedures include, Bag-Mask ventilations, CPAP, nebulized medication administration, advanced airway placement and CPR. Treatments that prompt aerosolization of respiratory droplets in the presence of suspicion of COVID-19 should prompt the clinicians to don gowns in addition to standard PPE precautions if there is any suspicion of COVID-19.

1) If possible, consult with medical control before performing aerosol-generating procedures for specific guidance.
2) An N-95 or higher-level respirator, instead of a surgical 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), biphasic positive airway pressure (bIPAP), or resuscitation involving emergency intubation or cardiopulmonary resuscitation (CPR) is necessary.
3) 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.

5.6 Transport of a Patient with suspected COVID-19 to a Healthcare Facility

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:
1) EMS clinicians should notify the receiving healthcare facility that the patient has an exposure history and/or signs and symptoms suggestive of COVID-19 (present with signs and symptoms of respiratory illness, fever, or have traveled to a high-risk area) so that appropriate infection control precautions may be taken prior to patient arrival.
2) Keep the patient separated from other people as much as possible.
3) Family members and other contacts of patients with possible COVID-19 shall NOT ride in the transport vehicle.
4) Utilize the exhaust fans in the patient compartment.
5) 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.
6) Follow routine procedures for a transfer of the patient to the receiving healthcare facility (e.g., wheel the patient directly into an examination room).
7) EMS shall convey findings from the patient assessment to the ER prior to arrival and ascertain direction from the ER prior to entering the facility or potential secondary triage designation. Clinicians should not enter the ER unless they have been instructed to do so.

5.7 Documentation

Documentation of patient care should be done 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 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.

ESO EPCR
1) ESO reports shall be complete, clear, and thorough.
2) ESO COVID-19 screening tools shall be completed to include:
   a. COVID-19 Screening
   b. Patient Travel Screening
   c. Outbreak Screening

5.8 Cleaning of EMS Vehicles

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a suspected COVID-19 patient:
1) 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.
2) 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.
3) 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.
4) 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.

5) 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.

6) Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer’s instructions.

7) The unit shall remain out of service and returned to the station, without delay, where it will be sanitized utilizing the Clorox Total 360 electrostatic system. It is understood that this may cause a delay in response to the next emergency, however, this is required to keep MFD personnel as safe as possible.

8) Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.

9) Follow standard operating procedures for containing and laundering used linen. Avoid shaking the linen.

5.9 Clinician Exposure Reporting

It is important to remember that if you have taken all necessary precautions, there is limited exposure potential. EMS personnel who have been exposed to a patient with suspected or confirmed COVID-19 should notify their shift commander to ensure appropriate follow-up.

The CDC has released guidance on exposure risk levels for healthcare providers (HCP) as follows:

**High-Risk** - refers to HCP who have had prolonged close contact with patients with COVID-19 who were not wearing a facemask while HCP nose and mouth were exposed to material potentially infectious with the virus causing COVID-19. Being present in the room for procedures that generate aerosols or during which respiratory secretions are likely to be poorly controlled (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction) on patients with COVID-19 when the healthcare providers’ eyes, nose, or mouth were not protected, is also considered high-risk.

**Medium-Risk** - exposures generally include HCP who had prolonged close contact with patients with COVID-19 who were wearing a facemask while HCP nose and mouth were exposed to material potentially infectious with the virus causing COVID-19. Some low-risk exposures are considered medium-risk depending on the type of care activity performed. For example, HCP who were wearing a gown, gloves, eye protection and a facemask (instead of a respirator) during an aerosol-generating procedure would be considered to have a medium-risk exposure. If an aerosol-generating procedure had not been performed, they would have been considered low-risk.
**Low-Risk** - exposures generally refer to brief interactions with patients with COVID-19 or prolonged close contact with patients who were wearing a facemask for source control while HCP were wearing a facemask or respirator. Use of eye protection, in addition to a facemask or respirator would further lower the risk of exposure.

Patient contacts in the absence of PPE:

1) Any unprotected exposure (e.g., not wearing recommended PPE) should be reported to your shift commander and designated infection control officer for evaluation and medical consulting.

2) All personnel involved in the response shall complete an MFD infectious exposure form.

3) EMS Providers should be alert for fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat).

4) The entire EMS crew shall be subject to home self-monitoring as follows:
   a. Self-monitoring shall be for a period of fourteen (14) days and staff will NOT report for duty.
   b. Staff shall utilize the self-monitoring form (Appendix A).
   c. At the completion of the fourteen (14) day period, the completed self-monitoring form shall be submitted to the shift commander or infection control officer for submission to the individual personnel file.
   d. If any symptoms are developed within the fourteen (14) day period, the employee shall report to the shift commander and infection control officer. In these instances, medical evaluation will be required.

Patient contacts when proper PPE was utilized:

1) All personnel involved in the response shall complete an MFD infectious exposure form.

2) The shift commander shall compile all documentation including the incident report and forward to the infection control officer and the Chief.

3) The MFD EMS Director and MFD Infection Control Officer shall be responsible for coordinating post exposure services for all personnel if indicated.

4) Decisions for monitoring, excluding from work, and other public health actions will be at the direction of the squad medical director.

5) In the event that a patient was transported and a COVID-19 test was ordered, assuming the EMS personnel utilized appropriate PPE, the entire EMS crew shall be subject to mandatory self-monitoring as follows:
   a. Self-monitoring shall be for a period of fourteen (14) days and staff will continue to report for duty.
   b. Staff shall utilize the self-monitoring form (Appendix A).
   c. At the completion of the fourteen (14) day period, the completed self-monitoring form shall be submitted to the shift commander for submission to the individual personnel file.
   d. If any symptoms are developed within the fourteen (14) day period, the employee shall report to the shift commander and infection control officer. In these instances, medical evaluation will be required before returning to work.
### EMS Provider Exposure Risk and Monitoring Recommendations

<table>
<thead>
<tr>
<th>Close Contact</th>
<th>Less than 6 feet for &gt; 10 minutes</th>
<th>Source patient <strong>NOT wearing a mask or applied within 10 minutes</strong></th>
<th>Work Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPE Utilized</strong></td>
<td><strong>Exposure Risk</strong></td>
<td><strong>Monitoring</strong></td>
<td></td>
</tr>
<tr>
<td>NONE</td>
<td>HIGH</td>
<td>ACTIVE</td>
<td>Exclude from work 14 days</td>
</tr>
<tr>
<td>No Mask N95 or PAPR</td>
<td>HIGH</td>
<td>ACTIVE</td>
<td>Exclude from work 14 days</td>
</tr>
<tr>
<td>No Eye Protection</td>
<td>MEDIUM</td>
<td>ACTIVE</td>
<td>Exclude from work 14 days</td>
</tr>
<tr>
<td>No Gown or Gloves</td>
<td>LOW</td>
<td>Self-monitor Supervision</td>
<td>NONE</td>
</tr>
<tr>
<td>All recommended PPE except Mask instead of N95 or PAPR</td>
<td>LOW</td>
<td>Self-monitor Supervision</td>
<td>NONE</td>
</tr>
</tbody>
</table>
# Self-Monitoring Symptom Log

Name: _________________________________________ Monitoring Start Date (Day 0): ____/____/____ Monitoring End Date (Day 14): ____/____/____

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Day 0</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Day 8</th>
<th>Day 9</th>
<th>Day 10</th>
<th>Day 11</th>
<th>Day 12</th>
<th>Day 13</th>
<th>Day 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Temperature</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
<td>AM</td>
</tr>
<tr>
<td>°F</td>
<td>AM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
</tr>
<tr>
<td>Cough</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Runny Nose</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Body Aches</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Red/Watery Eyes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Eye Infection</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Shortness of Breath</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Nausea</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Vomiting</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Fatigue</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have fever or any symptom listed above, immediately call your local health department: 304-263-5131, if not available call the WV Bureau for Public Health at 304-558-5358 ext 1. Or the 24/7 answering service at 304-347-0843.