A. Introduction

This response procedure is a guide for the proper management of patients suspected of being infected with COVID-19. This procedure is a supplemental document to the Medical Operations Manual. It is incumbent upon all Fire Rescue personnel involved, to act in the patient's best interest. Proper screening and accurate patient assessment must be utilized to determine the appropriate level of care needed. Patients will be treated following all other applicable Medical Operations Manual requirements.

B. Procedure

Every medical patient will initially be triaged by one crew member (in full PPE). The crew member will approach the patient and immediately place a **surgical mask** (not an N-95 respirator) on the patient. If the patient is c/o SOB, the appropriate oxygen therapy (non-rebreather mask, nasal cannula) will be applied. **A surgical mask will be placed over the nasal cannula or non-rebreather mask.** Perform an initial assessment and if it can be accomplished safely, consider moving the patient to an open-air environment to complete the remainder of the assessment while maintaining the Standard of Care. All other crew members should be ready to don full PPE on every call and remain six (6) feet away from patient until mask is applied. Patient treatment is a priority but limit the number of personnel who come in contact with the patient during treatment to one or two, unless additional personnel are necessary.

1. Patients meeting **ANY** of the following initial triage criteria will be considered a "Suspected COVID-19" patient:

   a.
   - Cardiac/Respiratory Arrests
   - Unconscious
   - Fever
   - Chills/Chills with Shivering
   - Sputum Production
   - Loss of Appetite
   - Cough
   - Sore Throat
   - Shortness of Breath
   - Diarrhea
   - Headache
   - All Stroke Alerts
   - Sudden onset of a loss of smell/taste
   - Was in close contact with a confirmed COVID-19 patient
   - Patient was laboratory confirmed to have COVID-19
   - Clinical (EMT/Paramedic) Judgment

   b. In addition, pediatrics presenting with any of the following:
      - Persistent Fever (lasting >24 hours)
      - Purpura (Rash of red/purple coloration)
      - Vomiting and Diarrhea
      - Abdominal Pain
      - Conjunctivitis (Pink Eye)
      - Red Swollen Hands/Feet
      - Red Cracked Lips

TREATMENT

2. Patients meeting the above criteria will be evaluated using the following Personal Protective measures:

- **All** personnel involved in direct patient care (within 6 FT of patient) **MUST** wear double gloves, N-95 respirator, fluid resistant sleeves, eye protection.
- Isolation gowns/coveralls are to be used for **ALL** confirmed COVID-19 patients. Also, on all cardiac arrests, intubations, extubations, BVM use, CPAP, suctioning, nebulizer treatments, or any time splash protection is anticipated.
- Reactive airway disease (Asthma, COPD) –
    - Nebulizer treatments for "Suspected COVID-19 Patients" **are only indicated if the SPO2 remains < 92% after applying appropriate oxygen therapy.** If a nebulizer treatment must be done it should be done on the scene in an open, well-ventilated setting prior to loading the patient into the Rescue. If a nebulizer treatment must be done inside the Rescue, it should be completed prior to leaving the scene. During nebulizer treatments, all doors on the Rescue or room must remain open and all personnel not needed for direct patient care should remain outside the Rescue or outside the room until the treatment is completed.
    - The use of the SafetyNeb Mask will assist in the significant reduction of aerosolization, but will not provide 100% aerosol exposure protection as each individual patient will have different facial characteristics that may allow for leaks in the mask and cause leakage.
        - If a third nebulizer treatment is administered, it is recommended that a new SafetyNeb Mask is used as the filters may become saturated.
    - Discontinue the nebulizer treatment procedure PRIOR TO ENTERING the Emergency Department. This is a critical step to avoid any unnecessary exposure to others.
- Place viral/bacterial filters **immediately** on **ALL** ET tubes, I-GELs, BVM, and CPAP **PRIOR** to first ventilation. Procedure 22
- See Cardiac Arrest for Suspected COVID-19 patients Appendix 10-6 Appendix 10-7

TRANSPORT

3. If the patient will be transported by MDFR, the unit OIC will notify the receiving hospital that they have a "Suspected COVID-19" patient.

- Patients that will be transported by MDFR should be transported using the following precautions:
    - Patient should be placed on a disposable blanket and wrapped in the blanket if access to patient is not needed for additional care.
    - Close the door/window between the patient compartment and cab 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.
- 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.
- Family members and other contacts of "Suspected COVID-19 Patients" should **NOT** ride in the transport vehicle, if possible. If riding in the transport vehicle, they must wear a facemask.

- If patient is being transferred to an ambulance for BLS transport, the ambulance crew must be alerted to wear proper PPE.
- The ePCR application has been updated to **require** a "Risk Factor Assessment" be completed on all "Suspected COVID-19" patients.
- A "**14FT Alert**" will **ONLY** be declared and transmitted to the Fire Alarm Office immediately upon determining that the crew had a high-risk exposure. The FAO will dispatch the closest EMS Field Supervisor.
- The MDFR Infection Control Office will be alerted via the ePCR application when a "high-risk" assessment is part of any closed report. The ICO will follow-up with the Emergency Department to determine if patient was a confirmed COVID-19 patient.
- All portions of the MOM including Protocol 2 and Protocol 4 remain unchanged by this procedure.

PPE DONNING AND DOFFING

4. The following procedure must be adhered to when **donning** Personal Protective Equipment:
   - Equipment should be donned in the following sequence: Isolation gown/coveralls (if used), N-95 respirator, goggles/face shield, inner gloves, fluid resistant sleeves, outer gloves.
5. The following **sequence** must be adhered to when **removing** Personal Protective Equipment:
   - Outer gloves should be removed first cautiously making sure to flip gloves inside out and dispose in biohazard container.
   - Remove goggles and dispose in biohazard container if it meets the disposal criteria below.
   - Remove sleeve by reaching underneath to the clean side and slide off arm and dispose in biohazard container.
   - If a gown is used, pull gown away from neck and shoulders, touching inside of gown only. Turn the gown inside out and fold or roll into a bundle then discard.
   - While wearing your clean gloves hold N-95 respirator to face and remove top strap, then bottom strap and discard in biohazard container if it meets the disposal criteria below.
   - **All** personnel should perform hand hygiene including use of alcohol-based hand gel immediately after removing personal protective equipment.

PPE USE

6. After initial use, N-95 respirators can be reused by the same employee **for an entire work shift** under the following guidelines:
    - N-95 respirators are re-usable if still structurally sound and passes the users seal check when inhaling and exhaling.
    - N-95 respirators should **ONLY** be discarded if used for cardiac arrest resuscitation, intubation, extubation, nebulizer therapy, CPAP, suctioning, use of a BVM and/or whenever contaminated with blood, respiratory or nasal secretions or other bodily fluids from patient.
    - Keep personal N-95 respirators stored in a paper bag when not being used.
    - A pair of clean/non-sterile gloves must be used when donning a used N-95 respirator. Hand hygiene must be performed after each contact with the exterior of the N-95 respirator.
    - N-95 respirators must be discarded in bio-hazard bags and bio-hazard receptacles.
7. After initial use, safety goggles can be kept and reused by the same employee under the following guidelines:
    - Safety goggles should be cleaned with approved disinfectant or washed with soap and water.
    - Safety goggles must be discarded in bio-hazard bags and bio-hazard receptacles following use of aerosol-generating procedures and/or whenever contaminated with blood, respiratory or nasal secretions or other bodily fluids from patient.
8. Isolation gowns/coveralls are to be used for ALL confirmed COVID-19 patients. Also, on all cardiac arrests, intubations, extubations, BVM use, CPAP, suctioning, nebulizer treatments, or any time splash protection is anticipated. Gowns are disposable and are to be discarded after initial use.
9. If available, face shields should be worn for every advanced airway procedure and cardiac arrests.

DECON

10. The following decontamination procedure will be used for all low or medium risk exposure incidents. The crew and the apparatus **MUST** be decontaminated prior to the unit returning to quarters
    - After transporting the patient, leave the rear doors of the transport vehicle open to allow for enough 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.
    - While wearing PPE and clean gloves, all equipment and working surfaces will be cleaned and decontaminated after contact with potentially infectious materials. An appropriate disinfectant or a 1:10 solution of household bleach and water will be used to clean these surfaces. A 1:10 solution is made by combining 1-part bleach and 9-parts water. This solution should always be made just prior to its use to ensure effectiveness. At no time will soiled material be left for the oncoming shift to clean.

- Non-transport units will place all disposable PPE in a red biohazard bag and send to the hospital with the Rescue or BLS transport unit for disposal at the hospital. If no transport unit is on scene, the biohazard bag will be placed in an exterior compartment and disposed of in the station biohazard container. All disposable PPE must be removed prior to re-entering the apparatus.
- **All** personnel should perform hand hygiene including use of alcohol-based hand gel immediately after removing personal protective equipment.

11. Suspected COVID-19 patient treatment that include cardiac arrest resuscitation, intubation, CPAP, BVM or nebulizer treatment pose a higher risk to all personnel involved. These incidents will be evaluated by the EMS Field Supervisor to determine if specialized decontamination of personnel and apparatus is required with the assistance of a Haz-Mat unit.

C. Resource Links

- CDC – Guidance for EMS
- CDC – Clinical Guidance
- Elsevier COVID-19 Healthcare Hub
- John Hopkins Center for Health Security – COVID-19 Resource Center
- National Institutes of Health – COVID-19
- The New England Journal of Medicine – COVID-19
- Royal College of Pediatrics and Child Health
- The World Health Organization – COVID-19 Outbreak

D. Risk Factor Assessment

In accordance with CDC guidance, a risk factor assessment will continue to be completed on all "Suspected COVID-19" patient contacts. This will be required in the ePCR application. The EMS Field Supervisor will be notified to assess all personnel that respond to an incident where a **"14FT Alert"** was declared due to a high-risk exposure.

Any EMS response that presents a NO to any of the following will be deemed a **HIGH-RISK** exposure:

1. Were all crew members wearing an N-95 respirator during an EMS response?

   ☐ **YES** ☐ **NO**

2. Did all crew members wear eye protection on a response to a person with SARS-CoV-2 infection that a surgical mask was not applied during a cardiac arrest resuscitation?

   ☐ **YES** ☐ **NO**

3. Were all crew members wearing all recommended PPE (i.e., sleeves, gloves, eye protection, N-95 respirator) while performing an aerosol-generating procedure?

   ☐ **YES** ☐ **NO**

Notes/Additional Information: