	Frederick County, Maryland Division of Fire and Rescue Services	
	SPECIAL ORDER 20-013 Rev.1	
	Date: March 27, 2020	**Page 1 of 13**

COVID-19 Operational Guidelines

Overview

COVID-19 cases are now present in Maryland. This is due to both travel and now community transmission. With these new developments, the emphasis of public health has moved from containment to mitigation. This has resulted in significant actions taken by the State of Maryland that have proven to be successful in combating the spread of this disease. Social distancing is one of the keys to combating the spread of this disease. This document is intended to provide the emergency responders of Frederick County with procedures and guidelines to assist in dealing with this disease process. It is anticipated that the situation will continue to evolve on a weekly basis.

DEFINITIONS

- **Aerosol-Generating Procedures –** Any medical procedure that has the potential to create small particles that may linger in the air. This includes oropharyngeal suctioning, endotracheal intubation, intra-nasal medications, nebulizers, any forms of positive pressure ventilation, or resuscitation involving emergency intubation or cardiopulmonary resuscitation (CPR).
- **Coronavirus -** A large family of viruses, some causing illness in people and others that circulate among animals.
- **COVID-19** – Is a new strain of the much larger Coronaviruses (CoV) family and is a betacoronavirus, like MERS and SARs. "2019-nCoV" was first detected in Wuhan City, Hubei Province, China but has since expanded to include the United States. For confirmed 2019-nCoV infections, reported illnesses have ranged from people with little to no symptoms, to people being severely ill and dying. Symptoms can include: Fever, Cough, and Shortness of breath.
- **Standard PPE –** Tyvek Suit/Impervious Gown, Gloves, N95 respirator mask, eye protection/face shield and foam/wipe decontamination solution.
- **Patient PPE –** Surgical Mask
- **Potential PUI** – A person who has a confirmed cough or fever.
- **Close Contact** - Close contact is defined as being within six (6) feet of an infected patient, or being within the patient's care area or room for greater than 5 minutes. Brief

interactions such as walking by a person or moving past their room does not constitute close contact.

* **High Risk Exposure -**Defined as being less than 6 feet from a PUI or a patient with a confirmed case of COVID-19 **without appropriate personal protective equipment, for greater than five (5) minutes, or when a high-risk procedure is being performed.**
* **Low Risk Exposure -** Defined as being greater than 6 feet from a PUI or a patient with a confirmed case of COVID-19 while inside an enclosed environment without PPE, or prolonged close contact with appropriate PPE.
* **High Risk Procedures -** CPAP, BVM, CPR, intubation, suctioning, administration of nebulized medications.

General Hygiene

Fire/Rescue/EMS Stations

- Regular cleaning with appropriate disinfectants is essential.
- Frequently touched areas must be cleaned several times per day with appropriate disinfectant.
- When appropriate, windows should be open to allow free flow of air.

Crewmembers

- Have a minimum of two (2) uniforms at work at all times. It is strongly recommended that crewmembers shower prior to leaving work, and either launder their duty uniforms at the station, or bag and launder them at home.
- Personnel should place a change of clothes in an exterior compartment on the apparatus in case they need to be decontaminated.
- Volunteer and career employees will not report for duty if they are experiencing any fever (>100.0 degrees), or signs and symptoms of respiratory infection (i.e. sore throat, cough, runny nose).
- Providers should not respond on incidents with personal belongings (i.e. phones, wallets, etc.) on their person as these items may become contaminated and may not survive decontamination procedures.

Apparatus

- Apparatus doors should be left open when in quarters to allow free flow of air.
- The stretcher, patient compartment floors, action area, seats, etc., shall be cleaned at the beginning of each shift and after each transport with an appropriate disinfectant.
- The driver compartment should also be disinfected at the beginning of each shift, and as warranted throughout the shift. Particular attention shall be paid to frequently touched areas (door handles, steering wheel, radio mic, etc.).

General Potential PUI Response

The information contained in this procedure is intended to be consistent with the EMS and ECC interim guidance given by the Centers for Disease Control and Prevention for management of patients with known or suspected 2019-nCoV. In some cases, our local implementation of infection control procedures will exceed those recommended by the CDC.

PATIENT SCREENING

- On Tuesday, March 17, 2020 at 1600 hours, the Frederick County Emergency Communications Center began screening callers requesting emergency services for **any** patient or person on the scene that has a fever or cough.
- An incident involving a patient that has been identified as satisfying the inclusion criteria symptoms (cough or fever), shall be considered a **Potential PUI (Person Under Investigation)** however the "call type" will no longer be a "PUI".
- Frederick County ECC will dispatch these incidents based on their normal "call type" determinants and will enter comments in CAD identifying a "Potential PUI" and highlight the known patient information for responders to see on the MDT.

POTENTIAL PUI RESPONSE ASSIGNMENT

- When Frederick County ECC determines there is a person that conforms to the COVID-19 **Potential PUI** criteria, the incident assignment will include the following:
    - First Due Engine Company
    - First Due Ambulance
    - DFRS Supervisor (EMS Supervisor, Battalion Chief, or Safety Officer)
    - ALS Resources (if indicated by the call type)

ARRIVAL PROCEDURES

- Effective immediately, all crews will interview patients from a distance greater than 6 feet. If possible, it is preferred that you make initial contact from outside the structure. If the patient meets the potential PUI requirements, the appropriate level of PPE will be donned and providers may begin patient care.
- In accordance with recent MIEMSS guidance published on March 25, 2020, DFRS is requiring all providers 6ft or closer to an aerosol-generating procedure or a patient being treated for a cardiac arrest to don the following PPE: gloves, N95 respirator mask and eye protection/face shield, and begin patient care without delay.
- The same PPE shall be required on all unconscious person calls as most will require aerosol-generating procedures, and we need to begin patient care without delay.
- Every effort should be made to minimize unnecessary exposures for all calls including cardiac arrests and unconscious persons.
- Providers will carry only necessary equipment (aide bag, O2, etc.) into the scene, but will place the equipment no closer than 15 feet from a potential PUI patient. This equipment will be staged until absolutely required.

ECC DISPATCHED Potential PUI

- **The DFRS Supervisor responding to these calls will ensure that all dispatched units are aware of the MDT comments.**
- The first arriving personnel shall attempt to make contact with the patient, or a person on the scene with knowledge of the situation, to confirm the inclusion criteria for a Potential PUI prior to entering the structure. This can be completed through phone triage if a phone number is available (it is recommended that you use *67 to avoid divulging your phone number), or you can attempt to communicate by voice from outside. If this cannot be completed, proceed as follows:
- The initial provider making patient contact to determine the inclusion criteria for a potential PUI will don the minimum required PPE to include: gloves, N95 respirator mask and eye protection/face shield. This will be completed from a distance greater than 6 feet. A Tyvek Suit or impervious gown will be donned if the patient meets the criteria for a Potential PUI prior to engaging in patient care.
- Inclusion Criteria for Potential PUI is defined as a patient with a cough or fever.
- If the patient **DOES NOT** qualify as a PUI, the providers should continue treatment per protocol and follow proper BSI Procedures.
    - Providers will notify ECC with the updated information.
- If the patient **DOES** qualify as a PUI, the providers will:
    - In a professional and compassionate manner, explain to the patient that additional precautions are required given the patient's situation, and remove themselves from the patient area to don the appropriate PPE.
    - Notify ECC of the Potential PUI.
    - Judgement is required of the initial providers in determining how many people are needed to treat and load the patient. Only that number of providers needs to don PPE, be in the treatment area, or be within 6ft of the patient.
    - Follow the appropriate treatment plan as described below.

NON ECC DISPATCHED Potential PUI

- The first arriving personnel shall attempt to make contact with the patient, or a person on the scene with knowledge of the situation, to confirm the inclusion criteria for a Potential PUI prior to entering the structure. This can be completed through phone triage if a phone number is available (it is recommended that you use *67 to avoid divulging your phone number), or you can attempt to communicate by voice from outside. If this cannot be completed, proceed as follows:
- The initial provider making patient contact to determine the inclusion criteria for a potential PUI will don the minimum required PPE to include: gloves, N95 respirator mask, and eye protection/face shield. This will be completed from a distance greater than 6 feet. A Tyvek suit or impervious gown will be donned if the patient meets the criteria for a Potential PUI prior to engaging in patient care.
- Inclusion Criteria for Potential PUI is defined as a patient with a cough or fever.
- If the patient **DOES NOT** qualify as a PUI, the providers should continue treatment per protocol and follow proper BSI Procedures.
- If the patient **DOES** qualify as a PUI, the providers will:
    - In a professional and compassionate manner, explain to the patient that additional precautions are required given the patient's situation, and remove themselves from the patient area to don the appropriate PPE.
    - Notify ECC of the Potential PUI.
    - Judgement is required of the initial providers in determining how many people are needed to treat and load the patient. Only that number of providers needs to don PPE, be in the treatment area, or be within 6ft of the patient.
    - Follow the appropriate treatment plan as described below.

VIRAL SYNDOME PANDEMIC TRIAGE PROTOCOL

- This emergency protocol will assist EMS clinicians in identifying patients that may be appropriate to care for themselves safely at home, without transport to the emergency department. ALS or BLS clinicians may use this protocol.
- PPE doffed on the scene will be placed in a Red Bag. The red bag should be double bagged with a focus on not contaminating the outer bag. This is to avoid contaminating the clean vehicle. The doubled bagged PPE is to be placed in the RED bag container at the station.
- **Refer to IB 20-025 for protocol details.**

TREATMENT PLANS

- For patients meeting the potential PUI criteria providers will determine if this is an **Ambulatory Stable Patient** case or an **Unstable** case.
    - A STABLE case is a patient presenting with no to mild respiratory distress and will not require any advanced airway procedures.
    - An UNSTABLE case is defined as a patient that is actively expelling body fluids to include, saliva/sputum, **AND/OR** a patient that will require advanced airway treatment to include BVM assistance, intubation, nebulizer medication, CPAP, or BLS airway placement.

"Ambulatory /Stable Patient" TREATMENT PLAN

- The initial provider should be in standard PPE and the only person in close contact with the patient.
    - All other providers including ALS will remain at the 6-foot mark, in the proper PPE for the environment, until the determination is made if they are needed. The goal should be to limit the number of providers entering the enclosed environment.
    - **No students or designates will assist in patient care of a non-priority 1 patient.**
- If the patient is conscious, alert, and in minor distress, ask the patient to place a surgical mask on themself. The surgical mask can be placed over a nasal cannula or non-rebreather mask, if applicable.
- The initial provider will obtain all vital signs and make a clinical determination if the patient should, and is capable of walking to the unit, or if the patient qualifies for the Viral Syndrome Pandemic Triage Protocol.
    - If the patient is unable to walk, or has signs and symptoms which would exclude them from walking, the driver (and additional providers if needed) will don the Standard PPE and assist as needed.
- As long as the driver of the ambulance has made no patient contact, they will drive the unit to the receiving facility.
    - **No one who has had patient contact will ride in the front of the ambulance or drive the medic unit. This includes the driver of the ambulance if they have assisted in moving the patient to the unit. No family members or other persons from the scene shall ride in the ambulance or medic unit.**
- The DFRS Supervisor on scene is the preferred method of contact to the receiving facility; if no DFRS Supervisor is on scene, contact can be made via EMRC through the med radio by the transporting unit.
- Once arrived at the receiving facility, a final determination will be made if the patient is capable of walking into the facility.
- Once **advised by the receiving facility,** the aide provider will walk the patient into the facility. The driver will remain with the unit.

"Unstable" TREATMENT PLAN

- All providers in the enclosed environment or within 6ft of the patient shall be in the appropriate PPE.
    - Providers not delivering patient care will remain outside the enclosed environment until the determination is made if they are needed. The goal should be to limit the number of providers entering the enclosed environment.
    - **No students or designates will assist in patient care of a non-priority 1 patient.**
- If the patient is conscious, alert, and in minor distress, ask the patient to place a surgical mask on themself. The surgical mask can be placed over a nasal cannula or non-rebreather mask, if applicable.
- Interventions will occur as needed following all Maryland Medical Protocols; however, special attention shall be placed on minimizing risk and exposure to the providers.
- Potential limitation of procedures.
    - Patients should receive the care they need, and the procedures that are indicated.
    - Aerosolized (nebulizer) treatments should be avoided, but if needed, all personnel in Close Contact are required to be in the full complement of Standard PPE no matter the duration of time. **Nebulizers will be stopped prior to exiting the ambulance.**
    - Non-essential interventions, such as *elective* IVs or *elective* advanced airway procedures should be deferred to the hospital setting when treatment indications are such that deferral of those procedures is appropriate.
    - Life-saving procedures that are indicated by protocol shall be executed by providers using the appropriate PPE with the minimum being: gloves, N95 respirator mask, and eye protection/face shield.
    - Advanced airway management should utilize HEPA filters on CPAP, ETT and BVM ventilations. Video Laryngoscopy is the preferred method on all potential PUI patients needing intubation.
- For patients requiring treatment enroute, consider utilizing a "clean provider/dirty provider approach".
    - Clean provider is in appropriate PPE and does not touch the patient. This provider can obtain supplies from bags and cabinets.
    - Dirty provider is in contact with the patient and provides all care.
- The DFRS Supervisor on scene is the preferred method of contact to the receiving facility; if no DFRS Supervisor is on scene contact can be made via EMRC through the med radio by the transporting unit.
- Once advised by the receiving facility, the providers will move the patient into the facility.

No one who has had patient contact will ride in the front of the ambulance or drive the medic unit. This includes the driver of the ambulance if they have assisted in moving the patient to or from the unit. No family members or other persons from the scene shall ride in the ambulance or medic unit.

PROVIDER PPE

- Frederick County DFRS is following the minimum CDC recommendations for PPE protection. Below is a list of required PPE for patient contact:
    - Hot Zone (<= 6' from the PUI)
        - Respiratory Protection, Eye Protection, Gown/Suit, Gloves
    - Warm Zone (Inside any structure with a PUI and > 6' away from the PUI)
        - Respiratory Protection, Eye Protection, Gloves
    - Cold Zone (> 6' away from the PUI in an open-air environment)
        - No PPE required
- All ambulances, medic units, special units and inspected first responder units, will carry Standard PPE to include Tyvek suit/impervious gown, gloves, Surgical/N95 mask, eye protection/face mask, and foam/wipe solution. If supplies are limited, units will be restocked in the order listed above.
- All personnel that don PPE shall strictly adhere to the outlined PPE donning and doffing procedure along with decontamination procedures.
- Significant attention must be given to the PPE doffing process in order to prevent accidental contamination. See Doffing of PPE section.
- All provider PPE will be restocked after every PUI incident by the on scene DFRS Supervisor. This will be done on a one-for-one basis.

PREPARATION OF EMS TRANSPORT UNITS

- All Ambulances will keep the area between the patient compartment and the driver compartment segregated with a plastic barrier and duct tape at all times. This procedure will follow the guidelines provided by Station 33.
- Turn on the patient compartment exhaust fan.
- During transport, vehicle ventilation systems in both compartments should be on non-recirculated mode to maximize air exchanges.
- Keep cabinet doors closed unless supplies are needed. Once a cabinet has been opened, the entire interior must be disinfected.
- Tablets/computers should not be in the patient compartment.

CREW CONFIGURATION

- First Responder
    - Make every effort to limit the exposure of providers.
- Ambulance
    - Provide patient care with every effort made to keep the driver of the ambulance from donning PPE or becoming exposed.
- Suppression Apparatus
    - Provide extra personnel to facilitate the movement of vehicles to the receiving facility.
    - The providers from the suppression piece will make every effort to not don PPE and remain "clean".
    - If the DFRS Supervisor is not on the scene, it is the responsibility of the engine officer to coordinate the incident. If the call meets the potential PUI criteria, complete the Possible PUI Personnel Tracking Report for all providers on the scene. This form is located on the MDT under Quick Links/Coronavirus.
- ALS
    - Minimize exposure as much as possible and attempt to make the determination for ALS from 6 foot.
- DFRS Supervisor
    - Coordinate the incident.
    - Communicate with receiving facility and notification of potential PUI transport.
    - Track providers on potential PUI calls on the Possible PUI Personnel Tracking Report. This form is located on the MDT under Quick Links/Coronavirus.
    - **NO NOTIFICATION** is required to the Health Department.

FREDERICK HEALTH HOSPITAL (FHH) PROCEDURES

- All transported Potential PUI patients will require notification to the receiving facility. The on scene DFRS Supervisor will complete this. If no DFRS Supervisor is present on the call, the ambulance crew will complete this. Announce the term **Potential PUI** during the consultation.
- Frederick Health Hospital will have two procedures upon arrival at their facility:
    - **Direct Bed Procedure**- The crew will be given a direct bed to report to upon arrival.
    - **Hold in Place Procedure**- The ambulance crew will hold in the ambulance until directed by FHH staff. The clean driver of the ambulance will go into the hospital and let the staff know they have arrived.
- No family members will be admitted through the Emergency Department EMS entrance, they should be directed to the front entrance to check in.

DECON OF APPARATUS AND EQUIPMENT

- **Low Risk Decontamination**
    - **Non Aerosolized Procedures**- Any patient care procedure that does not require aerosolized medications or positive pressure ventilations.
    - All patient compartment doors will remain open after patient removal to allow air exchange.
    - Don PPE or remain in current PPE after patient turnover to include surgical mask, gloves and eye protection.
    - All exposed surfaces and patient contact areas must be decontaminated using an appropriate cleaning solution.
    - An appropriate cleaning solution.
        - An Environmental Protection Agency (EPA) registered hospital disinfectant with the label claim for disinfection of non-enveloped organisms (e.g. norovirus, rotavirus, adenovirus, and poliovirus). If a commercial disinfectant is used, follow the directions set forth by the manufacturer.
        - A freshly mixed 1:10 bleach to water solution, made by using 5-6% (household) bleach mixed with cold water in a spray bottle. This solution will remain effective as a disinfectant for 24 hours, and then discard.
    - Clean up any visible body fluids.
    - Discard all cleaning material appropriately.
    - Wash hands.

- **High Risk Decontamination**
    - **Aerosolized Patient Procedures**- Any medical procedure that has the potential to create small particles that may linger in the air. This includes nebulizers and any forms of positive pressure ventilation.
    - All patient compartment doors will remain open after patient removal to allow air exchange.
    - Personnel shall remain in their BSI/PPE and ride in the patient compartment of the ambulance to FS33. At no point are they to ride in the clean cab of an ambulance or other vehicle (ALS, BC, Safety buggy, etc.). The "clean" provider will drive the unit to Station33.
    - Any additional "clean" personnel will be transported back to their station or to Station 33 via another unit. The DFRS Supervisor will arrange transportation.
    - Upon arrival at Station 33, the providers will be provided direction through the fogging operation.

DOFFING OF PPE:

- Doffing procedures will be completed after every Potential PUI.
- Adherence to proper PPE doffing procedures is critical. In general, work from clean to dirty. The following order is recommended:
    - Alcohol based hand sanitizer will be used to decontaminate gloves prior to any doffing procedures.
    - Hair protection (if used)
    - Impervious Gown/Tyvek Suit
    - Arm covers (if used)
    - Leg covers (if used)
    - Shoe covers
    - Eye protection
    - Full Face Shield/Respiratory protection
    - Gloves
    - Alcohol based hand sanitizer
    - Wash hands
- If the appropriate PPE is donned correctly, once the PPE is removed, the only decontamination typically required is hand washing.
- PPE doffed at FHH will be placed in a regular trash bin in the doffing room and left at the receiving facility. Once the trash bin is full, notify the charge RN and they will have it emptied. The doffing room is the backboard storage room at FHH.
- PPE doffed on the scene will be placed in a Red Bag. The red bag should be double bagged with a focus on not contaminating the outer bag. This is to avoid contaminating the clean vehicle. The doubled bagged PPE is to be placed in the RED bag container at the station.
- Station 33 personnel will provide direction on the disposal of PPE at Station 33.
- Cot linens will go in the normal Linen baskets as designated by the receiving facility. Dirty linens should not go back to your station or to Station 33.

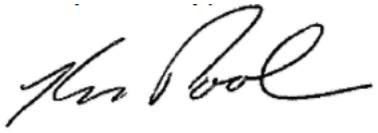
DECON PROCEDURES OF PERSONNEL

- Low Risk Exposure Decon
    - Providers that meet the definition of a Low Risk Exposure will:
        - Appropriately doff any PPE and wash their hands, after Decon of the apparatus is completed at the receiving facility or on the scene if the patient is not transported or the provider does not go to the hospital.
- High Risk Exposure Decon
    - Providers that meet the definition of a High Risk Exposure will:
        - Remain in their BSI/PPE and ride in the patient compartment of the ambulance to FS33. At no point should they ride in the clean cab of an ambulance or other vehicle (ALS, BC, Safety buggy, etc.).
        - Personnel who are exposed with no PPE and not directly involved in patient transport will be taken to FS33 for decontamination. The on scene DFRS Supervisor will arrange transportation.
- Station 33 Operations
    - Personnel should make their way to the East side of the decontamination tent and take the following actions with instruction being provided by Hazmat personnel who will maintain at least a 6' separation distance.
- Adherence to proper PPE doffing procedures is critical. In general, work from clean to dirty. The following order is recommended:
    - Alcohol based hand sanitizer will be used to decontaminate gloves prior to any doffing procedures.
    - Hair protection (if used)
    - Impervious Gown/Tyvek Suit
    - Arm covers (if used)
    - Leg covers (if used)
    - Shoe covers
    - Eye protection
    - Full Face Shield/Respiratory protection
    - Gloves
    - Alcohol based hand sanitizer
    - Wash hands
    - Provider with no PPE
- Secure personal items in the provided bags for decontamination later.
- Enter the tent and completely disrobe all clothes by stepping into a trash bag and pulling the clothes off directly into the trash bag.

- The bag should then be secured and placed on the exit (*station side*) of the tent.
- Personnel should thoroughly wash themselves in the shower using the provided shampoo and soap.
- Upon completion of decon personnel will don the spare clothing they have with them or a post decon kit supplied by FS33.

POST CALL PROCEDURES

- The DFRS Supervisor will be responsible for the tracking of all providers on the scene and the potential exposure of providers. This will be completed on the Possible PUI Personnel Tracking Report. This form is located on the MDT under Quick links/Coronavirus.
- If a DFRS Supervisor is not on the scene, it is the responsibility of the engine officer to complete the Possible PUI Personnel Tracking Report.
- Providers who come into prolonged contact(> 5 minutes) with a Potential PUI or a laboratory confirmed COVID-19 patient **without proper PPE** may be placed in quarantine for up to 14 days.
- The Division will follow the current CDC guidelines to address exposures. Quarantine procedures will be completed at the provider's residence or other arranged location.
- The DFRS Supervisor will restock units as appropriate with PPE supplies that were used on the call.

BY ORDER OF: 

Division Signature