
	Scarborough Fire Department	
	Scarborough, Maine	
	Standard Operating Guidelines	

Book:	Emergency Operations
Chapter:	Medical Emergencies
Subject:	3420 - Advanced Disinfecting & Operating Procedures During Contagious Disease Outbreaks
Revision Date:	10/31/2014
Approved by:	<i>B. Michael Thurlow</i>

PURPOSE

During public health emergencies or when a potential contagious disease impacts the department, the administration and staff must be responsible and take all appropriate measures to control the spread of any suspected or known infectious outbreaks.

This policy will be in effect anytime there is a local, state, national, or world-wide outbreak of a contagious disease process that may affect the safety of our work place and the wellness of our employees. This could range from a simple local outbreak within our stations to a world-wide pandemic. This policy is designed to be enacted immediately based on need or threat, and discontinued when the threat has been mitigated.

POLICY

When activated by the Fire Chief, this policy will supersede the current infection control plan and normal station and apparatus cleaning policies by implementing a more aggressive disinfection program along with certain modifications to operational procedures.

SCOPE

This policy applies to all staff and is subject to short notice changes as the spread or containment of the contagious threat changes as well as application of updated scientific methods to deal with current pathogens or any mutations. This policy requires flexibility and will be expanded or contracted based on facts such as phase and development of infection, Maine and Federal CDC recommendations, department response volume, exposures, and a variety of other influences.

DEFINITIONS

- A. PPE – Personal Protective Equipment
- B. P100 – An oil resistant particulate mask designed to filter 99.97% of airborne particles.
- C. CDC – Centers for Disease Control (either Maine or Federal)
- D. MDT – Mobile Data Terminal
- E. EMD – Emergency Medical Dispatch
- F. EVD – Ebola Virus Disease
- G. EV-D68 – Enterovirus

PROCEDURE

A. Apparatus and Equipment:

Each week and after any known or suspected case of a contagious disease, as an extension of the ambulance and apparatus checks, policy #'s 2200 and 2210, each ambulance and fire apparatus will be disinfected as follows:

- a. Employees shall use gloves, a surgical style mask, and safety eyewear as appropriate while conducting these procedures.
- b. The disinfectant used for these procedures will be Cavacide Wipes. Cavacide Spray is optional for Oak Hill or Dunstan Station as there are laundry facilities and procedures in place to clean soiled linen used to decontaminate.
- c. The disinfectant will be allowed to air dry, not dried by any other means.
- d. All apparatus components that an employee's hands could come in contact with during the course of routine or emergency operations will be wiped with the Cavacide Wipes/Spray including but not limited to:
 - i. Interior and exterior door handles, all cabinet doors and slide unit handles, release controls, knobs, grab rails, steering wheels, seat belt buckles, SCBA release straps, etc.
 - ii. Radio microphones, radio control knobs and switches including portable radios and headsets.
 - iii. All apparatus switches, buttons and control knobs.
 - iv. MDT keys and control knobs.
 - v. Any map books, resource manuals or GIS units.
 - vi. Windshield visors, fan motors and controls.
 - vii. All dash and auxiliary HVAC vents and control knobs.
 - viii. Siren control heads.
 - ix. EMS jump kit handles and carrying straps.

B. Stations/Facilities:

Each day and after any known or suspected case of a contagious disease, as an extension of the station cleaning policy # 2000, each station will be disinfected as follows:

- a. Employees shall use gloves, and as necessary, a surgical style mask, and safety eyewear as appropriate while conducting these procedures.
- b. The disinfectant used for these procedures will be Cavacide Wipes. Cavacide Spray is optional for Oak Hill or Dunstan Station as there are laundry facilities and procedures in place to clean soiled linen used to decontaminate.
- c. The disinfectant will be allowed to air dry, not dried by any other means.
- d. The HVAC system filters are changed each quarter in the stations that have them. Aggressive station cleaning will maximize their effectiveness by eliminating contaminants from getting into the intake of these HVAC systems.
- e. All station features that an employee's hands could come in contact with during the course of routine or emergency operations will be wiped with the Cavacide Wipes/Spray including but not limited to:
 - i. Door handles, knobs and panic hardware.
 - ii. All areas of the door where an employee's hands could be used to push or pull the door open or closed.
 - iii. All water cooler knobs and spigots.

- iv. All sinks water control knobs, faucets and stoppers.
- v. All toilets including flush controls and seats.
- vi. All key entry pads on computers, phones and building access systems.

C. Personal Hygiene Measures:

Each of us has a responsibility to practice good personal hygiene habits to help control the spread of germs including but not limited to:

- a. Wash your hands after using the rest rooms, before and after meal preparation and meal consumption.
 - b. Wash your hands after the use of medical gloves both after an EMS call and after a disinfecting/cleaning procedure. The use of a department approved waterless hand sanitizer may be used for this purpose as an alternative.
 - c. Use appropriate disposal and storage procedures when using shaving, tooth care and contact lens materials. These items should be stored in such away as to avoid allowing these products to become exposed to contagious diseases.
 - d. Cough and sneeze hygiene will follow current CDC recommendations. Tissues must be disposed of appropriately.
 - e. All linen containing blood or other body fluids created in the work place including: at the station, on department property, on an apparatus, or at an emergency scene, must be placed in the appropriate container for laundering.
 - f. All call company personnel responding in their personal vehicles should disinfect their hands before returning to their vehicles to clear the scene.
- D. Limited access to department stations during implementation of this policy:
- a. The department may need to limit the use of all or parts of its stations from use by the general public in an effort to minimize the spread of contaminates to our personnel.
 - b. The department may also need to require that the vehicle bay doors remain closed, other than for egress and ingress of apparatus, to minimize entry by contaminated members of the public.
 - c. No personal vehicles will be allowed in the stations.
- E. Operational considerations:
- a. If determined by EMD that there is a possibility of infectious disease EVD, attempt to make contact with the patient directly by phone prior to face to face contact. This will allow responding personnel the opportunity to gather the proper PPE and begin the EVD screening process.
 - b. Limit the amount of equipment you bring into the scene to prevent contamination.
 - c. Whenever possible, perform initial interview of all patients and customers from at least 3-6 feet away to determine if personal protective equipment precautions are necessary. Assess all patients for flu like symptoms of acute febrile (fever) respiratory illness (fever plus one or more of the following: nasal congestion, rhinorrhea, sore throat, cough, **body aches, headache, chills, abdominal pain, fatigue and unexplained hemorrhage.**). **Some people have reported diarrhea and vomiting associated with contagious diseases.**
 - d. Whenever appropriate, before coming in contact with a suspected patient displaying signs and symptoms of influenza, H1N1, Ebola (EVD) or Enterovirus (EV-D68), have them place a surgical style mask on themselves.
 - e. Gloves are required for any patient contact.

- f. Tyvek style impermeable suits.
- g. Eye protection (goggles or face shield that fully covers the front and sides of the face)
- h. Facemask
- i. Additional PPE might be required in certain situations (e.g., large amounts of blood and body fluids present in the environment), including but not limited to double gloving, disposable shoe covers, and leg coverings.
- j. Patient should be placed on an impermeable sheet or in impermeable suit prior to transport.
- k. “Both the CDC and World Health Organization (WHO) recommend that aerosol-generating procedures, such as nebulizers or suctioning, be avoided in suspected Ebola cases unless performed in a negative- pressure room in a medical facility. Weigh the risk vs benefits of treatment or withholding treatment and follow EMS Protocols” (West).
- l. When in the ambulance patient compartment with a suspected patient, the ventilation fan and side door window should be opened during, and for 10 minutes after, a suspected patient transport.
- m. Notify receiving facilities of the patient’s condition early so they can make the appropriate arrangements for isolation as necessary. The preferred means of communication is cell phone.
- n. PPE should be worn upon entry into the scene, prior to patient contact and continued to be worn until personnel are no longer in contact with the patient.
- o. Transfer of the patient to hospital staff will occur in the ambulance bay, Bay 1 at Maine Medical has been identified as the bay to use for any suspected patients.
- p. PPE should be carefully removed without contaminating one’s eyes, mucous membranes, or clothing with potentially infectious materials. If PPE is contaminated, you will proceed through the decontamination room.
- q. PPE should be placed into a medical waste container at the hospital and not be brought back to the station
- r. Re-useable PPE should be cleaned and disinfected according to the manufacturer's reprocessing instructions and EMS agency policies
- s. Appropriately disinfect the ambulance after the transport of a suspected patient prior to placing the ambulance back in service.

F. Exposure Incident Response (CDC recommendations)

“EMS personnel can safely manage a patient with suspected or confirmed Ebola by following recommended isolation and infection control procedures, including standard, contact, and droplet precautions. Particular attention should be paid to protecting mucous membranes of the eyes, nose, and mouth from splashes of infectious material, or self-inoculation from soiled gloves. Early recognition and identification of patients with potential Ebola is critical. An EMS agency managing a suspected Ebola patient should follow these CDC recommendations:

- a. Limit activities, especially during transport that can increase the risk of exposure to infectious material (e.g., airway management, cardiopulmonary resuscitation, use of needles).
- b. Limit the use of needles and other sharps as much as possible. All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers.
- c. EMS personnel with exposure to blood, bodily fluids, secretions, or excretions from a patient with suspected or confirmed Ebola should immediately:

- i. Stop working and wash the affected skin surfaces with soap and water. Mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution;
 - ii. Contact occupational health/supervisor for assessment and access to post-exposure management services; and
 - iii. Receive medical evaluation and follow-up care, including fever monitoring twice daily for 21 days, after the last known exposure. They may continue to work while receiving twice daily fever checks, based upon EMS agency policy and discussion with local, state, and federal public health authorities.
- d. EMS personnel who develop sudden onset of fever, intense weakness or muscle pains, vomiting, diarrhea, or any signs of hemorrhage after an unprotected exposure (i.e., not wearing recommended PPE at the time of patient contact or through direct contact to blood or body fluids) to a patient with suspected or confirmed Ebola should:
- i. Not report to work or immediately stop working and isolate themselves;
 - ii. Notify their supervisor, who should notify local and state health departments;
 - iii. Contact occupational health/supervisor for assessment and access to post-exposure management services; and
 - iv. Comply with work exclusions until they are deemed no longer infectious to others.” (CDC)

G. Emergency Medical Dispatch (PSAP)

The State of Maine has adopted the use of ProQA in our PSAP centers. ProQA has recently created a tool to help identify the potential Infectious disease. The use of the Emergency Infectious Disease tool (EID) will be authorized by the State Medical Director as needed.

- a. Once this policy is in effect, all calls that are identified as a potential infectious disease, no Engine company will be assigned.
- b. EMS crews may request additional help once on scene.

RESPONSIBILITIES

- A. It is the responsibility of the Fire Chief or his designee to implement this policy including the frequency of tasks.
- B. It is the responsibility of the Fire Chief or his designee to notify staff whenever this policy is placed into effect as well as when this policy has been cancelled.
- C. It is the responsibility of staff to comply with this policy for their protection against illness and to avoid spreading any illness to the patients that we care for, co-workers, and the public we serve.
- D. It is the responsibility of the call takers and dispatchers to follow this and any related protocols and policies.

REFERENCES

- A. Maine CDC guidelines
- B. Federal CDC guidelines
- C. Ebola and EV-D68: What EMS needs to Know, IAFC