Influenza Pandemic Personal Protective Guidelines

Chapter 5.6

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Purpose: Provide information and guidelines for transportation of patients during Influenza Pandemic Conditions.

All personnel should be aware of the signs and symptoms of infectious respiratory diseases and the procedures necessary for protecting themselves. Influenza transmission can occur from direct or indirect contact via droplet nuclei. Certain procedures can also impact transmission of influenza particulates by producing aerosols: intubation, extubation, deep tracheal suctioning and nebulized respiratory treatments.

Persons with swine-origin influenza A (H1N1) virus infection should be considered potentially infectious from one day before to 7 days following illness onset. Persons who continue to be ill longer than 7 days after illness onset should be considered potentially contagious until symptoms have resolved. Children, especially younger children, might potentially be contagious for longer periods.

Respiratory Precautions:

- Implement the use of surgical masks by personnel during the evaluation of patients with respiratory symptoms which may be influenza related.
- Implement the use of N95 respirators by personnel when performing intubation (oral or nasal), insertion of King Tube, suctioning, and nasal or oral airway placement.
- If not requiring oxygen administration, provide surgical masks to all patients with symptoms of respiratory illness.
- For patients who cannot wear a surgical mask in addition to any medical treatment being provided, provide tissues and instructions on when to use them (i.e., when coughing, sneezing, or controlling nasal secretions).
- Continue to use respiratory precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions.

Recommendations:

- Use gown, gloves and eye protection if contact with bodily secretions or if a contaminated environment is anticipated. Use proper procedures for donning and doffing PPE.

- Practice good hand hygiene. Use the provided waterless hand cleaner until you can access soap and water.
- Assure adequate cleaning of equipment and vehicles between transports. (See additional information in separate section on cleaning of transport vehicles)

Patient Assessment

- Step 1: The Centers for Disease Control and Prevention (CDC) suggests that EMS personnel stay more than 6 feet away from patients and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions while assessing all patients for suspected cases of swine-origin influenza.
- Step 2: Assess all patients for symptoms of acute febrile respiratory illness (fever plus one or more of the following: nasal congestion/cold symptoms, sore throat, or cough)
- If no acute febrile respiratory illness, proceed with normal EMS care.

Personal Protective Equipment (PPE)

- When treating a patient with a suspected case of swine-origin influenza as defined above, the following PPE should be worn:
    - Disposable surgical mask and eye protection (e.g., goggles; eye shield), disposable non-sterile gloves, and gown, when coming into close contact with the patient.
    - When treating a patient that is not a suspected case of swine-origin influenza, but who has symptoms of acute febrile respiratory illness, the following precautions should be taken:
        - Place a standard surgical mask on the patient, if tolerated.
        - If not tolerated, personnel may wear a standard surgical mask.

Use good respiratory hygiene:

- Use non-sterile gloves for contact with patient secretions, or surfaces that may have been contaminated.
- Follow hand hygiene including hand washing or cleansing with alcohol based hand disinfectant after every contact.
- Encourage good patient compartment vehicle airflow/ventilation to reduce the concentration of aerosol accumulation when possible.

Guidance for Cleaning Emergency Medical Service Rescue Vehicles during an Influenza Pandemic

Following are general guidelines for cleaning or maintaining rescue vehicles after transporting a suspected influenza patient during a pandemic. This guidance may be modified or additional procedures may be recommended by the Centers for Disease

Control and Prevention (CDC) when an influenza pandemic becomes widespread in the United States, or as new information about a pandemic strain becomes available.

All personnel should consistently practice basic infection control procedures including vehicle/equipment decontamination, hand hygiene, cough and respiratory hygiene, and proper use of PPE.

Influenza viruses can persist on nonporous surfaces for 24 hours or more, but quantities of the virus sufficient for human infection are likely to persist for shorter periods. Although the relative importance of virus transfer from inanimate objects to humans in spreading influenza is not known, hand transfer of the virus to the mucous membranes of the eyes, nose, and mouth resulting in infection is likely to occur. Hand hygiene, cough etiquette and respiratory hygiene are the principal means of interrupting this type of transmission. Routine cleaning and disinfection practices may play a role in minimizing the spread of influenza.

Routine cleaning with soap or detergent and water to remove soil and organic matter, followed by the proper use of provided disinfectants, are the basic components of effective environmental management of influenza. Reducing the number of influenza virus particles on a surface through these steps can reduce the chances of hand transfer of virus. These products must be used in accordance with their label instructions; following label instructions is necessary to achieve adequate efficacy and to avoid unreasonable adverse effects.

After the patient has been removed and prior to cleaning, the air within the vehicle may be exhausted by opening the doors and windows of the vehicle while the ventilation system is running. This should be done outdoors and away from pedestrian traffic. Consider the use of an aeroclave to disinfect the patient compartment.

Some reusable equipment may need to be covered with disposable plastic covers to protect it from contamination if it cannot be decontaminated with disinfectants without the chance of damage to the equipment (per the manufacturers' recommendations). These covers should be changed as appropriate (e.g., after each shift, after every run) or when they are visibly contaminated. Dispose of these covers in a leak proof bag or waste container.

Routine cleaning methods should be employed throughout the vehicle with special attention in certain areas as specified below:

- Clean and disinfect non-patient-care areas of the vehicle according to the vehicle manufacturer's recommendations.
- Non-patient-care areas of the vehicle, such as the driver's compartment, may become indirectly contaminated, such as by touching the steering wheel with a contaminated glove. Personnel should be particularly vigilant to avoid contaminating environmental surfaces that are not directly related to patient care (e.g., steering wheels, light switches). If the surfaces in the driver's compartment

become contaminated, they should be cleaned and disinfected according to the recommendations in item 4 below.

- Wear non-sterile, disposable gloves while cleaning the patient-care compartment and when handling cleaning and disinfecting solutions. Avoid activities that may generate infectious aerosols. Eye protection, such as a face shield or goggles, may be required if splashing is expected. Cleaning activities should be supervised and inspected periodically to ensure correct procedures are followed.
- Frequently touched surfaces in patient-care compartments (including stretchers, medical equipment control panels, adjacent flooring, walls, ceilings and work surfaces, door handles, radios, keyboards and cell phones) that become directly contaminated with respiratory secretions and other bodily fluids during patient care, or indirectly by touching the surfaces with gloved hands, should be cleaned first with detergent and water and then disinfected using the provided disinfectant in accordance with the manufacturer's instructions. Ensure that the surface is kept wet with the disinfectant for the full contact time specified by the manufacturer. Adhere to any safety precautions or other recommendations as directed (e.g., allowing adequate ventilation in confined areas, and proper disposal of unused product or used containers).
- Non-porous surfaces in patient-care compartments that are not frequently touched can be cleaned with detergent and water.
- Clean any small spills of bodily fluids (e.g., vomit from an ill patient) by cleaning first with detergent and water followed by disinfection.
- Large spills of bodily fluids (e.g., vomit) should first be managed by removing visible organic matter with absorbent material (e.g., disposable paper towels discarded into a leak-proof properly labeled container). The spill should then be cleaned and disinfected as above.
- Place contaminated reusable patient care devices and equipment in biohazard bags clearly marked for cleaning and disinfection or sterilization as appropriate.
- Clean and disinfect or sterilize reusable devices and equipment according to the manufacturer's recommendations.
- After cleaning, remove and dispose of gloves as instructed in a leak proof bag or waste container. State and local governments should be consulted for appropriate disposal decisions. Barring specific state solid or medical waste regulations to the contrary, these wastes are considered routine solid wastes that can be sent to municipal solid waste landfills without treatment.

Immediately clean hands with soap and water or an alcohol-based hand gel. Avoid touching the face with gloved or unwashed hands.