

**INFECTION CONTROL / BODY SUBSTANCE ISOLATION
GUIDELINES****Criteria:**

- A. These guidelines should be used whenever contact with patient body substances is anticipated and/or when cleaning areas or equipment contaminated with blood or other body fluids.
- B. Your patients may have communicable diseases without you knowing it; therefore, these guidelines should be followed for care of all patients.

System Requirements:

- A. These guidelines provide general information related to body substance isolation and the use of universal precautions. These guidelines are not designed to supersede an EMS agency's infection control policy [as required by EMS Act regulation 28 § 1005.10 (l)], but this general information may augment the agency's policy.
- B. These guidelines do not comprehensively cover all possible situations, and EMS practitioner judgment should be used when the EMS agency's infection control policy does not provide specific direction.

Procedure:**A. All patients:**

1. Wear gloves on all calls where contact with blood or body fluid (including wound drainage, urine, vomit, feces, diarrhea, saliva, nasal discharge) is anticipated or when handling items or equipment that may be contaminated with blood or other body fluids.
2. Wash your hands often and after every call. Wash hands even after using gloves:
 - a. Use hot water with soap and wash for 15 seconds before rinsing and drying.
 - b. If water is not available, use alcohol or a hand-cleaning germicide.
3. Keep all open cuts and abrasions covered with adhesive bandages that repel liquids. (e.g. cover with commercial occlusive dressings or medical gloves)
4. Use goggles or glasses when spraying or splashing of body fluids is possible. (e.g. spitting or arterial bleed). As soon as possible, the EMS practitioner should wash face, neck and any other body surfaces exposed or potentially exposed to splashed body fluids.
5. Use pocket masks with filters/ one-way valves or bag-valve-masks when ventilating a patient.
6. If an EMS practitioner has an exposure to blood or body fluids¹, the practitioner must follow the agency's infection control policy and the incident must be immediately reported to the agency infection control officer as required. EMS practitioners who have had an exposure² should be evaluated as soon as possible, since antiviral prophylactic treatment that decreases the chance of HIV infection must be initiated within hours to be most effective. In most cases, it is best to be evaluated at a medical facility, preferably the facility that treated the patient (donor of the blood or body fluids), as soon as possible after the exposure.
7. Preventing exposure to respiratory diseases:
 - a. Respiratory precautions should be used when caring for any patient with a known or suspected infectious disease that is transmitted by respiratory droplets. (e.g. tuberculosis, influenza, or SARS)
 - b. HEPA mask (N-95 or better), gowns, goggles and gloves should be worn during patient contact.
 - c. A mask should be placed upon the patient if his/her respiratory condition permits.

- d. Notify receiving facility of patient's condition so appropriate isolation room can be prepared.
8. Thoroughly clean and disinfect equipment after each use following agency guidelines that are consistent with Center for Disease Control recommendations.
9. Place all disposable equipment and contaminated trash in a clearly marked plastic red Biohazard bag and dispose of appropriately.
 - a. Contaminated uniforms and clothing should be removed, placed in an appropriately marked red Biohazard bag and laundered / decontaminated.
 - b. All needles and sharps must be disposed of in a sharps receptacle unit and disposed of appropriately.

Notes:

1. At-risk exposure is defined as "a percutaneous injury (e.g. needle stick or cut with a sharp object) or contact of mucous membrane or non-intact skin (e.g. exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, tissue or other body fluids that are potentially infectious." Other "potentially" infectious materials (risk of transmission is unknown) are CSF (cerebral spinal fluid), synovial, pleural, peritoneal, pericardial and amniotic fluid, semen and vaginal secretions. Feces, nasal secretions, saliva, sputum, sweat, tears, urine and vomitus are not considered potentially infectious unless they contain blood.

**SUSPECTED INFLUENZA-LIKE ILLNESS (ILI)
STATEWIDE BLS PROTOCOL**

Criteria:

- A. This protocol applies to all patients encountered by EMS during an epidemic/ pandemic of influenza. [Note: Infectious diseases are dynamic and EMS providers should frequently check the EMS Protocols Link on the Pennsylvania Department of Health Bureau of EMS's webpage at <http://www.health.state.pa.us/ems> for the most current version of this protocol]
- B. The Centers for Disease Control and Prevention (CDC) has declared an epidemic of a viral illness like H1N1 influenza A, SARS or avian influenza.

Exclusion Criteria:

- A. None

System Requirements:

- A. All levels of responders should have fit-tested disposable N95 respirator, eye protection, and disposable non-sterile gloves and gown.
- B. EMS agencies in geographic areas with confirmed cases of ILI should screen their EMS providers for fever or symptoms of acute respiratory illness before each shift, and EMS providers should immediately report symptoms that develop during or after a shift. EMS agencies should work with their occupational health programs, EMS agency medical director, and EMS regional councils to make sure that long-term PPE needs and prophylactic antiviral needs (as directed by the PaDOH) are addressed.
- C. Dispatch/ PSAP Issues:
 1. PSAP call takers should screen callers to determine if the patient, or someone at the incident location, has symptoms of "influenza-like illness" (ILI - which include nasal congestion/ runny nose, sore throat, cough, fever, or other flu-like symptoms), and symptoms of "influenza-like illness" should be communicated to responders prior to arrival at the scene. Ask patient to meet EMS at the door, if the patient condition permits.
 2. EMS agencies should collaborate with their PSAP, regional EMS council, and medical director/ PSAP medical director/ regional EMS medical director to review resources dispatched to calls. For some categories of calls, it may be reasonable to send only an ambulance (BLS when appropriate) to avoid exposure to first responders (including QRS, firefighters, law enforcement). If a community becomes inundated with calls for possible ILI, it may be appropriate to send only a QRS/first responder or to direct the caller to other community resources established for individuals with symptoms of ILI.

Procedure:**A. All Patients:**

1. If symptoms of ILI are suspected based upon dispatch information, consider limiting the number of initial providers that approach the patient or enter a residence.

B. Patients with medical condition that requires immediate care and EMS providers suspect possible influenza-like illness (ILI) but cannot complete assessment for suspected case of ILI (for example a cardiac arrest with preceding respiratory illness):

1. EMS providers should don PPE for suspected case of ILI before proceeding with patient care/ resuscitation.¹

C. If there HAS NOT been ILI reported in the geographic area:

1. Assess patient while staying at least 6 feet away from patient and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions (cough etiquette, hand hygiene, and spatial separation) while assessing all patients for suspected cases of ILI.
2. Assess all patients for "influenza-like illness" (ILI = nasal congestion/ runny nose, sore throat, or cough with or without fever ($\geq 100^{\circ}\text{F}$ or 37.8°C if measured)).
 - a. If no ILI, proceed to protocol #201 and other appropriate protocols.
3. If ILI, place a standard surgical mask on the patient (if tolerated) and use appropriate PPE for ILI.^{1,2,3}

D. If the CDC HAS reported cases of confirmed ILI in the geographic area:

1. Address scene safety:
 - a. If EMS providers have been advised by PSAP that there is potential “influenza-like illness” (ILI) on scene, EMS providers should don PPE for suspected case of ILI prior to entering scene.¹
 - b. If PSAP has not identified individuals with symptoms of ILI on scene, EMS providers should stay more than 6 feet away from patient and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions (cough etiquette, hand hygiene, and spatial separation) while assessing all patients for suspected cases of ILI.
2. Assess all patients for “influenza-like illness” (ILI = nasal congestion/ runny nose, sore throat, or cough with or without fever ($\geq 100^{\circ}\text{F}$ or 37.8°C if measured)).
 - a. If ILI, don appropriate PPE for suspected case of ILI before proceeding with care.^{1,2,3}
 - b. If no ILI, proceed to protocol #201 and other appropriate protocols.

E. All patients:

1. Proceed to protocol #201 and other appropriate protocols
 - a. Assess pulse oximetry, if available. See protocol #226.
 - b. Apply oxygen, if appropriate. See protocol #202.²
2. If patient has symptoms of ILI or is a case of suspected ILI:
 - a. Contact the receiving facility prior to arrival and advise of “influenza-like illness”.
3. Contact Medical Command, if indicated/ required.
 - a. For isolated ILI or suspected case of ILI in otherwise stable patients, regional protocol may require contact with medical command prior to transport for possible integration or care with local pandemic plan.
4. Before returning to service, clean/ decontaminate the vehicle following “Interim Guidance for Cleaning Emergency Medical Service Transport Vehicles during an Influenza Pandemic” available at http://www.pandemicflu.gov/plan/healthcare/cleaning_ems.html.⁴

Possible MC Orders:

- A. If traditional medical systems become overwhelmed by the numbers of suspected ILI patients, the Department of Health may establish alternatives to traditional care that may be ordered by medical command or by regional EMS protocol. These alternatives may include assessment without transport, delivery of antivirals to the patient’s residence, referral or diversion to somewhere other than an emergency department, etc.

Notes:

1. Personal Protective Equipment (PPE)
 - a. **For case of suspected ILI**– don fit-tested disposable N95 respirator and eye protection (e.g., goggles; eye shield), disposable non-sterile gloves, and gown, when coming into close contact with the patient.
 - i. EMS providers should wear this PPE when in close contact with patient (within 6 feet of patient), when in the patient compartment of the ambulance with the patient, and when in the front passenger compartment of the ambulance (unless the patient compartment and passenger compartments of the ambulance are physically separate).
 - ii. All EMS providers engaged in aerosol generating activities (e.g. endotracheal intubation, nebulizer treatments, BVM ventilation, or CPR) should wear PPE for suspected ILI unless EMS providers are able to rule out ILI.
 - iii. EMS providers who cannot wear a fit-tested N95 respirator (e.g. due to beard or unavailability of supplies) should wear a standard surgical mask and avoid engaging in aerosol generating activities if possible.
 - iv. Use good respiratory hygiene – use non-sterile gloves for contact with patient, patient secretions, or surfaces that may have been contaminated. Follow hand hygiene, including hand washing or cleansing with alcohol-based hand disinfectant after contact.
2. Use of standard surgical masks on patients: