Interim Guidance for Emergency Medical Services (EMS) Systems and 9-1-1 Public Safety Answering Points (PSAPs) for Management of Patients with Known or Suspected Ebola Virus Disease in the United States


PSAP call takers should consider screening callers for symptoms and risk factors of Ebola.

Callers should be asked if they, or someone at the incident, have fever of greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit,

AND

- If they have additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained bleeding.

AND

- In the past 3 weeks before onset of symptoms, has the individual:
  - Traveled to Guinea, Liberia, Nigeria, and Sierra Leone
  - Been in contact with blood or body fluids of a patient known to have or suspected to have Ebola;
  - Attended funeral proceedings of a person suspected or known to have died of Ebola
  - Handled bats or nonhuman primates from disease-endemic areas.

If they meet the above criteria, call takers should alert first responders and EMS personnel that they are confidentially aware of the potential for Ebola before the responders arrive on scene.

Before transporting the patient, please make sure hospital facilities are prepared to handle these patients. If you have any questions, please contact your local or state health department at 1-877-PA-HEALTH, 717-724-3258.
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 fluids, 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 exposure 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.

Effective 09/01/04
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.  

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, cough with or without fever (≥100° 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. 

Effective 07/01/11
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 (≥100°F or37.8°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_emsv.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:
FREQUENTLYASKEDQUESTIONS: EBOLA

October 1, 2014

ABOUT EBOLA

What is Ebola?
Ebola virus disease is a severe, often deadly illness that affects humans and non-human primates (monkeys, gorillas and chimpanzees). The disease most often causes fevers of 101.5°F or higher, severe headache, muscle pain, vomiting, diarrhea, stomach pain and unexplained bleeding or bruising.

What are the symptoms of Ebola?
Signs and symptoms can appear anywhere from two to 21 days after being exposed to the Ebola virus, but they most commonly begin within eight to 10 days after exposure.

Symptoms usually include:
- Fever of 101.5°F or higher
- Severe headache
- Muscle pain
- Vomiting
- Diarrhea
- Stomach pain
- Unexplained bleeding or bruising

Who is most at risk of getting Ebola?
Health care professionals who take care of Ebola patients – as well as family and friends in close contact with Ebola patients – have the highest risk of getting the disease because they might come in direct contact with the blood or body fluids of those with the virus.

How does Ebola spread?
The Ebola virus is spread by directly touching an infected person or animal’s skin, blood or body fluids. You cannot get Ebola simply by being near someone who is infected – it is not spread through the air or in water. People are only contagious after they begin to have symptoms, such as fever.

Since the Ebola virus can survive on surfaces for a short period of time, people can also get it by touching objects (like needles or bed sheets) that have been contaminated by infected blood or body fluids.

How is Ebola treated?
There is currently no vaccine or medicine that has been proven to cure Ebola. People who have the disease are treated for individual disease symptoms as they appear. For instance, if used early in the illness, the following treatments can improve someone’s chances of survival: providing fluids; maintaining oxygen levels and blood pressure; and treating other infections if they occur.
Can someone who survives Ebola still spread the virus?
Once someone recovers from Ebola, they can no longer spread the virus. However, Ebola has been found in semen for up to three months after someone recovers from the disease. The Centers for Disease Control and Prevention (CDC) advises people who recover from Ebola to either not have sex or use condoms for three months after getting better.

THE EBOLA OUTBREAK

Where has Ebola been reported?
Ebola originates in Africa and is not found naturally in the United States. Africa is currently experiencing history’s largest outbreak of the disease in the countries of Guinea, Liberia, Nigeria and Sierra Leone.

On September 30, 2014, the United States confirmed its first case of Ebola in a person who had traveled to Dallas, Texas from Liberia. The patient did not have symptoms when leaving West Africa, but developed symptoms approximately four days after arriving in the U.S. The CDC and other public health officials are working to prevent the spread of this disease by identifying people who had close contact with the ill patient and monitoring them for several weeks. The ill patient is currently isolated and receiving treatment in a Dallas hospital.

Ebola can ONLY be spread by directly touching an infected person or animal’s skin, blood or body fluids – you cannot get the virus simply by being near someone who is infected. Because the ill person did not have any Ebola symptoms during their travel from West Africa to Texas, the CDC is not recommending monitoring for people on the same commercial airline flights.

How can I protect myself against Ebola?
If you are in or plan to travel to any of the African countries affected by the Ebola outbreak, you can protect yourself by doing the following:

- Washing hands frequently
- Avoiding contact with anyone’s blood and body fluids – particularly someone who is sick
- Not handling items that may contain an infected person’s blood or body fluids
- Not touching the body of someone who has died from Ebola
- Not touching bats, monkeys, gorillas or chimpanzees or their blood and fluids
- Not eating “bushmeat” (wild animals that are hunted for food)
- Avoiding hospitals where Ebola patients are being treated
- Seeking medical care immediately if you develop Ebola symptoms
*It should be noted that CDC advises against non essential travel. \[http://wwwn.cdc.gov/travel/notices\].

**What should I do if I think I might have Ebola?**
The only people at risk in the current outbreak are those who traveled to Guinea, Liberia, Nigeria or Sierra Leone in the past three weeks and might have had direct contact with a person showing symptoms or an animal infected with Ebola.

If you recently traveled from one of the affected African countries and develop fever within three weeks after leaving that country, seek medical care right away and tell your doctor about your recent travel. Make sure you call the doctor’s office or emergency room before going and tell them about your recent travel and symptoms so that arrangements can be made, if needed, to prevent others from becoming sick.

**Where can I get more information about Ebola?**
Visit the Ebola section of the CDC’s website at: \[www.cdc.gov/vhf/ebola\].
This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE

FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE

LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

The Pennsylvania Department of Health is forwarding the following advisory to healthcare providers, “Evaluating Patients for Possible Ebola Virus Disease: Recommendations for Healthcare Personnel and Health Officials” from the Centers for Disease Control and Prevention (CDC).
Summary: The first case of Ebola Virus Disease (Ebola) diagnosed in the United States was reported to CDC by Dallas County Health and Human Services on September 28, 2014, and laboratory-confirmed by CDC and the Texas Laboratory Response Network (LRN) laboratory on September 30. The patient departed Monrovia, Liberia, on September 19, and arrived in Dallas, Texas, on September 20. The patient was asymptomatic during travel and upon his arrival in the United States; he fell ill on September 24 and sought medical care at Texas Health Presbyterian Hospital of Dallas on September 26. He was treated and released. On September 28, he returned to the same hospital, and was admitted for treatment.

The purpose of this HAN Advisory is to remind healthcare personnel and health officials to:

(1) increase their vigilance in inquiring about a history of travel to West Africa in the 21 days before illness onset for any patient presenting with fever or other symptoms consistent with Ebola;

(2) isolate patients who report a travel history to an Ebola-affected country (currently Liberia, Sierra Leone, and Guinea) and who are exhibiting Ebola symptoms in a private room with a private bathroom and implement standard, contact, and droplet precautions (gowns, facemask, eye protection, and gloves); and

(3) immediately notify the local/state health department.

Please disseminate this information to infectious disease specialists, intensive care physicians, primary care physicians, and infection control specialists, as well as to emergency departments, urgent care centers, and microbiology laboratories.

Background

The first known case of Ebola with illness onset and laboratory confirmation in the United States occurred in Dallas, Texas, on September 2014, in a traveler from Liberia. The West African countries of Liberia, Sierra Leone, and Guinea are experiencing the largest Ebola epidemic in history. From March 24, 2014, through September 23, 2014, there have been 6,574 total cases (3,626 were laboratory-confirmed) and 3,091 total deaths reported in Africa. Ebola is a rare and deadly disease caused by infection with one of four viruses (Ebolavirus genus) that cause disease in humans. Ebola infection is associated with fever of greater than 38.6°C or 101.5°F, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage. Ebola is spread through direct contact (through broken skin or mucous membranes) with blood or body fluids (including but not limited to urine, saliva, feces, vomit, sweat, breast milk, and semen) of a person who is sick with Ebola or contact with objects (such as needles and syringes) that have been contaminated with these fluids. Ebola is not spread through the air or water. The main source for spread is human-to-human transmission. Avoiding contact with infected persons (as well as potentially infected corpses) and their blood and body fluids is of paramount importance. Persons are not contagious before they are symptomatic. The incubation period (the time from exposure until onset of symptoms) is typically 8-10 days, but can range from 2-21 days. Additional information is available at http://www.cdc.gov/vhf/ebola/index.html.

Recommendations

Early recognition is critical to controlling the spread of Ebola virus. Consequently, healthcare personnel should elicit the patient’s travel history and consider the possibility of Ebola in patients who present with fever, myalgia, severe headache, abdominal pain, vomiting, diarrhea, or unexplained bleeding or bruising. Should the patient report a history of recent travel to one of the affected West African countries (Liberia,

Patients in whom a diagnosis of Ebola is being considered should be isolated in a single room (with a private bathroom), and healthcare personnel should follow standard, contact, and droplet precautions, including the use of appropriate personal protective equipment (PPE). Infection control personnel and the local health department should be immediately contacted for consultation.

The following guidance documents provide additional information about clinical presentation and clinical course of Ebola virus disease, infection control, and patient management:


The case definitions for persons under investigation (PUI) for Ebola, probable cases, and confirmed cases as well as classification of exposure risk levels are at http://www.cdc.gov/vhf/ebola/hcp/case-definition.html.

Persons at highest risk of developing infection are:

- those who have had direct contact with the blood and body fluids of an individual diagnosed with Ebola – this includes any person who provided care for an Ebola patient, such as a healthcare provider or family member not adhering to recommended infection control precautions (i.e., not wearing recommended PPE).
- those who have had close physical contact with an individual diagnosed with Ebola.
- those who lived with or visited the Ebola-diagnosed patient while he or she was ill.

Persons who have been exposed, but who are asymptomatic, should be instructed to monitor their health for the development of fever or symptoms for 21 days after the last exposure. Guidelines for monitoring and movement of persons who have been exposed to Ebola are available at http://www.cdc.gov/vhf/ebola/hcp/monitoring-and-movement-of-persons-with-exposure.html.

Healthcare personnel in the United States should immediately contact their state or local health department regarding any person being evaluated for Ebola if the medical evaluation suggests that diagnostic testing may be indicated. If there is a high index of suspicion, U.S. health departments should immediately report any probable cases or persons under investigation (PUI).
Laboratory Testing

If testing for Ebola virus is being considered for any patient, the Pennsylvania Department of Health (PADOH) must be consulted immediately. The PADOH will coordinate joint consultation with the PADOH Bureau of Laboratories (BOL) and the CDC. During that consultation the need for testing will be carefully evaluated. If testing is approved guidelines will be provided for the number and type of specimens to collect for submission together with the appropriate shipping instructions for those specimens. Neither the BOL nor the CDC will accept specimens without prior consultation and approval.

Please contact your state or local jurisdiction at one of the following numbers if you suspect an individual who may have Ebola Virus Disease:

i. **PA-DOH**: 877-PA-HEALTH (877-724-3258)
   ii. **Allegheny County Health Dept**: 412-687-2243; After Hours: 412-687-2243
   iii. **Allentown Health Bureau**: 610-437-7760; After Hours 610-437-7760
   iv. **Bethlehem Bureau of Health**: 610-865-7087; After Hours 610-865-7187
   v. **Bucks County Dept of Health**: 215-345-3318; After Hours: 888-245-7210
   vi. **Chester County Health Dept**: 610-344-6225; After Hours: 610-733-4919
   vii. **Erie County Dept of Health**: 814-451-6700, 24 Hrs/7 Days
   viii. **Montgomery County Dept of Health**: 610-278-5117; After Hours: 610-275-1222
   x. **Wilkes-Barre City Health Dept**: 570-208-4268; After Hours: 570-208-4268
   xi. **York City Bureau of Health**: 717-849-2299; After Hours: 717-324-6591

Categories of Health Alert messages:

- **Health Alert**: conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of October 3, 2014, but may be modified in the future.