October 22, 2014

As part of the ongoing Ebola response planning, the New York State Department of Health (DOH) is providing the following guidance documents to Emergency Medical Services (EMS) agencies, Program Agencies, Regional EMS Councils and EMS Education Sponsors, in an effort to prepare the healthcare infrastructure for potential Ebola cases.

At this time, there are no confirmed cases of Ebola in New York State. This response, however, may extend for many months, and all providers should continue their planning activities. Included are:

1. The Commissioner’s Order and the Specifications Required Under the Commissioner’s Order

2. New York State Department of Health Pre-Hospital Screening Guide – EMS providers should use this guide when assessing a patient. The DOH has also provided the 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 to Public Safety Answering Points (PSAPs) throughout New York State.

3. Centers for Disease Control and Prevention (CDC) EMS Checklist – Agencies can use this checklist to guide them through Ebola response planning.

4. CDC Personal Protective Equipment (PPE) Guidance (10/20/2014) – This provides critical information on PPE and the appropriate donning and removal of PPE.
   http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html

5. Training and education material – A training outline has been provided. This outline is not meant to be an all-inclusive guide, but rather minimum content that should be covered. Agencies may opt to include additional information, especially since guidance will be updated as the response continues.

6. Additional guidance can be found on the DOH website at:

There is an area specific to EMS-related guidance in the lower left part of the screen. As information changes, DOH will post documents here and share them via existing distribution methods. Please contact the Bureau of EMS e-mail at NYSEMSebola@health.ny.gov and provide the agency name, agency code and the names and 24/7 contact information for each of the two (2) points of contact.

Safety is a priority. Please make sure that your EMS agency and providers are appropriately trained.

Sincerely,

Lee Burns
Director
Bureau of Emergency Medical Services
Ebola Virus Disease (EVD)
In-Service EMS Training Outline

Background (World Health Organization, 2014)

The current outbreak in West Africa (first cases notified in March 2014) is the largest and most complex Ebola outbreak since the Ebola virus was first discovered in 1976. There have been more cases and deaths in this outbreak than all others combined. It has also spread between countries starting in Guinea then spreading across land borders to Sierra Leone and Liberia.

Transmission (Centers for Disease Control and Prevention, 2014)

Ebola is spread through direct contact (through broken skin or mucous membranes in, for example, the eyes, nose, or mouth) with

- blood or body fluids (including, but not limited to, urine, saliva, sweat, feces, vomit, breast milk, and semen) of a person who is sick with Ebola
- objects (like needles and syringes) that have been contaminated with the virus
- infected animals
- Ebola is not spread through the air or by water, or in general, by food. However, in Africa, Ebola may be spread as a result of handling bushmeat (wild animals hunted for food) and contact with infected bats. There is no evidence that mosquitos or other insects can transmit Ebola virus. Only mammals (for example, humans, bats, monkeys, and apes) have shown the ability to become infected with and spread Ebola virus.

Signs and Symptoms of Ebola

- Fever
- Severe headache
- Muscle pain
- Weakness
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)

Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola, but the average is 8 to 10 days.
Commissioner’s Order regarding the Prevention and Control of Ebola Virus Disease:

The Acting Commissioner of Health of the State of New York issued an Order on October 17, 2014 directing all ambulance and advanced life support first response services licensed pursuant to Article 30 of the Public Health Law (EMS agencies) to take the following actions:

1. Identify to the New York State Department of Health (NYSDOH) at least two lead points of contact for EVD preparedness and response activities, one of whom must be available 24 hours per day, seven days per week.
2. Assign the lead points of contact to the role of 24/7 Ebola Lead in the Health Commerce System (HCS) Communication Directory.
3. Provide all Covered Personnel with personal protective equipment (PPE) that, at a minimum, meets the applicable specifications under the Commissioner’s Order.
4. Conduct in-person training for all Covered Personnel, on donning and removing PPE, including physically practicing donning and removing PPE in the setting that will be used for Patients. A designated trainer with infection control expertise selected by the EMS agency must be present at the training to assess whether Covered Personnel have initially achieved satisfactory competence. The training used must, at a minimum, meet the applicable specifications at required under the Commissioner’s Order.
5. Reassess Covered Personnel every month after initially achieving satisfactory competence, and must retrain any Covered Personnel who do not demonstrate satisfactory competence upon reassessment. Only staff who have demonstrated satisfactory competence are allowed to provide care to Patients.
6. Maintain a log that identifies all Covered Personnel who have received training, the dates they obtained satisfactory competence, and dates and results of monthly reassessments.
7. Maintain a log of all personnel coming into contact with a Patient, or a Patient’s area or equipment, regardless of the level of PPE worn at the time of contact. EMS agencies shall measure the temperature twice daily of all personnel who come in contact with a Patient, a Patient’s area or equipment, or obtain the temperatures from off-duty personnel. The log must describe each person’s measured temperatures and any symptoms. “Contact” for the purposes of this provision is defined as coming in physical contact, entering a patient room, coming within three feet of a Patient, or performing laboratory testing on a specimen from a Patient.
8. Implement a written protocol to safely contain, store and dispose of regulated medical waste in all settings where Patients will be cared for that is in compliance with the applicable specifications.
9. Implement a written protocol to safely clean and disinfect any vehicle or equipment with which Patients have come into contact, in accordance with applicable specifications under the Commissioner’s Order.

“Covered Personnel” means all employees, contractors, students and all other personnel who may (a) come into contact with a Patient, or a laboratory specimen from a Patient, or (b) be involved in the cleaning or disinfection of equipment or Patient care areas, including vehicles used to transport Patients. The web link to the Order and specifications required under the Order is:

Recommendations for 9-1-1 Public Safety Answering Points (PSAPs)


State and local EMS authorities may authorize PSAPs and other emergency call centers to use modified caller queries about Ebola when they consider the risk of Ebola to be elevated in their community (e.g., in the event that patients with confirmed Ebola are identified in the area). This will be decided from information provided by local, state, and federal public health authorities, including the city or county health department(s), state health department(s), and CDC.

It will be important for PSAPs to question callers and determine if anyone at the incident presents with the risk factors set forth in the bullets below. This should be communicated immediately to EMS personnel before arrival and to assign the appropriate EMS resources. PSAPs should review existing medical dispatch procedures and coordinate any changes with their EMS medical director and with their local public health department.

- PSAP call takers should screen 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.
  - If PSAP call takers suspect a caller is reporting symptoms of Ebola, they should screen callers for risk factors within the past 3 weeks before onset of symptoms. Risk factors include:
    - Contact with blood or body fluids of a patient known to have or suspected to have Ebola;
    - Residence in—or travel to—a country where an Ebola outbreak is occurring (a list of impacted countries can be accessed at the following link: http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html ); or
    - Direct handling of bats or nonhuman primates from disease-endemic areas.
  - If PSAP call takers have information alerting them to a person with possible Ebola, they must make sure any first responders and EMS personnel are made confidentially aware of the potential for Ebola before the responders arrive on scene.
Recommendations for EMS and Medical First Responders, Including Firefighters and Law Enforcement Personnel

These EMS personnel practices should be based on the most up-to-date Ebola clinical recommendations and information from appropriate public health authorities and EMS medical direction.

Patient assessment

Current recommendations:

1. Address scene safety:
   o If PSAP call takers advise that the patient is suspected of having Ebola, EMS personnel should put on the PPE appropriate for suspected cases of Ebola before entering the scene.
   o Keep the patient separated from other persons as much as possible.
   o Use caution when approaching a patient with Ebola. Illness can cause delirium, with erratic behavior that can place EMS personnel at risk of infection, e.g., flailing or staggering.

2. During patient assessment and management, EMS personnel should consider the symptoms and risk factors of Ebola:
   o All patients should be assessed for symptoms of Ebola (fever of greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage). If the patient has symptoms of Ebola, then ask the patient about risk factors within the past 3 weeks before the onset of symptoms, including:
     ▪ Contact with blood or body fluids of a patient known to have or suspected to have Ebola;
     ▪ Residence in—or travel to—a country where an Ebola outbreak is occurring (a list of impacted countries can be accessed at the following link: http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html); or
     ▪ Direct handling of bats or nonhuman primates from disease-endemic areas.
   o Based on the presence of symptoms and risk factors, put on or continue to wear appropriate PPE and follow the scene safety guidelines for suspected case of Ebola.
   o If there are no risk factors, proceed with normal EMS care.
Prehospital Medical Treatment

There are no approved treatments available for EVD. Clinical management should focus on supportive care. Clinical management should focus on supportive care for:

- Hypovolemia;
- electrolyte abnormalities;
- shock;
- hypoxia;
- hemorrhage control;
- Recommended care, in consultation with Physician Medical Control, includes:
  - Maintenance of blood pressure
  - IV Fluids
  - High flow, high volume oxygen
  - pain management

EMS Transfer of Patient Care to a Healthcare Facility

EMS personnel must notify the receiving healthcare facility when transporting a suspected Ebola patient, so that the receiving healthcare facility may prepare all appropriate infection control precautions prior to patient arrival.

Additional guidance for Air Medical transport of patients with confirmed or suspected Ebola, can be found at: [http://www.cdc.gov/vhf/ebola/hcp/guidance-air-medical-transport-patients.html](http://www.cdc.gov/vhf/ebola/hcp/guidance-air-medical-transport-patients.html)

Inter-facility Transport

(Centers for Disease Control and Prevention, 2014)

EMS personnel involved in the air or ground inter-facility transfer of patients with suspected or confirmed Ebola must wear recommended PPE.

Infection Control

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:

- Limit activities, especially during transport that can increase the risk of exposure to infectious material (e.g., airway management, cardiopulmonary resuscitation, use of needles).
- 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.
- Phlebotomy, procedures, and laboratory testing should be limited to the minimum necessary for essential diagnostic evaluation and medical care.

Use of Personal Protective Equipment (PPE)

EMS agencies must provide personnel with PPE that, at a minimum, meets the applicable specifications required under the Commissioner’s Order (http://www.health.ny.gov/diseases/communicable/ebola/#commissioner_order).

The latest CDC Guidance on PPE can be found at: http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html

Pre-hospital resuscitation procedures such as endotracheal intubation, open suctioning of airways, and cardiopulmonary resuscitation frequently result in a large amount of body fluids, such as saliva and vomit. Performing these procedures in a less controlled environment (e.g., moving vehicle) increases risk of exposure for EMS personnel. If conducted, perform these procedures under safer circumstances (e.g., stopped vehicle, hospital destination).

During pre-hospital resuscitation procedures (intubation, open suctioning of airways, cardiopulmonary resuscitation):

- In addition to recommended PPE, respiratory protection that is at least as protective as a NIOSH-certified fit-tested N95 filtering face piece respirator or higher should be worn (instead of a facemask).
- Additional PPE must be considered for these situations because of the potential increased risk for contact with blood and body fluids including, but not limited to, double gloving, disposable shoe covers, and leg coverings.

If blood, body fluids, secretions, or excretions from a patient with suspected Ebola come into direct contact with the EMS provider’s skin or mucous membranes, then the EMS provider should immediately stop working. The EMS provider should wash his or her affected skin
surfaces with soap and water and report exposure to an occupational health provider or supervisor for follow-up.

Recommended PPE should be used by EMS personnel as follows:

- PPE should be worn upon entry into the scene and continued to be worn until personnel are no longer in contact with the patient.
- PPE should be carefully removed without contaminating one’s eyes, mucous membranes, or clothing with potentially infectious materials.
- PPE should be placed into a medical waste container at the hospital or double bagged and held in a secure location.
- Re-useable PPE should be cleaned and disinfected according to the manufacturer's reprocessing instructions and EMS agency policies.
- Hand hygiene should be performed immediately after removal of PPE.

**Donning and Doffing of PPE**

All EMS agencies must conduct in-person training for personnel on donning and removal of PPE, including physically practicing donning and removing PPE in the setting that will be used for patients. A designated trainer with infection control expertise selected by the EMS agency must be present at the training to assess whether personnel have initially achieved satisfactory competence. The training use must, at a minimum, meet the applicable specifications required under the Commissioner’s Order.

The EMS agency must reassess personnel every month after initially achieving satisfactory competence and must retrain any personnel who do not demonstrate satisfactory competence upon reassessment. Only staff who have demonstrated satisfactory competence are allowed to provide care to persons under investigation for Ebola, a confirmed case, or the body of a person who has expired from EVD. Each EMS agency must maintain a log that identifies all personnel who have received training, the dates they obtained satisfactory competence, and dates and results of monthly reassessments.

Each instructor and agency must customize the training materials to adapt to the specific types and brands of PPE that their providers are expected to utilize during patient encounters,
treatment and transport. The PPE manufacturer’s guidelines must be followed to assure proper
donning and doffing.

**Cleaning EMS Transport Vehicles after Transporting a Patient with Suspected or Confirmed Ebola**

EMS providers must implement a written protocol to safely clean and disinfect vehicles and
equipment after transporting a patient with suspected or confirmed Ebola that complies with
applicable specifications required under the Commissioner’s Order, including:

- EMS personnel performing cleaning and disinfection must wear recommended PPE
described above) and consider use of additional barriers (e.g., rubber boots or shoe and leg
coverings) if needed. Face protection (facemask with goggles or face shield) should be worn
because tasks such as liquid waste disposal can generate splashes.
- Patient-care surfaces (including stretchers, railings, medical equipment control panels, and
adjacent flooring, walls and work surfaces) are likely to become contaminated and should
be cleaned and disinfected after transport.
- A blood spill or spill of other body fluid or substance (e.g., feces or vomit) must be managed
through removal of bulk spill matter, cleaning the site, and then disinfecting the site. For
large spills, a chemical disinfectant with sufficient potency is needed to overcome the
tendency of proteins in blood and other body substances to neutralize the disinfectant’s
active ingredient.
- An EPA-registered hospital disinfectant with label claims for viruses that share some
technical similarities to Ebola (such as, norovirus, rotavirus, adenovirus, poliovirus) and
instructions for cleaning and decontaminating surfaces or objects soiled with blood or body
fluids must be used according to those instructions. After the bulk waste is wiped up, the
surface must be disinfected as described in the bullet above.
- Contaminated reusable patient care equipment must be placed in biohazard bags and
labeled for cleaning and disinfection according to agency policies. Reusable equipment
must be cleaned and disinfected according to manufacturer’s instructions by trained
personnel wearing correct PPE. Avoid contamination of reusable porous surfaces that
cannot be made single use.
- Use only a mattress and pillow with plastic or other covering that fluids cannot get through.
To reduce exposure among staff to potentially contaminated textiles (cloth products) while
laundering, discard all linens, non-fluid-impermeable pillows or mattresses as appropriate.
The Ebola virus is a Category A infectious substance regulated by the U.S. Department of Transportation’s (DOT) Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). Any item transported for disposal that is contaminated or suspected of being contaminated with a Category A infectious substance must be packaged and transported in accordance with the HMR. This includes medical equipment, sharps, linens, and used health care products (such as soiled absorbent pads or dressings, kidney-shaped emesis pans, portable toilets, used Personal Protection Equipment [e.g., gowns, masks, gloves, goggles, face shields, respirators, booties] or byproducts of cleaning) contaminated or suspected of being contaminated with a Category A infectious substance.

Cleaning and Disinfection Guidelines specified by the Order may be found at:

Follow-up and/or reporting measures by EMS personnel after caring for a suspected or confirmed Ebola patient

- EMS personnel must be aware of the follow-up and/or reporting measures they should take after caring for a suspected or confirmed Ebola patient.
- EMS agencies must develop policies for monitoring and management of EMS personnel potentially exposed to Ebola. EMS agencies must maintain a log of all personnel coming into contact with a patient (as defined under the Commissioner’s Order) or a patient’s area or equipment, regardless of the level of PPE worn at the time of contact. EMS agencies shall measure the temperature twice daily of all personnel who come in contact with a patient, a patient’s area or equipment, or obtain the temperatures from off-duty personnel. The log must describe each person’s measured temperatures and any symptoms.
- EMS agencies should develop sick leave policies for EMS personnel that are non-punitive, flexible and consistent with public health guidance
- Ensure that all EMS personnel, including staff who are not directly employed by the healthcare facility but provide essential daily services, are aware of the sick leave policies.
- EMS personnel with exposure to blood, bodily fluids, secretions, or excretions from a patient with suspected or confirmed Ebola should immediately:
  o 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;
  o Contact occupational health/supervisor for assessment and access to post-exposure management services; and
Receive medical evaluation and follow-up care, including fever monitoring twice daily for 21 days, after the last known exposure.

- 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:
  - Not report to work or immediately stop working and isolate themselves;
  - Notify their supervisor, who should notify local and state health departments;
  - Contact occupational health/supervisor for assessment and access to post-exposure management services; and
  - Comply with work exclusions until they are deemed no longer infectious to others.

**Ebola Medical Waste Management**

- Medical waste generated in the care of patients with known or suspected EVD is subject to procedures set forth by local, state and federal regulations. Each agency must have a written plan to safely contain, store and dispose of regulated medical waste. Minimum specifications for Medical Waste may be found at:
  - [http://www.dec.ny.gov/chemical/99119.html](http://www.dec.ny.gov/chemical/99119.html)
Additional reference and guidance is available at:


➤ For questions on CDC guidance, please contact 1-800-CDC-INFO (1-800-232-4636).

➤ Relevant DOT guidance is available at http://www.phmsa.dot.gov/. For questions on DOT guidance or the HMR requirements, please contact DOT’s Pipeline and Hazardous Materials Safety Administration’s (PHMSA’s) Hazardous Materials Information Center at 1-800-467-4922, 9:00 am-5:00 pm Eastern Standard Time.

➤ Relevant OSHA guidance is available at https://www.osha.gov/SLTC/ebola/index.html. For questions on OSHA guidance, please contact 1-800-321-OSHA (6742).

➤ New York State Department of Health, Bureau of EMS at NYSEMSEbola@health.ny.gov or 518-402-0996
Detailed Emergency Medical Services (EMS) Checklist for Ebola Preparedness

The U.S. Department of Health and Human Services (DHHS) Centers for Disease Control and Prevention (CDC) and Office of the Assistant Secretary for Preparedness and Response (ASPR), in addition to other federal, state, and local partners, aim to increase understanding of Ebola and encourage U.S.-based EMS agencies and systems to prepare for managing patients with Ebola and other infectious diseases. Every EMS agency and system, including those that provide non-emergency and/or inter-facility transport, should ensure that their personnel can detect a person under investigation (PUI) for Ebola, protect themselves so they can safely care for the patient, and respond in a coordinated fashion. Many of the signs and symptoms of Ebola are non-specific and similar to those of other common infectious diseases such as malaria, which is commonly seen in West Africa. Transmission of Ebola can be prevented by using appropriate infection control measures.

This checklist is intended to enhance collective preparedness and response by highlighting key areas for EMS personnel to review in preparation for encountering and providing medical care to a person with Ebola. The checklist provides practical and specific suggestions to ensure the agency is able to help its personnel detect possible Ebola cases, protect those personnel, and respond appropriately.

Now is the time to prepare, as it is possible that individuals infected with Ebola virus in West Africa may travel to the U.S., develop signs or symptoms of Ebola, and seek medical care from EMS personnel.

EMS agencies, in conjunction with their medical directors, should review infection control policies and procedures and incorporate plans for administrative, environmental, and communication measures.

The checklist format is not intended to set forth mandatory requirements or establish national standards. It is a list of activities that can help each agency prepare. Each agency is different and should adapt this document to meet its specific needs. In this checklist, EMS personnel refers to all persons, paid and volunteer who provide pre-hospital emergency medical services and have the potential for direct contact exposure (through broken skin or mucous membranes) with an Ebola patient’s blood or body fluids, contaminated medical supplies and equipment, or contaminated environmental surfaces.

This detailed checklist for EMS is part of a suite of HHS checklists. This guidance is only for EMS agencies and systems; the CDC’s Interim guidance for EMS includes information for individual providers and for 9-1-1 Public Safety Answering Points.

CDC is available 24/7 for consultation by calling the CDC Emergency Operations Center (EOC) at 770-488-7100 or via email at eocreport@cdc.gov.
**PREPARE TO DETECT**

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<tr>
<td>Train all EMS personnel on how to identify signs and symptoms of Ebola infections and to avoid risk of exposure.</td>
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<td>Review CDC Ebola case definition for guidance on who meets the criteria for a PUI for Ebola.</td>
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<td>Ensure EMS personnel are aware of current guidance: Interim Guidance Emergency Medical Services Systems.</td>
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<td>Review patient assessment and management procedures and ensure they include screening criteria (e.g. relevant questions: travel within 21 days from affected West African country, exposure to case) for use by EMS personnel to ask individuals during the triage process for patients presenting with compatible symptoms.</td>
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<td>Post screening criteria in conspicuous locations in EMS units, at EMS stations, and in other locations frequented by EMS personnel (see suggested screening criteria).</td>
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<td>Designate points of contact within their EMS organization/system responsible for communicating with state and local public health officials. Remember: Ebola must be reported to local, state, and federal public health authorities.</td>
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<td>Ensure that all personnel are familiar with the protocols and procedures for notifying the designated points of contact regarding a PUI for Ebola.</td>
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<td>Conduct spot checks and reviews for staff to ensure they are incorporating Ebola screening into their patient assessment and management procedures and are able to initiate notification, isolation, and PPE procedures.</td>
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**PREPARE TO PROTECT**

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<tr>
<td>Consider travelers with fever, fatigue, vomiting and/or diarrhea and returning from affected West African countries as potential cases, and obtain additional history.</td>
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<td>Conduct a detailed inventory of available supplies of PPE suitable for standard, contact, and droplet precautions. Ensure an adequate supply, for EMS personnel, of: Fluid resistant or impermeable gowns, Gloves, Shoe covers, boots, and booties, and Appropriate combination of the following: Eye protection (face shield or goggles), Facemasks (goggles or face shield must be worn with facemasks), N95 respirators (for use during aerosol-generating procedures) Other infection control supplies (e.g. hand hygiene supplies).</td>
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<td>Ensure that PPE meets nationally-recognized standards as defined by the Occupational Safety &amp; Health Administration (OSHA), National Institute for Occupational Safety and Health (NIOSH), Food and Drug Administration (FDA), or Interagency Board for Equipment Standardization and Interoperability.</td>
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<td>Review plans, protocols, and PPE purchasing with community/coalition partners that promote interoperability and inter-agency/facility coordination.</td>
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<tr>
<td>Ensure Ebola PPE supplies are maintained in all patient care areas (transport unit and in bags/kits).</td>
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<tr>
<td>Verify all EMS personnel: Meet all training requirements in PPE and infection control.</td>
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- Are able to use PPE correctly,
- Have proper medical clearance,
- Have been properly fit-tested on their respirator for use in aerosol-generating procedures or more broadly as desired, and
- Are trained on management and exposure precautions for PUI for Ebola.

Encourage EMS personnel to use a “buddy system” when putting on and removing PPE.

Review CDC guidelines for isolation precautions and share with EMS personnel.

Frequently spot-check (for example through quality assurance/quality improvement) to be sure standard, contact and droplet infection control and isolation guidelines are being followed, including safely putting on and removing PPE.

Ensure procedures are in place to require that all EMS personnel accompanying a patient in a transport unit are wearing (at minimum): gloves, gown (fluid resistant or impermeable), eye protection (goggles or face shield), and a facemask.

Ensure procedures are in place to limit EMS personnel exposure to PUI for Ebola during treatment and transport.

Review and update, as necessary, EMS infection control protocols/procedures.

Review your policies and procedures for screening, isolation, medical consultation, and monitoring and management of EMS personnel who may have Ebola exposure and/or illness.

Review and update, as necessary, all EMS agency protocols and procedures for isolation of PUI for Ebola.

Review the agency’s infection control procedures to ensure adequate implementation for preventing the spread of Ebola.

Review protocols for sharps injuries and educate EMS personnel about safe sharps practices to prevent sharps injuries.

Emphasize the importance of proper hand hygiene to EMS personnel.

Develop contingency plans for staffing, ancillary services, vendors, and other business continuity plans.

Review plans for special handling of linens, supplies, and equipment from PUI for Ebola.

Review environmental cleaning procedures and provide education/refresher training to appropriate personnel.

Provide education and refresher training to EMS personnel on healthcare personnel sick leave policies.

Review policies and procedures for screening and work restrictions for exposed or ill EMS personnel, and develop sick leave policies for EMS personnel that are non-punitive, flexible, and consistent with public health guidance.

Ensure that EMS personnel have ready access, including via telephone, to medical consultation.

**PREPARE TO RESPOND**

Review, implement, and frequently exercise the following elements with EMS personnel:

- Appropriate infectious disease procedures and protocols, including putting on and taking off PPE.
- Appropriate triage techniques and additional Ebola screening questions,
- Disease identification, testing, specimen collection and transport procedures,
- Isolation, quarantine and security procedures,
- Communications and reporting procedures, and
- Cleaning and disinfection procedures.

Review plans and protocols, and exercise/test the ability to appropriately share relevant health data between key stakeholders, coalition partners, public health, emergency management, etc.

Review, develop, and implement plans for: adequate respiratory support, safe administration of medication, and sharps procedures; and reinforce proper biohazard containment and disposal precautions.

Ensure that EMS agency leaders are familiar with their responsibilities during a public health emergency.

Consider identifying a Communications/Public Information Officer who:
- Develops appropriate literature and signage for posting (topics may include definitions of low-risk, high-risk and explanatory literature for patient, family members and contacts),
- Coordinates with public health on targeted risk communication messages for use in the event of a PUI for Ebola.
- Requests appropriate Ebola literature for dissemination to EMS personnel, patients, and contacts,
- Prepares written and verbal messages, ahead of time, that have been approved, vetted, rehearsed and exercised, and
- Works with internal department heads and clinicians to prepare and vet internal communications to keep EMS personnel informed.

Plan for regular situational briefs for decision-makers, including:
- PUI for Ebola who have been identified and reported to public health authorities,
- Isolation, quarantine and exposure reports,
- Supplies and logistical challenges,
- Personnel status, and
- Policy decisions on contingency plans and staffing.

Maintain situational awareness of reported Ebola case locations, travel restrictions, and public health advisories, and update patient assessment and management guidelines accordingly.

Incorporate Ebola information into educational activities (e.g. initial/ refresher training, drills, and exercises).

Implement, as needed, a multijurisdictional, multidisciplinary exchange of public health and medical-related information and situational awareness between EMS; the health care system; local, state, federal, tribal, and territorial levels of government; and the private sector.

**Quick Resources List**

The CDC has produced several resources and references to help agencies prepare for Ebola, and more resources are in development. Information and guidance posted on these resources may change as experts learn more about Ebola. Frequently monitor the CDC’s Ebola [Homepage](#), and review CDC’s Ebola response guide checklists for:

- Clinician and healthcare workers,
• Department of Transportation Guidance for Transporting Ebola Contaminated Items, a Category A Infectious Substance
• Patient Management for US Hospitals
• Healthcare facilities.

Stay informed! Subscribe to the following sources to receive updates about Ebola:
• CDC Health Alert Network (HAN),
• CDC Clinician Outreach and Communication Activity (COCA),
• CDC National Institute for Occupational Safety and Health, and
• U.S. Department of Labor’s Occupational Safety & Health Administration (OSHA) Newsletter.

Below are a few of the resources most relevant to healthcare preparedness:
• Interim Guidance for Emergency Medical Services Systems and 9-1-1 PSAPs.
• Ebola Virus Disease Information for Clinicians in U.S. Healthcare Settings.
• Case Definition for Ebola Virus Disease. This case definition should be used for screening patients and should be implemented in all healthcare facilities.
• Safe Management of Patients with Ebola Virus Disease in US Hospitals.
• Infection Prevention and Control Recommendations for Hospitalized Patients with Known or Suspected Ebola Hemorrhagic Fever in U.S. Hospitals. This document provides a summary of the proper Personal Protective Equipment (PPE).
• Interim Guidance for Specimen Collection, Transport, Testing, and Submission for Patients with Suspected Infection with Ebola Virus Disease.
• Sequence for Removing Personal Protective Equipment (PPE)
• National Guidance for Healthcare System Preparedness’ Capabilities, with particular emphases on Capability #6 (Information Sharing) and Capability #14 (Responder Safety and Health)

Check CDC’s Ebola Hemorrhagic Fever website regularly for the most current information. State and local health departments with questions should contact the CDC Emergency Operations Center (770-488-7100 or eocreport@cdc.gov).
Pre-Hospital Screening for Ebola Virus Disease
Information Current with CDC and NYSDOH guidance as of October 22, 2014

Patient presents with a fever greater than 100.4° F and/or symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage

Yes

Has the patient traveled to the Western African countries of Guinea, Liberia, or Sierra Leone within the past 21 days?

Yes

Has the patient come in contact with the blood or body fluids of a person who is suspected or confirmed to have Ebola Virus Disease?

Yes

Has the patient handled the human remains of a person who was suspected or confirmed to have Ebola Virus Disease?

No

Has the patient directly handled bats or primates from the Western African countries of Guinea, Liberia or Sierra Leone within the past 21 days?

The patient does not meet the criteria to be considered a Patient Under Investigation (PUI)

No

The patient meets the criteria to be considered a Patient Under Investigation (PUI)

1. The patient should be isolated and STANDARD, CONTACT, and DROPLET precautions followed during further assessment, treatment, and transport.
2. IMMEDIATELY report suspected Ebola case to receiving facility.
3. If the patient is not transported (refusal, pronouncement, etc.):
Contact the County Dispatch Center and inform them of the positive screening so the County Health Department can be contacted. Be prepared to provide the patient’s name and contact information, EMS service name, PCR run number, EMS practitioner’s name and contact information.