

# **Ebola Virus Disease (EVD)**

## **Region 2 Healthcare Coalition**

### **Preparedness and Response Plan**

Version 4.0  
February, 2016



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## Foreword

Ebola Virus Disease (EVD) is a rare and deadly disease caused by an infection with the Ebola virus. Symptoms include fever, muscle pain, and unexplained hemorrhage (bleeding or bruising). The fatality rate of EVD is around 50% and there is currently no proven treatment or vaccine.

Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, sporadic outbreaks have occurred in Africa. The 2014 Ebola outbreak is the largest in history, affecting multiple countries in West Africa. The U.S. Centers for Disease Control and Prevention (CDC) and IDPH are taking precautions to prevent the further spread of Ebola within the United States. IDPH is taking steps to ensure health care system readiness for treating patients with EVD in Illinois.

The EVD Preparedness and Response Template for Healthcare Coalitions was developed:

- To help identify steps that need to be taken by healthcare coalitions prior to an outbreak to improve the level of preparedness and
- To coordinate regional planning and response with state planning and response activities in the event an outbreak occurs.

This tool was developed through a collaborative process involving the CDC and the Illinois Department of Public Health offices and divisions.

Mark Vassmer, Manager  
IDPH Hospital Preparedness Program

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# **EVD REGION 2 Healthcare Coalition Preparedness and Response Plan**

## **Purpose**

The purpose of the Ebola Virus Disease (EVD) Region 2 Healthcare Coalition Preparedness and Response Plan is to provide a framework for local government, private sector, and nongovernmental entities within the Region 2 Healthcare Coalition to work together to reduce the morbidity, mortality and social disruption that would result from an outbreak of EVD. Due to the costs and risks of infection, it describes the expectations of regional tiered system with facilities pre-designated that can safely and effectively manage and transport persons/patients with suspected or confirmed Ebola Virus Disease (EVD) or any highly infectious disease.

## **Scope**

The EVD Region 2 Healthcare Coalition Preparedness and Response Plan is limited to describing operational intent when responding to suspected or confirmed EVD cases, and includes considerations for the public health, EMS, and healthcare systems. Other planning factors may include jurisdictional legal authorities related to isolation/quarantine and law enforcement responsibilities.

## **Situation Overview**

The EVD Preparedness and Response Plan has been developed due to the possibility of EVD surfacing in the counties within the Region 2 Healthcare Coalition. EVD poses a serious threat and calls for enhanced understanding and improved coordination between all public and private sectors and at different levels of the health care system.

## **Assumptions**

- The Region 2 Healthcare Coalition is established and utilized to coordinate medical disaster response efforts, share resources, and address regional vulnerabilities during a natural or manmade disaster, or public health emergency. The geographic boundaries of this coalition are the same as the EMS Region 2 and include the following counties: Bureau, Fulton, Henderson, Henry, Knox, LaSalle, Livingston, Marshall, McDonough, McLean, Mercer, Peoria, Putnam, Rock Island, Stark, Tazewell, Warren, and Woodford.
- The REGION 2 Healthcare Coalition is coordinated by OSF Saint Francis Medical Center, designated as the Regional Hospital Coordinating Center (RHCC) hospital that engages the local and regional health care facilities, local health departments, emergency medical services, clinics, emergency management agencies, law

enforcement, fire services, coroners, etc., in the development of regional medical disaster plans and response activities.

- The Region 2 Healthcare coalition also coordinates the provision of mutual aid between hospitals that have signed mutual aid agreements and with facilities outside the Region 2 Healthcare Coalition if necessary.
- EVD planning includes patient screening, evaluation and transfer protocols, equipment, training and staffing needs, EMS/transport protocols and coordination with outpatient/ambulatory care facilities.
- Hospitals, emergency departments and ambulatory care settings must be able to identify persons presenting with a travel history or exposure history compatible with EVD and be prepared to isolate patients, provide basic supportive care, inform and consult with public health officials.
- The majority of people requiring evaluation and possible treatment for EVD will be those being monitored by a local health department within Region 2.
- Local health departments will conduct active and direct active monitoring of persons at some risk of EVD and notify the designated Ebola Evaluation Hospital or ETC if further medical evaluation and management is needed within the Region 2 Healthcare coalition.
- The local health department will make strong recommendations that the patient be transported to an Ebola Evaluation Hospital by an Infectious Disease Transport Vehicle.
- Suspected or confirmed EVD patients could possibly access the healthcare system through various points of entry and some may self-transport to a healthcare facility.
- Healthcare workers at entry points and within the larger healthcare system should be trained to identify persons for potential EVD exposure and be able to employ appropriate infection control and waste management procedures.
- PPE may be back-ordered or in short supply from time to time. The Region 2 Healthcare Coalition will coordinate and allocate available PPE supplies using the information in **FOUO Annex A**. The Region 2 Healthcare Coalition has plans to regionalize/redistribute/reallocate appropriate PPE supplies to prevent PPE emergencies; obtaining PPE supplies in an unforeseen emergency; an inventory management system to help track available resources and PPE; and has assured that all Ebola Evaluation Hospital and ETC staff have conducted PPE training/exercises

## Concept of Operations

### General

The Region 2 healthcare coalition will provide a regional tiered healthcare delivery system in order to limit infection potential and consolidate expensive EVD planning and response efforts in the coalition. This system will practically and safely identify potential and confirmed EVD patients and have the ability to identify, isolate, assess, treat, and transport persons/patients to facilities capable of managing suspected or confirmed EVD cases.

- Illinois Ebola Virus Disease (EVD) Preparedness and Response
  - The purpose of the Ebola Virus Disease (EVD) Preparedness and Response Plan is to provide a framework for federal, state, local, and private sector entities for collaboration in efforts to reduce the morbidity, mortality, and social disruption that would result from an outbreak of EVD. This plan will provide guidance and tools to response partners and will guide activities to educate and prepare the public. The EVD Preparedness and Response Plan is limited to describing

operational intent when responding to persons under investigation for Ebola as well as suspected or confirmed EVD cases. The plan includes considerations for public health agencies, Emergency Medical Services (EMS), and health care systems.

<http://dph.illinois.gov/sites/default/files/publications/publicationsoprevid-plan-2015.pdf>

- This document supplements policy and procedures contained in the Illinois Department of Public Health (IDPH) Emergency Support Function (ESF) 8 Plan and is consistent with the National Incident Management System (NIMS).
- **Emergency Operation Centers**
  - If an Ebola case is confirmed within the Region 2 Healthcare Coalition boundaries, relevant local emergency operating centers may be activated by the appropriate emergency management agency or department operation centers may be activated by the appropriate agency to provide logistical, security and other support to the healthcare and public health system. IDPH may activate its PHEOC, and Illinois may activate its SIRC to back up support needs that exceed the local response.
- **Outpatient/ambulatory care settings**
  - Outpatient/ambulatory care settings listed in FOUO Annex A can evaluate patients and properly identify those at risk of EVD and contact the local health department, Ebola Evaluation Hospital, Ebola Treatment Center, and emergency medical services system as necessary.
  - Will follow [IDPH Interim Guidance for Ambulatory / Outpatient Care Evaluation of Patients with Possible Ebola Virus Disease](#) see Annex E
  - Can protect their staff, other patients and visitors from possible exposure.
  - Consult with relevant public health officials if necessary to arrange for safe transport to Ebola Evaluation Hospital or Ebola Treatment Center, even on weekends and holidays.
- **Public Safety Answering Points (PSAPs)**
  - Are listed in **FOUO Annex A**, the PSAP and 911 centers have adopted special EVD protocols to conduct remote assessment and triage that is coordinated with coalition EMS System protocols and communicated to EMS crews before dispatch.

- In coordination with EMS Systems are capable of following CDC's [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](#) see Annex F
  
- **Emergency Departments**
  - Those listed in **FOUO Annex A** are able to perform the functions listed in CDC's guidance [Identify, Isolate, Inform: Emergency Department Evaluation and Management for Patients Who Present with Possible Ebola Virus Disease](#) and should be considered first for patients when a Ebola Evaluation Hospital or ETC is not immediately available.
  - Will conduct a proper medical screening exam that can identify suspected EVD cases, and if necessary, temporarily isolate them and arrange for their immediate and safe transfer/transport to an Ebola Evaluation Hospital and/or Ebola Treatment Center facility listed in **FOUO Annex A**.
  - EVD testing and transport will be done in consultation with Illinois Department of Public Health, local health department and emergency medical services.
  - Until transport or discharge, provide necessary stabilizing treatment within the hospital's capability and capacity.
  
- **Ebola Assessment Hospitals**
  - Designated in **FOUO Annex A**. They have been designated strategically by the RHCC and the indicated Healthcare Systems. These healthcare systems have agreed to share the initial evaluation and management care of suspected or confirmed EVD patients and will be able to assess patients' travel history and exposure risk, isolate, and provide care if necessary.
  - People with suspected or confirmed EVD will be referred to one of the coalition's Ebola Assessment Hospitals listed in **FOUO Annex A** based on their transfer agreement with the Ebola Assessment Hospital and after medical consultation with IDPH, EMS and relevant LHD. This consultation will be based on individualized assessment—e.g. location of patient, likelihood of EVD diagnosis, how many days ill, "wet" vs. "dry" EVD stage, turnaround times for labs, etc. In some cases, (e.g. if there is high probability for diagnosis of EVD), an early direct



referral to an ETC prior to diagnosis may be appropriate. Consideration will be given to minimizing number of inter-facility patient transfers.

- In consultation with IDPH and the local health department, each Ebola Assessment Hospital will also:
  - Conduct on site capability for laboratory testing (e.g. CBC, platelet count, coagulation panels, LFTs, malaria smears);
  - Have pre-arranged mechanisms for rapid transport of specimens for Ebola testing to an IDPH laboratory that performs Ebola PCR;
  - Have staffing and resources to provide supportive care, utilize investigational agents (if indicated), and maintain safe conditions (PPE, etc) for staff and other patients and visitors in the hospital;
  - Has quick access to designated Infectious Disease Transport Vehicle (IDTV) for a suspected or actual EVD patient.
- As determined by IDPH (REMSC & ERC) in consultation with the RHCC and LHD, significantly meets the criteria of [CDC's Interim Guidance for Preparing Ebola Assessment Hospitals](#).
- Waste will be handled per **Annex C**
- **Ebola Treatment Center (ETC)**
  - Designated in FOUO **Annex A** , the ETC is the tertiary care hospital that has dedicated and adequate treatment areas, skilled and trained staff, sufficient and appropriate equipment and supplies, excellent infection control procedures and can safely receive Infectious Disease Transport Vehicles to be able to treat and EVD Case for at least 30 days.
  - The ETC significantly meets the criteria in **Annex B – CDC Ebola Treatment Center Evaluation Criteria** as determined by IDPH (REMSC, ERC) in consultation with CDC and the relevant LHD; and both the needs of the State of Illinois and the communities served by this healthcare coalition.
  - ETC is expected to have access to sufficient PPE to be able to treat an EVD patient for 30 days.
  - The ETC will meet CDC's [Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)](#)
  - The ETC will be given priority access to federal or State PPE supplies and may be eligible for additional funding from the federal government or the State of Illinois as funds are available for PPE or for retrofitting the ETC facility.
  - Can meet CDC's [Infection Prevention and Control Recommendations for Hospitalized Patients with Known or Suspected Ebola Virus Disease in U.S. Hospitals](#)
  - As part of Regional and state planning the ETC may also be asked to accept EVD cases from outside the coalition boundaries.
  - Waste will be handled per **Annex C**.
- **Emergency medical services (EMS)**

- EMS Systems and providers listed in the **FOUO Annex A** have identified an Infectious Disease Transport Vehicle that meets IDPH approval and are specially training and equipped to transport suspected or diagnosed patients to an Ebola Treatment Center or Ebola Evaluation Hospital for further evaluation, testing and possible hospitalization.
  - Suspected or diagnosed EVD cases may originate from within the EMS system; an inter-facility transfer between different healthcare settings; or from a port of entry (POE), such as an airport.
  - Are able to meet the [IDPH Interim Guidance for Emergency Medical Services \(EMS\) Systems for Management of Patients with Known or Suspected Ebola Virus Disease in the United States](#)
  - Are able to meet CDC's [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](#)
  - EMS Systems serving this coalition have IDPH-approved protocols requiring suspected EVD patients be taken to a Ebola Evaluation Hospital or Ebola Treatment Center over other Emergency Departments unless emergent medical conditions require immediate care in the nearest Emergency Department.
  - Waste will be handled per **Annex C**
- **Local Health Departments**
    - Listed in the **FOUO Annex A** will monitor persons at risk of EVD as described in **Annex D**.
    - After consulting with IDPH, will notify designated Ebola Evaluation Hospital facility when person being monitored requires EVD evaluation.
    - After consulting with the Illinois Department of Public Health, will request or provide approval to relevant healthcare coalition members for EVD testing, transport, and transfer in coordination with this plan.
    - Will issue Isolation and Quarantine requests or orders if necessary to protect public health in compliance with Illinois law as described in **Annex D**.
- **Laboratory testing**
    - The IDPH Division of Laboratories is able to test specimens for Ebola Virus Disease (EVD) using the Ebola Zaire (Target 1) Real-Time – Polymerase Chain Reaction (RT-PCR) Assay which has been provided by CDC and the US Army. For further details, see [IDPH lab guidance](#).
    - Regional Ebola Assessment Hospital and Ebola Treatment Center Hospitals (or properly equipped EDs) will contact their local health department to request EVD testing. If the local health department cannot be reached, submitters should contact the IDPH Division of Infectious Diseases (**FOUO Annex A**)
    - Local health departments (LHD) will contact the IDPH Division of Infectious Diseases for a consultation. Contact the after-hours duty officer through the Illinois Emergency Management Agency, if necessary. (**FOUO Annex A**)

- CDC Emergency Operations Center will be consulted if necessary by IDPH.
- If testing is authorized, IDPH Division of Infectious Diseases and Division of Laboratories will contact the submitter to discuss submission of specimens.
- All shipments to the IDPH laboratory must meet Category A Substances shipping requirements. IDPH laboratory staff will provide specimen transport instructions to the submitter at the time testing is authorized.

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**FOUO Annex A - EVD Region 2 Healthcare Coalition Preparedness and Response Plan - EVD Contact Information- SENSITIVE INFORMATION – DO NOT RELEASE - For Official Use Only (FOUO) Updated 12-08-2014**

**Coalition Local Health Department(s) Infectious Disease Reporting**

LHD Name	LHD Address	Contact Name	Daytime Contact info	After Hours Contact
Bureau-Putnam	526 Bureau Valley Pkwy, Princeton IL, 61356	Diana Rawlings	815-872-5091	815-878-0447
Fulton	700 E. Oak St., Canton IL, 61520	Karol Herink	309-647-1134	309-357-0293
Henderson	208 W. Elm St., Gladstone IL, 61453	Mary Reed	309-627-2812	309-337-4403
Henry-Stark	4424 US Highway 34, Kewanee IL, 61443	Sandy Sommer	309-852-0197	815-866-5826
Knox	1361 W. Fremont St., Galesburg IL , 61401	Sam Jarvis	309-344-2224 X 291	309-368-7885
LaSalle	717 Etna Rd, Ottawa IL, 61350	Colleen Gibson	815-433-3366	815-433-2161
Livingston	310 E. Torrance Ave, Livingston IL, 61764	Jackie Dever	815-844-7174 X228	815-822-2178
Marshall	319 Sixth St., Lacon IL, 61540	Diana Rawlings	815-872-5091	815-878-0447
McDonough	505 E. Jackson St., Macomb IL, 61455	Cythia Sheffler	309-837-9951	309-303-8477
McLean	200 W. Front St., Bloomington IL, 61701	Amy Ehrich	309-888-5437	309-838-1688
Mercer	305 NW 7 <sup>th</sup> St., Aledo IL, 61231	Wendy Bingham	309-582-3759	309-371-5243
Peoria	2116 N. Sheridan Rd., Peoria IL, 61604	Jean Bellisario	309-679-6091	309-645-5956
Rock Island	2112 25 <sup>th</sup> Ave., Rock Island IL, 61201	Jody Bostrom	309-794-7080	309-794-7085
Tazewell	21306 Illinois Route 9, Tremont IL , 61568	Sarah Buller Fenton	309-925-5511	309-303-1375
Warren	240 S. Main St., Monmouth IL, 61462	Andrea Winking	309-734-1314	309-337-6063
Woodford	1831 S. Main St., Eureka IL, 61530	Hillary Aggertt	309-467-3064	309-231-2102

## **IDPH Communicable Disease Control Section**

Fred Echols, MD  
217-782-2016

## **IDPH Medical Officer**

Craig Conover, MD  
312-814-4846

## **After Hours State of Illinois Emergency Line**

800-782-7860

## **IDPH Laboratories**

Chicago 312-793-4760; Springfield 217-782-6562; Carbondale 618-457-5131

## **Illinois Ebola Hotline Number**

800-889-3931

## **Ebola Treatment Center(s)**

Name: **Ann & Robert H. Lurie Children's Hospital of Chicago**

Address: 225 E. Chicago Ave, Chicago, IL 60611

Emergency Contact Information- POC needs to be determined; 312-227-4000 (main)

Special Conditions and Requirements (if any):

Name: **Northwestern Memorial Hospital**

Address: 251 East Huron Street, Chicago, IL 60611

Emergency Contact Information- POC needs to be determined; 312-926-2000 (main)

Special Conditions and Requirements (if any):

Name: **Rush University Medical Center**

Address: 1653 W Congress Parkway, Chicago, IL 61612

Emergency Contact Information- POC needs to be determined; 888-352-7874 (main)

Special Conditions and Requirements (if any):

Name: **University of Chicago Medical Center**

Address: 5841 S. Maryland Avenue, Chicago, IL 60637

Emergency Contact Information- POC needs to be determined; 773-702-1000 (main)

Special Conditions and Requirements (if any):

### **Ebola Assessment Hospital**

Name: **OSF Saint Francis Medical Center**

Address: 530 NE Glen Oak Ave, Peoria, IL

Emergency Contact Information- OSF SFMC Ebola Hotline 309-683-5849

Special Conditions and Requirements (if any):

### **Isolation Transport Vehicles for Ebola**

Company Name: **Advance Medical Transport**

Address: 1718 North Sterling Ave, Peoria, IL 61655

Emergency Contact Information- 800-457-1143 (main); 309-494-6200 (dispatch)

Special Conditions and Requirements (if any):

Company Name: **Genesis Health System Ambulance**

Address: 730 Avenues of the Cities, East Moline, IL

Emergency Contact Information- 309-792-8634 (dispatch); 309-737-9838 (charge medic)

Special Conditions and Requirements (if any):

**Personal Protective Equipment for Ebola (Estimated total PPE to cover XX staff for XX days) for all Hospital EDs**

Facility Name	Facility Address	Contact Name	Contact info	Est # Staff	Est # days
OSF Saint Francis Medical Center	530 NE Glen Oak Ave, Peoria, IL	Troy Erbenraut	309-208-0965	50	5
			309-683-8365		
McDonough District Hospital	525 E Grant Macomb IL 61455	Dylan Ferguson	309-531-7888	4	3
Illinois Valley Community Hospital	925 West St, Peru, IL 61354	Dr. Wilma Hart-Flynn	815-780-3457 wilma.hart-flynn@ivch.org	15	3
Perry Memorial Hospital	530 Park Ave. Princeton, IL 61356	Deb Wood	815-876-4498	10	3 or 4
Genesis Medical Center-Silvis	801 Illini Dr Silvis, IL 61282	Chris Webster	309-281-4038	12	7
Genesis Medical Center-Aledo	409 NW Ninth St Aledo, IL 61231	Al Loeffelholz	563-421-7048/563-349-8062	9	5.5
St Margaret's Health	600 E 1st St Spring Valley,	Lisa Clinton	815-664-1543/815-664-5311/815-303-8838	13	7 level 1 basic-1 level 2 intense
OSF Saint Luke Medical Center	1051 W south St Kewanee, IL 61443	Jason Bitner	309-852-7605	10	6
OSF Holy Family Medical Center	1000 W Harlem Ave Monmouth, IL 61462	Shana Kennon	309-734-3141 ext.248; 309-536-1306	9	7
OSF Saint Elizabeth Medical Center	1100 E Norris Drive, Ottawa, IL 61350	Jeff Brodbeck	815-431-5536	10	4
HSHS St. Mary's Hospital	111 Spring Street	Lisa Neumann	815-673-4545 W	25	4
OSF Saint James	2500 E. Reynolds Pontiac, Il	Steve Baron	815-842-4969	15	3
Advocate BroMenn Medical Center	1304 Franklin Ave	Aaron Barclay	309-268-5426	80	10
Unity Point Health Peoria	221 NE Glen Oak Ave, Peoria, IL 61636	Tom Stecher	309-672-5646	8	4

Unity Point Health Peoria	5409 N. Knoxville Ave., Peoria IL 61614	Maggi Ballard	309-683-6180	8	4
Hammond Henry	600 N College, Genesio, IL	Kurt Kruger	309-944-9126/309-944-7803	3	3
Trinity Hospital	2701 17th Street, Rock Island, IL	Trent Mull	309-779-3039 / 309-508-6057	10	7
Graham Hospital	210 W. Walnut Canton, IL. 61520	Nuiel Atchley	309-649-6851	10	10

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# Annex B - Ebola Treatment Center Evaluation Guidance

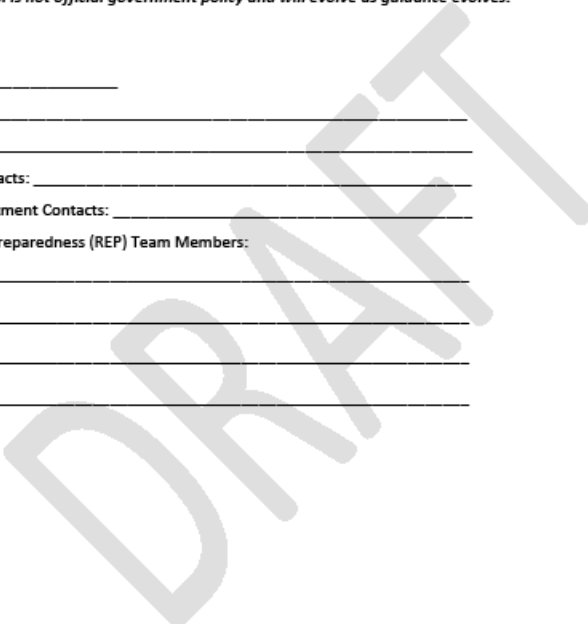
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10-31-2014 (v13) **\*\*\*DRAFT, CONFIDENTIAL, NOT FOR DISTRIBUTION\*\*\***  
**Rapid Ebola Preparedness (REP) Tool for Hospitals Designated to Receive Suspected or Confirmed Ebola Virus Disease (Ebola) Patients**

This tool can be used to assess whether the designated hospital has appropriate infection prevention policies, procedures, and supplies in place to allow healthcare personnel (HCP) to provide safe care during the treatment of patients with Ebola virus disease. This tool is designed to be used by hospitals as a self-assessment tool for Ebola preparedness, or by Rapid Ebola Preparedness (REP) Teams to assist and support hospitals in their preparedness efforts.

*Note: This tool is not official government policy and will evolve as guidance evolves.*

Date: \_\_\_\_\_  
Hospital: \_\_\_\_\_  
City, State: \_\_\_\_\_  
Hospital Contacts: \_\_\_\_\_  
Health Department Contacts: \_\_\_\_\_  
Rapid Ebola Preparedness (REP) Team Members:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Annex C – Waste Management

The following is guidance for the transportation and disposal of potentially infected medical waste from patients with Ebola virus disease (EVD). This guidance has been developed in cooperation with the Illinois Environmental Protection Agency (IEPA) and the U.S. Department of Transportation (DOT).

### Disposable materials:

- Potentially infectious medical waste (PIMW), including disposable materials (e.g., any single-use PPE, cleaning cloths, wipes, single-use microfiber cloths, gowns, linens, food service) privacy curtains and other textiles, generated in connection with diagnoses and treatment activities need to be appropriately disposed of after their use in the patient room. [Refer to OSHA Bloodborne Pathogen Standard.](#)
- These materials should be placed in leak-proof containment and discarded appropriately. To minimize contamination of the exterior of the waste bag, place this bag in a rigid waste receptacle designed for this use. <http://www.cdc.gov/vhf/ebola/hcp/medical-waste-management.html>
- Incineration or autoclaving as a waste treatment process is effective in eliminating viral infectivity and provides waste minimization. Facilities with the capacity to process PIMW on-site must demonstrate efficacy standards of treatment facilities per IEPA regulations ([35 Illinois Administrative Code: Subtitle M](#)).
- All PIMW must be treated to eliminate the infectious potential prior to disposal. If offsite treatment is necessary, then strict compliance with the DOT's Hazardous Materials Regulations (HMR, 49 CFR, Parts 171-180) is required. Untreated PIMW can only be transported by an IEPA permitted waste hauler to a permitted transfer, storage or treatment facility. More information can be found at: <http://www.epa.state.il.us/land/waste-mgmt/potentially-infectious-medical-waste.html>. Lists of permitted waste haulers and transfer, storage or treatment facilities are available at <http://www.epa.state.il.us/land/regulatory-programs/transportation-permits/> and <http://www.epa.state.il.us/land/waste-mgmt/facility-tables/pimw-facilities.html>.

### Transporting PIMW by an IEPA permitted hauler:

- The Ebola virus is classified as a Category A infectious substance under the HMR. These regulations cover such areas as packaging, marking, labeling, documentation, security, transportation, etc. Any item transported offsite for disposal by an IEPA permitted hauler that is contaminated or suspected of being contaminated with a Category A infectious substance must be packaged and transported in accordance with 49 CFR 173.196 or under a special DOT permit. 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 (gowns, masks, gloves, goggles, face shields, respirators, booties, etc.) or byproducts of cleaning) contaminated or suspected of being contaminated with a Category A infectious substance. Additional information can be found at the U.S Department of Transportation links below:

- [http://phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id\\_54AC1BCBF0DFBE298024C4C700569893C2582700/filename/Transporting\\_Infectious\\_Substances\\_brochure.pdf](http://phmsa.dot.gov/pv_obj_cache/pv_obj_id_54AC1BCBF0DFBE298024C4C700569893C2582700/filename/Transporting_Infectious_Substances_brochure.pdf)
  - Class 6, Division 6.2—Definitions and exceptions (49 CFR 173.134): [http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=1483d3ee3a3f2bfbdf8f83f4d004804e&n=pt49.2.173&r=PART&ty=HTML#se49.2.173\\_1134](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=1483d3ee3a3f2bfbdf8f83f4d004804e&n=pt49.2.173&r=PART&ty=HTML#se49.2.173_1134)
  - Category A infectious substances (49 CFR 173.196): <http://www.ecfr.gov/cgi-bin/text-idx?SID=2a97f2935677211e1785ac643163d2a9&node=49:2.1.1.3.10.5.25.33&rgn=div8>
- Wastes generated during delivery of care to Ebola virus-infected patients must be packaged and transported in accordance U.S. DOT Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). A special permit from U.S. DOT is required to allow alternative packaging from the requirements of the HMR for transportation. In addition to the alternative packaging, additional preparation and operation controls will apply to ensure an equivalent level of safety. Special permits are issued to the individual companies that apply, to ensure that each holder is fit to conduct the activity authorized. More information is available at U.S. DOT website: <http://phmsa.dot.gov/hazmat/question-and-answer>
  - Once a patient with suspected EVD (e.g., patients under investigation) is determined to not be infected with the Ebola virus, their waste materials no longer need to be managed as if contaminated with a Category A infectious substance.
  - CDC guidance for residential cleanup is at [Interim Guidance for the U.S. Residence Decontamination for Ebola Virus Disease \(Ebola\) and Removal of Contaminated Waste](#)

## Annex D – Isolation, Monitoring, and Quarantine

Click on page views below to view embedded PDF documents.



Pat Quinn, Governor  
LaMar Hasbrouck, MD, MPH, Director

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### MEMORANDUM

**TO:** Local Health Departments and Regional Offices of Illinois Department of Public Health

**FROM:** LaMar Hasbrouck, MD, MPH, Director

**DATE:** November 17, 2014

**SUBJECT:** Update: Interim Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure

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The world is facing the biggest and most complex [Ebola](#) outbreak in history. On August 8, 2014, the Ebola outbreak in West Africa was declared by the [World Health Organization \(WHO\) to be a Public Health Emergency of International Concern \(PHEIC\)](#) because it was determined to be an "extraordinary event" with public health risks to other countries. The possible consequences of further international spread are particularly serious considering the following factors:

1. The virulence (ability to cause serious disease or death) of the virus
2. The widespread transmission in communities and healthcare facilities in the currently affected countries and
3. The strained health systems in the currently affected and most at-risk countries

Coordinated public health actions are essential to stop and reverse the spread of Ebola. Healthcare workers who take care of patients with Ebola are not only helping the nations facing the Ebola outbreak but also protecting people in the United States by helping to fight the outbreak at its source. The risk in this country will only be fully addressed when the current outbreak in Africa is over. The participation of US and other healthcare workers from outside [countries with widespread transmission](#) is essential to control the disease.

IDPH has updated its interim guidance for monitoring people potentially exposed to Ebola (both in the United States and overseas) and for evaluating their intended travel, including the application of movement restrictions when indicated. This interim guidance includes a "low (but not zero) risk" category, a "no identifiable risk" category; modifies the recommended public health actions in the risk categories; and adds recommendations for specific groups and settings.

12/2/2014

Case No. \_\_\_\_\_ Date \_\_\_\_\_

### ORDER FOR OBSERVATION AND MONITORING

The \_\_\_\_\_ (name of health department) has determined, based upon the information contained below, that the individual referred to in this order is, or may be, infected with or exposed to a dangerously contagious or infectious disease. As a result, it is required that this individual must undergo observation and monitoring, and depending upon the results of that observation and monitoring, must receive treatment or remain in isolation until he/she is no longer potentially contagious to the community.

**Section A: Type of Order**

This order for observation and monitoring is made upon (check all that apply):

Voluntary (consented) (see Section G)

**NOTE: In the Absence of Consent, Individual Should Be Screened to Determine if Isolation or Quarantine Are Appropriate**

**Section B: Information**

**Individual Subject to Observation and Monitoring:**

Name: (Last) \_\_\_\_\_ (First) \_\_\_\_\_ (M.I.) \_\_\_\_\_ Date of Birth: \_\_\_\_-\_\_\_\_-\_\_\_\_

Member of a Household

**Current Location of Individual: (If a healthcare facility, include room number):**

Address: (Street) \_\_\_\_\_ (Apt./Rm.#) \_\_\_\_\_ (City) \_\_\_\_\_  
(State/Country) \_\_\_\_\_ (Zip) \_\_\_\_\_ (Telephone) \_\_\_\_\_ (Fax) \_\_\_\_\_  
(Cell/pager) \_\_\_\_\_ (Email) \_\_\_\_\_

**Permanent Address:**

Address: (Street) \_\_\_\_\_ (Apt./Rm.#) \_\_\_\_\_ (City) \_\_\_\_\_  
(State/Country) \_\_\_\_\_ (Zip) \_\_\_\_\_ (Telephone) \_\_\_\_\_ (Fax) \_\_\_\_\_  
(Cell/pager) \_\_\_\_\_ (Email) \_\_\_\_\_

**Name of Treating Physician:**

Name: (Last) \_\_\_\_\_ (First) \_\_\_\_\_  
Address: (Street) \_\_\_\_\_ (Apt./Rm.#) \_\_\_\_\_ (City) \_\_\_\_\_  
(State/Country) \_\_\_\_\_ (Zip) \_\_\_\_\_ (Telephone) \_\_\_\_\_ (Fax) \_\_\_\_\_  
(Cell/pager) \_\_\_\_\_ (Email) \_\_\_\_\_

**Emergency or Other Contact Information:**

Name: (Last) \_\_\_\_\_ (First) \_\_\_\_\_ Relationship: \_\_\_\_\_  
Address: (Street) \_\_\_\_\_ (Apt./Rm.#) \_\_\_\_\_ (City) \_\_\_\_\_  
(State/Country) \_\_\_\_\_ (Zip) \_\_\_\_\_ (Telephone) \_\_\_\_\_ (Fax) \_\_\_\_\_  
(Cell/pager) \_\_\_\_\_ (Email) \_\_\_\_\_

**Section C: Department of Public Health Findings**

1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been exposed to the following dangerously contagious or infectious disease: \_\_\_\_\_

2. Observation and Monitoring is ordered based upon the following:

*Describe the facts in support of Observation and Monitoring:* \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Duration of Observation and Monitoring: \_\_\_\_\_

12/2/2014

**RELEASE FROM [ ISOLATION] [QUARANTINE] [CLOSURE]  
[VOLUNTARY MONITORING]**

DIRECTED TO: ) [insert order #]  
)  
[subject individual's name] )  
[subject individual's address] )  
[city, state, zip] )

Whereas the [insert name of health department issuing order] requested [isolation][quarantine] [closure] [voluntary monitoring] of [insert subject individual's name or location of closed premises] based on recommendations from the Illinois Department of Public Health. A copy of the Order is attached.

Whereas, [insert subject individual's name] has completed a period of [isolation] [quarantine] [closure] [voluntary monitoring] as recommended by [insert name of health department issuing order] for persons or premises suspected of having [insert name of applicable dangerously communicable or infectious disease].

Whereas, [insert subject individual's name or location of closed premises] is no longer considered to be infectious or potentially infectious.

Therefore, the [insert name of health department issuing order] rescinds the [isolation] [quarantine] [closure] [voluntary monitoring] [insert order number] and releases [insert subject individual's name or location of closed premises] from [isolation][quarantine][closure] [voluntary monitoring]. The activities of [insert subject individual's name or location of closed premises] are no longer restricted and [he/she] may return to work, school, and other public activities or the premises may be used for public activities].

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Medical Director  
[insert name of health department]

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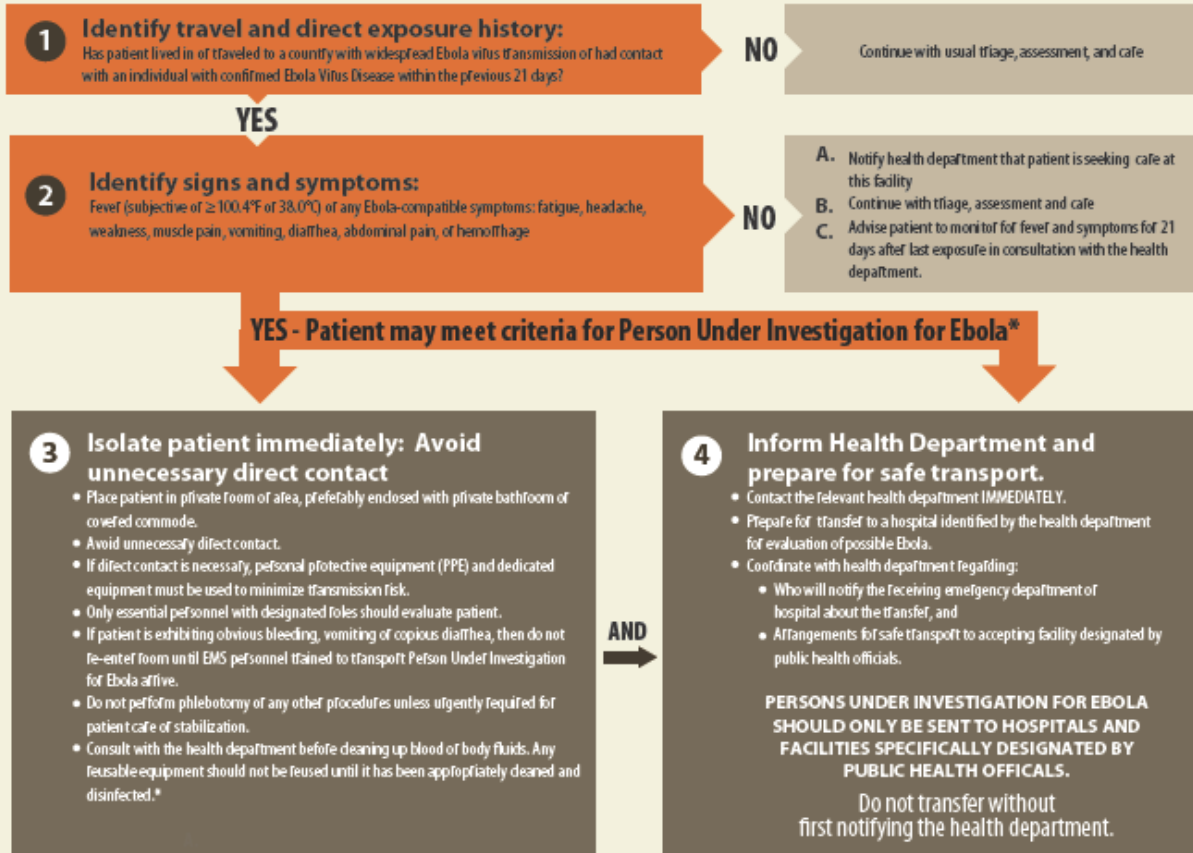
Date and Time

## Annex E – Ambulatory Care

# Identify, Isolate, Inform: Ambulatory Care Evaluation of Patients with Possible Ebola Virus Disease (Ebola)



The majority of febrile patients in ambulatory settings do not have Ebola Virus Disease (Ebola), and the risk posed by Ebola patients with early, limited symptoms is lower than that from a patient hospitalized with severe disease. Nevertheless, because early Ebola symptoms are similar to those seen with other febrile illnesses, triage and evaluation processes should consider and systematically assess patients for the possibility of Ebola.



### PPE in the ambulatory care setting\*\*:

- No one should have direct contact with a Person Under Investigation for Ebola without wearing appropriate personal protective equipment (PPE).
- If PPE is available and direct patient contact necessary, a single staff member (trained in proper donning and removal of PPE) should be designated to interact with the Person Under Investigation.
- At a minimum, health care workers should use the following PPE before direct patient contact:
  - A. Face shield & surgical face mask,
  - B. Impervious gown, and
  - C. Two pairs of gloves.
- The designated staff member should refrain from direct interaction with other staff and patients in the office until PPE has been safely removed in a designated, confined area. Examples of safe donning and removal of PPE should be reviewed: [http://www.cdc.gov/hicpac/2007IP/2007ip\\_fig.html](http://www.cdc.gov/hicpac/2007IP/2007ip_fig.html)

NOTE: Patients with exposure history and Ebola-compatible symptoms seeking care by phone should be advised to remain in place, minimize exposure of body fluids to household members of others near them, and given the phone number to notify the health department. The ambulatory care facility must also inform the health department. If the clinical situation is an emergency, the ambulatory care facility of patient should call 911 and tell EMS personnel the patient's Ebola risk factors so they can arrive at the location with the correct PPE.

\* Refer to <http://www.cdc.gov/vhf/ebola/> for the most up-to-date guidance on the Case Definition for Ebola, Environmental Infection Control and Ebola-Associated Waste Management;

\*\* Refer to <http://www.cdc.gov/hai/settings/outpatient/outpatient-care-guidelines.html> for a summary guide of infection prevention recommendations for outpatient settings.

**MEMORANDUM**

**Date:** November 03, 2014

**TO:** IDPH Ebola Guidance Distribution Group

**FROM:** LaMar Hasbrouck, MD, MPH, Director

**SUBJECT:** Re: Interim Guidance for Ambulatory/Outpatient Care Evaluation of Patients with Possible Ebola Virus Disease

See attached flowchart from CDC: *Identify, Isolate, Inform: Ambulatory Care Evaluation of Patients with Possible Ebola Virus Disease*

IDPH encourages Illinois ambulatory and outpatient care settings to adopt the CDC approach to evaluating patients with possible Ebola Virus Disease.

Some additional guidance and Illinois-specific information to accompany the flowchart is provided below.

**1. Identify Exposure (including Travel) History**

- Ensure that triage staff know which countries currently have widespread Ebola transmission and ask patients about these countries **by name**.
- As of 11/3/14, countries with widespread Ebola transmission are **Guinea, Liberia, and Sierra Leone**. Patients who have traveled to other African countries do not require isolation.
- Countries included in this list will change as the outbreak evolves; see [www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html](http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html) for a current list of countries with widespread transmission.



Location of Guinea, Sierra Leone, and Liberia

**2. Isolate Patient**

- Triage staff should maintain at least a 3-foot distance from patient and immediately alert responsible clinician when patient is placed in isolation area/examination room.
- Restrict staff entry to essential personnel.
- Put a mask in the room for the patient to wear if he/she is coughing.



- Remain calm: Remember that Ebola is not spread through the air. It spreads through direct contact with a symptomatic infected person's body fluids. Other diseases (e.g. malaria) are likely to cause fever in a returning traveler, and travelers may seek care for unrelated conditions.

### 3. Assess Patient

- Clinician should maintain at least a 3-foot distance from patient and should not touch patient during initial assessment. See attached algorithm for recommended PPE; wear the best available PPE in your ambulatory setting.
- If feasible, have patient take his/her own temperature (e.g. with a disposable single-use thermometer)
- Clinician should obtain detailed and accurate history
  - Confirm travel history, if applicable: specific locations and dates
  - Confirm symptom history: fever, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage (note onset dates or presence of other symptoms)
  - Evaluate potential Ebola exposures: in travelers, while in the affected country, any exposure to health care settings, funeral attendance, or contact with ill or deceased individuals in the last 21 days

### 4. Inform Local Health Department

#### 4a. Patient with compatible travel history or Ebola exposure and symptoms potentially consistent with Ebola:

- IMMEDIATELY
  - Call your local public health department. The local public health department should already be aware of and monitoring travelers.
  - If unable to reach, call the Illinois Emergency Management Agency at 1-800-782-7860 or 217-782-7860 (24 hours/7 days) and ask to speak to the duty officer.
- Do not touch patient or perform any procedures unless absolutely necessary. Follow instructions on the attached algorithm.
- If patient is not clinically stable, call 911 and inform the operator that a suspected Ebola patient needs transfer, AND immediately contact the health department.
- Persons under investigation for Ebola should only be sent to hospitals and facilities specifically designated by public health officials; do NOT transfer patients without talking to the health department first.

#### 4b. Patient with compatible travel history or Ebola exposure in the last 21 days but none of the above symptoms (e.g. presenting for unrelated illness):

- Call your local public health department to help ensure the routine 21 days of monitoring are completed by the health department.

4c. Patient WITHOUT compatible travel history or Ebola exposure, including patients who traveled to other unaffected countries in Africa or who traveled more than 21 days ago:

- Discontinue precautions, manage patient in routine manner



## Annex F – Public Answering Points (PSAPS)

### MEMORANDUM

TO: Illinois EMS Systems

FROM: LaMar Hasbrouck, MD, MPH  
Director

DATE: October 30, 2014

SUBJECT: Interim Guidance for Emergency Medical Services (EMS) Systems for Management of Patients with Known or Suspected Ebola Virus Disease in the United States - Updated

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The Centers for Disease Control and Prevention (CDC) has developed interim guidance for emergency medical services (EMS) regarding handling inquiries and responding to patients with suspected Ebola symptoms, and for keeping workers safe.

**Special note:** The guidance provided in this document reflects lessons learned from the recent experience caring for patients with Ebola in U.S. healthcare settings. This document references the CDC’s [“Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)”](#). Although hospital settings generally present higher risk of transmission than ambulatory settings, transfers by emergency medical services (EMS) present unique challenges because of the uncontrolled and critical care nature of the work, enclosed space during transfer, and a varying range of patient acuity. These factors may increase the risk of exposure to blood and body fluids relative to other ambulatory settings and make it more difficult to change personal protective equipment (PPE) into higher levels of protection based upon a changing clinical scenario. Close coordination and frequent communications among 9-1-1 Public Safety Answering Points (PSAPs), the EMS system, healthcare facilities, and the public health system is important when preparing for and responding to patients with suspected Ebola Virus Disease (EVD).

**Who this is for:** Managers of 9-1-1 Public Safety Answering Points (PSAPs), EMS Agencies, EMS systems, law enforcement agencies and fire service agencies as well as individual emergency medical services providers (including emergency medical technicians (EMTs), paramedics, and medical first responders, such as law enforcement and fire service personnel).

**What this is for:** Guidance keeping workers safe while handling inquiries and responding to patients with suspected Ebola symptoms.

**How to use:** Managers should use this information to understand and explain to staff how to respond and stay safe. Individual providers can use this information to respond to patients suspected to have Ebola and to stay safe.

Key Points of the guidance include:

- The likelihood of contracting Ebola in the United States is extremely low unless a person has direct unprotected contact with the blood or body fluids (like urine, saliva, feces, vomit, sweat, and semen) of a person who is sick with Ebola Virus Disease

- When risk of Ebola is elevated in their community, it is important for public safety answering points (PSAPs) to question callers about:
  - Residence in, or travel to, a country where an Ebola outbreak is occurring (Liberia, Guinea, Sierra Leone);
  - Signs and symptoms of Ebola (such as fever, vomiting, diarrhea); **and**
  - Other risk factors, such as direct contact with someone who is sick with Ebola.
- PSAPs should tell EMS personnel this information before they get to the location so they can put on the correct PPE following proper procedures as described in CDC's guidance: "[Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)](#)".
- EMS staff should immediately check for symptoms and risk factors for Ebola. Staff should notify the receiving healthcare facility in advance when they are bringing a patient with suspected Ebola, so that proper infection control precautions can be taken at the healthcare facility before EMS arrives with the patient.

## Background

The current Ebola outbreak in West Africa has increased the possibility of patients with Ebola traveling from the affected countries to the United States (<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html>). The likelihood of contracting Ebola is extremely low unless a person has direct unprotected contact with the body fluids of a person (like urine, saliva, feces, vomit, sweat, and semen) of a person who is sick with Ebola. Initial signs and symptoms of Ebola include sudden fever, chills, and muscle aches, with diarrhea, nausea, vomiting, and abdominal pain occurring after about 5 days. Other symptoms such as chest pain, shortness of breath, headache, or confusion, may also develop. Symptoms may become increasingly severe and may include jaundice (yellow skin), severe weight loss, mental confusion, bleeding inside and outside the body, shock, and multi-organ failure (<http://www.cdc.gov/vhf/ebola/hcp/clinician-information-us-healthcare-settings.html>).

Ebola is an often-fatal disease and extra care is needed when coming into direct contact with a recent traveler who has symptoms of Ebola and is traveling from a country with an Ebola outbreak. The initial signs and symptoms of Ebola are similar to many other more common diseases found in West Africa (such as malaria and typhoid). Ebola should be considered in anyone with a fever who has traveled to, or lived in, an area where Ebola is present (<http://www.cdc.gov/vhf/ebola/hcp/case-definition.html>).

The incubation period for Ebola, from exposure to when signs or symptoms appear, ranges from 2 to 21 days (most commonly 8-10 days). Any Ebola patient with signs or symptoms should be considered infectious. **Ebola patients without signs or symptoms are not contagious.** The prevention of Ebola includes actions to avoid:

- Exposure to blood or body fluids of infected patients through contact with skin, mucous membranes of the eyes, nose, or mouth, or
- Injuries with contaminated needles or other sharp objects.

Emergency medical services (EMS) personnel, along with other emergency services staff, have a vital role in responding to requests for help, triaging patients, and providing emergency treatment to patients. Unlike patient care in the controlled environment of a hospital or other fixed medical facility, EMS patient care is provided in an uncontrolled environment before getting to a hospital. This setting is often confined to a very small space and frequently requires rapid medical decision-making and interventions with limited information. EMS personnel are frequently unable to determine the patient history before having to administer emergency care.

Coordination among 9-1-1 Public Safety Answering Points (PSAPs), the EMS system, healthcare facilities, and the public health system is important when responding to patients with suspected Ebola. Each 9-1-1 and EMS system should include an EMS medical director to provide appropriate medical supervision.

### **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.

#### **For modified caller queries:**

It will be important for PSAPs to question callers and determine if anyone at the incident possibly has Ebola. This should be communicated immediately to EMS personnel before arrival and to assign the appropriate EMS resources. Local and state public health officials should also be notified. 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 consider screening callers for symptoms and risk factors of Ebola. Callers should be asked if they, or if the affected person, has a fever of 38.0 degrees Celsius or 100.4 degrees Fahrenheit or greater, 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; or
  - Residence in or travel to a country where an Ebola outbreak is occurring (a list of countries can be accessed at the following link: <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html>).
- If PSAP call takers have information alerting them to a person with possible Ebola, they should make sure any first responders and EMS personnel are made aware of the potential for a patient with possible exposure/symptoms of Ebola **before the responders arrive on scene**.
- If responding at an airport or other port of entry to the United States, the PSAP should notify the CDC Quarantine Station for the port of entry. Contact information for CDC Quarantine Stations can be accessed at the following link: [Quarantine Station Contact List, Map, and Fact Sheets](#).

### **Recommendations for EMS and Medical First Responders, Including Firefighters and Law Enforcement Personnel**

For the purposes of this section, “EMS personnel” means pre-hospital EMS, law enforcement and fire service first responders. 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.

When state and local EMS authorities determine there is an increased risk (based on information provided by local, state, and federal public health authorities, including the city or county health department(s), state health department(s), and the CDC), they may direct EMS personnel to modify their practices as described below.

## Patient assessment

Interim recommendations:

- Address scene safety:
  - 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.
  - Keep the patient separated from other persons as much as possible.
  - 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.
- During patient assessment and management, EMS personnel should consider the symptoms and risk factors of Ebola:
  - A relevant exposure history should be taken including:
    - Residence in or travel to a country where an Ebola outbreak is occurring (a list of countries can be accessed at the following link: [2014 Ebola Outbreak in West Africa - Outbreak Distribution Map](#), or
    - Contact with blood or body fluids of a patient known to have or suspected to have Ebola within the previous 21 days.
      - Because the signs and symptoms of Ebola may be nonspecific and are present in other infectious and noninfectious conditions which are more frequently encountered in the United States, relevant exposure history should be first elicited to determine whether Ebola should be considered further.
  - Patients who meet these criteria should be further questioned regarding the presence of signs or symptoms of Ebola Virus Disease, including:
    - Fever (subjective or  $\geq 100.4^{\circ}\text{F}$  or  $38.0^{\circ}\text{C}$ ), and
    - Headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or bleeding.
  - Based on the presence of risk factors and symptoms, put on or continue to wear appropriate PPE and follow the scene safety guidelines for suspected case of Ebola.
  - If during initial patient contact and assessment and before an EMS provider has donned the appropriate PPE, it becomes apparent that the patient is a suspected case of Ebola, the EMS provider must immediately remove themselves from the area and assess whether an exposure occurred. The provider should implement their agency's exposure plan, if indicated by assessment.
    - To minimize potential exposure, it may be prudent to perform the initial screening from at least 3 feet away from the patient.
    - In addition, EMS crews may – keeping scene safety in mind – consider separating so that all crew members do not immediately enter the patient area.
  - If there are no risk factors, proceed with normal EMS care.

## EMS Transfer of Patient Care to a Healthcare Facility

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

## Interfacility Transport

EMS personnel involved in the air or ground interfacility transfer of patients with suspected or confirmed Ebola [should wear recommended PPE](#).

## **Infection Control**

EMS personnel can safely manage a patient with suspected or confirmed Ebola by following [recommended PPE guidance](#). 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 that can increase the risk of exposure to infectious material, especially during transport.
- 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)**

Both **advanced planning and practice are critical** – in putting on PPE in a variety of circumstances, in the transfer of the patient to the hospital, and in the taking off of the PPE.

EMS workers who may be involved in the care of Ebola patients should receive training and have demonstrated competency in performing all Ebola-related infection control practices and procedures, and specifically in donning/doffing proper PPE. When treating a suspected Ebola patient, EMS personnel should wear PPE and follow proper procedures for putting on and taking off (donning and doffing) PPE as described in CDC's guidance: [“Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\).”](#)

Pre-hospital patient care, however, is frequently provided in an uncontrolled environment with unique operational challenges. EMS systems must design their procedures to accommodate their local operational challenges while still following the principles and procedures of the CDC PPE guidance.

- For instance, it may be as simple as having one provider put on PPE and manage the patient while the other provider does not engage in patient care but serves in the role of trained observer and driver.
- Or, there may be situations where a patient must be picked up and carried and multiple providers are required to put on PPE. EMS personnel wearing PPE who have cared for the patient must remain in the back of the ambulance and not be the driver.
- EMS agencies may consider sending additional resources (for example, a dedicated driver for the EMS unit who may not need to wear PPE if the patient compartment is isolated from the cab) to eliminate the need for putting on PPE (field-donning) by additional personnel. This driver should not provide any patient care or handling.

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 exposure for EMS personnel. If conducted, perform these procedures under safer circumstances (e.g., stopped vehicle, hospital destination).

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. They should wash the affected skin surfaces with soap and water and mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution. Report the exposure to an occupational health provider or supervisor for follow-up.

Recommended PPE should be used by EMS personnel as follows:

- PPE should be put on before entering the scene and continued to be worn until personnel are no longer in contact with the patient. PPE should be carefully put on under observation as specified in the CDC's ["Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)."](#)
- PPE should be carefully removed while under observation, in an area designated by the receiving hospital, and following proper procedures as specified in the CDC's ["Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)."](#)

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

The following are general guidelines for cleaning or maintaining EMS transport vehicles and equipment after transporting a patient with suspected or confirmed Ebola:

- An EPA-registered hospital disinfectant with label claims for viruses that share some technical similarities to Ebola (such as, norovirus, rotavirus, adenovirus, and poliovirus) and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions. After the bulk waste is wiped up, the surface should be disinfected as described below. For a list of EPA-registered hospital disinfectants effective against norovirus, click here: [http://www.epa.gov/oppad001/list\\_g\\_norovirus.pdf/](http://www.epa.gov/oppad001/list_g_norovirus.pdf)
- EMS personnel performing cleaning and disinfection should follow the ["Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\)."](#) There should be the same careful attention to the safety of the EMS personnel during the cleaning and disinfection of the transport vehicle as there is during the care of the patient.
- Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces), as well as stretcher wheels, brackets, and other areas are likely to become contaminated and should be cleaned and disinfected after each transport.
- A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed by trained personnel wearing correct PPE, 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. Contaminated reusable patient care equipment (e.g., glucometer, blood pressure cuff) should be placed in biohazard bags and labeled for cleaning and disinfection according to agency policies. Reusable equipment should 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 PPE, [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](#).

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

- EMS personnel should be aware of the follow-up and/or reporting measures they should take after caring for a suspected or confirmed Ebola patient.
- EMS agencies should develop policies for monitoring and management of EMS personnel potentially exposed to Ebola.
- 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:
  - 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;
  - 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. 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.
- 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.

The guidance provided in this document is based on current knowledge of Ebola. Updates will be posted as needed on the [CDC Ebola Webpage](#). The information contained in this document is intended to complement existing guidance for healthcare personnel, [Infection Prevention and Control Recommendations for Hospitalized Patients with Known or Suspected Ebola Virus Disease in U.S. Hospitals](#).