# High Consequence Infectious Disease (HCID) Region 2 Healthcare Coalition Preparedness and Response Plan



# **STADARD OPERATING GUIDELINES**

-This plan was developed to establish a set of guidelines for Region 2 Hospitals to follow when a patient is identified with a High Consequence Infectious Disease This page intentionally left blank.

# HCID REGION 2 Healthcare Coalition Preparedness and Response Plan

# **Purpose**

The purpose of the High Consequence Infectious Disease (HCID) 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 HCID. 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 HCID.

# Scope

The HCID Region 2 Healthcare Coalition Preparedness and Response Plan is limited to describing operational intent when responding to suspected or confirmed HCID 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 HCID Preparedness and Response Plan has been developed due to the possibility of an HCID surfacing in the counties within the Region 2 Healthcare Coalition. An HCID 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 (EMS), 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.
- HCID 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 an HCID 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 an HCID will be those being monitored by a local health department (LHD) within Region 2.
- LHDs will conduct active and direct active monitoring of persons at some risk of an HCID and may notify a designated evaluation hospital or treatment center if further medical evaluation and management is needed within the Region 2 Healthcare coalition.
- The LHD may make recommendations that the patient be transported to an evaluation hospital by an Infectious Disease Transport Vehicle.
- Suspected or confirmed patients with an HCID may 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 HCID 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 personal protective equipment (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; and an inventory management system to help track available resources and PPE. Regional evaluation hospitals and treatment centers 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 HCID planning and response efforts in the coalition. This system will practically and safely identify potential and confirmed HCID patients and have the ability to identify, isolate, assess, treat, and transport persons/patients to facilities capable of managing suspected or confirmed HCID cases.

The purpose of the High Consequence Infectious Disease (HCID) 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 an HCID. This plan will provide guidance and tools to response partners and will guide activities to educate and prepare the public. The HCID Preparedness and Response Plan is limited to describing operational intent when responding to persons under investigation for an HCID, as well as suspected or confirmed HCID cases. The plan includes considerations for public health agencies, Emergency Medical Services (EMS), and health care systems.

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 HCID 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 an HCID and contact the appropriate LHD, evaluation hospital, treatment center, and emergency medical services system, as necessary.

- Will follow IDPH guidance regarding ambulatory/outpatient care of patients with suspected HCID.
- Can protect their staff, other patients and visitors from possible exposure.
- Consult with relevant public health (IDPH and LHD) officials if necessary to arrange for safe transport to evaluation hospitals or treatment centers, even on weekends and holidays.
- Public Safety Answering Points (PSAPs)
  - Are listed in FOUO Annex F. The PSAP and 9-1-1 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 IDPH guidance for EMS and 9-1-1 PSAPs for management of patients with suspected HCID.
- Emergency Departments
  - Emergency departments listed in FOUO Annex A should be utilized to meet the needs of suspected HCID patients when an evaluation hospital or treatment center is not immediately available.
  - Will conduct a proper medical screening exam that can identify suspected HCID cases, and if necessary, temporarily isolate them and arrange for their immediate and safe transfer/transport to an evaluation hospital and/or treatment center facility listed in FOUO Annex A.
    - HCID testing and transport will be done in consultation with IDPH, the appropriate LHD and EMS.
  - Until transport or discharge, provide necessary stabilizing treatment within the hospital's capability and capacity.

#### Assessment Hospitals

- Designated in FOUO Annex A. Assessment hospitals 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 HCID patients and will be able to assess patients' travel history and exposure risk, isolate, and provide care if necessary.
  - People with suspected or confirmed HCID will be referred to one of the coalition's assessment hospitals listed in FOUO Annex A based on their transfer agreement with the assessment hospital and after medical consultation with IDPH, appropriate LHD and EMS. This consultation will be based on individualized assessment—e.g. location of patient, likelihood of HCID diagnosis, how many days ill, "wet" vs. "dry" HCID stage, turnaround times for labs, etc. In some cases, (e.g. if there is high probability for diagnosis of HCID), an early direct referral to a treatment center prior to diagnosis may be appropriate. Consideration will be given to minimizing number of inter-facility patient transfers.
  - In consultation with IDPH and the LHD, each 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 HCID testing to an IDPH laboratory;
    - ✓ 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;
    - ✓ Have quick access to designated Infectious Disease Transport Vehicle for a suspected or actual HCID patient.
- As determined by IDPH in consultation with the RHCC and LHD, significantly meets the identified criteria for assessment hospitals.
- Waste will be handled per Annex C.

## Treatment Center

- Designated in FOUO Annex A, a treatment center 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 an HCID Case for at least 30 days.
  - The treatment center meets criteria as determined by IDPH in consultation with CDC and the appropriate LHD; and both the needs of the State of Illinois and the communities served by this healthcare coalition.
    - Treatment centers are expected to have access to sufficient PPE to be able to treat an HCID patient for 30 days.
  - The treatment center will meet guidance on PPE to be used by healthcare workers during management of patients with suspected HCID as determined by IDPH and CDC.
    - ✓ The treatment centers 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 treatment center.

- ✓ The treatment center may also be asked to accept HCID 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 equipped to transport suspected or diagnosed patients to a treatment center or evaluation hospital for further evaluation, testing and possible hospitalization.
- Suspected or diagnosed HCID 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.
- In coordination with PSAPs, are capable of following IDPH guidance for EMS and 9-1-1 PSAPs for management of patients with suspected HCID.

• EMS Systems serving this coalition have IDPH-approved protocols requiring suspected HCID patients be taken to an evaluation hospital or 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

- LHDs listed in the FOUO Annex A will monitor persons at risk of an HCID as described in Annex D.
- After consulting with IDPH, will notify designated evaluation hospital facility when person being monitored requires HCID evaluation.
- After consulting with IDPH, will request or provide approval to relevant healthcare coalition members for HCID 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

- Assessment hospitals and treatment centers (or properly equipped EDs) will contact the appropriate LHD to request HCID testing. If the LHD cannot be reached, submitters should contact the IDPH Division of Infectious Diseases (FOUO Annex A).
- LHDs will contact the IDPH Division of Infectious Diseases for consultation and will 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, IDPH 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.

# **Activation of HCID Plan:**

The Region 2 HCID plan can be activated under limited conditions, such as having a PUI for an HCID in Region 2 or bordering regions. A patient is confirmed to have a HCID. At this point the Region 2 High Consequence Infectious Disease Plan will be activated.

# **Notification and Alerting:**

Once it is established a hospital has a suspected PUI or a confirmed case in their facility.

- ✓ Isolate the patient in a single room (containing a private bathroom) and setup isolation precautions for the patient and all medical staff. Contact infection prevention and other appropriate staff.
- ✓ IMMEDIATELY contact the Local Health Department. The Local 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.
- ✓ Contact the Region 2 RHCC at 309-683-8365 (office) or 309-253-3784 (cell) or contact PALS at 800-231-7257 and ask for Disaster Preparedness
- ✓ Contact appropriate EMS agency to begin the processes required to transport patient to an Assessment Center or Treatment Center (AMT or Genesis).
- ✓ The RHCC will make contact with other associate local and regional stake holders, along with other State stakeholders (IEMA, IDPH, etc.) to maintain a common operating picture.

# **Emergency Operations Coordination**

Incident coordination between local medical organizations, local public health entities, and the Region 2 RHCC will be critical to ensure efficient management of PUIs and any suspected or confirmed HCID cases. In most situations the impacted facilities, organizations and local government will utilize resources, contracts and mutual aid to meet resource needs, including any regionally purchased cached resources by the Region 2 Healthcare Coalition maintained by participating organizations. When the resources of local government are exhausted or when a needed capability does not exist within a local government, assistance is requested from the region and/or the state.

# **Medical Material Management and Distribution**

The primary medical material likely to be distributed during a suspected or confirmed HCID case is PPE. Region 2 will follow the normal request process as outlined in the Region 2 Plan. Using the web based RFR (Request for Resources) tool, hospitals in region 2 can request resources such as PPE, PAPRs, N95s, Ventilators and other equipment needed to managed a confirmed or suspected patient with a HCID. If resources are unavailable through local sourcing or regional requests, then requests can be made to IDPH, IEMA or the SNS if necessary. These resource requests could be for medical management materials like PPE, fluids or medications. Other possible requests could be for staffing and other inpatient resources such as Respiratory Therapists.

# Training

The office of the Region 2 RHCC can provide facilities and their staff with Just-in-Time training if requested. The training can be done in-person or if time does not allow the Region 2 RHCC has the ability to use virtual resources to provide the training.

# **Information Management and Coordination**

Once a confirmed or suspected patient with a HCID is known, the Region 2 RHCC will play a key role in information management and coordination. The Office of the Region 2 RHCC will begin coordinating with local, regional, state and possibly national stakeholders. Online platforms for conferencing and information

dissemination will be established. A Joint Information System may be stablished to help coordinate vetted information for local, regional and state stakeholder PIOs. This may include the establishment of a Joint Information Center is deemed necessary.

Hospitals could also use the Region 2 RHCC as a source for access to subject matter experts at the local, regional or state levels. These professionals can assist hospitals with advice and support to the team providing care to the patient.

## Transport of Patient with Suspected or Confirmed cased of a HCID

IDPH EMS Region 2 has two EMS agencies that are equipped to handle to transfer of a patient with a suspected or confirmed case of a HCID. The logistics of these transfers will be handled by the office of the Region 2 RHCC and OSF HealthCare Saint Francis Medical Center. Once a confirmed or suspected patient with an HCID is identified, considerations must be made to best care for the patient while also managing infection prevention activities. This may mean the patient will require transportation to an Assessment Center, a Treatment Center or even potentially a Specialty Center for continued care and medical management. These decisions will be made cooperatively with the current hospital treating the patient, Local Health Departments, EMS systems, IDPH, IEMA and other agencies, along with the Regional Assessment Center (OSF HealthCare Saint Francis Medical Center) and the Region 2 RHCC.

If transportation of the patient is deemed necessary, the office of the Region 2 RHCC in conjunction with the transporting EMS agency will work together to ensure the safe and coordinated transport of a HCID patient. The team will use appropriate PPE, in conjunction with best infection prevention practices for patient management, EMS crew safety, and possibly even an ISOPOD for patient isolation during transport. The highest standards of medical care will continue to be provided to the patient while in transport. Just in time training can be provided to the transporting team if necessary.

Prior to patient transport an emergency conference call will be hosted. This will include, at a minimum, the patient's condition, prognosis, and any transportation concerns. Should law enforcement escort of ground transportation be required, the Region 2 RHCC office will coordinate with local and state law enforcement for such escort.

In the event of a patient with Anthrax infection, the Region 2 Healthcare Coalition maintains an Anthrax Response Plan.

## **Fatality Management**

Region 2 boasts assets that are designed specifically to assist in the management of decedents. The Region 2 Healthcare Coalition has two (2) Mass Fatality Management Trailers. The Region 2 Healthcare Coalition also has access to heavy duty body bags and Bio-Seal system to safely and effectively manage decedents while also maintaining infection prevention.

## **Continuous Screening Processes and Access Restrictions**

In IDPH EMS Region 2 OSF HealthCare has 9 system hospitals. Within those 9 hospitals, screening processes, and visitor policies will be standardized. The Region 2 RHCC along with the Region 2 HealthCare Coalition can make recommendations for standardizing screening processes and visitor restrictions amongst regional partnering facilities. This will assist in similar processes and policies amongst regional coalition members.

# **Recovery, Demobilization and Debriefing**

The Region 2 HCID plan will remain active until it is determined by the Region 2 RHCC and other involved stakeholders that there is no longer a need for emergency operations. The Region 2 HCID plan can be demobilized as a whole or as a phased approach. The Region 2 RHCC and stakeholders will also determine with the ICS structure shall be deactivated. Deactivation will be based upon the ability to fulfill the remaining needs of an incident with normal functionality or after other alternatives have been established. The goal of recovery is to return to normal operations.

The need and process for demobilizing response efforts and returning functions to normal daily operations will be determined by the Region 2 RHCC, in consultation with the impacted facilities, regional stakeholders and emergency services. The Region 2 RHCC along with the Region 2 Healthcare Coalition will:

- ✓ Using the PIO and the Joint Information System (JIS) that there is no threat to the public, patients or visitors within the facility or facilities.
- ✓ Ensure all systems and communications are operational and available to support normal operations
- Ensure records, reports and data from the incident are received by the planning section to share with appropriate agencies for review and improvement planning.
- ✓ Conduct follow-up with health agency partners to ensure on-going needs are met and for post-incident/recovery planning

Post-incident debriefings will occur after demobilization. The coordination and facilitation of the debriefing and the development of the After Action Report and Improvement Plan (AAR/IP) will be a shared responsibility between the impacted agencies/facilities.

# **Planning and Exercise Activities**

The Region 2 RHCC along with the Region 2 Healthcare Coalition will conduct annual exercises to enhance the preparedness within the region, for regional healthcare partners. Exercises that are developed and have a HCID or infectious disease component, regional partners should involve infection prevention and other Healthcare Associated Infection (HAI) professionals to exercise operations in the event of a HCID. Facilities need to include HAI partners at the facility and jurisdictional level in planning, training and exercises/drills.

FOUO Annex A - EVD Region 2 Healthcare Coalition Preparedness and Response Plan - HCID Contact Information- SENSITIVE INFORMATION -DO NOT RELEASE - For Official Use Only (FOUO)

Coalition Local Health Department(s Emergency Management contacts can be found at this link: <u>Click Here</u>

## **IDPH Division of Infectious Diseases**

Heidi Clark, 217-782-2016

# 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 Hotline Number (24 hr.) 800-889-3931

## 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)

#### Name: Northwestern Memorial Hospital

Address: 251 East Huron Street, Chicago, IL 60611

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

#### 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)

#### **AssessmentHospital**

Name: OSF Saint Francis Medical Center

Address: 530 NE Glen Oak Ave, Peoria, IL

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

## **Isolation Transport Vehicles for HCID**

#### Company Name: Advance Medical Transport

Address: 1718 North Sterling Ave, Peoria, IL 61655 Emergency Contact Information- 800-457-1143 (main); 309-494-6200 (dispatch)

Company Name: American Medical Transport-Milan-Quad Cities

Address: 1207 11<sup>th</sup> St W, Milan, IL 61264 Emergency Contact Information- 309-494-6200

#### 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)

# Personal Protective Equipment for HCID (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	Jon Quast	309-253-8414	25	5
			309-683-8365		
McDonough District Hospital	525 E Grant Macomb IL 61455	Stefany Myers	309-531-7888	4	3
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
OSF HealthCare Saint Luke Medical Center	1051 W south St Kewanee, IL 61443	Barb Whedbee	309-333-0296	10	6
OSF HealthCare Holy Family Medical Center	1000 W Harlem Ave Monmouth, IL 61462	Barb Whedbee	309-333-0296	9	7
OSF HealthCare Saint Elizabeth Medical Center	1100 E Norris Drive, Ottawa, IL 61350	Amanda Los	815-431-5579	10	4
OSF HealthCare Saint James	2500 E. Reynolds Pontiac, Il	Andrew Larson	815-842-4938	15	3
Advocate BroMenn	1304 Franklin Ave	Alex Trickett	309-268-2633	80	10
Medical Center			309-261-2380		
Unity Point Health Methodist	221 NE Glen Oak Ave, Peoria, IL 61636	Tom Stecher	309-672-5646	8	4
Unity Point Health Proctor	5409 N. Knoxville Ave., Peoria IL 61614	Tom Stecher	309-672-5646	8	4
Hammond Henry	600 N College, Genesio, IL	Elyse Wolf	309-944-9126/309- 944-7803		3
Unity Point Health - Trinity Hospital	2701 17th Street, Rock Island, IL	Trent Mull	309-779-3039 / 309- 508-6057	10	7

## **Annex B - EVD Treatment Center Evaluation Guidance on PPE and Staffing** CDC's PPE Calculator

#### **Staffing Example:**

Patient was relatively stable. 3 nurses provided direct patient care (2 primary nurses, 1 support nurse) and were also responsible for environmental cleaning in the room, lab staff handling specimens was in Ebola PPE.

Role	Persons/Shift	Shifts/day	Persons/day
Nurses with patient contact	3	2	6
Physician with patient contact	1	2	2
Trained observer to assist with donning/doffing	1	2	2
Environmental Cleaning	2	2	4
Laboratory staff handling specimens	1	2	2
Total persons			16

#### **Example: PPE Requirements per shift**

Team Role	Either Gown o	or Coverall	All required				
	Gown	Coverall	Glove (extended Cuff)	Exam Glove	Shoe Cover	Apron	PAPR
Nurse w/contact	6	6	12	12	12	6	6
Physician	2	2	4	4	4	2	2
Trained Observer	2	2	4	4	4	2	2
Environmental	4	4	8	8	8	4	4
Lab	2	2	4	4	4	2	2
TOTAL	16	16	32	32	32	16	16

- Quantity of product per shift may vary based on multiple factors including patient acuity, length of shifts, breaks etc. Estimates in table assume 6 hour shift.
- Hospitals may have additional roles that need to be considered.
- Powered air purifying respirator (PAPR) blower units/system s are included in the table. These items may
  be reused post decontamination. Therefore, the quantity of PAPR blower units/systems needed per shift
  and per day should be based on the number of persons that may be using a PAPR blower and the time
  needed to decontaminate and ensure that these products are ready for use. One PAPR blower
  units/system will be needed for each staff member per shift who will be in direct contact with the
  patient. Should consider having 2.5 to 3 shifts worth of PAPR blower units/systems on hand to account
  for changing of staff and decon time.

## Annex C – Waste Management

The following is guidance for the transportation and disposal of potentially infected medical waste from patients with a High Consequence Infectious Disease (HCID). 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. <u>Refer to OSHA Bloodborne Pathogen Standard</u>.

- 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 (<u>35 Illinois Administrative Code: Subtitle M</u>).
- 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: <a href="https://www2.illinois.gov/epa/topics/waste-management/factsheets/Pages/general-regulations.aspx">https://www2.illinois.gov/epa/topics/waste-management/factsheets/Pages/general-regulations.aspx</a>. Lists of requirements for permitted waste haulers and transfer, storage or treatment facilities are available at <a href="https://www.edicalWaste Hauling-">Potentially Infectious Medical Waste Hauling -</a>

<u>Transportation Permits (illinois.gov)</u> and <u>RCRA Permits for Storage/Treatment Facilities -</u> <u>Hazardous Waste (illinois.gov)</u> and <u>Special Waste - Special Waste (illinois.gov)</u>

#### Transporting PIMW by an IEPA permitted hauler:

 Certain HCID Diseases (e.g. EVD) are 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:

- https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/Transporting\_Infectious\_Su bstances\_brochure.pdf
- Class 6, Division 6.2—Definitions and exceptions (49 CFR 173.134): <u>http://www.ecfr.gov/cgibin/retrieveECFR?gp=&SID=1483d3ee3a3f2bfbdf8f83f4d</u> <u>004804e&n=pt49.2.</u> 173&r=PART&ty=HTML#se49.2.173 1134
- Category A infectious substances (49 CFR 173.196): <u>eCFR :: 49 CFR 173.196 --</u> <u>Category A infectious substances.</u>
- Wastes generated during delivery of care to HCID patients must be packaged and transported in accordance U.S. DOT Hazardous Materials Regulations (<u>HMR, 49 C.F.R.,</u> <u>Parts 171-180</u>). 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: <u>https://www.phmsa.dot.gov/transportinginfectious-substances/packaging-ebola-contaminated-waste</u>
- Once a patient with a HCID (e.g., patients under investigation) is determined to not be infected, their waste materials no longer need to be managed as if contaminated with a Category A infectious substance.
- In the event of an Ebola Infected Patient CDC guidance for residential cleanup is at <u>Interim Guidance for the U.S. Residence Decontamination for Ebola Virus Disease (Ebola)</u> <u>and Removal of Contaminated Waste</u>.

# Annex D – Isolation, Monitoring, and Quarantine

#### SUBJECT: Updated Interim Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure

#### Epidemiologic Risk Factors to Consider when Evaluating a Person for Exposure to Ebola Virus

#### Transmission

Scientists think people are initially infected with Ebola virus through contact with an infected animal, such as a fruit bat or nonhuman primate. This is called a spillover event. After that, the virus spreads from person to person (especially from those with a history of travel to a country with widespread Ebola virus transmission or uncertain control measures or from contact with a person with symptomatic Ebola within the previous 21 days), potentially affecting a large number of people.

The virus spreads through direct contact (such as through broken skin or mucous membranes) with:

- Blood or body fluids (urine, saliva, sweat, feces, vomit, breast milk, and semen) of a person who is sick with or has died from EVD
- Objects (such as needles and syringes) contaminated with body fluids from a person sick with EVD or the body of a person who died from EVD
- Infected fruit bats or nonhuman primates (such as apes and monkeys)
- Semen from a man who recovered from EVD (through oral, vaginal, or anal sex)

The Ebola virus CANNOT spread to others when a person shows no signs or symptoms of EVD. Additionally, Ebola virus is not usually transmitted by food. However, in certain parts of the world, Ebola virus may spread through the handling and consumption of bush meat(wild animals hunted for food). There is also no evidence that mosquitoes or other insects can transmit Ebola virus.

#### Persistence of the virus

Ebola virus can remain in certain body fluids after a person has recovered from the infection. These fluids are semen, breast milk, ocular (eye) fluid, and spinal column fluid. Areas of the body that contain these fluids are known as immunologically privileged sites. These are sites of the body where viruses and pathogens, like Ebola virus, can remain undetected even after the immune system has cleared the virus from other sites of the body. Scientists are now studying how long the virus stays in these body fluids among Ebola survivors.

During an Ebola outbreak, the virus can spread quickly within healthcare settings (such as clinics or hospitals). Clinicians and other healthcare personnel providing care should use dedicated medical equipment, preferably disposable. Proper cleaning and disposal of instruments such as needles and syringes are important. If instruments are not disposable, they must be sterilized before additional use.

Ebola virus is killed using a U.S. EPA-registered hospital disinfectant with a label claim for a non-enveloped virus. On dry surfaces, like doorknobs and countertops, the virus can survive for several hours. However, in body fluids, like blood, the virus can survive up to several days at room temperature.

#### **Pets and livestock**

Serologic studies show that Ebola virus has been detected in dogs and cats living in areas affected by an Ebola outbreak, but there are no reports of dogs or cats becoming sick with EVD or spreading the Ebola virus to people or other animals. However, certain exotic or unusual pets (monkeys, apes, or pigs) have a higher risk of being infected with the virus and spreading it, if they are exposed to it.

Pigs are the only species of livestock known to be at risk of infection by an Ebola virus. In the Philippines and China, pigs are naturally infected with Ebola Reston virus, which does not cause illness in people. While pigs have developed illness when infected with an extremely high dose of Ebola virus (Zaire ebolavirus) in a laboratory setting, they are not known to become naturally infected with this virus strain, and there is no indication they are involved in the spread of this virus.

#### Monitoring, Isolation, and Quarantine

#### Active and direct active monitoring

Monitoring is defined in IDPH rules as the practice of watching, checking, or documenting medical findings of potential contacts for the development or non-development of an infection or illness. Monitoring may also include the institution of community–level social distancing measures designed to reduce potential exposure and unknown transmission of infection to others. Community-level social distancing monitoring measures may include, but are not limited to, reporting of geographic location for a period of time, restricted use of public transportation, recommended or mandatory mask use, temperature screening prior to entering public buildings or attending public gatherings.

When "active monitoring" occurs, the local public health authority assumes responsibility for establishing regular communication with potentially exposed individuals, including checking daily to assess for the presence of symptoms and fever, rather than relying solely on individuals to self-monitor and report symptoms if they develop. "Direct active monitoring" means the public health authority conducts active monitoring through direct observation. The purpose of active (or direct active) monitoring is to ensure that, if individuals with epidemiologic risk factors become ill, they are identified as soon as possible after symptom onset so they can be rapidly isolated and evaluated. Active (or direct active) monitoring could be either conducted on a voluntary basis or compelled by legal order if necessary. Active (or direct active) monitoring and prompt follow-up should continue and be uninterrupted if the person travels out of the jurisdiction.

Active monitoring should consist of, at a minimum, daily reporting of measured temperatures and symptoms consistent with Ebola (including severe headache, fatigue, muscle pain, fatigue or weakness, diarrhea, vomiting, abdominal pain, or unexplained hemorrhage) by the individual to the public health authority. Temperature should be measured using an FDA-approved thermometer (e.g. oral, tympanic or noncontact). The FDA approves all thermometers legally sold in the United States. People being actively monitored should measure their temperature twice daily, monitor themselves for symptoms, report as directed to the public health authority, and immediately notify the public health authority if they develop fever or other symptoms, or if they plan to leave the jurisdiction they are in prior to the end of monitoring. Initial symptoms can be as nonspecific as fatigue. Clinical criteria for required medical evaluation according to exposure level have been defined (see Annex D, Appendix 1 in IDPH EVD Plan) and should result in immediate isolation and evaluation. Medical evaluation may be recommended for lower temperatures or nonspecific symptoms based on exposure level and clinical presentation. If reporting to the public health authority does not occur, the local health authority should contact the person to ascertain his/her status. If necessary, direct active monitoring should be initiated to ensure regular ascertainment of the person's status.

For direct active monitoring, a public health authority directly observes the individual at least once daily to review symptom status and monitor temperature; a second follow-up per day may be conducted by telephone in lieu of a second direct observation. Direct active monitoring should include discussion of plans to work, travel, take public conveyances, or be present in congregate locations. Depending on the nature and duration of these activities, they may be permitted if the individual has been consistent with direct active monitoring (including recording and reporting of a second temperature reading each day), has a normal temperature and no symptoms whatsoever, and can ensure uninterrupted direct active monitoring by a public health authority.

For healthcare workers under direct active monitoring, public health authorities can delegate and/or coordinate the responsibility for direct active monitoring to the healthcare facility's occupational health program or the hospital epidemiologist. Facilities may conduct direct active monitoring by performing fever checks on entry or exit from the Ebola treatment unit and facilitate reporting during days when potentially exposed healthcare workers are not working. The occupational health program or hospital epidemiologist would report daily to the public health authority.

#### Isolation

Isolation means the separation of an individual or group who is reasonably believed to be infected with a quarantinable communicable disease from those who are not infected to prevent spread of the quarantinable communicable disease. An individual could be reasonably believed to be infected if he or she displays the signs and symptoms of the quarantinable communicable disease of concern and there is some reason to believe that an exposure had occurred.

#### Quarantine

Quarantine in general means the separation of an individual or group reasonably believed to have been exposed to a quarantinable communicable disease, but who is not yet ill (not presenting signs or symptoms), from others who have not been so exposed, to prevent the possible spread of the quarantinable communicable disease. IDPH rules include a provision for modified quarantine which involves imposing controlled movement and restrictions on participating in certain activities, without confining someone solely to their home. Modified quarantine is a selective, partial limitation of freedom of movement or actions of a person or group of persons who are or may have been exposed to a contagious disease or possibly contagious disease. Modified quarantine is designed to meet particular situations and includes, but is not limited to, the exclusion of children from school, the prohibition or restriction from engaging in a particular occupation or using public or mass transportation, or requirements for the use of devices or procedures intended to limit disease transmission. Any travel outside of the jurisdiction of the local health authority must be under mutual agreement of the health authority of jurisdiction and the public health official or officials who will assume responsibility.

Controlled movement limits the movement of people in quarantine or modified quarantine. For individuals subject to controlled movement under modified quarantine, travel by long-distance commercial conveyances (e.g., aircraft, ship, bus, train) should not be allowed. If travel is allowed, it should be by noncommercial conveyance, such as private chartered flight or private vehicle, and occur with arrangements for uninterrupted active monitoring. Federal public health travel restrictions may be used to enforce controlled movement. For people subject to controlled movement, use of local public transportation (e.g., bus, subway) should be discussed with and only occur with approval of the local public health authority.

#### Early Recognition and Reporting of Suspected Ebola Virus Exposures

Early recognition is critical to controlling the spread of Ebola virus. Healthcare providers should evaluate the patient's epidemiologic risk, including a history of travel to a country with widespread Ebola virus transmission or uncertain control measures or contact with a person with symptomatic Ebola within the previous 21 days.

If a diagnosis of Ebola is being considered, the patient should be isolated in a single room (with a private bathroom or covered bedside commode), and healthcare personnel should follow standard, contact, and droplet precautions, including the use of appropriate PPE. Infection control personnel should be contacted immediately.

If Ebola is suspected, the local or state health department should be immediately contacted for consultation and to assess whether testing is indicated and the need for initiating identification of contacts.

#### **Important Evaluation Factors**

During investigation of a confirmed case of Ebola, the cohort of potentially exposed individuals is determined based on a risk assessment of the incident. For each potentially exposed individual, both clinical presentation and level of exposure should be taken into account when determining appropriate public health actions, including the need for medical evaluation or active (or direct active) monitoring and the application of movement restrictions when indicated.

#### Recommendations for Evaluating Ebola Exposure Risk to Determine Appropriate Public Health Actions

This guidance provides public health authorities and other partners with a framework for determining the appropriate public health actions based on risk factors and clinical presentation. It also includes criteria for monitoring exposed people and for when movement restrictions may be indicated.

Federal communicable disease regulations, including those applicable to isolation and other public health orders, apply principally to arriving international travelers and in the setting of interstate movement. State and local authorities have primary jurisdiction for isolation and other public health orders within their borders. Thus, CDC recognizes that states, including Illinois, may make decisions about isolation, other public health orders, and active (or direct active) monitoring that impose a greater level of restriction than recommended by federal guidance, and that decisions and criteria to use such public health measures may differ by jurisdiction.

IDPH recommendations:

- 1. Symptomatic individuals in the high, some, or low (but not zero) risk categories who meet the symptom criteria for the category should undergo required medical evaluation with appropriate infection control precautions in place. Isolation orders may be considered if necessary to ensure compliance. Federal public health travel restrictions will be issued for individuals in the high risk category, and may be issued for those in the some risk or low (but not zero) risk categories if there is reasonable belief that the person poses a public health threat during travel. If medical evaluation results in individuals being discharged with a diagnosis other than Ebola, conditions as outlined for asymptomatic individuals in the relevant exposure category will apply until 21 days after the last potential exposure.
- 2. Asymptomatic individuals in the high risk category should be subject to modified quarantine orders, with direct active monitoring for 21 days after the last potential exposure. The individual should undergo direct active monitoring, have restricted movement within the community, and no travel on any public conveyances. Non-congregate public activities (e.g. going for a walk) while maintaining a 3-foot distance from others may be permitted. These individuals are subject to controlled movement with enforcement to include federal public health travel restrictions; travel, if allowed, should occur only by noncommercial conveyances, with coordination by origin and destination states to ensure a coordinated hand-off of public health orders, if issued, and uninterrupted direct active monitoring. (Category of order at baseline: formal court order)
- 3. Asymptomatic individuals in the some risk category should have direct active monitoring until 21 days after the last potential exposure. Additional restrictions may be implemented based on a specific assessment of the individual's situation. Factors to consider include the following: intensity of exposure (e.g., daily direct patient care versus intermittent visits to an Ebola treatment unit); point of time in the incubation period (risk falls substantially after 2 weeks); complete absence of symptoms; compliance with direct active monitoring; the individual's ability to immediately recognize and report symptom onset, self-isolate, and seek medical care;

and the probability that the proposed activity would result in exposure to others prior to effective isolation. (Category of order recommended at baseline: administrative order)

- 4. Asymptomatic individuals in the low (but not zero) risk category should be actively monitored until 21 days after the last potential exposure. Direct active monitoring is recommended for some individuals in this category. Individuals in this category do not require separation from others or restriction of movement within the community. For these individuals, IDPH recommends that travel, including by commercial conveyances, be permitted provided they remain asymptomatic and active (or direct active) monitoring continues uninterrupted. (Category of order recommended at baseline: administrative order)
- 5. **Individuals in the no identifiable risk category** do not require monitoring, separation from others or restriction of movement within the community *unless indicated because of a diagnosis other than Ebola*.

Active (or direct active) monitoring is justified for individuals in the some risk and low (but not zero) risk categories based on a reasonable belief that exposure may have occurred, though the exact circumstances of such exposure may not be fully recognized at any given time. Under such conditions, active (or direct active) monitoring provides a substantial public health benefit. Given the extent and nature of the epidemic, travelers from countries with widespread transmission or uncertain control measures may be unaware of their exposure to individuals with symptomatic Ebola infection, such as in community settings. Healthcare workers taking care of Ebola patients may have unrecognized exposure even while wearing appropriate PPE.

In addition to court-ordered modified quarantine, other court orders may be warranted if an individual fails to adhere to monitoring with recommended restrictions (activity/travel, etc.). Such noncompliance could include refusal to participate in a public health assessment by an individual with documented travel from a country with widespread transmission, uncertain control measures or other potential contact with a symptomatic Ebola patient. Without such information, public health authorities may be unable to complete a risk assessment to determine if an individual has been exposed to, or has signs or symptoms consistent with, Ebola. Medical evaluation will be required and isolation orders issued for travelers from a country with widespread transmission or uncertain control measures to cooperate with a public health assessment and appear ill.

#### Recommendations for specific groups and settings:

#### Healthcare workers

For the purposes of risk exposure to Ebola, regardless of country, direct patient contact includes doctors, nurses, physician assistants and other healthcare staff, as well as ambulance personnel, burial team members, and morticians. In addition, others (such as nonclinical staff and observers) who enter the treatment areas where Ebola patients are being cared for before completion of terminal cleaning and disinfection of the room would be considered to potentially be at risk of exposure to body fluids.

Clinical laboratory workers who use appropriate PPE and follow biosafety precautions, are not considered to have an elevated risk of exposure to Ebola, i.e., are considered to be in the low (but not zero) risk category. Laboratory workers in Biosafety Level 4 facilities are considered to have no identifiable risk. The high toll of Ebola virus infections among healthcare workers providing direct care to Ebola patients in countries with widespread transmission or uncertain control measures suggests that there are multiple potential sources of exposure to Ebola virus in these countries, including unrecognized breaches in PPE, inadequate decontamination procedures, and unrecognized exposure in patient triage areas or other healthcare settings. Due to this higher risk, healthcare workers who provide direct patient care to Ebola patients and others who enter a patient care area of an Ebola treatment unit while wearing appropriate PPE, as well as healthcare workers who provide patient care in any healthcare setting, are classified in the some risk category, for which additional precautions may be recommended upon their arrival in the United States. Healthcare workers who have no direct patient contact and no entry into active patient management areas, including epidemiologists, contact tracers, and airport screeners, are not considered to have an elevated risk of exposure to Ebola, i.e., are considered to be in the low (but not zero) risk category.

Healthcare workers who provide care to Ebola patients in U.S. facilities while wearing appropriate PPE and with no known breaches in infection control are considered to have low (but not zero) risk of exposure, because of the possibility of unrecognized breaches in infection control and should have direct active monitoring. As long as these healthcare workers have direct active monitoring and are asymptomatic, there is no reason for them not to continue to work in hospitals and other patient care settings. There is also no reason for them to have restrictions on travel or other activities. Review and approval of work, travel, use of public conveyances, and attendance at congregate events are not indicated or recommended for such healthcare workers, except to ensure that direct active monitoring continues uninterrupted.

Healthcare workers caring for Ebola patients in a U.S. facility where another healthcare worker has been diagnosed with confirmed Ebola without an identified breach in infection control may be considered to have a higher level of potential exposure. A similar determination may occur if an infection control breach is identified retrospectively during investigation of a confirmed case of Ebola in a healthcare worker. These individuals would be potentially subject to additional restrictions, including controlled movement and the potential use of modified quarantine orders, until 21 days after the last potential unprotected exposure.

In U.S. healthcare facilities where an unidentified breach in infection control has occurred, assessment of infection control practices in the facility, remediation of any identified deficiencies, and training of healthcare work ers in appropriate infection control practices should be conducted. Following remediation and training, asymptomatic, potentially exposed healthcare workers may be allowed to continue to take care of Ebola patients, but care of other patients should be restricted. For these healthcare workers, the last potential unprotected exposure is considered to be the last contact with the Ebola patient prior to remediation and training; at 21 days after the last unprotected exposure, they would return to the low (but not zero) risk category under direct active monitoring. Healthcare workers whose first Ebola patient care activities occur after remediation and training are considered to be in the low (but not zero) risk category.

#### Crew on public conveyances

Crew members on public conveyances where an individual with Ebola was present, such as commercial aircraft or ships, who are not subject to controlled movement are also not subject to occupational restriction and may continue to work on the public conveyance while under active monitoring.

#### People with confirmed Ebola virus disease

For people with confirmed Ebola, isolation and movement restrictions are removed upon determination by public health authorities that the person is no longer considered to be infectious.

# 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 Boola 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. Newertheless, 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 Biola.



- + If PPE is available and direct patient contact necessary, a single staffmember (iffained in proper domning 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 & sufgical face mask,
  - B. Impermeable gown, and
  - C. Two pails 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 domning and Temoval of PPE should be Teviewed: http://www.cdc.gov/hicpac/2007IP/2007ip\_fig.html

NOTE: Patients with exposufe history and Ebola-compatible symptoms seeking cafe by phone should be advised to Ternain in place, minimize exposufe 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 Fisk factors so they can affive 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;

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

U.S. Centers for Disease Control and Prevention

2014 October 31 8-0PM 05\_252407

Exposure Category	Clinical Criteria	Actions
<ul> <li>High Risk includes any of the following:</li> <li>Percutaneous (e.g. needle stick) or mucous membrane exposure to blood or bodily fluids of a person with a HCID</li> <li>Exposure to blood or body fluids (including but not limited to feces, saliva, sweat, urine, vomit or semen) of a person with a HCID without appropriate PPE.</li> <li>Processing body fluids of a person with a HCID without PPE or biosafety precautions</li> <li>Direct contact with a dead body without PPE in a location with widespread transmission.</li> <li>Having lived in the immediate household and provided direct care to an individual with a</li> </ul>	<ul> <li>Fever (subjective fever or measured temperature &gt;100.3<sup>I®</sup>F or any of the following: <ul> <li>Severe headache</li> <li>Muscle pain</li> <li>Vomiting</li> <li>Diarrhea</li> <li>Stomach pain</li> <li>Unexplained bleeding or bruising</li> </ul> </li> </ul>	<ul> <li>Implement rapid isolation in a private room with a private bathroom</li> <li>Immediately contact Infection Prevent and immediate implement PPE requirements and isolation precautions.</li> <li>Notify Local Health Department</li> <li>Medically Evaluate the patient</li> <li>If patient is stable consider transportation to an Evaluation Center for further testing. If unstable and HCID positive then transport to a Treatment or Specialty Center.</li> <li>If medically evaluated and discharged with a diagnosis other than a HCID, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> </ul>
HCID.	Asymptomatic (no fever or other symptoms consistent an HCID)	Continued Treatment as necessary Consideration for discharge: Consult with Local Health Officials for possible continued monitoring and/or quarantine/isolation considerations

Table: Summary of IDPH Interim Guidance for Monitoring and Movement of People Exposed to Ebola Virus

Exposure Category	Clinical Criteria	Actions
<ul> <li>Some Risk includes any of the following:         <ul> <li>In locations with widespread transmission</li> <li>Direct contact while using appropriate PPE with a person with a HCID or with the persons bodily fluids</li> <li>Any direct patient care in other healthcare settings</li> </ul> </li> <li>Close (but not high risk) contact in households, healthcare facilities or community settings with a person with a HCID         <ul> <li>Close contact is defined as being for a prolonged period of time while not wearing appropriate PPE within approximately 3 feet of a patient*                  *Depending upon activities, may include flight attendants who interacted with an individual with "some risk" on an airplane</li> </ul></li></ul>	Fever (subjective fever or measured temperature >100.3°F or any of the following: <ul> <li>Severe headache</li> <li>Muscle pain</li> <li>Vomiting</li> <li>Diarrhea</li> <li>Stomach pain</li> <li>Unexplained bleeding or bruising</li> </ul> <li>Asymptomatic (no fever or other symptoms consistent an HCID)</li>	<ul> <li>Implement rapid isolation in a private room with a private bathroom</li> <li>Immediately contact Infection Prevent and immediate implement PPE requirements and isolation precautions.</li> <li>Notify Local Health Department</li> <li>Medically Evaluate the patient</li> <li>If patient is stable consider transportation to an Evaluation Center for further testing. If unstable and HCID positive then transport to a Treatment or Specialty Center.</li> <li>If medically evaluated and discharged with a diagnosis other than a HCID, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> <li>Continued Treatment as necessary</li> <li>Consult with Local Health Officials for possible continued monitoring and/or quarantine/isolation considerations</li> </ul>
<ul><li>No identifiable risk:</li><li>Contact with an asymptomatic person who</li></ul>	Symptomatic (any)	Routine medical evaluation and management of illness as needed
<ul> <li>Contact with an asymptomatic person who had contact with a patient known to have a HCID</li> <li>Contact with a person known to have a HCID before symptoms persisted</li> <li>Having been more than 21 days previously in a location with widespread transmission</li> <li>Having been in a location without widespread transmission and not have any other exposures</li> </ul>	Asymptomatic	No actions necessary

•	Aircraft or ship crew members who remain	
	on or in the immediate vicinity of the	
	conveyance and have no direct contact	
	with anyone from the community during	
	the entire tome that the conveyance is	
	present in a location with widespread	
	transmission	

#### Monitoring and Movement Guidance Table

Exposure Category	Clinical Criteria	Actions
<ul> <li>Low (but not zero) risk includes and of the following:</li> <li>Having been in a location with widespread HCID transmission within the past 21 days and having no known exposures</li> <li>Having brief direct contact (e.g. shaking hands) with not wearing appropriate PPE with a person known to have a HCID</li> <li>Brief proximity, such as being in the same room(non-healthcare setting) for a brief period of time, with a person known to have a HCID</li> <li>In locations without widespread transmission, direct contact with a known</li> </ul>	Fever (subjective fever or measured temperature >100.3°F or any of the following: • Vomiting • Diarrhea • Unexplained bleeding or bruising	<ul> <li>Implement rapid isolation in a private room with a private bathroom</li> <li>Immediately contact Infection Prevent and immediate implement PPE requirements and isolation precautions.</li> <li>Notify Local Health Department</li> <li>Medically Evaluate the patient</li> <li>If patient is stable consider transportation to an Evaluation Center for further testing. If unstable and HCID positive then transport to a Treatment or Specialty Center.</li> <li>If medically evaluated and discharged with a diagnosis other than a HCID, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> </ul>
HCID patient while using appropriate PPE	Asymptomatic (no fever or other	Continued Treatment as necessary
<ul> <li>Traveled on an aircraft with a person with a</li> </ul>	symptoms consistent an HCID)	Consideration for discharge:
HCID		<ul> <li>Consult with Local Health Officials for possible continued monitoring and/or quarantine/isolation considerations</li> </ul>

## Case No.\_\_\_\_\_Date \_\_\_\_\_ ORDER FOR OBSERVATION AND MONITORING

			has determined, based upon the ed with or exposed to a danger	
disease. As a result, it is	required that this	individual must undergo	observation and monitoring, and in isolation until he/she is no lo	depending upon the results of
Section A: Type of Order	*			
This order for observation		s made upon (check all th	nat apply):	
□ Voluntary(consented)		······································		
•	· · · · ·	idual Should Be Screen	ed to Determine if Isolation or Q	uarantine Are Appropriate
Section B: Information				
Individual Subject to Ol				
		(First)	(M.I.) Date of	Birth:
Member of a Househ	old			
Current Location of Ind	ividual• (If a hea	thears facility include	room number).	
(State/Country)	(Zip)	(Telephone)	(Apt./Rm.#)(City) (Fax)	
(Cell/pager)		(Email)	` /	
		、 /		
Permanent Address:				
Address: (Street)			(Apt./Rm.#)	(City)
			(Fax)	
(Cell/pager)		(Email)		
N	- <b>•</b>			
Name of Treating Physic Name: (Last)		(First)		
Name. (Last)		<u>_(1'l1st)</u>		
Address: (Street)			(Ant / Rm #)	(City)
(State/Country)	(Zip)	(Telephone)	(Apt./Rm.#) (Fax) (Cell/pag	er)
		(1010p110110)		
	()			
<b>Emergency or Other Co</b>				
Name: (Last)		_(First)	Relationship:	
Address: (Street)			(Apt./Rm.#)_ (Fax)	(City)
(State/Country)	(Zip)	(Telephone)	(Fax)	
(Cell/pager)		(Email)		
Section C: Department	of Public Health	Findings		
			der has or is suspected of having	or having been exposed to the
following dangerously	contagious or inf	ectious disease:		

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

Describe the facts in support of Observation and Monitoring:

Duration of Observation and Monitoring:

Section D: Terms of Isolation				
The individual subject to this order is required t	0			
Instructions:				
Healthcare facility observation and monitori	ng: (Follow instructions	s provided by healthc	care personnel)	
Home Observation and Monitoring: Wear a protective mask when in presence of	fothers			
Use separate bathroom from other ho		ssible)		
Wash hands after using bathroom and	· •			
Monitor your body temperature and r	<b>U</b>	•		
Report body temperature results to lo				
Sleep in a separate room from other l				
Call			(name of ]	health department)
At (xxx)xxx-xxxx if you are exp	eriencing the following	symptoms:	、	1 /
Receive Specified Treatment	Medication	Dosage	Days	
Other Restrictions/Instructions:				

Case No.

Date

#### Section E: Statement of Legal Rights and Duties

- 1. The\_\_\_\_\_\_(name of health department) has ordered you to undergo observation and monitoring or to receive specified treatment because it is believed you have or are suspected of having or have been exposed to a dangerously contagious or infectious disease which must be controlled in order to protect others from becoming infected.
- 2. Observation and monitoring must not be reasonably likely to lead to serious harm to the affected individual.
- 3. \_\_\_\_\_\_(name of health department) requests that you sign the consent agreement contained in Section G of this order. If you consent to this order, the results of any observation and monitoring may subject you to isolation or quarantine. If you refuse to consent to this order and your refusal results in uncertainty regarding whether you have been exposed to or are infected with a dangerously contagious or infectious disease, then you may be subject to isolation or quarantine.
- 4. If you become subject to isolation or quarantine based upon your consent or refusal to consent to this order, you shall have the right to counsel. If you are indigent, the court will appoint counsel for you.
- 5. The\_\_\_\_\_(name of health department) will respect and accommodate your religious beliefs to the extent feasible without endangering the public's health.

		Case No.		Date
Section F: Signature	of Authorizing O	fficial		
				(name of health department)
Address:(Street)		(Apt./Rm.#)	(City)	
(State/Country)	(Zip)	(Telephone)	_(Fax)	
(Cell/pager)		(Email)		
Signature		·	Date	and Time
Title				

#### Section G: Consent Agreement to Observation and Monitoring (Optional, if individual consents)

I,\_\_\_\_\_, voluntarily agree to undergo observation and monitoring as ordered by the

(name of health department). I understand that my compliance with this isolation order is important to safeguarding the public's health and that if I violate its terms, I will put myself at risk, endanger the community's health, and risk spreading a communicable disease to others. I have received a copy of, and have read or had explained to me, information on the disease \_\_\_\_\_\_. I understand the benefits and risks of the prescribed treatments. I consent to receive the treatments listed on this form. The terms and conditions of this order have been explained to me, I have had a chance to ask questions, and they were answered to my satisfaction.

I understand that I must comply with this order and that if I wish to withdraw my voluntary consent to this order I will notify

(name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours). In understand that if I consent to this order, the results of any observation and monitoring may subject me to isolation or quarantine. I understand that if I refuse to consent to this order and my refusal results in uncertainty regarding whether I have been exposed to or are infected with a dangerously contagious or infectious disease, then I may be subject to isolation or quarantine.

I understand that if I have any questions regarding this order I should contact\_

(name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours).

Signature		Da	te and Time		
Section H: Consent for Minor (Optional, if individual is a minor)					
Consent by	Parent and/or Legal Guardian:				
Name	of	Parent	/	Legal	
Guardian		<u>          I</u>	am	(check	
one)	Parent	Legal Guardi	lan		

I certify that I am the parent and/or legal guardian of the minor child whose name is listed above (Child). I have read and fully understand the nature of this Order and agree to assume the full responsibility for compliance with this Order with respect to the Child.

Signature	Date and Time
Section I: Legal Authority	

This order is issued pursuant to the legal authority contained in the Department of Public Health Act (20 ILCS 2305/2).

#### SUBJECT: Signs and Symptoms of Ebola Virus Disease (EVD)

Symptoms of a High Consequence Disease include:

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

Symptoms may appear anywhere from 2 to 21 days after contact with the virus, with an average of 8 to 10 days. Many common illnesses can have these same symptoms, including influenza (flu) or malaria.

A HCID is a rare but severe and sometimes deadly disease. Recovery from a HCID depends on good supportive clinical care and the patient's immune response. Studies show that survivors of Ebola virus infection have antibodies (molecules that are made by the immune system to label invading pathogens for destruction) that can be detected in the blood up to 10 years after recovery.

#### SUBJECT: Guidance for Ambulatory/Outpatient 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.

The guidance is most relevant for hospital and other outpatient facility staff caring for a patient under investigation (PUI) or patient with confirmed Ebola virus disease (EVD).

- 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.
- 2. Isolate Patient If a diagnosis of EVD is being considered, the patient should be isolated in a single room (with a private bathroom), and healthcare personnel should follow standard, contact, and droplet precautions including the use of appropriate personal protective equipment (PPE).
  - 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 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
  - 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.
    - $\circ$  Do not touch patient or perform any procedures unless absolutely necessary. Follow instructions on the attached algorithm.
    - $\circ$  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.
  - Patient with compatible travel history or Ebola exposure in the last 21 days but none of the above symptoms

     Call your local public health department to help ensure the routine 21 days of monitoring are
     completed by the health department.
    - Patients 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:
      - $\ensuremath{\circ}$  Discontinue precautions, manage patient in routine manner

# Annex E - Public Answering Points (PSAPS)

# Interim Guidance for Emergency Medical Services (EMS) Systems and 9-1-1 Public Safety Answering Points (PSAPs) for Management of Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) in the United States

- The likelihood of contracting Ebola virus disease (EVD) in the United States is extremely low unless a person has direct contact with the blood or body fluids (like urine, saliva, sweat, feces, vomit, breast milk, amniotic fluid, and semen) of a person with EVD who has symptoms or the blood or body fluids of a person who has died of EVD.
- It is important for ECC/PSAPs to question callers about:
- Having traveled internationally to a country with ongoing EVD transmission or having had contact with a person with suspected or confirmed EVD within the previous 21 days; AND
- Signs and symptoms of EVD (such as fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, and unexplained hemorrhage).
- Managers of 9-1-1 ECC/PSAPs, EMS agencies, EMS systems, and agencies with medical first responders such as fire and law
  enforcement should collaborate with local public health authorities to develop coordinated plans for responding to a PUI in a given
  jurisdiction, including the possibility of designating certain teams for this response.
- All personnel should be educated and trained regarding Ebola response protocols. Those who may respond to a PUI also should be educated and trained in the use of the appropriate PPE consistent with their response role.
- If ECC/PSAP call takers have information alerting them to a PUI, they should make sure first responders and EMS clinicians are made aware of the potential for a patient with possible exposure/signs and symptoms of EVD before responders arrive on scene. This will enable EMS clinicians to select and correctly put on PPE following the principles described in CDC's <u>Identify, Isolate, Inform: Emergency Department Evaluation and Management for Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) and Guidance on Personal Protective Equipment (PPE) To Be Used By Healthcare Workers during Management of Patients with Confirmed Ebola or Persons under Investigation (PUIs) for Ebola who are Clinically Unstable or Have Bleeding, Vomiting, or Diarrhea in U.S. Hospitals, Including Procedures for Donning and Doffing PPE. The fundamental principle of standard and transmission-based precautions is to prevent contact with blood or potentially infectious body fluid.
  </u>
- Before treating and/or transporting a patient or PUI, personnel should have been educated, trained, and demonstrated competency in all Ebola-related infection control practices and procedures, specifically in donning and doffing proper PPE.
- When EMS clinicians arrive at the scene, they should immediately check for symptoms and risk factors for EVD and don PPE appropriate to the situation. When transporting a PUI, EMS clinicians should notify the receiving healthcare facility in advance, so that proper infection control precautions are ready to be implemented at the healthcare facility before arrival. EMS medical directors and EMS agencies should collaborate with healthcare and public health agencies to define local or regional protocols for transporting a PUI to an appropriate facility for EVD triage and care.
- Local protocols should be developed for cleaning and disinfecting of the ambulance and equipment as well as <u>disposing of medical</u> <u>waste</u> consistent with this guidance.

#### Background

Ebola virus spreads through direct contact (such as through broken skin or mucous membranes in the eyes, nose, or mouth) with blood or body fluids (urine, saliva, sweat, feces, vomit, breast milk, amniotic fluid, and semen) of a person who is sick with or has died from Ebola Virus Disease (EVD) or direct contact with objects (such as needles and syringes) contaminated with body fluids from a person sick with EVD or the body of a person who died from EVD. Signs and symptoms of EVD include fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal (stomach) pain, and unexplained hemorrhage (e.g., bleeding from gums, blood in urine, or bruising). Symptoms may appear anywhere from 2 to 21 days after contact with the virus, with an average of 8 to 10 days.1

EVD can cause illness similar to other travel-related infectious diseases. Attention is needed when coming into direct contact with a recent traveler from a country with ongoing Ebola virus transmission and who also has signs and symptoms of EVD. The initial signs and symptoms of EVD are often nonspecific and similar to other infectious diseases, such as malaria and typhoid. EVD should be considered in anyone with a fever who has traveled to, or lived in, an area where EVD is present.2

Most patients with fever and other non-specific signs and symptoms in the United States will not have EVD. Nevertheless, because early EVD symptoms are similar to those seen with other febrile illnesses, providers should consider and assess patients for the possibility of EVD. Transport by emergency medical services (EMS) presents unique challenges because of the uncontrolled nature of the work, the potential for resuscitation procedures being needed, enclosed space during transport, and a varying range of patient acuity.

#### Key safe work practices include avoiding

Unprotected exposure to blood or body fluids of patients with EVD through contact with skin, mucous membranes of the eyes, nose, or mouth.

Injuries with contaminated needles or other sharp objects.

Aerosol-generating procedures when possible.

Coordination among 9-1-1 ECC/PSAPs, the EMS system, healthcare facilities, and the public health system is important. Educating, training, and exercising with all stakeholders is critical when preparing to respond to PUIs. Each 9-1-1 and EMS system should include an EMS medical director to provide appropriate medical oversight.

#### **Case Definition for EVD**

CDC's most current case definition for Ebola may be accessed at: Case Definition for Ebola Virus Disease (EVD)

#### **Recommendations for 9-1-1 PSAPs**

If a community is considered at higher risk for having patients with EVD, state and local EMS authorities should coordinate with state and local public health, ECC/PSAPs, and other emergency call centers to use modified caller queries about EVD, outlined below. This should 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. Modified Caller Queries

viodified Caller Queries

It will be important for ECC/PSAPs to question callers and determine the possibility of anyone having signs or symptoms and risk factors for EVD. This information should be communicated immediately to EMS clinicians before arrival in order to assign the appropriate EMS resources. Local or state public health officials should also be notified. ECC/PSAPs should utilize medical dispatch procedures that are coordinated with their EMS medical director and with the local public health department.

- Use modified caller queries that ask for risk factors for EVD.
- If ECC/PSAP call takers have information alerting them to a PUI, they should make sure any first responders and EMS clinicians are made aware of the potential for a patient with possible exposure/signs and symptoms of EVD before the responders arrive on scene.
- If responding to a report of an ill traveler at an airport or other port of entry to the United States, the ECC/PSAP or EMS unit should notify the CDC Quarantine Station for the port of entry. For contact information check the CDC Quarantine Station Contact List. The ECC/PSAP or EMS unit also may call CDC's Emergency Operations Center at (770) 488-7100 to be connected with the appropriate quarantine station.

#### **Recommendations for EMS and Medical First Responders**

For the purposes of this section, "EMS provider" means prehospital EMS and medical first responders. These EMS provider 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 providers to modify their practices as described below.

#### **Patient assessment**

- To minimize potential exposure, only one EMS provider should approach the patient and perform the initial screening from at least 3 feet away from the patient. Based on the initial screening, if the EMS provider suspects the patient could have EVD, then PPE should be put on before coming into close contact with the patient. Keep other emergency responders further away, while assuring they are still able to support the provider with primary assessment duties.
- No one should have direct contact with a patient who may have EVD without wearing appropriate PPE.
- During patient assessment and management, EMS personnel should consider the signs, symptoms, and risk factors of EVD. A relevant exposure history should be taken including:
  - Residence in, or travel to, a <u>country or area with widespread Ebola virus transmission or cases in urban settings with</u> <u>uncertain</u> <u>control measures.</u>
  - Contact with blood or body fluids (including but not limited to urine, saliva, vomit, sweat, and diarrhea) of a PUI or patient with confirmed EVD.
- Patients who meet the criteria should be further questioned regarding the presence of signs or symptoms of EVD such as fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, diarrhea, and unexplained hemorrhage.

#### Safety and PPE

Based on the clinical presentation of the patient, there are two PPE options.

- If the patient is not exhibiting obvious bleeding, vomiting, or diarrhea and does not appear to be acutely ill, <u>EMS personnel should follow the</u> <u>PPE guidance for clinically stable PUIs</u>.
- If the patient is exhibiting obvious bleeding, vomiting, or diarrhea or is clinically unstable then EMS personnel should wear PPE described in <u>Guidance on Personal Protective Equipment (PPE) To Be Used By Healthcare Workers during Management of Patients with Confirmed Ebola</u> or Persons under Investigation (PUIs) for Ebola who are Clinically Unstable or Have Bleeding, Vomiting, or Diarrhea in U.S. Hospitals, Including

<u>Procedures for Donning and Doffing PPE</u>. This PPE should also be worn if the patient requires invasive or aerosol-generating procedures (such as intubation, suctioning, cardiopulmonary resuscitation). Extreme care should be followed in these instances.

- PPE should be put on before entering a scene with a PUI and continued to be worn until clinicians no longer are in contact with the patient.
   PPE should be carefully put on and removed under the supervision of a trained observer as described in <u>Guidance on Personal Protective</u> Equipment (PPE) To Be Used By Healthcare Workers during Management of Patients with Confirmed Ebola or Persons under Investigation (PUIs) for Ebola who are Clinically Unstable or Have Bleeding, Vomiting, or Diarrhea in U.S. Hospitals, Including Procedures for Donning and Doffing PPE.
- If blood, body fluids, secretions, or excretions from a PUI come into direct contact with the EMS clinicians' unprotected skin or mucous
  membranes, then the EMS clinician should immediately STOP working. They should wash the affected skin surfaces with a cleansing or
  antiseptic solution, and mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution, as per
  usual protocols. All waste should be placed in a biohazard bag. EMS clinicians should immediately report exposure to an occupational health
  provider, supervisor, or designated infection control officer for immediate care.

#### Patient management and Infection Control

EMS clinicians can safely manage a PUI by following the recommendations for appropriate PPE and following these recommendations:

- Use caution when approaching a PUI. On rare occasions, illness can cause delirium, with erratic behavior, such as flailing or staggering. This type of behavior can place EMS clinicians at additional risk of exposure.
- Keep the patient separated from others as much as possible.
- Limit the number of personnel who care for a PUI. All personnel within the range of coughs and splashes (i.e., 6 feet) of a PUI must wear PPE.
- Limit activities, especially during transport that can increase the risk of exposure to infectious material.
- Invasive procedures should be limited to those essential for patient management.
- Limit the use of needles and other sharps as much as possible. Needles and sharps should be handled with extreme care and disposed in
  puncture-proof, sealed containers specific to the care of this patient, in accordance with <u>OSHA's Bloodborne Pathogens Standard</u>, 29 CFR
  1910.1030. Do not dispose of used needles and sharps in containers that have sharps from other patients in them.
- Consider giving the patient oral medicine to reduce nausea, per medical director protocols and consistent with scope of practice.
- If patient is vomiting, give them a large red biohazard bag to contain any emesis.
- If patient has profuse diarrhea, consider wrapping the patient in an impermeable sheet to reduce contamination of other surfaces.
- Prehospital 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
  (for example, a moving vehicle) increases risk of exposure to infectious pathogens for EMS clinicians. Perform these procedures according
  to protocol under safer circumstances (e.g., when the vehicle has stopped, upon arrival at the hospital destination) and wear the
  PPE
  recommended for use during aerosol-generating procedures.
- Donning and doffing of PPE must be supervised by a trained observer to ensure proper completion of established PPE protocols. In collaboration with the receiving hospital, EMS agencies should consider how best to facilitate a supervised doffing process.

#### Prehospital care considerations

EMS systems should design their procedures to accommodate their local operational challenges while still following the principles of CDC PPE guidance.

- It may be as simple as having one clinician 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.
- There may be situations where a patient must be carried and multiple personnel are required to put on PPE. In those instances, EMS clinicians having had contact with the patient must remain in the back of the ambulance and should not join or serve as the driver.
- EMS agencies may consider sending additional resources to eliminate the need for putting on PPE by additional clinicians. For example, a dedicated driver for the ambulance may not need to wear PPE if they remain > 6 feet from the patient and other EMS clinicians, and do not provide patient care.
- Doffing of PPE must be performed with meticulous care to prevent self-contamination. See guidance on PPE doffing and ensure education and training emphasizes adherence to a standardized protocol.

Additional Considerations

- Prepare and use safe procedures to treat and transport the patient to the hospital.
- The person driving the ambulance should contact the receiving hospital and follow local or regional protocols to transport the patient to the receiving hospital.
- Remove and keep nonessential equipment away from the patient on the scene and in the ambulance. This will eliminate or minimize contamination.
- Avoid contamination of reusable porous surfaces not designated for single use. Cover the stretcher with an impermeable material.
- Conduct appropriate patient assessment according to established protocols, using minimal equipment.

- Prepare and use safe procedures to treat and transport the patient to the hospital.
- The EMS provider driving the ambulance should contact the receiving hospital and follow local or regional protocols to transport the patient to the receiving hospital.
- Remove and keep nonessential equipment away from the patient on the scene and in the ambulance. This will eliminate or minimize contamination.
- Avoid contamination of reusable porous surfaces not designated for single use. Cover the stretcher with an impermeable material.
- Conduct appropriate patient assessment according to established protocols, using minimal equipment.

#### EMS Transport of Patient to a Healthcare Facility

People who may have an exposure history and signs and symptoms suggestive of EVD should be transported to a healthcare facility prepared to further evaluate and manage the patient as instructed by EMS medical direction and local/regional protocols. These should be consistent with the predefined transportation/destination plan developed by public health officials, hospital, medical, and EMS personnel.

- Isolate the driver from the patient compartment.
- During transport, ensure that an appropriate disinfectant (EPA-approved hospital grade disinfectant from List L or List Q) is available in spray bottles or as commercially prepared wipes.

#### **Interfacility Transport**

EMS personnel involved in the interfacility transfer of PUIs or patients with confirmed EVD should follow <u>donning and doffing procedures as</u> <u>recommended in CDC guidance</u>. Provide patient care as needed to minimize contact with the patient and follow infection control guidelines noted below.

#### **Documentation of patient care**

- Documentation of patient care should be done after EMS clinicians have completed their personal cleaning and decontamination of equipment and the vehicle. Any written documentation should match the verbal communication given to the emergency department providers at time of patient handover.
- EMS documentation should include a listing of public safety providers involved in the response and level of contact with the patient (e.g., no contact with patient, provided direct patient care). This documentation may need to be shared with local public health authorities.

#### **Cleaning EMS Transport Vehicles after Transporting a PUI for EVD**

The following are general guidelines for cleaning or maintaining EMS transport vehicles (i.e., ambulances) and equipment after transporting a PUI:

- Personnel performing cleaning and disinfection where body fluids from a PUI are present should wear PPE as recommended by CDC. If no body fluids from a patient with EVD are present, follow <u>PPE guidance for PUIs who are Clinically Stable and Do Not Have Bleeding,</u> <u>Vomiting, or Diarrhea</u>.
- Use an EPA-registered hospital disinfectant from List L or List Q<sup>3, 4</sup> to disinfect environmental surfaces in the transporting vehicle and rooms of PUIs or patients with confirmed EVD. Cleaning and decontaminating surfaces or objects soiled with blood or body fluids are addressed below. There should be the same careful attention to the safety of EMS personnel during cleaning and disinfection of transport vehicles as during care of the patient.
- Patient-care surfaces (including stretchers and wheels, railings, door handles, medical equipment control panels, 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 thoroughly after each transport.
- A blood spill or spill of other body fluids or substances should be managed by personnel wearing correct PPE. This includes removing bulk spill matter, cleaning the soiled site, and then disinfecting the site. Follow the chemical disinfectant product's labeled instructions and dispose of the potentially contaminated materials used during the cleaning and disinfecting process as <u>recommended in CDC guidance</u>.
- Contaminated reusable patient care equipment (such as glucometer, blood pressure cuff) should be placed in biohazard bags and labeled for cleaning and disinfection or disposal according to agency policies and manufacturer recommendations. Reusable equipment should be cleaned and disinfected according to manufacturer's instructions by trained personnel wearing correct PPE. Avoid contamination of reusable porous surfaces not designated as single use.
- Use only a mattress and pillow with intact plastic or other covering that fluids cannot penetrate.
- To reduce exposure among staff to potentially contaminated textiles (cloth products) while laundering, discard used linens and nonfluidimpermeable pillows or mattresses as appropriate at the receiving facility.

Ebola is a Category A infectious substance regulated by the U.S. Department of Transportation's 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.<sup>5, 6</sup> This includes: disposable medical equipment; sharps; linens; and used healthcare products such as soiled absorbent pads or dressings, emesis pans, portable toilets; used PPE such as, gowns or coveralls, masks, gloves, goggles, face shields, respirators, and booties; and contaminated waste from cleaning. EMS systems should work with designated receiving hospitals to dispose of waste from PUIs.

#### Follow-up and/or Reporting Measures by EMS Clinicians After Caring for a PUI for EVD

- EMS clinicians should be aware of the follow-up and/or reporting measures they should take after caring for a PUI.
- EMS agencies should develop policies for monitoring and management of EMS personnel potentially exposed to Ebola virus.
- EMS agencies should develop sick-leave policies for EMS personnel that are nonpunitive, flexible, and consistent with public health guidance.
- Ensure 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, urine, saliva, sweat, feces, vomit, breast milk, amniotic fluid, semen, or diarrhea should immediately
  - STOP working and wash the affected skin surfaces with a cleansing or antiseptic solution, and mucous membranes (such as conjunctiva of the eye) should be irrigated with a large amount of water or eyewash solution, as per usual protocols. All wipes and solution should be placed in a biohazard bag.
  - Contact occupational health/supervisor/designated infection control officer for immediate assessment and access to postexposure management services.
  - Receive medical evaluation and follow-up care, based upon EMS agency policy and consultation with local, state, and federal public health authorities. Additional monitoring and movement restrictions may be imposed by public health authorities for personnel with unprotected exposure to a patient with EVD.
- All mission personnel should be advised to self-monitor for a period of 21 days after the last known contact with the patient with EVD. They should immediately report elevated body temperature or subjective fever or any other <u>signs or symptoms consistent with EVD</u> to their occupational health/supervisor/designated infection control officer.