### ILLINOIS DEPARTMENT OF PUBLIC HEALTH

# EBOLA VIRUS DISEASE (EVD) PREPAREDNESS AND RESPONSE PLAN

June 2019

This page intentionally left blank.

### Table of Contents

| Background   | 3  |
|--|----|
| Purpose  | 3  |
| Scope  | 3  |
| Situation Overview   | 3  |
| Assumptions  | 3  |
| Concept of Operations  | 4  |
| Patient Presentation   | 5  |
| Quarantine Station at O'Hare airport   | 5  |
| Ambulatory Care  | 5  |
| Emergency Medical Services (EMS)   | 5  |
| Ebola Assessment Hospitals   | 6  |
| Ebola Treatment Centers  | 6  |
| Local/Regional-level Responsibilities  | 7  |
| Local Health Departments (LHDs)  | 7  |
| Health Care Coalitions   | 8  |
| Direction and Control  | 8  |
| Centers for Disease Control and Prevention (CDC)   | 8  |
| Illinois Department of Public Health (IDPH)  | 9  |
| Illinois Emergency Management Agency (IEMA)  | 11 |
| Illinois Environmental Protection Agency (IEPA)/Illinois Department of Transportation (IDOT) | 12 |
| Recovery, Demobilization, and Debriefing   | 12 |
| Plan Development and Maintenance   | 12 |
| Authorities and References   | 13 |
| Annexes  | 14 |
| Acronyms   | 15 |

### <u>Annexes</u>

| Annex A Ebola Health Care Facilities and Resources Map                 | 16 |
|--|----|
| Annex B Ambulatory/Outpatient Care Guidance                            | 17 |
| Appendix 1 Ambulatory Care Evaluation Algorithm                        |    |
| Appendix 2 EMTALA Guidance   |    |
| Appendix 3 Ebola Contact and Droplet Precautions                       |    |
| Tab A Personal Protective Equipment Guidance                           |    |
| Appendix 4 Ebola Environmental Infection Control Measures              |    |
| Tab A Disinfectants for Use Against Ebola Virus                        |    |
| Appendix 5 Identification of Persons Under Investigation (PUI) for EVD |    |
| Annex C Emergency Medical Services (EMS) Guidance                      | 44 |
| Appendix 1 Ebola Capable Ambulance Services in Illinois                | 50 |
| Appendix 2 Ambulance Set-Up Guidance                                   |    |
| Annex D Monitoring Guidance  | 53 |
| Appendix 1 Monitoring and Movement Guidance Table                      |    |
| Appendix 2 Order for Observation and Monitoring                        |    |
| Appendix 3 Signs and Symptoms of Ebola Virus Disease                   |    |
| Annex E Isolation and Quarantine Guidance                              | 66 |
| Appendix 1 Order for Isolation   |    |
| Appendix 2 Order for Quarantine  | 72 |
| Annex F Regional Tiered Health Care Coalition Planning Guidance        | 76 |
| Appendix 1 Preparing U.S. Hospitals for Ebola Infographic              |    |
| Annex G IDPH Response Management                                       | 82 |
| Appendix 1 Sample IDPH Leadership Meeting Agenda                       |    |
| Appendix 2 Sample IDPH Response Rhythm                                 |    |
| Appendix 3 IDPH Emergency Operations Center (PHEOC) Operations         |    |
| Tab A OPR Incident Management Team Structure                           |    |
| Tab B Illinois Disaster Medical Response Communications Pathway        |    |
| Tab C Medical Incident Report Form                                     |    |
| Tab D Resource/Task Request Form                                       |    |
| Appendix 4 Risk Communications   |    |
| Annex H Clinical Laboratory Guidance                                   | 91 |
| Annex I Waste Disposal Guidance  | 93 |
| Appendix 1 Residential Decontamination Guidance                        |    |

### **Background**

Ebola Virus Disease (EVD) is rare and deadly disease with a case fatality rate of around 50%. Symptoms include fever, muscle pain, and unexplained hemorrhage (bleeding or bruising). EVD is transmitted through direct contact (through broken skin or mucous membranes) with blood or body fluids of an infected individual or through exposure to contaminated objects (such as bedding, needles, etc.). Individuals with EVD require intensive supportive care.

### Purpose

The purpose of the Illinois Department of Public Health (IDPH) Ebola Virus Disease (EVD) Preparedness and Response Plan is to provide guidance and tools for all response partners involved in efforts to reduce the morbidity, mortality, and social disruption that would result from an outbreak of EVD. This document supplements policy and procedures contained in the IDPH Emergency Support Function (ESF) 8 Plan and is consistent with the National Incident Management System (NIMS).

### <u>Scope</u>

The IDPH EVD Preparedness and Response Plan is limited to describing operational intent when responding to persons under investigation for Ebola as well as suspected or confirmed EVD cases in the state of Illinois. The plan includes considerations for public health agencies, Emergency Medical Services (EMS), and health care systems.

### **Situation Overview**

The EVD Preparedness and Response Plan has been developed due to the possibility of EVD importation to Illinois. EVD poses a serious threat and calls for enhanced understanding and improved coordination between all public and private sectors and at different levels of the public health and health care systems.

### **Assumptions**

- The IDPH ESF-8 Plan has been activated, either partially or fully, at the discretion of the IDPH director.
- The Public Health and Medical Services Response Regions serve as the primary regional geographical organizational structure for the IDPH ESF-8 Plan and the EVD Preparedness and Response Plan. Ebola health care facilities and resources are located regionally throughout the state (see <u>Annex A</u>).
- Health care network system planning is required and 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 will be able to identify persons presenting with a travel history or exposure history compatible with EVD and be prepared to isolate patients, provide basic supportive care, and inform and consult with public health officials.
- Suspected or confirmed EVD patients will access the health care system through various points of entry, and some may self-transport to a health care facility. Regional tiered approaches involving more than one state may be required (cross-border planning).

Health care workers at entry points and within the larger health care system will be trained to identify
persons for potential EVD exposure and be able to employ appropriate infection control and waste
management procedures.

### **Concept of Operations**

IDPH has implemented a regional tiered health care delivery system to identify potential and confirmed EVD patients safely. This system includes the ability to identify, monitor, isolate, assess, treat, and transport persons/patients to facilities capable of managing suspected or confirmed EVD cases. The system incorporates supporting processes to include legal planning, infection control procedures, training and education, transportation, risk management, and waste management and disposal.

Planning elements include:

- Outpatient/ambulatory care settings must be able to identify Persons Under Investigation (PUI) through risk assessment, protect personnel from possible exposure, and as advised by relevant public health officials, arrange for transport to EVD screening or treatment facilities.
- Emergency Medical Treatment and Labor Act (EMTALA) requires that all hospitals provide basic screening, isolate patients, and begin stabilizing treatment to any suspected or confirmed EVD patient. EMTALA requires that hospitals with specialized capabilities to treat EVD accept appropriate transfers of individuals who require those services, if they have capacity to provide them, regardless of the designation of that hospital as an Ebola Assessment Hospital (EAH) or Ebola Treatment Center (ETC). Under EMTALA, hospitals may NOT refuse a suspected EVD patient even if they lack personal protective equipment (PPE) or there is an EAH or ETC nearby.
- Certified local health departments (LHDs) will monitor persons with a compatible exposure history, perform contact tracing, and implement isolation and quarantine, when required.
- Emergency medical services (EMS), in accordance with the state's Ebola health care system plan, will transport suspected or diagnosed patients to an EAH or ETC for further evaluation, testing, and possible hospitalization. Suspected or diagnosed EVD cases may originate from within the EMS system; an interfacility transfer between different health care settings; or from a port of entry, such as an airport.
- EAHs will be able to assess patients' travel histories and exposure risks, isolate, and provide care if necessary for at least 96 hours prior to transfer. EAHs are considered diagnostic and early care facilities.
- ETCs are tertiary care hospitals that have dedicated and adequate treatment areas, skilled and trained staff, appropriate equipment, and excellent infection control procedures. ETCs will ideally be located within an eight-hour (or less) ground transportation radius of all EVD screening facilities.
  - Participation as an ETC is a designation made by IDPH, the Regional Hospital Coordinating Center (RHCC), the LHD, and the hospital, based on the needs of the community. IDPH and/or CDC have reviewed and consulted with this facility and concur that it can function as an ETC. A regional ETC may also be asked to accept medical evacuations voluntarily.

 If an EVD case is confirmed, IDPH will activate the IDPH Incident Management Team (IMT) and the Illinois Emergency Management Agency (IEMA) may activate the State Emergency Operations Center (SEOC).

### **Patient Presentation**

Patients may be identified by a variety of portals into the health care system. Staff who work in EMS, hospitals, and ambulatory care settings must be able to identify persons whose travel history could suggest possible exposure to EVD.

### **Quarantine Station at O'Hare airport**

U.S. CDC Quarantine Stations are part of a comprehensive system that serves to limit the introduction and spread of contagious diseases in the United States. Quarantine Stations are located at 20 international ports of entry and land-border crossings and are staffed with medical and public health officers from the CDC's Division of Global Migration and Quarantine. During routine operations, staff evaluate symptomatic international travelers entering the United States and determine what measures should be taken to minimize the spread of communicable diseases.

During heightened Ebola response, the Quarantine Station may actively screen all inbound passengers arriving in the U.S. from affected areas for symptoms or exposures consistent with Ebola as well as provide health education or other resources. Quarantine Station staff conveys information on arriving travelers to CDC headquarters, which is then shared with IDPH via Epi-X for persons requiring active monitoring.

CDC Quarantine Stations have the legal authority to detain any person who may have an infectious disease that is specified by Executive Order of the President of the United States (42 CFR parts 70 and 71) to be quarantinable, including Ebola and other viral hemorrhagic fevers. If necessary, CDC can deny ill persons with these diseases entry to the United States. CDC can also require ill persons be transferred to a hospital for follow-up medical evaluation or quarantined in a designated location for a defined amount of time to prevent the spread of disease.

#### **Ambulatory Care**

Outpatient/ambulatory care settings or hospitals not identified as EAHs or ETCs could possibly receive individuals who may have been – or think they may have been – exposed to Ebola whether or not they exhibit symptoms. IDPH encourages Illinois ambulatory and outpatient care settings to adopt the CDC approach to evaluating patients with possible EVD (see <u>Annex B</u>). All outpatient/ambulatory care settings or hospitals will appropriately screen and provide basic supportive care to any suspected or confirmed EVD patient, consistent with the EMTALA. All outpatient/ambulatory care settings or hospitals are responsible for training staff and keeping up to date with the most recent CDC and IDPH guidance.

#### **Emergency Medical Services (EMS)**

Transports by EMS present unique challenges because of the unknowns in responding to a call, the uncontrolled nature of work, the potential for resuscitation procedures being needed, enclosed space during transport, and a varying range of patient acuity. When EMS providers arrive at the scene, they

should immediately check for symptoms and risk factors for EVD and don PPE appropriate to the situation.

The primary authority within each EMS region for coordinating EMS System licensed providers in response to an emergency medical incident(s) as a result of a disaster or other large scale event rests with the EMS system(s) medical director(s) or their designee(s).

The majority of patients in the U.S. with fever and non-specific signs/symptoms do not have Ebola. Even if a person does have Ebola, the risk from patients with early symptoms is lower than the risk from a hospitalized, severely ill patient. Despite the low risk in transport situations, EMS personnel should consider and assess patients for the possibility of Ebola. Close coordination and frequent communication between the EMS personnel and the 911 call centers, EMS system, health care facilities, and public health partners will assist with safe transportation of the patient (see <u>Annex C</u>).

Transportation of suspected or confirmed EVD cases will be managed through EMS. Several EMS regions within Illinois have identified Ambulance Services willing and capable of transporting an Ebola patient (see <u>Appendix 1 to Annex C</u>).

- Suspected or diagnosed EVD cases may originate from within the EMS system; an inter-facility transfer between different health care settings; or from a port of entry (POE).
- EMS personnel will identify, assess, treat, and safely transport persons suspected of having EVD.
- EMS personnel should notify the receiving health care facility while en route transporting a suspected Ebola patient with estimated time of arrival (ETA) and status of patient's condition so that appropriate infection control precautions may be prepared prior to patient arrival, according to the protocols and procedures of the local EMS System.

EMS providers may request, in advance, a waiver approval from IDPH to utilize a currently licensed ambulance with the majority of required vehicle equipment removed for the purpose of transporting a known or suspected EVD patient (see <u>Appendix 2 to Annex C</u>).

### **Ebola Assessment Hospitals**

Ebola Assessment Hospitals (EAHs) (diagnostic and early care) are prepared to receive and isolate a person under investigation (PUI) for EVD and care for the patient until an Ebola diagnosis can be confirmed or ruled out and until discharge or transfer is completed. EAHs are able to assess travel history and exposure risk, isolate, and provide care for at least 96 hours prior to transfer, consistent with facility capabilities. EAHs are evaluated and confirmed by IDPH or Chicago Department of Public Health (CDPH) using guidance from CDC. All EAHs are responsible for training staff and keeping up to date with the most recent CDC and IDPH guidance.

### **Ebola Treatment Centers**

Ebola Treatment Centers (ETCs) are prepared to provide comprehensive care to people diagnosed with EVD for the duration of a patient's illness. These facilities have dedicated treatment areas and are generally located within an eight-hour (or less) ground transportation radius of all EVD screening facilities. ETCs are evaluated and confirmed by IDPH or CDPH using guidance from CDC. All ETCs are responsible for training staff and keeping up to date with the most recent CDC and IDPH guidance.

### Local/Regional-level Responsibilities

### Local Health Departments (LHDs)

The LHD, as the ESF-8 lead in its local jurisdiction, is responsible for coordinating response capabilities and resource requests that cannot be obtained locally or regionally for the hospitals, EMS, long-term care facilities, and other health and medical facilities.

If wide spread transmission of EVD is identified, CDC may determine that in addition to being screened for symptoms and exposures at their port of arrival in the U.S., all asymptomatic travelers arriving in the U.S. from Ebola outbreak-affected countries with wide spread transmission must be monitored for 21 days from the last potential exposure. IDPH will be alerted by CDC daily of any asymptomatic traveler who reports that his/her final destination is within Illinois. IDPH will then, on a daily basis, enter these individuals into the Illinois National Electronic Disease Surveillance System (I-NEDSS) and alert the relevant LHD. The LHD will then assume responsibility for monitoring these individuals.

LHDs will perform active monitoring of persons with compatible exposure history to help identify persons with early symptoms and implement plans for evaluation and management (see <u>Annex D</u>).

Control measures such as isolation and/or quarantine of ill or exposed persons may be required if the virus is introduced in the U.S. LHDs are responsible for isolation and quarantine orders. IDPH advises LHDs to review IDPH isolation and quarantine rules and their protocols for implementing isolation or quarantine orders (see <u>Annex E</u>).

- Isolation is the physical separation and confinement of an individual or groups of individuals who are infected, or reasonably believed to be infected, with a contagious or possibly contagious disease from non-isolated individuals, to prevent or limit the transmission of the disease to non-isolated individuals.
- Quarantine is the physical separation and confinement of an individual or groups of individuals who are, or may have been exposed to, a contagious disease or possible contagious disease and who do not show signs or symptoms.

If an EVD patient is identified in its jurisdiction, the LHD will perform contact tracing via I-NEDSS.

I-NEDSS is used for surveillance of infectious diseases in Illinois. If contact tracing for Ebola is necessary, it will be conducted through the I-NEDSS Viral Hemorrhagic Fever (VHF) contact module. The VHF contact module includes a risk assessment for contacts, risk factors, health care worker contacts and symptom check for 21 days. Health care providers can also access I-NEDSS to enter any contacts they become aware of.

I-NEDSS is a 24/7/365 web-based application utilized by all 95 Illinois LHDs and by health care providers and laboratories throughout Illinois to report and investigate infectious disease conditions, clusters and outbreaks. Providers also have access to county and statewide communicable disease data in an aggregated form (non-identifiable).

Cases entered by providers are routed to the jurisdiction of the patient (based on the zip code). If the zip code is not available, the report is routed to the jurisdiction of the provider. LHDs can review and process electronic laboratory reports (ELRs) by clicking on the I-NEDSS Lab/Provider Reports tab. ELRs are routed to the jurisdiction of the patient (based on zip code). If the zip code is not available, the report is routed to the jurisdiction of the provider.

The LHD will lead coordination of preparedness activities with local partners, including hospitals, EMS, local emergency management, and law enforcement.

### **Health Care Coalitions**

Regional Health Care Coalitions (HCCs), led by the RHCC, will create a regional Ebola response plan or a similar annex to their current regional medical disaster plan that coordinates a regional tiered health care delivery system in order to limit infection transmission and consolidate expensive EVD planning and response efforts. The plan will designate EVD response roles and responsibilities for coalition members in cases of identification, communication, patient transportation, patient assessment, and patient treatment. This system will practically and safely identify potential and confirmed EVD patients and have the ability to identify, isolate, assess, treat, and transport persons/patients to facilities capable of managing suspected or confirmed EVD cases (see <u>Annex F</u>).

The RHCC shall assist with coordination of supply/equipment caches and services (other than EMS licensed providers) as outlined in the IDPH approved regional disaster preparedness plan and within the scope of the IDPH Hospital Preparedness Program (HPP). In the case of facility to facility transport of a patient with suspected or diagnosed EVD, the regional health care coalition will utilize EMS transport provider vehicles especially prepared for EVD patient transport as designated in their regional Ebola response plan or annex. In situations in which an EMS provider is unable to be arranged within the region, the RHCC will instruct the local hospital to follow the Request for Medical Resources (RFMR) process outlined in the IDPH ESF-8 plan. In these situations, the local hospital will consult with the LHD. The LHD will contact the local EMA. The local EMA will send the request to IEMA and it will be forwarded to the SEOC and IDPH.

The same procedure should be followed for transport of pediatric patients. For further guidance on the care and transport of pediatric patients, refer to the IDPH ESF-8: Pediatric and Neonatal Surge Annex.

### **Direction and Control**

### **Centers for Disease Control and Prevention (CDC)**

CDC will provide technical assistance to the State Health Officials and Health Care Coalitions in support of local and statewide plans designed to manage confirmed and suspected EVD patients. To assist states in determining which hospitals may serve as EAHs/ETCs, CDC's Rapid Ebola Preparedness (REP) teams will consult with state officials in providing technical assistance and recommendations for each facility under consideration. Final decisions regarding hospital participation as an ETC are made by state and local health authorities in conjunction with the hospital, as based on community needs, using information provided by CDC REP teams. Although CDC may be asked for technical assistance in making these decisions, as HHS does not designate hospitals as ETCs, nor certify hospitals as competent to care for EVD patients, the states decide which hospitals will participate and have the ultimate authority to assess each hospital's readiness.

### Illinois Department of Public Health (IDPH)

IDPH retains overall primary authority and responsibility to determine public health related risks for the general population of Illinois. IDPH is responsible for managing persons under investigation for EVD and suspect or confirmed EVD cases. This includes:

- Providing a public information source
- Providing training and education guidance to LHDs, health care providers, and the public
- Tracking persons being monitored as well as other suspect and confirmed EVD cases
- Activating an Incident Management Team (IMT) to coordinate public health and medical system response operations as needed
- Providing assistance with contact tracing of confirmed EVD cases
- Providing laboratory support for testing

The organizational framework for the activation and management of key IDPH activities implemented in EVD response is found in <u>Annex G</u>.

### **Chief Medical Officer**

The IDPH Chief Medical Officer (CMO) serves in a medical and clinical capacity overseeing the regulatory and policy areas related to hospital and health care facility regulation, emergency services, ambulatory surgical treatment centers, health care professional regulation and credentialing, advising the Board of Health, patient safety initiatives, and the state's response to disease prevention an outbreak management and control. The CMO formulates, develops, and directs the development of medical policies related to the provision of services provided to public health recipients, directs implementation, and provides review and monitoring services to assure that approved policies are uniformly applied throughout public health.

The CMO will provide direction and consultation to Deputy Directors relative to approved medical practices and activities of the Offices engaged in EVD response, and continually evaluate the Illinois health system for the purpose of establishing short and long-term goals to improve the delivery of health services related to EVD throughout the state.

### Legal

The IDPH General Counsel and legal staff will advise the Office of the Director and IDPH response offices on the legal ramifications of emergency response activities, including isolation and quarantine orders. Legal staff will also review any guidance issued to LHDs and assist IDPH personnel in working collaboratively with IDPH partners.

### **Public Relations and Risk Communications**

The IDPH Public Information Officers (PIOs) will share information with the media and the public. The PIOs are responsible for public relations and risk communications activities for IDPH, including disseminating emergency response information and dispelling circulating rumors. A Joint Information Center (JIC) may be utilized. PIO staff will develop, update, and review public health information products tailored for various target populations/audiences. Staff will also regularly disseminate updated information and risk assessment on the EVD outbreak to stakeholders.

### Preparedness and Response

The IDPH Office of Preparedness and Response (OPR) will coordinate IDPH's preparedness activities in relation to the threat of EVD. The IDPH IMT is led by OPR and will be staffed according to the incident command system (ICS) structure. The IMT is composed of command and general staff members and support personnel qualified and prepared to respond formally to an Ebola outbreak. The IMT will communicate with all required IDPH offices, LHDs, and RHCCs as well as the SEOC through the SEOC liaison. The IMT will also communicate with all activated IDPH programs and other health and medical entities engaged in the response, and coordination with Border States regarding the activation of resources.

OPR Division of Emergency Medical Services (EMS) and Highway Safety will provide guidance to EMS providers regarding management of potential EVD patients. The Division also develops and oversees pediatric emergency care activities within the state.

OPR Division of Disaster Planning and Readiness will assist in all state-level planning efforts, support all PHEOC functions, and assist in training and exercise programs associated with EVD readiness. The Division serves as a key state liaison for the SEOC, LHDs, hospitals, and regional HCC emergency preparedness, and coordinates response and recovery operations.

The Strategic National Stockpile (SNS) Program Manager ensures the state has a plan for the receipt, distribution and dispensing of SNS supplies to support LHD and hospital response operations if and when local resources are depleted during a public health and medical emergency. The SNS Program Manager will collaborate with all appropriate state agencies during the planning and response stages. This could include the potential use of vaccine, either if approved, or per an established protocol pre-FDA approval.

### Epidemiological Investigation

The Office of Health Protection (OHPt), Division of Infectious Diseases seeks to protect people from infectious diseases through disease surveillance, analysis, immunization, and education. The Division will:

- Provide guidance on EVD to LHDs, health care providers, and the public
- Maintain the IDPH Ebola web portal page
- Notify LHDs of PUI in their jurisdiction by entering information into the Illinois National Electronic Disease Surveillance System (I-NEDSS)
- Provide LHDs with guidelines for monitoring PUI for EVD
- Utilize syndromic surveillance to identify suspect cases
- Provide LHDs with guidelines for the isolation and quarantine of individuals with EVD
- Provide epidemiologic support for identifying individuals with possible EVD
- Coordinate multi-LHD jurisdictional efforts

### Laboratory testing

The IDPH Division of Laboratories provides laboratory testing and referral services upon authorization from the Division of Infectious Diseases. CDC will provide confirmatory testing on any specimens that test positive at IDPH. The IDPH Division of Laboratories is responsible for developing guidance for the submission of specimens, testing, and referral of specimens to CDC (see <u>Annex H</u>).

The IDPH Chicago laboratory has implemented CDC Laboratory Response Network (LRN) assays for the detection of the Ebola Zaire virus. The tests are the NP and the VP40 assays. Both are real-time Reverse Transcription Polymerase Chain Reaction assays (rRT-PCR) for the presumptive detection of the virus and must be performed in safe, controlled environments. The Chicago laboratory has the capacity to test 30 samples per day with 2 shifts. The test is ordered on a STAT basis and results are prioritized. Typically, results are available within 5-7 hours of specimen delivery when individual specimens are sent to the laboratory. If large numbers of specimens are sent, turnaround times may increase to 1-2 days. Optimal turnaround time is contingent upon early notification to the laboratory about incoming specimens and careful communication and tracking to ensure the time of delivery is known and coordinated with testing staff.

The Ebola Virus NP and VP40 Real-Time RT-PCR assays are authorized by the FDA under Emergency Use Authorization (EUA) by specified laboratories and clinical laboratory personnel who have been trained on authorized instruments. The IDPH Chicago laboratory is assessed and qualified by the CDC to perform the Ebola Virus VP40 and NP Real-Time RT-PCR assays. The CDC testing algorithm instructs laboratories to run these two assays on each specimen, and to base the final determination on both results. Assay results are for the presumptive identification of Ebola virus and intended for use as part of a multi-test algorithm to detect the presence of Ebola virus RNA.

- Negative rRT-PCR results do not preclude Ebola virus infection and should not be used as the sole basis for patient management decisions.
- Equivocal rRT-PCR results must be discussed with CDC.
- Positive rRT-PCR results must be confirmed by CDC through additional tests such as viral culture. Specimen will need to be forwarded to CDC and shipped using Category A shipping criteria as a select agent. CDC will provide guidance to IDPH regarding how presumptive results should be used clinically, epidemiologically, and for infection control purposes.

Final diagnosis of Ebola virus infection must be made based on history, signs, symptoms, exposure likelihood, and other laboratory evidence, in addition to the detection of Ebola virus RNA in consultation with CDC. The IDPH laboratories are required to report results to the Division of Infectious Disease, specimen submitters, and CDC.

### Illinois Emergency Management Agency (IEMA)

During a disaster, IEMA is responsible for coordinating state resources and expertise in the response effort. In the event of an Ebola outbreak in Illinois, IEMA will:

- Work with specific agencies within jurisdiction(s) to gain situational awareness of the incident
- Collaborate with IDPH on the request for medical resources for hospitals, LHDs, and EMS
- Collaborate with IDPH to fulfill the request for medical care by activating the Illinois Medical Emergency Response Team (IMERT) as indicated

- Proceed with established procedures for requesting disaster declaration (state and federal) as indicated
- Proceed with established procedures for facilitating Emergency Management Assistance Compact (EMAC) requests as indicated

### Illinois Environmental Protection Agency (IEPA)/Illinois Department of Transportation (IDOT)

Guidance for the transportation and disposal of potentially infected medical waste from patients with EVD has been developed in cooperation with the Illinois Environmental Protection Agency (IEPA) and the U.S. Department of Transportation (DOT) (see <u>Annex I</u>).

### **Recovery, Demobilization, and Debriefing**

The Incident Commander (IC) shall determine when deactivation of the IDPH EVD plan, or portions thereof, is appropriate. The IC will also determine when the incident command structure shall be deactivated. Deactivation will be based upon the ability to fulfill the remaining needs of an incident with normal IDPH functions 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 IDPH functions to normal daily operations will be determined by the IC, in consultation with the director and other IDPH senior staff. The IC will designate appropriate staff to perform the following tasks in the demobilization efforts:

- Inform IDPH staff, news media and the public that the emergency or threat no longer exists
- Inform IDPH staff and partners on the process for returning to normal operations
- Supervise the demobilization efforts
- Ensure all systems and communications are operational and available to support normal operations
- Ensure basic human needs, if provided during the response, are last to demobilize so needs of the affected population and responders are met
- 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 postincident/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 IDPH programs and OPR.

### **Plan Development and Maintenance**

The Office of Preparedness and Response (OPR) will be responsible for developing and maintaining the EVD Preparedness and Response Plan.

The EVD Preparedness and Response Plan will be reviewed, as scheduled, by the below listed offices.

- IDPH Office of the Director
- IDPH Office of Preparedness and Response
- IDPH Office of Health Protection
- IDPH Office of Health Care Regulation

### **Authorities and References**

- Illinois Compiled Statutes, 20 ILCS 3305, IEMA Act, as amended
- Illinois Compiled Statutes, 20 ILCS 2305, Department of Public Health Act, as amended
- Illinois Compiled Statutes, 20 ILCS 2305/2, Isolation and Quarantine
- Illinois Compiled Statutes, 20 ILCS 2310, Department of Public Health Power and Duties Law, as amended
- Illinois Compiled Statutes 210 ILCS 50, Emergency Medical Services (EMS) Systems Act, as amended
- Illinois Administrative Code, 77 Ill. Admin. Code 515, Emergency Medical Services and Trauma Center Code, as amended
- Illinois Administrative Code, 77 Ill. Admin. Code, 690, Control of Communicable Diseases Code, as amended
- Illinois Department of Public Health Emergency Support Function 8 (ESF-8) Plan
- National Incident Management System (NIMS)
- Emergency Medical Treatment and Labor Act (EMTALA)
- United States Occupational Safety and Health Administration (OSHA) Blood borne Pathogens Standard (29 CFR 1910.1030)

### <u>Annexes</u>

- Annex A EBOLA HEALTH CARE FACILITIES AND RESOURCES MAP
- Annex B AMBULATORY/OUPATIENT CARE GUIDANCE
  - Appendix 1 AMBULATORY CARE EVALUATION ALGORITHM
  - Appendix 2 EMTALA GUIDANCE
  - Appendix 3 EBOLA CONTACT AND DROPLET PRECAUTIONS
    - Tab A PERSONAL PROTECTIVE EQUIPMENT GUIDANCE
  - Appendix 4 EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES
    - Tab A DISINFECTANTS FOR USE AGAINST EBOLA VIRUS
  - Appendix 5 IDENTIFICATION OF PERSONS UNDER INVESTIGATION (PUI) FOR EVD
- Annex C EMERGENCY MEDICAL SERVICES (EMS) GUIDANCE
  - Appendix 1 EBOLA CAPABLE AMBULANCE SERVICES IN ILLINOIS
  - Appendix 2 AMBULANCE SET-UP GUIDANCE
- Annex D MONITORING GUIDANCE
  - Appendix 1 MONITORING AND MOVEMENT GUIDANCE TABLE
  - Appendix 2 ORDER FOR OBSERVATION AND MONITORING
  - Appendix 3 SIGNS AND SYMPTOMS OF EBOLA VIRUS DISEASE
- Annex E ISOLATION AND QUARATINE GUIDANCE
  - Appendix 1 ORDER FOR ISOLATION
  - Appendix 2 ORDER FOR QUARATINE
- Annex F REGIONAL TIERED HEALTH CARE COALTION PLANNING GUIDANCE
  - Appendix 1 PREPARING U.S. HOSPITALS FOR EBOLA INFOGRAPHIC
- Annex G IDPH RESPONSE MANAGEMENT
  - Appendix 1 SAMPLE IDPH LEADERSHIP MEETING AGENDA
  - Appendix 2 SAMPLE IDPH RESPONSE RHYTHM
  - Appendix 3 IDPH EMERGENCY OPERATIONS CENTER (PHEOC) OPERATIONS
    - Tab A OPR INCIDENT MANAGEMENT TEAM STRUCTURE
      - Tab B ILLINOIS DISASTER MEDICAL RESPONSE COMMUNICATIONS PATHWAY
      - Tab C MEDICAL INCIDENT REPORT FORM
      - Tab D RESOURCE/TASK REQUEST FORM
  - Appendix 4 RISK COMMUNICATIONS
- Annex H CLINICAL LABORATORY GUIDANCE
- Annex I WASTE DISPOSAL GUIDANCE
  - Appendix 1 RESIDENTIAL DECONTAMINATION GUIDANCE

### **Acronyms**

| AGP    | Aerosol Generating Procedures                            |
|--------|--|
| AIIR   | Airborne Infection Isolation Room                        |
| САН    | Critical Access Hospital                                 |
| CDC    | Centers for Disease Control and Prevention               |
| EAH    | Ebola Assessment Hospital                                |
| EMAC   | Emergency Management Assistance Compact                  |
| EMC    | Emergency Medical Condition                              |
| EMS    | Emergency Medical Services                               |
| EMTALA | Emergency Medical Treatment and Labor Act                |
| ESF    | Emergency Support Function                               |
| ETC    | Ebola Treatment Center                                   |
| EVD    | Ebola Virus Disease                                      |
| HCID   | High Consequence Infectious Disease                      |
| НСР    | Health Care Personnel                                    |
| ICS    | Incident Command System                                  |
| IDPH   | Illinois Department of Public Health                     |
| IEMA   | Illinois Emergency Management Agency                     |
| IEPA   | Illinois Environmental Protection Agency                 |
| IMERT  | Illinois Medical Emergency Response Team                 |
| IMT    | Incident Management Team                                 |
| INEDSS | Illinois National Electronic Disease Surveillance System |
| JIC    | Joint Information Center                                 |
| LHD    | Local Health Department                                  |
| NGO    | Non-Governmental Organization                            |
| NIMS   | National Incident Management Team                        |
| OPR    | Office of Preparedness and Response                      |
| PAPR   | Powered Air Purifying Respirator                         |
| PHEOC  | Public Health Emergency Operations Center                |
| PIO    | Public Information Officer                               |
| POE    | Point of Entry   |
| PPE    | Personal Protective Equipment                            |
| PSAP   | Public Safety Answering Point                            |
| PUI    | Person under Investigation                               |
| RFMR   | Request for Medical Resources                            |
| REP    | Rapid Ebola Preparedness                                 |
| RHCC   | Regional Hospital Coordinating Center                    |
| SEOC   | State Emergency Operations Center                        |
| SNS    | Strategic National Stockpile                             |



### ANNEX B: AMBULATORY/OUTPATIENT CARE GUIDANCE

### 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 (see Appendix 1 to Annex B).

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

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

• Ensure that triage staff know which countries currently have widespread Ebola transmission and ask patients about these countries **by name**.

### 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 health care personnel should follow standard, contact, and droplet precautions (see Appendix 3 to Annex B), 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 ambulatory setting.
- If feasible, have patient take his/her own temperature (e.g. with a disposable single-use thermometer)
- Clinician should obtain detailed and accurate history
  - Confirm travel history, if applicable: specific locations and dates
  - Confirm symptom history: fever, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage (note onset dates or presence of other symptoms)
  - Evaluate potential Ebola exposures: in travelers, while in the affected country, any exposure to health care settings, funeral attendance, or contact with ill or deceased individuals in the last 21 days

### 4. Inform Local Health Department

- Patient with compatible travel history or Ebola exposure and symptoms potentially consistent with Ebola:
  - IMMEDIATELY Call your local public health department. The local public health department should already be aware of and monitoring travelers.
  - If unable to reach, call the Illinois Emergency Management Agency at 1-800-782-7860 or 217-782-7860 (24 hours/7 days) and ask to speak to the duty officer.
  - Do not touch patient or perform any procedures unless absolutely necessary. Follow instructions on the attached algorithm.
  - If patient is not clinically stable, call 911 and inform the operator that a suspected Ebola patient needs transfer, AND immediately contact the health department.

### ANNEX B: AMBULATORY/OUTPATIENT CARE GUIDANCE

- 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 (e.g. presenting for unrelated illness):
  - Call your local public health department to help ensure the routine 21 days of monitoring are completed by the health department.
- 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:
  - o Discontinue precautions, manage patient in routine manner

APPENDIX 1 (AMBULATORY CARE EVALUATION ALGORITHM) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)



APPENDIX 2 (EMTALA GUIDANCE)

### TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

### SUBJECT: Ebola Virus Disease and Emergency Medical Treatment and Labor Act (EMTALA) Compliance

This guidance addresses provider obligations for screening, stabilization, transfer and recipient hospital in the context of EMTALA requirements.

EMTALA requires Medicare-participating hospitals and Critical Access Hospitals (CAHs) that have a dedicated emergency department to, at a minimum:

- Provide an MSE to every individual who comes to the ED, for examination or treatment for a medical condition, to determine if they have an emergency medical condition (EMC); and
- Provide necessary stabilizing treatment for individuals with an EMC within the hospital's capability and capacity; and
- Provide for transfers of individuals with EMCs, when appropriate.

If during the MSE it is concluded the individual may be a possible Ebola case, the provider is expected to immediately initiate isolation precautions and notify the appropriate medical and public health authorities. It is both CMS' and IDPH's expectation that all hospitals and CAHs are able to, within their capability, provide an MSE and initiate stabilizing treatment while following isolation requirements and coordinating with local health departments and other authorities who in turn will coordinate with IDPH and as necessary with the CDC.

IDPH and Centers for Medicare and Medicaid Services (CMS) will take into account public health guidance if it receives a complaint of an inappropriate transfer or refusal to accept an appropriate transfer. IDPH guidance calls for the utilization of health care coalitions to create a tiered health care system response for Ebola (see Annex F). In addition to Illinois' designated Ebola Treatment Centers (ETCs) (e.g. network hospitals), the tiered system also requires the designation of one or more hospitals in each regional health care coalition as an Ebola Assessment Hospital (EAH) that also conducts initial evaluation and provides up to 96 hours of care for individuals in the community that are referred (e.g. by local health departments) or upon transfer from another health care setting (e.g. from other hospitals or clinics).

IDPH recognizes ongoing regional activities related to protocols and designations of hospitals to handle potential or confirmed Ebola cases. However, in the absence of a regional protocol and designations of EAHs, if it is determined that Ebola testing is required, the hospital or CAH is expected to maintain the individual in isolation, providing diagnostic and treatment measures within its capability for the individual's symptoms as needed, until it has the Ebola test results-unless prior to test results, it is determined in collaboration with public health authorities that transfer to another hospital is warranted, e.g. based on the severity of illness.

Per CDC Laboratory Guidance, U.S. clinical laboratories can safely handle specimens from these potential patients by taking all required precautions and practices in the laboratory specifically designed for pathogens spread in the blood, in order to do routine laboratory testing (e.g. CBC, platelet count, malaria smear or malaria immunochromatographic assay).

All hospitals should aim to participate in the regional, tiered approach planning process, in order to ensure rational purchase/distribution/stockpiling of scarce personal protective equipment, as well as to promote efficient use of resources devoted to training staff to the appropriate level, given the amount and level of care that will be provided in a particular facility. Designation of regional assessment centers is critical to ensuring Illinois' readiness to meet the challenge of Ebola, and to provide high quality care to ill individuals who may have Ebola or other conditions (e.g. malaria) that may require prompt diagnosis and treatment.

## SUBJECT: Infection Prevention and Control Recommendations for Hospitalized Patients under investigation (PUIs) for Ebola Virus Disease (EVD) in U.S. Hospitals.

**Who this is for:** Health care personnel in any health care setting. The Guidance is most relevant for hospital staff caring for a patient under investigation (PUI) or patient with confirmed Ebola virus disease (EVD).

What this is for: Guidance to help health care personnel follow standard, contact, and droplet precautions when caring for a PUI or patient with confirmed EVD.

**How this relates to other Ebola guidance:** This guidance outlines the key areas for infection and control for EVD in U.S. hospitals and health care settings.

### **Key Points**

- 1. CDC recommends a combination of measures to prevent transmission of EVD in hospitals including PPE. These should be implemented in addition to routine IPC practices that are implemented on a daily basis to prevent transmission of infectious diseases from patient to patient and patient to health care personnel.
- 2. Health care personnel might need to take additional infection control steps if a PUI or patient with confirmed EVD has other conditions or illnesses caused by specific infectious diseases, such as tuberculosis.
- 3. Health care personnel can be exposed to Ebola virus by touching a patient's body fluids, contaminated medical supplies and equipment, or contaminated environmental surfaces. Splashes to unprotected mucous membranes (for example, the eyes, nose, or mouth) are particularly hazardous. Procedures that can increase environmental contamination with infectious material or create aerosols should be minimized.

Precautions outlined in the table below are recommended for management of a hospitalized PUI or patient with confirmed EVD. Note that this guidance outlines only those measures that are specific for EVD; duration of specific infection control measures need to consider if a patient has other conditions or illnesses for which other measures are indicated (tuberculosis, multidrug resistant organisms).

Though these recommendations focus on the hospital setting, the recommendations for personal protective equipment (PPE) and environmental infection control measures are applicable to any health care setting. In this guidance health care personnel (HCP) refers all people, paid and unpaid, working in health care settings who have the potential for exposure to patients and/or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or aerosols generated during certain medical procedures. HCP include, but are not limited to, physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual personnel, home health care personnel, and people not directly involved in patient care (clerical, dietary, housekeeping, laundry, security, maintenance, billing, chaplains, and volunteers) but potentially exposed to infectious agents that can be transmitted to and from HCP and patients. **This guidance is not intended to apply to people outside of health care settings.** 

| Key Infection Control Precautions Recommended for Preventing Ebola Transmission |  |  |   |
|---|--|--|---|
| in U.S. Hospitals   |  |  |   |
| Component   | Recommendation   |  | Comments  |
| Patient Placement   | <ul> <li>Single patient room (containing a private bathroom) with the door closed</li> <li>Facilities should maintain a log of all people entering the patient's room</li> </ul>   | • C<br>d<br>o                            | Consider posting personnel at the patient's<br>loor to ensure appropriate and consistent use<br>of PPE by all people entering the patient room  |
| Personal<br>Protective<br>Equipment (PPE)                                       | Tab A to Appendix 3, Annex B   |  |   |
| Patient Care<br>Equipment   | <ul> <li>Dedicated medical equipment (preferably disposable, when possible) should be used for the provision of patient care</li> <li>All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and hospital policies</li> </ul>  |  |   |
| Patient Care<br>Considerations  | <ul> <li>Limit the use of needles and other sharps as much as possible</li> <li>Phlebotomy, procedures, and laboratory testing should be limited to the minimum necessary for essential diagnostic evaluation and medical care</li> <li>All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers</li> </ul>  |  |   |
| Aerosol<br>Generating<br>Procedures<br>(AGPs)                                   | <ul> <li>Avoid AGPs for patients with EVD.</li> <li>If performing AGPs, use a combination of measures to reduce exposures from aerosol-generating procedures when performed on patient with EVD.</li> <li>Visitors should not be present during aerosol-generating procedures.</li> <li>Limiting the number of HCP present during the procedure to only those essential for patientcare and support.</li> <li>Conduct the procedures in a private room and ideally in an Airborne Infection Isolation Room (AIIR) when feasible. Room doors should be kept closed during the procedure except when entering or leaving the room, and entry and exit should be minimized during and shortly after the procedure.</li> <li>HCP should wear appropriate PPE during aerosol-generating procedures.</li> <li>Conduct environmental surface cleaning following procedures (see section below on environmental infection control).</li> </ul> | • / C<br>t<br>s<br>a<br>e<br>F<br>r<br>f | Although there are limited data available to<br>definitively define a list of AGPs, procedures<br>that are usually included are Bilevel Positive<br>Airway Pressure (BiPAP), bronchoscopy,<br>sputum induction, intubation and extubation,<br>and open suctioning of airways.<br>Because of the potential risk to individuals<br>reprocessing reusable respirators, disposable<br>filtering face piece respirators are preferred. |

| Component  | Recommendation   | Comments   |
|--|--|--|
| Hand Hygiene   | <ul> <li>HCP should perform hand hygiene frequently, including before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves.</li> <li>Health care facilities should ensure that supplies for performing hand hygiene are available.</li> </ul>  | <ul> <li>Hand hygiene in health care settings can be<br/>performed by washing with soap and water or using<br/>alcohol-based hand rubs. If hands are visibly soiled,<br/>use soap and water, not alcohol-based hand rubs.</li> </ul>   |
| Environmental<br>Infection Control                     | Appendix 4 to Annex B  |  |
| Safe Injection<br>practices                            | <ul> <li>Facilities should follow safe injection practices<br/>as specified under Standard Precautions.</li> </ul>   | <ul> <li>Any injection equipment or parenteral medication<br/>container that enters the patient treatment area<br/>should be dedicated to that patient and disposed of<br/>at the point of use.</li> </ul>   |
| Duration of<br>Infection Control<br>Precautions        | <ul> <li>Duration of precautions should be determined<br/>on a case-by-case basis, in conjunction with<br/>local, state, and federal health authorities.</li> </ul>  | <ul> <li>Factors that should be considered include, but are<br/>not limited to, presence of symptoms related to EVD,<br/>date symptoms resolved, other conditions that would<br/>require specific precautions (tuberculosis, Clostridium<br/>difficile) and available laboratory information.</li> </ul> |
| Monitoring,<br>Management, and<br>Training of Visitors | <ul> <li>Avoid entry of visitors into the patient's room         <ul> <li>Exceptions may be considered on a case by case basis for those who are essential for the patient's wellbeing.</li> </ul> </li> <li>Establish procedures for monitoring managing and training visitors.</li> <li>Visits should be scheduled and controlled to allow for:         <ul> <li>Screening for EVD (fever and other symptoms) before entering or upon arrival to the hospital.</li> <li>Evaluating risk to the health of the visitor and ability to comply with precautions.</li> <li>Providing instruction, before entry into the patient care area on hand hygiene, limiting surfaces touched, and use of PPE according to the current facility policy while in the patient's room.</li> <li>Visitor movement within the facility should be restricted to the patient care area and an immediately adjacent waiting area.</li> </ul> </li> </ul> | <ul> <li>Visitors who have been in contact with the patient<br/>with EVD before and during hospitalization are a<br/>possible source of EVD for other patients, visitors,<br/>and staff.</li> </ul>  |

|   | TO ANNEX B (AND BEATON) OUT ATTEN   |          |
|---|---|----------|
| Component   | Recommendation  | Comments |
| Monitoring and  | Eacilities should develop policies for  |          |
| Management of Potentially   | monitoring and management of potentially  |          |
| Exposed Personnel   | exposed HCP   |          |
| Component<br>Monitoring and<br>Management of Potentially<br>Exposed Personnel | <ul> <li>Recommendation</li> <li>Facilities should develop policies for<br/>monitoring and management of potentially<br/>exposed HCP</li> <li>Facilities should develop sick leave policies<br/>for HCP that are non-punitive, flexible and<br/>consistent with public health guidance</li> <li>Ensure that all HCP, including staff<br/>who are not directly employed by the<br/>health care facility but provide<br/>essential daily services, are aware of<br/>the sick leave policies.</li> <li>People with percutaneous or<br/>mucocutaneous exposures to blood, body<br/>fluids, secretions, or excretions from a PUI<br/>should</li> <li>Stop working and immediately wash<br/>the affected skin surfaces with soap<br/>and water. Mucous membranes<br/>(conjunctiva) should be irrigated with<br/>copious amounts of water or eyewash<br/>solution.</li> <li>Immediately contact occupational<br/>health/supervisor for assessment and<br/>access to post exposure management<br/>services for all appropriate pathogens<br/>(Human Immunodeficiency Virus,<br/>Hepatitis C, etc.).</li> <li>HCP who develop sudden onset of fever,<br/>fatigue, intense weakness or muscle pains,<br/>vomiting, diarrhea, or any signs of<br/>hemorrhage should</li> <li>Notify their supervisor.</li> <li>Seek prompt medical evaluation and<br/>testing.</li> <li>Notify local and state health<br/>departments.</li> <li>Comply with work exclusion until they<br/>are deemed no longer infectious to<br/>others.</li> <li>For asymptomatic HCP who had an<br/>unprotected exposure (not wearing<br/>recommended PPE at the time of patient<br/>contact or through direct contact to blood</li> </ul> | Comments |
|   | <ul> <li>others.</li> <li>For asymptomatic HCP who had an unprotected exposure (not wearing recommended PPE at the time of patient contact or through direct contact to blood or body fluids) to a patient with EVD</li> <li>Should receive medical evaluation and follow-up care including fever monitoring twice daily for 21 days</li> </ul>   |          |
|   | <ul> <li>after the last known exposure.</li> <li>Hospitals should consider policies<br/>ensuring twice daily contact with<br/>exposed personnel to discuss potential<br/>symptoms and document fever checks.</li> </ul>   |          |

APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

SUBJECT: Guidance on Personal Protective Equipment (PPE) To Be Used by Health Care 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

### **Key Points**

- Health care workers caring for patients with Ebola must have received comprehensive training and demonstrated competency in performing Ebola-related infection control practices and procedures.
- PPE that covers the clothing and skin and completely protects mucous membranes is required when caring for patients with Ebola.
- Personnel providing care to patients with Ebola must be supervised by an onsite manager at all times, and a trained observer must supervise each step of every PPE donning/doffing procedure to ensure established PPE protocols are completed correctly.
- Individuals unable or unwilling to adhere to infection control and PPE use procedures should not provide care for patients with Ebola.

### Introduction

The following guidance on the types of PPE to be used and the processes for donning and doffing PPE is for all personnel entering the room of a patient hospitalized with EVD. This guidance reflects lessons learned from the recent experiences of U.S. hospitals caring for patients with EVD and emphasizes the importance of **training**, **practice**, **competence**, **and observation** of health care workers, especially in correct donning and doffing of PPE.

In health care settings, EVD is spread through direct contact with blood or body fluids of a person who is sick with Ebola or with objects (e.g., bathroom surfaces, medical equipment) that have been contaminated with infectious blood or body fluids. The virus in blood and body fluids can enter a person's body through broken skin or unprotected mucous membranes in, for example, the eyes, nose, or mouth. For all health care workers caring for patients with EVD, PPE that fully covers skin and clothing and prevents any exposure of the eyes, nose, and mouth is recommended to reduce the risk of accidental self-contamination of mucous membranes or broken skin. All PPE must be used in the context of a comprehensive infection control program that follows CDC recommendations and applicable Occupational Safety and Health Act of 1970 (OSHA) requirements, including the Blood borne Pathogens (29 CFR 1910.1030), PPE (29 CFR 1910.132), and Respiratory Protection (20 CFR 1910.134) standards, and other requirements under OSHA (e.g., the General Duty Clause, section 5(a)(1); and prohibitions against discrimination or retaliation against workers, section 11(c)).

To protect health care workers who are caring for patients with EVD, health care facilities must provide onsite management and oversight of adherence to safely using PPE and implement administrative and environmental controls with continuous safety checks through direct observation of health care workers, including during the PPE donning and doffing steps.

### Section 1. Recommended Administrative and Environmental Controls for Health Care Facilities

Protecting health care workers and preventing spread of Ebola to other patients requires that proper administrative procedures and safe work practices be carried out in appropriate physical settings. These include the following:

- At an administrative level, the facility's infection prevention management team (i.e., infection control), in collaboration with the facility's occupational health department and other clinical departments, should:
  - Establish and implement triage protocols to effectively and promptly identify patients who could have Ebola.
  - Designate site managers who are responsible for overseeing the implementation of routine and additional precautions for health care worker and patient safety. These site managers should have experience in

APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

implementing protocols for employee safety, infection control, and patient safety. A site manager's sole responsibility is to ensure the safe delivery of clinical care to patients with EVD. They are responsible for all aspects of Ebola infection control, including access to supplies and ongoing evaluation of safe practices with direct observation of care before, during, and after staff enter an isolation and treatment area.

- At least one site manager should be on-site at all times in the location where a patient with Ebola is receiving care.
- Consider engaging the hospital incident command structure to further facilitate implementing Ebola-specific precautions.
- Identify, in advance, critical patient care functions and essential health care workers to care for patients with Ebola, collect laboratory specimens, and manage the environment and waste.
- Ensure health care workers have been trained and evaluated in all recommended protocols to safely care for patients with Ebola before they enter the patient care area.
- Ensure that workplace safety programs are in place and have been followed, in particular for OSHA's Blood borne Pathogens, PPE and Respiratory Protection standards described above. Coordinate with safety program administrators to ensure that all PPE, including respirators, has been selected on the basis of a written risk assessment and that requirements for medical surveillance, medical clearance, fit testing, training, maintenance, storage, reporting, etc. are in place for all workers with potential exposure to Ebola.
- Train health care workers on all PPE recommended in the facility's protocols. Health care workers should practice donning and doffing procedures and must demonstrate competency through testing and assessment before caring for patients with Ebola.
- Health care workers should practice simulated patient care activities while wearing the PPE to understand the types of physical stress that might be involved and determine tolerable shift lengths.
  - Use trained observers to make certain that PPE is being used correctly and that donning and doffing PPE protocols are being adhered to by using a checklist for each step of the donning and doffing procedure.
  - Personnel who are unable to correctly use PPE and adhere to protocols should not provide care for patients with EVD.
- Document training of observers and health care workers for proficiency and competency in donning and doffing PPE and in performing all necessary care-related duties while wearing PPE.
- Designate spaces so that PPE can be donned and doffed in separate areas to prevent any cross- contamination.
- Key safe work practices include the following:
  - Identify and promptly isolate the patient with Ebola in a single patient room with a closed door and a private bathroom or covered bedside commode.
  - Limit room entry to only those health care workers essential to the patient's care and restrict non-essential personnel and visitors from the patient care area.
  - Monitor the patient care area at all times and, at a minimum, log entry and exit of all health care workers who enter the room of a patient with Ebola.
  - Be able to safely conduct routine patient care activities (e.g., obtaining vital signs and conducting clinicallyappropriate examinations, collecting and appropriately packaging laboratory specimens).
  - Dedicate a trained observer to watch closely and provide coaching for each donning and each doffing procedure to ensure adherence to donning and doffing protocols.
  - Ensure that health care workers take sufficient time to don and doff PPE slowly and correctly without distraction.
  - Reinforce the need to keep hands away from the face during any patient care and to limit touching surfaces and body fluids.
  - Frequently disinfect gloved hands by using an alcohol-based hand rub (ABHR), particularly after contact with body fluids.
  - Prevent needle stick and sharps injuries by adhering to correct sharps handling practices.
    - Avoid unnecessary procedures involving sharps.

APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

- Use needleless IV systems whenever possible.
- Immediately clean and disinfect any visibly contaminated PPE surfaces, equipment, or patient care area surfaces using an \*EPA-registered disinfectant wipe.
- Regularly clean and disinfect surfaces in the patient care area, even in the absence of visible contamination.
  - Only nurses or physicians should clean and disinfect surfaces in the patient care areas to limit the number of additional health care workers who enter the room.
- Observe (by the site manager or his/her designee) health care workers in the patient room if possible (e.g., through a glass-walled intensive care unit [ICU] room, video link) to identify any unrecognized lapses or near misses in safe care.
- Establish a facility exposure management plan that addresses decontamination and follow-up of health care workers in the case of any unprotected exposure. Training and follow-up should be part of the health care worker training.

### Section 2. Principles of PPE

Health care workers must follow the basic principles below to ensure that no infectious material reaches unprotected skin or mucous membranes while providing patient care.

- Donning
  - PPE must be donned correctly in proper order before entry into the patient care area; PPE should not be later modified while in the patient care area. The donning activities must be directly observed by a trained observer.
- During Patient Care
  - PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted during patient care. In the event of a significant splash, the health care worker should immediately move to the doffing area to remove PPE. The one exception is that visibly contaminated outer gloves can be changed while in the patient room and patient care can continue. Contaminated outer gloves can be disposed of in the patient room with other Ebola-associated waste(https://www.cdc.gov/vhf/ebola/healthcare-us/cleaning/waste-management.html).
  - Health care workers should perform frequent disinfection of gloved hands using an ABHR, particularly after contact with body fluids.
  - If during patient care any breach in PPE occurs (e.g., a tear develops in an outer glove, a needle stick occurs, a glove separates from the sleeve), the health care worker must move immediately to the doffing area to assess the exposure. The facility exposure management plan should be implemented; including correct supervised doffing and appropriate occupational health follow-up, if indicated by assessment. In the event of a potential exposure, blood borne pathogen exposure procedures must be followed in accordance with the OSHA Blood borne Pathogens Standard.
- Doffing
  - Removing used PPE is a high-risk process that requires a structured procedure, a trained observer, a doffing assistant in some situations, and a designated area for removal to ensure protection.
  - PPE must be removed slowly and deliberately in the correct sequence to reduce the possibility of selfcontamination or other exposure to Ebola.
  - A stepwise process should be developed and used during training and patient care.

Double-gloving provides an easy way to remove gross contamination by changing an outer glove during patient care and when removing PPE. Beyond this, more layers of PPE may make it more difficult to perform patient care duties and put health care workers at greater risk for percutaneous injury (e.g., needle sticks), self-contamination during care or doffing, or other exposures to Ebola. If health care facilities decide to add additional PPE or modify this PPE guidance, they must consider the risk/benefit of any modification and train health care workers on how to correctly don and doff for the modified procedure. Donning and doffing steps may need to be adapted on the basis of the specific PPE that is purchased by the hospital. If adaptations are made, facilities must select PPE that offers a similar or higher level of

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

protection than what is recommended here, train health care workers in its use, and ensure they demonstrate competence in its use before caring for a patient with Ebola.

### Section 3. Training on Correct Use of PPE

Training ensures that health care workers are knowledgeable and proficient in donning and doffing PPE before caring for a patient with Ebola. Comfort and proficiency when donning and doffing are only achieved by repeatedly practicing correct use of PPE. Health care workers should be required to demonstrate competency in using PPE, including donning and doffing while being observed by a trained observer, before working with patients with Ebola. Training should be tailored to the intended audience and effectively transmit the required information. In addition, during practice, health care workers and their trainers should assess proficiency and comfort with performing required duties while wearing PPE. People unwilling or unable to fulfill these requirements should not care for a patient with Ebola.

- The following elements are essential for PPE training:
  - How to safely don, adjust, use, and doff the specific PPE that the health care worker will use;
  - How to safely conduct routine clinical care;
  - Limitations of the PPE (e.g., duration of use, degree of protection);
  - What to do in the case of an equipment failure or detection of a breach in PPE;
  - $\circ$   $\;$  How to maintain PPE and appropriately dispose of it after use; and
  - The possible physiologic strain associated with using PPE, and how to recognize and report early signs and symptoms, such as fatigue.
- Training must be interactive and should allow frontline health care workers to practice donning, adjusting, using, and doffing the specific PPE that the employee will use.
- Hospitals should ensure that the trained employees understand the content of the training and can correctly perform the required tasks.
- Hospitals should also ensure that employees can demonstrate how to properly don, use, and doff the same type/model PPE and respirators that they will use when caring for a patient.
- Regular refresher trainings are essential to maintaining these skills.

### Section 4. Use of a Trained Observer

Because the sequence and actions involved in each donning and doffing step are critical to avoid exposure, a trained observer should read aloud to the health care worker each step in the procedure checklist and visually confirm and document that the step has been completed correctly. The trained observer has the sole responsibility of ensuring that donning and doffing processes are adhered to. The trained observer must be knowledgeable about all PPE recommended in the facility's protocol and the correct donning and doffing procedures, including how to dispose of used PPE, and must be qualified to provide guidance and recommendations to the health care worker. The trained observer will coach, monitor, and document successful donning and doffing procedures, and provide immediate corrective instruction if the health care worker is not following the recommended steps. However, the trained observer should NOT provide physical assistance during doffing, which would require direct contact with potentially contaminated PPE. The trained observer is required to wear PPE, nonetheless, because the coaching role will necessitate being present in the PPE removal area during the doffing process. PPE for the trained observer is described in Section 8. The trained observer should know the exposure management plan in the event of an unintentional break in procedure. A designated doffing assistant or "buddy" might be helpful in some circumstances, e.g., during the doffing of the PAPR.

### Section 5. Designating Areas for PPE Donning and Doffing

- Ensure that areas for donning and doffing are designated as separate from the patient care area (e.g., patient's room) and that there is a predominantly one-way flow from the donning area to the patient care area to the doffing area.
- Confirm that the doffing area is large enough to allow freedom of movement for safe doffing as well as space for a waste receptacle, a new glove supply, and ABHR used during the doffing process. If using a PAPR with external belt-

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

mounted blower, confirm that there is an area or container designated for collecting PAPR components for cleaning and disinfection, as well as routine maintenance.

Facilities should ensure that space and layout allow for clear separation between clean and contaminated areas. Separate the space into distinct areas and establish a directional, one-way flow of care, moving from clean areas (e.g., area where PPE is donned and unused equipment is stored) to the patient room and to the PPE removal area (area where potentially contaminated PPE is removed and discarded). The direction of flow should be marked (e.g., signs on the floor) with visible signage; temporary plastic enclosures can be added if necessary. Existing anterooms to patient rooms have been used for doffing but in many cases are not ideal because of their small dimensions. As an alternative, some steps of the PPE removal process may be performed in a clearly designated area of the patient's room near the door, provided these steps can be seen and supervised by a trained observer (e.g., through a window) and provided that the health care worker doffing PPE can hear the instructions of the trained observer.

Whenever possible, close the end of the hallway of a ward or ICU to through traffic, thereby restricting access to the patient's room to essential personnel who are properly trained in recommended infection prevention practices for caring for patients with Ebola. Designate two adjacent rooms, located on either side of the patient's room, to be cleared of equipment and furniture and used as donning and doffing areas. Glass-enclosed rooms or other designs (e.g., wide glass doors, windows, video monitoring) to observe ongoing care in the patient room and activity in the doffing area are preferred. The path from the room of the patient with Ebola to an external doffing room should be as short as possible and clearly defined and/or enclosed as a contaminated area that is cleaned frequently along with the doffing area. If areas are reconfigured, the facility should make certain the space remains compliant with all applicable building and fire codes.

Post signage to highlight key aspects of PPE donning and doffing, including:

- Designating clean areas vs. contaminated areas
- Reminding health care workers to wait for a trained observer before removing PPE
- Listing each step of the doffing procedure
- Reinforcing the need for slow and deliberate removal of PPE to prevent self-contamination
- Reminding health care workers to disinfect gloved hands in between steps of the doffing procedure, as indicated below.

Designate the following areas with appropriate signage:

### 1. PPE Storage and Donning Area

This is a clean area outside the patient room (e.g., a nearby vacant patient room, a marked area in the hallway outside the patient room) where clean PPE is stored and where health care workers don PPE before entering the contaminated area and the patient's room. Do not store potentially contaminated equipment (e.g., PAPR components that have not been cleaned and disinfected), used PPE, or waste removed from the patient's room in the clean area. If waste must pass through this area, it must be properly contained.

### 2. Patient Room

Use a single-patient room, preferably with a private bathroom; a covered bedside commode with bagging of human waste is an alternative approach. Plan ahead for the need to store many bags of regulated medical waste before their secondary containment. Additional guidance on waste management can be accessed at Ebola-Associated Waste Management (<u>https://www.cdc.gov/vhf/ebola/clinicians/cleaning/waste-management.html</u>). The door to the patient room should be kept closed. Any item or health care worker exiting this room should be considered contaminated.

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

### 3. PPE Doffing Area

Designate an area near the patient's room (e.g., anteroom or adjacent vacant patient room that is separate from the clean area) where health care workers leaving the patient's room can stand to doff and discard their PPE. Alternatively, some steps of the PPE removal process may be performed in a clearly designated area of the patient's room near the door, provided these steps can be seen and supervised by a trained observer (e.g., through a window and provided that the health care worker doffing PPE can hear the instructions of the trained observer). Do not use this designated area within the patient room for any other purpose. Stock gloves in a clean section of the PPE removal area accessible to the health care worker while doffing.

In the PPE removal area, provide supplies to disinfect PPE and perform hand hygiene and space to remove PPE, including an easily cleaned and disinfected seat where health care workers can remove boot or shoe covers. If space allows, designate stations around the perimeter of the doffing room where each piece of PPE will be removed, moving from more contaminated to less contaminated areas of the room as PPE is doffed. Provide leak-proof disposable waste containers for discarding used PPE. Provide a container to collect all reusable PAPR components. Frequently clean and disinfect the PPE removal area, including after each doffing procedure has been completed. One way such cleaning may be achieved is by having another health care worker who has just donned their full PPE clean the doffing area, moving from cleaner to dirtier areas within the doffing area, before entering the patient's room.

Facilities should consider making showers available for use for the comfort of health care workers after doffing PPE at the end of their shift; the heat from wearing PPE is likely to cause significant perspiration.

### Section 6. Selecting PPE for Health Care Workers Who Care for Patients with Ebola

This section outlines several PPE combinations and how they should be worn. The key to safely wearing PPE is consistent and correct use reinforced by repeated training and practice. Variations in PPE used to care for patients with Ebola should be avoided within a facility. A facility should select and standardize the PPE to be used by all health care workers who are directly interacting with patients with Ebola. OSHA's Blood borne Pathogens standard requires employers to establish a written Exposure Control plan designed to eliminate or minimize employee exposures and should include procedures for donning and doffing the PPE ensemble that is chosen. The protocol must be reviewed by staff who participate in Ebola care and the trained observer should ensure the protocol is adhered to.

Airborne transmission of Ebola has not been documented in hospitals or households during any of the human outbreaks investigated to date. However, certain procedures (e.g., bronchoscopy, endotracheal intubation) might create mechanically generated aerosols that could be infectious. Such aerosol-generating procedures require additional precautions. Experience in the care of patients hospitalized with Ebola in the United States indicates that the level of care may change unexpectedly and could require an aerosol-generating procedure. Because there might not be time for staff to leave the room to don proper PPE for an aerosol-generating procedure, CDC recommends that all health care workers entering the room of a patient with Ebola wear respiratory protection that would protect them during an aerosol-generating procedure. This would include a NIOSH-certified, fit-tested N-95 or higher respirator, or a PAPR.

Safety and comfort are both critical for health care workers wearing PPE while caring for patients with Ebola. Standardized attire under PPE (e.g., surgical scrubs or disposable garments and dedicated washable footwear) helps the donning and doffing process and eliminates concerns of contaminating personal clothing. Footwear should be closedtoe, soft-soled, washable, and have a closed back. If facilities elect to use different PPE from what is outlined below (e.g., coveralls with either an integrated hood or a surgical hood with integrated full face shield), they must train health care workers on how to use each type of PPE type and ensure that donning and doffing procedures are adjusted and practiced accordingly. Extra layers of PPE are not advised because they can reduce comfort, field of vision, and mobility and increase the risk of error and injury while adding no meaningful protection for the wearer.

In this guidance, impermeable gowns and coveralls indicates that the material and construction have demonstrated resistance to synthetic blood and simulated blood borne pathogens. In contrast, fluid-resistant indicates a gown that has

APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

demonstrated resistance to water or a coverall that has demonstrated resistance to water or synthetic blood. These categories reflect the currently available U.S. product specifications; specific test methods that assess resistance for these products are listed in Table 1. When purchasing gowns and coveralls, facilities should follow specifications in Table 1 to ensure they select gowns and coveralls as described in Sections 7 and 8.

| Table 1: Specifications for Impermeable and Fluid-Resistant Gowns and Coveralls |  |   |
|---|--|---|
|   | Gown   | Coverall  |
| Impermeable   | Surgical or isolation* gown that passes:<br>- ANSI/AAMI PB70 Level 4 requirements  | Coverall* made with fabric and<br>seams/closures that passes:<br>- ASTM F1671 (13.8kPa)<br>or<br>- ISO 16604 ≥ 14 kPa   |
| Fluid-Resistant   | Surgical or isolation* gown that passes:   | Coverall* made of fabric that passes:   |
|   | <ul> <li>ANSI/AAMI PB70 Level 3 requirements<br/>or</li> <li>EN 13795 high performance surgical gown<br/>requirements</li> </ul> | <ul> <li>AATCC 42 ≤ 1 g and AATCC 127<br/>≥ 50 cm H20 or EN 20811 ≥ 50<br/>cm H20<br/>or</li> <li>ASTM F1670 (13.8kPa)<br/>or</li> <li>ISO 16603 ≥ 3.5 kPa</li> </ul> |

\*Testing by an ISO 17025 certified third party laboratory is recommended.

For more details, refer to technical document "Considerations for Selecting Protective Clothing used in Health Care for Protection against Microorganisms in Blood and Body Fluids", which provides a more detailed explanation of the scientific evidence and national and international standards, test methods, and specifications for fluid-resistant and impermeable protective clothing used in health care.

### Section 7. Recommended PPE When Caring for a Patient with Confirmed Ebola or Unstable PUI

- Impermeable garment:
  - Single-use (disposable) impermeable gown extending to at least mid-calf.
     OR
  - Single-use (disposable) impermeable coverall. Coveralls without integrated hoods are preferred; coveralls with or without integrated socks are acceptable. Coveralls and gowns should be available in appropriate sizes so people with long arms are able to cover their forearms without gaps between gloves and sleeves when extending their arms to perform normal duties. Consider selecting gowns or coveralls with thumb hooks to the secure sleeves over the inner glove. Facilities that choose to tape gloves will need to ensure that the tape does not tear the gloves or gown/coverall during doffing and that sharp implements, such as scissors, are not needed to remove the tape. Experience in some facilities suggests that taping can increase risk by making the doffing process more difficult and cumbersome; however, other facilities have identified ways to optimize the use of tape and other adherent materials to anchor sleeves over inner gloves. Scissors should never be used to remove tape or any other part of PPE.
- Respiratory Protection: Either a PAPR or disposable, NIOSH-certified N95 respirator should be worn in case a
  potentially aerosol-generating procedure needs to be performed emergently. PAPRs with a full-face covering and
  head-shroud make accidental self-contamination during care more difficult (e.g., while adjusting eyeglasses);
  disposable N95 face piece respirators are less cumbersome and can be easier to doff safely. Any respirator must be
  used in the context of a comprehensive, written respiratory protection program as required under OSHA Respiratory
  Protection Standard, 29 CFR 1910.134. This standard includes a hazard assessment to ensure appropriate respirator

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

protection, fit testing, medical evaluation, and training of the worker. When required in the occupational setting, tight-fitting respirators cannot be used by people with facial hair that interferes with the face seal.

- PAPR: A hooded respirator with a full face shield, helmet, or headpiece. Any reusable helmet or headpiece must be covered with a single-use (disposable) hood that extends to the shoulders and fully covers the neck and is compatible with the selected PAPR. If a hood is used over the PAPR, it must not interfere with the function of the PAPR. The facility should follow manufacturer's instructions for decontaminating reusable components and, on the basis of those instructions, develop facility protocols that include designating responsible personnel who ensure that the equipment is safely and appropriately reprocessed and that batteries are fully charged before reuse.
  - A PAPR with a self-contained filter and blower unit integrated inside the helmet can facilitate doffing.
  - A PAPR with external belt-mounted blower unit requires an additional doffing step, as described below.
- N95 Respirator: Single-use (disposable) N95 respirator or higher in combination with single-use (disposable) surgical hood extending to shoulders and single-use (disposable) full face shield. If N95 respirators are used instead of PAPRs, health care workers should be carefully observed to ensure that they do not inadvertently touch their faces under the face shield during patient care.
- Single-use (disposable) examination gloves with extended cuffs. Two pairs of gloves should be worn so that a heavily soiled outer glove can be safely removed and replaced during care. At a minimum, outer gloves should have extended cuffs. Double-gloving also allows potentially contaminated outer gloves to be removed during doffing to avoid self-contamination.
- Single-use (disposable) boot covers that extend to at least mid-calf. In addition, single-use (disposable) ankle-high shoe covers ("surgical booties") worn over boot covers may be considered to facilitate the doffing process, reducing contamination of the floor in the doffing area thereby reducing contamination of underlying shoes. Although the use of shoe covers over boot covers may be analogous to using double gloves to ensure safe doffing, the risk of significant contamination to underlying shoes from the floor during the doffing process is very low relative to the risk of gloved hand contamination. Thus, facilities may consider methods other than shoe covers worn over boot covers to facilitate doffing of footwear including, most importantly, frequent cleaning of the floor in the doffing area. Boot and shoe covers (if the latter are used) should allow for ease of movement and must not present a slip hazard to the wearer.
  - Single-use (disposable) shoe covers are acceptable only if they will be used in combination with a coverall with integrated socks.
- Single-use (disposable) apron that covers the torso to the level of the mid-calf should be used over the gown or coveralls if patients with Ebola are vomiting or have diarrhea, and should be used routinely if the facility is using a coverall that has an exposed, unprotected zipper in the front. An apron provides additional protection, reducing the contamination of gowns or coveralls by body fluids and providing a way to quickly remove a soiled outer layer during patient care. Select an apron with a neck strap that can be easily broken or untied to avoid having to pull the strap over the head, which makes it easier to remove without self-contamination when exchanging a soiled apron during care or when removing the apron during the doffing procedure.

### Section 8. Recommended PPE for Trained Observer and Doffing Assistant during Observations of PPE Doffing

The trained observer should not enter the room of a patient with Ebola but must be in the PPE donning and doffing area to observe donning and doffing procedures, as outlined in Section 7. The following PPE are recommended for trained observers and doffing assistants observing the doffing process:

- Single-use (disposable) fluid-resistant gown that extends to at least mid-calf or single-use (disposable) fluid-resistant coverall without integrated hood.
- Single-use (disposable) full face shield.
- Single-use (disposable) surgical mask.
- Single-use (disposable) gloves with extended cuffs. Two pairs of gloves should be worn. At a minimum, outer gloves should have extended cuffs.

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

• Single-use (disposable) ankle-high shoe covers. Shoe covers should allow for ease of movement and not present a slip hazard to the wearer.

Trained observers should don and doff selected PPE according to the same procedures outlined below. Facilities may elect to use impermeable gowns or coveralls for their trained observers to standardize the PPE in the unit, for ease of training personnel on a single item, and to prevent health care personnel entering the patient care area from inadvertently selecting a fluid-resistant gown or coverall instead of the recommended impermeable garment. If facilities elect to use fluid-resistant gowns or coveralls for their trained observers, they must take measures (e.g., staff training, good signage, clear labeling of the product, good inventory management practices) to ensure that the correct garment is selected by appropriate personnel.

### Section 9. Recommended Sequences for Donning PPE

### Section 9A. Donning PPE, PAPR Option

Donning PPE, PAPR Option – This donning procedure assumes the facility has elected to use PAPRs. An established protocol facilitates training and compliance. A trained observer should verify compliance with the protocol.

- Engage Trained Observer: The donning process is guided and supervised by a trained observer, who confirms
  visually that all PPE is serviceable and has been donned successfully. The trained observer should use a written
  checklist to guide and confirm each step in donning PPE and can verify the integrity of the ensemble. No
  exposed clothing, skin or hair of the health care worker should be visible at the conclusion of the donning
  process.
- 2. Remove Personal Clothing and Items: Change into surgical scrubs (or disposable garments) and dedicated washable (plastic or rubber) footwear in a suitable clean area. No personal items (e.g., jewelry including rings, watches, cell phones, pagers, pens) should be brought into the patient room. Long hair should be tied back. Eye glasses should be secured with a tie.
- 3. Inspect PPE Before Donning: Visually inspect the PPE ensemble to be worn to ensure that it is in serviceable condition, all required PPE and supplies are available, and the sizes selected are correct for the health care worker. The trained observer should review the donning sequence with the health care worker before the donning process and read it aloud to the health care worker in a step-by-step fashion.
- 4. Put on Boot Covers: If a coverall without integrated socks is worn, the upper band of the boot cover will be worn UNDER the pants leg of the coverall to prevent pooling of liquids between the coverall pants leg and upper band of boot cover. This step can be omitted if wearing a coverall with integrated socks.
- 5. Put on Inner Gloves: Put on first pair of gloves.
- 6. Put on Gown or Coverall: Put on gown or coverall. Ensure gown or coverall is large enough to allow unrestricted freedom of movement. Ensure cuffs of inner gloves are tucked under the sleeve of the gown or coverall.
  - a. If a PAPR with a self-contained filter and blower unit that is integrated inside the helmet is used, then the belt and battery unit must be put on before donning the impermeable gown or coverall so that the belt and battery unit are contained under the gown or coverall.
  - b. If a PAPR with external belt-mounted blower is used, then the blower and tubing must be on the outside of gown or coverall to ensure proper airflow.
- 7. Put on Outer Gloves: Put on second pair of gloves (with extended cuffs). Ensure the cuffs are pulled over the sleeves of the gown or coverall.
- 8. Put on Respirator: Put on PAPR with a full face-shield, helmet, or headpiece.
  - a. If a PAPR with a self-contained filter and blower unit integrated inside the helmet is used, then a single-use (disposable) hood that extends to the shoulders and fully covers the neck must also be used. Be sure that the hood covers all of the hair and the ears, and that it extends past the neck to the shoulders.
  - b. If a PAPR with external belt-mounted blower unit and attached reusable headpiece is used, then a single-use (disposable) hood that extends to the shoulders and fully covers the neck must also be used. Ensure that the hood covers all of the hair and the ears and it extends past the neck to the shoulders.

APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

- 9. Put on Outer Apron (if used): Put on a disposable apron to provide an additional layer for the front of the body.
- 10. Verify: After completing the donning process, the trained observer should verify the integrity of the ensemble. The health care worker should be able to extend the arms, bend at the waist, and go through a range of motion sufficient for patient care delivery while all remaining correctly covered. A mirror in the room can be useful for the health care worker while donning PPE.

### Section 9B. Donning PPE, N95 Respirator Option

Donning PPE, N95 Respirator Option – This donning procedure assumes the facility has elected to use N95 respirators. An established protocol facilitates training and compliance. Use a trained observer to verify successful compliance with the protocol.

- 1. Engage Trained Observer: The donning process is guided and supervised by a trained observer who confirms visually that all PPE is serviceable and has been donned successfully. The trained observer should use a written checklist to confirm each step in donning PPE and verify the integrity of the ensemble. No exposed clothing, skin or hair of the health care worker should be visible at the end of the donning process.
- 2. Remove Personal Clothing and Items: Change into surgical scrubs (or disposable garments) and dedicated washable (plastic or rubber) footwear in a suitable, clean area. No personal items (e.g., jewelry including rings, watches, cell phones, pagers, pens) should be brought into patient room. Long hair should be tied back. Eye glasses should be secured with a tie.
- 3. Inspect PPE Before Donning: Visually inspect the PPE ensemble to be worn to ensure it is in serviceable condition, all required PPE and supplies are available, and the sizes selected are correct for the health care worker. The trained observer should review the donning sequence with the health care worker before donning begins and read it aloud during donning in a step-by-step fashion.
- 4. Put on Boot Covers. If a coverall without integrated socks is worn, the upper band of the boot cover will be worn UNDER the pants leg of the coverall to prevent pooling of liquids between the coverall pants leg and upper band of boot cover. This step can be omitted if wearing a coverall with integrated socks.
- 5. Put on Inner Gloves: Put on first pair of gloves.
- 6. Put on Gown or Coverall: Put on gown or coverall. Ensure gown or coverall is large enough to allow unrestricted freedom of movement. Ensure cuffs of inner gloves are tucked under the sleeve of the gown or coverall.
- 7. Put on N95 Respirator: Put on N95 respirator. Complete a user seal check.
- 8. Put on Surgical Hood: Over the N95 respirator, place a surgical hood that covers all of the hair and the ears, and extends past the neck to the shoulders. Ensure that hood completely covers the ears and neck.
- 9. Put on Outer Apron (if used): Put on a disposable apron to provide an additional layer for the front of the body.
- 10. Put on Outer Gloves: Put on second pair of gloves (with extended cuffs). Ensure the cuffs are pulled over the sleeves of the gown or coverall.
- 11. Put on Face Shield: Put on full face shield over the N95 respirator and surgical hood to protect the eyes, as well as front and sides of the face.
- 12. Verify: After completing the donning process, the trained observer should verify the integrity of the ensemble. The health care worker should be able to extend the arms, bend at the waist, and go through a range of motion sufficient for patient care delivery while all remaining correctly covered. A mirror in the room can be useful for the health care worker while donning PPE.

### Preparing for Doffing

The purpose of this step is to prepare for the removal of PPE. The doffing area should be separated into areas where early and later steps of doffing are conducted (e.g., separate chairs or ends of a bench). Before entering the PPE removal area, look for, clean, and disinfect (using an \*EPA-registered disinfectant wipe) visible contamination on the PPE. As a final step before doffing, disinfect outer-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR, and allow to dry. Verify that the trained observer is available in the PPE removal area before entering and beginning the removal process. Some facilities, especially those using PAPRs, might find it helpful to have a designated assistant to help with doffing. An assistant who is only assisting in doffing should wear the same PPE as the trained observer. If the
### TAB A (PERSONAL PROTECTIVE EQUIPMENT GUIDANCE)

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

doffing assistant is entering the patient's room (e.g. as a clinician), the assistant should wear the same PPE as other personnel entering the patient's room. The observer should not touch the person who is doffing and should not serve as the doffing assistant or "buddy." A mirror in the room can be useful for the health care worker while doffing PPE.

### Section 9C. Doffing PPE, PAPR Option

Doffing PPE, PAPR Option – PPE should be doffed in the designated PPE removal area. Place all PPE waste in a leak-proof infectious waste container.

- 1. Engage Trained Observer: The doffing process should be supervised by the trained observer, who reads aloud each step of the procedure and confirms visually that the PPE is removed properly. Before the health care worker doffs PPE, the trained observer should coach and remind the health care worker to avoid reflexive actions that may put them at risk, such as touching their face. Post this instruction and repeat it verbally during doffing.
- 2. Inspect: Inspect the PPE to assess for visible contamination, cuts, or tears before starting to remove. If any PPE is visibly contaminated, then clean and disinfect using an EPA-registered disinfectant wipe.
- 3. Disinfect Outer Gloves: Disinfect outer-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR, and allow to dry.
- 4. Remove Apron (if used): Remove (e.g., by breaking or untying neck strap and releasing waist ties) and roll the apron away from you, containing the soiled outer surface as you roll; discard apron taking care to avoid contaminating gloves or other surfaces.
- 5. Inspect: After removing the apron, inspect the PPE ensemble for visible contamination or cuts or tears. If visibly contaminated, then clean and disinfect affected areas using an \*EPA-registered disinfectant wipe.
- 6. Disinfect and Remove Outer Gloves: Disinfect outer-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR. Remove and discard outer gloves, taking care not to contaminate inner glove during removal process.
- 7. Inspect and Disinfect Inner Gloves: Inspect the inner gloves' outer surfaces for visible contamination, cuts, or tears. If an inner glove is visibly soiled, then disinfect the glove with either an \*EPA-registered disinfectant wipe or ABHR, remove the inner gloves, perform hand hygiene with ABHR on bare hands, and don a new pair of gloves. If no visible contamination is identified on the inner gloves, then disinfect the inner-gloves with either an \*EPA-registered disinfectant wipe or ABHR. If a cut or tear is detected on an inner glove, immediately review occupational exposure risk per hospital protocol.
- 8. Remove Respirator with External Belt-Mounted Blower: Remove the headpiece. The health care worker may need help removing the headpiece while still connected to the belt-mounted blower and filter unit. (Note: If a PAPR with a self-contained blower in the helmet is used, wait until step 14 to remove components.)
  - a. Remove the belt-mounted blower unit and place all reusable PAPR components in an area or container designated for the collection of PAPR components for disinfection.
  - b. Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 9. Remove Gown or Coverall: Remove and discard.
  - a. Depending on gown design and location of fasteners, the health care worker can either untie fasteners, have the doffing assistant or "buddy" unfasten the gown, or gently break fasteners. Avoid contact of scrubs or disposable garments with outer surface of gown during removal. Pull gown away from body, rolling inside out and touching only the inside of the gown.
  - b. To remove coverall, tilt head back and reach zipper or fasteners. Use a mirror to avoid contaminating skin or inner garments. Unzip or unfasten coverall completely before rolling down and turning inside out. Avoid contact of scrubs with outer surface of coverall during removal, touching only the inside of the coverall.
- 10. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 11. Remove Boot Covers: Sitting on a new clean surface (e.g., second clean chair, clean side of a bench) pull off boot covers, taking care not to contaminate pants legs.
- 12. Disinfect Washable Shoes: Use an \*EPA-registered disinfectant wipe to wipe down every external surface of the washable shoes.
- 13. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.

### TAB A (PERSONAL PROTECTIVE EQUIPMENT GUIDANCE)

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

- 14. Remove Respirator (if not already removed): If a PAPR with a self-contained blower in the helmet is used, remove all remaining components here.
  - a. Remove and discard disposable hood.
  - b. Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
  - c. Remove helmet and the belt and battery unit. The health care worker may need help removing the PAPR.
  - d. Place all reusable PAPR components in an area or container designated to collect PAPR components for disinfection.
- 15. Disinfect and Remove Inner Gloves: Disinfect inner-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR. Remove and discard gloves, taking care not to contaminate bare hands during removal process.
- 16. Perform Hand Hygiene: Perform hand hygiene with ABHR.
- 17. Inspect: Both the trained observer and the health care worker perform a final inspection of the health care worker for contamination of surgical scrubs or disposable garments. If contamination is identified, the garments should be carefully removed and the wearer should shower immediately. The trained observer should immediately inform the infection preventionist or occupational safety and health coordinator or their designee for appropriate occupational health follow-up.
- 18. Scrubs: Health care worker can leave the PPE removal area wearing dedicated washable footwear and surgical scrubs or disposable garments, proceeding directly to showering area where these are removed.
- 19. Protocol Evaluation/Medical Assessment: Either the infection preventionist or occupational safety and health coordinator or their designee should meet with each health care worker on a regular basis to review the patient care activities performed, identify any concerns about care protocols, and record the health care worker's level of fatigue.

### Section 9D. Doffing PPE, N95 Respirator Option

Doffing PPE, N95 Respirator Option – PPE should be doffed in the designated PPE removal area. Place all PPE waste in a leak-proof infectious waste container.

- Engage Trained Observer: The doffing process should be supervised by the trained observer, who reads aloud each step of the procedure and confirms visually that the PPE has been removed properly. Before doffing PPE, the trained observer must remind health care workers to avoid reflexive actions that may put them at risk, such as touching their face. Post this instruction and repeat it verbally during doffing.
- 2. Inspect: Inspect the PPE to assess for visible contamination, cuts, or tears before starting to remove. If any PPE is visibly contaminated, then disinfect using an \*EPA-registered disinfectant wipe.
- 3. Disinfect Outer Gloves: Disinfect outer-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR.
- 4. Remove Apron (if used): Remove (e.g., by breaking or untying neck strap and releasing waist ties) and roll the apron away from you, containing the soiled outer surface as you roll; discard apron taking care to avoid contaminating gloves or other surfaces.
- 5. Inspect: After removing the apron, inspect the PPE ensemble for visible contamination or cuts or tears. If visibly contaminated, then clean and disinfect any affected areas by using an \*EPA-registered disinfectant wipe.
- 6. Disinfect and Remove Outer Gloves: Disinfect outer-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR. Remove and discard outer gloves, taking care not to contaminate inner gloves during removal process.
- 7. Inspect and Disinfect Inner Gloves: Inspect the inner gloves' outer surfaces for visible contamination, cuts, or tears. If an inner glove is visibly soiled, then disinfect the glove with either an \*EPA-registered disinfectant wipe or ABHR, remove the inner gloves, perform hand hygiene with ABHR on bare hands, and don a new pair of gloves. If no visible contamination is identified on the inner gloves, then disinfect the inner-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR. If a cut or tear is detected on an inner glove, immediately review occupational exposure risk per hospital protocol.
- 8. Remove Face Shield: Remove the full face shield by tilting the head slightly forward, grasping the rear strap and pulling it gently over the head and allowing the face shield to fall forward, then discard. Care must be taken not to touch the face when removing face shield. Avoid touching the front surface of the face shield.

### TAB A (PERSONAL PROTECTIVE EQUIPMENT GUIDANCE)

### APPENDIX 3 (EBOLA CONTACT AND DROPLET PRECAUTIONS) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

- 9. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 10. Remove Surgical Hood: Unfasten (if applicable) surgical hood, gently remove, and discard. The doffing assistant or "buddy" can assist with unfastening hood.
- 11. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 12. Remove Gown or Coverall: Remove and discard.
  - a. Depending on gown design and location of fasteners, the health care worker can untie fasteners, have the doffing assistant or "buddy" unfasten the gown, or gently break fasteners. Avoid contact of scrubs or disposable garments with outer surface of gown during removal. Pull gown away from body, rolling inside out and touching only the inside of the gown.
  - b. To remove coverall, tilt head back to reach zipper or fasteners. Unzip or unfasten coverall completely before rolling down and turning inside out. Avoid contact of scrubs with outer surface of coverall during removal, touching only the inside of the coverall.
- 13. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 14. Remove Boot Covers: Sitting on a clean surface (e.g., second clean chair or clean side of a bench) pull off boot covers, taking care not to contaminate scrubs pants legs.
- 15. Disinfect and Change Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
  - a. Remove and discard gloves taking care not to contaminate bare hands during removal process.
  - b. Perform hand hygiene with ABHR.
  - c. Don a new pair of inner gloves.
- 16. Remove N95 Respirator: Remove the N95 respirator by tilting the head slightly forward, grasping first the bottom tie or elastic strap, then the top tie or elastic strap, and remove without touching the front of the N95 respirator. Discard N95 respirator.
- 17. Disinfect Inner Gloves: Disinfect inner gloves with either an \*EPA-registered disinfectant wipe or ABHR.
- 18. Disinfect Washable Shoes: Use an \*EPA-registered disinfectant wipe to wipe down every external surface of the washable shoes.
- 19. Disinfect and Remove Inner Gloves: Disinfect inner-gloved hands with either an \*EPA-registered disinfectant wipe or ABHR. Remove and discard gloves taking care not to contaminate bare hands during removal process.
- 20. Perform Hand Hygiene: Perform hand hygiene with ABHR.
- 21. Inspect: Both the trained observer and the health care worker perform a final inspection of health care worker for contamination of the surgical scrubs or disposable garments. If contamination is identified, the garments should be carefully removed and the wearer should shower immediately. The trained observer should immediately inform infection preventionist or occupational safety and health coordinator or their designee.
- 22. Scrubs: Health care worker can leave PPE removal area wearing dedicated washable footwear and surgical scrubs or disposable garments, proceeding directly to showering area where these are removed.
- 23. Protocol Evaluation/Medical Assessment: Either the infection preventionist or occupational health safety and health coordinator or their designee should meet with the health care worker on a regular basis to review the patient care activities performed, identify any concerns about care protocols, and record health care worker's level of fatigue.

### Footnotes

\*EPA-registered disinfectant wipe: Use a disposable wipe impregnated with a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with a label claim for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, and poliovirus); see <a href="https://www.epa.gov/pesticide-registration/list-l-disinfectants-use-against-ebola-virus">https://www.epa.gov/pesticide-registration/list-l-disinfectants-use-against-ebola-virus</a>

#### APPENDIX 4 (EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

### SUBJECT: Ebola Environmental Infection Control measures

**Who this is for:** Health care personnel in any hospitals. The guidance is most relevant for hospital staff caring for a patient under investigation (PUI) or patient with confirmed Ebola virus disease (EVD).

What this is for: Guidance to help health care personnel follow standard, contact and droplet precautions when caring for a PUI or patient with confirmed EVD.

Ebola viruses are transmitted through direct contact with infected blood or body fluids/substances (urine, feces, vomit) or through exposure to objects (such as needles) that have been contaminated with infected blood or body fluids. The role of the environment in transmission has not been established. Limited laboratory studies under favorable conditions indicate that Ebola virus can remain viable on solid surfaces, with concentrations falling slowly over several days. In the only study to assess contamination of the patient care environment during an outbreak, Ebola virus was not detected in any of 33 samples collected from sites that were not visibly bloody. However, virus was detected on a blood-stained glove and bloody intravenous insertion site. There is no epidemiologic evidence of Ebola virus transmission via either the environment or fomites that could become contaminated during patient care (bed rails, door knobs, laundry). However, given the apparent low infectious dose, potential of high virus titers in the blood of ill patients, and disease severity, higher levels of precaution are warranted to reduce the potential risk posed by contaminated surfaces in the patient care environment.

As part of the care of PUIs or patients with confirmed EVD, hospitals are recommended to:

- Be sure environmental services staff wear recommended personal protective equipment (PPE) to protect against direct skin and mucous membrane exposure of cleaning chemicals, contamination, and splashes or spatters during environmental cleaning and disinfection activities. If reusable heavy-duty gloves are used for cleaning and disinfecting, they should be disinfected and kept in the room or anteroom. Be sure staff are instructed in the proper use of PPE including safe removal to prevent contaminating themselves or others in the process, and that contaminated equipment is disposed of appropriately (see below).
- Use a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant (see Tab A) with a label claim for a non-enveloped virus (norovirus, rotavirus, adenovirus, and poliovirus) to disinfect environmental surfaces in rooms of PUIs or patients with confirmed EVD. Although there are no products with specific label claims against the Ebola virus, enveloped viruses such as Ebola are susceptible to a broad range of hospital disinfectants used to disinfect hard, non-porous surfaces. In contrast, non-enveloped viruses are more resistant to disinfectants. As a precaution, selection of a disinfectant product with a higher potency than what is normally required for an enveloped virus is being recommended at this time. EPA-registered hospital disinfectants with label claims against non-enveloped viruses (norovirus, rotavirus, adenovirus, and poliovirus) are broadly antiviral and capable of inactivating both enveloped and non-enveloped viruses.
- Avoid contamination of reusable porous surfaces that cannot be made single use:
  - $\circ$  Use only a mattress and pillow with plastic or other covering that fluids cannot get through.
  - $\circ$   $\,$  Do not place PUIs or patients with confirmed EVD in carpeted rooms.
  - Remove all upholstered furniture and decorative curtains from patient rooms before use.

**Routine cleaning and disinfection of the PPE doffing area**. Routine cleaning of the PPE doffing area should be performed at least once per day and after the doffing of grossly contaminated PPE. Cleaning should be performed by a health care worker wearing clean PPE. An EPA-registered hospital disinfectant with label claims against non-enveloped viruses (norovirus, rotavirus, adenovirus, and poliovirus) should be used for disinfection. When cleaning and disinfection are complete, the health care worker should carefully doff PPE and perform hand hygiene.

#### APPENDIX 4 (EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

- To reduce exposure among staff to potentially contaminated textiles (cloth products) while laundering, discard all linens, non-fluid-impermeable pillows or mattresses, and textile privacy curtains into the waste stream and dispose of appropriately.
- Ebola virus is classified as a Category A infectious substance regulated by the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). Any item transported offsite for disposal that is contaminated or suspected of being contaminated with a Category-A infectious substance must be packaged and transported in accordance with the HMR. This includes medical equipment, sharps, linens, used health care products such as soiled absorbent pads or dressings, kidneyshaped emesis pans, portable toilets; and used PPE (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 (see below).

### Frequently Asked Questions

1. How can I determine whether a particular EPA-registered hospital disinfectant is appropriate for use in the room of a PUI or patient with confirmed EVD?

Check EPA's Disinfectants for Use against the Ebola Virus (see Tab A) for a list of EPA-registered disinfectants. Users should be aware that an 'enveloped' or 'non-enveloped' virus designation may not be included on the container label. Instead check the disinfectant's label for at least one of the common non-enveloped viruses (e.g., norovirus, rotavirus, adenovirus, and poliovirus).

2. Are there special instructions for cleaning and disinfecting the room of a PUI or patient with confirmed EVD?

Daily cleaning and disinfection of hard, nonporous surfaces (high-touch surfaces such as bed rails and over bed tables, housekeeping surfaces such as floors and counters) should be done. Before disinfecting a surface, cleaning should be performed. In contrast to disinfection where products with specific claims are used, any cleaning product can be used for cleaning tasks. Use cleaning and disinfecting products according to label instructions. Check the disinfectant's label for specific instructions for inactivation of any of the non-enveloped viruses (norovirus, rotavirus, adenovirus, poliovirus) and follow label instructions for use of the product that are specific for inactivation of that virus. Use disposable cleaning cloths, mop cloths, and wipes, and dispose of these in leak-proof bags. Use a rigid waste receptacle designed to support the bag to help minimize contamination of the bag's exterior.

3. How should spills of blood or other body substances be managed?

The basic principles for blood or body substance spill management are outlined in the United States Occupational Safety and Health Administration (OSHA) Blood borne Pathogen Standards (29 CFR 1910.1030). CDC guidelines recommend removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient. An EPA-registered hospital disinfectant with label claims for non-enveloped viruses (norovirus, rotavirus, adenovirus, and poliovirus) and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions.

4. How should disposable materials (any single-use PPE, cleaning cloths, wipes, single-use microfiber cloths, linens, food service) and linens, privacy curtains, and other textiles be managed after their use in the patient room?

These materials should be placed in leak-proof containment and discarded appropriately. To minimize contamination of the exterior of the waste bag, place the bag in a rigid waste receptacle designed for this use. Incineration or autoclaving as a waste treatment process is effective in eliminating viral infectivity and provides

#### APPENDIX 4 (EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

waste minimization. If disposal requires transport offsite then this should be done in accordance with the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR, 49 CFR, Parts 171-180). Guidance from DOT has been released for Ebola.

5. Is it safe for patients with EVD to use the bathroom?

Yes. Sanitary sewers may be used for the safe disposal of patient waste. Additionally, sewage handling processes in the United States are designed to inactivate infectious agents.

6. How long does the Ebola virus persist in indoor environments?

Only one laboratory study has been reported, which was done under environmental conditions that favor virus persistence. This study found that under these ideal conditions, Ebola virus could remain active for up to six days. In a follow-up study, Ebola virus was found, relative to other enveloped viruses, to be quite sensitive to inactivation by ultraviolet light and drying; yet subpopulations did persist in organic debris.

In the only study to assess contamination of the patient care environment during an outbreak, conducted in an African hospital under "real-world conditions," Ebola virus was not detected by either nucleic acid amplification or culture in any of 33 samples collected from sites that were not visibly bloody. Virus was detected on a blood-stained glove and bloody intravenous insertion site by nucleic acid amplification, which may detect nonviable virus, but not by culture for live, infectious virus. Based upon these data and what is known regarding the environmental infection control of other enveloped RNA viruses, the expectation is that with consistent daily cleaning and disinfection practices in U.S. hospitals, the persistence of Ebola virus in the patient care environment would be short, with 24 hours considered a cautious upper limit.

7. Are wastes generated during delivery of care to patients with EVD subject to select agent regulations?

As long as facilities treating patients with EVD follow CDC's Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) in U.S. Hospitals (see Annex B, Appendix 3), waste generated during delivery of care to patients with Ebola would not be subject to federal select agent regulations (See the exclusion provision 42 CFR § 73.3(d)(1)). However, this would not apply to any facility that intentionally collected or otherwise extracted Ebola virus from waste generated during the delivery of patient care.

8. Are wastes generated during delivery of care to patients with EVD subject to any special transportation requirements?

Yes, wastes contaminated or suspected to be contaminated with Ebola virus must be packaged and transported in accordance with U.S. DOT Hazardous Materials Regulations (HMR, 49 CFR, Parts 171-180).

Once a PUI is no longer suspected to have EVD or has been ruled out for EVD, their waste materials no longer need to be managed as if contaminated with Ebola virus.

#### TAB A (DISINFECTANTS FOR USE AGAINST EBOLA VIRUS) APPENDIX 4 (EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

### SUBJECT: Disinfectants for Use against Ebola Virus

This list of registered disinfectants meets the CDC's criteria for use against the Ebola virus on hard, non-porous surfaces. It is necessary to follow the specific use instructions on the label for each disinfectant in order for the disinfectant to be effective. The product label will not specifically mention effectiveness against the Ebola virus. Instead, it will mention effectiveness against a different virus, such as norovirus, rotavirus, adenovirus, and/or poliovirus.

CDC's guidance recommends:

- 1. The use of an EPA-registered hospital disinfectant with a label claim for use against a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus); and
- 2. The product label use directions for the non-enveloped virus or viruses should be followed when disinfecting against the Ebola virus.

### US Environmental Protection Agency Office of Pesticide Programs

### List L: EPA's Registered Antimicrobial Products that Meet the CDC Criteria for Use against the Ebola Virus As Of January 10, 2018

| Product Information |  | Use Site                                    |  |                      |
|---------------------|--|---|--|----------------------|
| Registration Number | Marketed Product Name                                | Hospital/Health<br>Care Facilities<br>(Y/N) | Institutional (e.g.<br>schools, office<br>buildings, etc.) (Y/N) | Residential<br>(Y/N) |
| 10324-105           | Maquat 128-PD  | Y   | Y  | Y                    |
| 10324-105-66243     | Germ Control   | Y   | Y  | N                    |
| 10324-117           | Maquat 710-M   | Y   | Y  | Y                    |
| 10324-117-1270      | Zep FS Amine Z                                       | Y   | Y  | N                    |
| 10324-117-1270      | Zep Food Service Sanitizer                           | Y   | Y  | N                    |
| 10324-117-670       | Quick San 10   | Y   | Y  | N                    |
| 10324-141-5449      | Century Q Wipes                                      | Y   | Y  | N                    |
| 10324-170           | Maquat 64-PD-X                                       | Y   | Y  | Y                    |
| 10324-170-527       | Byquat Cleaner Disinfectant                          | Y   | Y  | N                    |
| 10324-177           | Maquat 705-M   | Y   | Y  | Y                    |
| 10324-198           | Maquat 702.5-M                                       | Y   | Y  | Y                    |
| 10324-214           | Maguard 5626   | Y   | Y  | Y                    |
| 10324-214-12120     | Navigator 62 Perisept                                | Y   | Y  | N                    |
| 10324-214-6186      | Neutra-Guard   | Y   | Y  | N                    |
| 10324-214-8155      | Husky 815 HCD Disinfectant                           | Y   | Y  | N                    |
| 10324-58            | Maquat 128   | Y   | Y  | Y                    |
| 10324-58-670        | Sunburst No-Bac                                      | Y   | Y  | N                    |
| 10324-59            | Maquat 750-M   | Y   | Y  | Y                    |
| 10324-59            | Maquat 64  | Y   | Y  | Y                    |
| 10324-59-1190       | D.C.S.   | Y   | Y  | N                    |
| 10324-59-12120      | Navigator 64 Fast Break                              | Y   | Y  | N                    |
| 10324-81            | Maquat 7.5-M   | Y   | Y  | Y                    |
| 10324-93            | Maquat 64 PD   | Y   | Y  | Y                    |
| 10324-93-45745      | Maxim Lemon Detergent Disinfectant                   | Y   | Y  | N                    |
| 10324-93-75473      | Bright Solutions Concentrated Lemon Zip Disinfectant | Y   | Y  | N                    |
| 1043-19             | Staphene® Spray                                      | Y   | Y  | Y                    |
| 10492-4             | DisCide ULTRA Disinfecting Towelettes                | Y   | Y  | Y                    |

### TAB A (DISINFECTANTS FOR USE AGAINST EBOLA VIRUS) APPENDIX 4 (EBOLA ENVIRONMENTAL INFECTION CONTROL MEASURES) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

| 10492-5      | DisCide ULTRA Disinfecting Spray     | Y | Y | Y |
|--------------|--------------------------------------|---|---|---|
| 1130-15      | WEIMAN GERMICIDAL SOLUTION           | Y | Y | N |
| 1130-15-1677 | Asepticare TB+ II                    | Y | Y | N |
| 11525-30     | DISINFECTANT SPRAY "G"               | Y | Y | Y |
| 1672-65      | Austin A-1 Ultra Disinfecting Bleach | Y | Y | Y |
|              |                                      |   |   |   |
| 10492-5      | DisCide ULTRA Disinfecting Spray     | Y | Y | Y |
| 1130-15      | WEIMAN GERMICIDAL SOLUTION           | Y | Y | N |
| 1130-15-1677 | Asepticare TB+ II                    | Y | Y | N |
| 11525-30     | DISINFECTANT SPRAY "G"               | Y | Y | Y |
| 1672-65      | Austin A-1 Ultra Disinfecting Bleach | Y | Y | Y |

| Product Information |  |   | Use Site   |                      |
|---------------------|--|---|--|----------------------|
| Registration Number | Marketed Product Name                            | Hospital/Health<br>Care Facilities<br>(Y/N) | Institutional (e.g.<br>schools, office<br>buildings, etc.) (Y/N) | Residential<br>(Y/N) |
| 1672-67             | Austin's A-1 Concentrated Bleach 8.25%           | Y   | Y  | Y                    |
| 1677-204            | 65 Disinfecting Heavy Duty Acid Bathroom Cleaner | Y   | Y  | N                    |
| 1677-21             | MIKRO-QUAT                                       | Y   | Y  | N                    |
| 1677-216            | EXSPOR BASE CONCENTRATE                          | Y   | Y  | N                    |
| 1677-226            | VIRASEPT   | Y   | Y  | N                    |
| 1677-235            | Bath & Tile Disinfecting Cleaner                 | Y   | Y  | N                    |
| 1677-237            | OxyCide Daily Disinfectant Cleaner               | Y   | Y  | N                    |
| 1677-238            | Peroxide Multi Surface Cleaner and Disinfectant  | Y   | Y  | N                    |
| 1677-241            | Hydris Disinfectant Cleaner                      | Y   | Y  | N                    |
| 1839-83-5741        | TB-Cide Quat                                     | Y   | Y  | N                    |
| 1839-167-5741       | Super HDQL10                                     | Y   | Y  | N                    |
| 1839-167-5741       | GS High Dilution 256                             | Y   | Y  | N                    |
| 1839-168            | BTC 885 Neutral Disinfectant Cleaner-32          | Y   | Y  | Y                    |
| 1839-168-1270       | Zep Tackle Effective Against MRSA                | Y   | Y  | N                    |
| 1839-168-1270       | Zep DZ-7 Neutral Disinfectant Cleaner            | Y   | Y  | N                    |
| 1839-168-1270       | Zep Broad Spectrum Disinfectant Floor Cleaner    | Y   | Y  | N                    |
| 1839-168-40849      | Zep No Rinse Disinfectant Floor Cleaner          | Y   | Y  | N                    |
| 1839-169            | BTC 885 Neutral Disinfectant Cleaner-64          | Y   | Y  | Y                    |
| 1839-169-13103      | Neutral Fresh                                    | Y   | Y  | N                    |
| 1839-169-13103      | Neutral Lemon                                    | Y   | Y  | N                    |
| 1839-169-1658       | Re-Juv-Nal                                       | Y   | Y  | N                    |
| 1839-169-1658       | Non-Acid Restroom Disinfectant/Cleaner           | Y   | Y  | N                    |

### APPENDIX 5 (IDENTIFICATION OF PERSONS UNDER INVESTICATION (PUI) FOR EBOLA VIRUS DISEASE) TO ANNEX B (AMBULATORY/OUTPATIENT CARE GUIDANCE)

### SUBJECT: Case Definition for Ebola Virus Disease (EVD)

Ebola virus disease (EVD) is a rare and deadly viral illness that is reportable to the National Notifiable Disease Surveillance System (NNDSS) in all U.S. states and territories. Early recognition of EVD is critical for infection control. Health-care providers should be alert for and evaluate any patients suspected of having EVD.

#### Person Under Investigation (PUI)

A person who has both consistent signs or symptoms and the following risk factors should be considered a PUI:

- 1. Elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage; **AND**
- 2. An epidemiologic risk factor (see Annex D) within the 21 days before the onset of symptoms.

#### Confirmed Case

Laboratory-confirmed diagnostic evidence of Ebola virus infection.

Early recognition is critical to controlling the spread of Ebola virus. Health care providers should evaluate the patient's epidemiologic risk (see Annex D), including a history of travel to a country with widespread Ebola virus transmission or cases in urban settings with uncertain control measures or contact within the preceding 21 days with a person with Ebola while the person was symptomatic. See CDC's evaluation algorithm (Annex B, Appendix 1) to determine if testing for EVD is indicated.

If a diagnosis of EVD is being considered, the patient should be isolated in a single room (with a private bathroom), and health care personnel should follow standard, contact, and droplet precautions, including the use of appropriate personal protective equipment (PPE). Infection control personnel should be contacted immediately.

If EVD is suspected, contact the local or state health department immediately for consultation and to assess if testing is indicated and the need for initiating identification of contacts.

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

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

**Special Note:** This document references the CDC's "Guidance on Personal Protective Equipment to Be Used by Healthcare Workers during Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing)" (Annex B, Appendix 3, Tab A). Although hospital settings generally present higher risk of transmission than ambulatory settings, transfers by Emergency Medical Services (EMS) present unique challenges because of the uncontrolled and critical care nature of the work, enclosed space during transfer, and a varying range of patient acuity. These factors may increase the risk of exposure to blood and body fluids relative to other ambulatory settings and make it more difficult to change personal protective equipment (PPE) into higher levels of protection based upon a changing clinical scenario. Close coordination and frequent communications among 9-1-1 Public Safety Answering Points (PSAPs), the EMS system, health care facilities, and the public health system is important when preparing for and responding to patients with suspected EVD.

**Who this is for:** EMS providers (including emergency medical technicians [EMTs]), paramedics, and medical first responders who could be providing patient care in the field – such as law enforcement and fire service personnel – as well as managers of 9-1-1- Public Safety Answering Points (PSAPs), EMS Agencies, EMS systems, and agencies with medical first responders.

What this is for: Guidance to assure EMS and first responders are safe and patients are appropriately managed while handling inquiries and responding to PUIs.

**How to use:** Managers should use this information to understand and explain to staff how to respond and stay safe. Individual providers can use this information to stay safe when responding to PUIs.

### Key points of the guidance include:

- The likelihood of contracting EVD in the United States is extremely low unless a person has direct unprotected contact with the blood or body fluids (like urine, saliva, feces, vomit, sweat, and semen) of a person who is sick with EVD and showing symptoms.
- It is important for PSAPs to question callers about:
  - Having traveled internationally or having had contact with a person with confirmed EVD within the previous 21 days; AND
  - Signs and symptoms of EVD (such as fever, sever headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, and unexplained hemorrhage).
- Managers of 9-1-1 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 trained regarding Ebola response protocols. Those who may respond to a PUI also should be trained in the use of the appropriate PPE consistent with their response role.
- If PSAP call takers have information alerting them to a PUI, they should make sure first responders and EMS providers are made aware of the potential for a patient with possible exposure/signs and symptoms of Ebola before the responders arrive on scene. This will enable EMS providers to select and correctly put on PPE following the principles described in CDC's: "Guidance on Personal Protective Equipment to Be Used by Healthcare Workers during Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing)".
- Before working with PUIs, providers should have repeated training and have demonstrated competency in all Ebolarelated infection control practices and procedures, specifically in donning/doffing proper PPE.
- When EMS providers 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 providers should notify the receiving healthcare

facility in advance, so that proper infection control precautions are prepared at the healthcare facility before arrival. 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 Ebola triage and care.

#### Background

The likelihood of contracting Ebola is extremely low unless a person has direct unprotected contact with the body fluids of a person (like urine, saliva, feces, vomit, sweat, and semen) of a person who is sick with Ebola. Initial signs and symptoms of Ebola include sudden fever, chills, and muscle aches, with diarrhea, nausea, vomiting, and abdominal pain occurring after about 5 days. Other symptoms such as chest pain, shortness of breath, headache, or confusion, may also develop. Symptoms may become increasingly severe and may include jaundice (yellow skin), severe weight loss, and mental confusion, bleeding inside and outside the body, shock, and multi-organ failure.

Ebola is an often-fatal disease and extra care is needed when coming into direct contact with a recent traveler who has symptoms of Ebola and is traveling from a country with an Ebola outbreak. The initial signs and symptoms of Ebola are similar to many other more common diseases (such as malaria and typhoid). Ebola should be considered in anyone with a fever who has traveled to, or lived in, an area where Ebola is present.

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

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

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

Coordination among 9-1-1 PSAPs, the EMS system, health care facilities, and the public health system is important when responding to patients with suspected Ebola. Each 9-1-1 and EMS system should include an EMS Medical Director to provide appropriate medical supervision.

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

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

#### For modified caller queries:

It will be important for PSAPs to question callers and determine if anyone at the incident possibly has EVD. This should be communicated immediately to EMS personnel before arrival and to assign the appropriate EMS resources. Local and state public health officials should also be notified. PSAPs should review existing medical dispatch procedures and coordinate any changes with their EMS Medical Director and with their local public health department.

• PSAP call takers should consider screening callers for symptoms and risk factors of Ebola. Callers should be asked if they, or if the affected person, has a fever of 38.0 degrees Celsius or 100.4 degrees Fahrenheit or greater, and

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

- If PSAP call takers suspect a caller is reporting symptoms of Ebola, they should screen callers for risk factors within the past 3 weeks before onset of symptoms. Risk factors include:
  - Contact with blood or body fluids of a patient known to have or suspected to have Ebola; or
  - Residence in or travel to a country where an Ebola outbreak is occurring.
- If PSAP call takers have information alerting them to a person with possible EVD, they should make sure any first responders and EMS personnel are made aware of the potential for a patient with possible exposure/symptoms of Ebola before the responders arrive on scene.
- If responding at an airport or other port of entry to the United States, the PSAP should notify the CDC Quarantine Station for the port of entry. Contact information for CDC Quarantine Stations can be accessed at the following link: <a href="https://www.cdc.gov/quarantine/quarantinestationcontactlistfull.html">https://www.cdc.gov/quarantine/quarantinestationcontactlistfull.html</a>.

**Recommendations for EMS and Medical First Responders, Including Firefighters and Law Enforcement Personnel** For the purposes of this section, "EMS personnel" means pre-hospital EMS, law enforcement, and fire service first responders. These EMS personnel practices should be based on the most up-to-date Ebola clinical recommendations and information from appropriate public health authorities and EMS medical direction.

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

### **Patient assessment**

- Address scene safety:
  - If PSAP call takers advise that the patient is suspected of having Ebola, EMS personnel should put on the PPE appropriate for suspected cases of Ebola **before** entering the scene.
  - Keep the patient separated from other persons as much as possible.
  - Use caution when approaching a patient with Ebola. Illness can cause delirium, with erratic behavior that can place EMS personnel at risk of infection, e.g., flailing or staggering.
- During patient assessment and management, EMS personnel should consider the symptoms and risk factors of Ebola:
  - A relevant exposure history should be taken including:
    - Residence in or travel to a country where an Ebola outbreak is occurring OR
    - Contact with blood or body fluids of a patient known to have or suspected to have Ebola within the previous 21 days.
      - Because the signs and symptoms of Ebola may be nonspecific and are present in other infectious and noninfectious conditions which are more frequently encountered in the United States, relevant exposure history should be first elicited to determine whether Ebola should be considered further.
  - Patients who meet these criteria should be further questioned regarding the presence of signs or symptoms of Ebola Virus Disease, including:
    - Fever (subjective or ≥100.4°F or 38.0°C), and
    - Headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or bleeding.
      - Based on the presence of risk factors and symptoms, put on or continue to wear appropriate PPE and follow the scene safety guidelines for suspected case of Ebola.
      - If during initial patient contact and assessment and before an EMS provider has donned the appropriate PPE, it becomes apparent that the patient is a suspected case of Ebola, the EMS provider must immediately remove themselves from the area and assess whether an

exposure occurred. The provider should implement their agency's exposure plan, if indicated by assessment.

- To minimize potential exposure, it may be prudent to perform the initial screening from at least 3 feet away from the patient.
- In addition, EMS crews may keeping scene safety in mind consider separating so that all crew members do not immediately enter the patient area.
- If there are no risk factors, proceed with normal EMS care.

### EMS Transfer of Patient Care to a Health Care Facility

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

### Inter-facility Transport

Transportation of suspected or confirmed EVD cases will be managed through EMS. Several EMS regions within Illinois have identified ambulance services willing and capable of transporting an Ebola patient (see Annex, C, Appendix 1). EMS personnel involved in the air or ground inter-facility transfer of patients with suspected or confirmed Ebola should wear recommended PPE.

### **Infection Control**

EMS personnel can safely manage a patient with suspected or confirmed Ebola by following recommended PPE guidance. Early recognition and identification of patients with potential Ebola is critical. An EMS agency managing a suspected Ebola patient should follow these CDC recommendations:

- Limit activities that can increase the risk of exposure to infectious material, especially during transport.
- Limit the use of needles and other sharps as much as possible. All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers.
- Phlebotomy, procedures, and laboratory testing should be limited to the minimum necessary for essential diagnostic evaluation and medical care.

### Use of Personal protective equipment (PPE)

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

EMS workers who may be involved in the care of Ebola patients should receive training and have demonstrated competency in performing all Ebola-related infection control practices and procedures, and specifically in donning/doffing proper PPE. When treating a suspected Ebola patient, EMS personnel should wear PPE and follow proper procedures for putting on and taking off (donning and doffing) PPE as described in CDC's guidance (see Annex B, Appendix 3, Tab A).

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

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

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

If blood, body fluids, secretions, or excretions from a patient with suspected Ebola come into direct contact with the EMS provider's skin or mucous membranes, then the EMS provider should immediately stop working. They should wash the affected skin surfaces with soap and water and mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution. Report the exposure to an occupational health provider or supervisor for follow-up.

Recommended PPE should be used by EMS personnel as follows and as specified in CDC's Guidance on Personal Protective Equipment (PPE) (see Annex B, Appendix 3, Tab A).

- PPE should be put on before entering the scene and continued to be worn until personnel are no longer in contact with the patient. PPE should be carefully put on under observation as specified in the CDC guidance.
- PPE should be carefully removed while under observation, in an area designated by the receiving hospital, and following proper procedures as specified in the CDC guidance.

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

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

- An EPA-registered hospital disinfectant with label claims for viruses that share some technical similarities to Ebola (such as, norovirus, rotavirus, adenovirus, and poliovirus) and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions. After the bulk waste is wiped up, the surface should be disinfected as described below.
- EMS personnel performing cleaning and disinfection should follow Ebola Environmental Infection Control Measures (Annex B, Appendix 4). There should be the same careful attention to the safety of the EMS personnel during the cleaning and disinfection of the transport vehicle as there is during the care of the patient.
- Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces), as well as stretcher wheels, brackets, and other areas are likely to become contaminated and should be cleaned and disinfected after each transport.
- A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed by trained personnel wearing correct PPE, through removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient. Contaminated reusable patient care equipment (e.g., glucometer, blood pressure cuff) should be placed in biohazard bags and labeled for cleaning and disinfection according to agency policies. Reusable equipment should be cleaned and disinfected according to manufacturer's instructions by trained personnel wearing correct PPE. Avoid contamination of reusable porous surfaces that cannot be made single use.
- Use only a mattress and pillow with plastic or other covering that fluids cannot get through. To reduce exposure among staff to potentially contaminated textiles (cloth products) while laundering, discard all linens, non-fluid-impermeable pillows or mattresses as appropriate.

The Ebola virus is a Category-A infectious substance regulated by the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). Any item transported for disposal that is contaminated or suspected of being contaminated with a Category A infectious substance must be packaged and

transported in accordance with the HMR. This includes medical equipment, sharps, linens, and used health care products (such as soiled absorbent pads or dressings, kidney-shaped emesis pans, portable toilets, used PPE, [e.g., gowns, masks, gloves, goggles, face shields, respirators, booties] or byproducts of cleaning) contaminated or suspected of being contaminated with a Category-A infectious substance.

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

- EMS personnel should be aware of the follow-up and/or reporting measures they should take after caring for a suspected or confirmed Ebola patient.
- EMS agencies should develop policies for monitoring and management of EMS personnel potentially exposed to Ebola.
- EMS agencies should develop sick leave policies for EMS personnel that are non-punitive, flexible and consistent with public health guidance
- Ensure that all EMS personnel, including staff who are not directly employed by the health care facility but provide essential daily services, are aware of the sick leave policies.
- EMS personnel with exposure to blood, bodily fluids, secretions, or excretions from a patient with suspected or confirmed Ebola should immediately:
  - Stop working and wash the affected skin surfaces with soap and water. Mucous membranes (e.g., conjunctiva) should be irrigated with a large amount of water or eyewash solution;
  - o Contact occupational health/supervisor for assessment and access to post-exposure management services; and
  - Receive medical evaluation and follow-up care, including fever monitoring twice daily for 21 days, after the last known exposure. They may continue to work while receiving twice daily fever checks, based upon EMS agency policy and discussion with local, state, and federal public health authorities.
- EMS personnel who develop sudden onset of fever, intense weakness or muscle pains, vomiting, diarrhea, or any signs of hemorrhage after an unprotected exposure (i.e., not wearing recommended PPE at the time of patient contact or through direct contact to blood or body fluids) to a patient with suspected or confirmed Ebola should:
  - Not report to work or immediately stop working and isolate themselves;
  - o Notify their supervisor who should notify local and state health departments;
  - o Contact occupational health/supervisor for assessment and access to post-exposure management services; and
  - o Comply with work exclusions until they are deemed no longer infectious to others.

APPENDIX 1 (EBOLA CAPABLE AMBULANCE SERVICES IN ILLINOIS) TO ANNEX C (EMERGENCY MEDICAL SERVICES (EMS) GUIDANCE)

# EBOLA Capable Ambulance Services In Illinois As of 28 June 2018

### Region 1 - Rockford

ATS Medical Services in Rockford 4787 Hydraulic Rd Ste. J, Rockford, IL 61109 (779) 368-0172

### Region 2 - Peoria

American Medical Transport (AMT) in Peoria 1718 N Sterling Ave, Peoria, IL 61604 (309) 494-6200

### American Medical Transport-Milan-Quad Cities 1207 11th St W, Milan, IL 61264 (309) 494-6200

### Genesis Health System Ambulance-East Moline

730 Avenue of the Cities, East Moline, IL, 61244 309/281-2770

### Region 4 - Edwardsville

Medstar Ambulance-Belleville and Sparta 610 E Main St, Belleville, IL 62220 (618) 234-3088

705 Bradbury Ln, Sparta, IL 62286 (618) 443-5061

Abbot EMS-Belleville 4400 N Belt W, Belleville, IL 62226 (618) 337-9111

### **Region 6 - Champaign**

Arrow Ambulance- Champaign 210 E University Ave # A, Champaign, IL 61820 (217) 337-3911

### APPENDIX 1 (EBOLA CAPABLE AMBULANCE SERVICES IN ILLINOIS) TO ANNEX C (EMERGENCY MEDICAL SERVICES (EMS) GUIDANCE)

### Region 7 – Oak Lawn

### ATI-Chicago

8400 W 183rd Pl, Tinley Park, IL 60487 (708) 802-8101

#### Kurtz-New Lenox

1900 Garnet Court, New Lenox, IL 60451 (815) 722-1900

### Trace-Tinley Park 8400 183rd Pl, Tinley Park, IL 60487 (708) 532-0088

### Region 8 – DuPage

Superior Ambulance-Elmhurst 395 W Lake St, Elmhurst, IL 60126 (630) 832-2000

### Region 10 – Highland Park

Medex-Skokie 5640 Howard St, Skokie, IL 60077 (847) 674-9111

### <u>Region 11 – Chicago</u>

Chicago Fire Department

### (312) 746-9500

Note: This number goes to the Fire/EMS call taker at the 911 Center. Ask for the Duty Chief to request the Ebola/HCID Ambulance.

### APPENDIX 2 (AMBULANCE SET-UP GUIDANCE)

#### TO ANNEX C (EMERGENCY MEDICAL SERVICES (EMS) GUIDANCE)

### SUBJECT: IDPH Guidelines for Ambulance Set-Up Specifically for the Purpose of Transporting a Patient Who Meets the Risk Factors for Diagnosis of a High Consequence Infectious Disease (HCID) or exposure to HCID

An EMS Medical Director may request in advance, a waiver approval, from IDPH to utilize a currently licensed ambulance with the majority of the required vehicle equipment removed for the purpose of transporting a known or suspected HCID patient to a health care facility. The vehicle identified for the waiver should only be used to transport patients that have been determined at risk for HCID.

The vehicle must be accompanied (on scene and during transport) by another fully-equipped non-transport vehicle or a transport ambulance licensed to operate at the same level of care as the transport isolation vehicle. The accompanying vehicle will provide the needed equipment or personnel to the transport isolation vehicle, if required. Adequate PPE should be available to the crew members of the accompanying vehicle should the need arise to assist other crew members of the transport isolation vehicle.

All EMS crew members or Health Care Workers (HCW) providing care to known or suspected HCID patients are recommended to follow the CDC's recommended guidance for PPE and transportation guidelines. EMS Medical Protocols may need to be modified by the EMS Medical Director for care of a patient with suspected HCID during transport. At a minimum, the transport isolation vehicle should have the following established:

- The patient compartment should be separated for splash or droplet protection from the driver's cab area. Covering walls, ceiling, floors, seats and benches with water-impermeable barriers such as transparent heavy plastic sheeting may be an option to help reduce contamination by body fluids and provide easier decontamination upon completion of the transport. (This would increase the medical waste that would be handled as a category-A infectious substance.)
- The transport isolation vehicle shall have the capability to communicate with the accompanying vehicle.
- Airway maintenance supplies and oxygen delivery system supplies and equipment must be present. (Provider may utilize a first-response bag in a separate sealed bag or plastic container.)
- Suction equipment and suction supplies shall be present and working.
- Emesis bags and bedpans shall be available.
- Adequate towels, linens, blankets and pillows (consider disposable items for these requirements).
- Adequate PPE shall be available for personnel staffing the transport isolation vehicle.
- Proper disinfectants for decontamination of the vehicle's surfaces.
- Biohazard waste bags.
- Biohazard container for storage of biohazard waste during transport.
- Consideration of full Tyvek coveralls and a hooded powered air purifying respirator (PAPR) for EMS crew
  members or accompanying HCWs would provide increased splash protection, reduce fogging of goggles or face
  shields and improve crew comfort during the transport. (Note: use of standard stethoscopes with PAPRs
  generally is not feasible due to the ambient noise created by PAPRs. Standard Stethoscopes also pose potential
  HCW contamination risk.)

EMS Systems should work with receiving hospitals to determine plans for routes of accepting the known or suspected HCID patient to minimize exposure to other patients and/or unnecessary contamination of the health care facility. Exercising a plan is highly recommended.

Ambulance crew members should review and practice decontamination procedures, prevent environmental exposures, and safely manage medical waste following the recommended guidelines by the CDC.

Questions or concerns should be addressed to your State Regional EMS Coordinator or call the IDPH Office of Preparedness and Response, Division of EMS & Highway Safety at 217-785-2080.

### 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 health care settings (such as clinics or hospitals). Clinicians and other health care 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) 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 health care workers under direct active monitoring, public health authorities can delegate and/or coordinate the responsibility for direct active monitoring to the health care 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 health care 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. Health care 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 health care 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. Health care 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 who refuse to cooperate with a public health assessment and appear ill.

Recommendations for specific groups and settings:

#### Health care workers

For the purposes of risk exposure to Ebola, regardless of country, direct patient contact includes doctors, nurses, physician assistants and other health care 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 health care 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 health care settings. Due to this higher risk, health care 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 health care workers who provide patient care in any health care setting, are classified in the some risk category, for which additional precautions may be recommended upon their arrival in the United States. Health care 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.

Health care 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 health care 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 health care workers, except to ensure that direct active monitoring continues uninterrupted.

Health care workers caring for Ebola patients in a U.S. facility where another health care 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 health care 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. health care 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 health care workers in appropriate infection control practices should be conducted. Following remediation and training, asymptomatic, potentially exposed health care workers may be allowed to continue to take care of Ebola patients, but care of other patients should be restricted. For these health care 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. Health care 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.

# APPENDIX 1 (MONITORING AND MOVEMENT GUIDANCE TABLE)

TO ANNEX D (MONITORING GUIDANCE)

| Exposure Category  | Clinical Criteria   | Public Health Actions  |
|--|---|--|
| <ul> <li>High risk includes any of the following:</li> <li>Percutaneous (e.g., needle stick) or mucous membrane exposure to blood or body fluids of a person with Ebola while the person was symptomatic</li> <li>Exposure to the blood or body fluids (including but not limited to feces, saliva, sweat, urine, vomit, and semen) of a person with Ebola while the person was symptomatic without appropriate personal protective equipment (PPE)</li> </ul> | Fever (subjective fever or measured<br>temperature ≥100.4°F/38°C) OR any of the<br>following:*_<br>• severe headache<br>• muscle pain<br>• vomiting<br>• diarrhea<br>• stomach pain<br>• unexplained bruising or bleeding | <ul> <li>Implement rapid isolation with immediate contact of public health authorities to arrange for safe transport to an appropriate healthcare facility for Ebola evaluation</li> <li>Medical evaluation is required         <ul> <li>Isolation orders may be used to ensure compliance</li> <li>Air travel is permitted only by air medical transport</li> </ul> </li> <li>If medically evaluated and discharged with a diagnosis other than Ebola, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> </ul>  |
| <ul> <li>Processing blood or body fluids of a person with Ebola while the person was symptomatic without <u>appropriate PPE</u> or standard biosafety precautions</li> <li>Direct contact with a dead body without <u>appropriate PPE</u> in a <u>country with</u> <u>widespread Ebola virus transmission</u></li> <li>Having lived in the immediate household and provided direct care to a person with Ebola while the person was symptomatic</li> </ul>     | Asymptomatic (no fever or other symptoms<br>consistent with Ebola)  | <ul> <li>Direct active monitoring</li> <li>Public health authority will ensure, through modified quarantine orders, the following minimum restrictions: <ul> <li>Exclusion from all long-distance and local public conveyances (aircraft, ship, train, bus, and subway)</li> <li>Exclusion from public places (e.g., shopping centers, movie theaters), and congregate gatherings</li> <li>Exclusion from workplaces for the duration of the public health order, unless approved by the state or local health department</li> <li>Travel outside of jurisdiction of the local health authority must be under mutual agreement with the local health authority who will assume responsibility for daily observation</li> </ul> </li> <li>Non-congregate public activities while maintaining a 3-foot distance from others may be permitted (e.g., jogging in a park)</li> <li>Federal public health travel restrictions (Do Not Board) will be implemented to enforce controlled movement</li> <li>If travel is allowed (e.g. to allow travelers arriving in the United States to reach home/housing facility), individuals are subject to restrictions <ul> <li>Travel by noncommercial conveyances (private plane or car) only</li> <li>Coordinated with public health authorities at both origin and destination</li> <li>Uninterrupted direct active monitoring during travel</li> </ul> </li> </ul> |

### APPENDIX 1 (MONITORING AND MOVEMENT GUIDANCE TABLE) TO ANNEX D (MONITORING GUIDANCE)

| Some risk includes any of the following:       In countras, with widespread Ebola virus:         In countras, with widespread Ebola virus:       Prever (subjective fever or measured temperature 2004#F38*C) OR any of the following:         In countras, with widespread Ebola virus:       Prever (subjective fever or measured temperature 2004#F38*C) OR any of the following:         In countras, with widespread Ebola virus:       Prever (subjective fever or measured temperature 2004#F38*C) OR any of the following:         In countras, with bola with the person was symptomatic, or with the person's body fluids       Immediate contrast with a diagnosis other than Ebola, conditions as outlines to arrange for safe transport to an appropriate healthcare facilities, or community sutings with a person was symptomatic (no fever or other symptomatic discharged with a diagnosis other than Ebola, conditions as outlines for asymptomatic individuals in this exposure category will apply         Ary direct patient care facilities, or community suting suting and person was symptomatic for fever or other symptomatic or fever or other symptomatic or collaboration with EDOI with ubulc health act facilities or collaboration with EDOI with the person was symptomatic or fever or other symptomatic or other symptomatic or fever or other symptomatic or other symptomatic or fever or other symptomatic or other symptomatic or other symptomatic or fever  | Exposure Category   | Clinical Criteria  | Public Health Actions   |
|--|---|--|---|
| <ul> <li>Close (but not high risk) contact in households, healthcare facilities, or community settings with a person was symptomatic (no fever or other symptoms consistent with Ebola)</li> <li>Direct active monitoring (health care facilities, or community settings with a person was symptomatic a close contact is defined as being for a prolonged period of time while not wearing approximate PPE within approximately 3 feet (1 meter) of a person with Ebola while the person was symptomatic *</li> <li>* depending on activities, may include flight attendants who interacted with an individual with "some risk" on an airplane</li> <li>* depending on activities, may include flight attendants who interacted with an individual with "some risk" on an airplane</li> <li>Y the above restrictions are anglied, non-congregate gatherings.</li> <li>E Kleutsion from other workplace settings</li> <li>If the above restrictions are activities may be undertaken</li> <li>The above restrictions are activities to ensure uninterrupted direct active monitoring (0. Not Beard) may be implementation of federal public health tarvel restrictions are outly bub ic health submetter the traveler reaches the final destination of the atternary.</li> <li>Other activities should be assessed as needs and circumstances change to defermine whether theray activities may be undertaken</li> <li>Travelers arriving in the United States, implementation of federal public health suborities to ensure uninterrupted direct active monitoring the previous states of the assessment of the intervation of the apple of the activities while maintaining a 3-foot distance from others may be permitted (e.g., jogging in a park)</li> <li>Other activities should be assessed as needs and circumstances change to determine whether theray activities may be implementation of federal public health travel restrictions. Cond Disperson and assessment of the particular circumstance or fortravelers arrivities may be activities to ensure uninterrupted</li></ul> | <ul> <li>Some risk includes any of the following:</li> <li>In <u>countries with widespread Ebola virus</u><br/><u>transmission</u>:         <ul> <li>Direct contact while using<br/><u>appropriate PPE</u> with a person<br/>with Ebola while the person was<br/>symptomatic, or with the person's<br/>body fluids</li> <li>Any direct patient care in other<br/>health care settings</li> </ul> </li> </ul>  | <ul> <li>Fever (subjective fever or measured temperature ≥100.4°F/38°C) OR any of the following:*</li> <li>severe headache</li> <li>muscle pain</li> <li>vomiting</li> <li>diarrhea</li> <li>stomach pain</li> <li>unexplained bruising or bleeding</li> </ul> | <ul> <li>Implement rapid isolation with immediate contact of public health authorities to arrange for safe transport to an appropriate healthcare facility for Ebola evaluation</li> <li>Medical evaluation is required         <ul> <li>Isolation orders may be used to ensure compliance</li> <li>Air travel is permitted only by air medical transport</li> </ul> </li> <li>If medically evaluated and discharged with a diagnosis other than Ebola, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> </ul>   |
|  | <ul> <li>Close (but not high risk) contact in<br/>households, healthcare facilities, or<br/>community settings with a person<br/>with Ebola while the person was symptomatic         <ul> <li>Close contact is defined as being for a<br/>prolonged period of time while not<br/>wearing <u>appropriate PPE</u> within<br/>approximately 3 feet (1 meter) of a<br/>person with Ebola while the person was<br/>symptomatic *</li> <li>*depending on activities, may include<br/>flight attendants who interacted with an<br/>individual with "some risk" on an<br/>airplane</li> </ul> </li> </ul> | Asymptomatic (no fever or other<br>symptoms consistent with Ebola)   | <ul> <li>Direct active monitoring (health care facilities may participate in monitoring process, in collaboration with LHD)</li> <li>Participation in patient care activities (with direct active monitoring before each shift and as otherwise required by the health care facility) when/if cleared by the health care facility in collaboration with public health authorities</li> <li>The LHD, <u>based on a science-based risk assessment of the individual's specific situation, in collaboration with IDPH, will determine whether any additional restrictions are needed. These <u>could</u> include: <ul> <li>Exclusion from long-distance commercial conveyances (aircraft, ship, train, bus) or local public conveyances (e.g., bus, subway). For travelers arriving in the United States, in most cases any such restrictions would begin after the traveler reaches the final destination of the itinerary.</li> <li>Exclusion from public places (e.g., shopping centers, movie theaters), and congregate gatherings.</li> <li>Exclusion from other workplace settings</li> </ul> </u></li> <li>If the above restrictions are applied, non-congregate public activities while maintaining a 3-foot distance from others may be permitted (e.g., jogging in a park)</li> <li>Other activities should be assessed as needs and circumstances change to determine whether these activities may be undertaken</li> <li>Travel will be coordinated with public health authorities to ensure uninterrupted direct active monitoring</li> <li>Federal public health travel restrictions (<u>Do Not Board</u>) may be implemented based on an assessment of the particular circumstance or For travelers arriving in the United States, implementation of federal public health travel restrictions would typically occur after the traveler reaches the final destination of the itinerary</li> </ul> |

### APPENDIX 1 (MONITORING AND MOVEMENT GUIDANCE TABLE) TO ANNEX D (MONITORING GUIDANCE)

| Exposure Category   | Clinical Criteria   | Public Health Actions   |
|---|---|---|
| <ul> <li>Low (but not zero) risk includes any of the following:</li> <li>Having been in a <u>country with widespread Ebola virus</u> transmission within the past 21 days and having had no known exposures</li> <li>Having brief direct contact (e.g., shaking hands), while not wearing <u>appropriate PPE</u>, with a person with Ebola while the person was in the early stage of disease</li> <li>Brief proximity, such as being in the same room (not an Ebola treatment area) for a brief period of time, with a person with Ebola while the person was symptomatic</li> </ul> | <ul> <li>Fever (subjective fever or measured temperature</li> <li>≥100.4°F/38°C) OR any of the following:*</li> <li>vomiting</li> <li>diarrhea</li> <li>unexplained bruising or bleeding</li> </ul> | <ul> <li>Implement rapid isolation with immediate contact of public health authorities to arrange for safe transport to an appropriate healthcare facility for Ebola evaluation</li> <li>Medical evaluation is required         <ul> <li>Isolation orders may be used to ensure compliance</li> <li>Air travel is permitted only by air medical transport</li> </ul> </li> <li>If medically evaluated and discharged with a diagnosis other than Ebola, conditions as outlined for asymptomatic individuals in this exposure category will apply</li> </ul> |
| <ul> <li>In <u>countries without widespread Ebola virus</u><br/><u>transmission</u>: direct contact while using<br/><u>appropriate PPE</u> with a person with Ebola<br/>while the person was symptomatic</li> <li>Traveled on an aircraft with a person with<br/>Ebola while the person was symptomatic</li> </ul>  | Asymptomatic (no fever,<br>vomiting, diarrhea, or<br>unexplained bruising or bleeding)  | <ul> <li>No restrictions on travel, work, public conveyances, or congregate gatherings</li> <li>Direct active monitoring for:         <ul> <li>Healthcare workers caring for symptomatic Ebola patients in the U.S. while wearing appropriate PPE (it is expected that health care facilities will participate in this process, in collaboration with LHD)</li> <li>Travelers on an aircraft with, and sitting within 3 feet of, a person with Ebola</li> </ul> </li> <li>Active monitoring for all others in this category</li> </ul>                      |
| No identifiable risk includes:  | Symptomatic (any)   | Routine medical evaluation and management of ill persons, as needed   |
| <ul> <li>Contact with an asymptomatic person who had<br/>contact with person with Ebola</li> <li>Contact with a person with Ebola before the person</li> </ul>  |   |   |
| developed symptoms  | Asymptomatic  | No actions needed   |
| <ul> <li>Having been more than 21 days previously in a <u>country with widespread Ebola virus transmission</u></li> <li>Having been in a <u>country without widespread Ebola virus transmission</u> and not having any other exposures as defined above</li> <li>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 time that the conveyance is present in a country with widespread Ebola virus transmission</li> </ul>  |   |   |

\*The temperature and symptoms thresholds provided are for the purpose of requiring medical evaluation. Isolation or medical evaluation may be recommended for lower temperatures or nonspecific symptoms (e.g., fatigue) based on exposure level and clinical presentation.

## APPENDIX 2 (ORDER FOR OBSERVATION AND MONITORING)

TO ANNEX D (MONITORING GUIDANCE)

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

# **ORDER FOR OBSERVATION AND MONITORING**

| This order for observation and monitoring is made upon (check all that apply):   Voluntary (consented) (see Section G)   NOTE: In the Absence of Consent, Individual Should Be Screened to Determine if Isolation or Quarantine Appropriate   Section B: Information   Individual Subject to Observation and Monitoring:   Name: (Last)   (First)   Member of a Household   Current Location of Individual: (If a healthcare facility, include room number):   Address: (Street)   (Cell/pager)   (Email)   Permanent Address: Address: (Street)    (Cell/pager)   (Cell/pager)   (Email)   Name of Treating Physician: Name: (Last)    Name: (Last)   (Cell/pager)   (Email)   Permanent Address: Address: (Street)    (Cell/pager)   | Section A: Type of Order       |                 |  |                          |                                      |
|---|--------------------------------|-----------------|--|--------------------------|--------------------------------------|
| □ Voluntary (consented) (see Section G)         NOTE:       In the Absence of Consent, Individual Should Be Screened to Determine if Isolation or Quarantine Appropriate         Section B:       Information         Individual Subject to Observation and Monitoring:   | This order for observation and | d monitoring    | is made upon (check all t  | hat apply):              |                                      |
| NOTE:       In the Absence of Consent, Individual Should Be Screened to Determine if Isolation or Quarantine Appropriate         Section B: Information       Individual Subject to Observation and Monitoring:         Name: (Last)       (First)       (M.I.)         Date of Birth:          Member of a Household       Current Location of Individual: (If a healthcare facility, include room number):         Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (City)       (State/Country)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)  | □ Voluntary (consented) (      | see Section G   | ř)   |                          |                                      |
| Appropriate         Section B: Information         Individual Subject to Observation and Monitoring:         Name: (Last)       (First)         (M.I.)       Date of Birth:         Member of a Household         Current Location of Individual: (If a healthcare facility, include room number):         Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (City)         State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (City)       (City)         Name of Treating Physician:       Name: (Last)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (Cell/pager)       (Email)       Emergency or Other Contact Information:       Name: (Last)       (Apt./Rm.#)       (City)         Name: (Last)       (First)       (Apt./Rm.#)       (City) <t< th=""><th>NOTE: In the Absence</th><th>of Consent,</th><th>Individual Should Be</th><th>Screened to Determ</th><th>ine if Isolation or Quarantine Ar</th></t<> | NOTE: In the Absence           | of Consent,     | Individual Should Be   | Screened to Determ       | ine if Isolation or Quarantine Ar    |
| Section B: Information         Individual Subject to Observation and Monitoring:         Name: (Last)   | Appropriate                    |                 |  |                          |                                      |
| Individual Subject to Observation and Monitoring:         Name: (Last)  | Section B: Information         |                 |  |                          |                                      |
| Name:       (Last)  | Individual Subject to Obser    | vation and N    | Ionitoring:  |                          |                                      |
| Image: Member of a Household         Current Location of Individual: (If a healthcare facility, include room number):         Address: (Street)       (Apt./Rm.#)(City)   | Name: (Last)                   |                 | (First)  | (M.I.)                   | Date of Birth:                       |
| Current Location of Individual: (If a healthcare facility, include room number):       Address:         Address:       (Apt./Rm.#)(City)  | ☐ Member of a Household        |                 |  |                          |                                      |
| Current Location of individual: (if a neatricare facility, include room number):         Address: (Street)       (Apt./Rm.#) (City)         (Cell/pager)       (Email)         Permanent Address:         Address: (Street)       (Apt./Rm.#) (City)         (State/Country)       (Zip) (Telephone)         (State/Country)       (Zip) (Telephone)         (Cell/pager)       (Email)         Name of Treating Physician:         Name: (Last)       (First)         (Cell/pager)       (Zip) (Telephone)         (State/Country)       (Zip) (Telephone)         (Gell/pager)       (Email)         Name: (Last)       (First)         (Cell/pager)       (Email)         (Cell/pager)       (Email)         (Cell/pager)       (City)         (State/Country)       (Zip)         (Telephone)       (Fax)         (Cell/pager)       (Email)         Emergency or Other Contact Information:         Name: (Last)       (First)         Relationship:       (Apt./Rm.#)         (State/Country)       (Zip)         (Cell/pager)       (Email)         State/Country)       (Zip)         (Cell/pager)       (Email)         State/Country) <td>Comment Leastion of Individ</td> <td>lual. (If a had</td> <td>lik sons fosiliku insluds</td> <td></td> <td></td>  | Comment Leastion of Individ    | lual. (If a had | lik sons fosiliku insluds  |                          |                                      |
| Autress. (Steet)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)         Permanent Address:       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Apt./Rm.#)       (City)         Name of Treating Physician:       (Apt./Rm.#)       (City)       (State/Country)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (Cell/pager)       (Email)       (Email)       (City)       (State/Country)       (City)       (State/Country)       (Zip)       (Telephone)       (City)       (State/Country)       (Zip)       (Telephone)       (Email)       (City)       (City)       (State/Country)       (Zip)       (Telephone)       (Email)       (City)       (City)       (State/Country)       (Zip)       (Telephone)       (Email)       (City)       (City)       (C  | Address: (Street)              | iuai: (11 a nea | anneare facility, include  | (Ant /Pm #)              | (City)                               |
| (Cell/pager)       (Exp)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (City)       (City)         Name of Treating Physician:       (Apt./Rm.#)       (City)         Name:       (Last)       (First)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (Cell/pager)       (Zip)       (Telephone)       (Fax)       (City)         (State/Country)       (Zip)       (Telephone)       (Apt./Rm.#)       (City)         Name:       (Last)       (First)       Relationship:  | (State/Country)                | (Zin)           | (Telephone)  | (Apt./Kiii.#)<br>(Fay    | (City)                               |
| Permanent Address:         Address: (Street)       (Apt./Rm.#)         (Cell/pager)       (Zip)         (Cell/pager)       (Email)         Name of Treating Physician:         Name: (Last)       (First)         Address: (Street)       (Apt./Rm.#)         (Cell/pager)       (Einail)         Name: (Last)       (First)         Address: (Street)       (Apt./Rm.#)         (Cell/pager)       (Zip)         (Cell/pager)       (Email)         Emergency or Other Contact Information:         Name: (Last)       (First)         Relationship:       Address: (Street)         (State/Country)       (Zip)       (Telephone)         (Cell/pager)       (Email)         Section C: Department of Public Health Findings         1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose   | (Cell/pager)                   | (Zip)           | (Fmail)  | (1'dX                    | )                                    |
| Permanent Address:         Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (First)       (City)         Name of Treating Physician:       Name: (Last)       (Apt./Rm.#)       (City)         Address: (Street)       (Apt./Rm.#)       (City)       (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)       (City)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)       (City)         (Cell/pager)       (Email)       (Email)       (City)       (State/Country)       (Zip)       (Telephone)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Apt./Rm.#)       (City)       (State/Country)       (Zip)       (Telephone)       (Apt./Rm.#)       (City)       (State/Country)       (Zip)       (Telephone)       (Fax)       (City)       (City)       (State/Country)       (Zip)       (Telephone)       (Fax)       (City)       (City)       (State/Country)       (Zip)       (Telephone)       (Fax)       (City)       (City)       (State/Country)       (Zip)       (Te   | (Cen/pager)                    |                 | (Linan)  |                          |                                      |
| Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)         Name of Treating Physician:       (Apt./Rm.#)       (City)         Name: (Last)       (First)       (Apt./Rm.#)       (City)         Address: (Street)       (Apt./Rm.#)       (City)       (State/Country)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)       (City)         Emergency or Other Contact Information:       Name: (Last)       (Apt./Rm.#)       (City)         Name: (Last)       (First)       Relationship:   | Permanent Address:             |                 |  |                          |                                      |
| (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Fax)         Name of Treating Physician:       (Email)         Name: (Last)       (First)       (Apt./Rm.#)         Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)       (City)         Emergency or Other Contact Information:       Relationship:       Address:         Name: (Last)       (First)       Relationship:       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (State/Country)       (Zip)       (Telephone)       (Fax)         (State/Country)       (Zip)       (Telephone)       (Fax)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (City)       (City)         Section C: Department of Public Health Findings       1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose  | Address: (Street)              |                 |  | (Apt./Rm.#)              | (City)                               |
| (Cell/pager)  | (State/Country)                | (Zip)           | (Telephone)  | (Fax)                    |                                      |
| Name of Treating Physician:         Name: (Last)  | (Cell/pager)                   | < 1/            | (Email)  | ( )                      |                                      |
| Name of Treating Physician:       [First]   |                                |                 | 、 /  |                          |                                      |
| Name: (Last)  | Name of Treating Physician     | 1:              |  |                          |                                      |
| Address: (Street)       (Apt./Rm.#)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)       (Email)         Emergency or Other Contact Information:       Relationship:       (Apt./Rm.#)       (City)         Name: (Last)       (First)       Relationship:       (City)         Address: (Street)       (Apt./Rm.#)       (City)       (City)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)       (Email)         Section C: Department of Public Health Findings       1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose  | Name: (Last)                   |                 | (First)  |                          |                                      |
| (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (Email)         Emergency or Other Contact Information:       Name: (Last)       Relationship:         Name: (Last)       (First)       Relationship:       (City)         Address: (Street)       (Zip)       (Telephone)       (Fax)         (State/Country)       (Zip)       (Telephone)       (Fax)         (Cell/pager)       (Email)       (City)       (City)         Section C: Department of Public Health Findings       1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose   | Address: (Street)              |                 |  | (Apt./Rm.#)              | _ (City)                             |
| (Cell/pager)  | (State/Country)                | (Zip)           | (Telephone)  | (Fax)                    |                                      |
| Emergency or Other Contact Information:         Name: (Last)  | (Cell/pager)                   |                 | (Email)  |                          |                                      |
| Emergency or Other Contact Information:         Name: (Last)  |                                |                 |  |                          |                                      |
| Name: (Last)  | Emergency or Other Conta       | ct Informatio   | on:  |                          |                                      |
| Address: (Street)(Apt./Rm.#)(City)(City)(State/Country)(Zip)(Telephone)(Fax)(Fax)(Cell/pager)(Email)         (Cell/pager)(City)(Fax)(Fa  | Name: (Last)                   |                 | (First)  | Relationship:            |                                      |
| (State/Country)(Zip)(Telephone)(Fax)(Fax)(Cell/pager)(Email)         (Cell/pager)(Email)         Section C: Department of Public Health Findings         1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose   | Address: (Street)              |                 | $(\mathbf{T}_{1}, \mathbf{T}_{2}, \mathbf{T}_{2}, \mathbf{T}_{3})$ | (Apt./Rm.#)              | (City)                               |
| Section C: Department of Public Health Findings         1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose  | (State/Country)                | (Zip)           | (Telephone)  | (Fa                      | X)                                   |
| 1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose  | (Cen/pager)                    | 11. 11 1/1 1    | (Email)  |                          | _                                    |
| 1. A reasonable belief exists that the individual identified in this order has or is suspected of having or having been expose  | Section C: Department of Pu    | iblic Health F  | indings  | 1 1 1                    |                                      |
|   | 1. A reasonable belief exist   | s that the indi | vidual identified in this  | order has or is suspecte | d of having or having been exposed t |
| the following dangerously contagious or infectious disease:   | the following dangerously      | y contagious of | or infectious disease:   |                          |                                      |
| 2. Observation and Monitoring is ordered based upon the following:  | 2. Observation and Monitor     | ing is ordered  | based upon the followin  | g:                       |                                      |

3. Duration of Observation and Monitoring:\_

#### APPENDIX 2 (ORDER FOR OBSERVATION AND MONITORING) TO ANNEX D (MONITORING GUIDANCE)

Case No. Date

Section D: Terms of Isolation

The individual subject to this order is required to \_\_\_\_\_\_

#### **Instructions:**

- $\square$ Healthcare facility observation and monitoring: (Follow instructions provided by healthcare personnel)
- Home Observation and Monitoring:
  - □ Wear a protective mask when in presence of others
  - Use separate bathroom from other household members (if possible)
  - □ Wash hands after using bathroom and after touching respiratory secretions
  - □ Monitor your body temperature and record the results and the time
  - □ Report body temperature results to local health department
  - □ Sleep in a separate room from other household members
  - \_\_\_\_\_at the □ Call

At (xxx)xxx-xxxx if you are experiencing the following symptoms:

Receive Specified Treatment \_\_\_\_\_ Medication \_\_\_\_\_ Dosage \_\_\_\_\_ Days

Other Restrictions/Instructions:

Section E: Statement of Legal Rights and Duties

- \_\_\_\_\_ (name of health department) has ordered you to undergo observation and monitoring or 1. The 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.
- (name of health department) will respect and accommodate your religious beliefs to the 5. The extent feasible without endangering the public's health.

(name of health department)

| IDPH Ebola Virus Disease Preparedness and Response Plan 2 | 019 |
|---|-----|
|---|-----|

### APPENDIX 2 (ORDER FOR OBSERVATION AND MONITORING)

| T   | O ANNEX D (MONITORING GUI  | DANCE)  |  |
|---|--|---|--|
|   | Case No.   | I   | Date   |
| Section F: Signature of Authorizing Official  |  |   |  |
|   |  |   | (name of health department)  |
| Address:(Street)  | (Apt./Rm.#)  | (City)  |  |
| (State/Country) (Zip)<br>(Cell/pager)   | (Telephone)<br>(Email)   |   | (Fax)  |
| Signature<br>Title  |  | Date and Time   |  |
| Section G: Consent Agreement to Observation   | and Monitoring (Optional, ij   | f individual conse  | ents)  |
| I,, v   | voluntarily agree to underg<br>(name of health departm                         | o observation a<br>ent). I underst                            | nd monitoring as ordered by the<br>and that my compliance with this  |
| isolation order is important to safeguarding the p<br>community's health, and risk spreading a com<br>explained to me, information on the disease | bublic's health and that if I v<br>municable disease to others<br>. I understa | iolate its terms, I<br>. I have receive<br>nd the benefits ar | will put myself at risk, endanger the<br>d a copy of, and have read or had<br>nd risks of the prescribed treatments. |
| I consent to receive the treatments listed on this  | form. The terms and condi  | tions of this orde  | r have been explained to me, I have  |
| had a chance to ask questions, and they were and  | swered 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  | Date 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 \_\_\_\_\_\_ I am (check one) \_\_\_\_\_ Parent \_\_\_\_\_ Legal Guardian

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).

### APPENDIX 3 (SIGNS AND SYMPTOMS OF EBOLA VIRUS DISEASE) TO ANNEX D (MONITORING GUIDANCE)

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

Symptoms of Ebola Virus Disease (EVD) 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.

EVD is a rare but severe and often deadly disease. Recovery from EVD 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.

#### ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

### SUBJECT: Illinois Department of Public Health- Isolation and Quarantine Rules Review.

This information is applicable to Ebola Virus Disease (EVD) and other diseases where isolation and quarantine may be necessary.

### Background

Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically in Africa. The 2014 Ebola outbreak is the largest in history, affecting multiple countries in West Africa. More information about EVD can be found at <a href="http://www.cdc.gov/vhf/ebola/index.html">http://www.cdc.gov/vhf/ebola/index.html</a>.

At present there is no approved vaccine for this virus so control measures such as isolation and/or quarantine of ill persons and/or persons exposed to the virus would need to occur if the virus was introduced in the United States. Illinois Department of Public Health (IDPH) advises local health departments to review IDPH isolation and quarantine rules and their protocols for implementing isolation or quarantine orders.

- 1. **Isolation** is the physical separation and confinement of an individual or groups of individuals who are infected or reasonably believed to be infected with a contagious or possibly contagious disease from non-isolated individuals, to prevent or limit the transmission of the disease to non- isolated individuals.
- 2. **Quarantine** is the physical separation and confinement of an individual or groups of individuals who are or may have been exposed to a contagious disease or possibly contagious disease and who do not show signs or symptoms.

### **Isolation and Quarantine Guidance**

The legal authority for isolation, quarantine, closure and other public health measures can be found in the Department of Public Health Act ("DPH Act") (20 ILCS 2305), the Department of Public Health Powers and Duties Law ("DPH Powers and Duties Law") (20 ILCS 2310/2310-15), and the Control of Communicable Diseases Code ("CD Code")(77 III. Adm. Code 690). Section 2 of the DPH Act provides that IDPH has the supreme authority in matters of isolation and quarantine, and may declare and enforce quarantine and isolation when none exists, and modify or relax when it has been instituted. Section 15 of the Powers and Duties Law authorizes IDPH to delegate its duties to certified local health departments. IDPH has explicitly delegated its authority to order isolation, quarantine, closure and the other public health measures to certified local health departments and has set out procedures for the implementation of those public health measures Subpart H of the CD Code.

Certified local health departments have the authority to institute disease control and contamination measures, including physical examination, testing, treatment isolation, quarantine, or other measures considered necessary. All local boards of health, health authorities and officers, police officers, sheriffs and all other officers and employees of the State or any locality are required to enforce orders of isolation or quarantine.

- 1. Certified local health departments should review their current policies and plans to prepare for the possibility that individuals may need to be isolated or quarantined. In consultation with other entities the certified health department deems necessary (e.g. local health care providers, health facilities, emergency management personnel, law enforcement agencies, schools, the local judicial system) the certified local health department should establish plans, policies, and procedures for instituting and maintaining emergency measures necessary to prevent the spread of disease. The following areas should be addressed in planning:
  - a. Communications and collaboration with multiple jurisdictions as needed.

### ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

- b. Responsibility for logistics, monitoring and cost in situations where a resident of one jurisdiction may need to be isolated or quarantined in a facility in another jurisdiction.
- c. Provision of interpreter and translation services if needed.
- d. Provision of adequate food, clothing, shelter, medical care, and communication with outside persons.
- 2. It is the responsibility of the local health department to establish procedures for collaborating with other local health departments in order to implement an isolation order for an individual patient that requires isolation or quarantine but is located in a jurisdiction without appropriate facilities to house the individual (e.g. the jurisdiction does not have a hospital and the individual requires isolation in a hospital). The following areas should be addressed in planning:
  - a. Communications and collaboration with multiple jurisdictions as needed.
  - b. Responsibility for logistics, monitoring and cost in situations where a resident of one jurisdiction may need to be isolated or quarantined in a facility in another jurisdiction.
  - c. Provision of interpreter and translation services if needed.
  - d. Provision of adequate food, clothing, shelter, medical care, and communication with outside persons.
- 3. Whenever an order of isolation or quarantine is being considered by a certified local health department, the following steps should be included:
  - a. Except in emergency situations where an immediate verbal order is necessary, notify IDPH Communicable Disease Section prior to issuing an order for isolation or quarantine.
  - In consultation with IDPH, identify the least restrictive means of controlling transmission of the disease.
     Isolation or quarantine orders should be obtained only after documented efforts to obtain voluntary compliance have failed.
  - c. Determine where the individual will be isolated or quarantined e.g. home, health care facility.
  - d. Determine the manner and frequency of monitoring the individual for compliance with the order and for the continued need for the restriction.
  - e. Determine the criteria for release from isolation or quarantine.
  - f. Notify IDPH by telephone within three hours after issuance of an order for isolation or quarantine.

If the certified local health department is unable to obtain consent of the individual, the certified local health departments may issue immediate isolation or quarantine orders verbally if the delay in imposing a written order would jeopardize the ability to prevent or limit the transmission of a dangerously contagious or infectious disease that poses a threat to the public. Verbal orders must be followed by a written order within 24 hours.

If consent from the individual cannot be obtained, as soon as practical, within 48 hours of issuance of the written or verbal order, the certified local health department must request a court order authorizing the isolation or quarantine order. Upon filing a petition requesting a court order, the certified local health department must serve a notice of the hearing to the person(s) being isolated or quarantined at least 24 hours before the hearing. Certified local health departments are encouraged to reach out to discuss these procedures with their State's Attorney's Offices. The County via the local State's Attorney will be the entity seeking the court order, not IDPH.

If you have any questions during regular business hours, please contact IDPH Communicable Disease Section Chief at 217-782-2016.

For afterhours assistance please contact the Illinois Department of Public Health Emergency Duty Officer at 217-782-7860.

Date

APPENDIX 1 (ORDER FOR ISOLATION OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

Case No. \_

# **ORDER FOR ISOLATION OF INDIVIDUAL**

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

### Section A: Type of Order

This order for isolation is made upon (check all that apply):

### □ Voluntary (consented) (see Section H)

 $\Box$  Immediate (If this is an immediate order then the health department may order isolation without consent or a court order if immediate action is required to protect the public from a dangerously contagious or infectious disease. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so.) 20 ILCS 2305/2(c).

| Section B: Information               |                                       |                          |                                 |
|--------------------------------------|---------------------------------------|--------------------------|---------------------------------|
| Individual Subject to Isolation:     |                                       |                          |                                 |
| Name: (Last)                         | (First)                               | (M.I.)                   | Date of Birth:                  |
| □ Member of a household              |                                       |                          |                                 |
|                                      |                                       |                          |                                 |
| Current Location of Individual:      | (If a healthcare facility, in         | clude room number        | •):                             |
| Address:                             |                                       |                          |                                 |
| (Street)                             |                                       | (Apt./Rm.#)              | _(City)                         |
| (State/Country) (2                   | Zip)(Telephone)_                      |                          | (Fax)                           |
| (Cell/pager)                         | (Email)                               |                          |                                 |
| Permanent Address:                   |                                       |                          |                                 |
| Address: (Street)                    |                                       | (Apt./Rm.#)              | (City)                          |
| (State/Country) (2                   | Zip) (Telephone)                      | ( <b>F</b> )             | (Fax)                           |
| (Cell/pager)                         | (Email)                               |                          |                                 |
|                                      | 、                                     |                          |                                 |
| Name of Treating Physician:          |                                       |                          |                                 |
| Name: (Last)                         | (First)                               |                          |                                 |
| Address: (Street)                    |                                       | (Apt./Rm.#)              | (City)                          |
| (State/Country)(Z                    | ip) (Telephone)                       |                          | _(Fax)                          |
| (Cell/pager)                         | (Email)                               |                          |                                 |
| En angen en on Other Contest Inf     | · · · · · · · · · · · · · · · · · · · |                          |                                 |
| Emergency or Other Contact Ini       | Ormation:                             | Deletio                  | nchin                           |
| Address: (Street)                    | (Fiist)                               | (Ant /Bm #)              | (City)                          |
| (State/Country)                      | Zin) (Talanhana)                      | (Apt./KIII.#)            | (City)                          |
| (State/Country)(A                    | (Email)                               |                          | (Гах)                           |
| (Cell/pager)                         | (Linian)                              |                          |                                 |
| Section C: Department of Public 1    | Health Findings                       |                          |                                 |
| 1 A reasonable belief exists that    | the individual identified in t        | his order has or is su   | spected of having the following |
| dangerously contagious or infe       | ections                               |                          | spected of having the following |
| disease.                             |                                       |                          |                                 |
| diseuse                              |                                       |                          |                                 |
| 2. Isolation is ordered based upor   | the following findings:               |                          |                                 |
| $\Box$ Physical Examination $\Box$ M | edical Evaluation $\Box$ Labor        | atory Testing $\Box$ Env | vironmental or Human Exposure   |
| $\square$ Other Information          |                                       |                          |                                 |
| Describe the facts in support of iso | olation:                              |                          |                                 |
|                                      |                                       |                          |                                 |

### APPENDIX 1 (ORDER FOR ISOLATION OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

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

3. Duration of Isolation:

#### Section D: Terms of Isolation

The individual subject to this order is required to remain in isolation at the following location and to follow the instructions set forth below:

### Place of Isolation (name of facility, if any):

| Address: (Street | t)                             |                     | (Apt./Rm.#)        | (City)                 |              |                    |
|------------------|--------------------------------|---------------------|--------------------|------------------------|--------------|--------------------|
| (State/Country)  | (Zip)                          | (Telephone)         |                    | (Fax)                  |              |                    |
| (Cell/pager)     |                                | (Email)             |                    |                        | _            |                    |
| Instructions:    |                                |                     |                    |                        |              |                    |
|                  | Healthcare facility isolation: | (Follow instruction | ions provided by h | <i>nealthcare pers</i> | sonnel)      |                    |
|                  | Other location outside the he  | ome                 |                    |                        |              |                    |
|                  | Home isolation:                |                     |                    |                        |              |                    |
| U Wear           | a protective mask when in pa   | resence of others   |                    |                        |              |                    |
| $\Box$ Use s     | eparate bathroom from other    | household member    | ers (if possible)  |                        |              |                    |
| □ Wash           | hands after using bathroom     | and after touching  | respiratory secret | tions                  |              |                    |
| 🗆 Moni           | tor your body temperature an   | d record the result | s and the time     |                        |              |                    |
|                  | rt body temperature results to | local health depa   | rtment             |                        |              |                    |
|                  | in a separate room from othe   | er household mem    | bers               |                        |              |                    |
|                  | -                              | at the              |                    |                        | _ (name of ) | health department) |
| At               | (xxx)xxx-xxxx if you experie   | ence the following  | physical symptor   | ns:                    |              | -                  |
|                  | ve Specific Treatment:         |                     | Medication         | Dose                   | 2            | Davs               |
| □ Other          | Restrictions/Instructions:     |                     |                    |                        |              |                    |
|                  |                                |                     |                    |                        |              |                    |

Section E: Statement of Legal Rights and Duties

1. The \_\_\_\_\_\_\_ (name of health department) has ordered you to remain isolated from other members of the community, and to follow the instructions set forth in Section D above, because it is believed you have or are suspected of having a dangerously contagious or infectious disease which must be controlled in order to protect others from becoming infected. 20 ILCS 2305/2(c).

- This isolation order will remain in effect only as long as you are in danger of spreading the disease to others. 20 ILCS 2305/2(c).
- 3. \_\_\_\_\_ (name of health department) staff will coordinate with your usual healthcare provider(s) to ensure that you are allowed to leave isolation as soon as isolation is no longer necessary to protect the public's health.

\_\_\_\_\_\_\_(name of health department) requests that you sign the consent agreement contained in Section H of this order. If you do not consent, then the \_\_\_\_\_\_\_ (name of health department) will seek a court order to require that you remain in isolation. **If this is an immediate order for isolation then the** \_\_\_\_\_\_\_ (name of health department) is not required to obtain your consent or file a petition seeking a court order until after issuing the order. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so. 20 ILCS 2305/2(c).

5. You have the right to counsel. If you are indigent, the court will appoint counsel for you. 20 ILCS 2305/2(c).

| APPENDIX 1 (ORDER               | FOR ISOLATION OF INDIVIDUAL) TO A | ANNEX E (ISOLATION AND | QUARANTINE GUIDANC | CE)    |
|---------------------------------|-----------------------------------|------------------------|--------------------|--------|
|                                 |                                   | Case No                | Date               |        |
| Section F: Signature of Authori | zing Official                     |                        |                    |        |
|                                 |                                   |                        | (nomo of           | hoalth |
| department)                     |                                   |                        |                    | lleann |
| Address: (Street)               |                                   | (Apt./Rm.#)            |                    |        |
| (City)                          | (State/Country)                   |                        |                    |        |
| (Zip)(Telephone)                | (Fax)                             |                        | (Business          |        |
| Phone)                          | (After-hours Phone)               |                        |                    |        |
|                                 |                                   |                        |                    |        |
| Signature                       |                                   | Date and Time          |                    |        |
| Title                           |                                   |                        |                    |        |
| Section G: Enforcement          |                                   |                        |                    |        |

Any person who knowingly or maliciously disseminates any false information or report concerning the existence of any dangerously contagious or infectious disease in connection with the Department's power of quarantine, isolation and closure or refuses to comply with a quarantine, isolation or closure order is guilty of a Class A misdemeanor. (20 ILCS 2305/2(k).)

### Section H: Consent Agreement to Isolation (Optional, if individual consent)

I understand that I must comply with this isolation order and that if I wish to withdraw my voluntary consent to this isolation order I will notify \_\_\_\_\_\_ (name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours). If I withdraw my voluntary consent to this isolation order, the \_\_\_\_\_\_ (name of health department) will seek a court order to require that I remain in isolation. If this is an immediate order for isolation then the \_\_\_\_\_\_ (name of health department) is not required to obtain my consent or file a petition seeking a court order until after issuing the order. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so. 20 ILCS 2305/2(c).

I understand that if I violate this order that I may be guilty of committing a Class A misdemeanor as described in Section G of this order. 20 ILCS 2305/2(k).

I understand that if I have any questions regarding this isolation order I should contact (name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours).
APPENDIX 1 (ORDER FOR ISOLATION OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

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

Section I: Consent for Minor (Optional, if individual is a minor)

**Consent by Parent and/or Legal Guardian:** 

Name of Parent / Legal Guardian

I am (check one) \_\_\_\_\_ Parent \_\_\_\_\_ Legal Guardian

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 J: Legal Authority

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

APPENDIX 2 (ORDER FOR QUARANTINE OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

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

# **ORDER FOR QUARANTINE OF INDIVIDUAL**

The \_\_\_\_\_\_ (name of health department) has determined, based upon the information contained below, that the individual referred to in this order has been exposed to a dangerously contagious or infectious disease. As a result, it is required that this individual remain in quarantine until he/she is no longer potentially contagious or infectious to others.

# Section A: Type of Order

This order for quarantine is made upon (check all that apply):

# □ Voluntary (consented) (see Section H)

 $\Box$  **Immediate** (*If this is an immediate order then the health department may order quarantine without consent or a court order if immediate action is required to protect the public from a dangerously contagious or infectious disease. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so.*)

| Section B: Information  |  |                                |                                    |
|---|--|--------------------------------|------------------------------------|
| Individual Subject to Quarantine:   |  |                                |                                    |
| Name: (Last)  | (First)  | (M.I.)                         | Date of Birth:                     |
| □ Member of a household   |  |                                |                                    |
| Current Location of Individual: (If a heat<br>Address:(Street)                                  | althcare facility, inclu<br>(Telephone)<br>(Email) | ude room number<br>(Apt./Rm.#) | (City)<br>(Fax)                    |
| Permanent Address:  |  |                                |                                    |
| Address: (Street)   |  | (Apt./Rm.#)                    | (City)                             |
| (State/Country)(Zip)  | (Telephone)  |                                | _(Fax)                             |
| (Cell/pager)  | (Email)  |                                |                                    |
| Name of Treating Physician:   |  |                                |                                    |
| Name: (Last)  | (First)  |                                |                                    |
| Address: (Street)   |  | (Apt./Rm.#)                    | (City)                             |
| (State/Country)(Zip)  | (Telephone)  |                                | _ (Fax)                            |
| (Cell/pager)  | (Email)  |                                |                                    |
| Emergency or Other Contact Informatio   | on:  |                                |                                    |
| Name: (Last)  | (First)  | Relation                       | nship:                             |
| Address: (Street)   |  | (Apt./Rm.#)                    | (City)                             |
| (State/Country)(Zip)  | (Telephone)  |                                | (Fax)                              |
| (Cell/pager)  | (Email)  |                                |                                    |
| <i>Section C: Department of Public Health F</i><br>1. A reasonable belief exists that the indiv | Findings<br>vidual identified in thi               | s order has been ex            | posed to the following dangerously |

contagious or infectious disease: \_\_\_\_\_

2. Quarantine is ordered based upon the following findings:

□ Physical Examination □ Medical Evaluation □ Laboratory Testing □ Environmental Exposure □ Other Information *Describe the facts in support:* 

3. Duration of Quarantine: \_\_\_\_\_

APPENDIX 2 (ORDER FOR QUARANTINE OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE)

| Case No.   |  |
|------------|--|
| Cube 1 10. |  |

Date

## Section D: Terms of Quarantine

The individual subject to this order is required to remain in quarantine at the following location and to follow the instructions set forth below:

#### Place of Quarantine (name of facility, if any): \_\_\_\_\_\_

| Address: (Street)_ | t)(Apt./Rm.#)(City) |    |
|--------------------|---------------------|----|
| (State/Country)    | (Zip)(Telephone)(Fa | x) |
| (Cell/pager)       | (Email)             |    |

#### Instructions:

- □ Healthcare facility quarantine: (*Follow instructions provided by healthcare personnel*)
- □ Home quarantine:
  - $\Box$  Wear a protective mask when in presence of others
  - Use separate bathroom from other household members (if possible)
  - □ Wash hands after using bathroom and after touching respiratory secretions
  - □ Monitor your body temperature and record the results and the time
  - □ Report body temperature results to local health department
  - □ Sleep in a separate room from other household members

| $\Box$ Call _ | <br>at the | (name of health department) at (xxx) xxx-xxxx if |  |
|---------------|------------|--|--|
|               | <br>       |  |  |

you experience the following physical symptoms:

| Receive Specific Treatment | Medication | Dose | Days |
|----------------------------|------------|------|------|
|----------------------------|------------|------|------|

□ Other Restrictions/Instructions: \_\_\_\_

□ If family members or other persons who reside in your home have not been issued a home quarantine order, they may leave your home to carry on their daily routines and to assist you with any needs you may have during the period of confinement. If you live alone, or if every member of your household is under a home quarantine order, you should arrange by telephone for relatives, neighbors, or friends to assist with any needs you may have during the period of confinement. **These persons should not have direct contact with you.** If you need assistance in providing for your daily needs, you should call the \_\_\_\_\_\_ and ask to speak with a health officer.

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

- 1. The \_\_\_\_\_\_ (name of health department) has ordered you to remain quarantined from other members of the community, and to follow the instructions set forth in Section D above, because it is believed you have or are suspected of having a dangerously contagious or infectious disease which must be controlled in order to protect others from becoming infected.
- 2. This quarantine order will remain in effect only as long as you are in danger of spreading the disease to others.
- 3. \_\_\_\_\_\_ (name of health department) staff will coordinate with your usual healthcare provider(s) to ensure that you are allowed to leave quarantine as soon as quarantine is no longer necessary to protect the public's health.
- 4. While quarantined, you are required to cooperate with the instructions of your healthcare provider(s) and the \_\_\_\_\_\_ (name of health department).
- 5. \_\_\_\_\_\_\_\_(name of health department) requests that you sign the consent agreement contained in Section H of this order. If you do not consent, then the \_\_\_\_\_\_\_\_ (name of health department) will seek a court order to require that you remain in quarantine. If this is an immediate order for quarantine then the \_\_\_\_\_\_\_\_ (name of health department) is not required to obtain your consent or file a petition seeking a court order until after issuing the order. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so.
- 6. You have the right to counsel. If you are indigent, the court will appoint counsel for you.

|           | APPENDIX 2 (ORDER FOR QUARANTINE OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE) |                  |             |             |              |                         |
|-----------|--|------------------|-------------|-------------|--------------|-------------------------|
|           |  |                  |             |             | Case No      | Date                    |
| Section I | F: Signature of Aut  | horizing Officia | al          |             |              |                         |
|           |  |                  |             |             | (name        | e of health department) |
| Address:  | (Street)   |                  |             | (Apt./Rm.#) | (City)       |                         |
| (State/Co | ountry)  | (Zip)            | (Telephone) |             | (Fax)        |                         |
| (Cell/pag | ger)   |                  | (Email)     |             |              |                         |
|           |  |                  |             |             |              |                         |
| Signatur  | e  |                  |             | Da          | ate and Time |                         |
| Title     |  |                  |             |             |              |                         |

#### Section G: Enforcement

Any person who knowingly or maliciously disseminates any false information or report concerning the existence of any dangerously contagious or infectious disease in connection with the Department's power of quarantine, quarantine and closure or refuses to comply with a quarantine, quarantine or closure order is guilty of a Class A misdemeanor. (20 ILCS 2305/2(k).)

# Section H: Consent Agreement to Quarantine (Optional, if individual consents)

I, \_\_\_\_\_, voluntarily agree to remain in quarantine as ordered by the \_\_\_\_\_\_ (name of health department). I understand that my compliance with this quarantine 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 \_\_\_\_\_\_. The terms and conditions of the quarantine 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 quarantine order and that if I wish to withdraw my voluntary consent to this quarantine order I will notify \_\_\_\_\_\_\_ (name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours). If I withdraw my voluntary consent to this quarantine order, the \_\_\_\_\_\_\_ (name of health department) will seek a court order to require that I remain in quarantine. If this is an immediate order for quarantine then the \_\_\_\_\_\_\_ (name of health department) is not required to obtain my consent or file a petition seeking a court order until after issuing the order. The health department must as soon as practical (within 48 hours after issuing immediate order) obtain consent or request a court order except when court system is unavailable or it is impossible to do so.

I understand that if I violate this order that I may be guilty of committing a Class A misdemeanor as described in Section G of this order.

I understand that if I have any questions regarding this quarantine order I should contact \_\_\_\_\_\_\_\_\_\_(name of health department) at (xxx) xxx-xxxx (during normal business hours) or (xxx) xxx-xxxx (after hours).

Signature

Date and Time

APPENDIX 2 (ORDER FOR QUARANTINE OF INDIVIDUAL) TO ANNEX E (ISOLATION AND QUARANTINE GUIDANCE) Case No. \_\_\_\_\_ Date \_\_\_

Section I: Consent for Minor (Optional, if individual is a minor)

Consent by Parent and/or Legal Guardian:

Name of Parent / Legal Guardian

I am (check one) \_\_\_\_\_ Parent \_\_\_\_\_ Legal Guardian

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 J: Legal Authority

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

# SUBJECT: Regional Tiered Health Care Coalition Planning for Coordinated Screening, Triage, Diagnosis and Care of EVD Patients in Illinois

Key elements of preparedness and response:

# 1. Screening, observation, and monitoring of incoming travelers from affected countries arriving at O'Hare and other airports

All passengers arriving at O'Hare from affected countries, as well as all passengers from affected countries arriving at other airports that are destined for Illinois will be identified. All such travelers will receive daily monitoring by local health departments (LHDs) extending through the 21 day incubation period for EVD. This monitoring will help ensure that for individuals who develop illnesses, transfer to appropriate care sites (e.g. via coordination between primary care providers, LHDs, and health care facilities) takes place, and that any individuals with Ebola virus infection are diagnosed <u>early</u> in the illness, before much higher levels of infectiousness and risk for transmission occurs. However, it is possible that some individuals may not be captured through these efforts and may be identified in other ways.

## 2. Screening assessments, triage, referral, diagnosis and care for ill individuals

All LHDs and health care facilities in the state **should participate** in **health care coalitions** in order to ensure that, to the fullest extent possible, high quality and safe care is provided for individuals with **and** without EVD. Each health care facility should understand its role in performing remote and onsite screening assessments, triage, referral, diagnosis, and care, in order to ensure that individuals with **and** without Ebola infection receive proper care, in settings where staff are appropriately protected. The critical importance of **accurate travel histories** and exposure assessments, including up to date knowledge of Ebola affected countries cannot be over-emphasized as it will result in avoidance of unnecessary and disruptive response activities.

# 3. Ensuring access to appropriate PPE for different settings

Personal Protective Equipment (PPE) resources must be appropriately managed to ensure that staff are properly protected, in particular those staff caring for patients with diagnosed EVD, who may excrete/secrete gallons of fluid each day, with fluid viral loads in the billions/ml. PPE supply chains must be ensured for Ebola Treatment Centers (ETC) and Ebola Assessment Hospitals (EAH) in collaboration with other facilities that have the ability to share PPE needed for Ebola care. IDPH and CDC can assist with emergency PPE supply needs.

Illinois regional Health Care Coalitions are well established and utilized to coordinate disaster response efforts, share resources, and address regional vulnerabilities during a natural or manmade disaster, or public health emergency. These Coalitions are coordinated by a designated Regional Hospital Coordinating Center (RHCC) hospital that engages the local and regional health care facilities, LHD, Emergency Medical Services, clinics, emergency management agencies, local law enforcement, fire service, coroners, etc., in the development of regional medical disaster plans and response activities. These Coalitions are also designed to provide mutual aid to other affected regions of the state whenever possible.

Health care coalitions and their component health care systems and hospital and non-hospital members in all regions should periodically review and disseminate updated Ebola-related guidance, obtain necessary PPE, and update plans to share PPE and other resources within each region. They should also conduct facility and regional training on Ebola patient procedures and donning and doffing PPE, including Ebola patient "walk-in" exercises. The Illinois Medical Emergency Response Team (IMERT) can assist with these walk-in exercises. All collaborations and planning should consider dispatch/EMS/clinic screening, EMS System Ebola Transport Plans, Ebola Evaluation and Treatment facilities, training, PPE stocks and caches, and LHD communications.

#### **Regional Ebola Coordination Plan Meetings**

It is important that Illinois' health care system executives focus on their responsibility to cooperate with IDPH to help prevent this disease from gaining a foothold in Illinois. IDPH Public Health and Medical Services Response Region (PHMSR) EMS Coordinators and Disaster Planning and Readiness (DPR) Emergency Response Coordinators should work with the RHCC and the LHD where the RHCC is located to convene with all the PHMSR hospital's Chief Medical Officers and CEOs. This will assure that quick decisions can be made in setting up a regional tiered health care response to EVD. It is important for health care systems to work with their RHCC, IDPH, and LHDs to coordinate and **share the responsibilities** of Ebola Assessment Hospitals (EAH) and Ebola Treatment Centers (ETC) as outlined in the table below.

IDPH Regional EMS Coordinators and Emergency Response Coordinator regional staff should also work with their corresponding RHCC hospital and the RHCC's LHD to hold coordinating meetings and discussions with all other relevant coalition health care partners in each of their regions to define and document their plans on how the region's Ebola response coordination will be accomplished. These meetings should include all other LHDs in the region, as well as EMS agencies, community health centers, outpatient clinics, urgent care centers, dentists, private health care providers, emergency management agencies, local law enforcement, fire service, coroners, and State's Attorney.

In preparation for regional meetings, review should be conducted of the key activities and considerations for the capabilities below as they pertain to the region. Record the region's designated ETC, EAH, and Isolation Transport Vehicle (ITV) for Ebola as described below. Include the roles and responsibilities of the various coalition members. Address planning, training, and exercises as necessary.

| Setting   | Capability   | Key activities /considerations  | Designated<br>System(s) or<br>Facilities/Roles/<br>Planning/Exercising/<br>Training |
|---|--|---|---|
| EMS Dispatch,<br>Outpatient<br>Clinics, EDs   | Remote assessment and<br>triage before in-person<br>patient encounter.<br><u>Interim Guidance for<br/>Emergency Medical</u><br><u>Services (EMS)</u><br><u>Systems and 9-1-1</u><br><u>Public Safety</u><br><u>Answering Points</u><br>(PSAPs) for<br><u>Management of Patients with</u><br><u>Known or Suspected Ebola</u><br><u>Virus Disease in the United</u><br><u>States</u> | Accurate information re:<br>travel history within past 21<br>days. If positive or uncertain,<br>assess for Ebola symptoms<br>and exposures.<br>Referral to appropriate site for<br>care based on travel history and<br>symptoms. Appropriate<br>transport mechanisms.   |   |
| Outpatient<br>Clinic  | Ability to stay up to date with,<br>and adhere to CDC guidance:<br><u>Outpatient and Ambulatory</u><br><u>Care Settings</u><br>Ability to contact LHD, as<br>needed (e.g. to support<br>suspect case), including<br>weekends and holidays when<br>LHD is not open, and<br>outpatient clinic is open.   | Accurate travel history and<br>symptom screen.<br>Availability of PPE. Staff<br>trained/drilled in use of PPE.<br>Pre-existing plan for EMS<br>transfer of patients to EDs,<br>or EAH, if needed.   |   |
| Ebola<br>Assessment<br>Hospitals (EAH).<br>(EAHs do not<br>have to be<br>Ebola treatment<br>centers.) | Same requirements as ED,<br>plus ability to provide initial<br>evaluation and clinical care of<br>patients up to the time of<br>Ebola diagnosis, and<br>provision of care prior to<br>transport to an ETC, a<br>minimum of 48 hours of care.<br>On site capability for<br>laboratory testing (e.g. CBC,<br>platelet count, coagulation<br>panels, LFTs, malaria smears).           | <ul> <li>PHMSR Health Care Coalitions need to strategically designate one or more EAHs in their region to be within 8 hours transportation of an available ETC.</li> <li>Corporate health care systems may internally identify one of their facilities in a region to be an EAH and receive patients from their other corporate health care system</li> </ul> |   |

#### their region. HOWEVER, through existing mutual aid Pre-arranged mechanisms for rapid transport of specimens agreements and regional plans, the RHCC will for Ebola testing to an IDPH coordinate (through load laboratory that performs sharing, rotation or Ebola PCR. reciprocity) the EAH support for patient referral from Capability (staffing etc.) to critical access hospitals, and provide supportive care, other health care partners not utilize investigational agents affiliated with, or supported by (if indicated), and maintain the EAH's health care system. safe conditions (PPE, etc.) for staff and other patients and Patient referral to an EAH visitors in the hospital. requires medical consultation and will be based on Quick access to designated individualized assessment—e.g. **Ebola Isolation Transport** location of patient, likelihood of vehicle (ITV). Ebola diagnosis, how many days ill, -wet|| vs. -dry|| EVD stage, turnaround times for labs, etc. In some cases, (e.g. if there is high probability for diagnosis of Ebola), an early direct referral to an ETC prior to diagnosis may be appropriate. Consideration should be given to minimizing number of inter-facility patient transfers. IDPH, the EAH's local health department, and EMS must be consulted prior to receiving a PUI or EVD diagnosed patient. Sufficient PPE supplies must be available to support EAHs; EAHs should seek training support. Media and other communications, security, labor relations issues identified and addressed in advance of

#### ANNEX F (REGIONAL TIERED HEALTH CARE COALITION PLANNING GUIDANCE)

accepting a patient.

| Ebola            | As above with additional          | A limited number of large <b>hospitals</b>     |  |
|------------------|-----------------------------------|--|--|
| Treatment        | capabilities for longer term care | may volunteer to be a designated               |  |
| Centers (ETCs) - | of                                | <b>ETC</b> . ETCs will receive priority access |  |
| Limited number   | patients diagnosed with EVD,      | to emergency IDPH and CDC PPE                  |  |
|                  | including higher levels of        | supplies.                                      |  |
|                  | for DDE anvironmental infection   |  |  |
|                  | control                           | Consultation and assessment by                 |  |
|                  | waste disposal etc <sup>i</sup>   | CDC and IDPH are necessary to be               |  |
|                  |                                   | designated an ETC.                             |  |
|                  | Infection Prevention and Control  | Sufficient PPF supplies and training           |  |
|                  | Recommendations for               | must be available to support ETCs.             |  |
|                  | Hospitalized Patients with        |  |  |
|                  | Known or Suspected Ebola Virus    | Patient referral to an ETC requires            |  |
|                  | Disease in U.S.                   | medical consultation and will be               |  |
|                  | Hospitals                         | based on individualized                        |  |
|                  |                                   | assessment—e.g. location of                    |  |
|                  | Must meet CDC and IDPH ETC        | patient, Ebola diagnosis, how many             |  |
|                  | assessment guidennes.             | days ill, —wet   vs —dry   EVD                 |  |
|                  | Quick access to designated Ebola  | stage, and turnaround times for                |  |
|                  | Isolation Transport vehicle (ITV) | labs, etc. IDPH, LHD and EMS must              |  |
|                  |                                   | Bull or EVD diagnosed patient                  |  |
|                  |                                   | For or EVD diagnosed patient.                  |  |
|                  |                                   | Media and other communications,                |  |
|                  |                                   | security, labor relations issues must          |  |
|                  |                                   | be identified and addressed in                 |  |
|                  |                                   | advance of accepting a patient.                |  |
| Personal         | Guidance for Confirmed Ebola      | Plans to                                       |  |
| Protective       | Patients or Clinical Unstable     | regionalize/redistribute/reallocate            |  |
| Equipment        | PUIs                              | appropriate PPE supplies within                |  |
| Supplies         |                                   | region to prevent PPE emergencies.             |  |
|                  | CDC PPE Donning and Doffing       | Plans for obtaining PPE supplies in            |  |
|                  | Procedures Video                  | an unforeseen emergency.                       |  |
|                  |                                   |  |  |
|                  | For emergencies, be prepared      | Inventory management system to                 |  |
|                  | to request emergency              | help track available resources and             |  |
|                  | supplies from IDPH.               | PPE.   |  |
|                  |                                   | PDF Training/Exercises                         |  |
|                  | 1                                 | TIE Hamme, Evercises.                          |  |

<sup>1</sup> Individuals without travel to affected countries in the past 21 days and without exposure to an Ebola patient in the past 21 days (e.g. at a US hospital) can receive usual management/care. Referral of all persons under investigation for diagnosis of EVD to an Ebola Treatment Center will not occur. Individuals with travel history in past 21 days but clearly without symptoms of Ebola can generally receive usual management/care; however, planning around inpatient admission of these individuals should take into account the potential for a patient who currently has no symptoms of Ebola to subsequently become ill with Ebola while hospitalized. Overuse of these facilities, e.g. for lower probability —rule/outs|| may have the unintended consequence of these facilities not being able to accept a patient with diagnosed Ebola, and cause delays in the transfer of -high probability|| patients. Similarly, unnecessary transfer of patients to EAHs should be avoided.

#### APPENDIX 1 (PREPARING U.S. HOSPITALS FOR EBOLA INFOGRAPHIC) ANNEX F (REGIONAL TIERED HEALTH CARE COALITION PLANNING GUIDANCE)





U.S. Department of Haalth and Human Service Centers for Disease Centers and Prevention

CDC has developed a strategy to help healthcare facilities and state health officials prepare for patients with possible or confirmed Ebola. This strategy identifies which hospitals will provide different levels of care for patients being assessed and treated for Ebola.



#### ANNEX G (IDPH RESPONSE MANAGEMENT)

## SUBJECT: IDPH Response Management Procedures for Ebola Virus Disease (EVD)

The Office of the Director sets the organizational framework for the activation and management of key IDPH activities during agency emergency response and recovery efforts, including activation of the IDPH Incident Management Team (IMT) as appropriate. Senior leadership update meetings are held daily in accordance with the IDPH Response Rhythm. A Sample Agenda for these meetings is found at Appendix 1 to this annex, and a Sample Response Rhythm is found at Appendix 2 to this annex. The director will advise the governor and IEMA on health and medical response issues related to the statewide EVD response.

IDPH is the lead agency for public health and medical response operations. IDPH is responsible for coordinating regional, state, and federal health and medical disaster response resources and assets to support local operations.

The overall authority for direction and control of IDPH resources and licensees rests with the IDPH director. The line of succession at IDPH goes from the director to the assistant director, forward to the appropriate deputy directors of the individual IDPH offices. The overall authority for direction and control of non-IDPH health and medical resources is through the individual agency lead official; however, the IDPH director is the coordinating authority for health and medical assets and resources to support local, regional, and state health and medical response operations.

When an EVD case is suspected, either the IDPH Duty Officer or the IEMA Communication Center will be notified. Those two parties will then share the information with each other. The IDPH Duty Officer will contact IDPH senior leadership.

Upon activation of the IDPH EVD Plan, the IDPH IMT will communicate via SIREN necessary information about the activation with affected entities and those entities that may be called upon to assist during the incident. IDPH Risk Communications activities are addressed in Appendix 4 to this annex.

The incident commander (IC) shall determine when deactivation of the Ebola plan, or portions thereof, is appropriate. The IC will also determine when the incident command structure shall be deactivated. Deactivation will be based upon the ability to fulfill the remaining needs of an incident with normal IDPH functions 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 IDPH functions to normal daily operations will be determined by the IC, in consultation with the director and other IDPH senior staff.

The IC will designate appropriate staff to perform the following tasks in the demobilization efforts.

- Inform IDPH staff, news media, and the public that the emergency or threat no longer exists
- Inform IDPH staff and partners on the process for returning to normal operations
- Supervise the demobilization efforts
- Ensure all systems and communications are operational and available to support normal operations
- Ensure basic human needs, if provided during the response, are last to demobilize so needs of the affected population and responders are met
- 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 IDPH programs and OPR.

APPENDIX 1 (SAMPLE IDPH LEADERSHIP MEETING AGENDA) TO ANNEX G (IDPH RESPONSE MANAGEMENT)

#### SUBJECT: IDPH Senior Leadership Update Meetings

During an ongoing EVD event, Senior Leadership will conduct daily update meetings in accordance with the established Response Rhythm. Commonly these meetings are attended by the Director, Assistant Director, Chief Medical Officer, Public Information Officer, and the Deputy Directors for the Offices of Health Protection and Preparedness and Response respectively. Additional attendees will be included as directed.

Sample Agenda

- I. Director's Opening Comments
- II. Assistant Director Report
  - A. Outside Agency Coordination
  - B. Intelligence Gathered
  - C. Communication with Legislators
- III. Deputy Director for Health Protection Epidemiological Assessment
  - A. Current Case Count
  - B. Outbreak Magnitude
  - C. Interviews and Data Analysis
  - D. Risk Factors Identified
  - E. Geographical Distribution of Cases
- IV. Chief Medical Officer Proposed Guidance to Health Care Providers, Hospitals, Plasma Centers, and LHDs
  - A. Rapid Recognition
  - B. Management of Cases
  - C. Task List for CDC Epi-Aid team
- V. Deputy Director for Preparedness and Response Report
  - A. Coordination with Hospitals, EMS Systems, and Providers
  - B. Assessment of Inventory of Medications and Other Supplies Utilized in Treatment
  - C. Federal Response to Shortages
  - D. Other PHEOC Activity
- VI. Public Information Officer Report
  - A. Redundant Questions from Media
  - B. PSA Messaging
    - 1. Education for At-Risk Populations on the Hazards of Illness
    - 2. Recognition of Signs and Symptoms
    - 3. Instructions on How to Obtain Care
- VII. Director's Closing Comments and Guidance
  - A. Update to Public
  - B. Update to Governor's Office
  - C. Update to Media
  - D. Update to Other Stakeholders

APPENDIX 2 (SAMPLE IDPH RESPONSE RHYTHM) TO ANNEX G (IDPH RESPONSE MANAGEMENT)

#### SUBJECT: Sample IDPH Response Rhythm



The IDPH Response Rhythm above will be tailored to capture recurring events over the course of an EVD response as well as any special events occurring on any specific day.

APPENDIX 3 (IDPH EOC OPERATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)

# SUBJECT: IDPH Emergency Operations Center (PHEOC) Operations

The PHEOC is staffed by the IDPH IMT led by OPR in accordance with the incident command system (ICS) structure (see Tab A to Appendix 3, Annex G).

PHEOC communications are conducted in accordance with the Illinois Disaster Medical Response Communication Pathway (see Tab B to Appendix 3, Annex G).

The PHEOC utilizes a standardized form for incident reporting (see Tab C to Appendix 3, Annex G).

A standardized resource request form is utilized for requesting medical resources (see Tab D to Appendix 3, Annex G).

All affected entities, as well as those that may be called upon to assist during the incident, must have the ability to communicate pertinent information internally and externally from their facility. Possible established methods for communication include:

- Telephone (landline)
- Telephone (cellular)
- Facsimile (fax)
- Electronic mail (e-mail)
- State of Illinois Rapid Electronic Notification (SIREN)
- Radio systems (Starcom, IREACH, MERCI, HAM/Amateur)
- Hospital bypass system/ EMResource
- WebEOC
- EMTrack
- Illinois Helps volunteer management system

In addition, Illinois has developed a Statewide Communications Interoperability Plan (SCIP) that identifies a strategy for use of interoperable communications by public safety agencies and non-government/private organizations.

TAB A (OPR INCIDENT MANAGEMENT TEAM STRUCTURE) APPENDIX 3 (IDPH EOC OPERATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)

# **OPR Incident Management Team (IMT)**

# **Command Staff**

| Incident Commander |
|--------------------|
| Title              |
| OPR deputy         |
| DPR chief          |
| EMS chief          |

| Safety Officer                         | Liaison Officer                 | Public Information<br>Officer | State ESF-8 Lead State<br>Emergency Operations Center<br>(SEOC) |
|--|---------------------------------|-------------------------------|---|
| Title                                  | Title                           | Title                         | Title   |
| T & E safety officer                   | OPR administrative<br>assistant | Communications manager        | DPR chief   |
| EMS special<br>programs<br>coordinator | DPR administrative<br>assistant | Communications manager        | All-Hazards Planning Section<br>chief                           |
|  | EMS administrative<br>assistant |                               |   |

# **General Staff**

| Operations<br>Section     | Planning Section                      | Logistics Section     | Finance and<br>Administration Section |
|---------------------------|---------------------------------------|-----------------------|---------------------------------------|
| Title                     | Title                                 | Title                 | Title                                 |
| EMS chief                 | All-Hazards Planning<br>Section chief | PHEOC<br>coordinator  | FGM chief                             |
| ERC regional supervisor   | Evaluation coordinator                | Accounting technician | HPP grants manager                    |
| REMSC regional supervisor |                                       |                       | PHEP grants manager                   |
| HPP program<br>manager    |                                       |                       |                                       |

#### TAB B (ILLINOIS DISASTER MEDICAL RESPONSE COMMUNICATIONS PATHWAY) APPENDIX 3 (IDPH EOC OPERATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)



TAB C (MEDICAL INCIDENT REPORT FORM) APPENDIX 3 (IDPH EOC OPERATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)



# MEDICAL INCIDENT REPORT FORM

| IDPH Duty Officer:  | Date/Time:                                   |  |
|---|--|--|
| From (Sender)   | To (Received)                                |  |
| Name:   | Name:  |  |
| Title:  | Title:                                       |  |
| Contact Information:  | Contact Information:                         |  |
|   |  |  |
|   |  |  |
| Address of Incident:  | Type/Nature of Incident:                     |  |
|   |  |  |
|   |  |  |
| Report received via:         Phone         Radio  | _FaxOther                                    |  |
| Priority:Urgent/HighNon-urgent/Med  | iumInformational/Low                         |  |
| Date/Time PHEOC activated:  | Reason for Activation:                       |  |
|   |  |  |
| Activation Level:ImmediateControlle   | ed   |  |
| CURRENT INCIDENT INFORMATION:   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   | IC.  |  |
| STATUS OF LOCAL MEDICAL RESPONSE OPERATION  | 5:   |  |
|   |  |  |
|   |  |  |
|   |  |  |
| REQUIRED/REQUESTED ACTIONS AT THIS TIME: (section must be completed; if none, enter $N/A$ ) |  |  |
| REQUIRED/REQUESTED ACTIONS AT THIS TIME. (SE  | ction must be completed, if none, enter N/A/ |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
| FACILITY NAME/LOCATION:   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
| COMMENTS:   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
| L   |  |  |

TAB D (RESOURCE/TASK REQUEST FORM) APPENDIX 3 (IDPH EOC OPERATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)



# **RESOURCE/TASK REQUEST FORM**

\*required field

| Incident Name: |   |   |                                 |                    | Date/Time*                   |   |   | Request Number: |  |  |
|----------------|---|---|---------------------------------|--------------------|------------------------------|---|---|-----------------|--|--|
|                | Priority:*  Life Safety/Immediate (4 hrs.) 	Priority (12 hrs.) 	Rc hrs.) Long-Term (96 hrs.) 	Extended (96+ hrs.) |   |                                 |                    | outine                       | e (24   | Date/Time D   | )ue:*           |  |  |
|                | *Have all Local and Mutual Aid resources been exhausted?  |   |                                 |                    |                              |   | □ Yes   | □ No            |  |  |
|                | *Resource or Task?  | <ul><li>Resource</li><li>Task</li></ul>   | equest involv<br>e request is f | es the<br>for a re | provision of<br>source, plea | physical resource<br>ase complete Res               | es or assistance with a task. If ource Details below. |                 |  |  |
|                | *Resource/Task:   |   |                                 |                    |                              |   |   |                 |  |  |
|                | *Detailed<br>Description:<br>(Vital<br>characteristics,<br>brand, specs,<br>experience, size,<br>etc.)            | ATTENTION: In order to expedite the request, it is critical to provide a detailed description of the need you are |                                 |                    |                              |   |   |                 |  |  |
|                | requesting to be filled. Failure to do so will result in unnecessary delays in filling the request.               |   |                                 |                    |                              |   |   |                 |  |  |
| r              | County:   |   |                                 |                    | IEMA Region:                 |   |   |                 |  |  |
| esto           | Jurisdiction:   | PHMSR   |                                 | PHMSR              | Region:                      |   |   |                 |  |  |
| nbə            | Contacts  |   |                                 |                    |                              |   |   |                 |  |  |
| Ř              | Contact Type N  | lame  | Organization/Facility           |                    | Phone #                      | Email   |   |                 |  |  |
|                | *Requestor  |   |                                 |                    |                              |   |   |                 |  |  |
|                | On-Scene<br>Contact   |   |                                 |                    |                              |   |   |                 |  |  |
|                | Resource Details  |   |                                 |                    |                              |   |   |                 |  |  |
|                | Kind ( Medical Non-medical)   |   |                                 | Туре               |                              | Quantity (specify unit: each, box, case, etc.)      |   |                 |  |  |
|                |   |   |                                 |                    |                              |   |   |                 |  |  |
|                |   |   |                                 |                    |                              |   |   |                 |  |  |
|                |   |   |                                 |                    |                              |   |   |                 |  |  |
|                |   |   |                                 |                    |                              |   |   |                 |  |  |
|                | Delivery/Reporting Location: Order # (I   |   |                                 | <u> </u>           |                              | ΕΤΛ (   |   | Cost            |  |  |
|                | Derivery/Reporting Location: Order # (L   |   |                                 | <u></u>            |                              | ETA (   | 130)  | COSI            |  |  |
|                |   |   |                                 |                    |                              |   |   |                 |  |  |
|                | Suitable Substitutes and/or Suggested Sources:  |   |                                 |                    |                              | POC phone number if known and suitable substitutes: |   |                 |  |  |
| Ser            | Sent To: Date/Time Se   |   |                                 |                    |                              |   | nt:   |                 |  |  |

#### APPENDIX 4 (RISK COMMUNICATIONS) TO ANNEX G (IDPH RESPONSE MANAGEMENT)

#### SUBJECT: IDPH Risk Communication Operations Associated with an EVD Outbreak

IDPH risk communications are the exchanges of real-time information, advice and opinions between IDPH and those facing the Ebola threat to their health, economic or social well-being. The ultimate purpose is to enable people at risk to make informed decisions to protect themselves and their loved ones. IDPH risk communications are conducted via three primary pathways.

*Telephone Lines*: Phone banks for Ebola hotlines will be established by CMS including availability of Telecommunications Device for the Deaf/Text Telephone Yoke (TDD/TTY) lines. A mechanism will be created to track call types for rumor control purposes. If needed, upon notification and request of IDPH, the Illinois Poison Center may stand up an Ebola information hotline for the general public and/or a reporting hotline for medical professionals if the resources are available to do so. Provisions will be made to ensure that the hotline can accommodate members of the public who need to reach the hotline in a non-English language.

*Internet*: IDPH will coordinate with the Department of Innovation and Technology (DoIT), as necessary, to update the IDPH website with emergency information.

*Media*: In collaboration with the IDPH Director, the Office of the Governor, CDC, IEMA PIO and other state agency PIOs, the IDPH PIOs will create and disseminate information regarding the Ebola situation; major actions being taken; and information about the disease, public guidance and resources. Rumor control will be a primary concern, and it will be imperative to immediately issue information updates and to correct errors and misperceptions. IDPH PIOs will monitor information requested from the media and public. IDPH PIOs will ensure that information meets standards of cultural competency, including language translation, if needed.

Joint Information Center (JIC): The JIC is a central location that supports operations. The JIC enhances information coordination, reduces misinformation, and maximizes resources by collocating PIOs as much as possible. The JIC is where personnel with public information responsibilities perform critical emergency information, crisis communication, and public affairs functions.

In most instances, the JIC is established at the SEOC, which provides all equipment resources. Additionally, based on the scope and magnitude of an event, additional PIOs may be activated from State PIOs located in Springfield, Chicago, and/or the ILNG Public Affairs Officers (PAOs) to help support a JIC operation, either at the SEOC or in the field. State PIOs include those from other state agencies – Illinois State Police, Department of Financial and Professional Regulation, Department of Agriculture, Department of Corrections, Illinois Environmental Protection Agency, etc. The IDPH Public Information and Crisis and Emergency Risk Communication Plan includes procedures for message development and media notification. IDPH PIOs also communicate with public health PIOs across the state through the IDPH PIO Workgroup structure.

The Illinois Information Service (IIS) is a state service for distributing press releases to media serving Illinois. IIS maintains lists of all TV, radio, daily newspapers, weekly newspapers, and ethnic media by county. If unable to send out a press release through IIS in a timely manner, the press release can be sent out directly from the PIO station in the SEOC. The PIO station in the SEOC has an email list for statewide daily newspapers, radio stations and TV stations.

#### ANNEX H (CLINICAL LABORATORY GUIDANCE)

# SUBJECT: Guidance for Clinical Labs Managing Specimens from Patients Under Investigation (PUI) for Ebola Virus Disease (EVD)

The IDPH Division of Laboratories has developed guidance related to authorization and submission of laboratory specimens from Patients Under Investigation (PUI) for Ebola Virus Disease (EVD). The IDPH Chicago laboratory has implemented CDC Laboratory Response Network (LRN) assays for the presumptive detection of the Ebola Zaire virus. The test is indicated for use only in **symptomatic** patients meeting clinical and/or epidemiological criteria for Ebola Viral infection. Ebola virus can be detected in blood only after onset of symptoms, most notably fever; however, it may take up to 3 days post-onset of symptoms for the virus to reach detectable levels. The assay is not considered useful for asymptomatic patients. If EVD is suspected and a blood specimen is collected < 3 days post-onset of symptoms, a subsequent specimen may be required for testing to completely rule out Ebola virus infection.

Current information on Ebola virus, including case definitions, is available at <u>http://www.cdc.gov/vhf/ebola/index.html</u>. The IDPH Division of Infectious Diseases personnel will work with the submitting facility and appropriate Local Health Department to complete a Person under Investigation (PUI) form to capture risk factors and health status of the individual for which testing is requested. This form will be used to communicate information about the specific case with CDC. Testing will not proceed unless CDC approves the use of the test.

## To request PCR testing for Ebola Virus Disease:

- Hospitals and health care providers should contact their local health department (LHD) to discuss testing. If the LHD cannot be reached, submitters should contact the IDPH Division of Infectious Diseases. (217-782-2016)
- LHDs should contact the IDPH Division of Infectious Diseases for a consultation. Contact the after-hours IDPH Duty Officer through the Illinois Emergency Management Agency, if necessary. (800-782-7860)
- IDPH Division of Infectious Diseases will contact the CDC Emergency Operations Center to discuss test authorization.
- If testing at CDC is authorized, IDPH Division of Infectious Diseases and Division of Laboratories will work with the submitter on submission of specimens.
- Do not ship specimens to IDPH without prior authorization.

# Acceptable specimens for Ebola Virus Disease testing at IDPH:

Whole blood is the preferred specimen type for EVD testing. Serum, plasma and urine are also acceptable specimens for testing. Urine should not be the sole specimen type tested from a patient and must be sent with a paired specimen.

- Whole blood Collect two lavender top blood tubes containing whole blood preserved with EDTA (minimum volume of 4mL each). Collect blood in plastic tubes only. Do not collect in glass tubes. Do not centrifuge specimens. Store and transport specimens at 2-8°C.
- Serum Collect whole blood in a gold top serum separator tube and centrifuge to separate. Store and transport specimens at 2-8°C.
- Plasma Collect whole blood into commercially available anticoagulant-treated tubes e.g., EDTA-treated (lavender tops) or citrate-treated (light blue tops). Cells are removed from plasma by centrifugation for 10 minutes at 1,000–2,000xg using a refrigerated centrifuge. The resulting supernatant is designated plasma. Following centrifugation, it is important to immediately transfer the liquid component (plasma) into a clean polypropylene tube using a Pasteur pipette. Store and transport specimens at 2-8°C.
- Urine Collect Urine in a 15ml conical plastic tube. Store and transport specimens at 2-8°C.

#### ANNEX H (CLINICAL LABORATORY GUIDANCE)

#### Submitting specimens for testing:

- When considering shipment for EVD testing to the IDPH laboratory, please call IDPH laboratory staff to discuss the submission process.
- IDPH laboratory staff will provide specimen transport instructions and submission form completion information to the submitter at the time testing is authorized. The phone number for the IDPH Laboratory in Chicago is 312-793-4760.
- All shipments to the IDPH laboratory must meet Category A Substances shipping requirements.
- IDPH offers web-based Infectious substances shipping training through iTrain at: <u>https://www.train.org/illinois/course/1075969/</u>. The training is free and accessible on-line.
- The IDPH Division of Laboratories does not supply Category A shipping supplies. These shipping supplies are readily available through commercial sources. (Safe-T-Pak, Fisher Scientific, etc.)
- The Division of Laboratories strongly encourages hospitals and laboratories to review the Category A shipping requirements as part of their preparedness efforts.
- Additional information regarding guidelines for shipping infectious substances is available at the IDPH website in the Resources section: <u>http://dph.illinois.gov/topics-services/lab-testing-</u> <u>services/clinical-testing</u>

#### **Results from Ebola Virus Disease testing:**

- All results from IDPH, either presumptive positive or negative, will require additional consultation with CDC and confirmation testing by CDC. CDC will provide guidance to IDPH regarding how presumptive results should be used clinically, epidemiologically and for infection control purposes.
- Results will be provided to submitters by FAX as soon as they are available.
- Supplemental testing may be performed on specimens referred to CDC at their discretion.
- Viral culture is considered the confirmatory test and is only available at CDC. This testing is performed in highly controlled laboratory environments.
- IDPH Division of Laboratories will provide CDC confirmatory test results to the submitter, the LHD, and the IDPH Communicable Disease Control Section as they are available.

#### **Contact Information for IDPH**

The IDPH Division of Laboratories can be contacted during business hours at the following numbers:

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

The IDPH Division of Infectious Diseases can be contacted during business hours at 217-782-2016. **To reach IDPH personnel during Holidays and non-business hours, please contact the Illinois Emergency Management Agency at 800- 782-7860. Ask for the IDPH Duty Officer.** 

#### ANNEX I (WASTE DISPOSAL GUIDANCE)

# SUBJECT: Guidance for the Disposal and Transport of Potentially Infected Ebola Medical Waste Generated in Health Care Facilities

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

Disposable materials:

- Potentially infectious medical waste (PIMW), including disposable materials (e.g., any single-use PPE, cleaning cloths, wipes, single-use microfiber cloths, gowns, linens, food service), privacy curtains, and other textiles, generated in connection with diagnoses and treatment activities need to be appropriately disposed of after use in the patient room.
- 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. <a href="http://www.cdc.gov/vhf/ebola/hcp/medical-waste-management.html">http://www.cdc.gov/vhf/ebola/hcp/medical-waste-management.html</a>
- 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</u> <u>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="http://www.epa.state.il.us/land/waste-mgmt/potentially-infectious-medical-waste.html">http://www.epa.state.il.us/land/waste-mgmt/potentially-infectious-medical-waste.html</a>. Lists of permitted waste haulers and transfer, storage or treatment facilities are available at <a href="http://www.epa.state.il.us/land/regulatory-programs/transportation-permits/">http://www.epa.state.il.us/land/regulatory-programs/transportation-permits/</a> and <a href="http://www.epa.state.il.us/land/waste-mgmt/facility-tables/pimw-facilities.html">http://www.epa.state.il.us/land/waste-mgmt/potentially-infectious-medical-waste.html</a>. Lists of <a href="http://www.epa.state.il.us/land/regulatory-programs/transportation-permits/">http://www.epa.state.il.us/land/regulatory-programs/transportation-permits/</a> and <a href="http://www.epa.state.il.us/land/waste-mgmt/facility-tables/pimw-facilities.html">http://www.epa.state.il.us/land/waste-mgmt/facility-tables/pimw-facilities.html</a>.

# Transporting PIMW by an IEPA permitted hauler:

- The Ebola virus is a 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, 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:
  - <u>http://phmsa.dot.gov/pv\_obj\_cache/pv\_obj\_id\_54AC1BCBF0DFBE298024C4C700569893C2582700/</u> <u>filename/Transporting\_Infectious\_Substances\_brochure.pdf</u>
  - Class 6, Division 6.2—Definitions and exceptions (49 CFR 173.134): <u>http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=1483d3ee3a3f2bfbdf8f83f4d004804e&n=pt49.2.173&r=PART&ty=HTML #se49.2.173\_1134</u>
  - Category A infectious substances (49 CFR 173.196): <u>http://www.ecfr.gov/cgi-bin/text-idx?SID=2a97f2935677211e1785ac643163d2a9&node=49:2.1.1.3.10.5.25.33&rgn=div8</u>

#### ANNEX I (WASTE DISPOSAL GUIDANCE)

 Wastes generated during delivery of care to Ebola virus-infected patients must be packaged and transported in accordance U.S. DOT Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). A special permit from U.S. DOT is required to allow alternative packaging from the requirements of the HMR for transportation. In addition to the alternative packaging, additional preparation and operation controls will apply to ensure an equivalent level of safety. Special permits are issued to the individual companies that apply, to ensure that each holder is fit to conduct the activity authorized. More information is available at U.S. DOT website: <u>http://phmsa.dot.gov/hazmat/question-and-answer</u>. Once a patient with suspected EVD (e.g., patients under investigation) is determined to not be infected with the Ebola virus, their waste materials no longer need to be managed as if contaminated with Ebola virus.

#### APPENDIX 1 (RESIDENTIAL DECONTAMINATION GUIDANCE) TO ANNEX I (WASTE DISPOSAL GUIDANCE)

## SUBJECT: Guidance for Residence Decontamination for Ebola and Removal of Contaminated Waste

**Who this is for:** Public health, state and/or local authorities who may have to decontaminate or arrange for a contract company to decontaminate a U.S. residence and remove contaminated waste because someone living there was confirmed to have Ebola virus disease (EVD).

Members of the general public who have concerns regarding their residence and environmental contamination because a member of the residence, whether owned or rented, had a confirmed case of EVD should contact local public health and/or assigned authorities for Ebola emergency response in their location. If the public health and/or assigned authorities cannot be reached, please call the IEMA Communication Center at: (800) 782-7860.

What this is for: These recommendations list effective disinfectant products and procedures, guidance for contract companies to follow in dealing with contaminated wastes, and guidance on how to use personal protective equipment (PPE).

**How to use:** Use this document for guidance on decontaminating a residence and disposing of waste that could be contaminated.

## **Key Points**

- Effective disinfectant product(s): Currently, no EPA-registered hospital disinfectant products state on the label that the product can kill Ebola virus. Use EPA-registered hospital disinfectants with label claims for hospital disinfection (or the equivalent microbial pathogen claims) and claims against non-enveloped viruses (norovirus, rotavirus, adenovirus, and poliovirus). These products are broadly antiviral and capable of inactivating both enveloped and non-enveloped viruses, including Ebola virus. These disinfectants should be used in accordance with the manufacturer's labeled instructions. One simple way to identify an appropriate product effective against Ebola virus is to use a product included in EPA's List L: Disinfectants for Use against the Ebola Virus (see Annex B, Appendix 4, Tab A).
- Level of cleaning and decontamination: Once a person has been confirmed to have EVD, the way to decontaminate the residence depends on the person's symptoms at the time they were in the residence:
  - Cleaning by residents If the person with EVD had only a fever with no gastrointestinal (diarrhea, vomiting) or hemorrhagic (bleeding) symptoms while he or she was in the residence, the person should not be contaminating their environment. The remaining members of the residence can clean and launder as normal using detergent and/or disinfectant.
  - Cleaning by a contract company If the person with EVD had a fever AND diarrhea, vomiting, and/or unexplained bleeding, public health and/or assigned authorities may need to contact a contract company that will assess the residence to determine the proper decontamination and disposal procedures. Remaining members of the residence should avoid contaminated rooms and areas until after the completion of the assessment and decontamination.
- Companies with experience in cleaning biohazard and crimes scenes can conduct the cleaning. OSHA provides guidance for cleaning and decontaminating in non-health care settings. Any contract company conducting such work must comply with Illinois Ebola policies and with OSHA standards for, among others that may apply, blood borne pathogens (29 CFR 1910.1030), PPE (29 CFR 1910.132), respiratory protection (29 CFR 1910.134), and hazard communication (29 CFR 1910.1200) (for example, for chemical hazards). In states that operate their own occupational safety and health programs, different or additional requirements may exist.
- **Transport of waste**: Ebola-contaminated waste (materials that cannot be decontaminated and were in contact with the person with EVD having fever AND diarrhea, vomiting, and/or unexplained bleeding) must be packaged and transported in accordance with regulations on the transportation of Ebola-contaminated items provided by the U.S. Department of Transportation (DOT): U.S. DOT Hazardous Materials Regulation for Category A Infectious Substance. If a contract company is handling the waste, requirements in OSHA standards, including Blood borne Pathogens (29 CFR 1910.1030) may also apply.

#### APPENDIX 1 (RESIDENTIAL DECONTAMINATION GUIDANCE) TO ANNEX I (WASTE DISPOSAL GUIDANCE)

## **Definitions**

- **Contract Company**: A company hired to complete a needed task. In regard to decontaminating residences of Ebola virus, the contract company is specialized in decontaminating, handling, and discarding of toxic chemicals and infectious agents, with experience in cleaning biohazard or crime scenes, and complies with all health and safety regulations. These companies may be certified through such associations as the National Institute of Decontamination Specialists (NIDS), Institute of Inspection, Cleaning and Restoration Certification (IICRC), American Bio Recovery Association (ABRA), or complete training as outlined in the OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER).
- **Disinfection product**: A product that will make certain biological agents inactive. Specific to Ebola, use an EPAregistered hospital disinfectant or one with the equivalent microbial pathogen claims that also have a label claim against a non-enveloped virus. Such products are included in EPA's List L: Disinfectants for Use against the Ebola Virus (see Annex B, Appendix 4, Tab A).
- Personal Protective Equipment (PPE): Equipment worn to prevent exposure to hazardous substances (chemicals, infectious agents, particles). For Ebola decontamination, the level of PPE will vary because of the contamination level and chemicals used for cleaning and decontaminating. Refer to the OSHA PPE Selection Matrix for Occupational Exposure to Ebola Virus for appropriate PPE and related recommendations in CDC's Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On (Donning) and Removing (Doffing) (see Annex B, Appendix 4, Tab A).

# Decontamination and waste disposal – Determined by the symptoms of the person with EVD while they were within the residence

- Remaining members of residences where a person with Ebola **only had a fever** with no gastrointestinal (diarrhea, vomiting) or hemorrhagic (bleeding) symptoms can clean and launder as normal because the individual should not be contaminating their environment.
- Remaining members of residences where a person with EVD had a fever AND diarrhea, vomiting, and/or unexplained bleeding should have local public health and/or assigned authorities for Ebola emergency response managing the decontamination and waste disposal through a contract company. Members of the residence (or property owners, if the residence is rented) should not handle contaminated materials; do not touch any body fluids or soiled surfaces and materials.

The public health authorities can assist in finding a qualified contract company. The contract company will assess the residence to determine the proper decontamination and disposal procedures. Only areas/rooms with contamination from diarrhea, vomiting, unexplained bleeding, and/or other body fluids will need to be cleaned and disinfected.

#### Recommendations for contract companies about disinfectants, training requirements, PPE, and waste removal

Recommendations for the contract company to follow are described in CDC's Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus and OSHA Fact Sheet 3756 on Cleaning and Decontamination of Ebola on Surfaces – Guidance for Workers and Employers in Non-Healthcare/Non-Laboratory Settings. For nonporous surfaces (door handles, tile floors), use an EPA-registered hospital disinfectant or a disinfectant with equivalent microbial pathogen claims according to manufacturer's instructions with a label claim against a nonenveloped virus, such as norovirus, rotavirus, adenovirus, or poliovirus. One simple way to identify an appropriate product effective against Ebola virus is to use a product included in EPA's List L: Disinfectants for Use against the Ebola Virus. Any EPA-registered disinfectant that is effective against a non-enveloped virus will also be effective against Ebola virus.

• Porous materials (linens, carpet, mattress, pillows) should be properly contained and disposed of according to Illinois regulations. Store the properly contained contaminated material in a room that is not being used until it can be collected for disposal. Additional CDC recommendations for Ebola Medical Waste Management provides further

#### APPENDIX 1 (RESIDENTIAL DECONTAMINATION GUIDANCE) TO ANNEX I (WASTE DISPOSAL GUIDANCE)

information about safe handling and disposal of medical waste from patients under investigation or patients with confirmed EVD.

• Waste contaminated with Ebola virus must be packaged and transported in accordance to U.S. DOT Hazardous Materials Regulations (HMR, 49 CFR, Parts 171-180). If a contract company is handling the waste, requirements in OSHA standards, including Blood borne Pathogens (29 CFR 1910.1030) may also apply.

**Contract company requirements and PPE (biological and chemical)**: Contract company employees must be properly trained. The contract company is responsible for selecting and providing PPE to protect their workers from exposure to Ebola and to chemical hazards from the cleaning and disinfectant agents. Refer to the OSHA PPE Selection Matrix for assistance in determining the appropriate PPE. Where respiratory hazards exist, such as from aerosolized viral particles or chemicals used in cleaning and disinfection, workers must use NIOSH-approved respirators, be fit-tested before using respirators, and be medically cleared.

| Table 1: Guidance Summary for Decontamination and Waste Disposal in an Illinois Residence Where a   |  |   |  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|--|
| Person Has EVD  |  |   |  |  |  |  |  |  |
| Definition  | Decontamination and Disposal   | Training and PPE  |  |  |  |  |  |  |
| <ul> <li>Residence where a<br/>person with EVD only<br/>had a fever and no<br/>gastrointestinal<br/>(diarrhea, vomiting)<br/>and/or no hemorrhagic<br/>(bleeding) symptoms</li> </ul> | <ul> <li>Residents can clean and launder<br/>normally, using detergent and/or<br/>disinfectant</li> <li>Residents can discard waste as<br/>normal</li> </ul>   | <ul> <li>No training required</li> <li>Follow detergent and<br/>disinfectant product<br/>manufacturer's instructions</li> </ul>                               |  |  |  |  |  |  |
| <ul> <li>Residence where a<br/>person with EVD had a<br/>fever AND diarrhea,<br/>vomiting, and/or<br/>unexplained bleeding</li> </ul>   | <ul> <li>Members of the residence or<br/>property owners should NOT<br/>handle contaminated materials</li> <li>Contact local public health or<br/>assigned authorities</li> <li>Contract company should conduct<br/>decontamination and disposal<br/>procedures</li> </ul> | <ul> <li>Contract company should follow<br/>local state policies, and comply<br/>with OSHA standards and<br/>federal guidelines as<br/>appropriate</li> </ul> |  |  |  |  |  |  |

Table 1. Interim Guidance Summary for Decontamination and Waste Disposal in a U.S. Residence Where a Person Has EVD