



## Detailed Hospital Checklist for Ebola Preparedness

The U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC), and Office of the Assistant Secretary for Preparedness and Response (ASPR), in addition to other federal, state, and local partners, aim to increase understanding of Ebola virus disease (EVD) and encourage U.S. hospitals to prepare for managing patients with EVD and other infectious diseases. Every hospital should ensure that it can detect a patient with ebola, protect healthcare workers so they can safely care for the patient, and respond in a coordinated fashion. Many of the signs and symptoms of EVD are non-specific and similar to those of many common infectious diseases, as well as other infectious diseases with high mortality rates. Transmission can be prevented with appropriate infection control measures.

In order to enhance our collective preparedness and response efforts, this checklist highlights key areas for hospital staff -- especially hospital emergency management officers, infection control practitioners, and clinical practitioners -- to review in preparation for a person with EVD arriving at a hospital for medical care. The checklist provides practical and specific suggestions to ensure your hospital is able to **detect** possible EVD cases, **protect** your employees, and **respond** appropriately.

While we are not aware of any domestic EVD cases (other than two American citizens who were medically evacuated to the United States), **now is the time to prepare**, as it is possible that individuals with EVD in West Africa may travel to the United States, exhibit signs and symptoms of EVD, and present to facilities.

Hospitals should review infection control policies and procedures and incorporate plans for administrative, environmental, and communication measures, as well as personal protective equipment (PPE) and training and education. Hospitals should also define the individual work practices that will be required to detect the introduction of a patient with EVD or other emerging infectious diseases, prevent spread, and manage the impact on patients, the hospital, and staff.

The checklist format is not intended to set forth mandatory requirements or establish national standards. In this checklist, healthcare personnel refers to all persons, paid and unpaid, working in healthcare settings who have the potential for exposure to patients and/or to infectious materials, including body substances, contaminated medical supplies and equipment, or contaminated environmental surfaces.<sup>1</sup>

This detailed checklist for hospitals is part of a suite of HHS checklists currently in development.

CDC is available 24/7 for consultation by calling the CDC Emergency Operations Center (EOC) at 770-488-7100 or via email at [eocreport@cdc.gov](mailto:eocreport@cdc.gov).

<sup>1</sup> Healthcare personnel includes, but is not limited to, physicians, nurses, nursing assistants, therapists, technicians, laboratory personnel, autopsy personnel, students and trainees, contractual personnel and persons not directly involved in patient care (e.g., house-keeping, laundry).

**C=Completed; IP=In Progress; NS=Not Started**

<b>PREPARE TO DETECT</b>	<b>C</b>	<b>IP</b>	<b>NS</b>
Review risks and signs and symptoms of EVD, and train all front-line clinical staff on how to identify signs and symptoms of EVD: <a href="http://www.cdc.gov/vhf/ebola/symptoms/index.html">http://www.cdc.gov/vhf/ebola/symptoms/index.html</a> ; <a href="http://www.cdc.gov/vhf/ebola/exposure/index.html">http://www.cdc.gov/vhf/ebola/exposure/index.html</a>			
Review CDC EVD case definition for guidance on who meets the criteria for a person under investigation for Ebola Virus Disease, <a href="http://www.cdc.gov/vhf/ebola/hcp/case-definition.html">http://www.cdc.gov/vhf/ebola/hcp/case-definition.html</a> and proper specimen collection and shipment guidelines for testing: <a href="http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html">http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html</a>			
Ensure EMS Crews at hospitals and other agencies are aware of current guidance: <a href="http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-emergency-medical-services-systems-911-public-safety-answering-points-management-patients-known-suspected-united-states.html">http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-emergency-medical-services-systems-911-public-safety-answering-points-management-patients-known-suspected-united-states.html</a>			
Review Emergency Department (ED) triage procedures, including patient placement, and develop or adopt screening criteria (e.g. relevant questions: exposure to case, travel within 21 days from affected West African country) for use by healthcare personnel in the ED to ask patients during the triage process for patients arriving with compatible illnesses.			
Post screening criteria in conspicuous placements at ED triage stations, clinics, and other acute care locations (see suggested screening criteria in Attachment A).			
Designate points of contact within your hospital responsible for communicating with state and local public health officials. <b>Remember:</b> EVD is a nationally notifiable disease and must be reported to local, state, and federal public health authorities.			
Ensure that all triage staff, nursing leadership, and clinical leaders are familiar with the protocols and procedures for notifying the designated points of contacts to inform 1) hospital leadership (infection prevention and control, infectious disease, administration, laboratory, others as applicable), and 2) state and local public health authorities regarding a suspected EVD case.			
Conduct spot checks and inspections of triage staff to determine if they are incorporating screening procedures and are able to initiate notification, isolation, and PPE procedures for your hospital.			
Communicate with state and/or local health department on procedures for notification and consultation for EVD testing requests.			
Ensure that laboratory personnel are aware of current guidelines for specimen collection, transport, testing, and submission for patients with suspected EVD.			

<b>PREPARE TO PROTECT</b>	<b>C</b>	<b>IP</b>	<b>NS</b>
Review and distribute the <i>Guidelines for Environmental Infection Control in Health-Care Facilities</i> : <a href="http://www.cdc.gov/hicpac/pdf/guidelines/eic_in_hcf_03.pdf">http://www.cdc.gov/hicpac/pdf/guidelines/eic_in_hcf_03.pdf</a> .			
Treat all symptomatic travelers returning from affected West African countries as potential cases and obtain additional history.			
Conduct a detailed inventory of available supply of PPE suitable for			

<p>STANDARD, contact and droplet precautions. Ensure an adequate supply, for all healthcare personnel, of:</p> <ul style="list-style-type: none"> <li>• Impermeable gowns (fluid resistant or impermeable),</li> <li>• Gloves,</li> <li>• Shoe covers, boots, and booties, and</li> <li>• Appropriate combination of the following: <ul style="list-style-type: none"> <li>○ Eye protection (face shield or goggles),</li> <li>○ Facemasks (goggles or face shield must be worn with facemasks),</li> <li>○ N95 respirators ( for use during aerosol-generating procedures)</li> </ul> </li> <li>• Other infection control supplies (e.g. hand hygiene supplies).</li> </ul>			
<p>Ensure that PPE meets nationally recognized standards as defined by the Occupational Safety &amp; Health Administration (OSHA), CDC, Food and Drug Administration (FDA), or Interagency Board for Equipment Standardization and Interoperability: <a href="https://iab.gov/SELint.aspx">https://iab.gov/SELint.aspx</a>.</p>			
<p>Review plans, protocols, and PPE purchasing, with your community/coalition partners, that promote interoperability and inter-facility sharing if necessary.</p>			
<p>Ensure EVD PPE supplies are maintained in triage, ED, and all patient care areas.</p>			
<p>Verify that all of your healthcare personnel:</p> <ul style="list-style-type: none"> <li>• Meet all training requirements in PPE and infection control,</li> <li>• Are able to use PPE correctly,</li> <li>• Have proper medical clearance,</li> <li>• Have been properly fit-tested on their respirator for use in aerosol-generating procedures <b>or more broadly as desired</b>, and</li> <li>• Are trained on management and exposure precautions for suspected or confirmed EVD cases: <a href="http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html">http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html</a>.</li> </ul>			
<p><b>Encourage healthcare personnel to use a “buddy system” when caring for patients and when putting on and removing PPE:</b>  <a href="http://www.cdc.gov/vhf/ebola/pdf/ppe-poster.pdf">http://www.cdc.gov/vhf/ebola/pdf/ppe-poster.pdf</a> and  <a href="http://www.cdc.gov/hicpac/2007IP/2007ip_part2.html">http://www.cdc.gov/hicpac/2007IP/2007ip_part2.html</a></p>			
<p><b>Spot-check frequently to be sure standard, contact and droplet infection control and isolation guidelines are being followed, including safe putting on and removing PPE.</b></p>			
<p>Ensure all healthcare personnel entering the patient room should wear at least: gloves, gown (fluid resistant or impermeable), eye protection (goggles or face shield), and a facemask.</p>			
<p>Ensure that non-clinical persons have limited access to suspected or confirmed EVD patients’ rooms.</p>			
<p>Review and update, as necessary, hospital infection control protocols/procedures.</p>			
<p><b>Review policies and procedures for screening, minimizing healthcare personnel exposure, isolation, medical consultation appropriate for EVD exposure and/or illness, and monitoring and management of potentially exposed healthcare personnel.</b></p>			
<p>Review and update, as necessary, all hospital protocols and procedures for isolation of patients with suspected or confirmed infectious diseases.</p>			
<p>Review your hospital’s infection control procedures to ensure adequate implementation for preventing the spread of EVD</p>			
<p><b>Review protocols for sharps injuries and educate healthcare personnel about</b></p>			

<b>safe sharps practices to prevent sharps injuries.</b>			
Emphasize the importance of proper hand hygiene to healthcare personnel.			
Post appropriate signage alerting healthcare personnel to isolation status, PPE required, proper hygiene, and handling/management of infected patients and contaminated supplies.			
Develop contingency plans for staffing, logistics, budget, procurement, security, and treatment.			
Review plans for special handling of linens, supplies, and equipment from suspected or confirmed EVD patients.			
<b>Review environmental cleaning procedures and provide education/refresher training for cleaning healthcare personnel:</b> <a href="http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html">http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html</a> .			
Distribute guidelines concerning laboratory diagnostics and specimen handling to all laboratory personnel, and post the guidelines conspicuously in your hospital laboratory: <a href="http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html">http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html</a> and <a href="http://www.cdc.gov/ncezid/dhcpp/vspb/specimens.html">http://www.cdc.gov/ncezid/dhcpp/vspb/specimens.html</a> .			
Provide education and refresher training for healthcare personnel on sick leave policies.			
Review policies and procedures for screening and work restrictions for exposed or ill healthcare personnel, and develop sick leave policies for healthcare personnel that are non-punitive, flexible and consistent with public health guidance.			
Ensure that healthcare personnel have ready access, including via telephone, to medical consultation.			
Conduct education and refresher training with healthcare personnel on EVD for special pathogen handling in the laboratory.			
<b>Ensure that all Airborne Infection Isolation Rooms (AIIR) are functioning correctly and are appropriately monitored for airflow and exhaust handling.</b> <b>Note:</b> CDC recommends an AIIR room be used if aerosol-producing procedures are absolutely necessary.			

<b>PREPARE TO RESPOND</b>	<b>C</b>	<b>IP</b>	<b>NS</b>
Review, implement, and frequently <b>exercise</b> the following elements with first-contact personnel, clinical providers, and ancillary staff: <ul style="list-style-type: none"> <li>• Appropriate infectious disease procedures and protocols, including PPE donning/removal,</li> <li>• Appropriate triage techniques and additional EVD screening questions,</li> <li>• Disease identification, testing, specimen collection and transport procedures,</li> <li>• Isolation, quarantine and security procedures,</li> <li>• Communications and reporting procedures, and</li> <li>• Cleaning and disinfection procedures.</li> </ul>			
Review plans and protocols, and exercise/test the ability to share relevant health data between key stakeholders, coalition partners, public health, emergency management, etc.			
Review, develop, and implement plans to provide safe palliative care, adequate respiratory support, ventilator management, safe administration of medication, sharps procedures, and reinforce proper biohazard containment and disposal precautions.			

<p>Review roles of the infection control practitioner to:</p> <ul style="list-style-type: none"> <li>• <b>Ensure appropriate infection control procedures are being followed, including for lab, food, environmental services, and other personnel, and</b> Maintain updated case definitions, management, surveillance and reporting recommendations.</li> </ul>			
<p><b>Properly train healthcare personnel in personal protection, isolation procedures, care of EVD patients.</b></p>			
<p>Ensure that administrators are familiar with responsibilities during a public health emergency.</p>			
<p>Identify a communications/public information officer who:</p> <ul style="list-style-type: none"> <li>• Develops appropriate literature and signage for posting within the hospital (topics may include definitions of low-risk, high-risk and explanatory literature for patient, family members and contacts),</li> <li>• Develops targeted public health risk communication messages for use in the event of a highly-suspected or confirmed EVD case in your hospital,</li> <li>• Develops internal messages for suspected and confirmed cases, and internal and external messages for confirmed EVD cases,</li> <li>• Contacts local- and state-identified EVD subject matter experts,</li> <li>• Requests EVD-appropriate literature for dissemination to healthcare personnel, patients, and contacts,</li> <li>• Prepares written and verbal messages ahead of time that have been approved, vetted, rehearsed and exercised,</li> <li>• Works with internal department heads and clinicians to prepare and vet internal communications to keep healthcare personnel and volunteers informed, and</li> <li>• Train subject-matter experts to become spokespersons and practice sound media relations.</li> </ul>			
<p>Plan for regular situational briefs for decision-makers, including:</p> <ul style="list-style-type: none"> <li>• Suspected and confirmed EVD patients who have been identified and reported to public health authorities,</li> <li>• Isolation, quarantine and exposure reports,</li> <li>• Supplies and logistical challenges,</li> <li>• Personnel status, and</li> <li>• Policy decisions on contingency plans and staffing.</li> </ul>			
<p>Maintain situational awareness of reported EVD case locations, travel restrictions and public health advisories, and update triage guidelines accordingly.</p>			
<p>Incorporate EVD information into educational activities, including physician Grand Rounds, nursing educational meetings, and other healthcare system and coalition healthcare personnel and management training opportunities: <a href="http://emergency.cdc.gov/coca/">http://emergency.cdc.gov/coca/</a>.</p>			

### Quick Resources List

CDC has produced several resources and references to help you prepare, and more resources are in development. Information and guidance may change as experts learn more about EVD. You should **frequently monitor** [CDC's EVD website](http://emergency.cdc.gov/coca/) and review CDC's EVD response guide checklists for:

- [Clinician and healthcare workers](#)
- Healthcare facility information: [Hospitals](#) and [Healthcare Settings](#)

**Stay informed! Subscribe** to the following sources to receive updates about EVD:

- CDC [Health Alert Network](#) (HAN)
- CDC [Clinician Outreach and Communication Activity \(COCA\)](#)
- CDC [National Institute for Occupational Safety and Health](#)
- U.S. Department of Labor's [Occupational Safety & Health Administration Newsletter](#)

Below are a few of the resources most relevant to healthcare preparedness:

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

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*Check CDC's Ebola website regularly for the most current information. State and local health departments with questions should contact the CDC Emergency Operations Center (770-488-7100 or [eocreport@cdc.gov](mailto:eocreport@cdc.gov)).*