Update on the Ebola Outbreak in Africa: CDC Guidance for U.S. Hospitals

At A Glance

One year after the Democratic Republic of the Congo (DRC) declared an outbreak of Ebola, the situation has improved, but the outbreak continues, with 2,982 cases and 1,983 deaths as of Aug. 26. The U.S. Centers for Disease Control and Prevention (CDC) activated its Emergency Operations Center in June to support the U.S. response to the outbreak and has sent more than 200 experts to DRC, countries bordering the outbreak area as well as World Health Organization (WHO) headquarters. On July 17, WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC).

Our Take:
While Ebola remains a lethal disease that is difficult to treat, at this time, CDC judges the chance of spread to the U.S. to be smaller than during the 2014-2015 Ebola outbreak in East Africa. Nevertheless, the potential for dire consequences if Ebola were to come to the U.S. again means that hospitals, health systems and clinicians should take steps to prepare, including reviewing the plans and protocols that were put into place by CDC during the 2014-2015 Ebola outbreak.

What You Can Do:
Please share this advisory with your chief medical/clinical officer, chief nursing officer, infection control leadership, emergency department director and emergency preparedness staff.

Further Questions:
Contact Roslyne Schulman at rschulman@aha.org for questions.

Key Takeaways
Hospitals and health systems should:

- Implement screening steps as a routine part of triage to quickly identify, isolate and inform public health authorities about patients who may have communicable infections. Among other items, this should include inquiring about and documenting international travel histories at initial triage.

- Review CDC recommendations for infection prevention and control for patients with confirmed Ebola or patients under investigation for Ebola in U.S. health care facilities, including guidance regarding personal protective equipment.

- Be familiar with the U.S. Regional Treatment Network for Ebola and Other Special Pathogens and understand their facility’s designated role as part of the network. The network assigns hospitals roles as a frontline health care facility, state-designated Ebola assessment hospital, state-designated Ebola treatment center or as one of the 10 federally-designated regional Ebola treatment centers.

- Access other resources, as needed, via CDC’s main Ebola portal.
Update on the Ebola Outbreak in Africa: CDC Guidance for U.S. Hospitals

Overview

A year ago, Ebola once again emerged in Africa. This time the outbreak is centered in the Democratic Republic of the Congo (DRC) and there have been 2,982 cases and 1,983 deaths as of Aug. 26, 2019. The Centers for Disease Control and Prevention (CDC) activated its Emergency Operations Center on June 13 in order to support the U.S. response to the outbreak after three travel-related cases were confirmed in neighboring Uganda, and CDC has sent more than 200 experts to DRC, countries bordering the outbreak area and World Health Organization (WHO) headquarters. On July 17, the WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC). A PHEIC is declared if an extraordinary event poses a public health threat to other nations through the spread of disease and requires a more robust coordinated international response.

It is vitally important that hospitals and health systems are aware of the situation and are prepared to take appropriate actions in the case that a person infected with the Ebola virus presents to a health care facility in the U.S.

However, while Ebola remains a lethal disease that is difficult to treat, there are several notable differences between the current Ebola outbreak and the outbreak in 2014.

Reduced likelihood of spread to the U.S. At this time, CDC judges the chance of spread to the U.S. to be smaller than in 2014. First, fewer U.S. clinicians are providing care in the remote part of the DRC where this outbreak is occurring. Second, there are no major cities with international airports near this outbreak, and people in this part of the DRC tend not to travel by plane, reducing the chances that a visitor will appear in a U.S. hospital. Third, an investigational Ebola vaccine and several antiviral drugs approved for use by the U.S. Food and Drug Administration (FDA) have been used with frontline health care workers and other people who are at risk for Ebola, such as contacts of known Ebola cases.

A treatment infrastructure exists. During the 2014 Ebola outbreak, the Department of Health and Human Services (HHS) created a Regional Treatment Network for Ebola and Other Special Pathogens with four different tiers of hospitals defined, including 10 regional Ebola treatment centers, a variety of state- or jurisdiction-level treatment centers, Ebola assessment hospitals and frontline hospitals, and described the different expectations for each level of facility. Each of the 10 designated regional Ebola treatment centers are partnered with its state department of health for this
designation, and each hospital and its state department of health received federal funding to create the capacity to do this work.

These regional Ebola and other special pathogen treatment centers are:

- Region 1: Massachusetts Department of Public Health in partnership with Massachusetts General Hospital (Boston, Mass.);
- Region 2: New York City Department of Health and Mental Hygiene in partnership with New York City Health and Hospitals Corporation/HHC Bellevue Hospital Center (New York City, N.Y.);
- Region 3: Maryland Department of Health and Mental Hygiene in partnership with Johns Hopkins Hospital (Baltimore, Md.);
- Region 4: Georgia Department of Public Health in partnership with Emory University Hospital and Children’s Healthcare of Atlanta/Egleston Children’s Hospital (Atlanta, Ga.);
- Region 5: Minnesota Department of Health in partnership with University of Minnesota Medical Center (Minneapolis, Minn.);
- Region 6: Texas Department of State Health Services in partnership with University of Texas Medical Branch at Galveston (Galveston, Texas);
- Region 7: Nebraska Department of Health and Human Services in partnership with Nebraska Medicine – Nebraska Medical Center (Omaha, Neb.);
- Region 8: Colorado Department of Public Health and Environment in partnership with Denver Health Medical Center (Denver, Colo.);
- Region 9: California Department of Public Health in partnership with Cedars- Sinai Medical Center (Los Angeles, Calif.); and,
- Region 10: Washington State Department of Health in partnership with Providence Sacred Heart Medical Center and Children’s Hospital (Spokane, Wash.)

The FDA has approved the investigational use of several antiviral drugs and a vaccine that may be effective. As noted above, treatment options that were not available in 2014 are showing promise in the field.

**CDC Recommendations for Hospitals**

**Initial Triage of Patients**

CDC advises clinicians and health care facilities to implement the following screening steps as a routine part of triage to quickly identify, isolate and inform public health authorities about patients who may have communicable infections:

- Ask about and document international travel histories at initial triage. This information can alert health care personnel to the possibility of communicable infections, such as viral hemorrhagic fevers or emerging respiratory viruses and other health conditions, such as malaria, that need specific treatment.
- Identify patients who have fever and other signs and symptoms of infection that might warrant isolation pending further evaluation.

- Post, in easily visible locations, the contact information that the health care facility’s emergency department triage and infection control personnel should use to report communicable diseases to their local public health authority.

**Current Infection Prevention and Control Recommendations for Ebola Virus Disease in U.S. Health Care Facilities**

Hospitals should review CDC recommendations for infection prevention and control for patients with confirmed Ebola or patients under investigation (PUIs) for Ebola in U.S. health care facilities, which can be found at: https://www.cdc.gov/vhf/ebola/clinicians/index.html.

This includes personal protective equipment (PPE) guidance such as:

- PPE guidance for the management of Clinically Stable PUIs and Confirmed Ebola Patients or Clinically Unstable PUIs.

- The PPE Calculator Tool to assist health care facilities in determining the appropriate supply of personal protective equipment (PPE to have on hand to manage a PUI or patient with confirmed Ebola).

**The Regional Treatment Network for Ebola and Other Special Pathogens**

Hospitals and health care systems should be familiar with the U.S. Regional Treatment Network for Ebola and other special pathogens. This includes ensuring that hospitals understand their designated role as part of the network, continue to be willing to serve in that capacity and maintain preparedness as a frontline health care facility, state-designated Ebola assessment hospital, state-designated Ebola treatment center or as one of the 10 federally-designated regional Ebola treatment centers.

- Hospitals and public health officials should have established plans for how PUIs and Ebola patients are to be managed and referred.

- State and local health department officials with responsibility for infectious disease epidemiology and health care infection control should be in communication with their health department emergency preparedness counterparts to ensure there is mutual understanding of the designations and preparedness status for state-designated Ebola assessment hospitals and state-designated Ebola treatment centers in their jurisdictions.

- The National Ebola Training and Education Center (NETEC), which is co-funded by the HHS Assistant Secretary of Preparedness and Response and CDC, has additional online resources and a blog and remains available to provide on-site readiness assessments to hospitals for Ebola and other special pathogens.
NETEC is comprised of faculty and staff from Emory University, the University of Nebraska Medical Center/Nebraska Medicine and the New York Health and Hospitals Corporation, Bellevue Hospital Center. All three of these health care institutions have safely and successfully treated patients with Ebola and work diligently to share their knowledge with other health care facilities and public health jurisdictions.

Additional Resources
The following are excellent resources for hospital leaders to stay current on the latest news regarding the Ebola outbreak and treatment. In addition, please watch AHA Today for updates.

- Main CDC Ebola portal: https://www.cdc.gov/vhf/ebola/index.html
- CDC Travel Health Notice for the current outbreak in DRC, including special recommendations for health care personnel and organizations sponsoring health care personnel in the outbreak area: https://wwwn.cdc.gov/travel/notices
- The National Institutes of Health (NIH) has an open-label clinical trial, titled “Pre-Exposure Prophylaxis in Individuals at Potential Occupational Risk for Ebola Virus Exposure” or “PREPARE,” to vaccinate adult volunteers (including deploying health care personnel and other responders) against Ebola. Study sites are at NIH in Bethesda, Md., and Emory University in Atlanta, Ga.