



October 21, 2014

LACDPH Health Update: Ebola Virus Disease (Ebola) Update

This message is intended for emergency medicine, internal medicine, travel medicine, urgent care, infectious disease, and primary care providers. Please distribute as appropriate.

Key communication

- **To date, there have been no suspected or confirmed cases of Ebola virus disease (Ebola) in Los Angeles County.**
- **The Ebola outbreak area currently is limited to the 3 West African countries of Guinea, Liberia, and Sierra Leone.**
- **The definition for fever in a suspect Ebola case has been reduced to $T \geq 100.4^{\circ}\text{F}$ / 38.0°C .**
- **New enhanced guidance for Personal Protective Equipment (PPE) during the management of a hospitalized Ebola patient has just been released by CDC.**
- **Providers should report all persons with travel from one of the 3 outbreak countries within past 21 days to the LAC DPH Acute Communicable Disease Control Program (ACDC) at 213-240-7941 (8:00 a.m. to 5:00 p.m. M-F; after hours/weekends/holidays 213-974-1234). An ACDC physician will provide consultation.**

Situation

The largest ever Ebola outbreak is ongoing in the West African countries of Guinea, Liberia and Sierra Leone. Three U.S. cases of Ebola virus disease (Ebola) were recently diagnosed in Dallas, Texas: a traveler from Liberia, who was hospitalized and eventually died; and two of his nurses who are currently hospitalized in Centers for Disease Control and Prevention (CDC) contracted facilities.

Based on recent experience from safely treating patients with Ebola at Emory University Hospital, Nebraska Medical Center and the National Institutes of Health Clinical Center, the CDC is recommending enhanced PPE for healthcare workers providing hospital care for patients with Ebola. The guidance can be accessed at: <http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>

All health care providers need to be ready to identify and assess a traveler from an Ebola-affected area who has signs/symptoms of the disease. Any delay in identifying a person with Ebola can result in additional exposures in the health care setting, at home, and in the community; thus, early identification is crucial.

All health care providers in Los Angeles County should be prepared to safely and effectively identify, isolate and, if needed, transfer a patient who may have Ebola, while preventing exposures to patients and staff.

NOTE: These recommendations are current as of 10/21/2014. Due to the evolving nature of the outbreak in West Africa and as best practices emerge from the three confirmed cases in the U.S., these recommendations may be revised as needed.

Actions requested of providers

- ✓ Ensure that persons with fever who present for care are asked about recent travel to the Ebola outbreak area. As the outbreak may spread, periodically check for updates on the CDC Website at: <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas>
- ✓ Review the updated Assessment and Management of Persons with Potential Ebola algorithm (attached and at: <http://publichealth.lacounty.gov/media/docs/EbolaAlgorithm.pdf>) and replace older versions of this document as this update includes the new lower fever threshold (defined above). This algorithm and associated tables provide current guidance on assessment, public health interventions, and reporting of suspect Ebola cases in LAC.
- ✓ **Hospital-based health care workers should be prepared to use the enhanced PPE guidance when caring for an Ebola case.** This includes three key principles:
 - All healthcare workers undergo rigorous training and are practiced and competent with PPE, including putting it on and taking it off in a systematic manner
 - No skin exposure when PPE is worn
 - All workers are supervised by a trained monitor who watches each worker putting on PPE and taking it off.

Reporting suspect Ebola cases in LAC:

- Weekdays 8:00 am-5:00 pm call (213) 240-7941
- Non-business hours (before 8:00 am, after 5:00 pm, or weekends/holidays) call (213) 974-1234

Reporting suspect cases in the cities of Long Beach or Pasadena, contact the local health department at the following numbers:

- Long Beach HD: (562) 570-4302 (Week days 8-5PM);
 - After hours call 562-435-6711 and ask for Communicable Disease Lead
- Pasadena HD: (626) 744-6043

Additional Resources

LAC DPH webpages

- Ebola homepage : <http://publichealth.lacounty.gov/media/ebola.htm>
- LAC DPH Guidance: Preparedness and Response for Outpatient Health Care Providers <http://publichealth.lacounty.gov/media/docs/EbolaPrep-OutptProviders.pdf>

- LAHAN (Los Angeles Health Alert Network) for all recent Ebola and other disease health alerts: <http://publichealth.lacounty.gov/lahan/>

Centers for Disease Control and Prevention (CDC) webpages:

- Information about the epidemic: <http://www.cdc.gov/vhf/ebola/index.html>.
- Information for healthcare providers: <http://www.cdc.gov/vhf/ebola/hcp/index.html>.

This Health Update was sent by Dr. Laurene Mascola, Chief, Acute Communicable Disease Control Program, Los Angeles County Department of Public Health.

Evaluation of Persons for Potential Ebola Exposure and Illness

LA County (LAC) Acute Communicable Disease Control (ACDC) Program

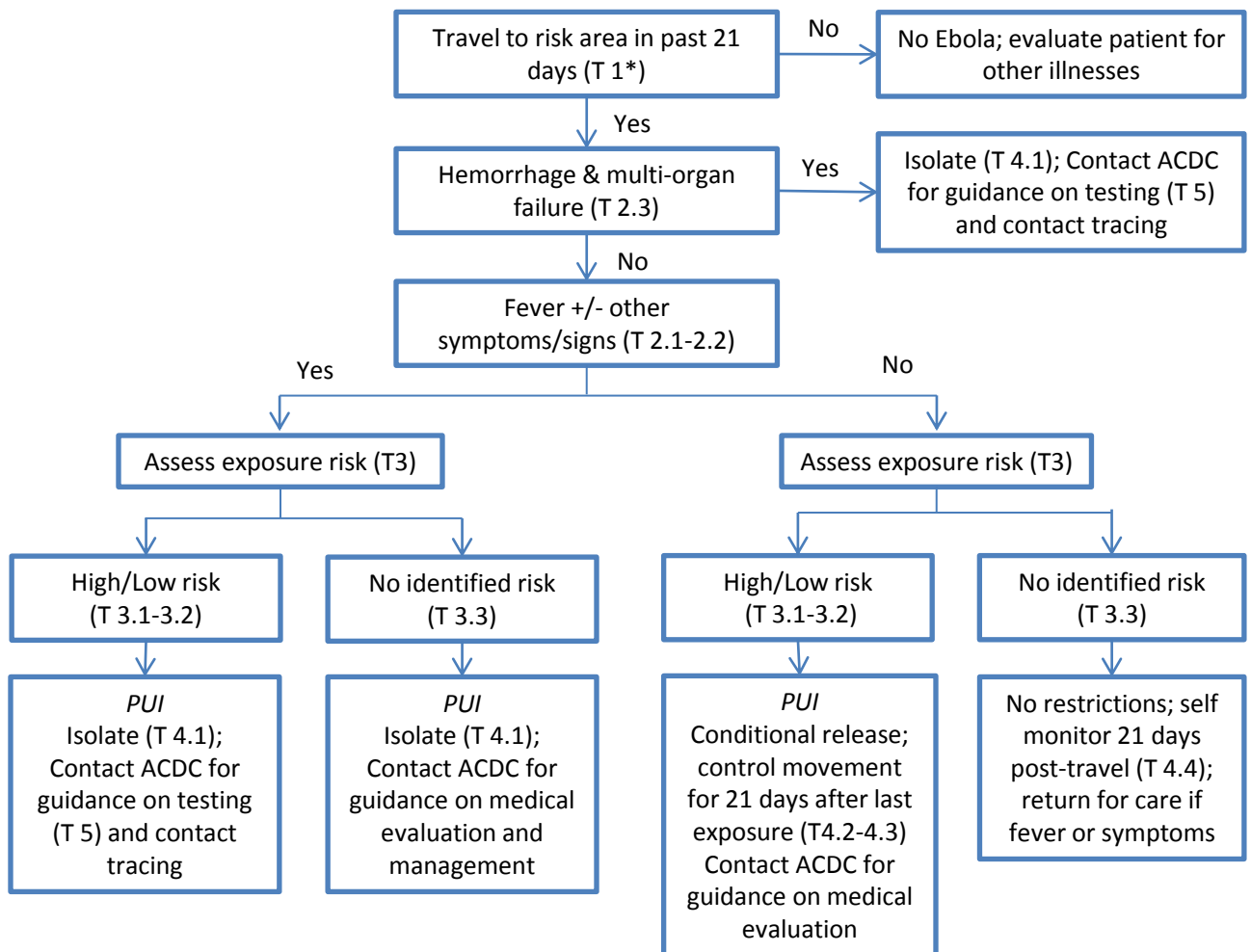
This algorithm provides guidance for clinicians evaluating a patient for suspect Ebola virus disease (Ebola). Evaluation for suspect Ebola should be limited to persons who have traveled or worked in the epidemic area during the previous 21 days (see Table 1). Persons who have not been in the epidemic area during this period and have not had direct contact with a known Ebola patient are not at risk for Ebola and should be evaluated for other causes of illness. Updated information will be provided on the LAC Department of Public Health (DPH) website (www.publichealth.lacounty.gov/media/ebola.htm) and on the CDC website (www.cdc.gov/vhf/ebola/hcp/index.html).

Persons with a positive travel history should be evaluated for fever and other symptoms (Table 2), and for exposure to Ebola patients (Table 3). During evaluation, keep patients in a private room with the door closed; limit entry and maintain a log of people who enter the room; use standard contact and droplet precautions; and perform only essential diagnostic and laboratory testing. Persons Under Investigation (PUI) are defined as those with a positive travel history plus fever with other compatible symptoms and/or with confirmed/suspect exposure to a person with Ebola or remains of someone who died from Ebola. **All persons with a history of travel from the outbreak area within 21 days and all PUI should be reported immediately to ACDC (weekdays: 213-240-7941; nights/weekends: 213-974-1234)**¹. Persons with a positive travel history, no identified risk factors and no symptoms should self-monitor for fever or other symptoms for 21 days after leaving the outbreak area and return for care as needed.

Laboratory testing for suspect Ebola using PCR is available at the LAC Public Health Laboratory (PHL). Consultation with ACDC is required for testing at LAC PHL or at CDC; assistance in specimen handling will be provided by the LAC PHL.

¹ Contact Long Beach HD (562) 570-4302 or Pasadena HD (626) 744-6043 to report local suspect Ebola cases.

Algorithm for assessment and management of persons with suspect Ebola



Tables 1-5: Assessment and management of persons with potential Ebola

Table 1. EBOLA RISK AREAS
<p>Current outbreak (as of 10/21/14): Guinea; Liberia; Sierra Leone.</p> <p>CDC outbreak link: www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas</p>

Table 2. SYMPTOMS AND SIGNS
<p>1 - Fever: T ≥ 38.0 C / 100.4 F or subjective history of fever</p>
<p>2 - Other symptoms: Headache, joint and muscle aches, abdominal pain, weakness, diarrhea, vomiting, stomach pain, lack of appetite, rash, red eyes, hiccups, cough, chest pain, difficulty breathing, difficulty swallowing, bleeding internally or externally</p>
<p>3 - Hemorrhage and multi-organ failure: Bleeding from GI tract or other sites, shock, DIC, renal failure, hemodynamic instability, or other symptoms/signs of severe illness</p>

Table 3. EXPOSURE RISK		
1 - High risk	2 - Low risk	3 - No identified risk
<ul style="list-style-type: none"> • Percutaneous (e.g., needle stick) or mucous membrane exposure to body fluids of Ebola patient • Direct care of an Ebola patient or exposure to body fluids without appropriate personal protective equipment (PPE) • Laboratory worker processing body fluids of confirmed Ebola patients without appropriate PPE or standard biosafety precautions • Participation in funeral rites which include direct exposure to human remains in the geographic area where outbreak is occurring without appropriate PPE 	<ul style="list-style-type: none"> • Household member or other close contact (within 3 feet) with an Ebola patient • Other close contact with an Ebola patient in a healthcare facility or community setting 	<ul style="list-style-type: none"> • Having been in a country in which an Ebola outbreak occurred within the past 21 days and having had no high or low risk exposures

Table 4. ISOLATION AND MOVEMENT RESTRICTIONS
<p>1 - Isolation:</p> <ul style="list-style-type: none"> • Single patient room with the door closed; limit entry of personnel to room; keep a log of all persons who enter the room • Standard, contact and droplet precautions • Limit phlebotomy and only perform essential diagnostic and clinical laboratory tests. • PPE – Gloves, gown, eye protection (goggles or face shield); facemask; additional PPE if copious blood or other fluid in the environment would include double gloving, disposable shoe covering, leg covering. Discard PPE on leaving room taking care to avoid contamination when removing; hand hygiene immediately after removing PPE. Note: for hospitalized confirmed Ebola cases see CDC guidance for enhanced PPE http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html • Aerosol generating procedures – Limit procedures as possible. If procedures required, conduct in a private room and ideally an Airborne Infection Isolation Room (AIIR). Personnel should use respiratory protection that is at least as protective as a NIOSH certified fit-tested N95 filtering facepiece respirator or higher (e.g., powered air purifying respiratory or elastomeric respirator)
<p>2 - Conditional release: Monitoring by public health authority; twice-daily self-monitoring for fever; notify public health authority if fever or other symptoms develop</p>
<p>3 - Controlled movement: Notification of public health authority; no travel by commercial conveyances (airplane, ship, train, bus, taxi); timely access to appropriate medical care if symptoms develop</p>
<p>4 - Self-monitor: Check temperature and monitor for other symptoms</p>

Table 5. RECOMMENDATIONS FOR SPECIMEN COLLECTION, HANDLING AND TRANSPORTATION
<p>Contact the LAC DPH Laboratory Bioterrorism Response Unit (562-658-1360) for consultation on laboratory testing for Ebola. Procedures for the collection, handling, transportation, and testing of specimens for Ebola issued by CDC is posted at: http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html.</p>