County of El Dorado

Emergency Medical Services Agency

2900 Fairlane Court
Placerville, CA 95667-4197

Michelle Patterson, MPH
EMS Agency Administrator

David Duncan, MD
EMS Agency Medical Director

Phone (530) 621-6500

PARAMEDIC ALERT
No. 2022-05

November 7th, 2022

TO: All Fire, EMS, hospital, and law enforcement personnel

FROM: El Dorado County EMS Agency

SUBJECT: Ebola Virus Disease (EVD) Guidance for EMS and Emergency Providers

Purpose: Stakeholder Information

Key Messages

- Ugandan health authorities have declared an outbreak of Ebola virus disease (EVD) following laboratory confirmation of a patient from Mubende district in Central Uganda.
- As of November 1, no suspected or confirmed cases of EVD have been detected in the United States.
- Healthcare providers should routinely ask patients with acute and possibly infectious illness about recent international travel (see the Identify, Isolate, Inform algorithm).
- Providers should consider EVD in their differential diagnosis for any patient who has signs and symptoms consistent with Ebola virus infection.
- Suspect EVD cases should be immediately reported to the call center, base, destination hospitals and the EDC Public Health Dept.

This information is intended for: Managers of 9-1-1 Public Safety Answering Points (PSAPs), EMS Agencies, EMS systems, EMS provider agencies, and fire service agencies as well as individual emergency medical services providers (including emergency medical technicians, paramedics, and medical first responders, such as law enforcement and fire service personnel).

Purpose: Guidance and model protocols for handling inquiries and responding to patients with suspected Ebola virus disease (EVD) symptoms, and for the safety of first responders and all emergency medical providers.

Please refer to the guidelines on the following pages for:

1) Determination of potential Ebola cases
2) Infection control precautions/PPE selection and use

3) Decontamination procedures
4) Exposure and post exposure procedures

Situation

On September 20, 2022, Ugandan health authorities declared an outbreak of EVD following laboratory confirmation of Sudan virus (species *Sudan ebolavirus*) in a patient from Mubende district in Central Uganda. As of October 6, 2022, a total of 44 confirmed cases and 30 deaths (10 confirmed and 20 probable) have been identified in Uganda, and no suspected, probable, or confirmed cases of EVD have been detected in the United States. The risk of importation of Ebola virus from returning residents and travelers into El Dorado County is extremely low. On October 7, 2022, the California Department of Public Health (CDPH) issued a health alert on Ebola that is attached. The Centers for Disease Control and Prevention (CDC) will post updates on this outbreak here.

Background

EVD has an incubation period of up to 21 days. Risk factors for EVD include traveling to the EVD-affected areas and having an EVD exposure, which may include taking care of an ill patient or a sick loved one or attending a funeral. Person-to-person transmission of Ebola occurs through direct contact with blood and other body fluids (e.g., urine, feces, saliva, vomit, sweat, semen, droplets, and other secretions) of a person who is sick with or died from Ebola. Ebola can also spread through direct contact with contaminated objects. Ebola is not spread through airborne transmission. Persons who do not have symptoms are not contagious. EVD symptoms include fever, headache, abdominal pain, nausea, vomiting, diarrhea, muscle aches, and unexplained bleeding.

Beginning the week of October 10, 2022, the CDC and Department of Homeland Security began funneling of air passengers traveling to the U.S. who had been to Uganda. These passengers are flown into Atlanta, Chicago, Newark, New York, and Washington DC. Any California resident identified as having traveled to a high-risk area will be referred to CDPH for follow-up. Clinicians should consider EVD in their differential diagnosis for any patient who has signs and symptoms consistent with Ebola virus infection and has traveled to affected areas of Uganda within 21 days before the onset of symptoms.

Treatment for EVD involves supportive care to prevent intravascular volume depletion, avoiding complications of shock, and correcting electrolyte abnormalities. No vaccines or therapeutics have been approved for prevention or treatment of EVD due to Sudan virus. The Ebola vaccine licensed in the United States (ERVEBO,® Ebola Zaire Vaccine, also known as V920, rVSVΔG-ZEBOV-GP or rVSV-ZEBOV) is indicated for the prevention of EVD due to Ebola virus (species *Zaire ebolavirus*) and is not expected to protect against Sudan virus or other viruses in the *Ebolavirus* genus.

Actions Requested

1. Healthcare and Emergency Medical System providers should routinely ask suspect patients with acute and possibly infectious illness about recent international travel.
2. Recommendations for 9-1-1 Public Safety Answering Points (PSAPs):
    a. Local EMS authorities may authorize PSAPs and other emergency call centers to use modified caller queries about Ebola. Given time constraints, and low risk of Ebola in the U.S. (no cases at this time), it may be impractical to further question callers with common nonspecific symptoms – however:
    b. PSAP call takers should consider screening callers for risk factors of Ebola by questioning callers who report fever (with or without additional symptoms of severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained bleeding) regarding history of travel to Uganda during the 21 days prior to onset of fever.
3. Clinicians should consider EVD in their differential diagnosis for any patient who has signs and symptoms consistent with Ebola virus infection (fever, severe headache, muscle pain, weakness, fatigue, vomiting, diarrhea, stomach pain, and unexplained bleeding) ***and*** has traveled to affected areas of Uganda within 21 days before the onset of symptoms.
4. Returned travelers from sub-Saharan Africa are also at risk of acquiring other diseases that are endemic in the region (e.g., malaria, yellow fever, dengue, rickettsial infections, typhoid, hepatitis A), so workup of other diseases should be undertaken concurrently.
5. Follow precautions in accordance with CDC's Identify, Isolate, Inform guidance:
    a. Immediate isolation of the patient in a private room with an in-room bathroom or covered bedside commode.
    b. Notify the base and receiving hospital(s).
    c. Contact with the patient should be limited to providing essential patient care.
    d. Any persons having contact with the patient should practice appropriate precautions and use appropriate Personal Protective Equipment (PPE) with careful donning and doffing technique: Ebola PPE Donning and Doffing
    e. Procedures that could create splashes or increase environmental contamination with infectious material or create aerosols should be minimized.
    f. If aerosol-generating procedures are needed, they should be conducted in an Airborne Infection Isolation Room (AIIR) when feasible.
    g. All healthcare provider contacts should be rigorously documented.
6. EMS Transfer of Patient Care to a Healthcare Facility
    a. EMS provider agencies should remove a vehicle from service that has been used to transport a patient considered high risk for EVD until adequate disinfection can be accomplished.
    b. Personnel should notify the receiving healthcare facility when transporting a suspected Ebola patient, so that appropriate infection control precautions may be prepared prior to patient arrival. Any U.S. hospital that is following

CDC's infection control recommendations and can isolate a patient in a private room is capable of safely managing a patient with Ebola.

c. Environmental infection control: Environmental cleaning and disinfection, and safe handling of potentially contaminated materials is essential to reduce the risk of contact with blood, saliva, feces, and other body fluids that can soil the patient care environment. EMS personnel should always practice standard environmental infection control procedures, including vehicle/equipment decontamination, hand hygiene, cough and respiratory hygiene, and proper use of U.S. Food and Drug Administration (FDA) cleared or authorized medical PPE. For additional information, see CDC's Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus.

7. EMS personnel performing environmental cleaning and disinfection should:
    a. Wear recommended PPE (link above) and consider use of additional barriers (e.g., shoe and leg coverings) if needed, following which careful doffing is utilized (link above).
    b. Wear face protection (facemask with goggles or face shield) when performing tasks such as liquid waste disposal that can generate splashes.
    c. Use an EPA-registered hospital disinfectant with label claims for viruses that share some technical similarities to Ebola (such as, norovirus, rotavirus, adenovirus, poliovirus) and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions. Alternatively, a 1:10 dilution of household bleach (final working concentration of 500 parts per million or 0. 5% hypochlorite solution) that is prepared fresh daily (i.e., within 12 hours) can be used to treat the spill before covering with absorbent material and wiping up. After the bulk waste is wiped up, the surface should be disinfected as described in this section.
    d. Spray and wipe clean any surface that becomes potentially contaminated during transport. These surfaces should be immediately sprayed and wiped clean (if using a commercially prepared disinfectant wipe) and the process repeated to limit environmental contamination.
    e. Patient-care surfaces (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls and work surfaces) are likely to become contaminated and should be cleaned and disinfected after transport.
    f. A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed 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.
    g. Contaminated reusable patient care equipment 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.
    h. 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 a regulated medical waste.

8. Occupational follow-up and/or reporting measures by EMS personnel after caring for a suspected or confirmed Ebola patient:
    a. 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.
    b. 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;
        - 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.

9. 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 EVD should:
    a. Not report to work or immediately stop working and isolate themselves;
    b. Notify their supervisor, who should notify local and state health departments;
    c. Contact occupational health/supervisor for assessment and access to post-exposure management services; and
    d. Comply with work exclusions until they are deemed no longer infectious to others.

10. Cedars-Sinai Medical Center in Los Angeles, California, has been identified as the regional Ebola Treatment Center for confirmed Ebola patients. El Dorado County LEMSA and HHSA should be notified prior to initiating transfer of any person under investigation for EVD to Cedars-Sinai Medical Center.

Resources

- Health Alert: Outbreak of Ebola virus disease (Sudan ebolavirus) in Central Uganda |CDC
- Screening Patients for Ebola Virus Disease / Case Definitions |CDC
- Interim Guidance on Risk Assessment and Management of Persons with Potential Ebola Virus Exposure |CDC
- Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) in U.S. Hospitals |CDC
- Ebola Personal Protective Equipment (PPE) |CDC
- Ebola PPE Training |CDC
- Ebola Health Professionals | CDPH