



PUBLIC HEALTH UPDATE EBOLA VIRUS & WEST NILE VIRUS

August 19, 2014

EBOLA VIRUS IN WEST AFRICA

SITUATION: There is currently a large outbreak of Ebola Virus Disease (EVD) in the West African countries of Guinea, Sierra Leone, Liberia, and most recently, Nigeria. As of August 19, the World Health Organization has reported a cumulative total of 2240 suspect and confirmed cases and 1229 deaths.

- CDC has advised travelers to avoid all non-essential travel to Guinea, Sierra Leone, and Liberia, and has issued a lower level alert for Nigeria.
- As of August 19, 2014, there are no EVD cases acquired in the United States.
- While the risk of importation of Ebola into the United States is considered to be very low, Alameda County Public Health Department (ACPHD) is working with the California Department of Public Health (CDPH) to prepare in the event that a returning traveler from these countries develops illness that may be concerning for EVD.
- Early identification of such cases and prompt infection control implementation will be key components to containment and prevention of spread.
- There are NO recommendations to quarantine ASYMPTOMATIC persons returning from travel or emigrating from countries* with EVD disease activity.

ACTIONS REQUESTED OF CLINICIANS:

1. **CONSIDER EVD** in patients that **meet the criteria** for suspecting EVD:
 - a. Any person with **fever** >38.6°C (>101.5°F) **and additional symptoms** such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage; **AND**
 - b. **Epidemiologic risk factors within the past 21 days before onset** of symptoms, such as:
 - i. Residence in—or travel to—[an area where EVD transmission is active](#)*; OR
 - ii. Contact with blood or other body fluids or human remains of a patient known to have or suspected to have EVD; OR
 - iii. Direct handling of bats, rodents, or primates from [disease-endemic areas](#)*
2. **IMPLEMENT STANDARD, DROPLET AND CONTACT PRECAUTIONS immediately** for suspected cases. Add airborne precautions for aerosol-generating procedures. Facilities wishing to further reduce transmission risk may wish to add airborne precautions even in the absence of aerosol-generating procedures.
3. **REPORT suspect EVD cases IMMEDIATELY** to Alameda County Public Health Department (ACPHD) **by phone at (510) 267-3250**.
4. **TEST suspected cases.** Collect at least 4 mL of serum, plasma, or whole blood and refrigerate. ACPHD and Alameda County Public Health Lab (ACPHL) will provide special instructions concerning specimen handling, and will arrange for the specimen to be transported directly to the CDC. Do NOT send specimens without consulting first with our public health laboratory.

Additional Information

- CDC Ebola Page: <http://www.cdc.gov/vhf/ebola/>
- CDC Infection Control Recommendations: <http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html>
- CDC Health Alert Network: <http://emergency.cdc.gov/han/index.asp>
- *For updated list of countries involved in the EVD outbreak: <http://www.who.int/csr/don/archive/disease/ebola/en>



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INCREASED WEST NILE VIRUS VECTOR ACTIVITY

SITUATION: As of August 13, 2014, Alameda County reported 51 dead birds and 10 mosquito pools positive for West Nile Virus (WNV); this is an unusually high number and already higher than all prior years. Mosquito Abatement has undertaken precautions to treat mosquitoes in areas where activity is highest in Livermore. There are currently no reported symptomatic cases of human WNV in Alameda County this year, and there are 57 reported human cases in CA from 36 jurisdictions.

ACTIONS REQUESTED OF CLINICIANS:

1. **BE ALERT** for human cases of WNV, especially those with aseptic meningitis, encephalitis or acute flaccid paralysis or other acute signs of central or peripheral neurologic dysfunction.
2. **TEST** for WNV by collecting serum +/- CSF specimens (if neuroinvasive disease)
3. **REPORT** suspect or confirmed WNV cases to Alameda County Public Health Department (ACPHD) by completing a Confidential Morbidity Report and faxing to (510) 268-2111 within 1 working day.
4. **ADVISE** patients of WNV prevention measures: use effective mosquito repellents, drain standing water, minimize dawn and dusk outdoor activities, and screen windows and doors.

BACKGROUND: WNV, a flavivirus, is transmitted by a mosquito bite. Mosquitoes become infected when they feed on infected birds, the reservoir for WNV. Human-to-human transmission of WNV does not occur, except for rare cases of human WNV infection associated with blood transfusion, organ transplant, and transmission through breast milk and transplacentally.

CLINICAL DESCRIPTION: Most persons (~80%) who become infected with WNV develop no clinical illness or symptoms. Among the ~20% of cases with WNV symptoms, most develop non-neuroinvasive disease (West Nile Fever) while a minority develop WNV neuroinvasive disease including encephalitis, meningitis, or acute flaccid paralysis.

HUMAN DIAGNOSTIC TESTING: Testing for WNV infection is based on clinical suspicion and risk for exposure such as residence, travel, or outdoor activity in an area with WNV activity. Acute serum (≥ 2 cc) and if relevant, 1-2ccs of CSF are required for testing. For additional instructions, see the WNV specimen submittal form at <http://www.cdph.ca.gov/programs/vrdl/Pages/CurrentVRDLSpecimenSubmittalforms.aspx>

PREVENTION: Key prevention tips for individuals:

- Drain standing water; as little as a tablespoon of water can support mosquito breeding.
- Report dead birds to the State WNV hotline at 1(877) WNV-BIRD (1-877-968-2473).
- Install or repair screens on doors and windows.
- Use effective EPA-registered insect repellent.
- Avoid outdoor activity when mosquitoes are most active (dawn and dusk).
- Wear protective clothing with long pants and long sleeves. Treat clothing, hats, and mosquito netting with Permethrin insecticide to further discourage mosquitoes.

INFORMATIONAL LINKS

- **Alameda County Public Health WNV Website:** <http://www.acphd.org/west-nile-virus.aspx>
- **Alameda County Mosquito Abatement District WNV Website:** http://www.mosquitoes.org/west_nile_virus.htm
- **California Dept Public Health WNV Website:** <http://westnile.ca.gov/>
- **CDC:** www.cdc.gov/westnile/

Health ALERT: conveys the highest level of importance; warrants immediate action or attention.

Health ADVISORY: provides important information for a specific incident or situation; may not require immediate action.

Health UPDATE: provides updated information regarding an incident or situation; unlikely to require immediate action.