



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Mary T. Bassett, MD, MPH  
*Commissioner*

## **2014 DOHMH Advisory #35: Ebola Virus Disease Update**

*Please distribute to staff in the Departments of Pediatrics and Neonatal Medicine, Critical Care, Emergency Medicine, Family Medicine, Geriatric Medicine, Infection Control, Infectious Disease, Internal Medicine, Laboratory Medicine, Nursing, Neurology, and Obstetrics and Gynecology*

- **The first and only U.S. case of Ebola virus disease (EVD) was recently reported in Dallas, Texas. No EVD cases have occurred in NYC.**
- **Obtain a travel history from all patients presenting with an illness consistent with EVD. Only persons reporting travel to one of the currently EVD-affected areas are of concern.**
- **The NYC Health Department EVD algorithm (attached) has been modified: fever is no longer a required criterion.**
- **Immediately call the Health Department about patients suspected to have EVD**

October 9, 2014

Dear Colleagues:

The outbreak of Ebola virus disease (EVD) in the West African countries of Liberia, Sierra Leone, and Guinea is the largest in history. The first and only case of EVD occurring in the United States was recently reported in Dallas, Texas, in a person who had recently traveled from Liberia.

Since July 31, 2014, the Health Department has received 88 calls from healthcare providers regarding patients for whom EVD was a concern. Of these, only 11 (12%) met reporting criteria listed above. Of these 11 patients, none reported either High- or Low-Risk Exposures to EVD, and one patient tested negative for Ebola virus at CDC in early August. Alternative diagnoses were made for 9 patients, including malaria (n=8) and typhoid (n=1); the other 2 patients resolved without a final diagnosis. Of the 77 patients reported to the Health Department who did not meet reporting criteria, 49 traveled to an area not currently affected by EVD, and 28 had a clinical presentation not concerning for EVD.

**In light of the continuing West African EVD outbreak and potential for EVD to be imported into NYC, the Health Department reminds clinicians that protocols should remain in place to rapidly identify potential cases, including:**

- Obtain a travel history from all patients presenting with fever **OR** with other signs or symptoms compatible with EVD (e.g., headache, myalgias, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage).
- Immediately isolate and employ appropriate infection control measures (standard, contact, and droplet) for any patient with fever or compatible signs or symptoms **AND** a travel history to an affected area within the 21 days before illness onset.

- Report any person who, within the 21 days before illness onset,
  - 1a. Traveled to an EVD outbreak-affected country, as defined by CDC (see <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas>\*)

OR

- 1b. Had close contact with a confirmed EVD case patient

**AND**

- 2a. Has measured or subjective fever

OR\*\*

- 2b. Has other signs or symptoms compatible with EVD (e.g., headache, myalgias, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage)

- For patients meeting clinical and epidemiologic criteria for EVD, obtain history of potential High- or Low-Risk EVD exposures (see attached algorithm).
- Report the patient to the Health Department (866-692-3641), and be prepared to discuss clinical information, travel history, and risk exposure history to help determine whether EVD testing is indicated.
- If the patient has No Known Exposures and no concerning clinical manifestations of EVD, in addition to evaluating for other causes of illness first, the Health Department will recommend close monitoring of the patient for several days. Patients with No Known Exposures who remain hospitalized should be kept in isolation using standard, droplet, and contact precautions until the Health Department determines that EVD is unlikely. If the patient does not need to be hospitalized, the Health Department will recommend voluntary isolation at home until the Health Department determines that EVD is unlikely. During this time, the Health Department will monitor the patient's status daily to ensure resolution of symptoms.
- Simultaneously work-up the patient for potential alternate diagnoses (e.g., malaria).

\*The primary countries of concern are **Liberia, Sierra Leone, and Guinea**. No recent cases have been noted in Nigeria or Senegal, though they are currently still listed as affected countries, since two full incubation periods have not yet passed since the last cases occurred.

\*\*Recognizing the potential for EVD cases to present for care early in their course with low grade or absent fever, and the desirability of ensuring that EVD cases are not released back into the community, for patients meeting epidemiologic criteria, the Health Department now requests notification for patients presenting with EVD clinical criteria of fever **OR** other signs and symptoms consistent with EVD. Please see attached updated algorithm.

If the patient does not have a travel history to a known EVD outbreak area, EVD is extremely unlikely and there is no need to report to the Health Department. If there is still concern of EVD (e.g., severe illness compatible with EVD with thrombocytopenia and elevated transaminases), providers should consult the Health Department. To stay up to date on the current list of affected countries, check the CDC website at <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas>.

As this is a rapidly evolving situation, providers should frequently check the Health Department (<http://www.nyc.gov/html/doh/html/diseases/ebola.shtml>) and CDC ([www.cdc.gov](http://www.cdc.gov)) websites. As always, we appreciate your partnership in protecting the health of New Yorkers.

*Marcelle Layton, MD*

Marcelle Layton, MD, Assistant Commissioner  
Bureau of Communicable Disease



# Ebola Virus Disease (EVD) Evaluation Algorithm

(Last updated October 9, 2014)

Measured or subjective FEVER OR compatible SIGNS or SYMPTOMS\* of EVD in patient who has traveled to an Ebola affected area\*\* or had contact with a confirmed EVD case in the 21 days before illness onset.

\* Including headache, myalgias, vomiting, diarrhea, abdominal pain or unexplained hemorrhage

No

No need to call NYC DOHMH. Advise patient to continue checking temperature daily until 21 days after return from Africa. Consult with a physician at the first sign of illness

Yes

1. Isolate patient in single room with private bathroom.
2. Implement standard, contact and droplet precautions.
3. Identify any risk exposures for EVD
4. Notify appropriate hospital staff, including Infection Control Program
5. IMMEDIATELY report to New York City Health Department (NYC DOHMH) at 1-866-692-3641

## HIGH-RISK EXPOSURE

- Percutaneous, mucous membrane or direct skin contact with blood or body fluids from a confirmed or suspected EVD patient without appropriate PPE
- OR**
- Laboratory handling of body fluids from a confirmed or suspected EVD patient without appropriate PPE or biosafety precautions
- OR**
- Participation in funeral rites which include direct exposure to human remains in the geographic area where outbreak is occurring without appropriate PPE

## LOW-RISK EXPOSURE

- Healthcare workers in facilities that have treated confirmed or suspected EVD patients
- OR**
- Household members or others with direct contact to confirmed or suspected EVD patient

## NO KNOWN EXPOSURE

- Residence or travel to affected areas\*\* without HIGH- or LOW-risk exposure

### Review Case with NYC DOHMH Using Additional Evaluation Criteria:

- Severity of illness
- Abnormal blood work:
  - Platelet count < 150,000/ $\mu$ L
  - Elevated hepatic transaminases
  - Abnormal coagulation studies
- Possible or likely alternative diagnosis

## EVD SUSPECTED-TESTING INDICATED

- NYC DOHMH will arrange specimen transport and testing at Public Health Laboratory and CDC
- NYC DOHMH, in consultation with New York State DOH and CDC, will provide guidance to hospital on all aspects of patient care and management

## EVD Unlikely, Testing Not Currently Indicated

### If patient requires in-hospital management:

- Admit to single patient room with private bathroom
- Implement standard, contact, and droplet infection control precautions
- Evaluate for other likely illnesses, e.g., malaria and typhoid fever
- Observe clinical course for 24-48 hours, and if patient has improved or an alternate diagnosis is made, then EVD ruled out
- If patient's symptoms progress, re-assess need for testing with NYC DOHMH

### If patient does not require in-hospital management

- Alert NYC DOHMH prior to discharge to arrange home isolation and monitoring by NYC DOMH to ensure symptoms improve.

\*\* CDC Website to check currently affected areas: [www.cdc.gov/ebola](http://www.cdc.gov/ebola)