Interim Guidance for Wisconsin Clinicians Regarding Possible Ebola Virus Infection among Travelers from West Africa (Issued 8/8/14)

Development of this document was prompted by the ongoing Ebola Virus disease outbreak in West Africa. Because of the ubiquity of international air travel, health care providers should be prepared for the possibility of being presented with an ill patient who has a recent history of travel to West Africa.

CRITERIA: Evaluation and testing persons with suspected Ebola Virus disease (EVD) should be guided by the risk level of exposure as described below.

Testing must be approved by the Wisconsin Division of Public Health.

Note that all the risk levels below apply to persons with illness onset within 21 days of possible exposure.

A. **High risk exposure:** Testing is recommended for all of the following persons if they are febrile*:
   1. Persons who had percutaneous or mucous membrane or direct skin contact with body fluids of a person who had a confirmed or suspected case of EVD, and the contact occurred without using appropriate personal protective equipment (PPE), or
   2. Persons who performed laboratory processing of body fluids from persons with suspected or confirmed EVD and this processing occurred without using appropriate PPE or standard biosafety precautions, or
   3. Persons who participated in funeral rites or other direct exposure to human remains in the geographic area where the outbreak is occurring and this activity occurred without using appropriate PPE.

   * Fever of > 101.5°F or 38.6°C.

   For persons with a high-risk exposure but without a fever, testing is recommended only if there are other compatible clinical symptoms present and blood work findings are unknown or abnormal (i.e., platelet count of <150,000 cells/µL and/or elevated transaminases).

B. **Low risk exposure:** Testing is recommended for all of the following if they are febrile and have unknown or abnormal blood tests:
   1. Persons who spent time in a healthcare facility where patients with EVD were being treated. This includes persons such as healthcare workers who used appropriate PPE and other patients who were hospitalized in such a facility.
   2. Household members or casual contacts of a patient with EVD but who do not have high risk exposures as defined above. Casual contacts include persons who spent > 4 hrs in the same room, or had sustained contact within 3 feet, with a patient with EVD.
   3. Persons who had direct unprotected contact with bats or primates from EV-affected countries.

C. **No known exposures that are listed above:** Testing should be considered for patients if they are febrile, have other symptoms, and have unknown or abnormal blood tests within 21 days of visiting EV disease-affected countries,**

   ** Currently (as of 8/8/14), human Ebola virus transmission is occurring in Guinea, Sierra Leone, Liberia, and the area of Lagos, Nigeria. See [http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html](http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html) for the most current status of this outbreak.

**ACTIONS:** If a patient meets any of these above criteria, the following should occur:

A. **Begin infection control measures.**
   1. Patient placement: Have the patient don a mask and remain in a single exam room with the door closed. Limit the number of staff entering the room to a minimum, and maintain a log of those who enter.
2. Notify the infection preventionist at your facility for further guidance regarding patient placement and precautions. Detailed infection control guidelines can be found at http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html, and essentially consist of standard, contact, and droplet precautions until EV infection is ruled out by laboratory testing.

3. Healthcare worker protection: Healthcare providers should wear gloves, gown (fluid resistant or impermeable), shoe covers, eye protection (goggles or face shield), and a facemask. Additional PPE might be required in certain situations (e.g., copious amounts of blood, other body fluids, vomit, or feces present in the environment), including but not limited to double gloving, disposable shoe covers, and leg coverings.

4. Avoid aerosol-generating procedures. If performing these procedures, PPE should include respiratory protection (N95 filtering face piece respirator or higher) and the procedure should be performed in an airborne isolation room.

5. Environmental infection control: Diligent environmental cleaning and disinfection and safe handling of potentially contaminated materials is paramount because blood, sweat, emesis, feces and other body secretions represent potentially infectious materials. Appropriate disinfectants for EV and other filoviruses include 10% sodium hypochlorite (bleach) solution, or hospital-grade quaternary ammonium or phenolic products. Persons performing environmental cleaning and disinfection should wear recommended PPE (described above) and consider use of additional barriers (e.g., shoe and leg coverings) if needed. Face protection (face shield or facemask with goggles) should be worn when performing tasks that can generate splashes, such as liquid waste disposal. Follow standard procedures, per hospital policy and manufacturers’ instructions, for cleaning and/or disinfection of environmental surfaces, equipment, textiles, laundry, food utensils and dishware.

B. Patients who do not require hospitalization and household contacts of patients under investigation should be instructed to self-isolate at home where public health staff will contact them.

C. Report suspect cases immediately to the Wisconsin Division of Public Health (DPH). Call 608-267-9003 during office hours or 608-258-0099 during nights and weekends. Testing for EV infection must be approved by the Wisconsin Division of Public Health.

D. After approval by DPH staff, patients should be tested for EV infection. Testing is performed by the CDC. See http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html for detailed guidance on specimen collection, transport, testing, and submission.
   a. Diagnostic specimens: A minimum volume of 4 mL whole blood preserved with EDTA, clot activator, sodium polyanethol sulfonate (SPS), or citrate in plastic collection tubes can be submitted for EVD testing. Do not submit specimens to CDC in glass containers. Do not submit specimens preserved in heparin tubes. Specimens should be stored at 4°C or frozen.
   b. External surfaces of specimen containers must be thoroughly disinfected prior to transport. A 1:10 dilution of household bleach or commercially prepared bleach-based hospital disinfectant or wipes should be used. Place specimens in sealed plastic bags and transport manually directly to the laboratory in a clearly labeled leakproof container. Inform laboratorians that specimens are from a potential EV-infected patient.
   c. Process specimens in a class II biologic safety cabinet following biosafety level 3 practices (full face shield or goggles, mask to cover all of nose and mouth, gloves, fluid resistant or impermeable gowns.) Limit processing to minimize aerosols and exposures to laboratory staff.
   d. Ship specimens refrigerated or frozen on ice pack or dry ice (no glass tubes) directly to CDC. Please refer to the link regarding specimen collection above for detailed instructions on packaging and shipping directions and to access the specimen submission form for CDC laboratory testing.

Clinicians are reminded that even following visits to areas where EVD has occurred, travelers with fever are far more likely to have infectious diseases other than EVD (notably, malaria is endemic in West Africa). Thus other diagnostic testing may be indicated. The link above regarding specimen handling also has recommendations on specimen handling for routine laboratory testing (not EV diagnosis) of patients with suspect EVD.

This guidance is based on CDC Health Advisory #364, issued 8/1/14. It is likely that revised guidance will be issued. Clinicians may call DPH at 608-267-9003 or monitor the following websites for updates.
http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html
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