Interim Guidance Document

Dated 10/10/14

1) Background

a) Ebola Viral Disease (EVD) is one of numerous Viral Hemorrhagic Fevers. It is a severe, often fatal disease caused by infection with a virus of the family Filoviridae, genus Ebolavirus.

2) Transmission

a) Direct contact (through broken skin or mucous membranes) with bodily fluids such as, but not limited to, blood, urine, feces, sweat, semen, and breast milk of an infected person.

b) Exposure to objects that have been contaminated with infected secretions (such as needles)

c) Direct handling of bats, rodents or primates from disease endemic areas

d) EVD is not spread by an airborne route

e) Incubation period: 8–10 days (ranges from 2–21 days)

3) Case Definition

a) Suspected Case

i) Clinical criteria: including:

(1) Fever of greater than 38.6 degrees C or 101.5 degrees F

AND

(2) Additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage

AND

ii) Epidemiologic risk factors within the past 3 weeks before the onset of symptoms

iii) Contact with blood or other body fluids of a patient known to have or suspected to have EVD;

iv) Residence in (or travel to) an area where EVD transmission is active; or direct handling of bats, rodents, or primates from disease-endemic areas.

b) Confirmed Case
    i) A suspected case with laboratory-confirmed diagnostic evidence of EVD.
c) High Risk Exposure
    i) Percutaneous (e.g. needlestick) or mucous membrane exposure or direct skin contact with body fluids of a person with a confirmed or suspected case of EVD without appropriate personal protective equipment (PPE)
    ii) Laboratory processing of body fluids of suspected or confirmed EVD cases without appropriate PPE or standard biosafety precautions, or
    iii) Participation in funeral rites or other direct exposure to human remains in the geographic area where the outbreak is occurring without appropriate PPE A
    iv) If testing is believed to be required by Upstate contact the local or state health department immediately to receive direction from them regarding EVD testing
d) Low Risk Exposure
    i) Household member or other casual contact with an EVD patient
    ii) Providing patient care or casual contact without high risk exposure with EVD patients in healthcare facilities (See exposure management section)

4) Clinical Precautions & Immediate Action Items

a) Charge RN/PSL must notify ED Physician not to enter room without PPE both verbally and place isolation signage on the door.
b) Patient must stay in isolation until EVD is ruled out.
c) Keep patient room door closed
d) Post staff in safe area to guard against accidental entry into patient room.
e) All patient interaction must be kept at an absolute minimum
f) Activate Incident Command
    i) Communicate situation with departmental supervisor
g) Log of patient interaction:
    i) Maintain a log of all persons entering / leaving the room or anyone who comes in contact with the patient in any clinical location.
    ii) Reduce interactions with other people to minimal staff contact including lab, environmental services, nursing and medical teams.

h) Emergency Department:

(1) Place patient in room ----- ED (available immediately for this patient) - Negative Pressure Required.

(2) Retrieve EBOLA PPE kit

(3) Use Room 11 for donning and doffing PPE

(4) All testing must be kept to a minimum and coordinated (imaging included). All treatments, testing and interventions must be coordinated with Infectious Disease Physician and/or Incident Command once available.

(5) All equipment and waste/trash must stay in room.

(6) No visitors to patient room

(7) Limit traffic around areas designated in the ED:

(a) Place retractable tape barriers

(8) Limit all foot traffic on designated unit to a minimum and coordinate access with Incident Command based on situational needs.

(9) Staff transporting patient must wear required PPE at all times.

(10) Environmental services must follow transport to clean hallways prior to allowing public to re-enter space.

(11) Patient must wear a surgical mask during transport unless short of breath.

(12) Drainage bags (e.g. foley) must be emptied prior to movement.

ii) Destination Area or Department

(1) Incident Command should identify a fixed number of dedicated staff members to care for this patient as well as equipment/supplies that need to be moved into the space.

i) <u>Outpatient Locations:</u>

i) If telephone triage has identified patient instruct to report to ED > notify ED immediately

ii) For patient already on premises:

(1) Screen upon presentation and immediately place patient in a private room with a door closed. Place in Negative Pressure Room if available.

(2) Provide patient with surgical mask and instruct in proper use.

(3) See Notifications/Contact Process section

(4) Minimize staff interactions.

(5) Keep list of staff that come in contact with patient.

(6) Follow Standard and Contact Precautions. Use available PPE.

(7) Transportation to Main Hospital Campus can be accomplished by calling 911 center and advising them of patient status. They will then dispatch an EMS unit-make sure ED is notified of incoming patient as well.

5) PPE

a) All hospital personnel involved in both patient care and specimen handling at the main hospital buildings will use PPE provided in the EVD kit.

b) EVD kits containing required will be located in the following location:

   i) EVD kit contents: PFR N95 high filtration mask, face-shield, full body fluid resistant suit, 2 pairs of gloves to double glove

c) Outpatient locations: use in-stock full contact PPE including goggles and N95 mask

d) Incident Command should utilize a "buddy system" to help monitor and transition staff members from hot (contamination present) to cold (no contamination) zones.

   i) An isolation cart should be moved to the location where donning/doffing takes place

   ii) The "buddy" will wear standard contact precautions while assisting personnel out of EVD PPE during doffing.

   iii) The "buddy" will also be monitored for possible exposures and fatigue as the situation warrants.

e) Staff members should not be in PPE for more than 30 minutes.

f) PPE doffing should be performed while standing on an open waste liner, allowing contaminated PPE to be dropped directly into the liner.

6) NOTIFICATIONS / CONTACTS

a) Contact Director of Infection Control: ----------

   i) If one is unavailable contact on call Infectious disease attending

b) Contact Nursing Supervisor & Infection Control Department

   i) Notify them of event for the immediate activation of Incident Command.

c) Infection Control / Nursing Supervisor will notify the following as soon as possible

   i) Environmental Health and Safety

   ii) Laboratory Services

iii) Environmental Services

iv) Onondaga County Health Department

(1) Business hours: 315- 435-3252

(2) Evening: 315-435-3236

v) NYS Bureau of Communicable Disease Control if unable to reach OCHD

(1) Business hours: 518-473-4439

(2) Evenings, weekends, holidays: 1-866-881-2809

vi) Follow and implement any additional recommendations

7) Visitors

a) Visitors who have been in contact with EVD patients before and during hospitalization are possible source of EVD for others.

b) Visitors cannot enter into a patient's room.

c) Evaluate exceptions on a case-by-case basis with Incident Command and take in to consideration pediatric patients need to stay near parents.

d) Consult Onondaga County/ NYSDOH for management of visitors on premises

e) Assist with Onondaga County/ NYSDOH as they begin a patient history investigation to identify other people the patient may have had extended contact with.

8) SPECIMEN COLLECTION

a) General Points and Safety

i) Limit testing to those tests performed using the POC device if available

ii) If laboratory-based testing is required, every effort will be made to coordinate submission of specimens during the Day Shift.

iii) All personnel involved in specimen handling will use required PPE provided in the EVD kit.

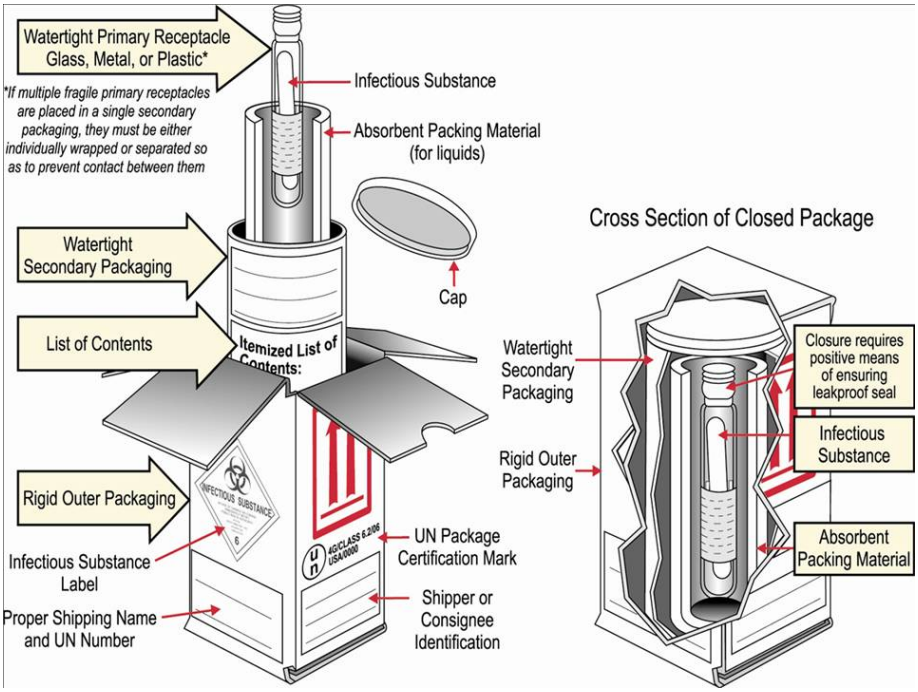
b) Limit testing to only essential labs.

i) If possible, fix a time table for collection of specimens

ii) Limit the use of needles and other sharps as much as possible

iii) Phlebotomy and laboratory testing should be limited to the minimum necessary for essential diagnostic evaluation and medical care

c) For patients with suspected EVD, collect the following samples via a single venipuncture using a butterfly/vacutainer set. Order “blood smear malaria” and request Ebola PCR and serology:
   i) 2 EDTA (lavender top) tubes (malaria smears and Ebola PCR)
   ii) 1 clot (red top) tube (Ebola serology)
   iii) 2 routine blood cultures, age and weight appropriate
d) Needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers
e) Specimen transport
   (1) Patient care units will contact the laboratory prior to collecting samples
   (2) Laboratory personnel will bring the required transport supplies directly to the patient’s room:
      (i) Samples will be placed in two layers of biohazard bags and then sealed in a plastic container.
      (ii) The plastic container will contain absorbent material and will be pre-labeled with Biohazard and Special Handling stickers.
      (iii) Labels and other paperwork should NOT be placed inside the plastic container.
      (iv) The exterior of the plastic container will be wiped down with fresh 10% bleach and then placed in a plastic cooler (outside of the patient room).
      (v) Laboratory personnel will then transport the specimens directly to the laboratory.
   (3) NOTE: the pneumatic tube system must NOT be used.

(4) 

9) Education PPE

i) Train the staff regarding proper use of personal protective equipment (PPE). Pictures of appropriate donning and doffing will be placed with the pre-staged PPE

10) ENVIRONMENTAL INFECTION CONTROL

a) Use hospital EPA approved disinfectant for cleaning
b) Use an adjoining room to store equipment and waste until final disposition
c) All equipment used for the treatment of a suspect case must be kept separate
d) Use only a mattress and pillow with plastic or other covering that fluids cannot get through
e) Remove: furniture and decorative curtains from patient rooms before use
f) Discard all linens, pillows, mattresses, and textile privacy curtains as regulated medical waste
g) Dispose all waste in designated collection bin inside the room.
h) Waste materials should be placed in leak-proof containment and discarded as regulated medical waste. To minimize contamination of the exterior of the waste bag, place bag in a rigid waste receptacle designed for this use. Detail of trash bag handling – add 200-300 ml water, double bag, germicidal wipe off (do NOT spray) of both 1st & 2nd bag, turkey neck closure.

i) Human waste (feces, urine) can be emptied into a sanitary sewer (toilet) in patient bathroom that is part of the patient room.
    i) If not available a commode must be used – mix waste with istazorb prior to flushing. PPE Should be worn at all times when the potential for contact exists.
j) All soiled linen should be discarded – none should be laundered.
k) Equipment (Xray/Ultrasound/EKG) should be wiped with the above product, if not compatible item remains in room or is discarded.
l) If a ventilator is used, that will not be used for any other patient until CDC/or DOH develops a clear guidance to clean that equipment.
    i) All cleaning will be cleared with Incident Command working with Infection Control: Cleaning will be a terminal clean- twice, allowing appropriate dwell time.
    ii) All equipment and waste/trash must stay in room. A rigid container will be placed in room for removal of waste.
    iii) Upon patient transfer, waste to be removed to designated staging area and room to be cleaned by ES min 4 hours required
    iv) Additional training of personnel to handle & transport waste, stage waste for collection will be coordinated with Incident Command.
    v) A secure trailer will be designated for EVD waste
        (1) Consideration for volume of waste generated and larger items to be disposed is required such as mattress and pillows.

11) AEROSOL GENERATING PROCEDURES (AGPS)

i) Avoid AGPs for EVD patients.
ii) AGPS include Bi-level Positive Airway Pressure (BiPAP), bronchoscopy, sputum induction, intubation and extubation, and open suctioning of airways.
iii) If performing AGPs, use a combination of measures to reduce exposures:
iv) HCP should wear PPE as described above
v) Limit the number of HCP present during the procedure to only those essential for patient-care and support.
vi) Entry and exit should be minimized during and shortly after the procedure.
vii) Visitors should not be present during aerosol-generating procedures under any circumstances.

viii) Conduct environmental surface cleaning following procedures

12) EXPOSURE MANAGEMENT

a) Known or suspected percutaneous or mucus membrane exposures to blood, body fluids, secretions, or excretions from a patient with suspected EVD

b) IMMEDIATELY

i) Wash contacted skin surfaces with soap and water

ii) Irrigate mucus membranes (e.g., conjunctiva) with copious amounts of water or eye wash solution

iii) Complete an Injury Report Form

iv) Reporting Exposure proceed without delay

v) Contact employee health (am) or emergency department (pm)

c) EH informs Infection Control upon notification of exposure

d) Monitoring asymptomatic HCP for illness

e) Documentation of current health status (complete medical questionnaire)

f) Monitor and record body temperature twice daily for 21 days after exposure

g) Daily communication with EH to report:

i) Temperature elevation greater than 38.6 degrees Celsius or 101.5 degrees Fahrenheit

ii) Symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage

h) Asymptomatic HCP may continue to work with twice daily fever checks and symptom monitoring depending on NYSDOH and CDC recommendations as interpreted by the Hospital Epidemiologist.

i) Symptomatic HCP

i) Do not report to work or leave work immediately after notifying the supervisor

ii) Seek prompt medical evaluation and testing

iii) Comply with work exclusion until deemed no longer infectious to others

iv) Return to work after clearance by EH

13) Room conversion for EVD patient

a) Room No --- will be used to treat patient with EVD

b) Further details need to be added to this section based on our understanding of how to get his area ready for EVD patient

14) Morgue

a) Morgue activities will be coordinated through Incident Command.

b) Do not move body prior to consultation with Incident Command.

15) References:

a) Virus Ecology Graphic http://www.cdc.gov/vhf/ebola/resources/virus-ecology.html

b) Distribution Map http://www.cdc.gov/vhf/ebola/resources/distribution-map.html

c) CDC Ebola Fact Sheet http://www.cdc.gov/vhf/ebola/resources/pdfs/Ebola-FactSheet.pdf

d) CDC Interim Laboratory Guidance www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html

e) CDC page on current outbreak: www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html

f) PPE Selection and Use http://www.cdc.gov/HAI/prevent/ppe.html

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This document was prepared with contributions from Infection control, emergency preparedness, employee health, nursing, administration, environmental services, microbiology laboratory, material management and all other involved departments at SUNY Upstate Medical University, based on guidance from various sources including CDC and NYDOH. Information contained in this document is based on our internal risk assessment and specific to our needs and our hospital. This will not apply to other hospitals. We encourage every hospital to do their own risk assessment and develop the plan according to their needs.

For Further information, please contact:

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