

Ebola Virus Disease Incident Response Guide	
Approved by: Special Pathogens Program Committee	
Date Issued :	Date Approved :
Purpose and Description	This Incident Response Guide serves as a protocol to screen, isolate, and treat patients who present to the facility with suspected or confirmed Ebola Virus Disease while minimizing the risk of transmission to health care workers and others.
Risk	Low
Impact	High
Affected Areas	Special Pathogens Unit, all hospital points of entry
Lead Department(s)	HICS Command, Special Pathogens Program, Infection Control and Prevention
Who Can Activate the Plan	Incident Commander, Medical Director, AOD
Circumstances for Plan Activation	HICS Alert level 2- Person Under Investigation. Hospital Incident Command Center activated
Vendors	Northstar Recovery Services
Internal Notifications	HICS Alerts
External Agency Notifications	NYC Health + Hospitals Central Office, Department of Health and Mental Health (DOHMH)
Mitigation Activities	Infection Control and Prevention mitigation/education
Preparedness Activities	Drills, Re-certification and other trainings, equipment/supply procurement

In accordance with section 6527 of the New York State Education Law, except under extremely limited circumstances “no proceeding, documentation, records, or committee action related to the performance of medical review, participation in a medical malpractice prevention program (2805J), incident reporting (2805I), or investigation for renewing professional privileges and association (2805K) shall be subjected to disclosure under Article 31 of the Civil Practice Law and Rules.” This IRG constitutes a medical review is a performance improvement document for the purpose of minimizing the risk of transmission of EVD to health care workers and others and shall not be released except to the New York State Department of Health.

DEFINITIONS

SECTION 1: Ebola Virus Disease Risk Assessment

SECTION 2: Point of Entry Patient Screening & Immediate Isolation

SECTION 3: Activation of and Transport to Special Pathogens Unit

SECTION 4: Care Rendered on the Special Pathogens Unit

SECTION 5: Additional Considerations for care provided on the Special Pathogens Unit

SECTION 6: Laboratory Services

SECTION 7: Waste Management

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SECTION 10: Management of Exposures

SECTION 11: Discharge Process

SECTION 12: Room Recovery Process

SECTION 13: Post Mortem Care

DEFINITIONS

AES – Adult Emergency Services
CDC – Centers for Disease Control and Prevention
COO – Chief Operating Officer
DOHMH – New York City Department of Health and Mental Hygiene
EAP – Employee Assistance Program
ECP – extended contact precautions
ED – Emergency Department
EMS – Fire Department of New York Emergency Medical Services
EVD – Ebola virus disease
EVS – Bellevue Environmental Services
EW – Emergency Ward
FDNY – Fire Department of New York
HICS – Hospital Incident Command System
HP – Hospital Police
IC – Bellevue Infection Control and Prevention Department
IRG – Incident Response Guide
JIT – Just-In-Time
NRS – Northstar Recovery Services (NYC Health + Hospitals contracted vendor)
OHS – Bellevue Occupational Health Services
PAPR – powered air purifying respirators
PCA – Patient Care Assistant
PES – Pediatric Emergency Services
POC – Point-Of-Care
PPE – personal protective equipment
PUI – person under investigation
SPP – Special Pathogens Program
SPU – Special Pathogens Unit

SECTION 1: Risk Assessment:

This risk assessment embraces both assessment of the patient for the possibility of EVD and assessment of associated risks to staff, family, and visitors. Measures to control risks include implementation of outlined infection control measures, information sharing, training, and surveillance/observation. *See also Exhibit A – Infection Control and Prevention EVD Fact Sheet*

Bellevue Hospital Center shall limit the number of health care workers, family members, and visitors who come into contact with suspected or confirmed EVD patients.

What is Ebola Virus Disease (EVD)?

EVD is one of several Viral Hemorrhagic Fevers. It is a severe, often fatal disease in humans and nonhuman primates (such as monkeys, gorillas, and chimpanzees) caused by the infection with a virus of the family Filoviridae, genus Ebolavirus.

What are the symptoms of EVD?

Symptoms may appear anywhere from 2 to 21 days after exposure to ebolavirus though 8-10 days is most common. People are infectious when they become symptomatic (i.e. fever) and as long as their blood and secretions contain the virus. EVD is often characterized by the sudden onset of fever, intense weakness, muscle pain, headache and sore throat. This is followed by vomiting, diarrhea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding. Laboratory findings include low white blood cell and platelet counts and elevated liver enzymes.

How is EVD transmitted?

Researchers have hypothesized that the first patient becomes infected through contact with an infected animal. When an infection does occur in humans, there are several ways in which the virus can be transmitted to others. These include:

- Direct contact with the blood or secretions of an infected person
- Exposure to objects (such as needles) that have been contaminated with infected secretions

Who is most at risk?

During an outbreak, those at higher risk of infection are:

- Health workers
- Family members or others in close contact with infected people
- Mourners who have direct contact with the bodies of the deceased as part of burial ceremonies

How is EVD treated and diagnosed?

Standard treatment for EVD is still limited to supportive therapy. This consists of: balancing the patient's fluids and electrolytes, maintain their oxygen status and blood pressure, and treating them for any complicating infections. Diagnosis and timely treatment of EVD in the early stages of the disease is challenging because early symptoms such as headache, fever and rash are non-specific to Ebola virus infection and are seen often in patients with more commonly occurring diseases. Other diseases that should be considered during the evaluation of EVD

include: malaria, typhoid fever, shigellosis, cholera, leptospirosis, plague, rickettsiosis, relapsing fever, meningitis, hepatitis and other viral hemorrhagic fevers.

Laboratory tests used in diagnosis include:

- Within a few days after symptoms begin:
 - Antigen capture enzyme-linked immunosorbent assay (ELISA) testing
 - IgM ELISA
 - Polymerase chain reaction (PCR)
 - Virus isolation

- Later in disease course or after recovery:
 - IgM and IgG antibodies

- Retrospectively in deceased patients:
 - Immunohistochemistry testing
 - PCR
 - Virus isolation

Staff should understand how Ebola virus is transmitted in a healthcare setting.

Anyone who is not clear about this or has further questions should contact Bellevue's Infection Prevention Control Department

Staff should be reminded that soap and water (or use of alcohol-based hand hygiene product) is sufficient to kill the virus. Hand hygiene is encouraged after all patient interactions. Alcohol based solutions are recommended by CDC for hand hygiene unless your hands are visibly soiled, in which case soap and water should be used.

Bleach Saniwipes are sufficient for cleaning and decontaminating surfaces. Bleach Saniwipes should not be used for cleaning hands or skin.

What infection control precautions are necessary for patients with EVD?

Standard, Droplet, and Contact precautions are required for management of hospitalized patients with known or suspected EVD. Isolation and precautions MUST be instituted PRIOR to confirmation of infection. Under circumstances when aerosolization of gastrointestinal or respiratory secretions are likely, airborne isolation PPE is required.

All staff members treating a confirmed EVD Patient will don Level C PPE

Note – staff members who only transport a PUI or transport or handle lab specimens shall don/doff a variation of Appropriate PPE

See Exhibit B – EVD PPE Matrix and Section 8 of this IRG.

SECTION 2: Point of Entry Patient Screening & Immediate Isolation

All Facility Points of Entry have visual cues informing patients of the need to inform hospital personnel of any fever and relevant travel history. *See Exhibit C – Visual Cue Map*

All patients presenting at all Facility Points of Entry are specifically assessed for EVD. *See Exhibit D – EVD algorithm*

SPECIFIC POINTS OF ENTRY

I. DOHMH coordinated PUIs

- a. Due to DOHMH’s current airport monitoring activities, most PUIs arriving at the Facility will be coordinated by DOHMH and shall be directly admitted and assessed on the Special Pathogens Unit (7W)
- b. Upon notification from DOHMH that a PUI shall be transferred to the Facility, the Special Pathogens Unit (7W) shall be activated via a HICS Level 2 Alert.
- c. *See Section 3 of this IRG* for coordinating arrival with DOHMH and FDNY.

II. Other Points of Entry for PUIs who present without notice from DOHMH

a. Emergency Department

1. Immediately upon patient arrival in AES or PES, the visual nurse or triage nurse will ask patients if (i) they have fever; (ii) if they have traveled to West Africa or have been in contact with someone who has traveled to West Africa.
2. If a patient has a fever, and has traveled to West Africa or been in contact with someone who has traveled to West Africa, the nurse will immediately have the patient don a surgical mask and escort the patient to EW 10 (while keeping a distance of at least 3 feet away).
3. A pink, “Extended Contact Precautions (ECP)” sign shall be posted on the isolation room door. *See Exhibit E*
4. In the event of multiple simultaneous patients who require evaluation, mobilize the additional isolation rooms in the following order: EW10 followed by the Discharge Center Isolation Room, followed by EW Rooms 9,8,7,6, and, finally, AES isolation rooms.
 - a. Each isolation room will have a disposable digital thermometer.
 - b. Each room is equipped with a translator phone to allow for further screening without entering the isolation room
5. At this point the door should be closed and the staff member must immediately perform hand hygiene
6. Once isolated, use ED Assessment Tool. *Exhibit F*
7. If the patient screens in, move to *Section 3 of this IRG*
 - a. The Isolation Room will be out of service until a terminal cleaning is conducted pursuant to *Section 7* of this IRG

8. If the patient screens out, remove the ECP sign and complete the patient's visit

b. Ambulatory Care Building/Administration Building

1. If a patient presenting to the front desk (or subsequently) reports they have fever and that they have traveled to West Africa or have been in contact with someone who has traveled to West Africa, the front desk will provide a face mask and then have the patient escorted (without touching, and keeping a safe distance of approximately 3 feet away) to the following rooms depending on the floor of entry:
 - a. Mezzanine: room M104
 - b. First Floor: rooms 1075, 1101, 1077,
 - c. Second Floor: rooms 2145, 2093, 2077
 - d. Third Floor: rooms 3085, 3108, 3126
 - e. Fourth Floor: rooms 4149, 4092,
 - f. Administration Building; room A419
2. The patient should be seated in the isolation room and told that either a nurse or PCA will be with him/her shortly. At this point the door should be closed and the staff member must immediately perform hand hygiene and alert the module nurse.
3. A pink, "Extended Contact Precautions (ECP)" sign shall be posted on the isolation room door. *See Exhibit E*
4. Once isolated, bring the Regulated Medical Waste container into the Isolation Room and use the Ambulatory Secondary Ebola Screening Tool and Triage Form. *See Exhibit G*
 - a. Required PPE is located in an isolation cart outside of M1010, 1010, 2010, 3009, 4009, and A423A-A420A
 - b. ***If an interpreter phone is needed for the initial triage, the phone should be set on the speaker setting.
5. If the patient screens in, move to *Section 3 of this IRG*
 - a. The Isolation Room will be out of service until a terminal cleaning is conducted pursuant to *Section 7* of this IRG
6. If the patient screens out, remove the ECP sign and complete the patient's visit

c. Labor and Delivery

1. If a patient presenting to the front desk (or subsequently) reports they have fever and that they have traveled to West Africa or have been in contact with someone who has traveled to West Africa, the front desk will provide a face mask and then have the patient escorted (without touching, and keeping a safe distance of approximately 3 feet away) to 9W20
2. The patient should be seated in the isolation room and told that either a nurse or PCA will be with her shortly. At this point the

- door should be closed and the staff member must immediately perform hand hygiene and alert the module nurse
3. A pink, “Extended Contact Precautions (ECP)” sign shall be posted on the isolation room door. *See Exhibit E*
 4. Once isolated, bring the RMW container into the Isolation Room and use the Ambulatory Secondary Ebola Screening Tool and Triage Form. *See Exhibit G*
 - a. Appropriate PPE is located in a bin in 9W20
 - b. If patient is excreting bodily fluids (incontinent of urine, feces, blood, or vomiting) use of Level C PPE is required
 - c. ***If an interpreter phone is needed for the initial triage, the phone should be set on the speaker setting.
 5. If the patient screens in, move to *Section 3 of this IRG*
 - a. The Isolation Room will be out of service until a terminal cleaning is conducted pursuant to *Section 7* of this IRG
 6. If the patient is screens out, remove the ECP sign and complete the patient’s visit

III. Considerations prior to transfer to Special Pathogens Unit (7W)

- a. If at any point in this stage the patient needs to use the toilet, a bedside commode should be brought into the room.
- b. If the patient is with a caregiver, the decision to keep the caregiver with the patient will be made on a case-by-case. If the DOHMH recommends admission to the hospital for the patient, the caregiver should then also be assessed for risk of EVD exposure.
- c. The Attending physician should call the patient on the phone. The Attending physician should explain to the patient the decision by the DOHMH to admit, explain the reasoning, answer any questions or allay any fears that the patient has. Time should be taken to address any of the patient’s concerns.
- d. In most instances, blood will be drawn on the Special Pathogens Unit.

SECTION 3: Activation of and Transport to Special Pathogens Unit

- I. Activation of the Special Pathogens Unit via DOHMH/FDNY Transfer to Bellevue**
 - a. Upon determining that a patient is a PUI, DOHMH and FDNY will contact Bellevue Hospital
 - i. The initial call from FDNY is usually directed to the ED
 1. Upon receipt of a Fever Transfer call from FDNY, the ED immediately contacts Medical Director, COO, or Director of Emergency Management
 - ii. DOHMH may contact the Medical Director, COO, or Director of Emergency Management
 - b. The Medical Director or Executive Director or designee will activate HICS Level 2 Alert to activate the Special Pathogens Team
 1. *HICS Medical Branch Director activates the SPP Team by contacting the Bellevue Operator*
 2. *The Bellevue Operators have names and contact information for the:*
 - a. SPP on call Physician(s) (which is also accessible on Amion.com)
 - b. SPP Nursing Team Members
 - c. SPP Administration/ SPP Site Managers
 - d. Command Center Incident Commander
 - i. The Incident Commander will notify (*See Exhibit H*):
 1. Hospital Police
 2. EVS
 3. Hospital Leadership
 4. NYC Health + Hospitals Leadership
 - c. PUIs coming to Bellevue via DOHMH/FDNY Transfer will enter via the Fire Lane (Hot Zone)
 - i. EVS will bring drums to the Fire Lane (x3836)
 - ii. During a Level II HICS activation for a PUI, an appropriately trained Hospital Police Officer will tape off the Fire Lane and act as the Hot Zone Boss/FDNY Liaison and will coordinate all Hot Zone Transfer Activity *per Exhibit I.*
 - iii. Hospital Police shall also:
 1. Recall all elevators necessary to the ground floor of the Ambulatory Building and/or Hospital Building.
 2. Remain on the floor with the elevator to await staff and patient's arrival.
 3. Be assigned on the ground floor level for crowd control.
 - d. Three SPP Team Nurses and an Administrator shall meet FDNY in the Fire Lane with a clean stretcher
 - e. The SPP Nurses shall assist FDNY in handing off the PUI in a mask and a clean sheet onto Bellevue's clean stretcher

- i. EMS staff will hand off the patient to Bellevue staff while staying in the Hot Zone
 - ii. The SPP Nurses stay in the Cold Zone
 - f. Transport Routes are available as *Exhibits J1 – J7 (confidential Exhibits)*
 - i. One of the three SPP Nurses shall walk behind the stretcher to monitor for possible contamination of transport routes during transport
 - g. When necessary, EVS shall clean the elevator used to transport the patient, as well as the entire transport route per their normal cleaning protocols
 - i. If the SPP Nurse walking behind the stretcher notes a possible point of contamination, a higher level of cleaning/PPE may be required.
 - h. Hospital Police shall be responsible for monitoring FDNY’s decontamination of the Hot Zone.
 - i. EMS staff will doff outside in the “hot” zone and will dispose of PPE and/or items in the drums placed behind the yellow tape. EMS staff will drop the items inside the drums without crossing the yellow tape.
 - ii. EVS or NRS will cover the drums and take them to the basement in the designated location. Bellevue will properly dispose of said waste per waste removal protocol.
 - iii. FDNY EMS will return to the ambulance and follow their protocol.

II. Activation of the Special Pathogens Unit via internal Point of Entry

- a. The Medical Director or Executive Director or designee will activate HICS Level 2 Alert to activate the Special Pathogens Team
 - 1. HICS Medical Branch Director activates the SPP Team by contacting the Bellevue Operator*
 - 2. The Bellevue Operators have names and contact information for the:*
 - a. SPP on call Physician(s) (which is also accessible on Amion.com)*
 - b. SPP Nursing Team Members*
 - c. SPP Administration/ SPP Site Managers*
 - d. Command Center Incident Commander*
 - i. The Incident Commander will notify (See Exhibit H):*
 - 1. Hospital Police*
 - 2. Hospital Leadership*
 - 3. NYC Health + Hospitals Leadership*
- b. A Hospital Police Officer will recall all elevators necessary to the ground floor of the Ambulatory Building and/or Hospital Building.
 - i. The Officer will remain on the floor with the elevator to await staff and patient’s arrival.
 - ii. Additional HP Officers will be assigned on the ground floor level for crowd control.
 - iii. The officer assigned to applicable Waiting Areas, with the assistance of staff, will ensure that patients remain seated, or remain on line.
- c. Three SPP Team Nurses and an Administrator shall arrive to transport the patient.

- d. Transport Routes are available as *Exhibits J1 – J7 (confidential Exhibits)*
 - i. One of the three SPP Nurses shall walk behind the stretcher to monitor for possible contamination of transport routes during transport
- e. When necessary, EVS shall clean the elevator used to transport the patient, as well as the entire transport route per their normal cleaning protocols
 - i. If the SPP Nurse walking behind the stretcher notes a possible point of contamination, a higher level of cleaning/PPE may be required.

SECTION 4: Care Rendered on the Special Pathogens Unit

I. Floor Layout

- 7W29 and 7W30 – Patients Rooms
- 7W34 – Lab
- 7W35 – Supply Room/Donning Room/Shower Room
- 7W33 – Quarantine Nurse’s Station
- 7W38 – Operatory (in progress)
- ***9W OR#3 (for L&D use only)

II. SPP Nurses and Physician Team

- a. *Physician (MICU or PICU)*
- b. *Primary RN*
- c. *Buddy RN*
- d. *Third RN*
- e. *Fourth RN*
- f. *Nursing Leader*
- g. *Unit Leader*
- h. *Site Manager*

III. Team Member responsibilities on Special Pathogens Unit (7W) before patient arrival

- a. *See Exhibit K* - EVD Activation Checklist
- b. The Nurse Leader and Unit Leader will review checklists to ensure all necessary equipment is in the patient room and the Supply/Donning Room
- c. A MICU or PICU MD will be on the unit when the patient arrives
- d. Primary RN, Buddy RN and Third RN don PPE in 7W35 with guidance from Site Manager or Nurse Leader in 7W35
 - i. The three RNs will pick up the PUI from the Fire Lane, ED, Ambulatory Care, etc. and transport the patient to Special Pathogens Unit (7W)
 - ii. Refresher training will be provided by Infection Control and Prevention to all staff (when necessary) on the tour receiving the patient and at the beginning of following shifts

IV. Team Member responsibilities upon patient arrival

- a. Consents must be obtained from a PUI/EVD patient prior to treatment whenever possible, per hospital policy.
- b. A HIPAA Privacy statement must be signed at the earliest possible juncture.
 - i. Consents will be obtained by RN/MD verbally. Any paper charts will be kept in the Quarantine nurses station (and are NOT brought into the patient room)
- c. Blood Pressure will be accessed through the monitor in 7W33 (a stethoscope is not required)

V. Team Member responsibilities during treatment

- a. Primary RN uses a check-off list to ensure she/he has all needed supplies to provide care to patient, including supplies for medication administration
 - i. Supplies and Medications are brought into patient room in a see-through bag

SECTION 5: Additional Considerations for care provided on the Special Pathogens Unit

I. Pediatric Considerations

a. Treatment

- i. Patients up to the age of 18 will be treated as pediatric patients
- ii. A Pediatric Intensivist will be the Pediatric Department's first responder and will initially triage and treat a pediatric PUI
- iii. If, despite being a PUI, the Pediatric Intensivist determines that the pediatric patient is otherwise in good health, the Pediatric Intensivist will hand-off the patient to a Pediatric Hospitalist and the Pediatric Intensivist shall remain on-call should the patient's condition worsen
- iv. The following equipment/supplies may be necessary:
 1. Bed, crib, incubator, or warmer
 2. Broselow or Neonatal Crash Cart
 3. Pediatric/Neonatal(840) vent/supplies/oscillator
 4. Ambu-bags with age appropriate face masks
 5. IV pump(s) with pediatric /neonatal settings, syringe pumps
 6. Pediatric and infant IV insertion supplies (i.e., IV catheters and butterflies)
 7. Portable suction
 8. Diapers/wipes
 9. Formula and oral rehydration solutions

b. Adults accompanying pediatric patients

- i. Generally, Bellevue will not permit anyone other than a PUI or confirmed EVD patient into the Hot Zone of the Isolation Unit
- ii. The need to allow a parent, guardian, caretaker, etc. into the Hot Zone to calm and/or comfort a child shall be determined on a case-by-case basis by the Clinical Team, Infection Control and Prevention, and Hospital Leadership
- iii. If a parent/caretaker is permitted to enter an isolation room with the patient, the parent/caretaker will have the risks associated with entering the room explained to him/her
 1. Just-In-Time Training on donning/doffing PPE will be provided to the parent/caretaker (the level of PPE shall be determined by Bellevue's Infection Control and Prevention Department).
 2. Any parent, guardian, caretaker permitted into the Isolation Room will have their temperatures monitored twice daily by DOHMH for EVD symptoms until 21 days after last exposure to the pediatric EVD patient.

II. Considerations for women of child bearing age

- a. For any PUI, for whom there is the possibility of pregnancy (sexually active female of childbearing age), a urine pregnancy test will be completed on 7W at time of arrival.

III. Considerations for a Pregnant PUI

- a. L&D EVD Cart, will be available on 9W.
- b. The following Labor and Delivery procedures shall be followed:
 - i. An OBGYN Consult is required to assess status and fetal well-being:
 - ii. If the patient is not in labor, Fetal-maternal surveillance/management will be provided by OB and Maternal Fetal Medicine (MFM)
 - iii. If the patient is in active labor, or goes into labor during isolation, management will be provided by OB and preparation for delivery will commence on 7W or 9W
 - iv. Assessment by OB will be on-going. If a complication develops, the Providers (OB and Anesthesia) will collaborate about the safest mode of delivery
- c. Those patients who identify themselves as pregnant with a known gestational age will be triaged according to gestational age and clinical status:
 - i. First trimester patients and all patients without vaginal bleeding, contractions, leakage of fluid - will be transported and treated on 7W.
 - ii. Patients > 20 weeks who have evidence of vaginal bleeding, contractions, leakage of fluid - will be treated in 9W36 OR 3
- d. Those patients who identify themselves as pregnant or who are obviously clinically pregnant but of unknown gestational age:
 - i. If a fundal height < 20 weeks (umbilicus) and all patients without vaginal bleeding, contractions, leakage of fluid - will be transported and treated on 7W
 - ii. Patients with fundal height > 20 weeks who have evidence of vaginal bleeding, contractions, leakage of fluid - will be treated in 9W36 OR 3
 - iii. If a fundal height < 20 weeks (umbilicus) and all patients without vaginal bleeding, contractions, leakage of fluid - will be transported and treated on 7W
 - iv. Patients with fundal height > 20 weeks who have evidence of vaginal bleeding, contractions, leakage of fluid - will be treated in 9W36 OR 3
- e. Other Considerations
 - i. Immediate access to Blood Bank shall be available as hemorrhage is more common even in NSVDs
 - ii. NNICU care may be needed for the infant

IV. Surgical and Invasive Procedures

- a. If a Suspected or confirmed EVD patient requires surgery or any other invasive procedure is required, the locations of said procedures shall be determined on a case-by-case basis.

V. Nutrition Services

- a. Assessment
 - i. If a nutritional assessment is needed, communication will be coordinated through nursing, via phone system

- i. Probes (e.g., vaginal probes) shall be covered with a condom and the condom cover should be discarded as regulated medical waste. Used probes shall remain in the room until treatment is completed.

VIII. Pharmacy Services

- a. Once brought into the patient room, all single and multi-dose medication (whole or partial) not administered shall be discarded
- b. Once brought into the patient room, any multi-dose vials, inhalers, creams, ointments, liquids, etc, must be stored in the patient room in a secure location until the medication is discontinued, or the patient is transferred or discharged
- c. For all medications administered to the patient, wrappers and containers shall also be disposed
- d. Controlled Substances: Once brought into the patient room all controlled medications (Schedule II-V) not administered (whole or partial) shall be wasted in the isolation room. Any container or wrapper that remains must also be disposed
- e. All IV solutions and IV tubing brought into the patient room should be discarded in a red container when no longer needed
- f. Any medication brought into the patient room CANNOT be returned to the pharmacy

IX. Patient Property and Deliveries

a. Property accompanying patient

- i. All property that a suspected EVD patient brings with him/her into the facility will go into room with patient
- ii. No property will be vouchered
- iii. Any patient property that the patient had contact with prior to admission, and is subsequently brought into the facility will be considered on a case by case basis
- iv. Any items that the patient did not come into contact with prior to admission will be considered on a case-by-case basis
- v. Subsequent to treating a confirmed EVD Patient, all property in the room will be treated as waste. Valuable items will be considered on a case-by-case basis.

b. Mail/Deliveries

- i. Hospital Police shall be informed of all mail/packages addressed to Special Pathogens Unit (7W) patients
 - a. No items shall be delivered into patient's room that would hinder or obstruct patient care or safety
- ii. Approved List for Mail/Packages:
 - 1. Nursing staff shall request from the patient, a list of family and friends who may forward mail and/or packages to the patient.
 - 2. Approved mail/packages shall be forwarded to the patient but shall not interfere or obstruct patient care

3. Patients shall be advised that suspicious mail/packages will be screened to ensure patient and staff safety and may be discarded
 4. The patient/patient family shall be informed that mail/packages that enter isolation room of confirmed cases shall be discarded at the end of the patient stay
 5. Patient's wishes regarding mail/package acceptance shall be documented in the patient's EMR
 6. Letters, cards, etc. shall be scanned or photographed and delivered electronically by Patient Advocacy
 - a. Original mail/packages will be held until patient discharge
 - b. If patient prefers accepting original mail/packages, the mail will be delivered to the patient using the process for delivering supplies/equipment in the isolation room
 - c. Patient shall be informed that original mail/packages delivered into the isolation room will be discarded at the end of the patient's stay.
- iii. Delivery of Written Mail/Packages from individuals NOT on the patients Approved List:
- a. Letters and packages that are not on the Special Pathogens Unit (7W) patient's approved list shall be screened prior to delivery

X. Psychiatry Considerations

- a. Persons under investigation (PUI) or confirmed EVD patients will NOT be treated in the Comprehensive Psychiatric Emergency Program (CPEP) or Inpatient Psychiatry. A psychiatric patient presenting as PUI or confirmed EVD patient will be screened and assessed in the Emergency Department.
- b. A patient will only be restrained if a determination is made that the patient is at risk of harming him/herself or others
 - i. The treating clinician will determine the need physical restraints. A psychiatry consult may be obtained.
 - ii. Rationale for and duration of use of restraints will be documented in the patient's EMR.
 - iii. Hospital Police will provide emergency assistance if the Ebola Team cannot successfully restrain the PUI or EVD patient. Hospital Police Officer MUST:
 1. Don Appropriate PPE
 2. Follow the directions of clinical staff.
 3. Hospital Police shall doff under the supervision of a trained/certified Observer

XI. Psychology Services

- a. Support groups for staff are available to all staff. *See Exhibit L*
- b. Regularly scheduled Art Therapy Stress Reduction groups are available on an as needed basis

- c. Psychiatry, Social Work, and Psychology- led support groups will be made available on specialized nursing units, including AES/EW, MICU and 7 West
 - i. Specific times are dependent on the particular unit's needs, with the goal of reaching all tours. These groups follow principles of Psychological First Aid and Critical Incident Stress Debriefing.
- d. Individual Psychiatry check-ins occur on affected units with individual nurses and other staff on duty
- e. Psychiatry is available to contact nurses on designated units on days off to check in telephonically, in coordination with Nursing Leadership.
- f. The NYC Health+ Hospitals Employee Assistance Program (EAP) will be made available on-site for individual and group interventions 5 days per week, depending on need.
 - i. Bellevue employees may contact the NYC Health+ Hospitals Employee Assistance Program (EAP), eap@olr.nyc.gov or 800 822 0244 for any individual or other issues not addressed by the above interventions
- g. NYU salaried employees may contact the NYU EAP directly, or be referred by a supervisor or Bellevue mental health professional: login.corporatecounseling.com using "nyulmc" as the company code, 800 833 8707
- h. Individuals with private issues/therapeutic needs not addressed by the above group and other interventions can contact:
 - i. the Psychiatry Department, 212 562 4601
 - ii. Senior Psychiatrist, pager 917 884 0015 - after hours
- i. Bellevue will consider Mobile Crisis Unit visits to healthy home-quarantined contacts of Ebola patients should the need arise
- j. Pastoral care is available for interested staff

XII. Media/Communications

- a. All media and internal communications shall first be approved by Bellevue Public Affairs and the Executive Director or their designees.

SECTION 6: Laboratory Services

I. Specimen Collection

- a. The Lab must be notified prior to any blood draw:
 - i. Central Accessioning: Extensions 3249, 7123, 2873, 6517
 - ii. Pathology Administration: Extension 3411
- b. Blood draws should be kept to an absolute minimum to decrease the risk of needle stick injuries and to decrease exposure of the staff to infectious fluids
- c. Special Pathogens Unit (7W) staff should confirm that Lab personnel are ready to receive samples prior to drawing blood
- d. Sample collection will be a two-person process (MD or primary RN and Buddy RN)
 - i. MD orders lab tests and prints out two sets of labels
 - ii. Extra specimen labels are placed by the Buddy RN into a specimen bag in the ante room
 - iii. RN or MD collects and individually bags samples
 - iv. RN or MD pushes patient room door until the lock clicks into the open position to initiate specimen hand-off
 - v. Buddy RN in Level C PPE walks to open door of the patient room and stops before the warm zone
 - vi. Buddy RN holds open a clean 2nd specimen bag (over warm zone without touching anything) and the RN or MD drops the already bagged specimen into the 2nd specimen bag
 - vii. Buddy RN places the double-bagged specimen into the blue specimen transportation box
 - viii. Repeat process until all specimens have been double-bagged and placed into the blue specimen transportation box
 - ix. Buddy RN closes up the blue specimen transportation box, wipes it down with bleach wipes, and discards the wipes
 - x. Buddy RN staff removes and discards gloves and washes hands or uses alcohol hand sanitizer
 - xi. RN or MD disposes of remaining waste into appropriate waste container (sharps or red bag waste bin)

II. Specimen Transport to 7th Floor Lab

- a. Third RN will walk the blue specimen transportation box from 7W29/30 to 7W34
- b. Third RN will don double gloves to open the specimen box by the specimen window
- c. Lab staff (donned in appropriate PPE) will reach into the box and take out the specimen bags
- d. Lab staff will affix specimen labels to the log book
- e. Buddy RN will close the blue specimen transportation box, wipe with bleach wipes, and discard wipes and outer gloves into the ante room red waste bag
- f. Buddy RN will sign the Lab drop-off log
- g. Buddy RN discards inner gloves, washes hands or uses alcohol-based hand sanitizer, and exits the Lab ante room
- h. Buddy RN returns the specimen box to the patient's ante room
- i. RN Buddy RN performs hand hygiene

III. **Specimen Transport to 4th Floor Lab**

- a. Specimens will be processed in 7W34
- b. If a specimen must be processed in the 4th Floor lab:
 1. An assigned Laboratory technologist will transport the specimen in the blue specimen transportation box (per the above process) via a service Elevator to the Laboratory on the 4th floor
 2. Upon arrival at the appropriate testing lab, the assigned staff will follow the 4th floor process delineated below

IV. **Laboratory procedures**

a. **7W34**

- i.* Technologists will don the enhanced appropriate PPE to process the samples
- ii.* Samples will be processed per the respective instrument protocol
- iii.* Results will be documented in Quadramed following the usual critical value notification process
 1. ADDITIONALLY, a log book MUST be kept to document the name of patient, date/time, individuals accepting samples, and personnel who processed and tested the samples
- iv.* At end of testing, samples will be secured in a refrigerator in the Lab
- v.* Blood Gas syringes will be placed into a sharps containers
- vi.* DOHMH and CDC samples will be stored appropriately for pick-up or for Ebola viral load testing
- vii.* Decontamination in the Lab shall be conducted as follows
 1. Equipment and Work Surfaces
 - a. Analyzers: Follow manufacturer guidelines for cleaning POC devices
 - b. Hood: ONLY clean with 70% ethanol
 - c. Work surfaces: Clean with bleach wipes
 - d. Lab waste: Discarded in double red bag waste or in sharps container
 - e. PPE: Dispose in double red bag waste

b. **4th Floor**

- i.* Technologists will don the enhanced appropriate PPE to process the samples
- ii.* Individual lab sections will use centrifuges with a bio-safety bucket (sealed carrier) to centrifuge samples where applicable
- iii.* Samples will be frontloaded by hand onto analyzers instead of going on the track
- iv.* Results will be document in Quadramed following the usual critical value notification process
 1. ADDITIONALLY, a log book MUST be kept to document name of patient, date/time, individuals accepting samples at each Lab, and personnel who processed and tested the samples
- v.* At end of testing, samples will be put in a Safety Pak and secured in a locked refrigerator in the Microbiology lab, 4E10

- vi.* Decontamination in the Lab shall be conducted as follows:
 - 1.* Analyzers: Decontaminated with bleach immediately after every sample from a suspected EVD patient
 - 2.* Centrifuge buckets: Placed in buckets containing 10% bleach to soak for 10 minutes; rinsed in water, then dried out thoroughly
 - 3.* Blue transportation boxes: Wiped inside and outside with 1:10 bleach before returning into circulation
 - 4.* Lab waste: Discarded in double red bag waste or in sharps container

SECTION 7: Waste Management/Cleaning & Terminal Cleanings

I. Waste Management

a. Pathway Cleanings

- i. EVS shall clean the transport pathway and elevators per their usual protocols
 1. A higher level of cleaning/PPE is only required if contamination is observed
 - a. Said cleanings shall be conducted after consulting with Infection Control and Prevention.

b. Patient Generated Waste

***NOTE: prior to disposing of any liquids, a quantity of absorbent material sufficient to absorb all liquid must be placed in the bottom of the bag.

i. Waste Container setup

1. The primary container shall be red, impervious to moisture, and of strength sufficient to resist ripping, tearing, or bursting under normal conditions of use
2. The primary container shall be marked “biohazard”
3. The primary container shall be lined with a primary bag
4. Sharps shall not be placed in the primary containers

ii. Sharps

1. Sharps shall be discarded into a dedicated, rigid, leak-resistant, puncture-resistant and closeable container

iii. Removal of waste from patient room:

1. The Nurse shall spray a Viricidal disinfectant into the primary bag and shall securely tie the bag
2. The Nurse shall spray the exterior of the primary bag with viricidal disinfectant
3. The primary bag shall be placed into a secondary bag held by NRS
4. NRS shall tie the secondary bag
5. NRS shall spray the secondary bag with viricidal disinfectant
6. NRS shall place the double bagged waste into the Category A DOT Waste drum
7. For Sharps: the sharp container shall be sprayed (on the wall) with viricidal disinfectant, shall be removed from the wall and sprayed again, and then will be placed be into a Category A DOT Waste drum.
8. NRS shall ensure that said drum is labeled “Category A DOT Waste”
9. The Category A DOT Waste drum shall be placed on designated cart, shall be covered, and shall be transported to the secure storage area

iv. Secure storage area

1. Upon arrival the Category A DOT Waste drums, NRS shall be placed into 95 gallon drums.
2. NRS shall wrap the 95 gallon drums at least, twice in duct tape.
3. The 95 gallon drums shall be stored separately from other regulated
4. Labeling on all drums in the secure storage area shall be checked and logged
5. Upon Stericycles' arrival, all 95 gallon drums shall be loaded onto Stericycles' trucks by NRS and a manifest shall be completed.
6. *See also Exhibit M - Category A Waste Handling and Packaging Procedures*

c. Laboratory Waste

i. 7th Floor

1. 7th floor lab technologists place waste in 20 gallon step-on container.
2. 7th floor lab technologists notify NRS to pick up waste
3. NRS removes waste
4. NRS mops the 7th floor lab with *viricidal disinfectant*

ii. 4th Floor (if 7th Floor lab is non-operational and contaminated items areas sent to the 4th Floor lab for processing ONLY)

d. Patient Room Cleanings

- i. High touch surfaces and equipment shall be wiped down by the primary care providers
- ii. When thorough cleanings are necessary, said cleanings shall be conducted by NRS with viricidal disinfectant

II. **Terminal Cleanings shall occur as follows:**

- a. Any room that was occupied by a confirmed EVD patient shall undergo an initial terminal cleaning by NRS
 - i. Approximately 4-6 hours after the initial terminal cleaning has been completed, a second terminal cleaning shall take place
 - ii. 24 hours after the completion of the second terminal cleaning, the room may be used again

SECTION 8: Personal Protective Equipment:

All staff members treating a PUI or confirmed EVD Patient will don Level C PPE

- Disposable scrubs (AAMI level 3) tops and pants
- Tyvek jumpsuit with attached booties
- Surgical gown (AAMI Level 4)(worn over Tyvek jumpsuit)
- Shoe booties
- 1 pair of 12” Nitrile exam gloves
- 1 pair of surgical gloves
- Knee high booties
- PAPR (respirator) (Helmet, Battery, Belt, Hood)

Level C PPE must be donned pursuant to *Exhibit N*

Level C PPE must be doffed pursuant to *Exhibit O*

All Surgical and Labor and Delivery staff members treating a PUI or a confirmed EVD Patient will don Level C+ PPE

- Disposable scrubs (AAMI level 3) tops and pants
- Tyvek jumpsuit with attached booties
- Surgical gown (AAMI Level 4)(worn over Tyvek jumpsuit)
- Shoe booties
- 2 pairs of 12” Nitrile exam gloves
- Knee high booties
- Independent Tyvek Hood
- PAPR (respirator) (Helmet, Battery, Belt, Hood)
- 2nd Surgical Gown
- 3rd Pair of Gloves

Level C+ PPE must be donned/doffed pursuant to specialized training provided by Bellevue’s Infection Control and Prevention PPE Training Center

All other staff members involved in the care of EVD patients shall don/doff PPE in accordance with *Exhibit B - PPE Matrix*

SECTION 9: Education/Awareness/Training/Recertification

- I. All staff are educated to heighten their awareness of EVD and are cognizant of the geography of the current epidemic (including staff members who typically do not come into physical contact with patients).
 1. Bellevue Outreach Staff are educated as follows:
 - i. Refrain from touching patients
 - ii. Refrain from shaking hands or other greetings that involve person-to-person touching
 - iii. Whenever possible, outreach staff should phone patients prior to traveling to see them in the field. During these pre-visit phone calls, staff should implement screening questions to assess if the patient has any risk for EVD or any other infection that may require use of PPE.
 - iv. In addition, Bellevue Outreach Staff should carry the following:
 1. Antibacterial gel to be used when hand-washing is not possible. This is useful after touching surfaces such as subways poles, doorknobs, or elevator buttons.
 2. N95 respirator masks. If a patient is coughing and sneezing, staff may choose to wear a mask for protection against air-borne illnesses such as the common cold.
 3. Surgical masks for patients
 4. Gloves
- II. Staff are also educated to understand that EVD can be a very stigmatizing illness. Suspected and confirmed patients may need psychosocial support. At every encounter, staff will be mindful of how the patient is feeling, will communicate clearly, and will ensure that the patient understands their treatment plan as a PUI or confirmed EVD patient.
- III. Only Staff members who received training from Infection Prevention and Control are directly or indirectly involved in the care of PUIs and confirmed EVD patients.
- IV. Staff members directly involved in direct patient care or handle patient specimens receive initial certification training for donning/doffing appropriate PPE and are re-certified thereafter.

SECTION 10: Management of Exposures

Health care workers who provide direct care to a confirmed EVD patient (or handle waste or specimens) must be monitored twice daily for symptoms during the incubation period of 2-21 days from the last date of exposure to the patient.

Health care workers who provide direct care (or handle waste or specimens) of a PUI will also be monitored until the PUI is ruled out.

Bellevue provides a list of appropriate employees to the NYCDOHMH and said employees report their temperatures to the NYCDOHMH twice daily for 21 days from the last date of exposure.

Employee Exposures

- I. Exposed health care workers include those who:
 - a. Provided care to a patient with Ebola and did not use appropriate precautions
 - b. Processed Ebola laboratory specimens without taking appropriate precautions
 - c. Despite using appropriate precautions, were exposed to an Ebola patient's body fluids (including a mucous membrane exposure and/or a needle-stick)
- II. If an exposure occurs, the site manager will help the employee to stay calm and doff PPE. As soon as PPE is appropriately removed, the site of the exposure will be immersed with 70% alcohol for 30 seconds and will then be washed with soap and water.
- III. For mucous membrane exposures, the site shall be flushed with soap and water.
 - a. In the case of a conjunctival exposure, the site shall be flushed with water
- IV. The exposure will be immediately reported to the Infection Control and Prevention Department, and the employee will be sent to Occupational Health Services (during normal business hours) or the Emergency Department (during non-business hours)
 - a. *Infection Control and Prevention will notify DOHMH of said exposure*
 - b. *Infection Control and Prevention and DOHMH will arrange for monitoring and determine whether quarantine is necessary*

Non-Employee Exposure

- I. Family members, household members, caregivers or other close contacts of a patient who is suspected of having Ebola virus after the onset of the patient's symptoms are monitored by the NYCDOHMH.
- II. For anyone accompanying a PUI to the facility:
 - a. If the individual is symptomatic, the individual will be isolated as a second PUI
 - b. If the contact is asymptomatic, upon coordination with the NYCDOHMH, the individual will monitor himself/herself for symptoms, including fever, for 21 days after last exposure to patient.
 - i. If symptoms develop the individual shall immediately call DOHMH

SECTION 11: Discharge Process

EVD Patient Special Pathogens Unit (7W) Exit Protocol

- I. Prior to the Patient's discharge, a family member or friend will be asked to bring clean clothing to the hospital, which will be placed in 7W35.
- II. Clean surgical scrubs and sock/slippers will be placed in sealed bag and will be brought into the patient's room.
- III. On the day of patient's discharge, the following will occur in the Hot Zone:
 - a. Patient takes a shower
 - b. After shower, patient will stand on clean towel in bathroom and don clean surgical scrubs
 - c. After drying feet, patient dons hospital sock/slippers
 - d. Patient dons shoe covers over sock/slippers
 - e. Patient dons long surgical booties over shoe covers
 - f. Patient dons 1 pair of gloves
 - g. Patient will then walk to door of patient room and carefully remove surgical booties and discard them in the regulated medical waste container
 - h. Patient will open door with Bleach Saniwipe (in gloved hand)
- IV. The following will occur in the Warm Zone
 - a. Patient will remove gloves, clean hands with alcohol gel then don clean gloves
 - b. Patient will sit on stool and carefully remove one shoe cover and sock and discard into regulated medical waste container
 - c. Patient will then don clean sock and (without placing foot on the floor in the warm zone), put clean foot into the cold zone
 - d. Patient will carefully remove second shoe cover and sock and discard into the regulated medical waste container
 - e. Patient will don second clean sock (without placing second foot on the floor in the warm zone) stand in the cold zone
- V. The following will occur in the Cold Zone
 - a. Patient will carefully stand in cold zone, doff gloves and cleans hands with alcohol gel
 - b. Patient will walk to the donning room
- VI. The following will occur in the Donning Room
 - a. Patient will take another shower
 - b. Patient will put on personal clothing

SECTION 12: ROOM RECOVERY PROCESS

- I. Deactivation of HICS due to a PUI rule out
 - a. The Command Center will facilitate an “All Clear” HICS Alert
 - b. The Command Center shall coordinate the following:
 - i. EVS will clean the SPP Unit
 - ii. EVS shall restock Bleach Saniwipes
 - iii. Central Supply shall immediately restock Special Pathogens Unit (7W) to par levels of supplies/PPE

- II. Deactivation of HICS due to the discharge of an EVD Patient
 - a. The Command Center will facilitate an “All Clear” HICS Alert
 - b. Terminal Cleanings shall occur as follows:
 - i. Any room that was occupied by a confirmed EVD patient or any lab used to process specimens shall undergo an initial terminal cleaning by NRS
 - ii. Approximately 4-6 hours after the initial terminal cleaning has been completed, a second terminal cleaning shall take place
 - iii. 24 hours after the completion of the second terminal cleaning, the room may be used again
 - c. The Command Center shall coordinate the following:
 - i. Central Supply shall immediately restock Special Pathogens Unit (7W) to par levels of supplies
 - ii. EVS shall restock Bleach Saniwipes and shall change bed linens, etc. 24 hours after second terminal cleaning.

See Exhibit P - EVD De-activation Checklist

SECTION 13: Post Mortem Care

To be handled by the New York City Office of the Chief Medical Examiner (OCME). *See Exhibit Q*