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Introduction and Background

Alberta Health Services

Although the risk of EVD remains very low, we need to be prepared for the unlikely event of an Albertan presenting with EVD. As part of the planning process designated facilities at which EVD cases would be admitted and treated have been identified. These sites are Alberta Children's Hospital (Calgary), Stollery Children's Hospital (Edmonton) for Pediatric Cases and South Health Campus (Calgary) and the University of Alberta Hospital (Edmonton) for adult EVD Inpatient care.

Significant work has been undertaken by many teams across AHS, focused on ensuring our health system is proactively prepared to manage EVD. This work exemplifies the commitment we all share to protecting the health of our staff and all Albertans.

Many guidance documents have been created and approved by the Alberta Health Services Emergency Coordination Centre. Direct links are imbedded within this document to these guidelines in order to ensure consistency and reduce discrepancies. As our learning and understanding about EVD evolves, these guidelines will be adjusted. Thus, the planning is an iterative and evolving process.

National Case Definition: Ebola Virus Disease (EVD)

The National Case Definition for Ebola Virus Disease is available from the Public Health Agency of Canada.

For surveillance purposes, a person with EVD-compatible symptoms is defined as an individual presenting with fever of ≥ 38.6 degrees Celsius AND at least one of the following additional symptoms/signs:

- malaise
- myalgia
- severe headache
- conjunctival injection
- pharyngitis
- abdominal pain
- vomiting
- diarrhea that can be bloody
- bleeding not related to injury (e.g., petechiae, ecchymosis, epistaxis)
- unexplained hemorrhage
- erythematous maculopapular rash on the trunk
This definition is slightly different from the Alberta Health Definition.

**Person Under Investigation (PUI)**
A person with EVD-compatible symptoms (as defined above) not attributed to another medical condition **AND** at least one of the following **epidemiologic risk factors** within the 21 days before the onset of symptoms:

- Residence in or travel to an area where EVD transmission is active
- **Healthcare worker (HCW) wearing personal protective equipment** (PPE) and adhering to appropriate infection prevention and control precautions with no safety breaches, who directly or indirectly cared for a probable or confirmed case of EVD (e.g. direct patient care or contact with environment or fomites of a case)
- Other patient or visitor without high risk exposures, as defined below, who spent time in a healthcare facility where probable or confirmed cases of EVD are being treated
- Household member of a probable or confirmed case of EVD without high-risk exposures, as defined below
- Laboratory worker processing body fluids of probable or confirmed cases of EVD with appropriate PPE and standard biosafety precautions and no safety breaches
- Direct exposure to human remains (e.g. through participation in funeral or burial rites) in a geographic area where the outbreak is occurring with appropriate PPE and no safety breaches
- Direct unprotected contact with bats or primates from EVD-affected country

**Suspect/Probable Case**
A person with EVD-compatible symptoms (as defined above) not attributed to another medical condition **AND** at least one of the following high-risk-exposures within the 21 days before the onset of symptoms:

- Percutaneous or mucous membrane exposure or direct skin contact with body fluids of a confirmed or probable case of EVD **OR**
- Sexual contact with a probable or confirmed EVD case **OR**
- Laboratory worker processing body fluids of probable or confirmed EVD cases without appropriate PPE or standard biosafety precautions **OR**
- Healthcare worker (HCW) not wearing personal protective equipment (PPE), who has been contaminated or broken the integrity of their PPE, and/or not adhered to appropriate infection prevention and control precautions, who directly or indirectly cared for a probable or confirmed case of EVD (e.g. direct patient care or contact with environment or fomites of a case) **OR**
- Direct exposure to human remains (e.g. through participation in funeral or burial rites) in the geographic area where the outbreak is occurring without appropriate PPE.
**Confirmed Case**
A person with laboratory confirmation of EVD infection using at least one of the methods below:

- Isolation and identification of virus from an appropriate clinical specimen (e.g., blood, serum, tissue, urine specimens or throat secretions) OR
- Detection of virus-specific RNA by reverse-transcriptase PCR from an appropriate clinical specimen (e.g., blood, serum, tissue) using two independent targets or two independent samples OR
- Demonstration of virus antigen in tissue (e.g., skin, liver or spleen) by immunohistochemical or immunofluorescent techniques AND another test (e.g., PCR) OR
- Demonstration of specific IgM AND IgG antibody by EIA, immunofluorescent assay or Western Blot OR
- Demonstration of a fourfold rise in IgG serum antibody by EIA, immunofluorescent assay or Western Blot from serial samples.
Activation Process and Readiness Preparation

- Site Administration will be notified of all suspect or confirmed cases.
- The site EOC will be activated as deemed necessary by site leadership.
- Communication of information on EVD admission (either ED or ICU) should include the following stakeholder departments:
  - Site Administration
  - DI
  - Lab
  - Environmental Services
  - Supplies
  - MDRD
  - IPC
  - Infectious Disease Physicians
  - FM&E
  - Protective Services
- AHS “STOP” Posters to be posted in public spaces and staff spaces as appropriate.
- ED and PICU will review the Readiness Checklist to identify completion of key tasks.
- Ambulatory Care Clinics will follow established Active Screening and Routine Practices.
- IPC precaution signage will be posted as per AHS protocol.
- Incident command process will be followed as per AHS EDM plans if required.
- See Team Notification for list of support departments to be notified.
- Children in Alberta with suspected or proven EVD will be treated in the following centers:
  - Calgary: Alberta Children’s Hospital
  - Edmonton: Stollery Children’s Hospital
- All children recognized as suspected EVD patients presenting to ACH will be admitted and treated in Room 4 of the Pediatric Intensive Care Unit (PICU) and will remain there until a negative blood result is confirmed, despite the primary care team.
- Should there be further admissions of suspected EVD patients Rooms 2 and 3 in PICU will be combined, room 3 as the patient room and room 2 as the anteroom. Should these rooms are unavailable room 26 in the Emergency Department will be used.

Ambulatory Care and Home Visits

- **Routine Screening Practices for Ambulatory Care** will be used in all Ambulatory Care settings.
- Rapid Assessment Screening will be conducted before any home visit.

## Site Preparation Checklist

<table>
<thead>
<tr>
<th>Category</th>
<th>Complete</th>
<th>Incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMMEDIATE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff PPE education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff AED education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC and EVD documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>accessible in unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ADMISSION IMINENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Administration and Support Departments notified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log for entry to the patient area located in donning area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE supplies available and placed in ante-room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resuscitation equipment, drugs and supplies in room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just –in-time review of care processes with staff taking patient (reviewed at shift change and when new staff assigned, establish a buddy).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biohazard bins in room and in ante-room</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Routine Screening Practices for Ambulatory Care

We all have a role to play in preventing the spread of infectious diseases. In Ambulatory Care, we implement best practices around active screening for all infectious diseases when confirming appointments and when a patient and family presents at the clinic or service.

**Active Screening – When Confirming Appointments**

1. Ask if the patient has fever, new onset of cough, vomiting or diarrhea; new rash; or an exposure to chickenpox or measles.
2. Check if appointment can be rescheduled for when they feel better.
3. If not, try to reschedule them for the end of the day.

**Active Screening in Clinic**

1. Encourage ALL patients and family members to do hand hygiene.
2. Ask if the patient or family members present have fever, new onset of cough, vomiting or diarrhea; new rash; or an exposure to chickenpox or measles.
3. If yes to any of these, separate from other patients in the clinic and place in a private room.
4. If the patient has upper respiratory tract symptoms, ask them (and the family) to do hand hygiene and place a mask on the patient.
5. If unsure of isolation requirement, please call Infection Control Practitioner:
   a. Regular Office Hours: ACH 985-7223, pager 05114 or 02634
   b. Outside of Office Hours: Call switchboard and ask for Infection Control Practitioner on Call.

**Routine Isolation Requirements**

<table>
<thead>
<tr>
<th>DROPLET +/− CONTACT ISOLATION</th>
<th>AIRBORNE +/− CONTACT ISOLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYMPTOMS – cough, runny nose, vomiting, diarrhea, fever, rash</td>
<td>CHICKENPOX/DISEMINATED SHINGLES</td>
</tr>
<tr>
<td>EXAMPLES:</td>
<td>- Diffuse skin rash with blisters or crusts &lt;5 days</td>
</tr>
<tr>
<td>- Influenza, RSV, Parainfluenza, Adenovirus</td>
<td>MEASLES</td>
</tr>
<tr>
<td>- Pertussis (whooping cough)</td>
<td>- Fever, generalized rash</td>
</tr>
<tr>
<td>- Bacterial Pneumonia</td>
<td>- Cough, runny nose/congestion &amp; red eyes</td>
</tr>
<tr>
<td>- Norovirus, Rotavirus, Salmonella</td>
<td>- Recent travel to measles endemic area (within past 3 weeks)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RECOMMENDATIONS MOST COMMON ILLNESSES</th>
<th>AIRBORNE +/− CONTACT ISOLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Move patient to an examination room as soon as possible.</td>
<td>1. Instruct symptomatic patient(s) and family members to wear a procedure mask.</td>
</tr>
<tr>
<td>2. If no single room is available, then instruct patient to</td>
<td>2. Move patient to a negative pressure isolation room immediately, if a negative pressure isolation room is not immediately available, move the patient to a single room and contact Infection Prevention and Control for advice.</td>
</tr>
<tr>
<td>3. Wear a procedure mask and move them &gt;2 meters away from other patients if they are in a waiting room</td>
<td></td>
</tr>
<tr>
<td>4. Practice respiratory etiquette: hand hygiene, use and properly dispose of tissues</td>
<td></td>
</tr>
</tbody>
</table>
Emergency Department Activation Process

- This activation process is for patients presenting directly to the ACH ED. If a patient is being transported to the ACH ICU via EMS, there is a separate activation process entitled Delivery of Patients to the ACH via EMS.
- The guidelines for triage and health information management will be followed: Recommendations for Triage and Health Information Management for Suspect/Confirmed Ebola Virus Disease
- The following algorithm will be used at ED triage:
  ED Clinical Assessment Tool
  ED Clinical Assessment Tool – French Translation
- If patient identified as potential risk of EVD (travel risk + fever), Code EVD is activated.
- The triage nurse provides the following information to families while activating Code EVD:

  "Please wait here while we get ready to take you down the hall to a patient care room. Currently we have been instructed to use special precautions when we have patients returning from "Country X" because of ongoing Ebola risk in that country. Please be patient and we will take you to your room shortly"

- Record of Individuals Accompanying a Confirmed or Suspected EVD Patient is completed and provided to the zone MOH.
- Suspected EVD Patient Presents to ED Algorithm is initiated and followed.
- The ED Unit Clerk uses the “Emergency Department – Unit Clerk: Suspect EVD Case” to initiate Code EVD notifications.
- Once EVD code has been established, patient to be transported to designated room in PICU using Suspected EVD Patient – ED to PICU Transport Algorithm along the approved ACH EVD Designated Care Spaces route.
- After transport of a suspected patient from Triage to PICU, the room is secured using “restricted access” signage until cleaning of the space is complete by Environmental Services as per IPC direction.
Suspect EVD Patient Presents to ED

**ED TRIAGE NURSE**
- Screens Patient as potential risk of EVD (travel risk + fever)
- STEPS BACK and calls Unit Clerk to page "Code EVD"
  - ED UNIT CLERK completes Code EVD Notifications:
    - [ ] ED Charge Nurse
    - [ ] PICU Charge Nurse
    - [ ] Protective Services
    - [ ] Unit Aide
    - [ ] ED Staff
    - [ ] Trauma ED
    - [ ] Charge RRT
    - [ ] ED Administration
    - [ ] Social Work
    - [ ] Infection Prevention and Control

**STEPS BACK**
- ED CHARGE NURSE Reports to Unit Clerk Desk
  - Assigns RN to Remotely Triage Patient Information in SEC to location "holding"
  - Calls PICU Charge RN to provide patient demographics, status and ETA
  - Assigns RN to secure triage space using "Restricted Access" signage post transfer
  - Directs Protective Services re: Patient Transfer
  - Supports or assigns RN to support Triage RN and Trauma MD to Don Wet PPE
  - Completes Bedside EVD Registration Form and provides to Admitting if time permits

**ED TRIAGE NURSE**
- STEPS BACK
  - Dons full Wet PPE with PPE Buddy during this process
  - Determines point of entry into the building and if washroom was used and/or spill occurred along route.
  - If washroom used/spill occurred informs Unit Clerk to notify Housekeeping.

- Completes Bedside EVD Registration Form and provides to Admitting if time permits
- Isolates Area and Asks parent to close door to waiting room
- Ask patient and family to apply a surgical mask and use hand sanitizer
- Instructs all unnecessary well family members to go home and wait for instruction from Public Health
- Instructs other family members to stay in room

**TRAUMA MD**
- Completes Bedside EVD Registration Form and provides to Admitting if time permits
- Completes Bedside EVD Registration Form and provides to Admitting if time permits
- Completes Bedside EVD Registration Form and provides to Admitting if time permits
Emergency Department – Unit Clerk: Suspect EVD Case

If “Code EVD” is activated, please notify the following staff members according to the following:

If the page is for an **in house** staff member, please use message:

“ACH CODE EVD – Please present to ED Unit Clerk Desk”

If the page is for an **off site** staff member, please use message:

“Potential Ebola Case in ACH ED, please call 403-955-7070”

<table>
<thead>
<tr>
<th>Please Notify</th>
<th>Contact Information</th>
<th>Time Notified</th>
<th>Arrival Time</th>
<th>Re-page Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED CHARGE NURSE</td>
<td>ED Charge Nurse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pager: 11840</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ED TRAUMA MD</td>
<td>Regional On-Call Application (ROCA)</td>
<td></td>
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<tr>
<td></td>
<td><a href="http://insite.albertahealthservices.ca/6492.asp">http://insite.albertahealthservices.ca/6492.asp</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED UNIT AIDE</td>
<td>Overhead page Unit Aide to present to Unit Clerk Desk</td>
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<td></td>
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<tr>
<td></td>
<td>Call Bell System</td>
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<tr>
<td>ED STAFF</td>
<td>Page all ED Staff to return to the Emergency Department</td>
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<tr>
<td></td>
<td>Switchboard</td>
<td></td>
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<tr>
<td>ED ADMINISTRATION</td>
<td>Sharleen Luzny</td>
<td></td>
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<tr>
<td></td>
<td>ED Patient Care Manager</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pager 05202</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Cell: 403-919-5169</td>
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<tr>
<td></td>
<td>Dr. Angelo Mikrogianakis</td>
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<tr>
<td></td>
<td>Pediatric Emergency Division Chief</td>
<td></td>
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<tr>
<td></td>
<td>Pager 10338</td>
<td></td>
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<tr>
<td>PICU CHARGE NURSE</td>
<td>PICU Charge Nurse</td>
<td></td>
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<tr>
<td></td>
<td>Pager: 11322</td>
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<td></td>
<td>Tel: 403-955-7074</td>
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<td>CHARGE RRT</td>
<td>Charge RRT</td>
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<tr>
<td></td>
<td>Pager: 03825</td>
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<tr>
<td>PROTECTIVE SERVICES</td>
<td>Protective Services</td>
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<tr>
<td></td>
<td>Tel: 403-955-7600</td>
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<tr>
<td>SOCIAL WORK</td>
<td>Social Work</td>
<td></td>
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<tr>
<td></td>
<td>Pager: 01723</td>
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</tbody>
</table>
## Infection Prevention and Control

<table>
<thead>
<tr>
<th>Please Notify</th>
<th>Contact Information</th>
<th>Time Notified</th>
<th>Arrival Time</th>
<th>Re-page Time</th>
</tr>
</thead>
</table>
| **INFECTION PREVENTION AND CONTROL** | Linda Kamhuka  
*Infection Control Practitioner,*  
Pager 02634 | | | |
|  | Leanne VanRootselar  
*Infection Control Practitioner,*  
Pager 05114 | | | |
|  | **After 1615 hours** | | | |
|  | **Monday to Thursday:** Admin. On-Call through Regional On-Call Application (ROCA) | | | |
|  | **Weekend (from Friday 1615 hours):** Infection Control Practitioner On-Call through Regional On-Call Application (ROCA)  
[http://insite.albertahealthservices.ca/6492.asp](http://insite.albertahealthservices.ca/6492.asp) | | | |
| **SITE ADMINISTRATION** | Margaret Fullerton,  
*ACH Senior Operating Officer,*  
Pager 10271 | | | |
|  | Lois Ward  
*Executive Director, Ambulatory and Site Director,*  
Pager 01388 | | | |
|  | Jill Woodward  
*Executive Director, Inpatients,*  
Pager 08674 | | | |
|  | Clare Hildebrandt  
*ACH Site Manager,*  
Pager 03980 | | | |
|  | **After Hours:**  
Administrator On-Call  
Pager: 08888 | | | |
Emergency Department – Unit Clerk: Suspect EVD Case Role Listing

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED CHARGE NURSE</td>
<td></td>
</tr>
<tr>
<td>ED TRAUMA MD</td>
<td></td>
</tr>
<tr>
<td>ED UNIT AIDE</td>
<td></td>
</tr>
<tr>
<td>ED Patient Care Manager</td>
<td></td>
</tr>
<tr>
<td>ED Unit Manager</td>
<td></td>
</tr>
<tr>
<td>Pediatric Emergency Division Chief</td>
<td></td>
</tr>
<tr>
<td>PICU CHARGE NURSE</td>
<td></td>
</tr>
<tr>
<td>CHARGE RRT</td>
<td></td>
</tr>
<tr>
<td>PROTECTIVE SERVICES #1</td>
<td></td>
</tr>
<tr>
<td>PROTECTIVE SERVICES #2</td>
<td></td>
</tr>
<tr>
<td>SOCIAL WORKER</td>
<td></td>
</tr>
<tr>
<td>INFECTION PREVENTION AND CONTROL PRACTITIONER</td>
<td></td>
</tr>
<tr>
<td>ACH SENIOR OPERATING OFFICER</td>
<td></td>
</tr>
<tr>
<td>EXECUTIVE DIRECTOR, AMBULATORY AND SITE DIRECTOR</td>
<td></td>
</tr>
<tr>
<td>EXECUTIVE DIRECTOR, INPATIENTS</td>
<td></td>
</tr>
<tr>
<td>ACH SITE MANAGER</td>
<td></td>
</tr>
<tr>
<td>ADMINISTRATOR ON CALL</td>
<td></td>
</tr>
</tbody>
</table>

Once completed, forward copy to PICU to be added to Health Care Worker Log.
ACH EVD Designated Care Spaces

- Primary Patient Care Space
- Secondary Patient Care Space
- Tertiary Patient Care Space (eSIM)
- ED
- EVD Transport Route
- PICU
- 24
- 25
- 26
- 27
- 1
- 2
- 3
- 4
Delivery of Patients to the ACH via EMS

- After EMS has consulted with the MOH, if the decision is made to transport to the ACH, RAAPID will initiate a conference call with the ACH ICU attending physician on call, ACH ED Trauma physician, Site Admin (on call) and the MOH.
- The ambulance will park outside of the ambulance bay wherever possible to limit exposure within the bay. In inclement weather, the ambulance can back up to the bay to limit the patient’s exposure to the elements.
- Patient must remain in the ambulance until contact is made with receiving facility staff.
- All Aerosol Generating Medical Procedures will be discontinued prior to opening the ambulance doors.
- If a patient is being transferred from another site, the ACH transport team (or designated PICU Staff if Transport team is not available) will come to meet the ambulance to offload the patient to a prepared hospital stretcher, bed, crib or wheelchair based on patient age and status according to the following algorithm:
  EMS Notification of Suspected EVD Case – Transfer from Other Site
- If a patient is identified as at risk for EVD by EMS at point of care, the ACH Emergency Department Team will come to meet the ambulance to offload the patient to a prepared hospital stretcher, bed, crib or wheelchair based on patient age and status according to the following algorithms:
  EMS Notification of Suspected EVD Case – Identified by EMS at Point of Care
  Suspected EVD Patient – ED to PICU Transfer
  - This will limit the movement of the EMS crew throughout the facility.
- All patients transported by EMS with suspected, probable or confirmed EVD should be transported directly to the designated room (PICU Room 4, PICU Room 2/3, ED Room 26) without stopping at ED.
- The ambulance will park outside of the ambulance bays and will be decontaminated as per IPC and EMS guidelines.
- The most up to date EMS guidelines can be found at the following links:
  EMS Interim Guidelines - Suspect Confirmed - Ebola Virus Disease
EMS Notification of Suspected EVD Case – Transfer from Other Site

RAAPID Call with EMS, Site Admin, PICU Physician and MOH re: Anticipated Suspected or Confirmed EVD Transfer

Transport to ACH

EMS Staff call into ACH ED upon arrival and wait in ambulance, outside of ambulance bay

Discontinue all Aerosol Generating Medical Procedures prior to opening ambulance doors

Transfer care to Transport Team

Decontaminate ambulance outside of the ambulance bays as per guidelines

TRANSPORT TEAM (or PICU Team if transport is out) receives report and dons wet PPE

Transfers patient (+/- family member) to transport wheelchair, bed or crib

Takes patient to designated room

Connects patient to monitor and completes first set of vitals

PICU MD dons wet PPE, completes assessment and transfers care to Hospital Paediatrician if warranted

PICU MD accepts care and notifies PICU Unit Clerk of pending admission

ED UNIT CLERK Notifies Transport Team and PICU Unit Clerk of Arrival

PICU UNIT CLERK Initiates Admission EVD Call Out

- Site Administration
- PICU Managers
- Housekeeping
- Laboratory Services
- Supply Management
- Transport Team
- Protective Services
- IP&C
- NST Managers
- MDRD
- FM&E
- Food Services
- ED Unit Clerk

2 PROTECTIVE SERVICES STAFF accompany Transport Team

First Protective Services Staff to ensure patient doors are closed on route

Stays 2 meters ahead of EVD transport team using designate route

Clears path and opens doors

Watches for spills of bodily fluids

If spill occurs, ensures spill is guarded at 2 meter distance until Housekeeping arrives

Calls Housekeeping to with code EVD spill. Ensures Housekeeping dons wet PPE

Site Administration
IP&C
PICU Managers
NST Managers
Housekeeping
MDRD
Laboratory Services
Supply Management
Transport Team
Protective Services
ED Unit Clerk
EMS Notification of Suspected EVD Case – Identified at Point of Care

EMS Initiates RAAPID Call with EMS, Site Admin, Trauma ED and MOH re: Suspected EVD Case

If EVD Suspected

TRAUMA MD
Notifies Unit Clerk re: anticipated EMS arrival and Code EVD

EMS Staff transport patient to ACH as per guidelines

EMS Staff call into ACH ED upon arrival and wait in ambulance, outside of ambulance bay

Discontinue all Aerosol Generating Medical Procedures prior to opening ambulance doors

Transfer care to ED Team

Decontaminate ambulance outside of the ambulance bays as per guidelines

ED UNIT CLERK completes Code EVD Notifications:
- ED Charge Nurse
- PICU Charge Nurse
- Protective Services
- Infection Prevention and Control

ED UNIT CLERK notifies ED RN, Trauma MD, and PICU Unit Clerk of Arrival

ED CHARGE NURSE
Reports to Unit Clerk Desk

Assigns RN to Remotely Triage Patient Information in SEC to location "holding" and to be

Calls PICU Charge RN to provide patient demographics, status and ETA

Directs Protective Services re: Patient Transfer

Supports or assigns RN to support Triage RN and Trauma MD to Don Wet PPE

See Transfer Algorithm

ED RN receives report and dons wet PPE

Transfers patient (+/- family member) to transport wheelchair, bed or crib

TRAUMA MD
Dons wet PPE and meets EMS with

See Transfer Algorithm
Suspected EVD Patient – ED to PICU Transfer

ED TRIAGE NURSE
Donned in Wet PPE
- Transfers patient (+/- family member) to transport wheelchair with impermeable cover
- Instructs accompanying family members to only touch wheelchair and patient items
- Takes patient and all used equipment into designated room
- Connects patient to monitor and completes first vital signs
- Completes Bedside EVD Registration Form if not previously completed

TRAUMA MD
Donned in Wet PPE
- Provide treatment as required on route
- Enters patient room and calls MOH

ED CHARGE NURSE
No PPE
- Maintain 2 meter distance
- Directs Unit Aide to clear transfer hallway
- Informs staff and patients in transport hallway to stay in room until transport complete
- Follows EVD transport team to designated room

2 PROTECTIVE SERVICES STAFF
- First Protective Services Staff to ensure patient doors are closed on route
- Second Protective Services Staff to maintain 2 meters behind transport team
- Stays 2 meters ahead of EVD transport team using designated route
- Watches for spills of bodily fluids
- If spill occurs, ensures spill is guarded at 2 meter distance until Housekeeping arrives
- Calls Housekeeping to with code EVD spill. Ensures Housekeeping dons wet PPE

MOH
Determination of EVD Risk
- Potential EVD Case
  - Direct team to return to ED and don PPE in ED
  - PICU UNIT CLERK Notified of Potential EVD Admission by MD or RN in Room
  - PICU UNIT CLERK Initiates Admission EVD Call Out
    - Site Administration
    - PICU Managers
    - Housekeeping
    - Laboratory Services
    - Supply Management
    - IP&C
    - NST Managers
    - MDRO
    - FM&E
    - Food Services
  - HAND OFF: ED Charge RN
    - Acts as PPE Buddy in doffing of PPE if needed (must don Buddy PPE first)
    - ED Charge RN arranges Housekeeping for ED Triage Space after notification of required clean by IPC

ASSIGNED RRT
Remains outside of room ready to assist as required
- Provide treatment as required on route
- Keeps informed of staff and patients in transport hallway
- Informs staff and patients in transport hallway to stay in room until transport complete
- ED CHARGE RN
  - Acts as PPE Buddy in doffing of PPE if needed (must don Buddy PPE first)
PICU Activation Process

- Patients with suspected, probable and confirmed EVD will be admitted directly to the “ACH EVD Designated Care Spaces”
  1. Primary room to be used is PICU Room 2 and 3, with PICU Room 3 identified as the patient room, and PICU Room 2 identified as the anteroom.
  2. Secondary room to be used is PICU Room 4 (palliative suite), with the family space identified as the anteroom.
  3. If neither of these rooms is available, assessment will occur in Emergency Department eSIM room.
- These rooms are negative-pressure capable that will support contact and droplet isolation protocols.
- They are positioned at the end of the unit and can be accessed directly from the hallway without the need to transport patients past other occupied rooms.
- Access to the DI department is also possible with minimal transport through other patient care areas from PICU.
- The PICU has restricted access therefore it is possible to closely monitor and control public access to the patient room.
- The Critical Care Strategic Clinical Network has developed the following document for the clinical management of Suspected EVD patients in the ICU: Care of the Seriously or Critically Ill Patient with possible or proven EVD

Notification of Suspect or Confirmed EVD Patient

- Upon notification of a suspect or confirmed EVD patient from EMS or ED, the PICU Charge Nurse initiates PICU Preparation – Suspect or Confirmed EVD Patient Algorithm.
- Upon admission of a suspect or confirmed EVD patient, the PICU Unit Clerk initiates notification of admission process using the PICU Unit Clerk Checklist.
- Guidelines for transportation within the facility must be followed when admitting a patient to the unit.
PICU Preparation – Suspected or Confirmed EVD Patient

ED Charge RN or designate calls PICU Charge RN to provide patient age/size, clinical status and ETA

PICU Charge Nurse
Assigns Room to Patient (e.g. Room 4 or Room 3)

Assigns Unit Aide to clear equipment from designated transport hallways

Provides report to RRT Charge

Assigns PICU RN to prepare room and to PPE Monitor role

Notifies PICU unit staff and Attending of suspected EVD patient

Notifies staff to have patients and families stay in rooms until transport complete.

See Transfer Algorithm

PICU RN prepares room for patient based on age and weight

Places 3 portable screens to isolate area

PICU RN acts as PPE Monitor

RRT Charge assigns potential RRT to be designated to room

Assigned RRT prepares RRT Supplies

If warranted, assigned RRT prepares intubation bucket for patient

Remains outside of room ready to assist as required
PICU Unit Clerk: Confirmed or Suspect EVD Case Being Admitted

After the Physician consults with the Medical Officer of Health (MOH) and when the MOH decides to treat the patient as a suspect Ebola case, please notify the following people immediately:

If the page is for an in house staff member, please use message:

“ACH EVD Suspect Admission – Please contact PICU for details”

If the page is for an off site staff member, please use message:

“Potential Ebola Case in ACH PICU, please call 403-955-7074”

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| **NOTIFY PICU AND NURSING SUPPORT TEAM MANAGERS** | Kerry Hart Patient Care Manager, PICU Pager: 06461 Tel: 403-955-7929 | Pager 06461 |
|                                                      | Heather Hunter Unit Manager-RFH and NST Tel: 403-955-7198 Pager: 11869 | Pager 11869 |

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PICU Room Set Up:

- PICU has two primary designated care spaces Room 3 and Room 4.
- An overview of the Room 4 set up is provided.
- PICU Designated Care Spaces are to be set to negative pressure at all times. Room 4 key is located in monitor outside room. If using rooms 2 and 3, PICU will have to contact maintenance to initiate negative pressure and IPC to complete testing to measure negative pressure.
- Everything entering room must remain in room until directed by IPC for cleaning and removal.
- All exiting of room must occur through anteroom.
- See room supply lists:
  - Supply List A: Site Preparation for EVD Patient
  - Supply List B: Activation of Code EVD
  - Supply List C: Admission of Suspected or Confirmed EVD Patient
- 5 biohazard containers will be provided. Three biohazard containers will be provided within the patient care space - two will be designated for sharps and medications with protective cover and small opening, a third separate container for linens and waste will be provided. Two containers will be provided within the anteroom. Additional containers will be provided as required.
- Decrease room temperature to support staff comfort while donned in PPE. Reassess patient tolerance as needed.
ACH EVD Designated Care Spaces

Tertiary Patient Care Space (eSIM)

Primary Patient Care Space

Secondary Patient Care Space

ED

EVD Transport Route

PICU

2427

22 25

24

25

1

2

3

4
ACH PICU Room 4 Set Up

- Bed or crib
- Sliding Door – kept closed for negative pressure room
- Delivery of supplies into room by placing onto table, or rolling through door.
Supply List A: Site Preparation for EVD Patient

Set up of patient care area for POTENTIAL EBOLA patient

- Linen as deemed appropriate for patient age & condition - minimize if able.
- Bed or crib based on patient need
- 2 Plastic washable chairs in room (one for family, one for staff)
- Log book for Staff – Outside of room
- Marker for white board
- Commode with disposable commode bags, disposable urinals, bedpans, diapers, disposable kidney basins and disposable emesis bags as deemed appropriate for patient age & condition.
- Biohazard bucket (X3) (2 with protective cover and small opening)
- Telephone
- Thermometer and box of covers (x1)
- Accel Wipes( x 2 containers)
- Solidifiers (x6)
- Stethoscope – Ped (X1)
- Modified Contact and Droplet sign on outside of room including restricted access wording
- Suction regulator, canister and tubing (X2)
- Yaunkauer Suction tips straight and bulb end
- Bedside table X2 – one at entrance for receiving supplies, one on far side of bed to support patient care

Premade “Ebola” Baskets

- Saline Flushes (x10)
- Chlorehexidine Swabs
- Syringes – All sizes (x2)
- Blue IV Connectors (x6)
- Y Connector (x2)
- Blunt cannula (X12)
- Blunt needle (X6)
- Filter needle (X6)
- STATlock (X1)
- Insyte Autoguard – (each size x2)
- Tourniquet (x1)
- Tegaderm (2 of each size)
- Lacrilube X2
- NG adaptor (Blue) (x2)
- Medline (x 2)
- Baxter Pump straight tubing (x1)
- Push-Pull System (x1)
- 1 LRingers lactate bag (x1)
- Sat Probe (x1)
- ECG stickers- adult/Peds
- Gauze- 4x4 (X3), 2x2 (x5)
- Green Clamp (x1)
- Disposable Scissors (x2)
- Clear Tape

Anteroom:
- Biohazard Buckets – For Doffing and for supplies
- Extra gloves- to be placed on “clean” side, PPE monitor to hand to Doffer
- Microsan – 4 Bottles at all times
- Accel Wipes
- Large Doffing signs
- Plastic chair x2. one on dirty side & one on clean side.
- Bedside table x1 on clean side for lab use with blood work.
Supply List B: Activation of Code EVD

Supply List for PICU Bed 4 when Code EVD Activated – RN Responsibility

- Confirms room set up based on Supply List A
- Age/weight appropriate blood pressure cuff
- Appropriate Code Sheet for weight
- 3 privacy screens in hallways
- Ensure room set to negative pressure

Supply List for PICU Bed 4 when Code EVD Activated – RRT Responsibility

- Bagging unit and mask
- OPA
- NPA x 2
- LMA and syringe

If intubation required:
- Ventilator
- In-line Suction
- EtCO2 Module for Philips monitor
- CMAC video-laryngoscope and blade
- Filterline for EtCO2 monitor
- PICU Airway Cart – to be stored outside the room

Supply List C: Admission of Suspected or Confirmed EVD Patient

Rapid Sequence Intubation Medications
- To be collected if patient condition is unstable and requested by physician, and stored in the narcotic cupboard outside of Room 3.
  - Atropine vials (x2)
  - Rocuronium vials (x2)
  - Ketamine ampoule (x1)
  - Midazolam ampoule (x1)

Initial Resuscitation Bucket
- To be kept on counter outside of Room 4, labelled and sealed.
  - Preloaded Epinephrine
  - Sodium Bicarbonate
  - Calcium Chloride
  - High Concentration Potassium
  - 1 L Ringers Lactate
  - 1 L Normal Saline
  - Push Pull
  - Pressure Bag
Receiving and Admitting Processes and Patient Belongings

Admission Process
- ED Triage Nurse or ED Charge Nurse will collect patient demographics and complete admission forms without entering the patient’s room or making direct contact with the suspected EVD patient.
- Pt demographic information will be relayed from the patient’s nurse to the admitting clerk through the use of a remote admission form Ebola Bed Side Registration for Nurses.
- If patient demographics are not available, patients will be registered in Clinibase using the unknown patient process.

Patient Belongings
- Patient belongings will be placed in a sealable Patient Belongings bag and kept with the patient throughout the inpatient stay.
- Disposition of items will be determined on a case-by-case basis in consultation with IPC.
- Clothing that is clearly contaminated with blood or other body fluids will be discarded in the patient room in the Biohazard waste container.

Patient Discharge
- Routine patient discharge processes would be followed in relation to electronic documentation in Clinibase, SCM and e-Critical.
- The release of patient belongings to the patient will require a risk assessment by IPC, prior to releasing to the patient.
Ebola Bed-side Registration for Nurses

Child’s Legal Name:

- Last Name: _______________________________________________
- First Name: _______________________________________________
- Provincial Healthcare Number: ___________________ Expiry date: ________
- DOB: _______/_______________/______
  (year) (month) (day)
- Gender: Male / Female
- Mother’s Name: ___________________________________________
- Father’s Name: ___________________________________________
- Who brought the child in: _________________________________
- Home address: ___________________________________________
- Home phone number: (____) _______ - ____________
- Family Physician: ________________________________

Nurses please give this form to Admitting to enter into Clinibase and link with SEC.
Communication Once Admitted

- All media queries will be directed to AHS Communications.
- Bed Placement notified by PICU Charge Nurse of pending suspect or confirmed admission and activates admission plan and coordinates bed assignment in Clinibase.
- MD-to-MD communication is required. The attending physician will be informed that patient is suspected, probable EVD when consult is made.
- Once the patient is admitted, the following departments will be notified by the PICU Unit Clerk using the PICU Unit Clerk Confirmed or Suspect EVD Case Being Admitted Checklist.
- Site Administration will be notified via Site Manager (pager 3980) or Administrator on Call (pager 8888).
- Site Incident command process will be followed as per AHS EDM plans if necessary.
PICU Unit Clerk: Confirmed or Suspect EVD Case Being Admitted

After the Physician consults with the Medical Officer of Health (MOH) and when the MOH decides to treat the patient as a suspect Ebola case, please notify the following people immediately:

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Infection Control Measures and PPE Guidelines

- Staff training on appropriate PPE must occur prior to caring for a patient with suspected or confirmed EVD. If a staff member is required in the room who has not yet received training, then just in time training must occur prior to the staff member entering the room.
- Staff must be vigilant in the donning and doffing of PPE.
- Donning will occur outside of room in hallway in the designated donning area and doffing to occur in anteroom.
- Privacy screens with “Restricted Access” signage to be put in place to isolate area from other PICU patients, family and staff.
- Microsan and Accel wipes will be provided in both the patient care space and the anteroom.
- Visibly soiled hospital scrubs will be discarded as biohazardous waste.

Appropriate PPE:

- All staff entering room are to change into hospital scrubs provided (currently located in spare lockers in PICU) at beginning of shift and remove at end of shift or if they become visibly soiled during care or doffing. Changing into scrubs is to occur in bathroom located next to PICU conference room. Staff clothing including all jewelry is to be kept in staff lockers.
- Hair is to be pinned back tightly. Hair elastics/pins to be provided for staff members if required in the donning station. Staff are encouraged to keep a personal supply available at work.
- EVD PPE cart located outside of PICU Room 4 in the designated donning area to be restocked by Supplies management. Daily inventory and recording of supplies will occur.
- See below the appropriate guidelines for donning and doffing Wet and Dry PPE. Note that guidelines may change based on new evidence.
- Links to the most up to date AHS recommended Infection Control Measures and PPE Guidelines are listed below:

  - Infection Prevention and Control (IPC) & Workplace Health and Safety (WHS) Ebola Virus Disease (Ebola) Guidance for Acute Care Settings
  - Contact and Droplet Precautions Suspect/Confirmed Ebola Virus Disease
  - PPE Requirements for Suspect/Confirmed Ebola Virus Disease
  - Heat Strain While Wearing PPE
  - Ebola Suspect or Confirmed WET Patient: Donning Personal Protective Equipment
  - Ebola Suspect or Confirmed WET Patient: Doffing Personal Protective Equipment
  - Cleaning Protocol Standards for Occupied Patient Cubicle (Isolation)
  - Cleaning Protocol Standards for Discharge/Transfer (Isolation)
  - Ebola Room Entry Log
Direct Patient Care

- For recommendations regarding patient care, please refer to this document: Care of the Seriously or Critically Ill Patient with possible or proven EVD

Guidelines for Personal Care

- **ComMODES** will be provided in the patient room, as patients will not have access to a toilet.
- **Commode Set Up Procedures** and **Commode Waste Disposal Procedures** must be followed.
- Urinals will be provided for age and mental status appropriate patients.
- If a patient is too unwell to use a commode or urinal, diapers will be used due to the increased risk of splash and spills associated with bedpans.
- All human waste will be solidified prior to disposal in the provided biohazard containers.
- Absolutely no patient waste will be disposed of in sinks or toilets.
- Solidifiers will be kept on the EVD cart and within the patient room supply cart.

Guideline for Passing Supplies into Patient Room

- Care RN inside of the room will call the buddy RN using the telephone on speaker mode or the call bell. Handset not to be used for contamination concerns.
- Care RN will ensure table placed next to the entry door is clean and clear
- Care RN will step away from door.
- Buddy RN (without PPE) will slide open entry door and drop supplies into the bucket provided on the table. Larger items will be pushed through without RN crossing the entry doorframe.

Vascular Access / Injection Safety

- Use of sharps to be minimized
- Sharps are disposed of in the designated biohazard container (with protective cover and small opening) within the room.
- Do not place hands within these containers due to increased risk of injury.
- PIVS, CVCs and Arterial lines should only be inserted if absolutely required and will be initiated by the most experienced caregiver
- Insyte autoguards are the only IVs to be used on patient
- No blood draws from IV starts
- If an arterial line is required it is preferable to insert into the radial artery
- All access devices should be secured with non-suture devices (ex. Statlock)
Blood Products

- Standard testing for platelets, type and screen and coagulation will not be available
- The use of platelets, FFP and cryoprecipitate will be limited to patients with active bleeding if possible.
- All patients under investigation for EVD either suspected or proven will receive unmatched O negative red cells, Group AB plasma and low titre or AB platelet products

Antimalarial Therapy

- Malaria is the most likely diagnosis in febrile patients with recent travel from regions with EVD outbreaks
- Available medications are:
  - Malarone – given PO, available in ED
  - Artesunate- given IV, available in pharmacy
- Therapy will be guided by Infectious Disease Physicians

Antibiotic Treatment

- Treatment for severe sepsis/septic patients based on clinical presentation and advice from Infectious Diseases Consultant.
- Gram negative bacteremia can occur during the course of EVD, and may be multi-drug resistant. Consider the use of Meropenem.

Fluid Replacement Therapy

- Diarrhea can be a significant concern with EVD leading to associated electrolyte abnormalities.
- For patients with mild-moderate dehydration, oral rehydration should be considered.
- If unable to swallow, placement of nasogastric tube is appropriate.
- Placement of NG tube should be confirmed with the pop test or aspiration of contents.
- Severe paralytic ileus is a possibility, TPN may be required.
- If IV fluid replacement is required, it is preferable to use Ringers Lactate or Plasmalyte to minimize the need for electrolyte testing.
- Severe hypokalemia can occur and should be managed with enteral and IV replacement of potassium chloride is recommended.
- Maintenance fluids should be ordered as per usual protocols.

Emergent Care

Inpatient Care
Hemodynamic instability and resuscitation

- In the event of an acute deterioration of a patient, complete attention to donning of wet PPE is required prior to entering the room.
- Appropriate goals of care must be established upon admission to the PICU and will be revisited as necessary during the course of care.
- Patients with late stage proven EVD and progressive multi-organ failure have minimal expectation of survival and withholding CPR is appropriate to avoid unnecessary risk to health professionals.
- If deemed medically appropriate, CPR will be initiated.
- If a code blue occurs, the code cart will be taken into the room. It will remain in the room until directed by IPC.
- ELSO has proclaimed that ECMO will not be offered for confirmed EVD patients.

Renal Replacement Therapy

- Only to occur after extensive discussion with the unit and zone medical and administrative leadership team.
- Fresenius cannot be used in PICU Room 4 due to plumbing.
- If a decision is made to pursue renal therapy, PrismaFlex and trained staff will be required.

Respiratory

Non Intubated Patients

- Respiratory care for the non-intubated patient will be provided by the care nurse.
- Absolutely no nebulized medications.
- MDI and spacer can be used to deliver aerosolized medications.
- Non-invasive ventilation will not be used.
- Heated or high flow oxygen therapy will not be used.
- Humidification will not be used oxygen therapy.
- Capillary blood gases will not be performed.
- Bronchoscopy will not be performed.

Intubated Patients

- Full wet PPE, including N95 must be worn during intubation and for care thereafter.
- If at all possible, Rapid Sequence Intubation should be used for intubation to reduce the need for bagging.
- Intubation should be performed by the most experienced physician using video laryngoscopy.
- Minimize the number of people in the patient room.
- Students will not care for EVD patients.
- Negative Pressure must be maintained.
• For intubation, a PICU Airway Cart will be brought outside of the patient room. The intubation cart should not be brought into the room. All required intubation supplies will be passed into the room as required and the room door closed immediately after to maintain negative pressure.

• An additional RRT buddy should be assigned and remain outside the room during intubation to hand in required supplies. This staff member will stay outside the room to support the designated RRT until the patient is stabilized on the ventilator. The RRT buddy will then provide relief for the designated RRT.

• Heated humidification will be used for ventilated pediatric patients. For older patients, use of an HME should be considered.

• Disconnections of the ventilator circuit should be avoided.

• The aero-neb should not be used to deliver aerosolized medications. Patients on adult circuits can have nebulized medications delivered via an MDI and collapsible spacer device that can be left in the patient circuit.

• There is no MDI or spacer device for pediatric circuits; therefore, consider direct instilling of medication via inline instill port on the inline suction setup. Alternatively, consider IV therapy.

• There will be no delivery of an MDI using a spacer and manual bagger to intubated patients.

• Only closed in-line suction will be used. Absolutely no open suctioning of the endotracheal tube.

• No Bronchoscopy will be performed.

• High frequency oscillatory ventilation will not be performed.
Visitor Guidelines, Monitoring, Management and Training

- Visitation to patients hospitalized with Ebola should be discouraged.
- Other strategies to maintain contact should be considered including:
  - Skype
  - Telehealth
  - Telephone (on speakerphone)
- Visitation will be limited to:
  - 1 well parent or guardian to be main caregiver, no other visitors (symptomatic parents will be cared for at the South Health Campus).
  - Caregiver must be trained to don and doff PPE appropriately with assigned buddy.
  - Patient and parent or guardian will be able to use phone in room on speakerphone to communicate with other family members.
- Visitors will not be present during aerosol generating procedures as fit testing for an N95 mask will not have occurred.
- Visitors will be provided with information about Ebola and the types of precautions required to minimize the risk of exposure.
- Visitors will be required to don full wet PPE prior to entering the room. A healthcare worker should assist the parent in donning. The family members name and relationship to the patient should be written on the outside apron (e.g. Mike, Father).
- Upon initial transfer from ED to the PICU, the accompanying family member will be brought into the room in street clothes. Once the assessment is complete and the patient is settled, the family member will be taken outside of the room to don PPE. If any of the family members clothes are soiled, they should be removed and placed in a biohazard container and the family member should be provided with hospital scrubs.
- Visitors are to use the bathroom outside in the hallway of PICU.
- Visitors cannot eat or drink inside the patient room, this must be done outside the room after removing all PPE.
- Visitors are to have their temperature monitored twice daily via PICU staff.
- The visitor will be informed that by visiting a patient with suspected or confirmed Ebola, they will become an exposed contact requiring surveillance for 21 days after the last visit.

References:
Public Health Agency of Canada
World Health Organization Interim Infection Prevention and Control Guidance for Care of Patients with Suspected or Confirmed Filovirus Hemorrhagic Fever in Health Care Settings, with Focus on Ebola. August 2014

Department of Health United Kingdom, Advisory Committee on Dangerous Pathogens (2012). Management of Hazard Group 4 viral hemorrhagic fevers and similar human infectious diseases of high consequence
Staff and Physician Coverage and Monitoring

- Goal when treating patient is to minimize the number of staff directly involved with the patient while also being able to maintain set out guidelines for safety.
- An effort will be made to reduce the number of staff that comes in contact with patient and environment.
- Staff will be instructed to self-monitor for fatigue while caring for a patient, as staff fatigue increases the risk of errors with PPE.
- Medical Students, Residents, Nursing students, Respiratory Therapy students and other learners will not be allowed to enter EVD patient rooms.
- A logbook will be maintained of staff entering patient room.
  - Ebola Room Entry Log
- Care providers should be confined to suspected EVD patient for shift. Should a care provider be needed to care for other patients (i.e. Attending) they must doff appropriately and change hospital scrubs before caring for other patients.
- There will undoubtedly be a need for the charge RN and RRT to augment staff at this time.
- All Staff must be N95 Fit tested and appropriately trained in donning and doffing of PPE.
- All persons entering room must have designated “buddy” to help doff PPE.
- Trauma MD to make decision for appropriate care team for patient; Hospitalist or Intensivists. Nursing resources may be collected from PICU, ED and NST regardless of MD care provider.
- The amount of time that staff members will be wearing PPE will be monitored to observe staff for fatigue, overheating and dehydration.
- Staff will receive education about self-monitoring and grouping care activities within patient room to reduce number of incidences of entering and exiting patient’s room.
- FIT Testing is encouraged: Ebola FIT Testing Memo
- Ebola Work Restriction Guidelines are to be followed: Work Restriction Guidelines
- Frequently asked questions for staff include: AHS Employee Frequently Asked Questions (Ebola)

References:

AHS EVD Response Planning Aug 2014
  - Care of the Seriously or Critically Ill Patient with possible or proven EVD
Staff Roles Assigned to Room:

PPE Monitor (1 Staff member)
- Once EVD code is first activated, PICU charge RN will assign this role to a PICU RN.
- May be an RN from PICU, ED or NST, an LPN, NP, or other health care worker who is trained in proper donning and doffing of PPE once MOH has deemed positive risk.

PPE Buddy (1 Staff Member)
- Can be any member of the care team (PICU, ED or NST nurse, IPC professional, Respiratory Therapist, Unit Aide) that is able to be designated for doffing of PPE, typically 2nd RN.
- Helps care provider don PPE then monitors through glass of room for possible contamination of care provider.
- Can assist with handing supplies into room.
- When any care provider or support staff exits the room, the PPE buddy must assist in doffing of PPE.

Nursing (2 to 3 Staff Members)
- PICU, ED, NST or combination to be determined based on site wide resources.
- One will act as a care provider and other as PPE buddy, recognizing that these roles can be dynamic.
- If patient status deteriorates an extra RN may need to be assigned as a patient care helper.
- RNs not to come into contact with other patients.

Registered Respiratory Therapist (1 to 2 Staff Members)
- Only to be designated in initial code EVD until the patient is deemed to not required intubation and when a patient is to be intubated and for care following intubation.
- 2nd RRT will be assigned in patient status deteriorates and intubation is anticipated. RRT buddy will assist by gathering intubation supplies, and remain outside of the room with the airway cart to hand in necessary equipment and then must be available for relief of assigned RRT caring for an intubated patient.
- PPE buddy same as RN PPE buddy.

Attending Physician (1 Staff Member)
- Intensivist or Hospital Pediatrician.
- Assigned only to EVD suspected patient
- No residents are to care for EVD suspected patient
- PPE buddy same as RN PPE buddy
Workplace Health and Safety Quick Reference Documents

For guidance on workplace health and safety issues, please see:

- What Do I Do Now? (post exposure quick reference document)
- What Happens Now? (caring for a patient with suspect Ebola)
- What Do I Do Now? (developing symptoms after exposure to Ebola)
Laboratory Services

- Links to the most up to date Laboratory recommendations is provided below:

  - AHS Laboratory Services - Ebola - V10
  - Ebola Patient Testing Summary Sheet
  - Update on Laboratory Testing for Patients with Suspected Ebola
  - Interim Guidelines for Laboratory Management of Ebola Requests

- Direction of MOH to determine blood draws
  - Malaria PCR and Smear
  - EVD PCR and Serology
  - Lassa Fever PCR
  - Blood Culture

- All blood samples are to be collected via Venous Puncture from LAB PERSONNEL ONLY or via CVC or arterial line by RN

- The RN will not draw bloodwork from the CVC or arterial line until the lab personnel are present.

- Capillary samples are not to be collected

- No glass tubes are to be used

- All blood samples are to be transferred to the lab via lab personnel ONLY

- After initial blood work only ISTAT testing will be performed

- Current ISTAT tests available include:
  - CG4+ - lactate, pH, pCO2, pO2, TCO2, Bicarbonate, Base Excess, sO2
  - CHEM8+ - Na, K, Chloride, TCO2, Anion Gap, Ionized Ca, Glucose, Urea, Creatine, Hematocrit and Hemoglobin

- Attending physician in PICU should be consulted immediately if patient is agitated or combative. Sedation should be considered early in this whole process to enhance the safety of all HCWs.

- PICU physicians should also be consulted as soon as possible if lab staff are experiencing difficulties in venipuncture. Tools such as ultrasound may be required to facilitate successful venipuncture.

ACH EVD Blood Collection Process

- From the time of lab draw CLS only has 30 minutes to run the samples on the i-STAT

- Laboratory specimens are collected according to the guidelines for either:
  - CLS Laboratory Specimen Draw
  - PICU Laboratory Specimen Draw

- Attending physician in PICU should be consulted immediately if patient is agitated or combative. Sedation should be considered early in this whole process to enhance the safety of all HCWs.

- PICU physicians should also be consulted as soon as possible if lab staff are experiencing difficulties in venipuncture. Tools such as ultrasound may be required to facilitate successful venipuncture.
CLS Laboratory Specimen Draw:

1. Unit notifies CLS Lab (i.e. Accession Department) at 955-7390 with as much notice as possible to let them know that LAB needs to draw blood in PICU on suspect/known EVD patient. Lab needs time to secure additional resources for both the collection and for internal lab processes required once specimens received in lab.

2. PICU to specify which collection kit for the lab to bring: “Ruling Out” (i.e. initial diagnostic bloodwork as initiated by MOH) or “Monitoring” (i.e. i-Stat testing only). Age of patient required for appropriate blood culture tube selection. Collection kits include manual requisitions with required tests listed. **Do not order tests in SCM.**

3. Accession will ask for RHRN, patient name, and then calls MOC at 770-3757 to notify of blood collection. Accession notifies Lab Technologists of upcoming collection

4. 20 patient demographic labels to be printed in PICU and given to Accession staff upon their arrival

5. Accession will take collection kit requested, phlebotomy tray (including Accel wipes and durable, leakproof specimen transport canister) to PICU.

6. Accession will provide requisitions and malaria history form to nursing staff. Nursing staff to apply demographic labels on requisitions and history form, document ordering physician information, complete history form, and check off the tests that appear on labels already affixed to the requisitions. Nursing staff should make photocopies of completed requisitions and history form for chart retention purposes.

7. Phlebotomist will change into scrubs and don Wet PPE with help of a buddy. Lab buddy to don Dry PPE. Lab buddy will help prepare all collection materials for phlebotomist while they are still donning PPE, including one pack of Accel wipes from kit.

8. Phlebotomists will draw specimens, immediately dispose of used sharps, transfer specimen to appropriate tube.

9. Wipe each tube with Accel wipes and allow to dry on an Accel wipe laid out on a working surface

10. Phlebotomist will affix patient label and “Level IV” label to the tubes. Place Level IV sticker on PathNet label on tube so that it won’t come off easily.

11. Phlebotomist will re-wipe tubes with Accel wipes and allow to dry

12. Phlebotomist on dirty side of anteroom will work with lab buddy on clean side of anteroom to drop each tube into its own biohazard bag containing Dri-mops.

13. Ensure as much air is removed from each bag before sealing. Lab buddy to wipe each bag with Accel wipes and allow to dry prior to being deposited into canister located on clean side of anteroom.

14. Lab buddy wipes entire canister with Accel wipes and allow to dry

15. Lab buddy wraps requisitions and spare labels around the canister

16. Lab buddy doffs PPE, disposing of PPE in biohazard waste bin.

17. Immediately transport canister with requisitions to the lab while wearing fresh gloves.

18. RN PPE buddy to assist phlebotomist with doffing of PPE.

19. Phlebotomist to change out of scrubs.
PICU Laboratory Specimen Draw:

1. CLS Lab (i.e. Accession Department) notified at 955-7390 with as much notice as possible that PICU will be drawing blood specimens from suspected/known EVD patient. PICU and Accession need to arrange for specific time of blood draw to ensure lab personnel will be available to deliver specimen. Lab needs time to secure additional resources for both receiving and delivering specimen as well as for the internal lab processes required once specimens arrive in lab.

2. PICU to specify which collection kit for the lab to bring: “Ruling Out” (i.e. initial diagnostic bloodwork as initiated by MOH) or “Monitoring” (i.e. i-Stat testing only). Age of patient required for appropriate blood culture tube selection. Collection kits include manual requisitions with required tests listed. **Do not order tests in SCM.**

3. Accession will ask for RHRN, and patient name. Accession calls MOC at 770-3757 to notify of blood collection. Accession notifies Lab Technologists of collection.

4. 20 patient demographic labels to be printed in PICU. At least 7 labels should be placed by patient bedside for tube labelling purposes. Keep remaining labels outside of room.

5. Accession will take phlebotomy tray (including Accel wipes and durable, leakproof canister) to PICU at the pre-arranged collection time.

6. Accession will provide requisitions and malaria history form to nursing staff. Nursing staff to apply patient labels on requisitions and history form, document ordering physician information, complete history form, and check off the tests that appear on labels already affixed to the requisitions. Nursing staff should make photocopies of completed requisitions and history form for chart retention purposes.

7. Accession staff, now a lab buddy, will don Dry PPE and enter anteroom to assist RN with post collection specimen packaging. Lab buddy should retain one pack of the Accel wipes for use post collection.

8. RN draws specimens, immediately disposes of used sharps, transfer specimen to appropriate tube.

9. Wipe each tube with Accel wipes and allow to dry on an Accel wipe laid out on a working surface.

10. RN will affix patient label and “Level IV” label to each collected tube. Place Level IV sticker on patient label on tube so that it won’t come off easily. Ensure patient information is not obscured with the sticker.

11. RN will re-wipe tubes with Accel wipes and allow to dry.

12. RN on dirty side of anteroom will work with lab buddy on clean side of anteroom to drop each tube into its own biohazard bag containing Dri-mops.

13. Ensure as much air is removed from each bag before sealing. Lab buddy to wipe each bag with Accel wipes and allow to dry prior to being deposited into canister located on clean side of anteroom.

14. Lab buddy will wipe each bag with Accel wipes and allow to dry prior to being deposited into the canister.

15. Lab buddy wipes entire canister with Accel wipes and allows to dry.

16. Lab wraps manual requisitions and extra patient labels around the canister.

17. Lab buddy doffs PPE, disposing of PPE in biohazard waste bin.

18. Lab buddy immediately transports canister with requisitions to the lab while wearing fresh gloves.
Medication Management

- For recommendations regarding patient care, please refer to this document: [Care of the Seriously or Critically Ill Patient with possible or proven EVD](#)

- Intubation and emergency resuscitation meds will be stored in the narcotics cupboard outside of Room 3 if requested by physician based on patient condition. Key stored as per existing protocol, see PICU Charge Nurse to obtain key code.

- Routine medications should be checked per policy and brought into the room at beginning of shift for 4-6 hour duration.

- Co-signing of medications to occur outside of the room prior to entering the space when possible.

- Fridge meds are to be kept in Fridge located outside of PICU Rm 4.

- Other required medications will be delivered into the room using the procedure once requested from inside the room using a telephone (See Guideline).

- Nebulization of medication will not be performed.

- MDI and spacer are appropriate for use.
Diagnostic Imaging

- Portable X-RAYS are to be absolutely minimized - XRAY will need to stay in room until decontamination process is directed by IP&C.
- Ultrasounds are to be used when possible.
- Other tests requiring patient to be transfer to DI must minimized and will be decided with appropriate care team (Most Responsible Physician, Radiologist on Call) and departments impacted following the Transfer with Site Protocol.
- Guidelines on equipment decontamination can be found via these links:

Equipment Decontamination

[Infection Prevention and Control (IPC) & Workplace Health and Safety (WHS) Ebola Virus Disease (Ebola) Guidance for Acute Care Settings](#)

[Cleaning Protocol Standards for Occupied Patient Cubicle (Isolation)](#)

[Cleaning Protocol Standards for Discharge/Transfer (Isolation)](#)

X-ray/US Requests

- Mobile X-ray unit will stay in the PICU for use with possible EVD patients.
- If a piece of mobile DI equipment is to enter an EVD patient’s room, and IP&C risk assessment should be conducted to determine whether or not the equipment can be removed from the room after being cleaned.
- The X-ray detector cassette will be kept in the basket at the back of the room supply cart to minimize the risk of damage to this expensive piece of equipment.

In Department Imaging

- Computerized Tomography / Magnetic Resonance Imaging / Nuclear Medicine / Fluoroscopy
- Given the risk of EVD virus transmission, transferring a patient to the Diagnostic Imaging Department at the ACH is generally discouraged. In the event an imaging study is required, an IP&C risk assessment should be conducted prior to removing the patient from their isolation room. These general principles will be followed in the event that a patient is going to be transferred to the DI Department:
- Patients to be booked at a specific time – unless critically indicated – should be booked at end of day to ensure room cleaning and settle time minimize room downtime – Rooms will be held open to ensure patients come from unit directly into the DI room.
- Follow AHS patient transport guidelines as per Site Preparation guide. (settle times – 2 hrs)
- Having the patient wait will be avoided at all costs. The patient will not be called to DI until the room is empty and ready to accept the patient. The IP suite will have an isolation cart adjacent to it.
• Any mobile accessory equipment or carts shall be removed from the DI procedure room prior to the patient arriving to reduce exposure.
• Donning will occur outside the procedure room (control room), doffing will occur inside the procedure room (includes DI staff and Porters)
• All linen to be disposed of in biohazard bins

Interventional Radiography
• To minimize travel and potential exposure to Surgical patients – whenever possible Interventional procedures to take place in the multipurpose room
• Use disposable instruments if possible
• IR suite imaging – follow OR standards – TBD as per Site preparation guide
• Gross contamination on non-disposable items to be wiped within the procedure room – at point of use prior to sending to MDR
• Donning will occur outside the procedure room -doffing will occur inside the procedure room (includes DI staff and Porters) Control rooms should be kept “clean” where ever possible
• All linen to be disposed of in biohazard bins

Patient travel within or through DI
• Ensure direct pathways occur to exam room, close doors to adjoining rooms and avoid areas with OP’s/staff (may need to move patient in the US waiting room – all other modalities – have direct access to modalities without passing through common areas
Operating Room

For recommendations regarding Operative interventions for EVD patients, please refer to this document:

Care of the Seriously or Critically Ill Patient with possible or proven EVD

- There are limited recommendations for operating room use in this patient population.
- Currently there is no in OR capability for patients with EVD.
- Procedures will be performed in the PICU.
- Single use disposable items will be used whenever possible.
- Adherence to approved procedures for quarantine and decontamination of instruments and equipment used for patients with positive EVD.
- Procedures for quarantine and decontamination of instruments and equipment used for patients with positive EVD will be used – CJD guidelines should be followed only after discussion with IPC.
- All staff involved in surgery/investigations/procedures should be educated and trained regarding Contact and Droplet isolation and blood born disease precautions. All staff will comply with PPE donning and doffing protocols.
- Unnecessary equipment will not be taken into the patient room.
- Procedures will be performed by staff grade surgeons and anesthesiologists. Residents will not take part in any surgical procedures.
- Two scrub nurses will be required. One will be outside the patient room with a sterile setup and will pass instruments into the patient room as required.
- The second scrub nurse will be in the patient room in full wet PPE. They will assist the surgical team as required.
- Instruments will be passed onto a sterile tray in the patient room. Once in the patient room all instruments will remain in the room until directed otherwise by IP&C.
- Anesthesia will be via total intravenous anesthesia (TIVA) based techniques, an anesthesia machine will not be taken into the patient room.
Medical Device Reprocessing (MDR)

- Units must use Single use disposable items whenever possible. Consult updated service agreement for disposable equivalents.
- All reusable instrumentation used during the care of a patient with EVD like symptoms will be isolated and quarantined.
- Any Instrumentation should be delivered to MDR will be in a clearly labeled biohazard container with “Quarantine – EVD”.
- Medical Device Reprocessing should be notified prior to arrival of quarantined Instrumentation with clear communication around isolation expectations.
- Place ‘Restricted Access’ signage on door to MDR Decontamination.
- Adherence to approved procedures for quarantine and decontamination of instruments and equipment used for patients with positive CJD. CJD guidelines should be followed only after discussion with IPC.
- All staff involved in surgery/investigations/procedures educated and trained regarding Contact and Droplet isolation and blood born disease precautions, occupational risk involved and procedures and processes to be followed.
- MDR processors will be required to have further donning and doffing education provided by the MDR Educator. This education should also include the practice of coaching another staff member through the process.
- MDR will be notified well in advance prior to instrumentation arrival to the department.
- The disposable supplies noted on the revised service agreements will be required to implement this plan.
- The outside of closed case carts or quarantine bins will be cleaned with Accel wipes, prior to transport.
- Environmental services will be on standby to clean elevators used during the transport of quarantined items – should it be contaminated with body fluids – prior to the elevator being put back into regular service.
- Traffic in and out of the MDR Decontamination area will be limited. ‘Restricted Access’ signage will be placed on the MDR Decontamination door.
- All areas used during the cleaning of instrumentation and high level disinfection will be wiped by the surgical processor after use with Accel wipes.
- There will be a designated area for doffing of potentially contaminated PPE within the decontamination area of MDR. Another ‘Clean’ Surgical Processor will provide assistance and guidance for the removal of PPE without contamination.
- Procedures for quarantine and decontamination of instruments and equipment used for patients with positive CJD will be used – CJD guidelines should be followed.
- All staff involved in surgery/investigations/procedures educated will be trained regarding Contact and Droplet isolation and blood born disease precautions, occupational risk involved and procedures and processes to be followed.
• Both the Case Cart washer and Cube Washers have been determined to meet the requirements to inactivate the EVD virus, and instrumentation after this point will be treated as per usual practice.
Waste Management

- Trained environmental service staff to clean room twice per day and as required
- Environmental Services staff must wear wet PPE
- Equipment will not leave the room, unless directed by IPC.
- Cleaning of equipment will be guided by IPC
- No linen is to leave room. All to be disposed of in biohazard containers for waste.
- All waste will be disposed of in biohazard containers. These containers must be no more than ¾ full when sealed for pick up. Overfilled containers pose a risk of leaking/breaking.
- Environmental Services will remove containers on a daily basis (or more frequently if required) following IPC guidelines.
- Waste is to be incinerated
- PPE Monitor will supervise cleaning, waste removal, and doffing of ES staff to ensure staff safety
- Site Environmental Services will notify the waste carrier that waste is Ebola infected prior to pick up.

The most up to date EVD Waste Management guidelines can be found here:  
Ebola Waste Management Recommendations
Recommended Practices for Use of Commode

- EVD patients can have a significant amount of diarrhea and it can be violent so protection of all is essential.
- It is recommended to change the yellow biohazard bag with each episode of large amounts of diarrhea.
- Equipment:
  - Clear plastic bags: on EVD cart.
  - Yellow biohazard bags: on EVD cart.

- Ideally there will be two commodes in the room set up and ready to go. This is what it will look like:
## Commode Set Up Procedure

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Roll commode over large clear plastic bag. Ensure 4 wheels are on the plastic bag. Secure brakes.</td>
</tr>
<tr>
<td>2.</td>
<td>Fold plastic bag over commode, ensuring entire top and back of commode is covered by clear plastic bag.</td>
</tr>
<tr>
<td>3.</td>
<td>Fold over the top of the biohazard bag and place into commode ‘hole’. Spread bag out at base to avoid wrinkles.</td>
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</tbody>
</table>
4. Add solidifier into yellow biohazard bag (use multiple solidifiers if patient has significant amount of diarrhea).

**proper PPE to be worn whenever in the patient room**

5. Place commode seat on top

6. The patient is ready to 'go.'
## Commode Waste Disposal Procedure

<p>| | |</p>
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<tbody>
<tr>
<td>1.</td>
<td>Ensure brakes are on at all times.</td>
</tr>
<tr>
<td>2.</td>
<td>Position patient and have them ‘go’.</td>
</tr>
<tr>
<td>3.</td>
<td>Assist patient back to bed, cover commode seat with blue pad (blue pad is just to cover stool.)</td>
</tr>
<tr>
<td>4.</td>
<td>Add more solidifier to yellow biohazard bag if required. Add blue pad to yellow biohazard bag.</td>
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</tbody>
</table>
| 5. | Wipe commode seat with Accel wipe.  
**proper PPE to be worn whenever in the patient room** |
| 6. | Wipe underside of seat with Accel wipe.  
**proper PPE to be worn whenever in the patient room** |
<table>
<thead>
<tr>
<th></th>
<th>7. Gently fold yellow biohazard bag with stool down into a loose ball. <strong>proper PPE to be worn whenever in the patient room</strong></th>
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<tbody>
<tr>
<td></td>
<td>8. With visible soiling, wipe back and sides of clear plastic bag with Accel wipes. <strong>proper PPE to be worn whenever in the patient room</strong></td>
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</tr>
<tr>
<td>9.</td>
<td>Gently remove clear plastic bag and lay the bag on the floor around yellow biohazard bag. <strong>proper PPE to be worn whenever in the patient room</strong></td>
</tr>
<tr>
<td>10.</td>
<td>Wheel commode off of clear plastic bag.</td>
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<tr>
<td>11.</td>
<td>Carefully wrap yellow biohazard bag into ball within clear plastic bag.</td>
</tr>
<tr>
<td></td>
<td><strong>proper PPE to be worn whenever in the patient room</strong></td>
</tr>
<tr>
<td>12.</td>
<td>Dispose of waste ‘ball’ into dedicated biohazard container.</td>
</tr>
<tr>
<td></td>
<td><strong>proper PPE to be worn whenever in the patient room</strong></td>
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<tr>
<td><strong>14.</strong></td>
<td>Wipe commode clean with Accel wipes.</td>
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<tr>
<td><strong>15.</strong></td>
<td>Proceed with setup instructions.</td>
</tr>
</tbody>
</table>
Decontamination

Please refer to the following link for the most up to date recommendations:

Infection Prevention and Control (IPC) & Workplace Health and Safety (WHS) Ebola Virus Disease (Ebola) Guidance for Acute Care Settings

Spills

- Code Brown will be called for all spills that occur outside the patient isolation room.
- Protective Services staff accompanying transfer team will call the Code Brown and remain at the scene to ensure access to the spill is controlled and communicate nature of spill and patient condition to Environmental Services staff when they arrive.
- Cleaning of walls that are not visibly soiled would only be necessary if the spill is close to the wall. As the Environmental Services staff member completes the perimeter clean with bleach after the solidified body fluids have been removed, Environmental Services will also clean about 4 feet up the wall if the spill was close to the wall.
- Environmental Services staff will take their outer gloves off and be given a new pair of gloves by the buddy after cleaning up all the body fluid debris, and before moving to cleaning with the mop and bleach.
- The chair will be disinfected after the cleaner has used it to take off their PPE, before the Buddy uses it to take off their PPE. The cleaner can be the staff member who supports the PPE Buddy in removing their PPE after completing hand hygiene and donning a new pair of gloves. The chair should be disinfected one more time after the buddy removes the buddy PPE.

Equipment

- Equipment will be dedicated to the patient or, preferably, should be disposable, single use. Any reusable equipment will be dedicated to the room for the duration of the patient stay.
- No equipment will be removed from the room until approved by IPC.
- Cleaning and disinfection using bleach or Accel wipes will occur.
- The care nurse will remove any gross contamination from equipment that needs to go to MDR prior to putting the item into the MDR bin. Accel wipes will be used.

Commodes

- Commodes will be provided for single patient use and labelled appropriately.

Laundry

- Handle soiled or used linens with minimal agitation and place directly in biohazard bags/containers.
- All soiled linens will be disposed of as biohazardous waste.
• Staff will be provided with AHS issued scrubs. These will be removed in the staff locker room and cleaned by laundry services. If the scrubs become contaminated with patient fluids, the health care worker will change immediately in the anteroom and the scrubs will be discarded in the biohazardous waste container in the room.

Spill Kits
• Spill kits with an absorbent should be in the room and appropriate disposable PPE located inside the kit.

Terminal Cleaning
• Rooms will undergo a terminal cleaning using bleach solution once the patient is discharged.

Routine Housekeeping
• Routine housekeeping will occur.
• All Environmental Services staff entering the room will be required to don full Wet PPE and will use bleach solutions or Accel wipes to clean surfaces and equipment.
Transportation within the ACH Facility

- EVD patients will not leave their isolation rooms except under very rare circumstances for potentially lifesaving diagnostic and therapeutic procedures that can not be performed in the patient room or until patient is deemed virus free.
- When necessary use appropriate barrier coverings on the patient (mask, gown, wrapped in sheets or impervious dressings if draining present).
- Notify personnel in receiving area of the impending arrival and precautions necessary to prevent transmission.
- Contact with patient and patient care environment should be limited to assigned personnel. Assigned personnel should not also care for other patients.
- PICU Charge Nurse will notify receiving department about the patient transport and precautions required.
- PICU Care Nurse and Buddy will accompany the patient transport team to monitor for spills of body fluids so that immediate notifications can occur (Code Brown) and to stay at site of spill to control access to spill area.
- Protective Services will clear hallways and close doors in advance of patient movement through the halls.
- If elevator transport is required, the trauma elevator will be used.
- Arrange transport to consider operation of the elevator to avoid contamination of the inside the elevator or the elevator panel (clean assist).
- Environmental services will be on standby to clean the elevator – should it be contaminated with body fluids – prior to the elevator being put back into regular service.

References:
- Infection Prevention and Control (IPC) & Workplace Health and Safety (WHS) Ebola Virus Disease (Ebola) Guidance for Acute Care Settings
- Public Health Agency of Canada
- CDC 2007 Guideline for Isolation precautions: Preventing transmission of Infectious Agents in Healthcare Settings
- Department of Health United Kingdom, Advisory Committee on Dangerous Pathogens (2012). Management of Hazard Group 4 viral hemorrhagic fevers and similar human infectious diseases of high consequence
Equipment and Supplies

- Adequate supplies for site use will be maintained by CPSM.
- Information for restocking will be provided on each cart.
- Equipment and supplies brought into the patient’s isolation room will remain there until patient is discharged or until decontamination and removal can be coordinated and overseen by IPC.
- Crash carts: Each site will ensure that crash cart contents are easily accessible/readily available adjacent to the room where the EVD patient is being treated.
- Disposables will be discarded and reusable equipment will undergo terminal clean at patient discharge based on IPC direction.
- Disposable supplies and instruments will be used wherever possible.
- The reusable items will have gross contaminants removed with approved disinfectant (Accel wipes/PCS 1000).
- Bins for equipment/instruments that need to go to MDR will be kept separate from unit bins and are to be clearly labelled “EVD” prior to being sent directly to the MDR at each site. Items will be transferred from the “dirty bin” in the room to a “clean bin” in the anteroom prior to transport. The MDR bin will be disinfected with bleach solution or Accel wipes prior to being moved out of the room for transport to MDR. Consult with site IPC to confirm this process.
- Hospital Scrubs will be provided for staff that are providing direct patient care to the EVD patient to avoid staff having to launder contaminated clothing at home.
- Staff will don the scrubs in the staff locker room and can doff scrubs in the bathroom beside the PICU conference room at the end of the shift or prior to returning to general duty. Staff will change scrubs while in the patient room if the scrubs become contaminated – a privacy screen will be made available in the room for this purpose.
- WHS, IPC and the ICU CNE will provide education and reinforcement of PPE donning and doffing to unit staff.
- Given that contaminated linens will be incinerated, it is important to track available linens on impacted units to ensure quantities are available to support patient care. Adjustment in stock quotas may be required on these units.
Room and Equipment Maintenance

- Confirmed EVD will be admitted to PICU at ACH into Rooms 4, 2/3 and ED 26.
- These rooms are negative-pressure capable and have anterooms that will support contact and droplet isolation protocols.
- FM&E has verified these rooms for correct operation.
- With items requiring immediate maintenance attention ICU will contact FM&E. These items may include but are not limited to electrical, lighting, medical gases, Tornado (Bed Pan Washer), room and isolation control.
- All FM&E Staff will follow strict PPE donning and doffing procedures.
- All FM&E staff who have to enter patient rooms for maintenance will participate in infection control education/training demonstrating correct use of PPE and hand hygiene and handling of contaminated wastes prior to entering the patient’s room.
- A log will be kept of all education received
- All tools and test equipment utilized within the room during a repair will require an IP@C risk assessment prior to being determined if it must be left in the room or can be cleaned and wiped down using a bleach solution or Accel Wipes.

References:
Ebola Virus Disease, CDNA Guidelines for Public Health units – Australia: WHO Interim Prevention and Control Guidance For Care of Patients with Suspected or Confirmed Filovirus Hemorrhagic Fever.

Infection Prevention and Control (IPC) & Workplace Health and Safety (WHS) Ebola Virus Disease (Ebola) Guidance for Acute Care Settings

AHS Ebola Information for Health Professionals
Facility Capacity Contingency

- Suspected, probable and confirmed cases of EVD requiring admission will be accommodated as quickly as possible.
- (PICU Room 4, PICU Room 2/3, ED Room 26) at the ACH are the designated unit.
- Transfer within and out of PICU will be expedited to allow this to occur rapidly.
- Capacity within the units will be managed as per usual protocols.
- PICU capacity escalation plans include PACU as identified in the ACH Over Capacity Plan.

Reference:
Ebola Virus Disease, CDNA Guidelines for Public Health Units – Australia; WHO Interim Prevention and Control Guidance for Care of Patients with Suspected or Confirmed Filovirus Hemorrhagic Fever.
Evacuation Procedures (Code Green)

- Should the evacuation of an EVD patient in the ICU be required due to fire or other circumstances, the Code Green (ACH Evacuation Procedures) will be instituted.
- Contact and Droplet Isolation protocols will be maintained at all times.
- First level evacuation will be to the most adjacent, non-impacted isolation room.
- Supplies and equipment will not be transferred from the original patient room unless absolutely necessary.
- Second level evacuation will be directed by Site Control.
Care of the Deceased

- Refer to established guidelines.

- Deceased Body (Acute Care Setting Algorithm):
  
  Deceased Body: Acute Care Setting Algorithm (DB-AC)

- Body Handling Protocol; EVD
  
  Body Handling Protocol (BHP)

References:

Bodies of Deceased Persons Regulation of the Public Health Act

Care of the Seriously or Critically Ill Patient with possible or proven EVD