

Ebola Emergency Management Plan

British Columbia Emergency Health Services

BCEHS Ebola Working Group

**Updated
May 28, 2015,**



This document is intended to outline BCEHS' planning and preparedness, mitigation, response and recovery needs as it relates to an Ebola event within British Columbia. This plan includes the BCEHS' integration into the health sector partner's Ebola planning as well as integration with police and fire services.

This page has purposefully
been left blank.

Table of Contents

1. BACKGROUND	3
1.1. Introduction.....	3
1.2. History.....	3
2. BCEHS EBOLA Outbreak PLAN – Operations Centres	4
2.1. Expected Duration	4
2.2. Overview of Planning Process	4
2.2.1. The Plan Principles	4
2.2.2. BCEHS Incident Management Structure – Site Support.....	4
2.2.3. Delivery of Services	5
2.2.4. Essential Services	5
2.3. Planning Phase	5
2.3.1. Monitoring.....	6
2.3.2. BCEHS Personnel Surveillance.....	7
2.4. Response Phase.....	7
2.4.1. BCEHS Personnel Surveillance.....	8
2.4.2. BCEHS Staff Health and Wellness	8
2.5. Recovery Phase.....	8
2.6. Post Event Operational Review	9
3. Dispatch and BC Patient Transfer Network Call Screening.....	10
3.1. 911 Call Screening Emerging Infectious Disease MPDS Questions.....	10
3.2. Dispatch Supervisor Procedure.....	14
3.3. BCPTN Procedures (for details see - 1 Appendices).....	14
4. Managing the Risk within BCEHS	15
4.1. Reducing Paramedic Exposures.....	15
4.2. Paramedic Basic PPE:.....	16
4.3. BCEHS Infectious Disease Care Team (IDCT).....	17
4.4. Proper Protection Measures Infectious Disease Response Unit	20
4.5. Biohazard and Soiled Materials Management	20
5. BCEHS EBOLA PLAN AUTHORITY.....	21
1. Appendices – BC Patient Transfer Network Inter-facility Call Screening Process.....	22
2. Appendices – Technical Advisor Program & EPOS Protocols	23

3. Appendices –Ebola Signs and Symptoms.....	25
4. Appendices - Ebola - Task Force: Policy Communique - PPE Guidelines for Ebola Virus Disease	27
5. Appendices – Pre-Hospital Call Algorithm	28
6. Appendices – Infectious Prevention and Control Guidance for Air Transport	29
7. Appendices – BC Ferries Ebola Transport Structure.....	34
8. Appendices – Ebola Cleaning, Decontamination and Waste Management.....	35
9. Appendices – Reducing Paramedic Exposures – Donning and Doffing Procedures.....	48

1. **BACKGROUND**

1.1. **Introduction**

Ebola is spread through direct contact of mucous membranes or non-intact skin with blood or body fluids of an infected person or animal. A number of outbreaks have been recorded in African countries since the mid 1970's, with the most recent serious outbreak affecting Western Africa.

The purpose of this Plan is about BCEHS's responsibilities in the prevention of spread of an outbreak of Ebola Viral Disease (EVD). This done by addressing overarching responsibility regarding the safety of BCEHS personnel, protection of patients and the public by mitigating the risk of spreading EVD to larger population. This includes the efficient screening of 911 calls / inter-facility transfers, the proper use of Personal Protective Equipment (PPE) and standard patient management, as well as transport specific EVD procedures.

1.2. **History**

The 2014 Ebola epidemic is the largest in history, affecting multiple countries (<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html#areas>) in West Africa; specifically Sierra Leone and Guinea.

Two imported cases, including one death, and two locally acquired cases in healthcare workers have been reported in the United States (<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/united-states-imported-case.html>). All but one HCW who acquired their illness in caring for EVD patients have recovered and there have been no further transmissions.

The US CDC and partners are taking precautions to prevent the further spread of Ebola within the United States. CDC is working with other U.S. government agencies, the World Health Organization (WHO), and other domestic and international partners and has activated its Emergency Operations Center to help coordinate technical assistance and control activities with partners. CDC has also deployed teams of public health experts to West Africa and will continue to send experts to the affected countries.

Source:



The current outbreak of Ebola is in West Africa. There have not been any cases of Ebola in Canada. There are current travel health notices of the Ebola virus in: Sierra Leone and Guinea

Source:

Public Health Agency of Canada

www.publichealth.gc.ca

2. **BCEHS EBOLA Outbreak PLAN – Operations Centres**

2.1. **Expected Duration**

There is no history of an Ebola Outbreak outside of African; thus an Outbreak on North American soils would be precedent setting, thus no means to accurately determine the duration of such an event.

2.2. **Overview of Planning Process**

2.2.1. **The Plan Principles**

The BCEHS Ebola Emergency Management Plan (here forward known as the Plan) is based on:

- The Emergency & Health Services Act
- The Emergency Program Act
- The Principles of British Columbia Emergency Response Management System (BCERMS)
- WorkSafe BC Regulations
- The BCEHS Mass Casualty Incident Emergency Management Plan – updated January 2014

2.2.2. **BCEHS Incident Management Structure – Site Support**

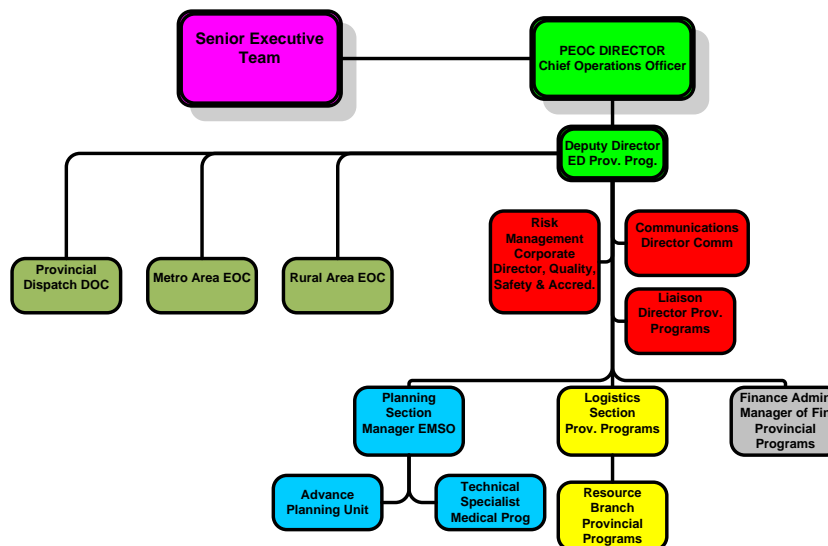


Figure 1 – BCEHS Provincial Emergency Operations Centre (PEOC) – Organizational Chart

In the event that the British Columbia Provincial Health Officer declares an Ebola outbreak, BCEHS will activate the PEOC to mitigate the Ebola Outbreak on the delivery of BCEHS daily services, while still managing the delivery of services specific to the Ebola Outbreak.

2.2.3. Delivery of Services

The objective of BCEHS during a declared Ebola outbreak will be to maintain the delivery of BCEHS essential services utilizing strategies and tactics based on the scope and impact of the outbreak on the health and wellbeing of BCEHS personnel.

2.2.4. Essential Services

These services are defined as those services related to emergency medical services including:

1. Critical Care Transport
2. Pre-hospital care
3. Provincial district/dispatch supervision
4. Dispatch services
5. Provincial Scheduling
6. Patient Transport Network (BCPTN)
7. Other Services that support the essential delivery of daily services
 - Emergency Management Special Operations
 - Technical Advisor Program
 - Planned Events (Mass gatherings)

In an effort to maintain essential services, all BCEHS personnel holding paramedic licences may be required to fulfill paramedic duties. The same will hold true for those BCEHS personnel who meet the qualifications for the dispatch centres and whose services may be required to support the dispatch centres.

In order to control any potential spread of the virus among staff, it will be necessary to enact restricted access between the essential services areas. As an example, those personnel assigned to dispatch will not be able to cover shifts on car or Critical Care Transport. Movement between departments, such as admin office, Provincial Scheduling and dispatch centres should be kept to a minimum.

Special Operation's event coverage will be scrutinized to cover only essential events as directed by the PEOC Director.

2.3. Planning Phase

Activate the Provincial Emergency Operations Centre, (PEOC), Area Operations Centre(s) (AOC) and Provincial Dispatch Centre (DOC) to Level One, to monitor the increasing threat of the a declared Ebola Outbreak or to monitor increasing levels prior to a declaration by the Chief MHO and to develop Area specific contingency planning Consider the following:

1. Ensure that the station supplies are up to daily needs
2. Ensure that there is a 12 week BCAS Ebola Personal Protection Equipment, PPE stockpile
3. Prepare and distribute the BCEHS Internal Ebola Bulletin on a regularly scheduled basis to BCEHS personnel (produced by Medical Programs and distributed by Communications Branch)

4. Prepare to deliver Information Sessions for BCEHS personnel and their families on infection prevention and control as well as personal and family preparedness
5. Review and ensure proper field use of infection prevention and control measures are being followed
6. Conduct periodic review of infection prevention and control measures as per the British Columbia Centre for Disease Control (BCCDC) to ensure currency with effective measures
7. Maintain an ongoing quantitative fit-testing education program for protective masks
8. Continue, as appropriate, the comprehensive Infectious Prevention and Control Educational Program

Refer to the PEOC & AOC Concept of Operations for the emergency management structure and reporting requirements for the BCEHS Operations Centres specific ensuring to establish reasonable Operational Periods to maintain personal health and wellbeing. The Concept of Operations not only details the emergency management structure used, it outlines the authoritative control throughout the BCEHS structure during PEOC & AEOC activations.

Ensure that proper infection prevention and control practices are followed to contain and control the specific infection as well as any circulating infectious risks. This will include the Exposure Control Plan, Hand Hygiene Policy and other guidance produced to support staff specific to the identified risk:

<https://intranet.bcas.ca/publications/exposureControlPlan.pdf>

Follow BC Policy Chapter 3 – Occupational Health and Safety

3.4.2 Pre-Exposure Precautions for Communicable Diseases:

<https://intranet.bcas.ca/policy/volume2/chapter3/3.4.2.html>

2.3.1. Monitoring

Effective monitoring is essential in producing Incident Action Plans (IAP) and preparing the service for the impacts for a potential Ebola Outbreak.

Monitoring includes but is not limited to:

1. BCEHS <https://intranet.bcas.ca/>
2. Emergency Management Unit – Ministry of Health
<http://www.health.gov.bc.ca/emergency/>
3. Health Emergency Management BC - PHSA
 - VIHA http://www.viha.ca/emergency_management/
 - VCH
https://www.vch.ca/your_environment/facility_licensing/residential_care/emergency_preparedness/

- IHA
<http://www.interiorhealth.ca/YourEnvironment/EmergencyPreparedness/Pages/default.aspx>
- NHA <https://www.northernhealth.ca/>
- PHSA
<http://www.phsa.ca/AgenciesAndServices/Services/Emergency-Management.htm>
- 4. First Nations Health Authority (FNHA)
<http://www.fnha.ca/what-we-do/environmental-health/environmental-public-health>
- 5. Health Canada <http://www.hc-sc.gc.ca/hc-ps/ed-ud/respond/index-eng.php>
- 6. Emergency Management Unit <http://www.health.gov.bc.ca/emergency/index.html>
- 7. Emergency Management BC <http://embc.gov.bc.ca/em/index.html>
- 8. British Columbia Centre for Disease Control www.bccdc.org
- 9. World Health Organization www.who.org
- 10. Public Health Agency of Canada <http://www.phac-aspc.gc.ca/Ebola>
- 11. Public Safety Canada <http://www.publicsafety.gc.ca/index-eng.aspx>
- 12. Media outlets:
 - As an information source and to monitor misinformation

2.3.2. BCEHS Personnel Surveillance

BCEHS through PEARL, Dispatch and office managers will diligently monitor absentee personnel during a declared outbreak. This surveillance of BCEHS personnel is in order to isolate potential carriers from the different work environments (street, dispatch centres, BCPTN, Scheduling and administration offices etc.) to minimize the spread. The other measure that will be enforced when an EVD outbreak is declared is the licenced paramedics who also licenced EMD and/or EMCT in dispatch will either work on the street or in dispatch, but not shifts in both throughout the duration of the declared outbreak; thus, mitigating cross contamination of other paramedics, other first responders, physicians, hospital employees, BCEHS dispatchers, BCPTN personnel and/or nursing home staff.

2.4. Response Phase

Expand the PEOC and AOCs to Level Two or Three based on the scope of the declared Outbreak including those functions required to maintain pre-hospital and inter-facility transfer essential services level. Consideration must be given to the fact that the PEOC & AEOC must be considered as essential services. Consider the reduction of non-essential services in an effort to move qualified staff to essential services delivery and support and to isolate staff from each other to reduce the potential for cross-infection.

It is during this phase that supply lines could be greatly compromised; thus it is imperative to ensure stockpiling of resources has been augmented as laid out in the Initial Planning Phase, section 3.3.

Of special note is any BCEHS staff member who is exposed to a sick person at home they should remain home. The employee will remain off work for the duration of the other individual's sickness or for a minimum of *twenty one days* after being declared cured. Pay claims for any medical quarantine so ordered will be subject to applicable collective agreement provisions.

2.4.1. BCEHS Personnel Surveillance

For paramedics and dispatch personnel, surveillance will be managed through the CAD system to track paramedic cases of Ebola in order to minimize exposure rates of patients, other paramedics, managers, and office staff. Paramedics who shift between dispatching and paramedic duties in the field will be restricted to either dispatching or field duties through the duration of the declared Ebola Outbreak. Sick days related to respiratory illness for office personnel will be tracked through the respective office managers and coordinated through the PEARL.

2.4.2. BCEHS Staff Health and Wellness

Being personally prepared at home and at work, for any type of disaster or major emergency, provides a certain level of comfort for both the employee and the employer through trying times. Using the information provided on the link below, with a few added infectious preparedness and control techniques may increase the level of protection against the Ebola virus for staff and their family members:

http://embc.gov.bc.ca/em/hazard_preparedness/general_preparedness.html

It is normal and expected for individuals to experience a heightened level of anxiety with the threat of a potential Ebola Outbreak. Constant media reporting via radio, TV and print, with experts expressing their personal and professional opinions, including death tolls in an effort to capture viewership exasperates anxiety levels. BCEHS personnel should monitor regularly scheduled bulletins produced by BCEHS Communications and other reliable sources, such as BCCDC, the WHO, Public Health Agency of Canada for accurate and current information.

To access the Employee Critical Incident Stress Debriefing (CISD) program contact any unit chief, charge dispatcher, management personnel, or call 1-800-303-6066.

2.5. Recovery Phase

The Recovery Phase is the time to do a complete inventory of the Infectious Control and Mass Casualty Incident stockpiles and replenish them. It is also essential to collect and assess the stockpiles to determine if the resources were appropriate for the use and if there were sufficient supplies to manage the pandemic/epidemic event.

2.6. *Post Event Operational Review*

In an effort to capture ‘Best Practices and Lessons Learned’ the PEOC and each AOC will conduct an Operational Review with those individuals who worked within the scope of the respective centre as well as all their personnel. Each centre will produce a Post Ebola Outbreak Operational Review Report that will capture lessons learned, recommendations and outstanding issues. The documents will be forwarded to the Emergency Management Special Operations at BCASEMO@bcehs.ca and capsulated into a single BCEHS Post Operational Review Report.

The Reports will be broken into two specific categories:

- Operational
 - Issues specific to Context, Planning, Preparedness/Mitigation, Response and Recovery
- Structure
 - Issues related to facilities, management structures and support services

3. Dispatch and BC Patient Transfer Network Call Screening

3.1. 911 Call Screening Emerging Infectious Disease MPDS Questions

(BCEHS uses the Medical Priority Dispatch System (MPDS); the following questions are used under the limited use license. International Academies of Emergency Dispatch is the sole and exclusive owner of the copyrights and other intellectual property associated with the materials.)

Listen carefully and tell me if s/he has any of the following symptoms:

- difficulty breathing or shortness of breath
- persistent cough
- measured body temperature > 101.4° F (38.0° C)
- chills
- unusual sweats
- hot to the touch in room temperature
- unusual total body aches
- headache
- sore throat
- nasal congestion (blocked nose)
- runny or stuffy nose
- recent onset of any diarrhea, vomiting, or bloody discharge from the mouth or nose
- abdominal or stomach pain
- unusual (spontaneous/non-traumatic) bleeding from any area of the body
- contact with someone with the flu or flu-like symptoms (if so, when?)

Page 2 MPDS Questions

Ask only in early phases when new flu, respiratory illness, or hemorrhagic fever is emerging from specific areas:

- traveled in the last 21 days (if so, where?) Note: (If travel time frame questionable) was it roughly within the past month?

Ask only if a higher-risk exposure is suspected (close contact with sick persons, dead bodies, or exotic

African animals):

- needle stick, scalpel cut, or similar injury in treating or caring for Ebola patients
- blood or body fluid exposure to eyes, nose, or mouth (mucous membranes) in treating or caring for Ebola patients
- skin contact with, or exposure to, blood or body fluids of an Ebola patient
- direct contact with a dead body without use of personal protective equipment in a country where an Ebola outbreak is occurring

- handling of bats, rodents, or non-human primates in or recently received from Africa
- Infection Prevention Instructions:
 - (Keep isolated) From now on, don't allow anyone to come in close contact with her/him.

EMCT procedure should be utilized when the above questions yield a high probability patient.

IMMEDIATELY: Advise Dispatch Supervisor immediately of suspected Ebola event
Ebola-Specific Pre-hospital Assessment Questions* (immediately following EIDS Tool):

1. When did the symptoms first start?
2. (If recent travel to Africa) What countries did you visit in Africa?
 - a. What was the duration?
 - b. Was it for work or pleasure?
 - c. (If for work) Were you there to provide healthcare to others?
 - d. Were you visiting mostly the city, the country or both?
 - e. Did you spend time in any medical clinic, healthcare facility or hospital while travelling?
 - f. Have you visited caves/mines or had contact with non-human primates (monkeys, gorillas, lemurs, gibbons, chimpanzees, etc.), bats or rodents within outbreak countries?
 - g. Were you diagnosed or treated for malaria while travelling?
 - h. Did you take medicines to prevent malaria while travelling?
3. Do you have malaria?
4. Have you come into contact with live or dead people or animals known or strongly suspected of having EVD (Ebola Virus Disease)?
5. Have you worked in a laboratory within the outbreak area or come into contact with any bodily fluids from humans suspected to have the disease?
6. Have you participated in the funeral of someone suspected or known to have EVD?
7. Have you been in contact with or provided personal care to somebody suspected or known to have EVD?

Ebola-Specific Post Dispatch Instructions:**

IMPORTANT: Provide **ONLY** these instructions. Do **NOT** provide any PAI or PDI instructions from ProQA or AMPDS!

1. Tell the patient not to leave the exact spot in the room/house/area s/he is currently in.
2. Do not enter the same area as the patient or make any further contact with the patient. Move to another room if possible.
3. Do not leave.
4. Reassure her/him help is on the way.
5. Let her/him rest in the most comfortable position.
6. If s/he gets worse in any way, call us back immediately for further instructions.

*Assessment questions are in addition to the EIDS Tool in ProQA/AMPDS

**Ebola-Specific Post Dispatch Instructions are the ONLY instructions provided by the EMCT (Do NOT provide PDIs from ProQA or AMPDS)

Inter-facility Transfer Requests:

All inter-facility transfers for patients diagnosed with Ebola or suspected of having Ebola must be processed through the BC Patient Transport Network (BCPTN). EMCTs must warm-transfer the caller to the BC BCPTN.

The following questions must be asked in addition to regular Infectious Precaution questioning:

1. Has the patient been questioned or screened for Ebola?
2. Is s/he considered an exposure risk?

(NO – Proceed with booking the request)

(YES – Warm transfer the caller to BC BCPTN)

IMMEDIATELY: Advise Dispatch Supervisor immediately of suspected Ebola event

Ebola-Specific Pre-hospital Assessment Questions* (immediately following EIDS Tool):

1. When did the symptoms first start?
2. (If recent travel to Africa) What countries did you visit in Africa?
 - a. What was the duration?
 - b. Was it for work or pleasure?
 - c. (If for work) Were you there to provide healthcare to others?
 - d. Were you visiting mostly the city, the country or both?
 - e. Did you spend time in any medical clinic, healthcare facility or hospital while travelling?
 - f. Have you visited caves/mines or had contact with non-human primates (monkeys, gorillas, lemurs, gibbons, chimpanzees, etc.), bats or rodents within outbreak countries?
 - g. Were you diagnosed or treated for malaria while travelling?
 - h. Did you take medicines to prevent malaria while travelling?
3. Do you have malaria?
4. Have you come into contact with live or dead people or animals known or strongly suspected of having EVD (Ebola Virus Disease)?
5. Have you worked in a laboratory within the outbreak area or come into contact with any bodily fluids from humans suspected to have the disease?
6. Have you participated in the funeral of someone suspected or known to have EVD?
7. Have you been in contact with or provided personal care to somebody suspected or known to have EVD?

Ebola-Specific Post-Dispatch Instructions:**

IMPORTANT: Provide **ONLY** these instructions. Do **NOT** provide any PAI or PDI instructions from ProQA or AMPDS!

1. Tell the patient not to leave the exact spot in the room/house/area s/he is currently in.
2. Do not enter the same area as the patient or make any further contact with the patient. Move to another room if possible.
3. Do not leave.
4. Reassure her/him help is on the way.
5. Let her/him rest in the most comfortable position.
6. If s/he gets worse in any way, call us back immediately for further instructions.

***Assessment questions are in addition to the EIDS Tool in ProQA/AMPDS**

****Ebola-Specific Post Dispatch Instructions are the ONLY instructions provided by the EMCT (Do NOT provide PDIs from ProQA or AMPDS)**

Inter-facility Transfer Requests received at BCAS Dispatch:

All inter-facility transfers for patients diagnosed with Ebola or suspected of having Ebola must be processed through the BC Patient Transport Network (BCPTN). EMCTs must warm-transfer the caller to the BCPTN.

The following questions must be asked in addition to regular Infectious Precaution questioning:

1. Has the patient been questioned or screened for Ebola?
2. Is s/he considered an exposure risk?

(**NO** – Proceed with booking the request)

(**YES** – Warm transfer the caller to BCPTN)

EMD Procedures

IMMEDIATELY: Confirm with Dispatch Supervisor s/he has been advised of suspected Ebola event

Immediately upon receiving information regarding suspected Ebola patient:

1. Advise responding BCAS crews of suspected Ebola event and state the following:

“Make your call a wait and wait well away. Do NOT enter the area under any circumstances. Ensure no one else enters the location. The Dispatch Supervisor is contacting the TA – we’ll advise.”

2. Confirm with the Dispatch Supervisor that partner agencies have been notified.

If crews arrive at a scene where the patient is presenting with Ebola-like symptoms:

1. Advise crews to leave and wait immediately outside the location.
2. Instruct crews NOT to go in the ambulance and NOT to leave the area.
3. Instruct crews not to come into contact with any other individuals
4. Advise Dispatch Supervisor.

IMPORTANT: The above info in the event.

3.2. Dispatch Supervisor Procedure

IMMEDIATELY: Advise responding partner agencies of suspected Ebola event & have their responding crews to wait with BC Ambulance crews at designated area.

Immediately upon receiving information regarding suspected Ebola patient:

1. Contact Technical Advisor (TA) and EPOS
2. Request responding partner agency to have their responding crew(s) call the BCAS Dispatch Supervisor directly, who will conference in the TA, Duty Manager and BC Ambulance Service crew(s)

If crews arrive at a scene where the patient is presenting with Ebola-like symptoms:

1. Conference the BC Ambulance Service crew(s), responding partner agency crew(s), TA, Duty Manager and EPOS

If hospital advises of exposure risk to a crew who previously transported a patient who is now suspected of having Ebola (unknown at the time of transport):

1. Contact Duty Manager
2. If crew members are on-duty, immediately show them out of service and have them contact the Duty Manager
3. Follow the communicable disease process as outlined in the memo titled “communicable disease process” dated Oct 9 2014
 - a. <https://intranet.bcas.ca/memos/all/14/1003067.pdf>

IMPORTANT: Document above info in the event

3.3. BCPTN Procedures (for details see - 1 Appendices)

Transfer Identified of a High Risk Suspect Ebola Patient

(From A facility to confirmed receiving facility identified by Health Authority in consultation with BCPTN, EPOS, TA)

BCPTN receives and confirms transfer request.

High Risk and/or confirmed Ebola (VHF) patient identified.

contacts On –Duty TA

Setup Red Teleconference inclusive of MHO, EPOS, TA, facility requesting the transfer and the receiving facility and potentially Public Health Agency Canada (PHAC) at the request of the MHO.

BCPTN Staff - For Your Action:

All patient transfer requests involving patients who pose a high risk or confirmed Ebola will be treated as a **RED patient** and we ask that you refer to the “Additional Infectious Precautions” handout to confirm that all appropriate members are included in the conference call. Until we have confirmation from the health authorities on the appropriate receiving specialists, please follow the direction of the ETP and Sending Physician.

4. Managing the Risk within BCEHS

4.1. Reducing Paramedic Exposures

BCEHS has undertaken aggressive Ebola preparedness and planning measures to manage an Ebola or suspected Ebola patient. This includes dispatch and BCPTN screening protocols, transporting protocols & procedures in order to isolate a patient from daily crews and ambulance units as described in previous sections.

The principles of routine infection control including the donning and doffing of PPE for potential Ebola patients are the same as those principles taught to the paramedic in the OSH 5 course and further available on the BCEHS intranet site in the Exposure Control Plan part 2 (April 2014) and the Emerging Infectious Disease Protection online course. Applying these principles in conjunction with the direction from the Technical Advisor Program¹ and EPOS at the time of the call maintains the paramedic’s safety when dealing with a potential Ebola patient.

When call screening identifies an Ebola patient the Infectious Disease Care Team will be called in to transport the patient (this applies to both inter-facility or 9-1-1 calls); this is a team of paramedics specifically trained to manage an Ebola patient using PPE and transport techniques to maintain the highest degree level of infectious control principles. Furthermore two ambulances housed at station 264 have been modified (for ease of cleaning and infection control) for the sole purpose of transporting an infectious Ebola or highly suspected Ebola patient.

For paramedic checklists see Appendices 9 – Reducing Paramedic Exposure – Donning and Doffing PPE.

See the following links to memos dated Oct 17 and 29, 2014 regarding details for regular paramedic response:

<https://intranet.bcas.ca/memos/all/14/1003731.pdf>

<https://intranet.bcas.ca/memos/all/14/1003299.pdf>

¹ See Appendices 9 for details.

4.2. *Paramedic Basic PPE:*

Principles:

1. Fluid repellent gown
2. Use buddy system for both donning and doffing
3. Continue usage of ACCEL wipes for decontamination of PPE
4. Continuous secure collection of biohazards:
 - a. Wipes
 - b. PPE
 - c. Dressings
 - d. Medical disposables
5. If in doubt, request the Infectious Disease Care Team (IDCT) with the higher level of protection
6. Current fit tested N95 mask
7. Practiced PPE Donning and Doffing

Head & Face Covering

1. Fluid resistant head covering
2. Fit tested N95 mask with safety glasses or face shield

Masks:

1. Fit tested 1860 or 1870 N95 mask

Gloves:

1. 2 pairs of (Inner glove under gown-outer glove over) gloves that are long enough to reach over gown
2. Outer glove to be bigger than inner glove for ease of donning and doffing

Gowns:

1. Full length gown fluid repellent
2. Foot coverings above calf long, not “booties” (consider rubber boots based on dynamics of the call for paramedic safety)

Clothing under PPE:

1. No jewelry, stethoscope, portable radio, cellular phones or other devices, lanyards, etc. under PPE

Other Considerations:

1. Emergency anteroom
2. Showers
3. Contact time of disinfectants

4.3. ***BCEHS Infectious Disease Care Team (IDCT)***

IDCT Defined:

- Six Team members
- Two BCEHS paramedic attendants
 - Level C PAPR complete Personal Protective Ensemble (PPE)
 - Responsible for patient care, transport, stretcher handling and isolation chamber in transport
 - Responsible for all decontamination
- Two BCEHS paramedic as Safety Officer:
 - Travels in driver's compartment passenger seat
 - No patient or equipment contact
 - Monitors the Teams Donning and Doffing ensuring proper practices are adhered to and watches for any potential exposures
 - Maps routes to and from the scene to facility
 - Does safety sweep of premises and facility to minimize exposures and cross contamination
- Two BCEHS drivers
 - One drives lead IDTU
 - Assists Safety Officer in route planning, communications, notifications.
 - Monitor's Safety Officer's donning and doffing procedures.
 - Complete patient care records
 - Second driver drives backup IDTU
 - Maintains a safe distance from lead IDCT
 - From a safe distance monitors patient loading and unloading advises Safety Officer of any potential safety issues

Once the threshold for the dispatching of the Team has been met:

1. On-duty TA will notify the IDCT
2. IDCT will use a specially modified ambulance as an Infectious Disease Transport Unit (IDTU)
3. IDCT will assess, prepare and place patient in isolation in preparation for transport
4. Safety Officer plans the egress from facility to IDTU
5. Once at the IDTU and prior to loading the isolation chamber with the patient into the IDTU the outside of the chamber will be wiped down using ACCEL wipes by the two IDCT attendants
6. IDCT lead driver will have **no** contact with the patient, the transport devices or the equipment associated with the patient
7. The Safety Officer will have **no** contact with the patient, the transport devices or the equipment associated with the patient

8. The backup IDTU with driver follows the lead IDCT in case of vehicle breakdown, MVI or any other potential issue that would delay and or compromise completion of transfer
9. Once arriving at the receiving facility the Safety Officer walks the route through the facility to the patient's destination room to ensure there are no obstacles in the way and that there are no public, staff or other persons in way of the transit to the patient's room
10. IDCT attendants will remove the patient from IDTU aboard the isolation chamber and follow the Safety Officer's planned route to the patient's room
11. Once inside the patient's room the IDCT attendants will remove the patient from isolation chamber to bed
12. The IDCT attendants will then return all equipment: stretcher, isolation chamber to the IDTU
13. The IDCT attendants will decontaminate the isolation chamber with ACCEL wipes as per standard prior to reloading the stretcher and chamber back into the IDTU
14. The best practice is for a comprehensive decontamination of the IDCT & IDTU is to return to 8100 Nordel Way
15. If geographic location does not allow for the IDCT and IDTU to return to Nordel Way (a Powel River transport using a spare unit) then return to station and proceed with deep cleaning protocols outside of the station
16. All waste from transport should be left at the receiving facility if at all possible
17. All other waste should be secured in IDTU and removed and disposed of during the deep cleaning procedure
18. IDTU to be decontaminated as per guidelines (TBD by Inf Ctl)
19. IDCT PPE used during transport will be bagged tagged and of disposed as per the BCCDC's directed standards

Street Calls - BCEHS Infection Disease Transport Team

1. Potential or confirmed Ebola Viral Hemorrhagic Fever (VHF) patient identified by dispatch
2. Dispatch notifies BCPTN, on-duty Technical Advisor (TA), Emergency Physicians Online Support (EPOS) and Medical Health Officer (MHO)
3. BCPTN initiates the teleconference with the above name group
4. MHO on the teleconference determines the destination facility for patient
5. Infectious Disease Care Team (IDCT) is made up of a five person crew
6. Dispatch contacts on-duty TA to deploy the IDCT
7. IDCT responds to the scene using one of two specially modified ambulances, known as Infectious Disease Transport Unit (IDTU)
8. Second IDTU with single driver follows first IDTU in case of vehicle breakdown, MVI or any other potential issue that would delay and / or compromise completion of the transfer by the lead IDTU
9. IDCT Safety Officer in consultation with the TA, EPOS, & MHO evaluates BCEHS crew and others for decontamination requirements and disposition
10. Patient assessed, prepared and placed in isolation chamber for transport

11. IDCT Safety Officer supervises planned egress from scene to IDTU to minimize bystander exposures and cross contamination
12. Isolation chamber decontaminated outside of IDTU prior to being loaded into unit by wiping all surfaces down with ACCEL wipes
13. Two paramedics in Level C PAPRs attendants to patient while other IDCT members refrains from patient or equipment contact
14. Driver and Safety Officer in basic PPE while driving (gown, boots, hair cover, with N95 and eye protection at the ready)
15. Driver and Safety Officer is not to come into contact with the sealed off patient compartment of the IDTU or any transport or medical equipment
16. Driver is not to enter building or location of patient, (no patient contact or patient assist)
17. Safety Officers completes route planning, communication, paperwork and provides oversight for transport
18. Arrival at receiving facility, one of the Safety Officers walks route in receiving facility to ensuring there are no obstacle, minimum public, staff or other persons
19. remove patient from IDTU, and are briefed by Safety Officer on the route to take to the ward
20. Paramedic IDCT attendants remove patient from Isolation chamber to bed
21. Paramedic IDCT attendants returns the stretcher and Isolation chamber to the ITTU
22. Paramedic IDCT attendants and isolation pod are wiped down by ACCEL wipes as per decontamination procedures
23. IDCT returns to 8100 Nordel Way to doff PPE and begin IDTU decontamination procedures or doff at facility dependent on time and geographic location
24. All waste from transport is to be properly packaged left at receiving facility
25. All other waste secured in vehicle
26. IDTU to be decontaminated as per guidelines (TBD by Infection Control) and if at all possible at 8100 Nordel Way
27. PPE utilized on transport will be bagged tagged and disposed of according to the BCCDC standards

4.4. *Proper Protection Measures Infectious Disease Response Unit*

Response Team Specialized PPE

1. No exposed skin
2. Level C impervious Tyvek type suit, inclusive of separate hood with PAPR, two pairs of gloves and boots
3. IDCT transport using one of the two specialized IDTUs

4.5. *Biohazard and Soiled Materials Management*

1. Waste generated on a response to a facility will be left with the facility
2. Waste generated post response will be the responsibility of the IDCT (OverPak at Nordel Way)
3. MHO will determine the method of decontamination, or disposal of PPE and/or other equipment used in the transport

See Appendices 8 for details

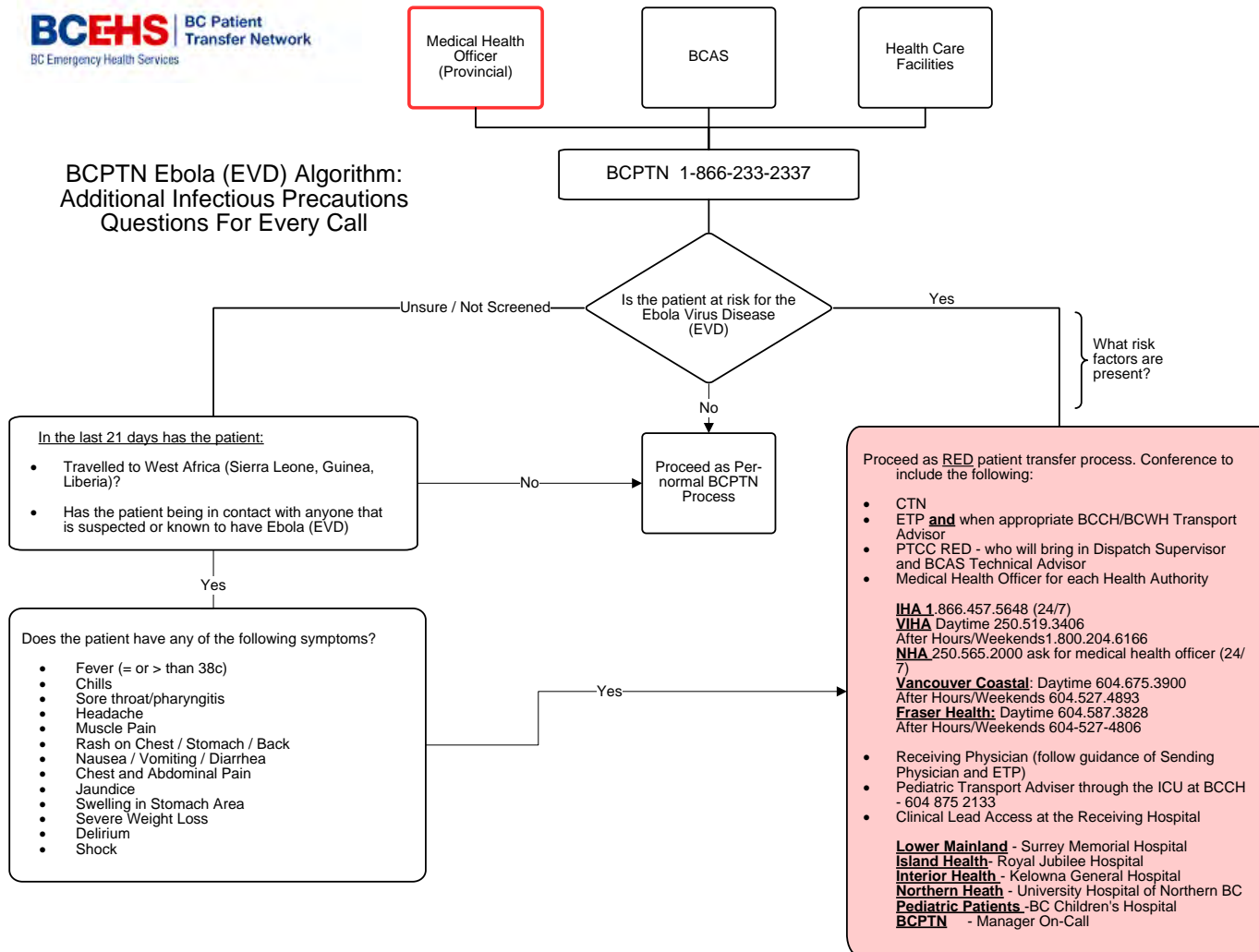
5. BCEHS EBOLA PLAN AUTHORITY

The British Columbia Emergency Health Services, under the authority of the undersigned, adopts this Plan as the framework that defines the service's roles and responsibilities as it relates to an Ebola event. The roles and responsibilities herein defined are in respect to the planning/mitigation, response, recovery and review requirements of Emergency Management principles.

Jodi Jensen
Chief Operations Officer
BCEHS

William Dick, MD, MSc, FRCPC
Vice President, Medical Programs
BC Emergency Health Services

1. Appendices – BC Patient Transfer Network Inter-facility Call Screening Process



March 10, 2015 Version 1.3 TB

2. Appendices – Technical Advisor Program & EPOS Protocols

Emergency Physician Online Support (EPOS) physicians and Technical Advisors (TA's) in consultation with the Medical Officer of Health (MOH) will follow the direction of MOH in treatment, transport and disposition of all confirmed or suspected Ebola patients.

Technical Advisor (TA)

Ebola Virus Disease (EVD) Processes

Initial screening of all patients with a potential risk of EVD includes establishing a history of travel to an identified Ebola Outbreak Country. Where appropriate, screening processes will include consultation with the Medical Health Officer, who has knowledge of all high risk persons (for EVD) in the Province. When travel history excludes EVD, standard procedures, including procedures for the care of patients with an Influenza Like Illness (ILI).

- Patient screened by BCAS according to screening procedures (see section 2.2)
- Low suspicion of EVD
 - Crew dispatched
 - Limit staff exposures – limit number of staff attending the patient to those necessary for safe care
 - Appropriate PPE used (as patient will likely present with viral symptoms suggestive of ILI)
 - Hand hygiene
 - Gloves
 - Boot protection (if necessary – wet presentation)
 - Gown or Tyvek suit
 - Head cover
 - Fit tested N95 mask/respirator
 - Eye protection (visor and/or goggles)
 - Surgical mask for patient
 - Point of Care Risk Assessment on site (while maintaining a six foot separation from the patient)
 - – travel history will be questioned again at this point

At this point the risk of EVD will have been excluded through the Point of Care Risk Assessment and discussion with the TA, EPOS and the MHO. Routine ILI procedures will be employed:

- No aerosol generating medical procedures – including nebulized treatment
- Transport to a well notified facility according to normal practice
- Doffing of PPE when leaving the patient zone

Working Final

- Following call
 - Doffing of PPE according to established principles
 - Decontamination of the ambulance
 - Risk assessment of staff – establish need to remove uniform, shower and send uniform for dry cleaning done in consultation with TA and hospital staff (who may be in possession of more information of diagnosis)
 - **Workplace Health Contact 1- 877- 587- 4080**

If during Point of Care Risk Assessment, travel history to a Ebola Outbreak Country within the previous 21 days is confirmed, the crew will leave the immediate area (wait outside and minimize contact with others) while awaiting advice from the TA and EPOS via teleconference established by dispatch (inclusive of paramedic crew and supervisor where required)

- Infectious Disease Care Team called to attend
- EVD Processes – according to Section 3.2

3. **Appendices –Ebola Signs and Symptoms**

Ebola Virus Disease – infection prevention and control guidance

Signs and symptoms

Early symptoms of EVD

- Fatigue
- Malaise
- General weakness
- Fever
- Headache
- Myalgia and arthralgia
- Pharyngeal erythema
- Lymphadenopathy
- Nausea
- Vomiting
- Diarrhea – non-blood

Although a cough can be present, it is not a recognised symptom of EVD

Symptoms which develop later in the disease

- Abdominal pain
- Profuse diarrhea
- Severe vomiting
- Hiccups
- Conjunctivitis
- Confusion, delirium, prostration, seizures and coma
- Maculopapular rash
- Shock
- Chest pain
- Jaundice
- Respiratory distress (commonly a response to the disease process – metabolic acidosis, volume overload etc)
- Haemorrhagic manifestations

Infection prevention and control

- Early identification
 - Symptoms as described above

AND

- Travel to the affected region of West Africa in the previous 21 days
<http://www.cdc.gov/vhf/ebola/resources/distribution-map-guinea-outbreak.html>

Working Final

- Contact/droplet precautions
- Mask on the patient
- Aerosol generating procedures must not be performed in the ambulance unless absolutely necessary, including:
 - Intubation
 - Nebulized therapy
- Hand hygiene
- Communication
 - Early contact with the Technical Advisor and the receiving hospital
- Cleaning and disinfection of the vehicle
- Waste management

January 20, 2015

4. Appendices - Ebola - Task Force: Policy Communique - PPE Guidelines for Ebola Virus Disease



MINISTRY OF HEALTH POLICY COMMUNIQUE

COMMUNIQUE

TO: Health Authority Chief Executive Officers

TRANSMITTAL DATE: October 29, 2014

COMMUNIQUE
NUMBER: 2014-12

CLIFF NUMBER: 1023337

SUBJECT: BC Ebola Virus Disease Personal Protective Equipment

DETAILS: This document provides, at a high level, British Columbia's policies related to infection control measures and the use of personal protective equipment in the event of possible or confirmed EVD.

EFFECTIVE DATE: October 29, 2014

MINISTRY CONTACT: Tricia Braidwood-Looney

THE RECOMMENDATIONS AND INFORMATION CONTAINED IN THIS DOCUMENT ARE SUBJECT TO CHANGE AS NEW EVIDENCE EMERGES. THIS DOCUMENT EFFECTIVE AS OF OCTOBER 29, 2014.

While the probability of Ebola virus disease (EVD) in British Columbia is low, preparedness to ensure healthcare workers can safely and effectively care for patients is essential.

This document provides, at a high level, British Columbia's policies related to infection control measures and the use of personal protective equipment in the event of possible or confirmed EVD. British Columbia Ebola Virus Disease Personal Protective Equipment (PPE) Guidelines are aligned with the guidelines released by the Public Health Agency of Canada. The development of training modules is underway and will be available as soon as possible.

A handwritten signature in black ink, appearing to read "Perry Kendall".

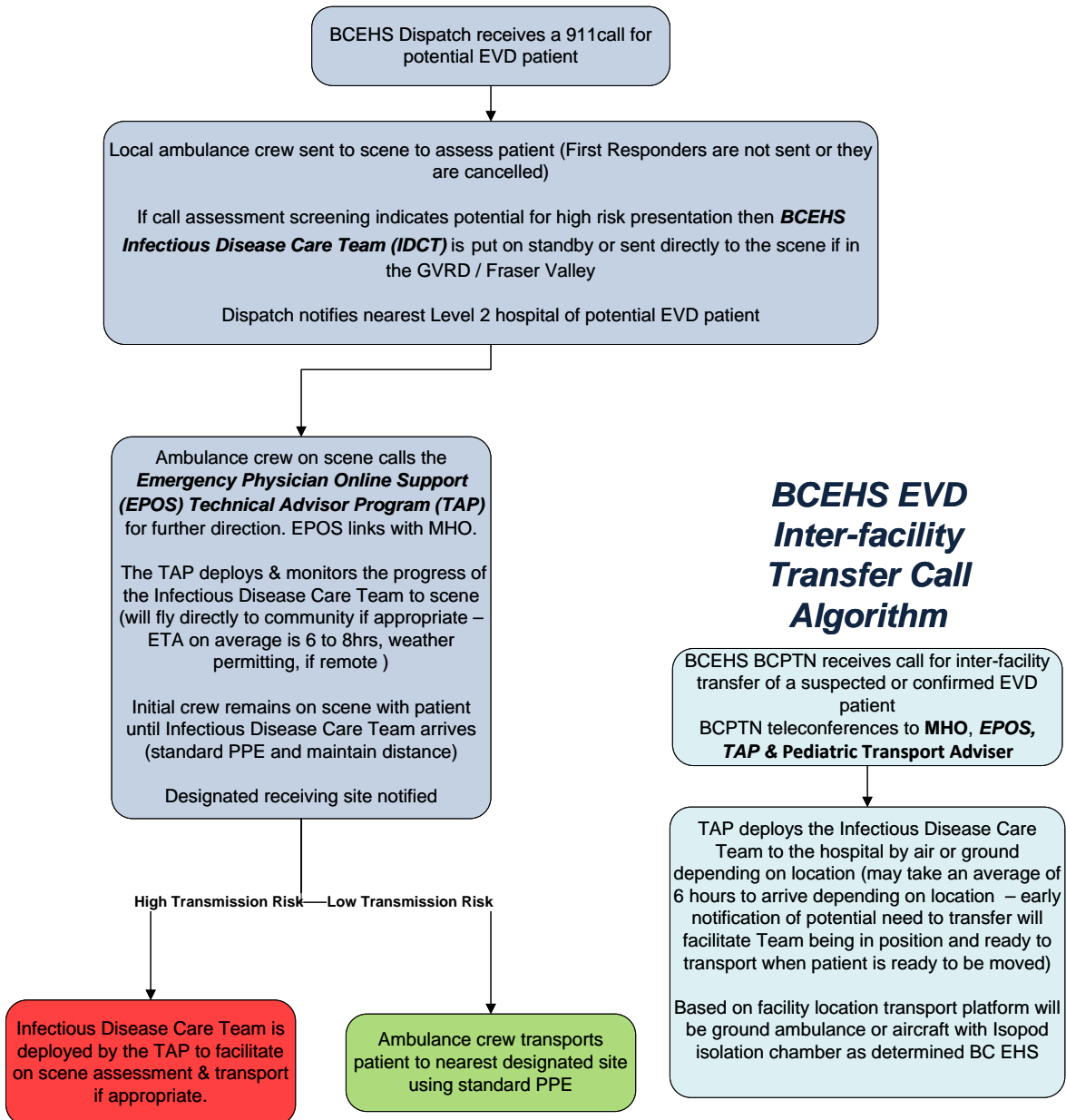
Perry Kendall
Provincial Health Officer
Co-Chair
Provincial Ebola Response Task Force

A handwritten signature in black ink, appearing to read "Lynn Stevenson".

Lynn Stevenson
Associate Deputy Minister
Co-Chair
Provincial Ebola Response Task Force

5. Appendices – Pre-Hospital Call Algorithm

BCEHS EVD Pre-Hospital Call Algorithm (Addendum to the BCEHS Ebola Management Plan)



Note:

* The IDCT under normal conditions should be able to reach any community in BC on an average of 6 hours from notification.

** All patient and IDCT movement timings will be weather and road condition dependent and numerous factors will need to be considered when determining which will be the best transportation method.

*** All IDCT patient movements will be completed using high risk PPE protection regardless of patient risk level due to the closeness of the ambulance and aircraft environments

6. Appendices – Infectious Prevention and Control Guidance for Air Transport

BCEHS Infection Prevention and Control Guidance for Air Transport of an Ebola or Suspected Ebola Patient

General considerations

Public Health Agency of Canada (PHAC) will be called in to assess the viability of transporting a High Infectious Risk patient and if transport is deemed necessary will facilitate the transport.

BCEHS Infectious Disease Care Team (IDCT) will only transport via air a Low Infectious Risk patient. Crew should be kept to the minimum required to carry out the flight and patient care duties in a safe manner.

Aircraft selection

Fixed-wing pressurized aircraft should be selected only with separate access to pilot cabin:

- The greatest separation as possible between the cockpit and patient is desirable

Infection prevention and control

- Only staff directly involved in the care of the patient or operation of the aircraft should be onboard
- Flight Crew will follow the direction of the Infectious Disease Care Team (IDCT) Safety Officer in maintaining a safe distance from the patient and associated equipment
- The air carrier will have removed all nonessential equipment and seats from the rear cabin of the aircraft prior to the IDCT's arrival
- Prior to loading the Patient into the aircraft the IDCT Safety Officer will provide the Flight Crew with an Ebola Orientation related to the flight crew's needs, not more than 15 minutes in duration
- The IDCT will load and unload the patient / Iso Pod from the aircraft the flight crew will not come into contact with the patient, the Iso Pod and any other associated equipment, including the transport ambulance
- The patient should be managed using enhanced contact and droplet precautions
- Sufficient infection control supplies should be on board the aircraft to support the expected transport duration plus additional time in the event of delays or weather diversions
- Patient will be placed in a portable isolation unit (Iso-Pod) at the facility of origin in order to create the isolation area and reduce the risk of contamination of the environment as per the BCEHS Ebola Emergency Management Plan - November 2014
- Personal protective equipment (PPE) should be worn in accordance with established recommendations as per the BCEHS Ebola Emergency Management Plan – November 2014

- Aerosol generating treatments (nebulizers) are to be substituted with other treatment modalities, aerosol generating procedures and procedures that require the use of needles and other sharp implements should be limited to that which is essential to patient care or applied prior to immobilizing the patient for transport

Waste disposal

All waste should be considered hazardous, handled with the utmost care, and disposed of in accordance with BCEHS Ebola Emergency Management Plan – November 2014 protocols for such waste.

Aircraft Cleaning and Disinfection

- Once the patient is off loaded from the aircraft the flight crew will disembark the aircraft and secure the aircraft awaiting the return of the IDCT
- After IDCT has completed the transport to a facility they will doff their PPE at the facility and return to the aircraft in the secondary IDTU that was not used to transport the patient once returning to the aircraft the IDCT will don fresh PPE to facilitate the disinfecting of the aircraft
- Non-patient care areas of the aircraft should be cleaned and maintained according to manufacturer's recommendations
- BCEHS IDCT will facilitate the wiping down of the patient transport area of the aircraft
- Patient care area and equipment should be cleaned and disinfected with the ACCEL TB wipes. A two-step cleaning process is recommended
- Fabric seating and restraints should be removed prior to the transport to avoid contamination, otherwise may require disposal. Containment of the items should be considered; if disposal is the identified route, biohazard waste containment should be used
- Equipment should be designated as single use for the most part, including the isolation unit (Iso-Pod) in confirmed EVD cases
- ACCEL TB healthcare grade disinfectant will be available during transport to manage events that result in contamination
- Large body fluid spillage should be contained within the Iso-Pod and in the remote chance that a spillage breaches the containment of the Iso-Pod decontaminate in the following manner:
 - Confine and contain the spill, by wiping up blood or body fluid first with disposable towels, or use GreenZ
 - Remove waste into the biohazard bag using a scoop or paper towels and dispose of as per the BCEHS Ebola Emergency Management Plan - November 2014
 - Using firm pressure, clean the area or equipment (the available healthcare grade disinfectant such as ACCEL TB used throughout BCEHS can be used for this purpose) It is important to clean the surface of all body fluid prior to using bleach to disinfect

Working Final

- Using firm pressure and a cloth or wipe, disinfect the area or equipment using a solution of 5,000ppm of available chlorine, consider disposal of grossly contaminated equipment
 - Leave to air dry
- Dispose of all waste including that generated through the cleaning and disinfection process according to the BCEHS Ebola Emergency Management Plan – November 2014 for waste disposal

- Aerosol generating treatments (nebulizers) are to be substituted with other treatment modalities, aerosol generating procedures and procedures that require the use of needles and other sharp implements should be limited to that which is essential to patient care or applied prior to immobilizing the patient for transport

Waste disposal

All waste should be considered hazardous, handled with the utmost care, and disposed of in accordance with BCEHS Ebola Emergency Management Plan – November 2014 protocols for such waste.

Aircraft Cleaning and Disinfection

- Once the patient is off loaded from the aircraft the flight crew will disembark the aircraft and secure the aircraft awaiting the return of the IDCT
- After IDCT has completed the transport to a facility they will doff their PPE at the facility and return to the aircraft in the secondary IDTU that was not used to transport the patient once returning to the aircraft the IDCT will don fresh PPE to facilitate the disinfecting of the aircraft
- Non-patient care areas of the aircraft should be cleaned and maintained according to manufacturer's recommendations
- BCEHS IDCT will facilitate the wiping down of the patient transport area of the aircraft
- Patient care area and equipment should be cleaned and disinfected with the ACCEL TB wipes. A two-step cleaning process is recommended
- Fabric seating and restraints should be removed prior to the transport to avoid contamination, otherwise may require disposal. Containment of the items should be considered; if disposal is the identified route, biohazard waste containment should be used
- Equipment should be designated as single use for the most part, including the isolation unit (Iso-Pod) in confirmed EVD cases
- ACCEL TB healthcare grade disinfectant will be available during transport to manage events that result in contamination
- Large body fluid spillage should be contained within the Iso-Pod and in the remote chance that a spillage breaches the containment of the Iso-Pod decontaminate in the following manner:
 - Confine and contain the spill, by wiping up blood or body fluid first with disposable towels, or use GreenZ
 - Remove waste into the biohazard bag using a scoop or paper towels and dispose of as per the BCEHS Ebola Emergency Management Plan - November 2014
 - Using firm pressure, clean the area or equipment (the available healthcare grade disinfectant such as ACCEL TB used throughout BCEHS can be used for this purpose) It is important to clean the surface of all body fluid prior to using bleach to disinfect

Working Final

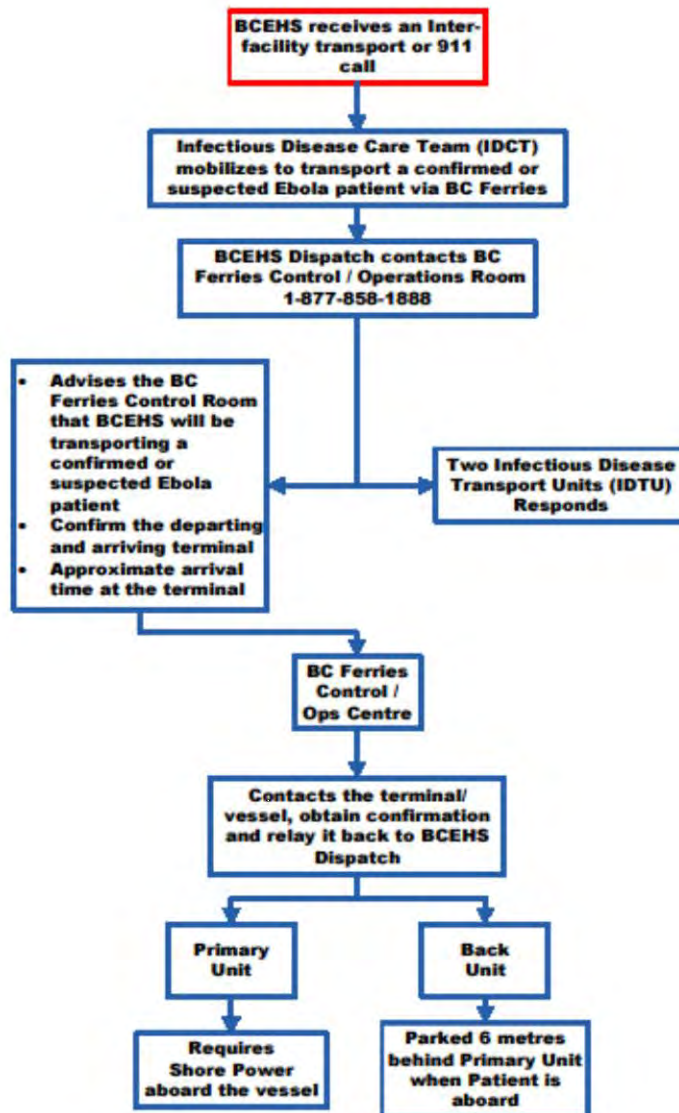
- Using firm pressure and a cloth or wipe, disinfect the area or equipment using a solution of 5,000ppm of available chlorine, consider disposal of grossly contaminated equipment
 - Leave to air dry
- Dispose of all waste including that generated through the cleaning and disinfection process according to the BCEHS Ebola Emergency Management Plan – November 2014 for waste disposal

7. Appendices – BC Ferries Ebola Transport Structure

December 3,
2014

BCEHS Ebola Transport via BC Ferries

DRAFT



8. ***Appendices – Ebola Cleaning, Decontamination and Waste Management***



BCEHS Ebola Cleaning, Decontamination and Waste Management

Standard Operating Procedures

Lisa Young
3/18/2015

This document is intended to be a comprehensive standard for all BCEHS operational personnel in managing the cleaning, decontaminating and waste management of personnel, equipment and vehicles related to an Ebola Virus Disease (EVD) transport. This document is updated as required

This Page Purposefully Left Blank

Working Final

Contents

STANDARD OPERATING PROCEDURE #1 – TERMINAL CLEANING OF THE AMBULANCE	3
Preparation of the ambulance used for the transport of a patient who is under investigation (PUI), probable or confirmed EVD, and cleaning area	3
Equipment/Supplies	3
First Cleaning Phase	4
Second Cleaning Phase	6
STANDARD OPERATING PROCEDURE #2 – BLOOD OR BODY FLUID SPILL CLEAN-UP	9
Equipment/Supplies	9
Dilution Chart for Bleach	9
STANDARD OPERATING PROCEDURE #3 – TERMINAL CLEANING OF THE AIRCRAFT	12
Preparation of the aircraft used for the transport of a patient who is under investigation (PUI), probable or confirmed EVD, and cleaning area	12
Equipment/Supplies	12
First Cleaning Phase	13
Second Cleaning Phase	14
STANDARD OPERATING PROCEDURE # 4 – CLEANING/DISPOSAL OF PPE	17
Cleaning or disposal of PAPRs Personal Protective Equipment following the transport of a suspected or confirmed Ebola patient	17
Equipment/Supplies	17
First Cleaning Phase	17
Second Cleaning Phase	18

2 | Page

January 20, 2015

STANDARD OPERATING PROCEDURE #1 – TERMINAL CLEANING OF THE AMBULANCE

Preparation of the ambulance used for the transport of a patient who is under investigation (PUI), probable or confirmed EVD, and cleaning area

The term clean is used to identify the combined process of cleaning and disinfection using the disinfectant wipes available to BCEHS staff (ACCEL TB)

Principles:

1. The ambulance will have minimal equipment and supplies present, to the degree possible for the care of the patient
2. All patients belongings will have been collected and placed in a red biohazardous waste bag, with the top twisted and secured with a zip tie, and sent with the patient when admitted to hospital
3. Clearly identify a clean zone and a dirty zone – tape can be used for this purpose
4. The IDCT Safety Officer will observe and supervise the cleaning of the ambulance
5. Cleaning will be performed using a firm friction technique
6. One disinfectant wipe will be used to clean/disinfect an item or area and then be discarded correctly
7. Surfaces will remain moist for 5 minutes to ensure the required contact time with the disinfectant solution (which may require repeated wiping)
8. Blue waste drum will be used for all waste, and only filled to 2/3 full
9. Waste will not be pushed down to compact it.

Equipment/Supplies

- PPE –
 - gloves (x2 pairs long cuffed),
 - fluid resistant gown or suit
 - fluid resistant hood
 - full face visor
 - N95 mask
 - boot covers (fluid impervious foot, with fluid resistant leg)
- Disinfectant wipes (ACCEL TB)
- Soaker pad(s) (incontinent pad soaked in pre-diluted ACCEL TB solution)
- Blue waste drum(s) – with bags and ties

3 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
First Cleaning Phase		
Pre-cleaning preparation	<ul style="list-style-type: none"> Assemble any supplies needed for cleaning: <ul style="list-style-type: none"> PPE – gloves (x2 pairs long cuffed), fluid resistant gown or suit, fluid resistant hood, full face visor, N95 mask, boot covers (fluid impervious foot, with fluid resistant leg) Disinfectant wipes (ACCEL TB) Prepare soaker pad between dirty zone and clean zone (incontinent pad soaked in pre-diluted ACCEL TB solution) Prepare blue waste drum <ul style="list-style-type: none"> Prepare soaker pad and place under blue waste drum Line blue waste drum with 2 red waste bags, draped over the top edge Tape the zip ties for the red waste bags to the side of the blue waste drum Ensure the lid and fastening clamp is kept outside the dirty zone 	<ul style="list-style-type: none"> Safety of workers is of paramount importance Follow the direction of the IDCT Safety Officer at all times All containers of solutions and disinfectant wipes should be appropriately labelled with the name and concentration Disinfectant wipes should never be topped up When sealing the red waste bags, they will each be closed using a zip tie independently
Personal protective equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in the donning of your PPE Put on PPE following the directions of the IDCT Safety Officer The IDCT Safety Officer will verify that the PPE is on correctly 	<ul style="list-style-type: none"> Always use the appropriate PPE Put on PPE at a controlled pace so that it is donned properly Always follow the direction of the IDCT Safety Officer No skin should be exposed when the PPE is on
Removal of items from the ambulance	<p>All waste will be discarded into the blue waste drum</p> <ul style="list-style-type: none"> Take all the needed supplies into the back of the ambulance Clean up any blood or body fluid spills (according to SOP #2) Remove the stretcher from the ambulance to the dirty zone Roll any linen (paper or fabric) and pillow into the centre of the stretcher, and then place gently blue waste drum Remove sharps container, snap closed and discard 	<ul style="list-style-type: none"> Work safely at a controlled pace and be observant for unexpected hazards Remember to keep your hands away from your mask and face shield Remember to disinfect your gloves if you are in contact with any body fluids If the outside glove gets torn, or PPE

4 | Page

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Remove all containers that hold blood or body fluids (suction canisters etc); seal and discard Remove all patient care items (such as wound products) and discard Discard all opened or exposed supplies Discard any other obvious waste Clean outer glove with disinfectant wipe or ABHR 	<ul style="list-style-type: none"> becomes dislodged and skin is exposed immediately report it to the IDCT Safety Officer Do not compress waste to compact it Anything that cannot be easily cleaned/disinfected is discarded
Cleaning of equipment	<p>Iso-Pod</p> <ul style="list-style-type: none"> Ensure the slide fastener of the Iso-Pod is closed and blower and filters are in place Cover the blower outlet with a green cap plug Clean the outside surface of the Iso-Pod. Place on a level surface within the dirty zone Discard filters, gloves and other contaminated items into the blue waste drum Remove the blower and blower hose Clean the inside of the Iso-Pod Inspect for cuts, holes, tears or any other damage. If any damage is noted, report to the IDCT Safety Officer (who will notify the Technical Advisor Program 604-660-6557) and discard the Iso-Pod. <p>Mattress</p> <ul style="list-style-type: none"> Clean all surfaces of the mattress and place in the dirty zone Check mattress for any cuts, holes, tears or other damage. If any damage, mattress must be discarded appropriately Clean all surfaces of the stretcher and keep in the dirty zone 	<ul style="list-style-type: none"> Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area. Green cap plug used to prevent disinfectant entering the blow and causing damage Leave all equipment that has been cleaned as part of phase one cleaning in the dirty zone for a second clean
Cleaning of plastic wrapped patient compartment	<ul style="list-style-type: none"> Working from clean to dirty and high to low, clean all plastic wrapped surfaces of the patient compartment of the ambulance Gently detach all plastic wrap and roll in on itself, in a manner to contain the exposed surface inside and the surface that faced the ambulance surfaces (walls and ceiling) is now on the outside. Discard in a large biohazard sack (more than one may be needed) Clean outside surface of the disinfectant wipe container and leave 	<ul style="list-style-type: none"> As above

5 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
Personal Protective Equipment	<ul style="list-style-type: none"> in the patient compartment of the ambulance The IDCT Safety Officer will observe and direct you in doffing your PPE Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Doff your PPE at a controlled pace so that the process is followed correctly Remember to keep your hands away from your face and hair until you have completed your final hand hygiene
Second Cleaning Phase		
Pre-cleaning preparation	<ul style="list-style-type: none"> Assemble any supplies needed for cleaning: <ul style="list-style-type: none"> PPE – gloves (x2 pairs long cuffed), fluid resistant gown or suit, fluid resistant hood, full face visor, N95 mask, boot covers (fluid impervious foot, with fluid resistant leg) Disinfectant wipes (ACCEL TB) – a second container of wipes should be left at the edge of the dirty zone to allow cleaning of the waste receptacle Blue waste drum [as before] 	<ul style="list-style-type: none"> Safety of workers is of paramount importance All containers of solutions and disinfectant wipes should be appropriately labelled with the name and concentration Disinfectant wipes should never be topped up
Personal protective equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in donning your PPE Put on PPE following the directions of the IDCT Safety Officer The IDCT Safety Officer will verify that the PPE is on correctly 	<ul style="list-style-type: none"> Always use the appropriate PPE Put on PPE at a controlled pace so that it is donned properly No skin should be exposed when the PPE is on
Principles for cleaning/disinfection of the ambulance	<ul style="list-style-type: none"> Using firm friction for all cleaning Use one disinfectant wipe for each item or area. Discard used wipe into blue waste drum. Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area. All surfaces must remain moist for 5 minutes to have the required contact time with the disinfectant solution. This may require surfaces to be repeatedly wiped 	
Cleaning of equipment	Iso-Pod <ul style="list-style-type: none"> Clean the outside surface of the Iso-Pod. Clean the inside of the Iso-Pod. Pass to clean zone 	<ul style="list-style-type: none"> Pass all cleaned equipment over to clean zone

6 | Page

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Clean all surfaces of the stretcher and move to clean zone; wheels should be passed over the soaker mat to fully soak the wheels Clean all surfaces of the mattress and place on the cleaned stretcher in the clean zone 	
Cleaning of patient compartment	<ul style="list-style-type: none"> Working from high to low, clean all surfaces of the patient compartment of the ambulance Discard disinfectant wipe container once cleaning is complete 	<ul style="list-style-type: none"> As above
Waste removal	<ul style="list-style-type: none"> Ensure soaker pad is on floor under the drum Grasp the top of the inner red bag, twist until closed and then zip tie the bag Grasp the top of the outer red bag, twist until closed and then zip tie the bag Place the lid on the drum (the lid does not snap in place). Ensure the closure device is placed right side up, so that the safety lock mechanism can be set (to seal the drum). Hold the clam fastener at 9 o'clock and 3 o'clock, attach and secure. Wipe the outside surface of the waste receptacle and allow full 5 minute contact time Clean outer glove with disinfectant wipe or ABHR place the waste receptacle on to the soaker pad Wipe the outside surface of the waste receptacle and allow full 5 minute contact time 	
Personal Protective Equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in doffing your PPE Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into new blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Doff your PPE at a controlled pace so that the process is followed correctly Remember to keep your hands away from your face and hair until you have completed your final hand hygiene
Removal of waste receptacle	<ul style="list-style-type: none"> Don clean gown and gloves Place clean lid on the waste receptacle and seal it Pull cleaned waste receptacle away from the dirty zone and 	<ul style="list-style-type: none"> Do not place waste receptacles where they could be mistaken for regular waste

7 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
	transport to the designated holding area <ul style="list-style-type: none"> Place used (folded) soaker pads into a new blue waste drum (pre-prepared as above) Remove gown and gloves and place in the new blue waste drum Grasp the top of the inner red bag, twist until closed and then zip tie the bag Grasp the top of the outer red bag, twist until closed and then zip tie the bag Place the lid on the drum (the lid does not snap in place). Ensure the closure device is placed right side up, so that the safety lock mechanism can be set (to seal the drum). Hold the clam fastener at 9 o'clock and 3 o'clock, attach and secure. Don a clean pair of gloves and Wipe the outside surface of the waste receptacle and allow full 5 minute contact time Dispose of gloves as clinical waste 	<ul style="list-style-type: none"> Waste should be collected as soon as possible

8 | Page

STANDARD OPERATING PROCEDURE #2 – BLOOD OR BODY FLUID SPILL CLEAN-UP

Principles Used:

- As far as is possible, cocoon the patient and use vomit bags to contain/control any body fluid exposure
- The ambulance will have minimal equipment and supplies present, to the degree possible for the care of the patient
- EVD is spread through direct contact (via broken skin or mucous membranes of the eyes, nose or mouth) with the blood/body fluids of an EVD infected person, or with items contaminated by blood fluids of an EVD infected person
- Immediately clean and disinfect any surfaces contaminated with blood, urine, feces, vomit or other body fluids that are suspected or known to contain Ebola virus
- Disinfectants cannot work properly if the surface has organic material (i.e. blood or other bodily fluids) on it
- Never mix chemicals together
- Clearly identify a clean zone and a dirty zone – tape can be used for this purpose
- Blue waste drum will be used for all waste, and only filled to 2/3 full
- Waste will not be pushed down to compact it

Equipment/Supplies

<ul style="list-style-type: none"> PPE <ul style="list-style-type: none"> gloves (x2 pairs long cuffed) fluid resistant gown or suit fluid resistant hood full face visor N95 mask boot covers (fluid impervious foot, with fluid resistant leg) 	Spill Kit <ul style="list-style-type: none"> Absorbent granules (GreenZ) Heavy duty towels (Brawny) Neutral detergent Bleach 5,000ppm available chlorine (dilution chart below) or disinfectant wipes (ACCEL TB) Pan and spatula/scoop Blue waste drum (prepared as SOP #1)
--	---

Dilution Chart for Bleach

5,000 Part Per Million (ppm) of Available Chlorine	Tablets Required
Zochlor	5 per liter of water
Presept	2 per liter of water

9 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Assess the size and nature of the spill to determine the best method of spill cleanup 	
Preparation	<ul style="list-style-type: none"> Restrict access to the area until decontamination is complete If large spill, make up a solution of warm water and neutral detergent for cleaning and a solution of 5,000ppm available chlorine 	
Personal protective equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe you putting on PPE Put on PPE following the directions of the IDCT Safety Officer Have the IDCT Safety Officer verify that the PPE is on correctly 	<ul style="list-style-type: none"> Always use the appropriate PPE Put on PPE at a controlled pace so that it is donned properly No skin should be exposed when the PPE is on
Spots of small splatter	<ul style="list-style-type: none"> Using spatula/scoop, remove any broken glass or sharps as necessary, and discard into a puncture proof container/sharps bin Check gloves for tears or punctures Wipe the area with heavy duty paper towel and discard into blue waste drum Using firm friction clean using disinfectant wipes to remove any residual soil Surface must remain moist for 5 minutes to have the required contact time with the disinfectant solution. This may require surfaces to be repeatedly wiped Discard the wipe into blue waste drum Once dried, wipe the area a second time with a fresh disinfectant wipe and allow to remain moist for a further 5 minutes Discard the wipe in to blue waste drum. 	<ul style="list-style-type: none"> If gloves get torn or punctured inform the IDCT Safety Officer
Spills (regardless of size)	<ul style="list-style-type: none"> Quickly and gently contain the spill by creating a circular barricade around the perimeter of the spill with the absorbent granules or heavy duty paper towels If able to do without stepping into or leaning over the spill, use the spatula/scoop to remove any broken glass or sharps as necessary, and discard into a puncture proof container/sharps bin 	<ul style="list-style-type: none"> Work safely at a controllable pace and be observant for unexpected hazards Follow the direction of the IDCT Safety Officer Avoid creating splash while cleaning spill

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Check gloves for tears or punctures Cover the entire spill gently and generously with the absorbent granules or heavy duty paper towels Place the blue waste drum close by Using heavy duty paper towels and/or scoop, remove the bulk material (granules or soaked heavy duty paper towels) and discard into blue waste drum Clean outer gloves with a disinfectant wipe or ABHR Wash the area using the neutral detergent solution and heavy duty paper towels or disposable mop Wipe the area with 5,000ppm of available chlorine [as above] and let dry Discard all wipes and waste into the blue waste drum 	<ul style="list-style-type: none"> Use proper body mechanics when removing the bulk material. Avoid bending at the waist or twisting If gloves get torn or punctured advise the IDCT Safety Officer immediately Remember to keep your hands away from your mask and face shield Remember to disinfect your gloves after contact with any body fluids Disinfectants cannot work properly if the surface has blood or body fluids on it To avoid splash or splatter, do not spray disinfectant
Cleaning equipment	<ul style="list-style-type: none"> Discard mop all containers and other cleaning equipment in blue waste drum Clean outer gloves using disinfectant wipes or ABHR 	<ul style="list-style-type: none"> Disinfectant wipes may be used for further cleaning, but once cleaning has been completed the container must be disposed of
Personal Protective Equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in doffing your PPE Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Take off PPE at a controlled pace so that the process is followed correctly Remember to keep your hands away from your face and hair until you have completed your final hand hygiene

Terminal cleaning of the patient compartment of the ambulance or aircraft will continue according to the appropriate SOP, which includes cleaning of equipment and waste disposal

STANDARD OPERATING PROCEDURE #3 – TERMINAL CLEANING OF THE AIRCRAFT

Preparation of the aircraft used for the transport of a patient who is under investigation (PUI), probable or confirmed EVD, and cleaning area

The term clean is used to identify the combined process of cleaning and disinfection using the disinfectant wipes available to BCEHS staff (ACCEL TB)

Principles:

1. The aircraft will have minimal equipment and supplies present, to the degree possible for the care of the patient
2. The patient area will be accessed for cleaning through the rear door of the aircraft only
3. All patients belongings will have been collected and placed in a red biohazardous waste bag, with the top twisted and secured with a zip tie, and sent with the patient when admitted to hospital
4. Clearly identify a clean zone and a dirty zone – tape can be used for this purpose
5. All cleaning / decontamination is observed and supervised by the IDCT Safety Officer
6. Cleaning will be performed using a firm friction technique
7. One disinfectant wipe will be used to clean/disinfect an item or area and then be discarded correctly
8. Surfaces will remain moist for 5 minutes to ensure the required contact time with the disinfectant solution (which may require repeated wiping)
9. Blue waste drum will be used for all waste, and only filled to 2/3 full
10. Waste will not be pushed down to compact it.

Equipment/Supplies

- PPE –
 - gloves (x2 pairs long cuffed),
 - fluid resistant gown or suit
 - fluid resistant hood
 - full face visor
 - N95 mask
 - boot covers (fluid impervious foot, with fluid resistant leg)
- Disinfectant wipes (ACCEL TB)
- Soaker pad(s) (incontinent pad soaked in pre-diluted ACCEL TB solution)
- Blue waste drum(s) – with bags and ties

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
<i>First Cleaning Phase</i>		
Pre-cleaning preparation	<ul style="list-style-type: none"> Assemble any supplies needed for cleaning: <ul style="list-style-type: none"> PPE – gloves (x2 pairs long cuffed), fluid resistant gown or suit, fluid resistant hood, full face visor, N95 mask, boot covers (fluid impervious foot, with fluid resistant leg) Disinfectant wipes (ACCEL TB) Prepare soaker pad between dirty zone and clean zone (incontinent pad soaked in pre-diluted ACCEL TB solution) Prepare blue waste drum <ul style="list-style-type: none"> Prepare soaker pad and place under blue waste drum Line blue waste drum with 2 red waste bags, draped over the top edge Tape the zip ties for the red waste bags to the side of the blue waste drum Ensure the lid and fastening clamp is kept outside the dirty zone 	<ul style="list-style-type: none"> Safety of workers is of paramount importance Follow all instruction of the IDCT Safety All containers of solutions and disinfectant wipes should be appropriately labelled with the name and concentration Disinfectant wipes should never be topped up
Personal protective equipment	<ul style="list-style-type: none"> A IDCT Safety Officer will observe you donning your PPE Put on PPE following the directions of the IDCT Safety Officer The IDCT Safety Officer will verify that the PPE has been donned correctly 	<ul style="list-style-type: none"> Always use the appropriate PPE Put on PPE at a controlled pace so that it is donned properly Follow all instructions from the IDCT Safety Officer No skin should be exposed when the PPE is on
Removal of items from the aircraft	<p>All waste discarded into blue waste drum</p> <ul style="list-style-type: none"> Take all the needed supplies into the patient area of the aircraft Clean up any blood or body fluid spills (according to SOP #2) Remove sharps container, snap closed and discard Remove all containers that hold blood or body fluids (suction canisters etc); seal and discard Remove all patient care items (such as wound products) and discard 	<ul style="list-style-type: none"> Work safely at a controlled pace and be observant for unexpected hazards Remember to keep your hands away from your mask and face shield Remember to disinfect your gloves if you are in contact with any body fluids If the outside glove gets torn, or PPE becomes dislodges and skin is exposed

13 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Discard all opened or exposed supplies Discard any other obvious waste Clean outer glove with disinfectant wipe or ABHR 	<ul style="list-style-type: none"> notify the IDCT Safety Officer immediately Do not compress waste into the receptacle Anything that cannot be easily cleaned/disinfected is discarded
Cleaning of patient area and equipment	<ul style="list-style-type: none"> Working from clean to dirty and high to low, clean all surfaces of the patient area All remaining equipment should be surface cleaned as directed above and placed into the dirty zone if removable Clean outside surface of the disinfectant wipe container and leave in the patient area 	<ul style="list-style-type: none"> Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area If any equipment shows signs of damage it should be assessed and a decision made to discard it
Personal Protective Equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in doffing your PPE Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Doff PPE at a controlled pace so that the process is followed correctly Remember to keep your hands away from your face and hair until you have completed your final hand hygiene
Second Cleaning Phase		
Pre-cleaning preparation	<ul style="list-style-type: none"> Assemble any supplies needed for cleaning: <ul style="list-style-type: none"> PPE – gloves (x2 pairs long cuffed), fluid resistant gown or suit, fluid resistant hood, full face visor, N95 mask, boot covers (fluid impervious foot, with fluid resistant leg) Disinfectant wipes (ACCEL TB) – a second container of wipes should be left at the edge of the dirty zone to allow cleaning of the waste receptacle Blue waste drum [as before] 	<ul style="list-style-type: none"> Safety of workers is of paramount importance Follow the direction of the IDCT Safety Officer All containers of solutions and disinfectant wipes should be appropriately labelled with the name and concentration Disinfectant wipes should never be topped up
Personal protective equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will monitor and direct you on the donning of your PPE 	<ul style="list-style-type: none"> Always use the appropriate PPE Put on PPE at a controlled pace so that

14 | Page

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Put on PPE following the directions of the IDCT Safety Officer The IDCT Safety Officer will verify that the PPE is on correctly 	<ul style="list-style-type: none"> it is donned properly No skin should be exposed when the PPE is on
Cleaning of patient area and equipment	<ul style="list-style-type: none"> Working from high to low, clean all surfaces of the patient area of the aircraft Clean all equipment which remains in the aircraft or is now in the dirty zone (moving it to the clean zone once cleaned) Wipe around the door frame, door handles (internal and external), and any other external surface/handle which has been touched as on the outside of the aircraft Discard disinfectant wipe container once cleaning is complete 	<ul style="list-style-type: none"> Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area.
Waste removal	<ul style="list-style-type: none"> Ensure soaker pad is on floor under the drum Grasp the top of the inner red bag, twist until closed and then zip tie the bag Grasp the top of the outer red bag, twist until closed and then zip tie the bag Place the lid on the drum (the lid does not snap in place). Ensure the closure device is placed right side up, so that the safety lock mechanism can be set (to seal the drum). Hold the clam fastener at 9 o'clock and 3 o'clock, attach and secure. Wipe the outside surface of the waste receptacle and allow full 5 minute contact time Clean outer glove with disinfectant wipe or ABHR place the waste receptacle on to the soaker pad Wipe the outside surface of the waste receptacle and allow full 5 minute contact time 	
Personal Protective Equipment	<ul style="list-style-type: none"> The IDCT Safety Officer will observe and direct you in doffing your PPE Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Take off PPE at a controlled pace so that the process is followed correctly Remember to keep your hands away from your face and hair until you have completed your final hand hygiene

15 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
Removal of waste receptacle	<ul style="list-style-type: none"> • Don clean gown and gloves • Place clean lid on the waste receptacle and seal it • Pull cleaned waste receptacle away from the dirty zone and transport to the designated holding area • Place used (folded) soaker pads into a new blue waste drum (pre-prepared as above) • Remove gown and gloves and place in the new blue waste drum • Grasp the top of the inner red bag, twist until closed and then zip tie the bag • Grasp the top of the outer red bag, twist until closed and then zip tie the bag • Place the lid on the drum (the lid does not snap in place). • Ensure the closure device is placed right side up, so that the safety lock mechanism can be set (to seal the drum). • Hold the clam fastener at 9 o'clock and 3 o'clock, attach and secure. • Don a clean pair of gloves and Wipe the outside surface of the waste receptacle and allow full 5 minute contact time • Dispose of gloves as clinical waste 	<ul style="list-style-type: none"> • Do not place waste receptacles where they could be mistaken for regular waste • Waste should be collected as soon as possible

16 | Page

STANDARD OPERATING PROCEDURE # 4 – CLEANING/DISPOSAL OF PPE

Cleaning or disposal of PAPRs Personal Protective Equipment following the transport of a suspected or confirmed Ebola patient

The term clean is used to identify the combined process of cleaning and disinfection using the disinfectant wipes available to BCEHS staff (ACCEL TB)

Principles:

1. Items that are identified for disposal must not be cleaned and reused
2. Doffing of PPE will be performed at the boundary between the dirty zone and clean zone as identified in SOP 1
3. Blue waste drum will be used for all waste, and only filled to 2/3 full
4. Waste will not be pushed down to compact it

Equipment/Supplies

- Disinfectant wipes (ACCEL TB)
- Soaker pad(s) (incontinent pad soaked in pre-diluted ACCEL TB solution)
- Blue waste drum(s) – with bags and ties

ACTIVITY	STEPS	KEY SAFETY POINTS
First Cleaning Phase		
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble supplies needed <ul style="list-style-type: none"> ○ soaker trough – trough with pre-diluted ACCEL TB solution poured in ○ waste collection and removal containers 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance • All containers of solutions and disinfectant wipes should be appropriately labelled with the name and concentration
Personal Protective Equipment	<ul style="list-style-type: none"> • The IDCT Safety Officer will observe and direct you in doffing your PPE 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that the process is followed correctly

17 | Page

Working Final

ACTIVITY	STEPS	KEY SAFETY POINTS
	<ul style="list-style-type: none"> Take off PPE following direction from the IDCT Safety Officer Gently discard all waste into blue waste drum without compressing it Perform hand hygiene 	<ul style="list-style-type: none"> Remember to keep your hands away from your face and hair until you have completed your final hand hygiene
Disposal – while removing PPE according to the process	<ul style="list-style-type: none"> Stand in the soaker trough until after the rubber boots have been removed Remove all tape and place directly into the blue waste drum Discard gloves Place the battery pack, PAPR unit, belt and rubber boots in a safe place within the dirty zone for cleaning Discard Tychem suit Detach the hose from the blower and hood Discard hood ensemble 	<ul style="list-style-type: none"> Soaking bottom of boots ensures thorough decontamination
Cleaning – to be performed as part of the first phase of cleaning according to STANDARD OPERATING PROCEDURE #1 – TERMINAL CLEANING OF THE AMBULANCE	<ul style="list-style-type: none"> Carefully remove plastic covers from PAPR unit and hose, being careful not to contaminate the equipment underneath Remove the filters and discard Ensure that all surfaces are thoroughly cleaned – paying attention to the contours of the PAPR unit and the sole of the rubber boots Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area. Discard used wipes into blue waste drum All surfaces must remain moist for 5 minutes 	<ul style="list-style-type: none"> Appropriate PPE must be worn by staff involved in the cleaning process as identified in SOP #1 If gross soiling to the underside of the rubber boots, consider disposing of them All surfaces must remain moist for 5 minutes to have the required contact time with the disinfectant solution. This may require surfaces to be repeatedly wiped
Second Cleaning Phase		
Cleaning – to be performed as part of the second phase cleaning according to STANDARD OPERATING	<ul style="list-style-type: none"> Ensure that all surfaces are thoroughly cleaned – paying attention to the contours of the PAPR unit and the sole of the rubber boots Change the disinfectant wipe when it is no longer saturated with disinfectant solution or moving to a different item or area. Discard used wipes into blue waste drum All surfaces must remain moist for 5 minutes 	<ul style="list-style-type: none"> Appropriate PPE must be worn by staff involved in the cleaning process as identified in SOP #1 All surfaces must remain moist for 5 minutes to have the required contact time with the disinfectant solution.

18 | Page

ACTIVITY	STEPS	KEY SAFETY POINTS
PROCEDURE #1 – TERMINAL CLEANING OF THE AMBULANCE	<ul style="list-style-type: none"> Discard used wipe into blue waste drum 	This may require surfaces to be repeatedly wiped
Waste removal	<ul style="list-style-type: none"> Waste will be removed according to SOP #1 	

19 | Page

9. Appendices – Reducing Paramedic Exposures – Donning and Doffing Procedures

Working Final

Basic Donning; Crew: BCEHS – EMSO:

Infectious Disease Control: (I.D.C.) Personal Protective Equipment (P.P.E.)

Date: Y ____ / M ____ / D ____ Time: (24 Hour) ____ : ____ .

Each member checks ✓ each other:

Partners Name: 1. ____ Partners Name: 2. ____

Basic Donning - CHECKLIST:

Step	Task: Donn your P.P.E. Kit. Wet or Dry patient?	Check	Check
		1 - ✓	2 - ✓
1.	Bio Break Completed		
2.	Pre-Donning Prep Sharps Off: Jewelry, Watch, Rings, Scissors - Etc.		
3.	Prepare 2 Large Biohazard Yellow Bags for Doffing. (Double Bagged)		
4.	Assemble All Basic PPE Equipment:		
	1 - Pair Nitrile EC (Extended Cuff) Gloves. Your regular size. 1 - Pair Larger Nitrile EC (Extended Cuff) Gloves for over the cuff of the Gown or Tyvek suit. 1 - Tyvek White Suit with Hood (Dry Patient.) &/or 1 - Impervious Polyethylene Isolation Gown, MedPro blue. (Wet Pt.) 1 - Pair Boot covers. 1 - Small Roll Duct tape 1 - N95 - 1870 mask &/or your N-95 Fit Tested Mask &/or Your issued Device 1 - Hair Net 1 - Pair Safety Glasses or Goggles 1 - Face shield		
5.	Wash Hands - Microsan Hand Sanitizer.		
6.	Donn - Tyvek White Suit with Hood - (Dry Patient.) &/or.		
7.	Donn - Impervious Polyethylene Isolation Gown - (Wet Patient.).		
8.	Donn - First Pair Nitrile Extended Cuff - (EC) gloves.		
*Note	First Pair Of (EC) Gloves: Should Be Under Tyvek Suit Sleeves &/Or Gown Sleeves.		
9.	Donn - Boot Covers And Tape to Tyvek Suit or Uniform Pant Legs.		
10.	Donn - Second Pair Of (EC) Gloves Over Tyvek Suit Sleeves &/Or Gown Sleeves.		
11.	Donn - N95 - 1870 Mask &/or Your N-95 Fit Tested Mask or Device.		
12.	Donn - Hair Net And All Hair Covered.		
13.	Donn - Safety Glasses Or Goggles.		
14.	Donn - Face Shield.		
15.	Visual Safety Inspection - Head To Toe - 360o By Partner. (Breach?)		
16.	Donn - Patient - With Surgical Procedure Mask – Droplet Protection		

Working Final

Basic Doffing : BCEHS – EMSO

Infectious Disease Control: (I.D.C.) Personal Protective Equipment (P.P.E.)

Date: Y____ / M____ / D____ Time: (24 Hour) ____: ____.

Each member checks each other:

Partners Name: 1. ____ Partners Name: 2. ____

Basic Doffing - **CHECKLIST:**

Step	Task: Doff your P.P.E. Kit for: Wet or Dry patient	Check	Check
		1 - ✓	2 - ✓
1.	Visual Safety Inspection. Head to Toe - 360 o by Partner: (Breach)		
	Wash Gloved Hands		
3.	Doff - Tape from Uniform Pants &/or Tyvex Suit & Boots		
	Wash Gloved Hands		
4.	Doff - Boot Covers		
	Wash Gloved Hands		
5.	Doff - Outer (EC) Gloves		
	Wash Gloved Hands		
6.	Doff - Gown, Lean Forward Turning Gown Inside Out and Roll Slowly		
	Wash Gloved Hands		
*Note	While Eyes Are Closed		
8.	Doff - Face Shield, Pull Gently From Behind.		
	Wash Gloved Hands		
*Note	While Eyes Are Closed		
10.	Doff - Glasses.		
	Wash Gloved Hands		
11.	Doff - Hair Net		
	Wash Gloved Hands		
*Note	Exhale: As you Doff - N95 - Mask or Device.		
12.	Doff - N95 - 1870 mask &/or your N-95 Fit Tested Mask or Device		
	Wash Gloved Hands		
13.	Doff Inner (EC) gloves		
14.	Wash Bare Hands		
15.	Wear New Gloves - Seal Double Lined Large Bio-Hazard Yellow Bags		
16.	Wash Gloved Hands		
17.	Doff Gloves.		
18.	Wash Bare Hands		