



Office of the
Provincial Health Officer

Recommendations for Environmental Services, Biohazardous Waste Management, and Food and Linen Management for Persons under Investigation and Confirmed Cases of Ebola Virus Disease: Standard Operating Procedures

Provincial Ebola Expert Working Group
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Introduction

While the probability of a person with Ebola virus disease (EVD) in British Columbia is low, preparedness to ensure health care workers can safely and effectively care for patients is essential. Preparedness relies on clear clinical processes, appropriate personal protective equipment (PPE) supply and deployment, and appropriate training for staff in the processes and equipment.

Ebola virus is an enveloped virus which can survive in blood or on wet contaminated surfaces. The duration of survival outside of the body is unknown but it is unlikely to survive for extended periods. The Ebola virus is spread through direct contact (via broken skin or mucous membranes of the eyes, nose or mouth) with the blood/body fluids¹ of an EVD-infected person, or of EVD-blood/body fluid-contaminated items. The risk of transmission increases with the amount of infectious material to which the individual is exposed. EVD-associated waste that has been appropriately incinerated or autoclaved is not infectious, does not pose a health risk, and is not considered to be regulated medical waste or a hazardous material.

This document lists the standard operating procedures (SOPs) - steps, principles, responsibility and materials required - for environmental services staff and to follow when performing cleaning and waste removal during/following treatment of persons under investigation (PUI) and confirmed cases of EVD. It has been developed by environmental services and infection control experts and should be read in conjunction with the *Recommendations for Environmental Services, Biohazardous Waste Management, and Food and Linen Management for Persons under Investigation and Confirmed Cases of Ebola Virus Disease (EVD)* document.²

¹ Body fluids include stool, emesis, urine, saliva, semen and sweat.

² Available at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.

Training Requirements

Training for environmental services staff on these SOPs will be as follows:

- **Type 1, 2 and 3 Facilities³:** A dedicated team of environmental services staff will be identified and trained in advance in the donning and doffing of appropriate PPE, and receive orientation to the SOPs in this document.

In addition to environmental services staff, health care workers who are providing ongoing care of PUI and confirmed EVD patients may be called upon to perform specified cleaning services in the patient room. These will include cleaning spills, daily room cleaning, cleaning of high touch areas and wiping down large equipment left in the room after patient discharge. A complete terminal clean will be performed by environmental services staff after the patient has been discharged and the room vacated.

Orientation and advance training for health care workers in these SOPs, in addition to the provision of on-site coaching by environmental services staff, will be required as follows:

- **Type 1 and 2 Facilities:**
 - All health care workers who have been identified as members of the team that may be called upon to care for PUIs or confirmed EVD patients in Type 1 and Type 2 facilities will, in addition to advance PPE training and training in safe management of these patients, receive a formal advance orientation to the relevant SOPs outlining HCW cleaning duties while in the patient room.
 - In addition, environmental services expert trainers will provide on-site coaching and observation for health care workers who are required to perform patient room cleaning duties in the course of caring for PUIs or confirmed EVD patients.
- **Type 3 Facilities:** In addition to advance orientation to these SOPs and on-site coaching by environmental services expert trainers, it is expected that dedicated EVD team health care workers in Type 3 facilities will participate in advance training on the specific SOPs. This training will be documented and identified for refresher training as needed or, at a minimum, semi-annually.

³ See *Roles of Provincial Facilities for Care of Potential or Confirmed Ebola Virus Disease Patients*. Available at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.

Standard Operating Procedure #1 – Daily Cleaning of Patient* Room

Steps to follow for daily cleaning of patient* room.

* Includes any patient under investigation, or who is a confirmed Ebola Virus Disease (EVD) case.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. The Ebola virus is spread through direct contact (body fluids including blood, saliva, mucous, vomit, urine, or feces from an infected person have touched the eyes, nose, mouth, or broken skin of another person), or by indirect contact through contaminated items.
3. A twice daily clean is required. All surfaces, including furniture and bathroom, are cleaned once a day, with a second daily cleaning, at a later time, of all high touch surfaces.
4. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
5. Surfaces contaminated with blood or body fluids to be cleaned immediately (see Standard Operating Procedure #10).
6. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in ante rooms and patient rooms.
7. Ante/clean room and exit room are cleaned by Environmental Services staff daily (see Standard Operating Procedure #3 & #4).
8. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Nursing staff already caring for the patient in the patient room

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable).

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Request assistance of Environmental Services (ES) staff to prepare container of [identify HA solution] pre-soaked microfibre cloths/mop pads; or labelled pre-filled bottle with cap. • Take into anteroom or designated clean space. • Sign log that you will be entering the room. • Ask “buddy” ES staff to be present to observe the cleaning process [if this backup process is used]. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Cleaning concepts	<ul style="list-style-type: none"> • Clean up any blood or body fluid spills before cleaning room. Follow Standard Operating Procedure #10. • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant or is visibly soiled. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean patient room	<ul style="list-style-type: none"> • Take any needed supplies, pre-soaked microfibre cloths (if used) and mop pads. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Start by cleaning door handles, push plate and touched areas of door frame. ▶ Check walls for visible soiling and spot clean if required. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Check and spot clean low level interior glass partitions, glass door panels, mirrors, windows and window sill. ▶ Clean counters and sink (if one in room). ▶ Clean all furnishings and horizontal surfaces in the room, including chairs, bedside table/locker and any other surfaces. Lift items to clean surfaces, and wipe bottom of item before replacing on cleaned surface. ▶ Clean the over-bed table, including the underside that touches the patient’s blankets and any drawers. Pay particular attention to those areas touched frequently by patient and staff. ▶ Clean any dedicated patient equipment – leave commode until end of room clean. ▶ Wipe over-bed lift straps and controls. ▶ Wipe equipment on walls such as top of suction bottle, intercom, monitors, as well as IV pole. ▶ Clean bedrails, bed controls and call bell. ▶ Clean commode if present in room. Start at the back top of commode, cleaning those areas that do not touch the patient, and work in to those that do (inside back support, armrests, seat). Pay close attention to the underside of the rim and clean leg supports/foot rests. • Check sharps container and remove when ¾ full. Do not wipe the top of the sharps container. • Clean outer gloves using wipe. 	<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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.
Clean bathroom	<ul style="list-style-type: none"> • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant, is visibly soiled, and after cleaning a heavily soiled item. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean bathroom cont'd.	<ul style="list-style-type: none"> • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean door handle, door frame and light switch. ▶ Clean chrome wall attachments. ▶ Clean inside and outside of sink, sink faucets and mirror. Wipe plumbing under the sink. ▶ Clean all dispensers and frames. ▶ Clean call bell and cord. ▶ Clean support railings, ledges and shelves. ▶ If present, clean shower faucets, soap dish, railing and spot clean shower walls. ▶ Clean bedpan support and/or seat raiser, and entire toilet including handle, lid (if present) and underside of flush rim. ▶ Clean toilet bowl with toilet brush/swab. Place back into designated holder. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Damp mop floor	<ul style="list-style-type: none"> • Floors are cleaned after patient room and bathroom are cleaned. • Wring out mop pad. Attach to mop handle. • Do bedroom first, followed by bathroom. • Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. • In open areas use, overlapping side to side strokes. If pad becomes soiled, remove, discard and replace. • When floor is completed, remove mop pad and discard. • Wipe mop handle, place equipment in designated area in room and discard wipe. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Check blue waste drum	<ul style="list-style-type: none"> • Wipe exposed sides of blue waste drum and discard wipe. • Check whether waste has reached the $\frac{3}{4}$ fill mark. • When $\frac{3}{4}$ full, follow Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in blue waste drum. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.

Standard Operating Procedure #2 – Daily Cleaning of High Touch Surfaces in Patient* Room

Steps to follow for daily cleaning of high touch surfaces in patient* room.

* Includes any patient under investigation, or who is a confirmed Ebola Virus Disease (EVD) case.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. The Ebola virus is spread through direct contact (body fluids including blood, saliva, mucous, vomit, urine, or feces from an infected person have touched the eyes, nose, mouth, or broken skin of another person), or by indirect contact through contaminated items.
3. A twice daily clean is required. All surfaces, including furniture and bathroom, are cleaned once a day, with a second daily cleaning, at a later time, of all high touch surfaces.
4. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
5. Surfaces contaminated with blood or body fluids to be cleaned immediately (see Standard Operating Procedure #10).
6. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Nursing staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable).

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Request assistance of Environmental Services (ES) staff to prepare container of [identify HA solution] pre-soaked microfibre cloths or labelled pre-filled bottle with cap (if used instead of wipes). • Take into anteroom. • Sign log that you will be entering the room. • Ask “buddy” ES staff to be present to observe the cleaning process [if this backup process is used]. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Cleaning concepts	<ul style="list-style-type: none"> • Clean up any blood or body fluid spills before cleaning room. Follow Standard Operating Procedure #10. • Wet wipe high touch surfaces working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean patient room	<ul style="list-style-type: none"> • Take any needed supplies, pre-soaked microfibre cloths (if used). • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Start by cleaning door handles, push plate and touched areas of door frame. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean the over-bed table, including the underside that touches the patient’s blankets and any drawers. Pay particular attention to those areas touched frequently by patient and staff. ▶ Wipe over-bed lift straps and controls. ▶ Wipe equipment on walls such as top of suction bottle, intercom, monitors, as well as IV pole. ▶ Clean bedrails, bed controls and call bell. ▶ Wipe hand hygiene sink in patient room. ▶ Clean handles, arm rests and seat of commode if present in room. ▶ Wipe down bedpan. • Clean outer gloves using wipe. 	<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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.
Clean bathroom	<ul style="list-style-type: none"> • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean door handle, frame and light switch. ▶ Clean inside and outside of sink and faucets. ▶ Clean all dispensers and frames. ▶ Clean call bell and cord. ▶ Clean support railings. ▶ If present, clean shower faucets, soap dish, railing and spot clean shower walls. ▶ Clean bedpan support and/or seat raiser, and entire toilet including handle and lid (if present). ▶ Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.

ACTIVITY	STEPS	KEY SAFETY POINTS
Check blue waste drum	<ul style="list-style-type: none"> • Wipe exposed sides of blue waste drum and discard wipe. • Check whether waste has reached the ¾ fill mark. • When ¾ full, follow Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in blue waste drum. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.

Standard Operating Procedure #3 – Daily Cleaning of Ante (Clean) Room and Personal Protective Equipment Doffing (Exit) Area When They are in the Same Room

Steps to follow for daily cleaning of clean room and exit room when they are both located within one area. Each hospital in B.C. may have different configurations for these two areas.

- One room located immediately adjacent to the patient room, and used for both clean and exit room purposes (for cleaning, use this standard operating procedure).
- Two rooms adjacent to the patient room, each designated as one of these area (for cleaning, see Standard Operating Procedure #4).

Principles used:

1. Clean and exit rooms are cleaned daily.
2. Surfaces contaminated with blood or body fluids to be cleaned immediately (see Standard Operating Procedure #10).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. Where one room is used for both purposes, there is a natural flow from corridor through door to clean side, and then across room to exit side and through door into patient room. The reverse would be followed when exiting the patient room. There is a clearly delineated area for taking off PPE and locating the blue waste drum.
5. There is a divide of preferably two metres/six feet between area where clean supplies are kept and area on exit side where PPE is taken off. The blue waste drum is in the exit area and should be the maximum distance possible from the clean supplies.
6. Although the clean side is classified as clean, given its direct adjacency to the exit side, PPE for low transmission risk situations is used.
7. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in anterooms and patient rooms.
8. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM. IN THE CLEAN ROOM, A RED WASTE PAIL IS ROUTINELY USED.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA]. Red waste pail UN3733 (located in clean area), labelled in same fashion as the blue waste drum.

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • [identify HA solution] wipes or pre-soaked microfibre cloths (if used); or labelled pre-filled bottle with cap. • [identify HA solution] pre-soaked mop pads. • Take into anteroom. • Sign log that you will be entering the room. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Cleaning concepts	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	
Clean “clean” side	<ul style="list-style-type: none"> • Take any needed supplies, pre-soaked microfibre cloths (if used) and mop pads. • Using firm friction when cleaning, start with clean side, placing used wipes into red waste pail: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean surfaces of all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all counters and sink on clean side. Lift items if necessary to clean. Wipe bottom of items before replacing. • Check and spot clean all other areas on the clean side. • Wet mop floors of clean side only (using steps identified below). Discard pad into red waste pail. • Check red waste pail. Wipe exposed sides. When ¾ full, seal with lid and place in blue waste drum in exit side. • Take mop handle to exit side. 	<ul style="list-style-type: none"> • Avoid going between clean and exit area to discard wipes. • Never throw wipes into regular waste containers in the anteroom. These should be discarded in the red pail.

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean “exit” side	<ul style="list-style-type: none"> • Once clean side has been completed, clean the exit side of the room. • Place used wipes into blue waste drum: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean surfaces of all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all counters and sinks on exit side. Lift items if necessary to clean. Wipe bottom of items before replacing. • Check and spot clean all other areas on the exit side. • Wet mop floors on exit side only (using steps identified below). Discard pad into blue waste drum. • Wipe gloves with wipe. 	<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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.
Check blue waste drum	<ul style="list-style-type: none"> • Wipe exposed sides of blue waste drum and discard wipe. • Check whether waste has reached the $\frac{3}{4}$ fill mark. • When $\frac{3}{4}$ full, follow Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Wet mop floors	<ul style="list-style-type: none"> • Wet mop floors using the following steps: <ul style="list-style-type: none"> ▶ Wring out mop pad. Attach to mop handle. ▶ Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. ▶ In open areas, use overlapping side to side strokes. If mop pad becomes soiled, remove, discard and replace. ▶ When completed, remove mop pad and discard into blue waste drum. ▶ Wipe mop handle, place equipment in designated area in room and discard wipe. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in blue waste drum. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.

Standard Operating Procedure #4 – Daily Cleaning of Ante (Clean) Room and Personal Protective Equipment Doffing (Exit) Room When They are in Separate Rooms

Steps to follow for daily cleaning of clean room and exit room when they are separate rooms. Each hospital in B.C. may have different configurations for these two areas.

- One room located immediately adjacent to the patient room, and used for both clean and exit room purposes (for cleaning, see Standard Operating Procedure #3).
- Two rooms adjacent to the patient room, each designated as one of these area (for cleaning, use this standard operating procedure).

Principles used:

1. Clean and exit rooms are cleaned daily.
2. Surfaces contaminated with blood or body fluids to be cleaned immediately (see Standard Operating Procedure #10).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. Where there are two separate rooms, the flow is from corridor through door to clean room, through door into patient room. To exit side, go from patient room through door into exit room and through door to corridor after taking off personal protective equipment (PPE). Do not go from patient room into clean room.
5. Although the clean room is classified as clean, to provide consistency of practice, PPE for low transmission risk situations is used.
6. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in anterooms and patient rooms.
7. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable). Regular garbage waste can with black liner (located in “clean” anteroom). Blue waste drum already in exit room.
- Regular stocked housekeeping cart (to clean the “clean” room only).

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • [identify HA solution] wipes or pre-soaked microfibre cloths (if used); or labelled pre-filled bottle with cap. • [identify HA solution] pre-soaked mop pads. • Leave on housekeeping cart. • Place housekeeping cart outside clean room. • Sign log that you will be entering the room. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Cleaning concepts	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean “clean” room	<ul style="list-style-type: none"> • Using firm friction when cleaning, start with clean room, placing used wipes into regular waste can: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean surfaces of all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all counters and sink on clean side. Lift items if necessary to clean. Wipe bottom of items before replacing. • Check and spot clean all other areas in the clean room. • Clean waste can: <ul style="list-style-type: none"> ▶ Remove bag from waste can, twist top and knot, and place by door. ▶ Wipe all surfaces of waste can. ▶ Re-line can. ▶ Discard bag into housekeeping cart waste bag (not biohazard bin). • Wet mop floors using equipment from housekeeping cart. Leave cart outside clean room. 	
Clean “exit” room	<ul style="list-style-type: none"> • Once “clean” room has been completed, enter exit room from outside corridor. • Take pre-prepared supplies into room and use equipment stored in the room. Do NOT USE Housekeeping cart for this room. • Place all used wipes into blue waste drum: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean surfaces of all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all counters and sinks. Lift items if necessary to clean. • Check and spot clean all other areas in the exit room. • Wet mop floors (see steps below). • Wipe exposed sides of blue waste drum (see steps below). 	<ul style="list-style-type: none"> • Movement between “clean” room and outside corridor is not restricted. • PPE is required for work in the exit room. • 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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.

ACTIVITY	STEPS	KEY SAFETY POINTS
Wet mop floors	<ul style="list-style-type: none"> • Wet mop floors using the following steps: <ul style="list-style-type: none"> ▶ Wring out mop pad. Attach to mop handle. ▶ Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. ▶ In open areas, use overlapping side to side strokes. If mop pad becomes soiled, remove, discard and replace. ▶ When completed, remove mop pad and discard into blue waste drum. ▶ Wipe mop handle, place equipment in designated area in room and discard wipe. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Check blue waste drum	<ul style="list-style-type: none"> • Wipe exposed sides of blue waste drum and discard wipe. • Check whether waste has reached the ¾ fill mark. • When ¾ full, follow Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in appropriate waste receptacle. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.

Standard Operating Procedure #5 – Room Preparation for Discharge Cleaning When Patient* is Transferred from Emergency Department

Preparation of room when patient* has been transferred from emergency department to in-hospital bed.

* Includes any patient under investigation, or who is a confirmed Ebola Virus Disease (EVD) case.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. The Ebola virus is spread through direct contact (body fluids including blood, saliva, mucous, vomit, urine, or feces from an infected person have touched the eyes, nose, mouth, or broken skin of another person), or by indirect contact through contaminated items.
3. A twice daily clean is required. All surfaces, including furniture and bathroom, are cleaned once a day, with a second daily cleaning, at a later time, of all high touch surfaces.
4. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
5. All of the patient's belongings have been collected, placed in a red biohazardous waste bag, top twisted, zip tied and sent with patient to hospital room. [guidelines need to be developed]
6. If over-bed lift is used, sling goes with patient to hospital room. Same could apply to pillow. [guidelines need to be developed]
7. Full precaution discharge clean will be performed by Environmental Services staff (see Standard Operating Procedure #7).
8. Guidelines are followed when patient is deceased. [provincial guidelines in development]
9. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Nursing staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room).
- Microfibre cloths pre-soaked with [identify what will be used in HA] and bucket or disposable container (if used).
- Absorbent patient care pad to cover toilet while flushing (if applicable).

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Request assistance of Environmental Services (ES) staff to prepare container of [identify HA solution] pre-soaked microfibre cloths (if used); or labelled pre-filled bottle with cap. • Take into anteroom. • Sign log that you will be entering the room. • Ask “buddy” ES staff to be present to observe the cleaning process [if this backup process is used]. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Removal of items and supplies in room and bathroom	<ul style="list-style-type: none"> • Take any needed supplies into room. • All dirty/used items and supplies are discarded in the blue waste drum in the room. • Clean up any blood or body fluid spills (follow Standard Operating Procedure #10). • Remove sharps container (1C gasket closing designated sharps container) – snap close and discard into blue waste drum. Do not dust or wipe top of sharps container. • Remove all containers that hold body fluids (catheters, suction canisters, IV solution bags). Discard fluids down toilet, flush, seal container and discard; or if solidifiers are used, seal container and discard into the blue drum. • Empty and discard bedpans, urinals and commode pots. • Discard all patient care items such as wound care products, perineal care products, creams, etc. • Discard all opened/used supplies in the room. • Discard obvious waste. • If pillow present, remove pillow from pillow case. Discard pillow. • If stretcher present, remove the stretcher linen by rolling it into the centre of the stretcher and place linen gently in blue waste drum. • Spot clean any visible blood and body fluid soil on walls and floor. • Check and note if there is any soil on ceiling. • Clean outer gloves with disinfectant. 	<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 outside glove gets torn or becomes dislodged and skin is exposed, follow the Health Authority Exposure Management Plan. • Do not compress waste in blue waste drum. • Do not lean into or touch the inside surface of the blue waste drum. • For sites using a regular mop and bucket, when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with the clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash. • Discard anything that cannot be easily cleaned/disinfected.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>Clean high touch surfaces and furniture/equipment used by patient</p>	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Start by cleaning door handles and push plate. ▶ Check walls for visible soil and spot clean. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol based hand rub dispenser and glove box holder. ▶ Check and spot clean low level interior glass partitions, glass door panels, mirrors and windows. ▶ Check and spot clean all horizontal surfaces, such as counters, shelves, radiators, etc. ▶ Clean hand hygiene sink and fixtures (if present in room). ▶ Clean all furnishings in the room used by the patient and those visibly soiled. ▶ Wipe equipment on walls such as suction/oxygen outlet, intercom, etc. ▶ Clean any dedicated patient equipment, such as IV pole, pump and monitors. Leave commode until end of room clean. ▶ Clean over-bed table, including the underside which touches the patient’s blankets and any drawers. Pay particular attention to those areas touched frequently by patient and staff. ▶ Clean over-bed lift straps and controls. ▶ Clean stretcher, if in room and not used for patient transfer. Remove impermeable cover, if placed on mattress during room set-up, and discard in blue waste drum. ▶ Discard pillow. ▶ Clean top and sides of mattress. ▶ Check for cracks or holes in mattress and note so housekeeping supervisor/infection control practitioner can be notified (item must be discarded). ▶ Clean stretcher rails, call bell and bed controls. Pay particular attention to areas that are visibly soiled, and surfaces frequently touched by patient and staff. ▶ Check and spot clean all lower parts of stretcher frame, including casters. • Clean commode if present in room and used by patient: <ul style="list-style-type: none"> ▶ Start at the back top of commode, cleaning those areas that do not touch the patient and work in to those that do (inside back support, armrests, seat). Pay close attention to the underside of the rim and clean leg supports/foot rests. 	<p>Same as above.</p> <p>If stretcher is used in patient transfer, initial cleaning occurs in in-patient room, and stretcher is returned to emergency department for discharge precaution clean by Environmental Services staff.</p> <p>Guideline needs to be developed (e.g., In the unlikely event that a mattress has a crack or hole, how would it be removed and destroyed? Possible direction could be: <i>Clean mattress, let dry, tape up any tears/holes, mark directly on mattress with indelible ink “FOR DESTRUCTION – BIOHAZARDOUS WASTE.”</i> Note: Current direction is to discard in blue drum when patient discharged.)</p>

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean bathroom	<ul style="list-style-type: none"> • Clean outer gloves using wipe. • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant, is visibly soiled, and after cleaning a heavily soiled item. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean door handle, door frame and light switch. ▶ Clean chrome wall attachments. ▶ Clean inside and outside of sink, sink faucets and mirror. Wipe plumbing under the sink. ▶ Clean all dispensers and frames. ▶ Clean call bell and cord. ▶ Clean support railings, ledges and shelves. ▶ If present, clean shower faucets, soap dish, railing and spot clean shower walls. ▶ Clean bedpan support and/or seat raiser, and entire toilet including handle, lid (if present) and underside of flush rim. ▶ Clean toilet bowl with toilet brush/swab. Place back into designated holder. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Prepare blue waste drum for removal	<ul style="list-style-type: none"> • See Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in appropriate waste receptacle. • Perform hand hygiene. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub or soap and water.
Room set-up	<ul style="list-style-type: none"> • Page housekeeping to identify room is ready for discharge clean [add specific pager/phone numbers], and identify if spot cleaning of ceiling is required. • Page [number] if mattress needs to be discarded based on final direction for discarding mattresses. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Stretcher cleaning – used for transfer of patient to in-patient room	<ul style="list-style-type: none"> • Stretcher is kept in in-patient room until nursing has admitted patient and can clean stretcher: <ul style="list-style-type: none"> ▶ Pillow and over-bed lift sling stay with patient. ▶ Remove the stretcher linen by rolling it into the centre of the stretcher and then place it gently in blue waste drum. Remove impermeable cover if placed on mattress during room set-up and discard in blue waste drum. ▶ Clean top and sides of mattress. ▶ Check for cracks or holes in mattress. Prepare mattress for removal and discarding if any found. ▶ Clean stretcher rails. Pay particular attention to areas that are visibly soiled and surfaces frequently touched by patient and staff. ▶ Check and spot clean all lower parts of stretcher frame, including casters. • Contact Environmental Services to return stretcher to emergency department for thorough discharge cleaning by Environmental Services staff [add specific pager/phone numbers]. 	

Standard Operating Procedure #6 – In-Patient Room Preparation for Discharge Cleaning When Patient* is Transferred/Discharged

Preparation of in-patient room when patient* has been transferred or discharged from in-patient bed.

* Includes any patient under investigation, or who is a confirmed Ebola Virus Disease (EVD) case.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. Nursing staff will decrease the transmission risk in the room by discarding or cleaning the high transmission risk items (e.g., discard any containers with body fluids, bed linen, all dirty/used items and supplies in room and bathroom; clean high touch areas in immediate patient environment and bathroom, equipment used by the patient; spot clean walls and floor if any visible blood or body fluid soil).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. Patient's belongings are transferred with patient in a red biohazardous waste bag, discarded or given back to patients. [guidelines need to be developed]
5. Full precaution discharge clean will be performed by Environmental Services staff (see Standard Operating Procedure #7).
6. Guidelines are followed when patient is deceased. [provincial guidelines in development]
7. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Nursing staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room). [identify what will be used in HA]
- Microfibre cloths in bucket or disposable container, pre-soaked with [identify what will be used in HA] (if used).
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable).

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Request assistance of Environmental Services (ES) staff to prepare container of [identify HA solution] pre-soaked microfibre cloths (if used); or labelled pre-filled bottle with cap. • Take into anteroom. • Sign log that you will be entering the room. • Ask “buddy” ES staff to be present to observe the cleaning process [if this backup process is used]. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Removal of items and supplies in room and bathroom	<ul style="list-style-type: none"> • Take any needed supplies into room. • All dirty/used items and supplies are discarded in the blue waste drum in the room. • Clean up any blood or body fluid spills (follow Standard Operating Procedure #10). • Remove sharps container, snap close and discard into blue waste drum. • Remove all containers that hold body fluids (catheters, suction canisters, IV solution bags). Discard fluids down toilet, flush, seal container and discard; or if solidifiers are used, seal container and discard into the blue drum. • Empty and discard bedpans, urinals and commode pots. • Discard all patient care items such as wound care products, perineal care products, creams, etc. • Discard all opened/used supplies in the room. • Discard obvious waste. • If pillow present, remove pillow from pillow case. Discard pillow. • Remove the bed linen by rolling it into the centre of the bed and then place it gently into blue waste drum. • Spot clean any visible blood and body fluid soil on walls and floor. • Check and note if there is any soil on ceiling. • Clean outer gloves with disinfectant wipe/microfibre cloth. 	<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 outside glove gets torn or becomes dislodged and skin is exposed, follow the Health Authority Exposure Management Plan. • Do not compress waste in blue waste drum. • Do not lean into or touch the inside surface of the blue waste drum. • Discard anything that cannot be easily cleaned/disinfected.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>Clean high touch surfaces and furniture/equipment used by patient</p>	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Start by cleaning door handles and push plate. ▶ Check walls for visible soil and spot clean. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol based hand rub dispenser and glove box holder. ▶ Check and spot clean low level interior glass partitions, glass door panels, mirrors and windows. ▶ Check and spot clean all horizontal surfaces, such as counters, shelves, radiators, etc. ▶ Clean hand hygiene sink and fixtures (if present in room). ▶ Clean all furnishings in the room used by the patient and those visibly soiled. ▶ Wipe equipment on walls such as suction/oxygen outlet, intercom, etc. ▶ Clean any dedicated patient equipment, such as IV pole, pump and monitors. Leave commode until end of room clean. ▶ Clean the exterior and any accessible interior surfaces of any medical equipment left in the room – to include infusion pumps, ultra-sound machines, portable X-ray machine and ventilators. ▶ Clean over-bed table, including the underside which touches the patient’s blankets and any drawers. Pay particular attention to those areas touched frequently by patient and staff. ▶ Clean over-bed lift straps and controls. • Clean bed: <ul style="list-style-type: none"> ▶ Discard pillow. ▶ Clean top and sides of mattress. ▶ Check for cracks or holes in mattress and note so housekeeping supervisor/infection control practitioner can be notified (item must be discarded). ▶ Clean bed rails, call bell and bed controls. Pay particular attention to areas that are visibly soiled, and surfaces frequently touched by patient and staff. ▶ Check and spot clean all lower parts of bed frame, including casters. • Clean commode if present in room and used by patient: <ul style="list-style-type: none"> ▶ Start at the back top of commode, cleaning those areas that do not touch the patient and work in to those that do (inside back support, armrests, seat). Pay close attention to the underside of the rim and clean leg supports/foot rests. 	<p>Same as above.</p> <p>Guideline needs to be developed (e.g., In the unlikely event that a mattress has a crack or hole, how would it be removed and destroyed? Possible direction could be: <i>Clean mattress, let dry, tape up any tears/holes, mark directly on mattress with indelible ink “FOR DESTRUCTION – BIOHAZARDOUS WASTE.”</i> Note: Current direction is to discard in blue drum when patient discharged.)</p>

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean bathroom	<ul style="list-style-type: none"> • Clean outer gloves using wipe. • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant, is visibly soiled, and after cleaning a heavily soiled item. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean door handle, door frame and light switch. ▶ Clean inside and outside of sink, and sink faucets. ▶ Check and spot clean mirror and plumbing under the sink. ▶ Clean all dispensers and holders. ▶ Clean call bell and cord. ▶ Clean support railings, ledges and shelves. ▶ Clean bedpan support and/or seat raiser, and entire toilet including handle, lid (if present) and underside of flush rim. ▶ Clean toilet bowl with toilet brush/swab. • Discard toilet brush/swab into blue waste drum. • Clean outer gloves using wipe. 	<p>Same as above.</p> <ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Prepare blue waste drum for removal	<ul style="list-style-type: none"> • See Standard Operating Procedure #11. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in appropriate waste receptacle. • Perform hand hygiene. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub or soap and water.
Room set-up	<ul style="list-style-type: none"> • Page housekeeping to identify room is ready for discharge clean [add specific pager/phone numbers], and identify if spot cleaning of ceiling is required. • Page [number] if mattress needs to be discarded [add specific pager/phone numbers]. 	

Standard Operating Procedure #7 – Environmental Services Discharge Precaution Clean of Patient Room

Steps to follow for discharge precaution clean of room for any patient under investigation or who was a confirmed Ebola virus disease (EVD) case.

- Patient transferred from emergency department to an in-patient bed.
- Patient transferred or discharged from an in-patient bed.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. Nursing staff will decrease the transmission risk in the room by discarding or cleaning the high transmission risk items (e.g., discard any containers with body fluids, bed linen, all dirty/used items and supplies in room and bathroom; clean high touch areas in immediate patient environment and bathroom, equipment used by the patient; spot clean walls and floor). See Standard Operating Procedure #5 (emergency) or #6 (in-patient bed).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. In order to simplify processes, it is anticipated all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in anterooms and patient rooms.
5. Environmental Services staff complete a discharge precaution clean of the ante (clean) and exit areas (see standard operating procedures #8 and #9).
6. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop pads, pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable).
- Toilet brush/swab.
- Red waste pail with lid or bag with zip ties (nursing will have sealed blue waste drum during room preparation).
- Ladder, if ceiling needs to be spot cleaned.

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Prepare bucket/container of [identify HA solution] pre-soaked microfibre cloths. • Prepare container of [identify HA solution] pre-soaked mop pads. • Take into anteroom. • Sign log that you will be entering the room. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Clean patient room	<ul style="list-style-type: none"> • Take any needed supplies into room (pre-soaked cloths if used, pre-soaked mop pads, red waste pail/bag). • Place red waste pail or bag so easily accessible while cleaning. Discard all supplies from room and bathroom (including all clean opened and closed unused supplies). Wipe gloves with wipe. • Remove sharps container. Do not wipe top of sharps container. • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the waste container. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. • Move all patient furniture and equipment into centre of room. Soak wheels of stretchers, beds, wheelchairs, etc. with [identify HA solution]. Cleaned/disinfected emergency department stretcher will be returned from in-patient room after transfer of patient, for final discharge precaution cleaning. • Start cleaning the perimeter of the room; using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Spot clean ceiling, if required. ▶ Clean doors, door handles, push plate and frame. ▶ Clean walls from ceiling to floor. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol-based hand rub dispenser and glove box holder. 	<ul style="list-style-type: none"> • Nursing staff will have dealt with patient's personal belongings, dirty/used items and supplies in room. • 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. • Do not overextend to reach areas above normal reach or side to side. Extend mop handle, use ladder and move when necessary. • If outside glove gets torn or becomes dislodged and skin is exposed, follow the Health Authority Exposure Management Plan. • Do not compress waste in blue waste drum. • Do not lean into or touch the inside surface of the blue waste drum.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>Clean patient room cont'd.</p>	<ul style="list-style-type: none"> ▶ Clean interior glass partitions, glass door panels, mirrors and windows. ▶ Clean all horizontal surfaces in the room (e.g., counters, shelves, radiators, etc.). ▶ Clean hand hygiene sink and fixtures (if present in room). ▶ Wet mop floors and baseboards around perimeter of room, then follow the steps below. • Clean room items, furniture and patient equipment. When each item is cleaned, place it along wall on cleaned floor. <ul style="list-style-type: none"> ▶ Wipe equipment on walls such as top of suction/oxygen outlets, intercom, etc. ▶ Clean any dedicated patient equipment (e.g., IV pole, pump, monitor). Leave commode until end of room clean. ▶ Clean the exterior and any accessible interior surfaces of any medical equipment left in the room, including: infusion pumps, ultra-sound machines, portable X Ray machine and ventilators. Enclose the technical/electronic portion of the machine in a large waste bag and clearly mark it as BIOHAZARDOUS in preparation for a final decontamination by the appropriate technician. Place the wrapped unit in the exit room, to be transported to its end destination along with the waste. ▶ Clean over-bed lift straps and controls. ▶ Clean the bedside cupboard or locker inside and out. Clean over-bed table, including the underside that touches the patient's blankets and any drawers. Pay particular attention to those areas that are touched frequently by patient and/or caregivers. • Clean bed. Make sure the head and foot are raised and entire under carriage is cleaned. <ul style="list-style-type: none"> ▶ Discard pillow. Clean top and sides of mattress; turn over and clean underside. ▶ Check for cracks or holes in mattress and note so housekeeping supervisor/infection control practitioner can be notified (item must be discarded). ▶ Inspect for pest control and note to initiate facility process if applicable. ▶ Clean exposed bed springs and frame. ▶ Remove head and foot piece (if removable). Clean all sides of headboard, foot board, bed rails, call bell and bed controls. Pay particular attention to areas that are frequently touched by patients and staff. ▶ Clean all lower parts of bed frame, including casters. • Clean commode if present in room: <ul style="list-style-type: none"> ▶ Start at the back top of commode cleaning those areas that do not touch the patient, and work in to those that do (inside back support, armrests, seat). Pay close attention to the underside of the rim. Clean leg supports and foot rests. • Clean outer gloves using wipe. 	<p>Guideline needs to be developed (e.g., In the unlikely event that a mattress has a crack or hole, how would it be removed and destroyed? Possible direction could be: <i>Clean mattress, let dry, tape up any tears/holes, mark directly on mattress with indelible ink "FOR DESTRUCTION – BIOHAZARDOUS WASTE."</i> Note: Current direction is to discard in blue drum when patient discharged.)</p>

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean bathroom	<ul style="list-style-type: none"> • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area; then discard in the red waste pail ▶ Change the wipe/cloth if it is no longer saturated with disinfectant, is visibly soiled, and after cleaning a heavily soiled item. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean ceiling. ▶ Clean door handle, door frame and light switch. ▶ Clean chrome wall attachments. ▶ Clean walls (ceiling to floor). ▶ Clean inside and outside of sink, sink faucets and mirror. Wipe plumbing under the sink. ▶ Clean all dispensers and holders. ▶ Clean call bell and cord. ▶ Clean support railings, ledges and shelves. ▶ If present, clean shower faucets, including soap dish and railing. Scrub shower walls and ceiling. ▶ Clean bedpan support and/or seat raiser, and entire toilet including handle, lid (if present) and underside of flush rim. ▶ Clean toilet bowl with toilet brush/swab. Discard into waste container. • Clean outer gloves using either wipe (if visibly soiled) or alcohol based hand rub. 	<ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Damp mop floor	<ul style="list-style-type: none"> • Floors are cleaned around perimeter of the room to receive cleaned equipment and furniture. • All other floor surfaces are washed after patient room and bathroom are cleaned. • Wring out mop pad. Attach to mop handle. • Do bedroom first, followed by bathroom. • Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. • In open areas use, overlapping side to side strokes. If pad becomes soiled, remove, discard and replace. • When entire floor is washed, remove mop pad and discard in waste container. • Clean outer gloves using either wipe (if visibly soiled) or alcohol based hand rub. • Wipe mop handle, ladder with wipe/cloth. Place by door to exit room. • Pour any remaining solutions into toilet. Flush and wipe toilet. Discard bottles/dispensers. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.

ACTIVITY	STEPS	KEY SAFETY POINTS
Prepare waste container for removal	<ul style="list-style-type: none"> • Close red waste pail with lid or, if bag is used, twist top and close with zip tie. Wipe all sides and place in blue waste drum in exit room. Wipe floor where pail/bag was located. Place wipe in blue waste drum in exit room. • Dismantle mop handle and discard in blue waste drum. • Clean outer gloves using wipe. • Leave cleaned equipment in “clean” patient room. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in appropriate waste receptacle. • Perform hand hygiene. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.
Sign off discharge precaution checklist	<ul style="list-style-type: none"> • Page Environment Services supervisor/manager (designated individual) AND infection prevention and control practitioner (nurse if they are not present) observing the discharge precaution clean. [add specific pager/phone numbers] • Environment Services staff complete precaution discharge clean checklist and sign off that room has been cleaned. Checklist is also signed by supervisor and infection prevention and control practitioner. 	<ul style="list-style-type: none"> • Patient room cleaning may be observed by Environment Services supervisor AND infection prevention and control practitioner to allow sign off that appropriate cleaning processes were followed and room is ready for next patient.
Room set-up	<ul style="list-style-type: none"> • Once signoff has occurred, proceed to make up the room for the next patient by: <ul style="list-style-type: none"> ▶ With clean hands (gloves and other PPE are not required), remake bed and replenish supplies as required (e.g., gloves, alcohol based hand rub, soap, paper towels, clean waste bag in waste canisters). ▶ Hang clean curtains. ▶ Tag any equipment as “clean” and return it to the designated clean area. ▶ Remove precaution sign, clean and disinfect, and place in designated storage area. • Clean hands with alcohol based hand rub upon leaving room. 	
Discharge cleaning of ante “clean” and exit room	<ul style="list-style-type: none"> • See standard operating procedures #8 and #9. 	

Standard Operating Procedure #8 – Discharge Cleaning of Ante (Clean) Room and Personal Protective Equipment Doffing (Exit) Area When They are in the Same Room

Steps to follow for discharge cleaning of clean room and exit room when they are both located within one area. Each hospital in B.C. may have different configurations for these two areas.

- One room located immediately adjacent to the patient room, and used for both clean and exit room purposes (for cleaning, use this standard operating procedure).
- Two rooms adjacent to the patient room, each designated as one of these area (for cleaning, see Standard Operating Procedure #9).

Principles used:

1. Clean and exit rooms are cleaned when patient is transferred/discharged from patient room.
2. Surfaces contaminated with blood or body fluids are cleaned immediately (see Standard Operating Procedure #10).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. Where one room is used for both purposes, there is a natural flow from corridor through door to clean side, and then across room to exit side, and through door into patient room. The reverse would be followed when exiting the patient room. There is a clearly delineated area for taking off personal protective equipment (PPE) and locating the blue waste drum.
5. There is a divide of preferably two metres/six feet between area where clean supplies are kept and area on exit side where PPE is taken off. The blue waste drum is in the exit area and should be the maximum distance possible from the clean supplies.
6. Discharge cleaning for Environmental Services staff is co-ordinated with nursing's preparation of the patient room. To avoid cleaning areas twice, the cleaning of the patient room should be done separately to the clean and exit rooms, and not a sequenced flow through approach.
7. Although the "clean" side is classified as clean, given its direct adjacency to the exit side, PPE for low transmission risk situations is used.
8. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in anterooms (clean rooms) and patient rooms.
9. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM. IN THE CLEAN ROOM, A RED WASTE PAIL IS ROUTINELY USED.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – "clean" room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in area between clean and exit sides) – not used for patient room.
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Red waste pail UN3733 (located in clean area), labelled in same fashion as the blue waste drum.
- Four biohazardous labels.

ACTIVITY	STEPS	KEY SAFETY POINTS
Discharge cleaning of patient room	<ul style="list-style-type: none"> • Environmental Services staff perform discharge clean of patient room, following Standard Operating Procedure #7. 	
Pre-cleaning preparation of ante/clean and exit rooms	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Prepare bucket/container of [identify HA solution] wipes, pre-soaked microfibre cloths (if used); or labelled, pre-filled bottle with cap. • Prepare [identify HA solution] pre-soaked mop pads. • Label the red waste pail (quarantine patient identifier/BIN number). • Take into anteroom. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Both Environmental Services workers enter exit room to take off personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in red waste bag. • Perform hand hygiene. Put on clean gown and pair of gloves. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.
Cleaning concepts	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	
Clean “clean” side	<ul style="list-style-type: none"> • Take all needed supplies into anteroom or designated clean space. • Remove all opened supplies, all supplies not easily cleaned, and discard into red waste pail located in “clean” area. Place any unopened, easily cleaned supplied to one side. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all shelves, ledges and cupboards. Wipe unopened, easily cleaned supplies and return them to shelves/cupboards. ▶ Clean all counters and sinks. 	<ul style="list-style-type: none"> • Avoid going between clean and exit area to discard wipes. • Never throw wipes into regular waste containers in the anteroom. These should be discarded in the red pail.

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean “clean” side cont’d.	<ul style="list-style-type: none"> • Clean walls from ceiling to floor. • Place red waste pail and lid into exit side (do not seal pail with lid at this point). • Wet mop floors of clean side only (using steps identified below). Discard pad into red waste pail. • Place mop handle on exit side. • Clean gloves with wipe. 	
Clean “exit” side	<ul style="list-style-type: none"> • Once clean side has been completed, clean the exit side of the room. • All waste is placed in blue waste drum: <ul style="list-style-type: none"> ▶ Place red waste pail by blue waste drum. ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all shelves, ledges and cupboards. Discard ALL supplies kept in this area. ▶ Clean all counters and sinks. • Clean walls from ceiling to floor. • Wet mop floors on exit side only (using steps identified below). 	<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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.
Wet mop floors	<ul style="list-style-type: none"> • Wet mop floors using the following steps: <ul style="list-style-type: none"> ▶ Wring out mop pad. Attach to mop handle. ▶ Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. ▶ In open areas, use overlapping side to side strokes. If mop pad becomes soiled, remove, discard and replace. ▶ When completed, remove mop pad and discard into blue waste drum. ▶ Wipe mop handle, dismantle handle, and discard wipe and handle in blue waste drum. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Prepare blue drum for removal	<ul style="list-style-type: none"> • Follow Standard Operating Procedure #11, up to and including placing blue drum on saturated soaker pad and pushing it to outside exit room to second staff member (ES 2) and place on dolly. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.

ACTIVITY	STEPS	KEY SAFETY POINTS
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in blue waste drum. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.
Disposal of red waste pail	<ul style="list-style-type: none"> • First worker (ES 1) seals the red waste pail with lid and wipes all sides. • ES 1 passes red waste pail to second worker (ES 2) to place on cart to take to waste storage. • ES 2 places biohazardous waste labels on drum (two) and pail (two) – one label is placed on either side of drum; one label is placed on either side of pail. • ES1 wipes gloves and assists ES 2 with transport of both blue drum and red pail to waste storage (see Standard Operating Procedure #11). • ES 1 returns to sign off on room and to replenish supplies. 	<ul style="list-style-type: none"> • Drum/pail is taken directly to designated locked waste storage area.
Sign off discharge precaution checklist	<ul style="list-style-type: none"> • Page Environment Services supervisor/manager (designated individual) AND infection prevention and control practitioner (nurse if they are not present) observing the discharge precaution clean. [add specific pager/phone numbers] • Environment Services staff complete precaution discharge clean checklist and signoff that anteroom (clean and exit areas) has been cleaned. Checklist is also signed by supervisor and infection prevention and control practitioner. 	<ul style="list-style-type: none"> • Patient room cleaning may be observed by Environment Services supervisor AND infection prevention and control practitioner to allow signoff that appropriate cleaning processes were followed and room is ready for next patient.
Replenish supplies	<ul style="list-style-type: none"> • Once signoff has occurred, proceed to make up the room for the next patient by: <ul style="list-style-type: none"> ▶ With clean hands (gloves and other PPE are not required), replenish supplies as required (e.g., PPE, gloves, alcohol based hand rub, soap, paper towels, clean waste bag in waste canisters). Keep to minimal amounts. ▶ Tag any equipment as “clean” and return it to the designated clean area. ▶ Remove precaution sign, clean and disinfect, and place in designated storage area. • Clean hands with alcohol based hand rub upon leaving room. 	

Standard Operating Procedure #9 – Discharge Cleaning of Ante (Clean) Room and Personal Protective Equipment Doffing (Exit) Room When They are in Separate Spaces

Steps to follow for discharge cleaning of clean room and exit room when they are separate rooms. Each hospital in B.C. may have different configurations for these two areas.

- One room located immediately adjacent to the patient room, and used for both clean and exit room purposes (for cleaning, see Standard Operating Procedure #8).
- Two rooms adjacent to the patient room, each designated as one of these area (for cleaning, use this standard operating procedure).

Principles used:

1. Clean and exit rooms are cleaned when patient is transferred/discharged from patient room.
2. Surfaces contaminated with blood or body fluids to be cleaned immediately (see Standard Operating Procedure #10).
3. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
4. Where there are two separate rooms, the flow is from corridor through door to clean room, through door into patient room. To exit, go from patient room through door into exit room and through door to corridor after taking off PPE. Do not go from patient room into clean room.
5. Discharge cleaning for Environmental Services staff is co-ordinated with nursing's preparation of the patient room. To avoid cleaning areas twice, the cleaning of the patient room should be done separately to the clean and exit rooms, and not a sequenced flow through approach.
6. Although the "clean" room is classified as clean, given its direct adjacency to the exit side, PPE for low transmission risk situations is used.
7. Waste generated in the clean room is not contaminated and is treated as regular garbage. Waste generated in the exit room could be contaminated and is treated as a low transmission risk – discarded in the red waste bag or blue waste drum.
8. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in anterooms (clean rooms) and patient rooms.
9. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – "clean" room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in exit room) – not used in patient room.
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Absorbent patient care pad to cover toilet while flushing (if applicable).
- Red waste bag with zip tie – labelled in same fashion as blue waste drum (for exit room).
- Four biohazardous labels.
- Regular garbage waste can with black liner (located in "clean" room). Blue waste drum already in exit room.

- Stocked housekeeping cart (for use in “clean” room only).

ACTIVITY	STEPS	KEY SAFETY POINTS
Discharge cleaning of patient room	<ul style="list-style-type: none"> • Follow Standard Operating Procedure #7. 	
Pre-cleaning preparation for ante/clean and exit rooms	<ul style="list-style-type: none"> • Assemble any supplies needed for the room. • Prepare bucket/container of [identify HA solution] wipes, pre-soaked microfibre cloths (if used), or labelled pre-filled bottle with cap. • Prepare [identify HA solution] pre-soaked mop pads. • Label the red waste bag (quarantine patient identifier/BIN number). • Place on housekeeping cart. • Place housekeeping cart outside clean room. • Sign log that you will be entering the room. 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • Always wear safety goggles when pouring undiluted chemicals. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Cleaning concepts	<ul style="list-style-type: none"> • Wet wipe room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one wipe/cloth for each item/area, then discard in the blue waste drum. ▶ Change the wipe/cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist for [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean “clean” room	<ul style="list-style-type: none"> • Remove all opened supplies, all supplies not easily cleaned, and discard into regular waste can. Place any unopened, easily cleaned supplies to one side. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all shelves, ledges and cupboards. Wipe unopened, easily cleaned supplies and return them to shelves/cupboards. ▶ Clean all counters and sinks. • Clean walls from ceiling to floor. • Clean waste can: <ul style="list-style-type: none"> ▶ Remove bag from waste can, twist top and knot, and place by door. ▶ Wipe all surfaces of waste can. ▶ Re-line can with bag. ▶ Discard bag into housekeeping cart waste bag as regular garbage (not biohazard bin). • Wet mop floor using equipment from housekeeping cart. Leave cart outside clean room. • Clean gloves with wipe. 	<ul style="list-style-type: none"> • Use housekeeping cart supplies and solutions as this is NOT a contaminated room.
Clean “exit” room	<ul style="list-style-type: none"> • Once “clean” room has been completed, take any needed supplies (pre-soaked microfibre cloths, mop pads and red waste bag with zip tie) into exit room. • Remove all supplies and discard into blue waste drum. • Clean the exit room: <ul style="list-style-type: none"> ▶ Wipe all high touch surfaces, such as door handles, push plate, touched areas of frame, light switches, thermostats and intercoms. ▶ Clean all wall mounted items such as alcohol-based hand rub dispenser and glove box holder. ▶ Clean all shelves, ledges and cupboards. ▶ Clean all counters and sinks. • Clean walls from ceiling to floor. • Wet mop floors (see steps below). 	<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 blood and body fluids. • If outside glove gets torn, PPE becomes dislodged and skin is exposed, or any other situation occurs that results in potential exposure to EVD, follow the Health Authority Exposure Management Plan.

ACTIVITY	STEPS	KEY SAFETY POINTS
Wet mop floors – exit room	<ul style="list-style-type: none"> • Floors are cleaned using the following steps: <ul style="list-style-type: none"> ▶ Wring out mop pad. Attach to mop handle. ▶ Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. ▶ In open areas, use overlapping side to side strokes. If mop pad becomes soiled, remove, discard and replace. ▶ When completed, remove mop pad and discard into blue waste drum. ▶ Wipe mop handle, dismantle handle, discard wipe and handle into blue waste drum. • Clean outer gloves using wipe. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Prepare blue drum for removal	<ul style="list-style-type: none"> • Follow Standard Operating Procedure #11, up to and including placing blue drum on saturated soaker pad and pushing it to outside exit room to second staff member (ES 2) and place on dolly. 	<ul style="list-style-type: none"> • Do NOT push down on waste to compact it. • Do not lean into or touch the inside surface of the blue waste drum.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Both Environmental Services workers enter exit room to take off personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in red waste bag. • Perform hand hygiene. Put on clean gown and pair of gloves. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.
Disposal of red waste pail	<ul style="list-style-type: none"> • First worker (ES 1) seals the red waste pail with lid and wipes all sides. • ES 1 passes red waste pail to second worker (ES 2) to place on cart to take to waste storage. • ES 2 places biohazardous waste labels on drum (two) and pail (two) – one label is placed on either side of drum; one label is placed on either side of pail. • ES1 wipes gloves and assists ES 2 with transport of both blue drum and red pail to waste storage (see Standard Operating Procedure #11). • ES 1 returns to sign off on room and to replenish supplies. 	<ul style="list-style-type: none"> • Drum/pail is taken directly to designated locked waste storage area.
Sign off discharge precaution checklist	<ul style="list-style-type: none"> • Page Environment Services supervisor/manager (designated individual) AND infection prevention and control practitioner (nurse if they are not present) observing the discharge precaution clean. [add specific pager/phone numbers] • Environment Services staff complete precaution discharge clean checklist and signoff that anteroom (clean and exit areas) has been cleaned. Checklist is also signed by supervisor and infection prevention and control practitioner. 	<ul style="list-style-type: none"> • Patient room cleaning may be observed by Environment Services supervisor AND infection prevention and control practitioner to allow signoff that appropriate cleaning processes were followed and room is ready for next patient.

ACTIVITY	STEPS	KEY SAFETY POINTS
Replenish supplies	<ul style="list-style-type: none"> • Once signoff has occurred, proceed to make up the room for the next patient by: <ul style="list-style-type: none"> ▶ With clean hands (gloves and other PPE are not required), replenish supplies as required (e.g., PPE, gloves, alcohol based hand rub, soap, paper towels, clean waste bag in waste canisters). Keep to minimal amounts. ▶ Tag any equipment as “clean” and return it to the designated clean area. ▶ Remove precaution sign, clean and disinfect, and place in designated storage area. • Clean hands with alcohol based hand rub upon leaving room. 	

Standard Operating Procedure #10 – Blood or Body Fluid Spill Cleanup

The same standard of practice is used for blood and body fluid spills inside and outside patient rooms.

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. The Ebola virus is spread through direct contact (body fluids including blood, saliva, mucous, vomit, urine, or feces from an infected person have touched the eyes, nose, mouth, or broken skin of another person), or by indirect contact through contaminated items.
3. Immediately clean and disinfect any surfaces contaminated with blood, urine, feces, vomit or other body fluids that are suspected or known to contain the Ebola virus.
4. Aseptic technique is the basis of cleaning flow. Always work from clean to dirty, from outside towards the centre of space, and from high to low.
5. Disinfectants cannot work properly if the surface has organic material (i.e., blood or other bodily fluids) on it.
6. Never mix chemicals together.
7. In order to simplify processes, it is anticipated that all areas will use a disposable mopping system to eliminate the need for a mop bucket and wringer in ante rooms and patient rooms.
8. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM.

Responsibility: Nursing staff – in patient rooms
Environmental Services staff – outside patient rooms

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Spill kit (kept in ante/clean room) with cleanable surfaces that contains:
 - ▶ inert absorbent granules,
 - ▶ paper towels,
 - ▶ virucide,
 - ▶ dust pan and spatula (when large spill), and
 - ▶ two red biohazardous waste bags with zip ties.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in patient or exit room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Sign to restrict entrance because of large spill.

ACTIVITY	STEPS	KEY SAFETY POINTS
Ensure safety	<ul style="list-style-type: none"> • Use signage or staff to restrict access to area until decontamination is completed, especially for large spills. 	
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • Put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Assess the spill	<ul style="list-style-type: none"> • Let fluid and droplets settle. • Assess the size and nature of the spill to determine the best method of spill cleanup. • Take supplies into room. 	
Spots or small splatter	<ul style="list-style-type: none"> • Using spatula, remove any broken glass or sharps and dispose in puncture proof container. • Check gloves for any tears or punctures. • Wipe the area immediately with paper towelling and discard in blue waste drum. • Clean area with wipe to remove any residual soil and discard. Area must be visibly clean. • Let dry to ensure contact time with disinfect [identify required dwell time]. • Wipe the area a second time to disinfect the surface/area and discard wipe. 	<ul style="list-style-type: none"> • If gloves are torn or punctured, follow the Health Authority Exposure Management Plan. • Disinfectants cannot work properly if the surface has blood or body fluids on it. • If spot is above average height, use the mop pad to clean. Use the extension capabilities of the handle.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>Spills (regardless of size)</p>	<ul style="list-style-type: none"> • Quickly and gently contain spill by creating a circular barricade/berm around the perimeter of the spill with absorbent material (granules or paper towels). • If able to do without stepping into or leaning over spill, use spatula to remove any broken glass or sharps and dispose in puncture proof container. • Check gloves for any tears or punctures. • Place the red waste bag in close proximity to you. • Allow fluid and droplets to settle. • Put disposable paper towels down to cover the material so it doesn't spread further. • To avoid any splashes and splatter, do not spray disinfectant onto spill and do not use a wet vacuum. • Over the paper towels, gently apply (do not spray) a disinfectant according to the manufacturer's instructions (use a product with a broad spectrum virucidal claim and a drug identification number). • Allow the product to remain in place to ensure a minimum contact time of 10 minutes or as per manufacturers' instructions. • Pick up the towels and organic material and place in red waste bag. When all material is removed, twist top of bag and zip tie bag. Discard into blue waste drum. • Clean outer gloves with wipe and discard wipe. • Wring out mop pad and attach to mop handle. • Wash the area using side to side strokes. Replace mop heads as they become soiled. Continue until area is visibly clean. Let dry to ensure contact time of [Identify required dwell time]. • Wipe the area with disinfectant [Identify what will be used in HA] and let dry to ensure contact time. Discard wipes. • If spill occurs on carpet, throw it out. 	<ul style="list-style-type: none"> • Work safely at a controlled pace and be observant for unexpected hazards. • Avoid creating splash while cleaning spill. • Use proper body mechanics when removing the bulk material. Avoid bending at waist or twisting. • If gloves are torn or punctured, follow the Health Authority Exposure Management Plan. • Remember to keep your hands away from your mask and face shield. • To avoid repeatedly standing and squatting when cleaning up matter, put waste into red bag. This also prevents any potential for leakage from high transmission risk matter once it has all been collected in the red waste bag. • 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. • Do NOT use wet vacuum.

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean cleaning equipment	<ul style="list-style-type: none"> • Remove mop pad and discard in blue waste drum. • Wipe mop handle and place in designated area in room. • Wipe exteriors of containers of absorbent granules and virucide. If there is any remaining product, wipe dust pan, spatula and spill kit. Store items back in spill kit and place in room where spill occurred (patient or exit room) for easy access for any subsequent spill. Discard containers when empty and whole kit when discharge precaution cleaning occurs. • Clean outer gloves using wipe (if visibly soiled) or alcohol based hand rub. 	<ul style="list-style-type: none"> • Pour solutions slowly into toilet to minimize splash back onto PPE. • Close toilet lid (if available) before flushing toilet to avoid splash. • If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. • Turn away and stand back from toilet when toilet is flushing to avoid splash.
Remove personal protective equipment (PPE) and signage	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in blue waste drum. • Perform hand hygiene. • Obtain any supplies required for room for subsequent cleans. Take and store in ante/clean room. • Remove signage in ante/clean room restricting access because of spill. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.

Standard Operating Procedure #11 – Access to Drum and Waste Removal from Patient and Exit Room

a) Steps to follow to (a) access blue waste drum and to (b) organize waste removal from the room of any patient under investigation or a confirmed Ebola virus disease (EVD) case. This is done when:

- Infection Prevention and Control have notified EVS that a patient has been admitted to emergency department of in-patient bed who is being followed for EVD-; or
- Replacement blue waste drum is required.

b) Removal

- Blue waste drum is $\frac{3}{4}$ full; or
- Patient is discharged/transferred from the room (emergency department or in-patient bed).

Principles used:

1. Number of health care workers entering the room should be kept to the minimum.
2. Nursing staff will decrease the transmission risk by ensuring the blue waste drum is sealed and disinfected.
3. A process will be established that uses each blue waste drum to its fullest, while maintaining the safety of the patient and staff. When a drum is $\frac{3}{4}$ full in a patient room and another bin is required in the room, if practical to do so, the one located in the exit room will be relocated to the patient room and the clean drum will be placed in the exit room.
4. Each site has a designated locked and secure area for holding biohazardous waste.
5. Stericycle's guidelines regarding waste for EVD will be followed.
6. RED WASTE PAILS (UN3733) ARE USED UNTIL BLUE WASTE DRUMS ARE AVAILABLE. THE RED PAILS ARE KEPT IN THE ROOM UNTIL THEY CAN BE DISCARDED INTO A BLUE WASTE DRUM. IN THE CLEAN ROOM, A RED WASTE PAIL IS ROUTINELY USED.

Responsibility: Nursing staff
Environmental Services staff x 2

Materials needed:

- Clean new blue waste drum (initially two; ongoing one).
- Lid.
- Zip ties.
- Tape.
- Disinfectant.
- Clean silver sharpie.
- Fastener clamp (if a separate item).
- Three cotton soaker pads (one per blue waste drum) – these are the pads on linen carts.

ACTIVITY	STEPS	KEY SAFETY POINTS
Access	<p>INITIAL:</p> <ul style="list-style-type: none"> • Infection prevention and control practitioner notifies Environmental Services a suspected case of EVD has been admitted (emergency department or in-patient) [insert pager/phone number]. <p>ONGOING:</p> <ul style="list-style-type: none"> • Nurse notifies Environmental Services staff blue waste drum needs to be removed from patient room and if new drum is required [insert pager/phone number]. 	
Preparation	<ul style="list-style-type: none"> • In corridor, nurse marks the new clean drums with line listing from infection control Quarantine Patient Identifier number. This is marked in metallic silver Sharpie permanent marker on the outside of the drum and lid. • In corridor, Environmental Services staff marks new drum numerically “Bin #” with same type of pen. • Red waste pails/bags used in the exit room during discharge precaution cleaning must also be labelled with “Quarantine Patient #” and “Bin #”. • A drum is placed in both the patient room and exit room. • This initial setup is done without PPE if patient has NOT yet been admitted to room. In all other cases, this step occurs after PPE has been put on. • Soaker pads are stored in ante/clean room. 	<ul style="list-style-type: none"> • Appropriate PPE must be worn when in low or high transmission risk areas/rooms.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on personal protective equipment (PPE), using the EVD PPE donning and doffing checklist. • The nurse and both Environmental Services staff involved in this task put on PPE following direction from trained observer. • Have the trained observer verify PPE is on correctly. • Nurse goes into patient room. One Environmental Services worker goes into exit room, one Environmental Services worker stays outside exit room. Each person takes one soaker pad saturated but not dripping with [identify HA solution]. 	<ul style="list-style-type: none"> • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>NURSING STAFF:</p> <p>Prepare blue waste drum for removal from patient room</p>	<ul style="list-style-type: none"> Place soaker pad on floor under the drum (pad #1). Remove taped red bags from 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 and repeat the closing procedure. Place the lid on the drum. The lid does not snap onto the drum. Ensure the closure device is placed right side up, so that the safety lock mechanism can be set. This is what seals the lid and drum. Hold the clamp fastener at 9 o'clock and 3 o'clock, attach and secure. Wipe down the drum with [identify HA solution]. Wait until contact time of [identify contact time] has been met. Wipe gloves with clean wipe. While waiting the necessary length of time, receive "in use" blue waste drum from exit room (see below). 	<ul style="list-style-type: none"> Do NOT push down on waste to compact it. Do not lean into or touch the inside surface of the blue waste drum. Work safely at a controlled pace and be observant for unexpected hazards. Assess situation and request assistance if needed to place drum on pad and push into exit room. Remember to keep your hands away from your mask and face shield. Remember to disinfect your gloves if you are in contact with blood and body fluids. If outside glove gets torn, PPE becomes dislodged and skin is exposed, follow the Health Authority Exposure Management Plan.
<p>Replace blue waste drum in patient room</p>	<ul style="list-style-type: none"> First Environmental Service worker pushes the "in use" blue waste drum from exit room to nurse in patient room. Nurse places it in patient room away from cleaned sealed drum. Nurse pushes the cleaned, sealed drum on the soaker pad from patient room into exit room. Once sealed drum is removed, nurse will place the blue waste drum (either from exit room or new) in the location where it is easy to access while providing care and cleaning. If nurse stays in room to provide care, wipe gloves with [identify HA solution] wipe. If nurse leaves room, follow procedure to take off PPE. 	<ul style="list-style-type: none"> Same as above.
<p>ENVIRONMENTAL SERVICE STAFF 1 (ES 2):</p> <p>Prepare blue waste drum for removal from exit room</p>	<ul style="list-style-type: none"> ES 1 receives drum from patient room. Wipe down the drum with [identify HA solution]. Place on new saturated soaker pad (pad #2). Wait until contact time of [identify contact time] has been met. Push the drum on the pad through exit room door. Fold up soaker pad #1 to be discarded as soon as new blue waste drum is in place 	<ul style="list-style-type: none"> Same as above

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>ENVIRONMENTAL SERVICE STAFF 2 (ES 2):</p> <p>Prepare blue waste drum for removal from area and replace drum in exit room</p>	<ul style="list-style-type: none"> • ES 2 receives drum from exit room. • Wipe down the drum with [identify HA solution]. • Wait until contact time of [identify contact time] has been met. • Wipe gloves with clean wipe. • While waiting, push clean waste drum to Environmental Service staff 1 (ES 1) in exit room. ES 1 places the new drum in the exit room and exits into corridor. • ES 2 places two universal biohazard symbols – one on either side of drum. • Both workers transfer the drum onto the designated barrel dolly on top of a soaker pad (pad #3). • The second soaker pad is placed in the blue waste drum in the exit room. • Both workers remove PPE in exit room following the regular procedure (if this is part of a discharge clean, place PPE in red waste pail/bag). See standard operating procedures #8 and #9. • ES 2 places two universal biohazard symbols – one on either side of red waste pail/bag. 	<ul style="list-style-type: none"> • Same as above.
<p>Remove blue waste drum from area</p>	<ul style="list-style-type: none"> • Both Environmental Services staff put on clean gowns and gloves. • Transport drum to the designated holding area. • If confirmation of Ebola has not yet been made, wait for notification from medical microbiologist or designate to determine appropriate labelling. • Remove gown and gloves. Discard in blue waste drum located in waste holding area. • Perform hand hygiene with alcohol based hand rub. • Leave holding area, ensuring door is locked. • Use alcohol based hand rub again outside holding area. 	
<p>Remove red waste pail/bag from area</p> <p>(if part of a discharge clean, see standard operating procedures #8 and #9)</p>	<ul style="list-style-type: none"> • Transport to the designated holding area. • Place in blue waste drum located in storage area. 	
<p>Confirmation of Ebola status</p>	<ul style="list-style-type: none"> • Medical microbiologist or designate will notify Environmental Services supervisor of Ebola test outcome (negative or positive). • Supervisor notifies Environmental Services staff. 	

ACTIVITY	STEPS	KEY SAFETY POINTS
Labelling drum if patient results are Ebola negative	<ul style="list-style-type: none"> • When confirmation is received that a patient is Ebola negative, locate all drums identified “Quarantine Patient Identifier Number.” • Remove the “QUARANTINE” identification by blacking it out with a metallic silver Sharpie permanent marker. • Attach a UN 3733 label to the blue drum. • Move drum(s) to location within the regular biomedical waste holding area. • Perform hand hygiene with alcohol based hand rub. • Complete the Stericycle manifest. 	<ul style="list-style-type: none"> • Once designated as Ebola negative, drum(s) can be released to Stericycle as regular biomedical waste. • Use appropriate PPE for task – Routine Practices. • Use a tracking system to ensure that all drums are located – VCH will share the one they have developed with other HAs.
Labelling drum if patient results are Ebola positive	<ul style="list-style-type: none"> • If patient status is known or when confirmation is received that a patient is Ebola positive, locate all drums identified “Quarantine Patient Identifier Number.” • Two “UN 2814” labels and two “Incinerate Only” labels must be applied to the blue drum, one on either side of the drum. These labels are supplied in the Stericycle kit. • Do NOT cover the “QUARANTINE” marking. • Move drum(s) within designated locked storage area, so they are easily accessible for pick-up. Do NOT place them where the regular pick-up by Stericycle occurs. 	<ul style="list-style-type: none"> • Special pickup procedures need to be established, as these drums cannot be picked as part of the regular Stericycle pick-up.
Arrange Stericycle pick-up from site for Ebola Positive waste	<ul style="list-style-type: none"> • Designated person contacts their Stericycle district manager and identifies drums containing Ebola Positive waste need to be picked up. • Designated person completes all required documentation (see Key Safety Points) as well as the Generator Certification of Proper Waste Packaging Ebola Virus Disease, has it available for time of waste pickup, and provides it to the Stericycle driver. • Manifest is completed by Stericycle (at Stericycle Port Coquitlam plant). 	<ul style="list-style-type: none"> • The generator certificate certifies the drums to be picked up have been: <ul style="list-style-type: none"> ▶ properly packaged to decrease any risk from leakage; and ▶ all proper waste packaging protocols as listed in the Stericycle “Procedures for Handling and Packaging Biomedical Waste from Suspected or Confirmed Cases of Ebola,” as well as the Transport Canada Equivalency Certificate SU11521.1, were followed.

Standard Operating Procedure #12 – Cleaning Emergency Department Entrance, Triage, Waiting Rooms

Cleaning of areas where patient has been prior to placement into emergency department room and/or determination they meet criteria of being a person under investigation or confirmed Ebola virus disease (EVD) case.

Principles used:

1. Patients arriving via BC Ambulance Service (BCAS) will be transported to the designated isolation room as follows:
 - ▶ BCAS crew member(s) from the clean vehicle will gain entrance to the emergency department and place pre-soaked pads down to run the stretcher wheels over prior to transport to the isolation room.
 - ▶ BCAS crew member(s) will pre-determine the safest route to the isolation room to ensure there is no exposure risk present.
 - ▶ Once the patient has been transferred to the isolation room, BCAS member(s) will doff some of their PPE in the exit area of the isolation room.
 - ▶ ALL waste and equipment generated during transport and transfer will be taken back to the BCAS Depot for disposal/disinfection.
2. Any items or surfaces that have come into contact with a patient are to be considered contaminated.
3. Any surfaces touched by patient and family member transporting patient along the route from car to the isolation room are to be considered contaminated.
4. Environmental Services cleaning will commence once an infection control practitioner has determined the patient meets the criteria for EVD and identifies all items/areas to be cleaned.
5. Any bathrooms used by patient will be closed and marked as inaccessible to other patients or visitors by the infection control practitioner until cleaned.
6. The infection control practitioner will inform Environmental Services staff and trained observer of the type of PPE required for cleaning.

Responsibility: Environmental Services staff

Materials needed:

- Personal protective equipment (kept in anteroom – “clean” room/space). See *Ebola Virus Disease Personal Protective Equipment (PPE), Donning and Doffing Guidelines and Checklists* at: www.health.gov.bc.ca/pho/physician-resources-ebola.html.
- Disinfectant wipes (kept in room) or microfibre cloths pre-soaked with [identify what will be used in HA].
- Mop handle (kept in a room).
- Mop pads – pre-soaked with [identify what will be used in HA].
- Squirt bottle with cap, appropriately labelled and pre-filled with [identify what will be used in HA].
- Two biohazardous labels.

ACTIVITY	STEPS	KEY SAFETY POINTS
Pre-cleaning preparation	<ul style="list-style-type: none"> • Determine what areas, furniture, and equipment need to be cleaned (information should be received from infection control practitioner). • Assemble all supplies needed for the cleaning, including red waste pail with lid. • Prepare bucket/container of [identify what will be used in HA] wipes, pre-soaked microfibre cloths (if used) or labelled pre-filled bottle with cap. • Label red waste pail with “Quarantine #, Bin #” (joint task with nurse). • Sign log that you are cleaning areas classified as “transmission risk.” 	<ul style="list-style-type: none"> • Safety of workers is of paramount importance. • All containers of solution must be appropriately labelled with name and concentration. • Disinfectant solutions should be refreshed each shift or, at minimum, daily. Bottles are never topped up.
Personal protective equipment (PPE)	<ul style="list-style-type: none"> • Ask trained observer to watch you put on PPE, using the EVD PPE donning and doffing checklist. • Put on PPE following directions of trained observer. • Have the trained observer verify PPE is on correctly. 	<ul style="list-style-type: none"> • Always follow precaution signage and use the appropriate PPE. • Put on PPE at a controlled pace so that it is applied properly. • No skin should be exposed when PPE is on.
Removal of items and supplies in affected area(s)	<ul style="list-style-type: none"> • Take any needed supplies into the area to be cleaned. • Clean up any blood or body fluid spills (follow Standard Operating Procedure #10). • All dirty/used/opened items and supplies, as well as magazines etc. are discarded in the red pail. • Discard obvious waste. • Spot clean any visible blood and body fluid soil on walls and floor. • Check and note if there is any soil on ceiling. • Clean outer gloves with [disinfectant wipe/wet microfiber cloth]. 	<ul style="list-style-type: none"> • Work safely at a controlled pace and be observant for unexpected hazards. • Anything that cannot be easily cleaned or disinfected is discarded. • 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 outside glove gets torn or PPE becomes dislodged and skin is exposed, follow the Health Authority Exposure Management Plan. • Do not compress waste in red waste pail.

ACTIVITY	STEPS	KEY SAFETY POINTS
<p>Clean surfaces, furniture and equipment used/touched by patient</p> <p>Start in the patient drop off area → waiting room(s) → triage area → diagnostic areas (if required)</p>	<ul style="list-style-type: none"> • Wet wipe area working from clean to dirty and high to low areas of the area, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one cloth for each item/area; then discard in the red waste pail. ▶ Change the cloth if it is no longer saturated with disinfectant. ▶ Surfaces should remain moist [identify time frame for specific solution used] to have the required contact time with the disinfecting solution. <p>Clean areas, furniture and equipment that has been identified by infection control practitioner as needing to be cleaned.</p> <p>The following provides the sequence in areas that require cleaning.</p> <ul style="list-style-type: none"> • Using firm friction when cleaning surfaces: <ul style="list-style-type: none"> ▶ Start by cleaning door handles and push plate. ▶ Check walls for visible soil and spot clean. ▶ Clean light switches and thermostats. ▶ Clean wall mounted items such as alcohol based hand rub dispenser, glove box holder, mask holder and stands containing these items (if present). ▶ Check and spot clean low level interior glass partitions, glass door panels, mirrors and windows. ▶ Check and spot clean all horizontal surfaces such as counters, shelves, radiators, etc. ▶ Clean hand hygiene sinks and fixtures (if present). ▶ Clean all furnishings in the area used/touched by the patient. ▶ Clean any equipment used for patient. ▶ Wipe equipment on walls such as suction/oxygen outlet, intercom, etc. ▶ Pay particular attention to those areas touched frequently by patient, visitors and staff. • Clean outer gloves using wipe. 	
<p>Clean bathroom if identified as used by patient</p>	<ul style="list-style-type: none"> • Clean room working from clean to dirty and high to low areas of the room, using the following infection control concepts: <ul style="list-style-type: none"> ▶ Use one cloth for each item/area; then discard in the red waste pail. ▶ Change the cloth if it is no longer saturated with disinfectant. • Discard any soiled/used/opened supplies. • Using firm friction when cleaning: <ul style="list-style-type: none"> ▶ Clean door handle, door frame and light switch. ▶ Clean walls from ceiling to floor. ▶ Clean inside and outside of sink and sink faucet. ▶ Clean mirror and plumbing under the sink. ▶ Clean all dispensers and holders. ▶ Clean call bell and cord. 	<p>Same as above.</p> <ul style="list-style-type: none"> • When cleaning the toilet, to prevent aerosolization during flushing: <ul style="list-style-type: none"> ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with the clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.

ACTIVITY	STEPS	KEY SAFETY POINTS
Clean bathroom cont'd.	<ul style="list-style-type: none"> ▶ Clean support railings. ▶ Clean ledges/shelves. ▶ Clean bedpan support and/or seat raiser, entire toilet including handle, toilet bowl lid and underside of flush rim. ▶ Clean toilet bowl with toilet brush/swab. • Discard the toilet brush/swab into red waste pail. <p>Clean outer gloves using wipe.</p>	
Damp mop floors	<ul style="list-style-type: none"> • Attach pre-soaked mop pad to mop handle. • Do entrance first (if applicable), then proceed to the waiting area, and then to triage. • Push mop around baseboards first, paying particular attention to removing soil from corners. Avoid splashing walls or furniture. • In open areas, use overlapping side to side strokes. If cloth becomes soiled, remove, discard and replace. • When floor is completed, remove pad and discard in red pail. • Dismantle mop handle and place in the red pail. • Wipe down all exposed surfaces of red waste pail and lid. 	<ul style="list-style-type: none"> • For sites using a regular mop and bucket (rather than pre-soaked disposable mops/cloths), when emptying bucket into the toilet, please note the following precautions: <ul style="list-style-type: none"> ▶ Pour solutions slowly into toilet to minimize splash back onto PPE. ▶ Close toilet lid (if available) before flushing toilet to avoid splash. ▶ If no toilet lid, cover the bowl with a clean absorbent patient care pad prior to flushing. ▶ Turn away and stand back from toilet when toilet is flushing to avoid splash.
Take off (doff) personal protective equipment (PPE) in exit room	<ul style="list-style-type: none"> • Ask trained observer to watch you take off PPE, using the EVD PPE donning and doffing checklist. • Take off PPE following directions from trained observer and place in red waste pail. • Perform hand hygiene. • Put on new gown and gloves. 	<ul style="list-style-type: none"> • Take off PPE at a controlled pace so that protocols are followed properly. • Remember to keep your hands away from your face until you have completed your final hand hygiene with alcohol based hand rub.
Prepare red waste pail for removal	<ul style="list-style-type: none"> • Seal pail with lid. • Wipe down all surfaces of the red pail. • If near patient room in emergency department and blue waste drum is present, place into drum. • If patient has been admitted to in-patient room and drum is not present, place red waste pail on pad saturated with [solution]. Place on a transport cart, attach the two biohazardous labels (one on either side of pail) and transport directly to the designated holding area (see Standard Operating Procedure #11). 	
Restock areas with supplies	<ul style="list-style-type: none"> • Clean hands with alcohol based hand rub. • Restock areas with any needed supplies. 	

DELETE THIS SECTION/PAGE FROM THE STANDARD OPERATING PRACTICE AFTER CUSTOMIZING FOR HA.

INSTRUCTIONS:

For the ease of the cleaning staff (housekeeping and nursing), please customize the above Standard Operating Procedure by including the specific product with its contact time that will be used in your health authority for this type of cleaning. **Those areas are highlighted in blue.**

PRODUCT	CONTACT TIME IN MINUTES
Oxivir Wipes	1
Virox Wipes	1
Clorox Wipes	1
CaviWipes	3
Oxivir Plus Wipes	5
Zochlor – Bleach Tablets	5
Virox RTU Liquid	5
Neutral Disinfectant	5
PCS 5000	5
EP51B	10
Every Day (ED) disinfectant used for regular daily cleaning at all sites, non-precaution	10