

Viral Hemorrhagic Fever (VHF) / Ebola Waste Management

Linen and Environmental Services, Waste Management and Infection Prevention and Control

Contents

What is VHF / Ebola?	2
Designated VHF / Ebola sites	2
Why do we have VHF / Ebola waste management requirements?	2
Emergency Department (ED) waste disposal requirements	3
ED staff	3
Environmental Services (ES) staff	3
Patient room waste disposal requirements	3
Patient care staff	3
ES staff (or designated staff responsible for removing the container)	4
Emergency Medical Services (EMS) waste disposal requirements	4
EMS staff	4
ED staff	5
ES staff	5
Air Ambulance (AA) waste disposal requirements	5
Fixed Wing/EMS Strike Teams	5
Helicopter	5
AA staff	5
ED staff	6
ES staff	6
Laboratory	6
Biomedical waste supplies	7
Transportation of dangerous goods	8
Confirmed VHF / Ebola waste packaging requirement	8
Confirmed VHF / Ebola waste shipping requirement	8
Emergency Response Assistance Plan (ERAP) – ERP2-0746	8

What is VHF / Ebola?

Viral Hemorrhagic Fever (VHF) are viruses, including Ebola, Lassa and Marburg, transmitted to humans from direct contact (e.g., through broken skin or mucous membranes) with blood, other body fluids and tissues of infected persons. Personnel must take appropriate measures to decrease the risk of transmission by following the IPC guidance below.

Refer to the [VHF / Ebola webpage](#) to access resources and IPC recommendations such as:

- [IPC Rapid Assessment and Triage for Emergency Department/Urgent Care Patients Presenting with Potential Viral Hemorrhagic Fever \(VHF\) / Ebola](#)
- [Viral Hemorrhagic Fever \(VHF\) / Ebola Virus Disease \(Ebola\) Guidance for Acute Care Settings](#)
- [Recommendations for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola in addition to Contact & Droplet Precautions](#) which includes a waste and sharps handling section.
- [PPE Requirements for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola](#)

Designated VHF / Ebola sites

The following are designated receiving sites for suspect and confirmed VHF patients:

- South Health Campus (SHC)
- Alberta Children's Hospital (ACH)
- University of Alberta Hospital (UAH): (UAH will receive and care for both adult and pediatric patients)
- Stollery Children's Hospital (Stollery)

In addition, all Emergency Departments (ED) and Urgent Care Centres in Alberta Health Services (AHS) facilities are expected to follow the same requirements for assessing and caring of VHF patients.

Why do we have VHF / Ebola waste management requirements?

To minimize the risk of contact with contaminated waste generated by suspect/confirmed VHF / Ebola virus disease patients, personnel must follow the requirements outlined in this document.

Infection Prevention & Control (IPC) measures included in this guidance are based on currently available scientific evidence and guidelines and are subject to review and change as new information becomes available.

Waste materials generated from a suspect or confirmed patient must be:

- Discarded in biomedical waste containers in room.
- Solidifier is required for any free liquids in the biomedical container.
- Sealed in the biomedical waste container and the outside of the container is disinfected before it leaves the room.
- Secured in a safe manner until laboratory confirmation on the virus. The lab provides this information per existing communication channels, e.g., confirms negative or positive to clinical leads. The clinical leads then notify Environmental Services and the provincial waste management company so that:
 - If results are NEGATIVE, the waste can then be disposed of as regular biomedical waste.

Viral Hemorrhagic Fever (VHF) / Ebola Waste Management | 3

- If results are POSITIVE, secure disposal methods outlined in this document must be followed.
- Managed in accordance with currently available scientific evidence on VHF and relevant provincial and municipal regulations.

Emergency Department (ED) waste disposal requirements

ED staff

- A supply of 18-gallon (yellow) biomedical waste containers will be distributed to all Emergency Departments / Urgent Care Centres in Alberta.
- Collect all waste material generated by a suspect VHF patient and place into a designated biomedical waste container as per [Recommendations for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola in addition to Contact & Droplet Precautions](#).
- Do not fill containers more than $\frac{3}{4}$ full.
- Obtain additional containers as needed through Environmental Services (ES).
 - Ensure a stock of five (5) 18-gallon biomedical waste containers are in the clean utility room at all times (designated sites only).
- Prior to sealing, solidifier is required for any free liquids in the biomedical container.
- Seal the designated biomedical waste container.
- Disinfect the outside of the waste container using an AHS approved disinfectant before removing the container from the room or relocating the container outside of the room or care area. Refer to [Ready-to-Use Disinfectant Wipes - Key Points](#) for examples of AHS approved disinfectants.
- After the container leaves the room affix a biohazard label to the container, indicate suspect or confirmed VHF / Ebola waste on the biomedical waste container, e.g., using a marker.

Environmental Services (ES) staff

- Place the sealed biomedical waste container into a 3 ml yellow biomedical waste bag (double taped using duct tape). Seal the bag.
- Place the bag into a biomedical waste cardboard box indicating suspect or confirmed VHF / Ebola waste.
- Relocate the sealed VHF / Ebola biomedical waste container to the designated quarantine area (facility biomedical waste cooler).
- Separate the suspected VHF / Ebola waste containers from other biomedical waste containers within the designated quarantine area (biomedical waste cooler).

Patient room waste disposal requirements

Patient care staff

- A supply of 18-gallon (yellow) biomedical waste containers is available at the four designated sites.
- Ensure a stock of five (5) 18-gallon biomedical waste containers are in the clean utility room at all times (designated site only). Obtain additional containers as needed through Environmental Services (ES).

Viral Hemorrhagic Fever (VHF) / Ebola Waste Management | 4

- Collect all waste material generated by a suspected VHF / Ebola patient and place into designated biomedical container(s) as per [Recommendations for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola in addition to Contact & Droplet Precautions](#).
- Do not fill containers more than $\frac{3}{4}$ full.
- Prior to sealing, solidifier is required for any free liquids in the biomedical container.
- Seal the designated biomedical waste container. Disinfect the outside of the waste container using an AHS approved disinfectant before removing the container from the room or relocating the container outside of the room or care area. Refer to [Ready-to-Use Disinfectant Wipes - Key Points](#) for examples of AHS approved disinfectants.
- After the container leaves the room affix a biohazard label to the container. Indicate suspect or confirmed VHF / Ebola waste on the biomedical waste container, e.g., using a marker.

ES staff (or designated staff responsible for removing the container)

- During an occupied or discharge/transfer clean follow [Recommendations for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola in addition to Contact & Droplet Precautions](#) Environmental Cleaning section.
- Dispose of all cleaning materials into dedicated containers, e.g., rags, mops, disposables.
- Prior to sealing, solidifier is required for any free liquids in the biomedical container.
- Seal the designated biomedical waste container.
- Disinfect the outside of the waste container using an AHS approved disinfectant before removing the container from the room or relocating the container outside of the room or care area.
- After the container leaves the room affix a biohazard label to the container. After the container leaves the room affix a biohazard label to the container.
- In a clean space, place the container into bag into a 3 ml yellow biomedical waste bag (double taped using duct tape); seal it using tape or zip tie; and then place it into a biomedical waste cardboard box. Indicate suspect or confirmed VHF / Ebola waste on the outside of the box, e.g., using a marker.
- Relocate the suspected VHF / Ebola biomedical waste container to the designated quarantine area (facility biomedical waste cooler).
- Separate the suspected VHF / Ebola waste containers from other biomedical waste containers within the designated quarantine area (biomedical waste cooler).

Emergency Medical Services (EMS) waste disposal requirements

EMS staff

- Follow [Recommendations for Suspect/Confirmed Viral Hemorrhagic Fever \(VHF\) / Ebola in addition to Contact & Droplet Precautions](#) which includes a waste and sharps handling section.
- Collect all waste material generated by a suspected VHF patient and place into a designated 18-gallon biomedical waste container located within the ambulance bay (designated sites only).
- Do not fill containers more than $\frac{3}{4}$ full.
- Prior to sealing, solidifier is required for any free liquids in the biomedical container.
- Seal the designated biomedical waste containers.

Viral Hemorrhagic Fever (VHF) / Ebola Waste Management | 5

- Disinfect the outside of the waste container using an AHS approved disinfectant before removing the container from the room or relocating the container outside of the room or care area. Refer to [Ready-to-Use Disinfectant Wipes - Key Points](#) for examples of AHS approved disinfectants.
- Indicate suspect or confirmed VHF / Ebola waste on the biomedical waste container, e.g., using a marker.

ED staff

- Contact the ES department to relocate the suspected VHF / Ebola biomedical waste container to the designated quarantine area.

ES staff

- After the container leaves the room affix a biohazard label to the container.
- In a clean space, place the container into bag into a 3 ml yellow biomedical waste bag (double taped using duct tape); seal it; and then place it into biomedical waste cardboard box. Indicate suspect or confirmed VHF / Ebola waste on the outside of the box, e.g., using a marker.
- Relocate the suspected VHF / Ebola biomedical waste container to the designated quarantine area (facility biomedical waste cooler).
- Separate the suspected VHF / Ebola waste containers from other biomedical waste containers within the designated quarantine area (biomedical waste cooler).

Note: A supply of 18-gallon biomedical waste containers (5) shall be available in designated locations within the ambulance bays.

Air Ambulance (AA) waste disposal requirements

Fixed Wing/EMS Strike Teams

- Collect and seal all waste material generated by a suspected VHF / Ebola patient into a biomedical waste container (if available) or a 3 ml yellow biomedical waste bag (double taped using duct tape).
 - Prior to sealing, solidifier is required for any free liquids in the container or bag.
- Indicate suspect or confirmed VHF / Ebola waste on the biomedical waste container, e.g., using a marker.
- Transfer sealed biomedical waste bag, along with the suspected VHF / Ebola patient to the waiting ambulance.
- Follow the EMS waste disposal requirements outlined within this document for the disposal of suspected VHF / Ebola waste material.

Helicopter

AA staff

- Obtain a designated 18-gallon biomedical waste container from the hospital ambulance bay.
- Collect all waste material generated by a suspected VHF / Ebola patient and place into a designated biomedical waste container.
- Do not fill container more than $\frac{3}{4}$ full.
- Prior to sealing, solidifier is required for any free liquids in the biomedical container.

Viral Hemorrhagic Fever (VHF) / Ebola Waste Management | 6

- Seal the designated biomedical waste containers.
- Disinfect the outside of the waste container using an AHS approved disinfectant before removing the container from the room or relocating the container outside of the room or care area. Refer to [Ready-to-Use Disinfectant Wipes - Key Points](#) for examples of AHS approved disinfectants.
- Indicate suspect or confirmed VHF / Ebola waste on the biomedical waste container, e.g., using a marker.
 - Relocate the biomedical waste container to the ambulance bay.
 - Notify the ED that the waste is to be quarantined.

ED staff

- Contact the ES department to relocate the suspected VHF / Ebola biomedical waste container to the designated quarantine area.

ES staff

- After the container leaves the room affix a biohazard label to the container.
- In a clean space, place the container into bag into a 3 ml yellow biomedical waste bag (double taped using duct tape); and then place it into a biomedical waste cardboard box.
- Indicate suspect or confirmed VHF / Ebola waste on the outside of the box, e.g., using a marker.
- Relocate the suspected VHF / Ebola biomedical waste container to the designated quarantine area (biomedical waste cooler).
- Separate the suspected VHF / Ebola waste containers from other biomedical waste containers within the designated quarantine area (biomedical waste cooler).
- Ensure a stock of five (5) 18-gallon biomedical waste containers and five (5) biohazard 3 ml bags (for AA) are in the ambulance bay at all times (designated site only).

Laboratory

Follow Alberta Precision Laboratories Biomedical Waste Disposal (HSM15-210) guidance on Insite: Home>Teams>Alberta Precision Laboratories (APL)>For Laboratory Staff>APL Health & Safety Manual Resources>HSM15-210 Biomedical Waste Disposal.

Biomedical waste supplies

Biomedical Waste Containers	Oracle Product Description / Stock Numbers
Biomedical waste 5-gallon pail - yellow	R12-119530
Biomedical waste 5-gallon gasket lid - yellow	R12-258052
Biomedical waste Bag 3 ml - yellow	G.M. Pearson
Biomedical waste 18-gallon	G.M Pearson (AP Medical - AP6ODY)
XSORB®	XL37 CHB packaging (direct purchase) (403) 287-7278
Super-Sorb®	Chemfax MCH202680 (direct purchase) (403) 287-2055
Metrex Canister Express™	#90-49685-CS, 454g
Red Z®	STC41131

Biomedical waste 5-gallon container – yellow



Biomedical waste gasket lid – yellow



Biomedical waste bag 3 ml – yellow



Biomedical waste container 18-gallon – yellow



Transportation of dangerous goods

Confirmed VHF / Ebola waste packaging requirement

Packaging of confirmed VHF / Ebola waste material must comply with the conditions set out within National Standard of Canada CAN/CGSB-43.125-2021:

- Confirmed VHF / Ebola waste will be contained in a securely closed, single-use, leak proof and puncture proof biomedical waste plastic container.
- Biomedical waste plastic container will be placed into the securely closed biomedical waste 3 ml bag.
- Bagged biomedical waste plastic container will be placed into a securely closed fiberboard box.

Note: Unless free liquids are visible in the biomedical waste plastic container, absorbent material is not required. If the biomedical waste plastic container has visible free liquids, absorbent material is required to ensure containment.

Confirmed VHF / Ebola waste shipping requirement

- Personnel handling, shipping or transporting the dangerous goods must be trained in regard to the conditions of the National Standard of Canada CAN/CGSB-43.125-2021.
- Outer packaging must contain the dangerous goods classification “UN3549, MEDICAL WASTE, CATEGORY A, AFFECTING HUMANS” printed legibly and in permanent marker.
- Activate Emergency Response Assistance Plan.

Emergency Response Assistance Plan (ERAP) – ERP2-0746

When offering to ship confirmed VHF / Ebola waste from an AHS designated facility, the shipper (ES) shall activate the ERAP by calling the Operations Centre at the National Lab (OCNML):

OCNML.Director@phac-aspc.gc.ca

Phone: 1-866-262-8433

Mobile: 1-204-942-1427

ERAP Response Teams will respond to spills involving confirmed Ebola waste. (See Alberta Precision Labs ERAP: Home>Teams>Alberta Precision Laboratories (APL)>For Laboratory Staff>APL Health & Safety Manual Resources> Emergency Response Assistance Plan).

Contact Information

Allen Bridge
Provincial Lead, Waste Management Quality, Standards and Compliance
43 Michener Bend
Red Deer AB T4P 0H6
Telephone: 587 797 1886

E-mail: allen.bridge@albertahealthservices.ca