

Viral Hemorrhagic Fever (VHF) Clinical Risk Assessment Tool

Published: May 2026

Patient Information Label (if used)

Last Name:	
First Name:	
Health Card No.:	Date of Birth (yyyy-mm-dd):

Background on VHF

- VHFs are caused by viruses (e.g., Ebola, Marburg, and Lassa) that can damage blood vessels, leading to unexplained bruising and bleeding and, in some instances, severe life-threatening illness due to internal hemorrhage, organ failure, and death.
- VHFs are primarily transmitted through direct contact with blood or body fluids (such as saliva, vomit, urine, or feces) of an infected person. They can also spread through contact with contaminated objects (e.g., medical equipment) or exposure to infected animals (e.g., rodents or primates).
- Ebola, Marburg, and Lassa viruses circulate in defined endemic regions in West and Central Africa.

Purpose of this tool

This risk assessment tool can be used by clinicians to assess whether a patient may have a VHF by conducting an appropriate symptom, travel history, and exposure assessment.

Immediate actions if you suspect your patient may have a VHF

- Immediately implement Public Health Ontario's [recommended IPAC measures](#) for patients with a suspect or confirmed VHF, including routine practices plus droplet and contact precautions with additional personal protective equipment (PPE) (as outlined on [page 5](#)), dedicated patient placement, dedicated care equipment, essential/dedicated staffing considerations, environmental cleaning, and Category A waste management.
- Do not draw blood for VHF or any other testing until after the coordination call (see below), as additional precautions are required for specimen collection, laboratory processing, and transport, unless appropriate VHF protocols are already established and in place at the institution. If blood work has already been collected or sent prior to VHF being considered, notify the laboratory immediately that VHF is on the differential diagnosis so that appropriate biosafety precautions can be implemented without delay.
- Consult your hospital or local Infection Prevention and Control (IPAC) team/hub, where available.
- Consult an Infectious Diseases physician for a secondary assessment, if required and where available.
- Notify, by telephone the Ministry of Health's Health Systems Emergency Management Branch (HSEMB) 24/7 Health Care Provider Hotline (1-866-212-2272 ext. 1). HSEMB will coordinate a call with you and relevant health system partners to discuss your patient's symptoms, travel history, and potential exposure(s).
- Notify, by telephone your local public health unit (PHU) using the [PHU locations website](#).
- Review the Ministry's [High-Risk Pathogen Notification Pathway](#) for more information

VHF Symptom Risk Assessment

1 - Does the patient currently have, or have they had at least one main sign or symptom consistent with a VHF? (check all that apply)

Fever,
Temperature $\geq 38.0^{\circ}\text{C}$,
or Chills

Any hemorrhagic manifestation
(e.g., petechial or purpurral rash, epistaxis,
hemoptysis, hematemesis, bloody stools,
conjunctival injection, etc.)

2 - Does the patient have or have they had any of the following additional signs or symptoms consistent with a VHF? (check all that apply)

Chest pain

Headache

Conjunctivitis

Vomiting

Cough

Fatigue or malaise

Abdominal pain

Diarrhea

Sore throat

Myalgia (body aches)

Nausea

Weakness

VHF Travel History Assessment

Refer to Public Health Ontario's [VHF Landing Page](#) for a list of areas with declared outbreaks or activity in VHF-endemic regions that exceeds expected seasonal and historical ranges.

3 - In the 21 days prior to symptom onset, did the patient travel to an area:

- | | | | |
|---|-----|----|--------|
| • Known to be endemic for a VHF agent, or | Yes | No | Unsure |
| • With a suspected or declared VHF outbreak | | | |

If Yes or Unsure:

Type of travel
(select all that apply)

Worked

Visited

Other Specify:

Setting
(select all that apply)

Urban

Rural

Remote

Locations of travel:

Dates of travel:

Start date:	Return date:	Country:	Province / State / Region / District	City / Town / Village / Community
-------------	--------------	----------	---	--------------------------------------

Other relevant travel information:

VHF Exposure Risk Assessment

4 - In the 21 days prior to symptom onset, did the patient have any of the following potential exposures to a VHF agent? (Check all that apply in Sections 1 and 2)

Section 1 - General VHF Exposure Risks:

Had close, direct contact with the blood or other body fluids of a person confirmed or suspected to have a VHF including:

- Household contacts (including breastfed infants)
- Sexual contacts
- Healthcare or laboratory workers
- Persons handling the bodies of the deceased such as funeral director / attendees and morgue workers

Had close, direct contact with a person who has signs or symptoms of a VHF?

Was a patient, healthcare provider or volunteer in a hospital or medical clinic?

Other exposure Specify risk:
(e.g., attended funeral / burial,
attended large / mass gatherings)

AND/OR

Section 2 - Animal Associated VHF Exposure Risks in Endemic Areas

Contact with an animal during a slaughtering practice?
[Crimean-Congo haemorrhagic fever]

Consumption and/or handling of bushmeat? [Ebola, Marburg]

Contact with a non-human primate (e.g., monkeys and apes)? [Ebola, Marburg]

Contact with a bat or visiting a cave / mine where cave-dwelling bats reside? [Ebola, Marburg]

Contact with a rodent or rodent excrement (e.g., inhaled particles while cleaning rodent excrement, consumption of potentially contaminated food and water)? [Lassa]

Other animal Specify risk:
exposure

Actions: Patient is suspected of having a VHF

In assessing a patient with compatible symptoms, relevant travel history, and potential exposure(s), if you suspect that your patient has a VHF it is strongly recommended that you take the following actions:

1. Immediately implement [Public Health Ontario's IPAC Management of VHF in Acute Care](#) recommended measures, for patients with a suspect or confirmed VHF including:
 - Place patient in a single room (door to remain closed) with a dedicated washroom. Consider using Airborne Infection Isolation Room (AIIR) if the patient symptoms are worsening
 - Implement routine practices plus droplet and contact precautions with additional PPE as outlined below based on patient clinical status. Recommend using Airborne Precautions if patient requires invasive or aerosol generating procedures (e.g., intubation, suctioning, active resuscitation) or exhibiting signs of VHF pneumonia or has a differential diagnosis of tuberculosis, varicella or measles
 - Dedicated patient care equipment to the room or use of disposable equipment (where possible),
 - Essential/dedicated staffing considerations
 - All staff entering the room must wear appropriate PPE, with requirements based on patient clinical status, as outlined below:
 - **Stable suspect cases (e.g. stable vital signs, contained body fluids):**
 - A well-fitting fluid-resistant medical mask ([ASTM level 2 and level 3](#))
 - Disposable full-face shield
 - Disposable fluid-resistant cuffed-sleeve gown that covers to mid-calf ([CSA or AAMI level 2 or 3 standards](#))
 - Gloves with extended cuffs to pull over gown cuffs.
 - **Unstable suspect cases (e.g. abnormal vital signs, uncontained fluids) or confirmed cases both require enhanced PPE:**
 - A fit-tested, seal-checked N95 respirator or powered air purifying respirator (PAPR)
 - Disposable full-face shield
 - Fluid-resistant or impermeable hair/head/neck covering
 - Either an impermeable long-sleeved, cuffed gown that covers to mid-calf and fluid resistant/ impermeable shoe cover with/plus gaiters that come up to the knee **OR** an impermeable coverall and fluid resistant/ impermeable shoe covers/integrated sock (apron can be worn if coverall has zipper on the front) ([CSA or AAMI level 4 standard](#))
 - Double gloves (outer gloves with extended cuffs to pull over gown cuffs)
 - * Staff must be trained in donning and doffing PPE for VHF. A trained observer should monitor compliance with PPE donning and doffing, and actively observe for and promptly address any breaches in PPE use.
2. Do not draw blood for VHF or any other testing until after the coordination call (see below), as additional precautions are required for specimen collection, laboratory processing, and transport, unless appropriate VHF protocols are already established and in place at the institution. If blood work has already been collected or sent prior to VHF being considered, notify the laboratory immediately that VHF is on the differential diagnosis so that appropriate biosafety precautions can be implemented without delay.

3. Consult your hospital or local IPAC team/hub, where available.
4. Consult an Infectious Diseases physician for a secondary assessment, if required and where available.
5. Notify the Ministry of Health's Health Systems Emergency Management Branch (HSEMB) **immediately by telephone** via the 24/7 Health Care Provider Hotline (1-866-212-2272 ext. 1).
See the [High-Risk Pathogen Notification Pathway](#) for more information.
 - HSEMB will coordinate a call with you and relevant health system partners to discuss your patient's symptoms, travel history, and potential exposure(s).
 - During the meeting, decisions will be made on VHF testing, patient care and transfer (if required), and communication coordination.
 - Prioritize detailed travel and exposure assessments to guide risk assessment, particularly when there is uncertainty.
6. Notify your local public health unit (PHU) **by telephone** using the [PHU locations website](#).

Before notifying the Ministry of Health and your local public health unit, please collect as much of the following patient information (as below) to help inform decision making. Note that information can be collected remotely (e.g., via phone or video call with patient)

- **Patient status**

- Current location of the patient
- Clinical condition and stability (e.g., stable/unstable, deteriorating, hospitalized, deceased)

- **Clinical information**

- Clinical presentation (symptoms, onset, progression, severity)
- Differential diagnoses
- Relevant medical history
- Immunocompromised status
- Travel-related prophylaxis (e.g., Hepatitis A and B vaccination status, Malaria prophylaxis)

- **Travel history**

- Country(ies) visited and specific locations (e.g., province / state / region / district, city / town / village)
- Dates of travel

- **Contact and exposure history**

- **Associated persons (if known)**

- Number and status of other travelers, household members, or close contacts
- Any symptoms or diagnoses among contacts

DO NOT include personal identifiers during notification (e.g., name, date of birth, health card number)

Actions: Patient is not suspected of having a VHF

1. Follow routine measures for the suspected diagnosis.
2. If another disease of public health significance is suspected or confirmed, please notify your local public health unit as per the [Health Protection and Promotion Act, R.S.O. 1990, c. H.7, s. 25 \(1\)](#).

Additional clinical notes:

Clinician Full name (printed):

Clinician's Signature:

Date signed (yyyy-mm-dd):

Resources:

Public Health Ontario monitors VHF activity worldwide and lists unexpected activity in VHF endemic areas and on VHF outbreaks declared by the World Health Organization on its [VHF Landing Page](#).

Additional information on current VHF outbreaks and endemic VHF-agent areas may be found at:

1. World Health Organization (WHO). Disease outbreak news (DONs) [Internet]. Geneva: WHO; 2025 [cited 2025 Jun 11]. Available from: <https://www.who.int/emergencies/disease-outbreak-news>
2. Government of Canada. Travel health notices [Internet]. Ottawa, ON: Government of Canada; 2024 [modified 2024 Aug 22; cited 2025 Jun 11]. Available from: <https://travel.gc.ca/travelling/health-safety/travel-health-notice>

Additional information regarding VHF:

3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Viral hemorrhagic fevers (VHFs) - test information [Internet]. Toronto, ON: King's Printer for Ontario; 2026 [cited 2026 Apr 9]. Available from: <https://www.publichealthontario.ca/en/laboratory-services/test-information-index/vhf-diagnostic-serology>
4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Diagnostic testing for viruses that cause hemorrhagic fevers [Internet]. Toronto, ON: King's Printer for Ontario; 2026 [cited 2026 Apr 9]. Available from: https://www.publichealthontario.ca/-/media/Documents/Lab/vhf-diagnostic-testing.pdf?sc_lang=en
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control management of viral hemorrhagic fever in acute care Toronto, ON: King's Printer for Ontario; 2025 [cited 2026 Apr 09]. Available from: <https://www.publichealthontario.ca/-/media/Documents/V/26/vhf-ipac-acute-care.pdf?>

Additional information regarding VHF:

6. Ontario Ministry of Health. High-risk pathogen notification pathway [Internet]. Toronto, ON: King's Printer for Ontario; 2025. Available from: <https://www.ontario.ca/files/2025-10/moh-notification-pathway-hsp-en-2025-10-06.pdf>
7. Ontario Ministry of Health. Public health unit locations [Internet]. Available from: <https://www.ontario.ca/page/public-health-unit-locations>

Disclaimer:

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication. The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

Citation:

Citation: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Viral hemorrhagic fever (VHF) symptom and exposure risk assessment for clinician use. Toronto, ON: King's Printer for Ontario; 2026.

For more information, visit publichealthontario.ca.

© King's Printer for Ontario, 2026