



Version 30 Sept 2024

An outbreak of Marburg virus disease (MVD) was declared in Rwanda on 27 September, 2024. This is the first outbreak of the disease recorded in Rwanda; however, MVD outbreaks have been regularly reported from neighboring Uganda. Other countries in Sub-Saharan Africa have previously reported outbreaks, including those that have emerged in Western Sub-Saharan Africa since 2021. WHO classified the risk of this outbreak as high at the regional level. The risk for importation of MVD from Rwanda to South Africa is considered to be low. The risk is continuously assessed as the situation develops in Rwanda.

Despite the low risk of importation into South Africa, Rwanda and South Africa are both part of the WHO African Region and healthcare workers across the country should be on high alert for suspected MVD cases (see case definition). It is important to exclude malaria in cases of febrile illness among returning travelers from affected areas/countries.

MVD case definition:

A **suspected case** of MVD: Any person presenting with one or more of the following symptoms: an acute onset of fever ($\geq 38^{\circ}\text{C}$), nausea, vomiting, diarrhoea, severe headache, muscle pain, abdominal pain, or unexplained haemorrhage; who visited or resided in Rwanda, in the 21 days prior to onset of illness and had direct contact with or cared for suspected/confirmed MVD cases in the 21 days prior to onset of illness or has unexplained multisystem illness that is malaria-negative.

Transmission of Marburg virus (MARV):

MARV is transmitted through close and direct physical contact with infected bodily fluids (with blood, faeces and vomit being the most infectious). Health care workers and caretakers are at higher risk. Other higher risk activities include contact with the deceased for example during funeral processions. In previous outbreaks, cases of MVD have been reported among miners working in caves inhabited by *Rousettus aegyptiacus* (Egyptian fruit) bats, as well as in visitors to these caves for recreation.

Specimen collection for confirmation of MVD:

1. Detailed specimen collection and submission guidelines are available on the NICD website ([lab guidelines](#))
2. Submit both a clotted blood (red or yellow top tube) and EDTA treated tube (purple top tube) for investigation.
3. The specimens should be packaged in accordance with the [Guidelines for Regulations for the Transport of Infectious Substances](#) (triple packaging using absorbent material) and transported directly and urgently to:
Centre for Emerging Zoonotic and Parasitic Diseases, Special Viral Pathogens Laboratory, National Institute for Communicable Diseases (NICD) National Health Laboratory Service (NHLS), 1 Modderfontein Rd., Sandringham, 2131
4. Ensure that the completed VHF case investigation form accompanies the specimens ([VHF CIF](#))
5. Samples should be kept cold during transport (cold packs are sufficient).
6. The NICD offers a full repertoire of laboratory testing for MVD. **Test requests need only to state for Marburg/Ebola /VHF investigation.** The NICD will provide appropriate testing for each case.

Refer to [lab guidelines](#) on NICD website for more information.

Response to a suspected case of MVD:

1. Establish that the patient meets the case definition for a suspected MVD case.
2. Observe appropriate infection control procedures.
3. Standard management for MVD is limited and may include supportive therapy including fluid management, provision of oxygen, and maintenance of blood pressure and treatment of secondary infections.
4. Inform the NICD hotline (0800 212 552) and notify the local and provincial communicable disease control co-ordinator (CDCC) telephonically.
5. Notify the case telephonically and through the NMC to platform – complete the Case Investigation Form - **National Guidelines of Recognition and Management of Viral Haemorrhagic Fevers** ([National Guidelines](#)). Submit forms to provincial CDCC.
6. Submit samples to NICD for laboratory testing.

Refer to the [National Guidelines](#) for Recognition and Management of viral haemorrhagic fevers for more information.

Managing a suspected MVD case

As soon as the decision is made to proceed on the basis of a presumptive diagnosis of MVD, measures should be applied to minimize exposure of medical staff, other patients and relatives.

1. Inform the management and infection control officers at the facility about the suspected MVD case.
2. Isolate the patient and apply infection precautions.
3. Administer necessary life-saving therapy, keeping the patient hemodynamically stable, managing fever, and treating any other life-threatening symptoms.
4. Take steps to confirm the diagnosis.
5. Notify the case on NMC and inform the National Director of Communicable Disease Control (CDCC) and relevant provincial CDCC, if not already done.
6. Determine whether the patient should remain at the primary hospital (isolation facilities) or be transferred to a VHF-designated hospital.
7. Assess the patient's risk level as low, moderate, or high based on the "[National Guidelines](#)".

For more information, visit the NICD website, [MARBURG](#) and [VIRAL HAEMORRHAGIC FEVER \(VHF\)](#)