Rapid Risk Assessment for Marburg Virus Disease in Ethiopia
(Risk Assessment: Low)
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Global Health Intelligence Signal

On 18 November 2025, Global Health Intelligence (GHI) in Saudi Arabia has detected a signal of Marburg Virus Disease (MVD) in Ethiopia. The WHO announced on 19 November 2025 that Ethiopia has reported its first MVD outbreak following the identification of suspected viral hemorrhagic fever cases in Jinka town, in South Ethiopia. In 17 November 2025, a total of 7 cases were reported, including 4 confirmed, 3 probable, and 6 deaths. An additional 8 suspected cases were hospitalized, and 157 contacts, including 81 healthcare workers, were under active follow-up.

The index case developed symptoms on 21 October 2025 and was initially treated for malaria, resulting in delayed isolation and likely contributing to further community and healthcare-associated transmission. Clinical presentations included high fever, vomiting, abdominal cramps, diarrhea (watery or bloody), hemorrhagic manifestations, and signs of multi-organ involvement.

Ethiopian health authorities have activated national and regional Emergency Operations Centers (EOCs), enhanced surveillance, initiated widespread contact tracing, strengthened infection prevention and control (IPC) measures, and designated treatment centers for case management. WHO has recommended inter-laboratory confirmation given that this is the first MVD outbreak in Ethiopia and continues to support response coordination and technical guidance.

Update: As of 7 December 2025, Ethiopia has reported a total of 13 confirmed MVD cases since the beginning of the outbreak. Of these, 8 deaths have been recorded, 4 patients have recovered, and 1 case remains under treatment, according to the Ministry of Health's latest situational report. A total of 1,428 laboratory investigations have been conducted to date. One of the confirmed cases was recently detected in Hawassa. WHO continues to work closely with Ethiopian health authorities to strengthen surveillance, support contact tracing, and contain the outbreak as quickly as possible.

Overview on Marburg Virus Disease (MVD)

Marburg Virus Disease (MVD) is a rare but severe zoonotic disease, with a fatality rate ranging average between 24-88%. This rate can be lower with good and early patient care. MVD is caused by viruses of the Orthomarburgvirus genus (including MARV and RAVV) within the Filoviridae family. The Egyptian fruit bat (Rousettus aegyptiacus) is considered the natural reservoir, with human infections typically starting through zoonotic spillover followed by human-to-human transmission through direct contact with body fluids. It can, also, spread through contact with contaminated surface that has been exposed to these fluids.

The incubation period ranges from 2 to 21 days (mean 4-9 days) with symptoms typically developing between 5-10 days. Available evidence indicates no documented asymptomatic transmission. Initial symptoms of MVD infection include high fever, severe headache, muscle aches and fatigue. Many patients develop severe bleeding within a

week of onset. MVD is diagnosed using antibody-capture enzyme-linked immunosorbent assay (ELISA) and (RT-PCR) assay.

In term of available management for MVD, medical countermeasures are under trials. The current management relies mainly on supportive care. There is no approved vaccine or antiviral treatment. Key risk factors include exposure to bat-inhabited caves or mines, close contact with infected individuals, inadequate infection-control practices in healthcare settings, certain high-risk occupations, and potential travel-related importation from affected regions.

Rapid Risk Assessment

Based on PHA's Rapid Risk Assessment Tool: Low risk

- **Probability level: Low**

The probability of importation of MVD into Saudi Arabia remains low. The number of confirmed cases in Ethiopia is limited (7 cases) and geographically confined to sparsely populated areas in Jinka town, South Ethiopia. National health authorities have implemented rapid response measures, including case identification, isolation, contact tracing, and activation of emergency operations. Additionally, WHO is providing technical and operational support to strengthen early containment.

Early detection, strong field investigations, and coordinated control measures significantly reduce the likelihood of further transmission or cross-border spread. Historically, previous Marburg and Ebola outbreaks in East and Central Africa have not resulted in international exportation of cases. Based on the current epidemiological situation and available evidence, the risk of introduction of MVD into Saudi Arabia remains low.

- **Impact level: Low**

The rapid risk assessment indicates that the potential impact of MVD on Saudi Arabia remains low in the event of detection. This is supported by the country's advanced and scalable public health preparedness and response systems, which include robust Points-of-Entry surveillance, strong IPC capacities, and well-prepared healthcare facilities capable of early detection, isolation, and effective clinical management.

These capacities substantially reduce the potential burden on the healthcare system and limit the likelihood of transmission, resulting in a low overall impact level.

Overall, the event is assessed as posing a low risk at the national level, while warranting continued close monitoring and coordinated preparedness efforts.

References:

- https://www.who.int/news-room/fact-sheets/detail/marburg-virus-disease
- https://www.cdc.gov/marburg/about/index.html
- MOH Ethiopia https://x.com/FMoHealth/status/1993361593086685464?s=20