

**Communicable Disease Epidemiology  
and Immunization Section**

401 5th Avenue, Suite 1250  
Seattle, WA 98104

**206-296-4774** Fax 206-296-4803  
TTY Relay: 711

www.kingcounty.gov/health

**Health Advisory - Marburg Virus Disease Outbreaks in United Republic of Tanzania and Equatorial  
Guinea — April 10, 2023**

**Actions Requested:**

- Be aware of two concurrent confirmed outbreaks of Marburg virus disease (MVD) — one in the United Republic of Tanzania (Tanzania) and Equatorial Guinea. No confirmed cases of MVD related to these outbreaks have been reported in other countries outside Equatorial Guinea and Tanzania and the current risk of MVD in the United States is low.
- [Consider MVD in patients with compatible symptoms](#) and history of concerning exposure while in an MVD affected area.
  - Illness typically onsets suddenly and progresses from “dry” symptoms (fever, aches, fatigue) to “wet” symptoms (diarrhea, vomiting, and in some cases, bleeding).
  - Symptoms include some or several of the following:
    - Fever >100.4° F,
    - Severe headache and muscle and/or joint pain,
    - Weakness and fatigue,
    - Sore throat,
    - Inappetence,
    - Gastrointestinal symptoms including abdominal pain, diarrhea, and vomiting,
    - Unexplained hemorrhaging, bleeding or bruising,
    - Red eyes, rash (maculopapular, most prominent on the trunk), and hiccups.
  - Incubation period is 2–21 days following exposure.
  - Alternative diagnoses such as malaria, influenza, COVID-19 or other common causes of febrile and gastrointestinal illness in persons with recent international travel should be considered, evaluated, and managed appropriately.
  - Transmission occurs through contact (through broken skin or mucous membranes) with the blood or other body fluids (including urine, saliva, sweat, feces, vomit, breast milk, amniotic fluid, or semen) of a person who is sick with or has died from MVD, with the body fluids of infected animals, or with needles or other fomites that are contaminated with the virus; Marburg virus is not spread through airborne transmission.
- Inquire about travel history and exposure risk in patients with compatible symptoms:
  - Having contact with a symptomatic person with suspected or confirmed MVD, or any objects contaminated by their body fluids;
  - Experiencing a breach in infection prevention and control precautions that result in the potential for contact with body fluids of a patient with suspected or confirmed MVD;
  - Having contact with semen from a man who has recovered from MVD;
  - Participating in any of the following activities while in an area with an active MVD outbreak:
    - Contact with someone who was sick or died, or any objects contaminated by their body fluids;

- Attend/participate in funeral rituals, including preparation of bodies for funeral/burial;
  - Work in a healthcare facility or laboratory;
  - Visit a healthcare facility or traditional healer;
  - Contact with bats or wild animals;
  - Work or spend time in a mine/cave.
- Consider treatment with supportive care measures in suspected cases; there is no specific treatment for MVD and no vaccination.
  - In the absence of early diagnosis and supportive care, MVD has high mortality rates of between 23%-90%.
- Inform infection prevention and control promptly if a patient is suspected of MVD or other viral hemorrhagic fever and [implement appropriate infection prevention measures](#).
  - Infection prevention measures for MVD are the same as for Ebola Virus Disease, and include the following:
    - Isolate the patient in a single-occupancy room with the door closed and log all staff and visitors entering the room until receiving a negative Marburg virus test on a sample collected >72 hours after symptom onset.
    - Ensure all staff wear appropriate PPE and dispose of PPE appropriately. Separate PPE guidance is available for management of clinically stable and unstable patients.
    - Limit aerosol-generating procedures.
- Counsel patients with planned travel to outbreak-affected areas on ways to prevent exposure to MVD.
- **Immediately** notify Public Health at 206- 296-4774 if Marburg virus disease is suspected.
  - Testing may be coordinated by Public Health for patients with compatible risk factors and symptoms following consultation with CDC and Public Health.

**Background:**

On March 21, 2023, the Ministry of Health of the United Republic of Tanzania (Tanzania) declared an outbreak of Marburg virus disease (MVD) in the country. As of March 22, eight laboratory-confirmed cases, including five deaths (case fatality rate of 62.5%) have been reported from two villages in Bukoba district, Kagera region, in the northern region of the country near the border of Uganda. Two of these cases were healthcare workers, one of whom has died. This is the first MVD outbreak reported in Tanzania. To date, all cases in Tanzania appear to be epidemiologically linked.

On February 13, 2023, Equatorial Guinea Ministry of Health and Social Welfare reported a cluster of deaths suspected to be caused by viral hemorrhagic fever, with subsequent laboratory confirmation of MVD in one of the cases. As of April 5, 2023, 14 laboratory-confirmed cases have been identified in four provinces in Equatorial Guinea, with 10 deaths (case fatality rate of 71.4%).

The World Health Organization has assessed the risk of spread in-country in Tanzania and Equatorial Guinea as very high but moderate at the regional level. Currently, the risk of MVD globally and in the United States is low; to date, no confirmed cases of MVD related to these outbreaks have been identified outside of Equatorial Guinea and Tanzania. There is no evidence to suggest the two outbreaks are related at this time and most experts agree that these represent two independent animal-to-human spillover events. On April 6, 2023, the Centers for Disease Control and Prevention (CDC) issued a [Health](#)

[Alert Network \(HAN\) Health Advisory](#) to inform clinicians and public health departments about these outbreaks.

At this time, CDC does not recommend risk assessment and monitoring by public health departments for travelers returning from outbreak areas. CDC is sending mobile phone text messages (SMS) to travelers returning to the United States explaining what symptoms to watch for within 21 days of last date of travel in Equatorial Guinea or Tanzania. Public Health – Seattle & King County is preparing for potential escalation of the recommendation and will initiate risk assessment and monitoring of returned travelers to King County should recommendations change.

Marburg virus disease is a rare but severe and highly fatal hemorrhagic fever virus which affects people and non-human primates. MVD is caused by two viruses, Marburg virus and Ravn virus, within the Filovirus family. The six species of Ebola virus are the only other known members of the filovirus family. Egyptian fruit bats are the natural reservoir for Marburg viruses and this bat species is known to be present in both affected countries. Viral sequencing data from Tanzania is in process; these results will further inform whether these two outbreaks are separate emergence events from distinct animal-to-human spillover events.

**Resources:**

- [CDC | HAN - Marburg Virus Disease Outbreaks in Equatorial Guinea and Tanzania](#)
- [CDC | Assessing Viral Hemorrhagic Fever Risk in a Returning Traveler](#)
- [CDC | Guide for Clinicians Evaluating an Ill Person for Marburg Virus Disease](#)
- [CDC | Diagnoses for Consideration in a Returning Traveler with Fever](#)
- [CDC | Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation \(PUIs\) for Ebola Virus Disease \(EVD\) in U.S. Hospitals](#)
- [CDC | Marburg Outbreaks](#)

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