

Marburg virus disease

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Marburg virus belongs to the Filovirus family, along with Ebola virus. It can cause a severe and often fatal haemorrhagic fever called Marburg virus disease (MARD). The case fatality rate in previous outbreaks ranges from 25% to 88% (average of 50%).

The disease was first recognised in 1967 following two large outbreaks that occurred at the same time in Marburg and Frankfurt in Germany, and in Belgrade in Serbia. The outbreak was associated with laboratory workers who had contact with blood and organs from African green monkeys imported from Uganda.

Marburg virus is an animal-borne (zoonotic) virus. Bats are the primary host but non-human primates (e.g. monkeys and chimpanzees) and antelope can also be infected. Humans can be infected through prolonged exposure to mines or caves inhabited by *Rousettus* bat colonies, or exposure to the body tissue or fluids of infected animals.

Marburg virus can spread from person to person, and transmission occurs from an infected person after they develop symptoms. The disease is spread through direct contact (broken skin or mucous membranes), with blood, secretions, organs or other bodily fluids of infected people, and through contact with materials such as bedding and clothing contaminated with these fluids. Sexual transmission of the virus can occur, and the virus may remain in semen for several weeks after recovery from illness. Transmission via contaminated injection equipment or needle-stick injuries is associated with more severe disease. Close contact with the body or body fluids of people who have died of MARD during preparation for burial is also a recognised source of infection.

Four cases of MARD have occurred in travellers visiting caves inhabited by bats, and miners in the Democratic Republic of the Congo and Uganda have also become infected from working in underground mines where bats live.

Outbreaks and sporadic cases have been reported in Angola, Democratic Republic of the Congo, Equatorial Guinea, Kenya, Ghana, Guinea, South Africa (in a person who had travelled from Zimbabwe), Tanzania and Uganda. In September 2024, the first ever outbreak of MARD was reported in Rwanda.

In previous outbreaks, cases have been diagnosed in returning travellers to the United States and the Netherlands. To date, there have been no reported cases of MARD in the UK.

Symptoms of MARD begin suddenly with a high fever, severe headache, muscle aches and general weakness. Gastrointestinal symptoms can occur within 2-5 days and include watery diarrhoea, abdominal pain, nausea and vomiting. Severe haemorrhagic symptoms may appear within 7 days, and can lead to death from internal bleeding or multi organ failure. Care is supportive and treatment of specific symptoms can improve survival.

There is currently no licensed vaccine for MARD, and no proven treatment.

Check our [Country Information](#) pages for destination-specific news and outbreaks.

Prevention

Travellers who may be at increased risk for exposure to MARD include those involved in animal research, those with prolonged visits to caves inhabited by Egyptian fruit bats, and health care workers (and others) who do not have appropriate personal protective equipment when caring for patients with MARD.

UK travellers planning to visit an area with MARD outbreaks or reporting isolated cases, should consider their trip plans carefully, in consultation with a travel health specialist.

All travellers to Marburg virus risk areas should:

- Ensure regular handwashing with soap and water or use of alcohol-based hand rub.
- Avoid contact with anyone with symptoms of MARD.
- Avoid contact with blood and body fluids and any items that may have been contaminated with blood and body fluids such as cloths, bedding or medical equipment.
- If attending a funeral, mourners should avoid all contact with the deceased, their body fluids and their personal property.
- Avoid handling, cooking or eating any type of raw or wild meat (bushmeat) or meat from unknown sources.
- Wash and peel fruit and vegetables before consumption.
- Follow safer sex advice (to prevent possible sexual transmission from someone who is recovering from MARD)
- Avoid contact with wild animals, including monkeys, forest antelopes, rodents and bats, both alive and dead.
- Avoid caves or mines in areas/countries where MARD has been reported and where bats may be living.

Some traditional burial rituals may play a part in the spread of MARD. The World Health Organization has guidance on [safe and dignified burials](#) to help prevent transmission of Marburg virus in these circumstances.

Aid workers and health professionals planning to undertake humanitarian work in areas where outbreaks or isolated MARD cases are reported, should seek risk assessment advice and training from their employer/organisation prior to travel. They should also be familiar with the UK Health Security Agency guidance: [Ebola and Marburg haemorrhagic fevers: outbreaks and case locations](#) and [Ebola and Marburg: returning workers scheme \(RWS\)](#).

Travellers who become unwell after returning to the UK should ring their GP for advice or call [NHS 111](#). It is important returning travellers provide details of any recent travel to their health professional so appropriate measures and testing can be arranged.

Resources

- [UK Health Security Agency: Marburg virus disease: origins, reservoirs, transmission and guidelines](#)
- [ECDC: Factsheet about Marburg virus disease](#)
- [WHO: Marburg virus disease](#)
- [CDC: Marburg virus disease](#)