

# Marburg virus

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**In news**-Recently, Guinea confirmed the first recorded case of Marburg virus death in West Africa.

## About Marburg virus

- **Marburg virus disease (MVD), formerly known as Marburg haemorrhagic fever.**
- Marburg virus disease is a highly virulent disease that causes haemorrhagic fever, **with a fatality ratio of up to 88%.**
- It is in the **same family as the virus that causes Ebola virus disease.**
- The virus is **passed from animal hosts to humans**, like the coronavirus.
- Two **large outbreaks** that occurred simultaneously in Marburg and **Frankfurt in Germany, and in Belgrade, Serbia, in 1967**, led to the initial recognition of the disease.
- The outbreak was associated with laboratory work using African green monkeys (*Cercopithecus aethiops*) imported from Uganda.
- The **worst epidemic was in Angola in 2005**, with 252 infections and a 90% death rate.
- This epidemic apparently spread through the reuse of contaminated transfusion equipment in a paediatric ward.

## Symptoms

Symptoms include headache, vomiting blood, muscle pains and bleeding through various orifices. Many patients develop severe haemorrhagic signs within seven days. Case fatality rates have varied from 24% to 88% in past outbreaks depending on virus strain and case management.

## Transmission

- **Rousettus aegyptiacus, fruit bats of the Pteropodidae family,** are considered to be **natural hosts** of Marburg virus.
- The Marburg virus is **transmitted to people from fruit bats** and spreads among humans through human-to-human transmission.
- Once an individual is infected with the virus, Marburg can spread through human-to-human transmission via direct contact with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials contaminated with these fluids.

### **Treatment and vaccines**

Currently there are **no vaccines or antiviral treatments approved** for MVD. However, supportive care rehydration with oral or intravenous fluids – and treatment of specific symptoms, improves survival.

### **Ebola virus**

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a rare but severe, often fatal illness in humans.
- Occasional outbreaks of this disease occur mostly on the African continent.
- EVD most commonly affects people and nonhuman primates (such as monkeys, gorillas, and chimpanzees).
- The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- Ebola virus was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of Congo

**It is caused by an infection with a group of viruses within the genus Ebolavirus, which include:**

- Ebola virus (species Zaire ebolavirus)
- Sudan virus (species Sudan ebolavirus)

- Tai Forest virus (species Tai Forest ebolavirus, formerly Côte d'Ivoire ebolavirus)
- Bundibugyo virus (species Bundibugyo ebolavirus)
- Reston virus (species Reston ebolavirus)
- Bombali virus (species Bombali ebolavirus)

Only four (Ebola, Sudan, Tai Forest, and Bundibugyo viruses) have caused disease in people.