



Marburg Virus

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Why in News

Recently, West Africa's first case of the extremely contagious and deadly **Marburg virus** was confirmed in Guinea.

- Its first case was first identified just **two months after the country was declared free of Ebola**.
- Both the **Marburg case and this year's Ebola cases were detected in Guinea's Gueckedou district**.
- The **first cases of the 2014-2016 Ebola epidemic, the largest in history, also were from the same region in Southeastern Guinea's forest region**.



Key Points

- **About:**

- Marburg virus disease is a highly virulent disease that causes **haemorrhagic fever**, it is **carried by bats with a fatality ratio of up to 88%**.
- It is in the **same family as the virus that causes Ebola virus disease**.
- **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.

- Subsequently, outbreaks and sporadic cases have been reported in Angola, Democratic Republic of the Congo, Kenya, South Africa and Uganda.
- There have been **12 major Marburg outbreaks since 1967**, mostly in southern and eastern Africa.

- **Human- Infection:**

Human infection with Marburg virus disease initially results from prolonged exposure to mines or caves inhabited by **Rousettus bat colonies**.

Rousettus is a genus of Old World fruit bats or megabats. They are sometimes referred to as **dog-faced fruit bats, or flying foxes**.

- **Transmission:**

Once an individual is infected with the virus, **Marburg can spread through human-to-human transmission via direct contact** (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.

- **Symptoms:**

- **Headache, vomiting blood, muscle pains and bleeding** through various orifices.
- Symptoms become increasingly severe and can include **jaundice**, inflammation of the pancreas, severe weight loss, liver failure, **massive hemorrhaging**, and **multi-organ dysfunction**.

- **Diagnosis:**

- Since many of the disease's symptoms are similar to those of **malaria** and typhoid fever, making a diagnosis is difficult.
- However, **Polymerase Chain Reaction (PCR)** and **Enzyme-Linked Immunosorbent Assay (ELISA)** testing can be used to confirm a case.

- **Treatment:**

- There is no specific treatment or approved vaccine for Marburg hemorrhagic fever. **Supportive hospital therapy** should be utilized.
- Supportive hospital therapy includes balancing the patient's fluids and electrolytes, maintaining oxygen status and blood pressure, replacing lost blood and clotting factors, and treatment for any complicating infections.

Source: IE