

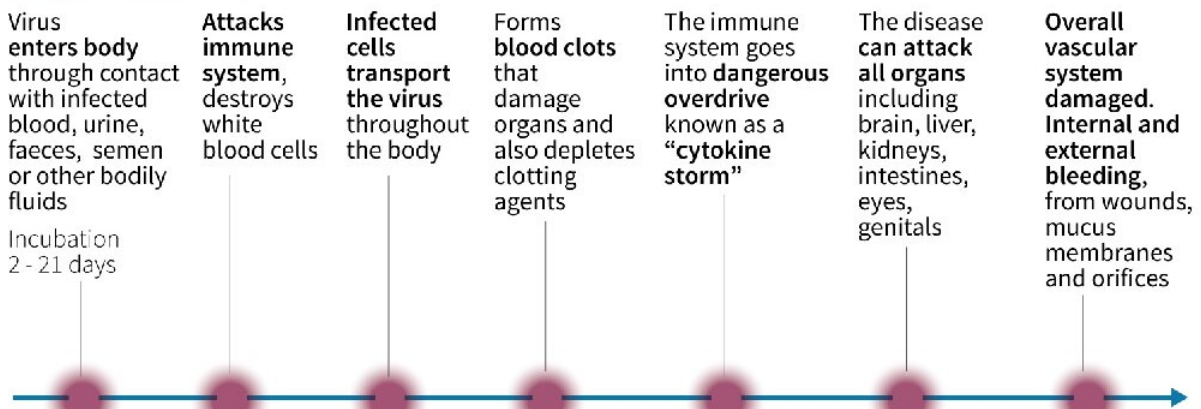

The Ebola virus: profile of a dreaded killer

September 20 2022

How the Ebola virus attacks

Viruses are parasitic, they hijack living cells to reproduce their own genome

Progression of illness





Ebola Hemorrhagic Fever

- Causes fever, vomiting and intense diarrhoea
- Ebola is a **Filovirus**, identified in 1976
- The group includes the *Marburg*, another deadly virus



Fruit bats of the pteropodidae family are thought to be the **natural Ebola virus hosts**



Death can be caused by **organ failure or hypovolemic shock**, the loss of more than 20 percent of blood or fluid supply



Survivors are normally considered cured if virus is no longer detectable in the bloodstream, typically within weeks of infection

Sources: WHO/emedicine.medscape.com/CDC/Medicinet.com/Medterms.com/Healthline/Boston University



Factfile on how the Ebola virus attacks.

The highly contagious Ebola virus has claimed more than 15,000 lives since it was first identified in central Africa in 1976.

On Tuesday, [Uganda announced](#) its first Ebola fatality since 2019 in an outbreak in the central district of Mubende.

Here is a factfile on one of the world's most deadliest diseases:

Origins

Ebola is a viral haemorrhagic fever that was first discovered in the Democratic Republic of Congo (DR Congo).

Five of the virus species are known to cause disease in humans—Zaire, Sudan, Bundibugyo, Reston and Tai Forest.

The first three have resulted in serious outbreaks in Africa.

The 24-year-old man whose death was announced Tuesday in Uganda tested positive for the Sudan strain.

Transmission

The virus' natural reservoir animal is suspected to be a species of fruit bat, which does not itself fall ill but can pass the disease on to primates, including humans. Humans become exposed to the virus if they kill or butcher infected bats for food.

Among humans, the virus is passed on by contact with the blood, body fluids, secretions or organs of an infected or recently deceased person.

Those infected do not become contagious until symptoms appear. They

become more and more contagious until just after their death, which poses great risks during funerals.

Death rates are high, at around 50 percent on average of those infected, and up to 90 percent for some epidemics, World Health Organization (WHO) data show.

Symptoms

Following an [incubation period](#) of between two and 21 days, Ebola develops into a [high fever](#), weakness, intense muscle and [joint pain](#), headaches and a [sore throat](#).

The initial symptoms are often followed by vomiting and diarrhoea, skin eruptions, kidney and [liver failure](#), and sometimes internal and external bleeding.

Vaccines and treatment

Merck's Ervebo vaccine, the first Ebola jab approved by the US Food and Drug Administration (FDA) in December 2019, has been shown to be highly effective in protecting people from the Zaire strain.

US group Johnson & Johnson has also reported promising results against the Zaire strain of its two-dose Zabdeno vaccine, which has been authorised for use in the European Union.

In terms of treatment, the WHO in August recommended two life-saving medicines, Inmazeb and Ebanga, which were successfully trialled during Ebola outbreaks.

Worst outbreaks

The worst-ever outbreak began in December 2013 in southern Guinea before spreading to two neighbouring West African countries, Liberia and Sierra Leone.

More than 11,300 people were killed, according to WHO estimates.

The second-deadliest took place between 2018 and 2020 in DR Congo's conflict-plagued North Kivu province and killed 2,299 people according to the WHO.

DR Congo has experienced 14 Ebola outbreaks since the 1970s.

The first person infected outside Africa was a Spanish nurse who caught the disease in 2014 after cleaning the hospital room of a Spanish missionary who was repatriated from West Africa with the virus. The missionary died but the nurse survived.

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