

Lassa Fever

ABOUT THE DISEASE

Lassa fever is an acute, viral illness typically found in the West African countries of Guinea, Liberia, Sierra Leone, and Nigeria. It is named after the Nigerian town where it was first detected in 1969.

The fever is caused by Lassa virus, a member of the arenavirus family – a group of viruses generally transmitted by rodents. The virus is most commonly spread from rodents to humans, or from humans to humans, with hundreds of thousands of people infected each year. Tens of thousands die annually of the disease, making Lassa fever a major public health concern in the region.

TRANSMISSION, SYMPTOMS, AND PROGNOSIS

Lassa is an animal-borne virus that is endemic in rodents, particularly the “multimammate mouse.” These rodents are common in sub-Saharan Africa and frequently colonize human living spaces, making contact with humans nearly unavoidable. The rodents shed the virus in urine and droppings, and humans can catch the virus through direct contact with rodent excrement; by inhaling tiny particles of excretions circulating in the air; or by eating contaminated food supplies. Once a human has the virus, they can spread it to others through infected fluids or tissue, or through contact with contaminated medical equipment.

Those with Lassa fever exhibit a range of symptoms beginning one to three weeks after infection. Symptoms may include fever; cough; chest, back, and abdominal pain; sore throat; vomiting and diarrhea; and protein in the urine. Victims may also exhibit neurological problems,



A transmission electron micrograph (TEM) of a number of Lassa virus virions adjacent to some cell debris.
Credit: CDC/C. S. Goldsmith/Wikimedia Commons

particularly hearing loss. Deafness occurs in 25% of Lassa patients, with about half regaining some of their hearing after recovery.

Women in their last trimester of pregnancy and their unborn fetuses are at particularly high risk of death, as are children and the elderly.

PREVENTION AND TREATMENT

The most effective way to prevent the disease is to avoid contact with the rodents that harbor the disease, through animal control efforts and by keeping living spaces clean. Once Lassa fever is present in the human population, infection control measures such as sterilization of medical equipment; use of protective clothing and equipment; and isolation of infected patients can help to minimize the spread of the disease.

Lassa fever can be diagnosed through laboratory blood tests, and the antiviral drug ribavirin has been shown to be effective in treating the disease. Supportive care aimed at maintaining fluid and electrolyte balance, and stabilizing blood pressure and oxygen levels, are also helpful for recovery.

The material above is collected from the following sources:

- [Centers for Disease Control](#)
- [World Health Organization](#)
- [Patient.co.uk](#)

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