

LASSA FEVER: OVERVIEW AND STATUS UPDATE WEST AFRICA

What is Lassa fever?

Lassa fever is a viral illness caused by the Lassa virus. This virus was first identified in 1969 although the illness that it causes was first described in the 1950s. The Lassa virus is in the Arenaviridae family, and, in severe cases, it can cause a hemorrhagic illness. Outbreaks of Lassa fever generally occur in **West Africa**. Lassa fever is considered endemic in Benin, Guinea, Liberia, Sierra Leone and parts of Nigeria. There is currently an ongoing Lassa fever outbreak in Nigeria as well as one confirmed case in the bordering town of Tchaourou in Benin.

How is Lassa virus infection transmitted?

Lassa virus is transmitted to humans through contact with food or household items contaminated with rodent urine or feces. The main source of the virus is the multimammate rat. The route of transmission is through ingestion or inhalation of the virus. The touching of soiled objects, eating contaminated food or exposure of open wounds can result in infection. Breathing in tiny particles in the air that are contaminated with infected rodent excretions can result in infection. Additionally, person-to-person transmission may occur after exposure to virus in the blood, tissues, secretions or excretions of infected persons. There is no evidence of airborne spread between humans. The Lassa virus can also be spread through contaminated medical equipment such as reused needles. There are reports of sexual transmission of the virus. Persons at greatest risk are those living in communities with poor sanitation or crowded living conditions and health workers caring for Lassa fever patients in the absence of stringent infection control practices.

What are the symptoms?

People who are infected with Lassa virus typically experience gradual onset of the following symptoms:

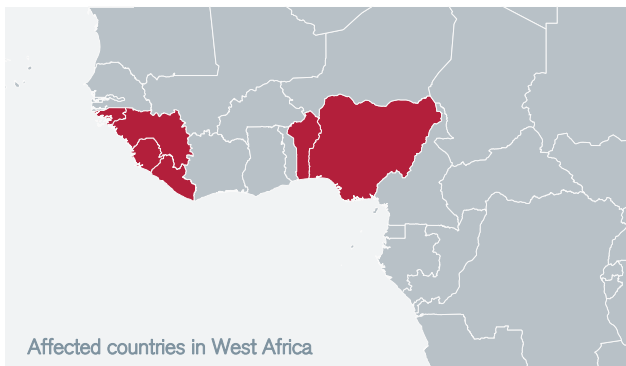


- Fever, lethargy
- Headache
- Sore throat
- Muscle pain
- Nausea, vomiting and diarrhea
- Cough
- Belly pain
- In severe cases, facial swelling, bleeding from the mouth, nose, vagina or gastrointestinal tract, seizures and coma

Lassa virus infection is especially severe late in pregnancy. Maternal death and/or loss of the fetus occur in greater than 80% of cases during the third trimester.

How long after being exposed will I exhibit symptoms?

About 80% of infected people do not develop any symptoms. When symptoms do develop, about 1 in five infections result in severe disease. People who develop symptoms of Lassa fever typically note symptoms 6 - 21 days after exposure to the virus. In severe cases, death generally occurs within 14 days. However, only 1% of all Lassa virus infections result in death.



Affected countries in West Africa

Is there definitive treatment for Lassa virus infection?

Specific antiviral drug treatment is effective when given early in the course of the illness. Supportive care, such as fluid and electrolyte management, is also given. There is no vaccine to prevent infection. Protecting yourself is the best course of action. If you think you have been infected, seek treatment from your healthcare provider. Your provider may order blood tests to look for the virus and exclude other diseases with similar symptoms.

How can I protect myself?

Currently, there is no vaccine to protect against Lassa virus infection. Actions you can take to protect yourself from Lassa virus infection are as follows:



Avoid contact with rodents



Put food in rodent-proof containers



Keep the home clean to help discourage rodents from entering homes



Do not use rodents as a food source



Decrease rodent populations in and around homes



Avoid contact with patient secretions through use of protective clothing such as masks, gloves, gowns and goggles if caring for Lassa patients



Isolate infected persons from contact with unprotected persons until the disease has run its course

Medical Intelligence Status Update

Currently, Lassa fever is affecting several states in Nigeria. Although the disease is endemic in the country, the scope of the currently outbreak is more widespread than in previous years. Thus far, cases have been recorded in 17 states, including the Federal Capital Territory, Lagos and Rivers, where the populous cities of Abuja, Lagos and Port Harcourt are located, respectively. Since November 2015, when the first case was confirmed, health authorities have recorded 212 suspected cases, resulting in 76 deaths. In comparison, according to the Nigerian Centre for Disease Control, 375 people were infected with the disease last year. On a larger scale, Lassa fever outbreaks are common across the African continent and the U.S. Centers for Disease Control and

Prevention (CDC) estimates that each year approximately 100,000 to 300,000 individuals are infected, resulting in approximately 5,000 deaths, across Africa.

Lassa fever is also endemic in Benin. In late January 2016, Benin's Ministry of Public Health confirmed a positive case of Lassa fever in the city of Tchaourou, located in the central Borgou Department near the border with Nigeria. Additional occurrences of Lassa fever transmission are also periodically reported in Guinea, Liberia and Sierra Leone. Additional Lassa fever outbreak information will be posted online via our UnitedHealthcare Global Alerts Member Center. Additional information can also be obtained from the links below.

Security Risk Update

There have been no security incidents related to the ongoing Lassa fever outbreaks in any of the affected countries, thus far. However, as seen with other types of disease outbreaks in West Africa, there is potential for them to spark social unrest if there is general discontent among the population with the government's response, if restrictions and/or quarantines are imposed in an effort to stem the spread of the disease or over the location of temporary treatment facilities. Furthermore, a lack of knowledge of the virus, particularly in rural communities, can lead to attacks against health care workers as residents may suspect them of carrying the disease. Additionally, mistrust of the government and health systems, in general, can lead to resistance among local communities, which increases the potential for violence against health care practitioners.

Are there any risks to me as I travel?

At this time, the CDC has not issued any travel alerts. Awareness of the virus and prevention of exposure is important. Pregnant women should be particularly cautious.

The World Health Organization (WHO), European Centre for Disease Prevention and Control (ECDC) and The Centers for Disease Control and Prevention (CDC) provide updates regarding Lassa fever infections. The links to their sites are provided below. These sites are your best source of current information for travel guidance and recommendations.

- **WHO:** www.who.int/mediacentre/factsheets/fs179/en
- **CDC:** www.cdc.gov/vhf/lassa
- **ECDC:** http://ecdc.europa.eu/en/healthtopics/lassa_fever/Pages/index.aspx

