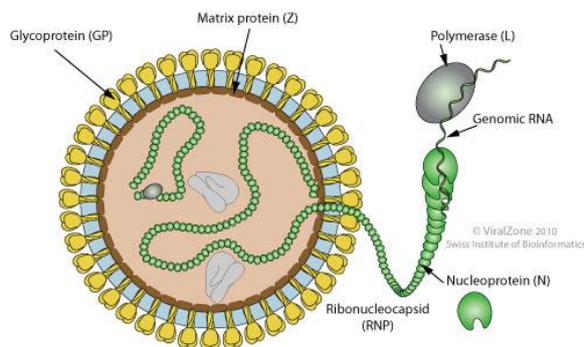


Lassa virus



Lassa fever is a hemorrhagic disease endemic in parts of West Africa, including Sierra Leone, Liberia, Guinea and Nigeria. It is estimated that around 300 000 people are infected yearly, causing approximately 5000 deaths.

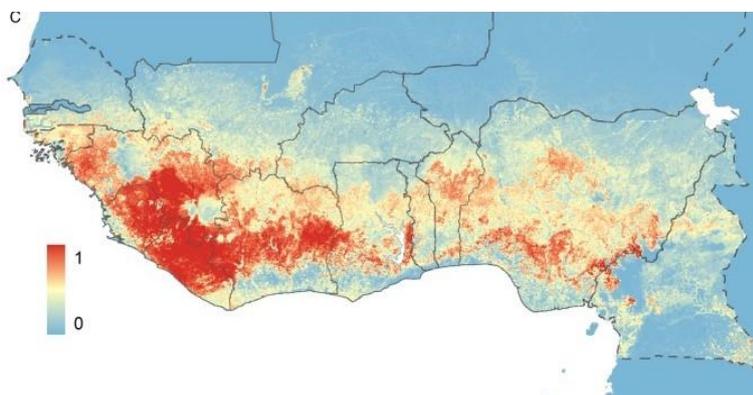
ViralZone, SIB Swiss Institute of Bioinformatics.

Lassa fever is caused by a zoonotic, single stranded RNA virus in the Arenaviridae family, and was first discovered in Nigeria in 1969. The primary mode of transmission to humans is via exposure to infected *Mastomys* rodents, which are the natural reservoir of the virus. This occurs through ingestion or inhalation of food/objects that have been in contact with rodent urine or faeces. Since the rodents often live in or around households and scavenge on poorly stored left-over human food, direct contact transmission is common. In addition, human- to- human transmission may occur after exposure to virus in blood, tissue, secretions or excretions of a Lassa infected person, thus infections in hospitals are not uncommon.

Incubation period is typically 1-3 weeks and for the majority (80%), the symptoms are mild. However, in approximately 20% of the cases, the disease progresses and can cause more serious disease including respiratory distress, bleeding (i.e. gums, nose, and eyes), facial swelling, hearing loss and encephalitis. Sensorineural deafness occurs in up to one-third of patients. Lassa fever is especially dangerous in late pregnancy, where maternal death and/or foetal loss occur in more than 80% of cases during the third trimester.

Approximately 1 percent of all Lassa virus infections result in death, but among hospitalized patients, mortality rates range from 15- 30 percent, and death usually occur within two weeks after onset of symptoms.

Due to the nonspecific and diverse nature of Lassa infection symptoms, clinical diagnosis is difficult. Ribavirin, an antiviral drug shows promising results if administered early after onset of symptoms.



Map of the predicted geographical distribution of the zoonotic niche for Lassa virus

Sources of information

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