

Lassa Fever First Steps Guide

Lassa Fever Background

Lassa fever is an animal-borne acute viral hemorrhagic illness that is endemic in parts of West Africa, including Sierra Leone, Liberia, Guinea, and Nigeria. The Current Infectious Diseases Outbreaks of Concern document lists the countries for which Lassa fever is a concern. Lassa Fever is considered a High Consequence Infectious Disease (HCID) and patients with suspected or known Lassa Fever will be managed following the Ebola/Viral Hemorrhagic Fevers Response Plan.



Humans usually become infected with Lassa virus through exposure to food or household items contaminated with urine or feces of infected “multimammate rat” (*Mastomys natalensis*). Secondary human-to-human transmission can also occur through direct contact with the blood, secretions, organs, or other bodily fluids of infected persons.

Signs and symptoms of Lassa fever typically occur 1-3 weeks after a person is infected. Approximately 80% of Lassa virus infections in humans are either asymptomatic or mild, with fever, fatigue, and headache; however, infection in the remaining 20% of infections represents clinically as a febrile illness of variable severity associated with multi-organ dysfunction with or without hemorrhage. The overall case fatality rate is approximately 1% but is significantly higher among patients hospitalized with severe illness, around 15%.

Lassa Fever Infection Control Guidance

Lassa fever requires activation of the Ebola/Viral Hemorrhagic Fevers Response Plan.

In the Emergency Department, please see the Ebola/Viral Hemorrhagic Fevers Response Plan and resources and additional resources in the Disaster Box, and immediately implement the following:

- As soon as Lassa fever is suspected, the patient should be given a facemask to put on, and the patient will be brought directly to the Decontamination Room via the Ambulance garage using a standard protocol outlined in Emergency Department First Steps for Ebola Virus Disease (EVD) Response.

- Page the **Biothreats non-COVID MD** to review the case. The Biothreats non-COVID MD will assist in evaluation and activation of the plan, as appropriate.
- Limit staff in the room or in contact with patient as clinically feasible. If staff must enter the patient room to provide urgent care, they should don Tier 1 PPE which is as follows:
 - Single-use (disposable) fluid resistant gown that extends to at least mid-calf
 - Single use (disposable) facemask
 - Single-use (disposable) full face shield
 - Two pairs of single-use (disposable) gloves with extended cuffs

If outside of the Emergency Department, please see the [Ebola/Viral Hemorrhagic Fevers Response Plan and resources](#) and immediately implement the following:

- As soon as Lassa fever is suspected, the patient should be given a facemask to put on, and the patient placed in an Airborne Infection Isolation Room (AIIR, “negative pressure” room) with a bathroom, if available. Validate negative airflow (check airflow into the room with tissue or observe ping pong ball indicator if present).
 - If no AIIR is immediately available, place the patient (wearing a facemask) in a room with the door closed.
- Page the **Biothreats non-COVID MD** to review the case. The Biothreats MD will assist in evaluation and activation of the plan, as appropriate.
- Limit staff in the room or in contact with patient as clinically feasible. If staff must enter the patient room to provide urgent care, they should don Tier 1 PPE which is as follows:
 - Single-use (disposable) fluid resistant gown that extends to at least mid-calf
 - Single-use (disposable) facemask
 - Single-use (disposable) full face shield
 - Two pairs of single-use (disposable) gloves with extended cuffs

Lassa Fever Epidemiological and Symptom History

Clinicians should assess the patient for the following signs and symptoms and gather a detailed travel history:

Epidemiological Review		Yes	No
Travel to <input type="checkbox"/> Sierra Leone, <input type="checkbox"/> Liberia, <input type="checkbox"/> Guinea, or <input type="checkbox"/> Nigeria in the prior 21 days			
Travel dates and details:			
Direct contact with an individual with confirmed/suspected Lassa Fever or contact with their blood/body fluids. Date of contact: _____ Type of contact: _____			
Worked in a laboratory that processed specimens from confirmed/suspected Lassa Fever patients:			
Participated in funeral rites or had contact with human remains in area of Lassa Fever transmission:			
Had direct contact with rodents or their excretions			

Symptom Review in the prior 21 days. If yes, indicate date of symptom onset.					
Symptom	Yes/onset	No	Symptom	Yes/onset	No
Fever			Respiratory symptoms (shortness of breath, cough, respiratory distress)		
Myalgias					
Weakness/Fatigue			Unexplained hemorrhaging, bleeding, or bruising		
Headache					
Nausea/Vomiting			Other:		

Lassa Fever Testing Guidance and Submission Forms

Consultation with **Biothreats non-COVID MD** is required.

Testing for Lassa fever must be approved by the State Epidemiologist. If the patient is determined to be a Person Under Investigation (PUI), or requires testing for another reason (i.e., compatible signs and symptoms and close contact with rodents), the State Epidemiologist must be contacted by the **Biothreats non-COVID MD** to review the case and obtain approval for testing and recommendations on what samples to obtain. The **Biothreats non-COVID MD** will coordinate with the **Micro Fellow On Call** who will assist in coordinating shipment of the samples to the State Lab.

Lassa fever Fact Sheets

- [CDC Lassa Fever](#)

Lassa fever Useful Links

- [CDC Lassa fever](#)
- [WHO Lassa fever](#)

SAMPLE