



## NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

17 May 2022

### LASSA FEVER PREPAREDNESS

#### An update for Physicians, Accident & Emergency Practitioners and Laboratorians

Division of Public Health Surveillance and Response and  
Centre for Emerging Zoonotic and Parasitic Diseases  
(NICD) 24-hour hotline number: 0800 212 552

**An imported case of Lassa fever (LASF) was diagnosed in South Africa on 12 May 2022. The case involved a traveler returning from Nigeria to South Africa. LASF is a Category I notifiable medical condition in South Africa. Outbreak responses focus on the tracing of all possible contacts with the index case and monitoring of these contacts.**

#### Case definition

**Suspected case:** A person with fever ( $> 38.5^{\circ}\text{C}$ ) with at least three of the following signs and symptoms: headache, lethargy, myalgia, or abdominal pain, vomiting, anorexia, loss of appetite, diarrhoea, difficulty in swallowing, hiccups, bloody diarrhoea, or bleeding from gums, bleeding into skin (purpura), bleeding into eyes and urine, or unexplained progressive hepatitis or death.

**AND an epidemiological link** including: close contact with a suspected or confirmed LASF case within 21 days of illness onset; or residence in or travel to an endemic area within 21 days of illness onset; or laboratory exposure to LASF virus within 21 days of illness onset; or exposure to semen from a confirmed acute or convalescent case of LASF within the 10 weeks of that person's onset of symptoms.

#### Transmission

In the context of a non-endemic country with introduction of LASF in returning traveller and/or close contacts of confirmed LASF case. LASF is transmissible from person-to-person but through **close and direct contact** with infected bodily fluids (with blood, faeces and vomit being the most infectious). Casual contact (i.e. hugging, sitting next to) person with LASF is low risk for transmission. Therefore it is mostly health care workers (HCWs) and those with close contact with persons suffering from LASF who are at risk. Strict contact precautions are advised to prevent hospital-based transmission of LASF virus.

#### Response to a suspected case:

1. Establish that the patient meets the case definition for a suspected LASF case.
2. Observe appropriate infection control procedures.
3. Standard management is supportive therapy including fluid management, provision of oxygen, and maintenance of blood pressure and treatment of secondary infections.
4. Inform the NICD hotline (0800 212 552) and notify the local and provincial communicable disease control co-ordinator (CDCC) telephonically.
5. Notify the case telephonically and through the NMC App – complete the Case Investigation Form - **National Guidelines of Recognition and Management of Viral Haemorrhagic Fevers** (see NICD website). Submit forms to provincial CDCC.
6. Submit samples to NICD for laboratory testing.

**For more information, visit the NICD website, [Lassa fever](#)**  
Refer to the [National Guidelines](#) for Recognition and Management of viral haemorrhagic fevers for more information.

#### Managing a suspected case

**As soon as the decision is made to proceed on the basis of a presumptive diagnosis of LASF, measures should be applied to minimize exposure of HCWs, other patients and other close contacts.**

1. Inform the management and infection control officers at the medical facility concerned of the existence of the suspected case of LASF.
2. Isolate the patient and apply infection precautions.
3. Administer such life-saving therapy as may be necessary and possible. Keep the patient hemodynamically stable and manage fever. Treat for any other life-threatening symptoms as necessary.
4. Take steps to verify the diagnosis. Submit samples for testing to NICD.
5. Notify the National Director of Communicable Disease Control (CDC) and the relevant provincial CDCC if not already done.
6. Decide whether the patient is to be retained at the primary hospital (isolation facilities), or whether to seek transfer to a VHF designated hospital.

#### Sample collection and testing for LASF:

1. Submit a clotted blood (red or yellow top tube) and EDTA treated tube (purple top tube).
2. The samples should be packaged in accordance with the [Guidelines for Regulations for the Transport of Infectious Substances](#) (triple packaging using absorbent material) and transported directly and urgently to:  
**Centre for Emerging Zoonotic and Parasitic Diseases, Special Viral Pathogens Laboratory, National Institute for Communicable Diseases (NICD) National Health Laboratory Service (NHLS), Modderfontein Rd. 1, Sandringham, 2131**
3. Samples should be kept cold during transport (cold packs are sufficient).
4. The NICD offers a full repertoire of laboratory testing for LASD. Test requests need only to state for LASF investigation.
5. Contact the laboratory for more information if needed, [jacqueline@nicd.ac.za](mailto:jacqueline@nicd.ac.za) or [naazneen@nicd.ac.za](mailto:naazneen@nicd.ac.za)

**Post-exposure prophylaxis for contacts:** Oral ribavirin as post-exposure prophylaxis for LASF is only recommended in high-risk exposures such (1) penetration of skin by a contaminated sharp instrument (e.g. needlestick injury), (2) contamination of mucous membranes or broken skin with blood or bodily secretions (e.g., blood splashing in the eyes or mouth), (3) participation in emergency procedures (e.g., resuscitation after cardiac arrest, intubation, or suctioning) without use of appropriate personal protective equipment, and (4) prolonged (i.e., for hours) and continuous contact in an enclosed space without use of appropriate personal protective equipment.