

e Lassa fever — an update on the ongoing outbreak in Nigeria, and review of an imported case in Germany

There is an ongoing Lassa outbreak in West Africa since November 2015 with over 300 cases reported and over 160 deaths in Nigeria, Benin, Sierra Leone and Togo. Lassa fever virus is endemic in the area (Figure 4) but the number of cases and area of distribution has increased for 2016 compared with 2015. While Lassa fever virus is not found in South Africa, importation of cases may occur, as happened in 2007 when a Nigerian physician sought medical care for his presumed typhoid in a South African hospital. During the course of this current outbreak, a health care worker was evacuated to Cologne, Germany from Togo on 25 February 2016 for treatment of reported but unconfirmed complicated falciparum malaria. The patient passed away on 26 February 2016 following multi-organ failure. Autopsy findings were suggestive of haemorrhagic fever, and Lassa fever diagnosis was confirmed on 9 March at the Bernhard Nocht Institute for Tropical Medicine in Hamburg, Germany.

Unfortunately, prior to the diagnosis of Lassa fever in the health care worker, a funeral home employee handled the index patient's corpse on 2 March. He apparently wore gloves and did not recall being exposed to bodily fluids. On the day of exposure to the corpse, he reported pre-existing symptoms of an upper respiratory infection. His symptoms waxed and waned over the following days. When the diagnosis of Lassa fever was made in the index patient at autopsy, the funeral home employee was tested for Lassa fever on 10 March. His result was initially negative by polymerase chain reaction (PCR). How-

ever, when symptoms persisted, diagnostics were repeated and Lassa fever infection was confirmed by PCR on 15 March. The patient was transported to a special isolation unit in Frankfurt where he responded well to treatment, including ribavirin. He had no history of travel in the 21 days prior to the illness. Four of his family members voluntarily agreed to be quarantined in the same isolation unit.

Malaria is a common and important cause of severe illness in travelers to Africa, and must always be considered first in the differential diagnosis of persons with acute febrile illness. However, viral haemorrhagic fever, if missed, may have serious consequences for close contacts. Overlapping signs and symptoms between malaria and VHF mean that a cautious approach, especially in ill, potentially exposed health workers, is required. The diagnosis of malaria must be definitively confirmed through visualization of parasites in a peripheral blood smear, or PCR or antigen detection. When smears are negative, a malaria PCR should be done to detect current or recently treated malaria. If malaria tests are negative, consideration must be given to an alternative diagnosis, including a VHF. Appropriate infection control practices must be followed in the interim. Lassa fever may not be suspected as a definite exposure to rodent excreta is not easy to elicit.

Source: Division of Public Health, Surveillance and Response, NICD-NHLS; (outbreak@nicd.ac.za)

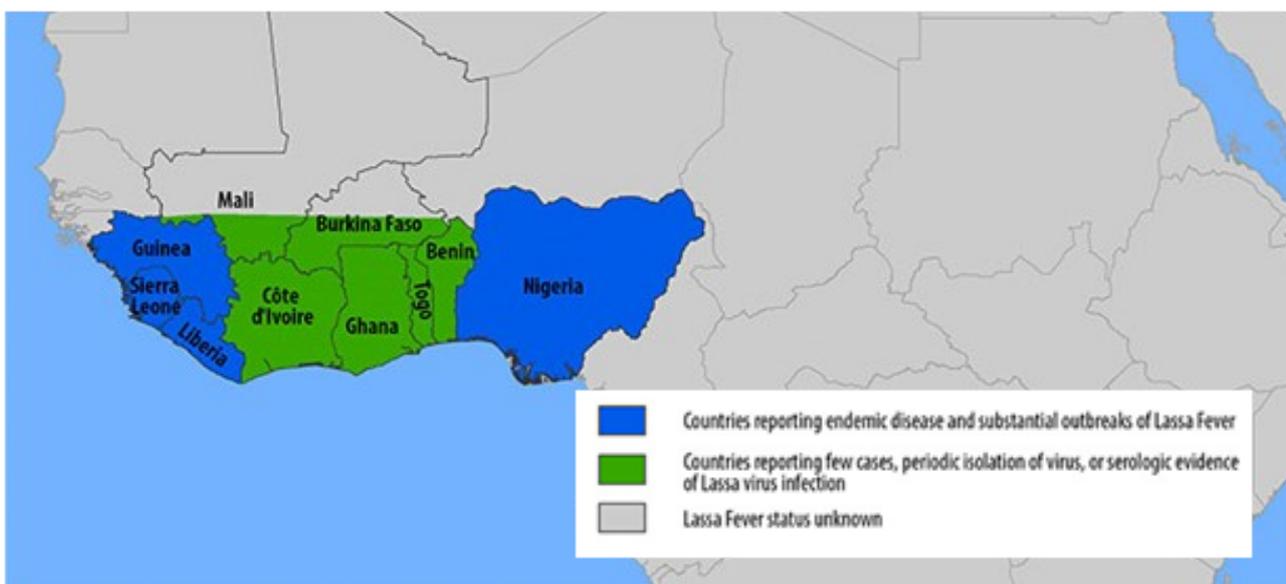


Figure 4. Lassa fever distribution map ([www. http://www.cdc.gov/vhf/lassa/outbreaks/index.html](http://www.cdc.gov/vhf/lassa/outbreaks/index.html))