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In the news

LASSA FEVER OUTBREAK IN NIGERIA

The current Lassa fever outbreak in Nigeria is the largest recorded outbreak of the virus in the country, with about 1,400 suspected cases and more than 300 cases so far being confirmed in 2018, and case numbers are increasing (NCDC 18 March 2018; WHO, 19 March 2018). The disease was first identified in Lassa, Nigeria, in 1969, after an outbreak in a mission hospital. Lassa virus is endemic in many West African countries, including Sierra Leone, Liberia, Guinea and Nigeria, and when transmitted from its natural reservoir to humans, it can cause life-threatening haemorrhagic fever. Humans can become infected with Lassa virus from exposure to urine or faeces of infected *Mastomys* rats but also through direct contact with bodily fluids of a patient infected with Lassa fever or through contaminated medical equipment.

Continued efforts to contain the outbreak are underway. A national Lassa fever Emergency Operations Centre was activated in Abuja, Nigeria, on 22 January, to coordinate response activities in collaboration with the WHO and other partners. The Nigeria Centre for Disease Control, which was established in response to the challenges of public health emergencies and to enhance Nigeria's preparedness and response to epidemics, and the WHO have intensified their responses, which include clinical case management, contact tracing, mobilizing a network of healthcare workers at hospitals, infection control measures and building public awareness.

Owing to sequencing efforts by researchers at the Irrua Specialist Teaching Hospital, in collaboration with partners from the Bernhard Nocht Institute for Tropical Medicine, Germany, and others, sequences from 15 samples derived from the blood of patients infected with Lassa virus are now <u>available</u>. Based on those early results, no new virus lineages have been detected, the viruses circulating in 2018 seem to be consistent with previous outbreaks and the most likely route of transmission continues to be spillover of viruses from the rodent reservoir to humans rather than human-to-human transmission (NCDC, 12 March 2018). The availability of such sequencing information will support the response to the ongoing outbreak.

The Ebola epidemic has highlighted how important the global response to epidemics is, and, as seen with the ongoing Lassa virus outbreak, infectious diseases continue to pose a global public health threat and developing countries can be particularly vulnerable. In an effort to combat deadly outbreaks, the Coalition for Epidemic Preparedness Innovations (CEPI), which was set up in 2017 with financial support from the Wellcome Trust, national governments and the Bill & Melinda Gates Foundation, aims to accelerate vaccine production for viruses with known potential to cause serious epidemics (Nature News, 18 Jan 2017; Reuters 18 Jan 2017). Lassa fever is one of the first targets of this vaccinedevelopment initiative, and the CEPI aims to have stockpiles of promising vaccine candidates by 2021 that could be deployed rapidly to contain outbreaks before they become global health emergencies.

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