

Lassa fever

Annual Epidemiological Report for 2019

Key facts

For 2019, two imported cases of Lassa fever were reported in the Netherlands. No further cases of Lassa fever or other viral haemorrhagic fevers caused by arenaviruses were reported in the EU/EEA in 2019.

Methods

This report is based on data for 2019 retrieved from The European Surveillance System (TESSy) on 17 November 2020. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases.

For a detailed description of methods used to produce this report, refer to the *Methods* chapter [1].

An overview of the national surveillance systems is available online [2].

A subset of the data used for this report is available through ECDC's online *Surveillance atlas of infectious diseases* [3].

For 2019, 27 EU/EEA countries reported case-based data (Bulgaria, Denmark, Liechtenstein, and Portugal did not report). Eighteen countries used the EU case definition, four used an alternative case definition (Czechia, Germany, Italy and the United Kingdom) and five did not specify the case definition they used (Belgium, Croatia, Cyprus, France and Ireland). Reporting was compulsory in 24 countries, 'not specified' in Croatia and Cyprus, and voluntary in the United Kingdom. Surveillance was comprehensive ('not specified' in Croatia and Cyprus) and mostly passive.

Epidemiology

For 2019, two imported cases of Lassa fever from Sierra Leone were reported in the Netherlands, including one death.

No further cases of Lassa fever or other viral haemorrhagic fevers caused by arenaviruses were reported in the EU/EEA in 2019.

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Discussion

Lassa fever is endemic in many parts of West Africa (particularly Guinea, Liberia, Nigeria and Sierra Leone) and usually causes seasonal outbreaks roughly between November and May [4].

For 2019, Nigeria reported 5 057 suspected cases. Of these, 852 were classified as confirmed (833) or probable (19), including 174 deaths among the confirmed cases [5]. This outbreak was larger than the previous year, in which Nigeria reported 3 498 suspected cases. Of these, 653 cases were classified as confirmed (633) or probable (20), with 191 deaths (171 confirmed and 20 probable) [6].

On 20 and 24 November 2019, the Dutch public health authorities confirmed two imported cases of Lassa fever from Sierra Leone. Both were Dutch healthcare workers who had worked in a rural hospital in Sierra Leone and were probably infected during surgery that they conducted together on two local patients on 4 November 2019. Onset of symptoms was 11 November in both healthcare workers, and they were medically evacuated to the Netherlands, where one of them died. Contact tracing activities were carried out in several European countries, including the Netherlands, Germany, Denmark and the United Kingdom, as well as outside the EU in Sierra Leone, Uganda, and India [4,7]. Two further cases were detected in Sierra Leone among national healthcare workers from the Masanga hospital, where both had been involved in the management of the two local surgical patients operated on by the Dutch doctors [8]. The last time a case of Lassa fever was reported in the Netherlands was in 2000, when a surgeon working in Sierra Leone became infected [9].

Between 29 April and 17 July 2019, five cases of arenavirus infection were reported in Bolivia, including three deaths [10]. The US CDC identified a New World arenavirus of the Chapare genotype [11].

Public health implications

The diagnosis of Lassa fever should be considered in febrile patients returning from areas where the disease is endemic, especially if they do not respond to anti-malarial and anti-bacterial medication. This is particularly true during the dry season (November to May), a period of increased transmission in endemic regions, and even if a differential diagnosis such as malaria has been laboratory-confirmed [4]. Primary transmission of Lassa virus from its rodent host to humans can be prevented by avoiding contact with *Mastomys* rodents in Lassa virus-endemic regions [12]. Healthcare workers caring for patients with febrile diseases in Lassa virus-endemic areas should apply infection control measures to prevent direct contact with patient blood and bodily fluids [12].

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