

## SURVEILLANCE REPORT

Annual Epidemiological Report for 2015

# Lassa fever

### Key facts

- In 2015, no cases of Lassa fever or other infections by arenaviruses responsible for viral haemorrhagic fevers were reported in the EU/EEA.

### Methods

This report is based on data for 2015 retrieved from The European Surveillance System (TESSy) on 12 December 2016. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases. EU Member States and EEA countries contribute to the system by uploading their infectious disease surveillance data at regular intervals.

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

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

Additional data on this disease are accessible from ECDC's online *Surveillance atlas of infectious diseases* [3].

The EU case definition was used by 14 countries. Three countries used an alternative case definition, and five countries did not specify the case definition they used.

Surveillance is compulsory in 19 EU/EEA countries, comprehensive in 21 countries, and mostly passive. Active disease surveillance is currently only carried out by the Czech Republic, Slovakia and the United Kingdom. [2]. Data reporting is case based and conducted at the national level. Data were obtained from 21 EU/EEA countries.

### Epidemiology

No cases of Lassa fever were reported in EU and EEA countries in 2015.

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## Discussion

Lassa fever is an acute viral illness that occurs in West Africa, mainly in Nigeria, Sierra Leone, Liberia and Guinea. A few cases were also reported in Cote d'Ivoire, Ghana and Benin. The viral aetiology of the disease was identified in 1969. The name refers to the town of Lassa, Nigeria, where the disease was first described. The reservoir of Lassa virus is a rodent known as the multimammate rat (*Mastomys natalensis*). Several other rodent-borne arenaviruses infecting humans (e.g. Junin, Machupo, Guanarito) circulate in South America [4].

Humans become infected through contact with the excreta of infected rodents. While about 80% of the infected people are asymptomatic or have mild symptoms, the remaining patients develop severe multi-system disease, and up to 15% of the hospitalised cases may die. A higher mortality rate is reported in pregnant women in the third trimester of pregnancy. Lassa fever is also associated with occasional epidemics, including nosocomial outbreaks, during which the case–fatality rate can reach 50%. Early treatment with the antiviral drug ribavirin is effective, and infection can be prevented by practising good hygiene.

Several studies estimate that between 100 000 and 300 000 Lassa fever cases with about 5 000 deaths occur each year [5]. From November 2015 to March 2016, West Africa faced a large seasonal outbreak in Benin, Liberia, Nigeria, and Togo, with more than 300 cases and 167 deaths [6].

In May 2015, the USA notified a fatal Lassa fever case in a traveller from Liberia to the United States. This case was the sixth known occurrence of Lassa fever in a traveller returning to the United States since 1969 [7].

In 2009, the United Kingdom reported two cases, one imported from Mali and one from Nigeria [8,9].

## Public health implications

Primary transmission of the Lassa virus from its host to humans can be prevented by avoiding contact with *Mastomys* rodents, especially in regions where outbreaks occur [2]. The virus can also be transmitted by contact (e.g. through bodily fluids), so healthcare workers performing invasive procedures on a case are at an increased risk.

## References

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