Lassa fever

Reporting on 2014 data retrieved from TESSy* on 19 November 2015

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Key facts

- In 2014, no cases of Lassa fever or other arenaviruses responsible for viral haemorrhagic fevers were reported in the EU/EEA.

Methods

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- Data were obtained from 23 EU/EEA countries.

- The EU case definition was used by 15 countries, three countries used an alternative case definition, and five countries did not specify the case definition they used.

- Surveillance is compulsory in 20 EU/EEA countries, comprehensive in 21 countries, and mostly passive (active surveillance only in the Czech Republic, Slovakia and the United Kingdom) (Annex). Data reporting is case based and done at the national level.

Epidemiology

No cases of Lassa fever were reported in EU and EEA countries in 2014.

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 [1].

Humans become infected through contact with the excreta of infected rodents. While about 80% of the infected people are asymptomatic, the remaining patients develop severe multi-system disease, and up to 15% of the hospitalised cases may die. 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 [2]. In Nigeria, 989 cases with 36 deaths were reported in 2014; in 2013, 1 195 cases with 39 deaths were reported. In Liberia, the Ministry of Health has notified WHO of an outbreak of Lassa fever in February/March 2014 [14 laboratory-confirmed cases). In Benin, 16 cases (two confirmed, seven probable and seven suspected cases), nine of them fatal, were reported in 2014 [3,4].

The last travel-related case of Lassa fever in Europe was reported in the United Kingdom in 2009 [5]. In 2015, the US 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 [6]. In 2016, one case of Lassa fever was medically evacuated from Togo to Germany. The patient later died in a German hospital. When the corpse was prepared for flight repatriation, a staff member of the funeral home caught the disease [7].

Public health conclusions

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].

References

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Additional information

ECDC Surveillance Atlas of Infectious Diseases

Annex

Table. Lassa fever, surveillance systems overview, 2014

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Country	Surveillance system	Case definition	Case definition used	Case based	Comprehensive	Active	Passive
Austria	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Belgium	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Bulgaria	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Czech Republic	Mandatory	Clinical	Clinical	Yes	Yes	Yes	Yes
Denmark	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Estonia	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Finland	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
France	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Germany	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Hungary	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Ireland	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Italy	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Latvia	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Lithuania	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Luxembourg	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Netherlands	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Poland	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Romania	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Slovakia	Mandatory	Clinical	Clinical	Yes	Yes	Yes	Yes
Spain	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Sweden	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
United Kingdom	Mandatory	Clinical	Clinical	Yes	Yes	Yes	Yes
Iceland	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes
Norway	Mandatory	Clinical	Clinical	Yes	Yes	No	Yes

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* The European Surveillance System (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.