

Rift Valley fever

Annual Epidemiological Report for 2019

Key facts

- For 2019, EU/EEA countries did not report any cases of Rift Valley fever.

Rift Valley fever (RVF) is an acute viral disease that affects domestic animals (such as cattle, buffalo, sheep, goats, and camels). The disease is caused by the RVF virus, generally found in regions of eastern and southern Africa, but also in most countries of sub-Saharan Africa, Madagascar, Saudi Arabia and Yemen.

Humans may become infected through direct or indirect contact with the blood or organs of infected animals. While most human cases are relatively mild, a small percentage of patients develop a much more severe form of the disease. The uncomplicated cases are characterised by acute influenza-like illness leading to full recovery. In some patients the illness can progress to a severe form with haemorrhagic manifestations and hepatitis; possible complications include retinitis (inflammation of the retina) and encephalitis (inflammation of the brain). Vaccination of the animals at risk is the most important way of preventing infection in humans.

Methods

This report is based on data for 2019 retrieved from The European Surveillance System (TESSy) on 9 October 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, 22 EU/EEA countries reported case-based data (Austria, Bulgaria, Cyprus, Denmark, Finland, Iceland, Liechtenstein, the Netherlands and Portugal did not report). Thirteen countries used the EU case definition, four (Czechia, Germany, Italy and the United Kingdom) used an alternative case definition, and five (Belgium, France, Ireland, Poland and Romania) did not specify the case definition used.

Reporting was compulsory in 19 countries, 'not specified' in Ireland and Poland and voluntary in the United Kingdom. Surveillance was mostly comprehensive ('not specified' in Ireland and Poland) and passive.

Epidemiology

For 2019, as for 2017 and 2018, EU/EEA countries did not report any cases of Rift Valley fever.

For 2016, EU/EEA countries reported three cases of Rift Valley fever, two of which were confirmed. All cases were reported by France and involved males aged 28–37 years. Two were probably infected in Mali and one in Ghana. For 2015, France reported one confirmed case in a 29-year-old male, probably infected in Mali [4].

Discussion

Rift Valley fever is an acute viral febrile haemorrhagic disease that primarily affects ruminants (such as cattle, buffalo, sheep, goats), and also camels in Africa and the Arabian Peninsula. Historically, Rift Valley fever occurs in humans in many sub-Saharan countries, Madagascar, Saudi Arabia and Yemen. Humans may become infected by mosquito bites and through direct or indirect contact with the blood or organs of infected animals. While most human cases are relatively mild (influenza-like illness), a small percentage of patients develop a severe form of the disease with haemorrhagic manifestations, hepatitis and neurological disorders. Animal movement may contribute to viral spread, threatening countries in Europe where competent vectors are present [5].

Between November 2018 and July 2019, an outbreak of Rift Valley fever occurred in Mayotte, France. During this period 143 human confirmed cases were reported, 60% of which had had direct contact with animals or animal body fluids [6,7].

Public health implications

As the initial epidemiological cycle of Rift Valley fever involves domestic ruminants, and humans mostly become infected after contact with viraemic animals, vaccination of ruminants is the favoured method for preventing human disease in endemic areas [5]. Other recommended measures include a ban on slaughtering and butchering of ruminants during epizootics, vector control measures, the use of insect repellents and bed nets during outbreaks, information campaigns for people at risk (farmers, veterinarians, slaughterhouse employees, butchers) and the appropriate disposal of dead animals [8].

References

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