



SURVEILLANCE REPORT

Annual Epidemiological Report for 2015

Crimean–Congo haemorrhagic fever

Key facts

- Four cases of Crimean–Congo haemorrhagic fever (CCHF) were reported to The European Surveillance System in 2015. Three of these cases were confirmed. All cases were reported by Bulgaria.
- CCHF is endemic in the Balkan region.
- Bulgaria regularly reports a small number of cases.

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].

In 2015, 25 EU/EEA countries provided information on CCHF. Cases were reported from Bulgaria (n=4), the rest of the countries reported zero cases.

Twenty-one countries used the standard EU case definition [4], which is generic for all viral haemorrhagic fever cases, while three countries used a different case definition (Germany, Italy and the United Kingdom). The case definition for two countries (Belgium and France) was unknown or not specified.

Epidemiology

Three confirmed cases and one probable case of CCHF were reported in 2015 from Bulgaria (Table 1). All cases were in the 45–64-year-old age group.

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CCHF is endemic in the Balkan region, where Bulgaria regularly reports a small number of cases (four in 2011 and in 2012, eight in 2013 and in 2014).

Table 1. Distribution of reported cases of Crimean–Congo haemorrhagic fever, EU/EEA, 2011–2015

Country	2011		2012		2013		2014		National coverage	2015			Confirmed cases
	Reported cases		Reported cases		Reported cases		Reported cases			Reported cases			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate		Number	Rate	ASR	
Austria	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Belgium	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Bulgaria	4	0.1	4	0.1	8	0.1	8	0.1	Y	4	0.1	0.0	3
Croatia	.	.	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Cyprus	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Czech Republic	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Denmark	.	.	.	.	.	.	.	.	.	.	.	.	.
Estonia	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Finland	.	.	.	.	.	.	.	.	.	.	.	.	.
France	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Germany	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Greece	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Hungary	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Ireland	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Italy	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Latvia	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Lithuania	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Luxembourg	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Malta	0	0.0	0	0.0	0	0.0	0	0.0	.	.	.	.	.
Netherlands	0	0.0	0	0.0	0	0.0	.	.	.	.	.	.	.
Poland	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Portugal	.	.	.	.	.	.	.	.	Y	0	0.0	0.0	0
Romania	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Slovakia	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Slovenia	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Spain	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Sweden	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
United Kingdom	0	0.0	1	0.0	0	0.0	1	0.0	Y	0	0.0	0.0	0
EU	4	0.0	5	0.0	8	0.0	9	0.0	.	4	0.0	0.0	3
Iceland	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
Liechtenstein	.	.	.	.	.	.	.	.	.	.	.	.	.
Norway	0	0.0	0	0.0	0	0.0	0	0.0	Y	0	0.0	0.0	0
EU/EEA	4	0.0	5	0.0	8	0.0	9	0.0	.	4	0.0	0.0	3

Discussion

Crimean–Congo haemorrhagic fever is a zoonotic tick-borne disease infecting a large variety of domestic and wild animals, but only humans present clinical symptoms. The virus is most often transmitted by the bite of an infected tick, mostly of the *Hyalomma* genus. Humans can also be infected by contact with blood from viraemic animals and through human-to-human transmission, in particularly during nosocomial outbreaks. Possible sexual transmission has also been reported [5].

CCHF is endemic in Africa, the Balkans, the Middle East, and western and south-central Asia. The septentrional limit of the main tick vector lies south of the 50th northern parallel. In the WHO European Region, cases of human infection have been reported from Albania, Bulgaria, Greece, Kosovo, Serbia, Turkey, Armenia, Georgia, Ukraine, Russia, as well as from Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan.

A few sporadic cases are reported on a regular basis from Bulgaria [6]. In the WHO European Region, Turkey remains the country that is most affected. The main vector for Crimean–Congo haemorrhagic fever, the tick *Hyalomma marginatum*, has a wide distribution in Europe [7]. Using an ecological niche modelling approach, most suitable areas for CCHF transmission in the Balkans have been identified [8].

Public health implications

Crimean–Congo haemorrhagic fever has the potential for human-to-human transmission. Early detection of cases (clinically and in the laboratory) is essential for the implementation of protective measures and initiation of treatment [9].

References

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