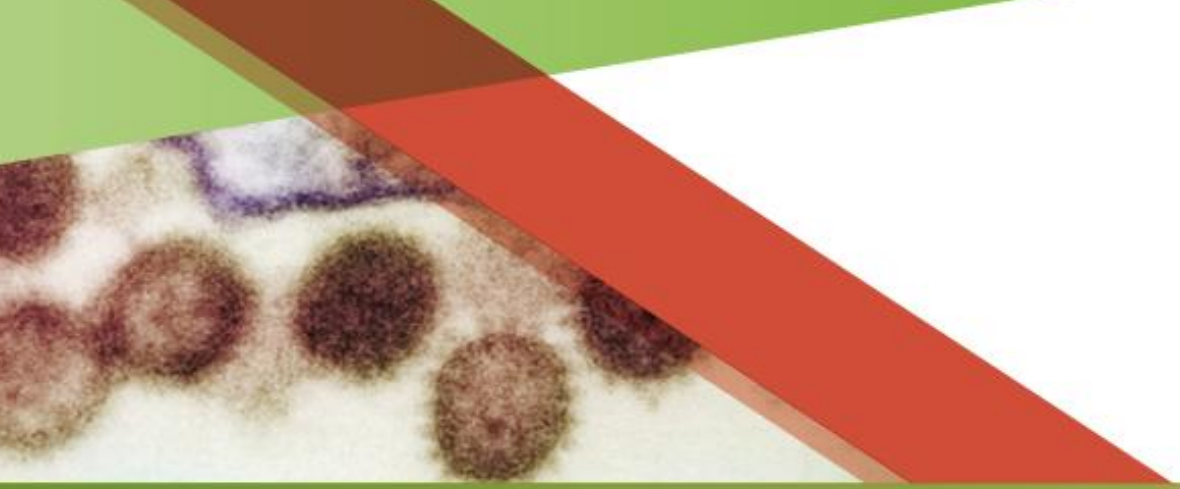

SURVEILLANCE REPORT

Crimean-Congo haemorrhagic fever

Annual Epidemiological Report for 2020

Key facts

- For 2020, Spain reported three cases of Crimean-Congo haemorrhagic fever and Bulgaria reported one case.

Introduction

Crimean-Congo haemorrhagic fever (CCHF) virus is widespread, and evidence for the virus has been found among ticks in Africa, Asia, the Middle East and Southern Europe. CCHF is a tick-borne disease, caused by the *Crimean-Congo hemorrhagic fever orthonairovirus* (CCHFV, *Orthonairovirus* genus*, Nairoviridae* family), with symptoms such as high fever, muscle pain, dizziness, abnormal sensitivity to light, mental disturbances, abdominal pain and vomiting. CCHFV infections in domestic mammals are subclinical, but non-vectorial transmission to humans is possible, as is human-to-human transmission via bodily fluids.

Methods

This report is based on data for 2020 retrieved from The European Surveillance System (TESSy) on 25 October 2021. TESSy is a system for the collection, analysis, and dissemination of data on communicable diseases.

For a detailed description of the 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].

Twenty-seven EU/EEA countries reported data for 2020. Denmark, Finland, and Liechtenstein did not report data on CCHF. Twenty-three countries used the EU case definition, two used an alternative case definition (Germany and Italy), and two did not specify the definition they used (Belgium and France). Surveillance is comprehensive in all reporting countries and mostly passive.

Suggested citation: European Centre for Disease Prevention and Control. Crimean-Congo haemorrhagic fever. In: ECDC. Annual epidemiological report for 2020. Stockholm: ECDC; 2023.

Stockholm, March 2023

Epidemiology

For 2020, Spain reported three cases of CCHF and Bulgaria one case. All cases were classified as confirmed. CCHF is endemic in the Balkans, and Bulgaria regularly reports a small number of cases (four cases each in 2015 and 2016, two in 2017, and six in 2018). Greece has previously reported one case in 2018, and Spain also reported its first cases in recent years (two cases in 2016 and one in 2018) [4].

Discussion

CCHF is endemic in Africa, the Balkans, the Middle East and western and south-central Asia. The main vector transmitting the virus, the *Hyalomma marginatum* tick, is widely distributed in southern and eastern Europe [5]. Its habitat lies south of the 50th northern parallel. Humans may also become infected through direct or indirect contact with the blood or organs of infected animals. In the WHO European Region, cases of human CCHF infection have been reported from Albania, Armenia, Bulgaria, Georgia, Greece, Kosovo[1], Russia, Serbia, Türkiye and Ukraine, as well as Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan, with Türkiye being the most affected country [6].

Several sporadic cases are reported on a regular basis from Bulgaria [7]. Using an ecological niche modelling approach, the most suitable areas for CCHF transmission in the Balkans have been identified [8].

In 2010, CCHFV was detected for the first time in *Hyalomma lusitanicum* ticks in Spain [9], followed by the first autochthonous human case and one nosocomial infection in 2016 [10], and one further case in 2018 [11].

Public health implications

CCHF has the potential for human-to-human transmission. Early clinical diagnosis and laboratory confirmation of cases is essential for initiating treatment and implementing protective measures [12]. An operational health emergency preparedness checklist is available for preparedness planning in the event of outbreaks, including single cases of high-consequence infectious diseases (HCID), such as the importation of viral haemorrhagic fever cases like CCHF [13]. Prevention of CCHF infection is achieved by avoiding or minimising exposure to ticks by using tick repellent and wearing protective clothing, as well as the timely and correct removal of ticks. Contact with the blood or tissue of infected animals and humans should be avoided. In addition, the use of protective equipment is recommended in CCHF-endemic areas in cases where the handling of blood or tissue of infected animals and humans is common (e.g. veterinarians and slaughterhouse workers).

[1] This declaration is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

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