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## **Crimean-Congo haemorrhagic fever cases in Spain**

### **CCHF cases reported in the Castilla y León region, north-western Spain**

On 13 August 2020, a fatal human case of Crimean-Congo haemorrhagic fever (CCHF) was confirmed in Salamanca, in the Castilla y León region of north-western Spain, following a tick bite a week prior to hospital admission [1]. A non-fatal CCHF case was also confirmed in the same region in May 2020 [2].

The first local human CCHF case in Spain was reported in 2016 in Ávila province in Castilla y León [3]. Infected ticks were first identified in western Spain in 2010 [4].

CCHF is caused by a tick-borne virus. This virus has the widest geographic range of all tick-borne viruses and is endemic throughout Africa, Asia, the Middle East, Eastern and South Western Europe. Hyalomma ticks are the main reservoir and vector of CCHF virus [5 - 8].

The virus can be transmitted to humans by tick bites or through contact with infected animal blood or tissues during and immediately after slaughter. Exposure to the virus may also occur from contamination with tick body contents/blood, for example, if a tick is squashed between the fingers [5].

Human-to-human transmission has been reported, as a result of close contact with blood, secretions or other bodily fluids of infected persons [5, 7]. Worldwide the majority of cases have occurred in people involved in the livestock industry, such as agricultural workers, farmers, slaughterhouse staff and vets. Cases also occur in health workers caring for infected people [7]. Outdoor activities in endemic areas are a risk factor for tick exposure [8].

The incubation period (time from an infected tick bite to symptoms appearing) is usually one to three days, with a maximum of nine days. The incubation period following contact with infected blood or tissues is usually five to six days, with a documented maximum of 13 days [5, 7].

Early symptoms can include: fever, muscle ache, dizziness, neck pain and stiffness, backache, headache, sore eyes and photophobia (light sensitivity). There may be nausea, vomiting, diarrhoea, abdominal pain and sore throat, followed by sharp mood swings and confusion. After two to four days, agitation may be replaced by sleepiness, depression and lethargy [5, 7].

Other clinical signs include a fast heart rate (tachycardia), enlarged lymph nodes (lymphadenopathy) and a petechial rash (small, red, flat spots of blood) can develop in the mouth and throat, and on the skin. Larger rashes, called ecchymoses, and other signs of internal bleeding may appear. Rapid kidney, liver and/or pulmonary (lung) failure can occur after the fifth day of illness. CCHF has a case fatality rate of 10 to 40% [5].

In the United Kingdom (UK) there is no licensed human CCHF vaccine available [8].

### **Advice for travellers**

The risk for most UK travellers is low. You can reduce your risk of infection with the following precautions [7]:

- avoid areas where ticks are abundant at times when they are active
- use tick repellents
- check clothes and skin carefully for ticks and remove them with a recommended technique - see our [insect and tick bite avoidance factsheet](#) for details.
- if working with animals in endemic areas, use tick repellents on skin and clothing, and wear gloves/protective clothing to prevent skin coming into contact with infected tissues/blood [7].

Seek advice from your GP or NHS111 if you think you, or anyone in your family has symptoms. Remember - tell your healthcare provider that you travelled abroad.

## Advice for health professionals

Health professionals should remain alert for travellers returning from CCHF affected areas who develop symptoms compatible with CCHF.

Health professionals should practise strict universal precautions, including barrier nursing, when caring for patients presenting with haemorrhagic fever syndrome, including when there is suspicion of CCHF [9].

Hospital staff must observe adequate infection control procedures (barrier nursing). Contaminated needles, surgical instruments and body waste materials should be safely disposed of using appropriate decontamination procedures [7].

[Guidance on the management of patients is available from the Advisory Committee on Dangerous Pathogens \(ACDP\)](#) [10].

There are [specialised laboratory facilities](#) to provide a definitive CCHF diagnosis. After discussion with their local microbiology, virology or infectious disease consultant, health professionals can contact the [Imported Fever Service](#) (IFS) for advice.

Health professionals seeking information about testing samples from patients with a possible viral haemorrhagic fever should read [Viral haemorrhagic fever: sample testing advice](#) before contacting the IFS.

## Resources

- [Diseases transmitted by insects and ticks in Europe](#)
- [World Health Organization, Crimean-Congo haemorrhagic fever factsheet](#)

## References

1. [General Directorate of Public Health of the Junta de Castilla y León. La Junta La Junta recibe la confirmación de un caso de fiebre hemorrágica Crimea Congo en Salamanca. 13 August 2020. \[Accessed 1 September 2020\]](#)
2. [European Centres for Disease Control and Prevention. Crimean-Congo Haemorrhagic fever - Europe - 2020. Communicable Disease Threats Report 15 August 2020. \[Accessed 1 September 2020\]](#)
3. [European Centre for Disease Prevention and Control. New rapid risk assessment Crimean-Congo haemorrhagic fever in Spain. 12 September 2016. \[Accessed 1 September 2020\]](#)
4. Estrada-Peña A, Palomar AM, Santibáñez P et al. Crimean-Congo hemorrhagic fever virus in ticks, southwestern Europe, Emerg Infect Dis Jan 2010. 18(1): 179 - 80.

5. [World Health Organization. Crimean-Congo haemorrhagic fever. 2020. \[Accessed 1 September 2020\]](#)
6. [European Centres for Disease Control and Prevention. Crimean-Congo haemorrhagic fever \(CCHF\) - Annual Epidemiological Report for 2017. 28 February 2019. \[Accessed 1 September 2020\]](#)
7. [Public Health England. Crimean-Congo haemorrhagic fever: origins, reservoirs, transmission and guidelines. Last updated 20 September 2016. \[Accessed 1 September 2020\]](#)
8. [European Centre for Disease Prevention and Control. Factsheet about Crimean-Congo haemorrhagic fever. 2020. \[Accessed 1 September 2020\]](#)
9. [European Centre for Disease Prevention and Control. Prevention and control measures for Crimean- Congo haemorrhagic fever. 2020. \[Accessed 1 September 2020\]](#)
10. [Department of Health and Social Care/Public Health England. Advisory Committee on Dangerous Pathogens \(ACDP\). Viral haemorrhagic fever: ACDP algorithm and guidance on management of patients. Last updated 19 November 2015. \[Accessed 1 September 2020\]](#)