

# Crimean-Congo Hemorrhagic Fever Fact Sheet

Toledo-Lucas County Health Department | Emergency Preparedness



## What is Crimean-Congo Hemorrhagic Fever (CCHF)?

Crimean-Congo hemorrhagic fever (CCHF) is caused by infection with tick-borne virus (*Nairovirus*) in the family *Bunyaviridae*. CCHF is found in Eastern Europe, particularly in the former Soviet Union, throughout the Mediterranean, in northwestern China, central Asia, southern Europe, Africa, the Middle East, and the Indian subcontinent.

## How is Crimean-Congo Hemorrhagic Fever transmitted?

Ixodid (hard) ticks are both a reservoir and a vector for the CCHF virus. Numerous wild and domestic animals, such as cattle, goats, sheep and hares, serve as amplifying hosts for the virus.



Transmission to humans occurs through contact with infected ticks or animal blood. CCHF can be transmitted from one infected human to another by contact with infectious blood or body fluids. Documented spread of CCHF has also occurred in hospitals due to improper sterilization or medical equipment, reuse of injection needles, and contamination of medical supplies.

## What are signs and symptoms of Crimean-Congo Hemorrhagic Fever?

The onset of CCHF is sudden, with initial signs and symptoms including headache, high fever, back pain, joint pain, stomach pain, and vomiting. Red eyes, a flushed face, a red throat, and red spots on the palate are common. Symptoms may also include jaundice, and in severe cases, changes in mood and sensory perception. As the illness progresses, large areas of severe bruising, severe nosebleeds, and uncontrolled bleeding at injections sites can be seen, beginning on about the fourth day of illness and lasting about two weeks.

## How is Crimean-Congo Hemorrhagic Fever diagnosed?

Laboratory tests that are used to diagnose CCHF include antigen-capture enzyme-linked immunosorbent assay (ELISA), real time polymerase chain reaction, virus isolation attempts, and detection of antibody by ELISA. Laboratory diagnosis of a patient with a clinical history compatible with CCHF can be made during the acute phase of the disease by using the



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combination of detection of the viral antigen, viral RNA sequence in the blood or in tissues collected from a fatal case and virus isolation.

## How is Crimean-Congo Hemorrhagic Fever treated?

Treatment for CCHF is primarily supportive. Care should include careful attention to balance and correction of electrolyte abnormalities, oxygenation and hemodynamic support, and



appropriate treatment of secondary infections. The virus is sensitive in vitro and the antiviral drug ribavirin. It has

been used in the treatment of CCHF patients reportedly with some benefits.

The long-term effects of CCHF infection have not been studied well enough in survivors to determine whether or not specific complications exist. However, recovery is slow.

## How is Crimean-Congo Hemorrhagic Fever prevented?

Agricultural workers and others working with animals should use insect repellent on exposed skin and clothing. Insect replants containing DEET are the most effective in warding off ticks. Wearing gloves and other protective clothing is recommended. Individuals should also avoid contact with the blood and body fluids of livestock or humans who show symptoms of infection.

### For more information:

Centers for Disease Control and Prevention (CDC):  
<https://www.cdc.gov/vhf/crimean-congo/index.html>

***The Toledo-Lucas County Health Department is committed to providing relevant and timely information during a public health emergency.***

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