

**Announcement on:**

**Enhancing Surveillance and Case Detection of Crimean-Congo hemorrhagic fever (CCHF) in all public and private health facilities**

The Preventive Services Center at Dubai Health Authority is grateful for the continuous and joint cooperation of all the health care centers in Dubai for the shared goal of prevention, and control communicable disease.

Referring to the above subject, During Eid Aladha and Sacrifices Season, the human contact with live and slaughtered animals increases the risk for CCHF transmission. Efforts by relevant veterinary and municipal authorities are in place to control Ticks and animal infection and to prevent human exposure. In spite of these measures, cases are expected during this season. Healthcare workers are required to consider the diagnosis of CCHF in cases fulfilling the above mentioned clinical criteria with exposure history as follows:

1. Occupational exposure in Animal markets and Slaughter Houses
2. Visiting life Animal markets within last 2 weeks

**الإعلان عن:**

**اجراءات التحكم في حالات حمى القرم الكونجو النزفية خلال موسم الاضاحي لعيد الاضحى في كافة المنشآت الصحية الحكومية والخاصة في اماره دبي**

يتقدم مركز الخدمات الوقائية بهيئة الصحة بدبي بجزيل الشكر والامتنان للتعاون المستمر والمشارك من جميع مراكز الرعاية الصحية بدبي في سبيل الوقاية والسيطرة والقضاء على الامراض المعدية.

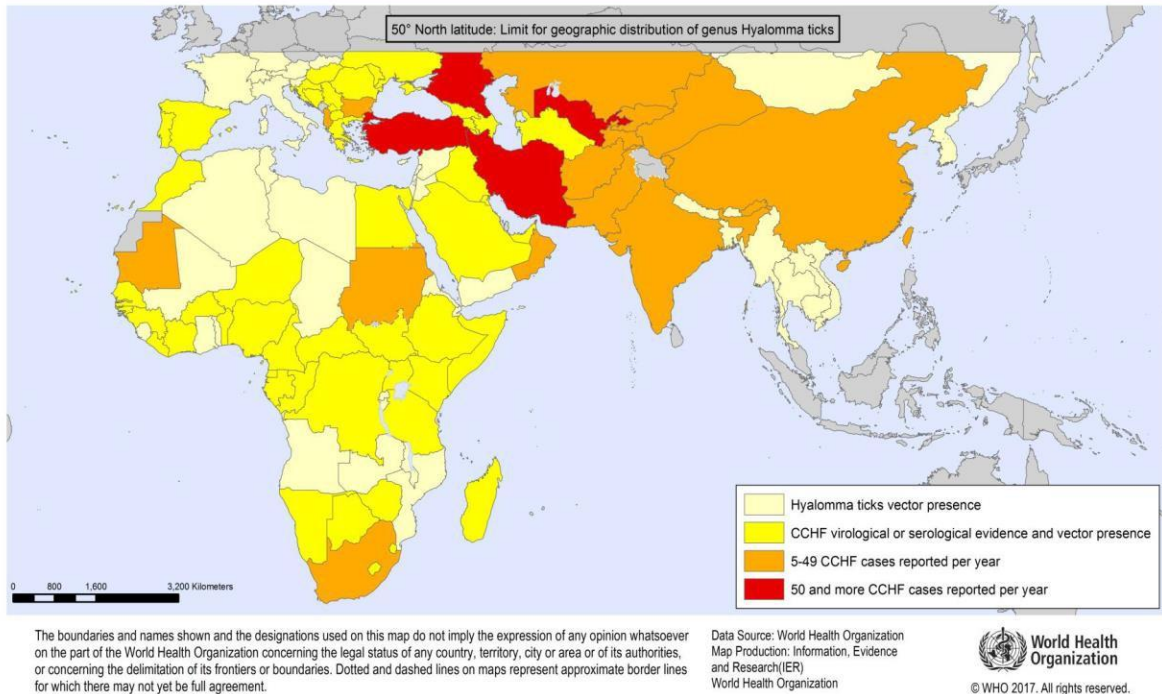
بالإشارة للموضع أعلاه خلال موسم الاضاحي في عيد الاضحى يزيد الاتصال البشري بالحيوانات الحية ولحومها النيئة والمقاصب مما يزيد من خطر انتقال مرض حمى القرم الكونجو النزفية , وعلى الرغم من التدابير وتفعيل اجراءات السيطرة التي تقوم بها السلطات البيطرية و البلديات على القراد والعدوى الحيوانية ومنع التعرض البشري , الا انه من المتوقع حدوث بعض الاصابات خلال هذا الموسم ولضمان الاكتشاف المبكر لمثل هذه الاصابات وسرعة تفعيل الاجراءات الوقائية فوجب التنويه على العاملين في مجال الرعاية الصحية في القطاع العام والخاص ضرورة الاشتباه بمرض حمى القرم الكونجو النزفية في الحالات التي تستوفي المعايير السريرية وتاريخ التعرض للحيوانات وعمل الفحوصات اللازمة للتشخيص وذلك للفتات التالية:

1. للعاملين في اسواق الحيوانات والمسالخ او المقاصب
2. في حالة زيارة اسواق الحيوانات الحية خلال اسبوعين من

الاعراض

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|--|---|
| <p>3. Being involved in slaughtering animals or having contact with recently slaughtered meat or blood during the last 2 weeks</p> <p>Suspected cases should be investigated for CCHF and notified urgently to the respective Health Department.</p> <p><b>Thank you for your cooperation</b></p> <p><u>Appendix:</u></p> <p>1- Crimean-Congo hemorrhagic fever Factsheet</p>  | <p>3. في حالة المشاركة في ذبح الحيوانات او الاحتكاك مع اللحوم المذبوحة حديثا خلال اسبوعين من ظهور الاعراض كما انه في حالة الاشتباه يرجى ابلاغ الادارة الصحية المعنية من خلال الاجراءات المعتمدة بصورة عاجلة</p> <p><b>شاكرين لكم حسن تعاونكم معنا.</b></p> <p><u>المرفقات:</u></p> <p>1- بيان حقانق حمى القرم الكونجو النزفية</p> |
| <p><a href="#">Link: if any attachment</a></p> <p><b>Crimean-Congo hemorrhagic fever (CCHF) factsheet</b></p> <p>Crimean-Congo hemorrhagic fever (CCHF) is a widespread disease caused by a tick-borne virus (Norovirus). The virus causes severe viral hemorrhagic fever outbreaks, with a case fatality rate of 10–40%.</p> <p>CCHF is endemic in Africa, the Balkans, the Middle East and Asian countries south of the 50th parallel north – the geographical limit of the principal tick vector.</p> |   |

### Geographic distribution of Crimean-Congo Haemorrhagic Fever



Regionally, the disease has been reported in Oman, KSA, Kuwait, Iran, Pakistan, India, and Iraq. Nationally cases have been reported since 1979 with exposure locally to infected animals. Most of the reported cases are among people working in animal markets and slaughterhouses.

### The Crimean-Congo hemorrhagic fever virus in animals and ticks

The hosts of the CCHF virus include a wide range of wild and domestic animals such as cattle, sheep and goats. Many birds are resistant to infection, but ostriches are susceptible and may show a high prevalence of infection in endemic areas.

Animals become infected by the bite of infected ticks and the virus remains in their bloodstream for about one week after infection, allowing the tick-animal-tick cycle to continue when another tick bites. Although a number of tick genera are capable of becoming infected with CCHF virus, ticks of the genus *Hyalomma* are the principal vector.

### **Transmission**

The CCHF virus is transmitted to people either by tick bites or through contact with infected animal blood or tissues during and immediately after slaughter. The majority of cases have occurred in people involved in the livestock industry, such as agricultural workers, slaughterhouse workers and veterinarians.

Human-to-human transmission can occur resulting from close contact with the blood, secretions, organs or other bodily fluids of infected persons. Hospital-acquired infections can also occur due to improper sterilization of medical equipment, reuse of needles and contamination of medical supplies.

### **Signs and symptoms**

The length of the incubation period depends on the mode of acquisition of the virus. Following infection by a tick bite, the incubation period 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.

Onset of symptoms is sudden, with fever, myalgia, dizziness, neck pain and stiffness, backache, headache, sore eyes and photophobia. There may be nausea, vomiting, diarrhea, abdominal pain and sore throat .followed by sharp mood swings and confusion. After two to four days, the agitation may be replaced by sleepiness, depression and lassitude, and the abdominal pain may localize to the upper right quadrant, with hepatomegaly.

Other clinical signs include tachycardia, lymphadenopathy, and a petechial rash on internal mucosal surfaces, and on the skin. The petechial may give way to larger rashes called ecchymosis, and other hemorrhagic phenomena. There is usually evidence of hepatitis, and severely ill patients may experience rapid kidney deterioration, sudden liver failure or pulmonary failure after the fifth day of illness

Death usually occurs in the second week of illness. In patients who recover, improvement generally begins on the ninth or tenth day after the onset of illness.

### **Diagnosis**

CCHF virus infection can be diagnosed by several different laboratory tests:

1. Enzyme-linked immunosorbent assay (ELISA) antigen detection;
2. Serum neutralization;
3. Reverse transcriptase polymerase chain reaction (RT-PCR) assay; and
4. Virus isolation by cell culture.

Patients with fatal disease, as well as in patients in the first few days of illness, do not usually develop a measurable antibody response and so diagnosis in these individuals is achieved by virus or RNA detection in blood or tissue samples.

Tests on patient samples present an extreme biohazard risk and should only be conducted under maximum biological containment conditions. However, if samples have been inactivated (e.g. with viruses, gamma rays, formaldehyde, heat, etc.), they can be manipulated in a basic biosafety environment.

### **Treatment**

General supportive care with treatment of symptoms is the main approach to managing CCHF in people.

The antiviral drug ribavirin has been used to treat CCHF infection with apparent benefit. Both oral and intravenous formulations seem to be effective.

### **Prevention and control**

#### **1. Controlling CCHF in animals and ticks**

The tick-animal-tick cycle usually goes unnoticed and the infection in domestic animals is usually not apparent.

The tick vectors are numerous and widespread, so tick control with acaricides is a realistic option for animal markets and local farms.

There are no vaccines available for use in animals.

## 2. **Reducing the risk of infection in people**

There is currently no safe and effective vaccine available for human use.

Only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.

### 2.1 **Reducing the risk of tick-to-human transmission: During contact with Animals**

- Wear protective clothing (long sleeves, long trousers);
- Wear light colored clothing to allow easy detection of ticks on the clothes;
- Use approved acaricides on clothing;
- Use approved repellent on the skin and clothing;
- Regularly examine clothing and skin for ticks; if found, remove them safely;
- Seek to eliminate or control tick infestations on animals or in stables and barns; and
- Avoid areas where ticks are abundant and seasons when they are most active.

### 2.2 **Reducing the risk of animal-to-human transmission:**

- Wear gloves and other protective clothing while handling animals or their tissues, notably during slaughtering, butchering and culling procedures in slaughterhouses or at home;
- Quarantine animals before they enter slaughterhouses or routinely treat animals with pesticides two weeks prior to slaughter.

### 2.3 **Reducing the risk of human-to-human transmission in the community:**

- Avoid close physical contact with CCHF-infected people;
- Wear gloves and protective equipment when taking care of ill people;
- Wash hands regularly after caring for or visiting ill people.

## 3. **Controlling infection in health-care settings**

Health-care workers caring for patients with suspected or confirmed CCHF, or handling specimens from them, should implement standard infection control precautions. These include basic hand hygiene,

use of personal protective equipment, safe injection practices and safe burial practices.

Samples taken from people with suspected CCHF should be handled by trained staff working in suitably equipped laboratories.

Recommendations for infection control while providing care to patients with suspected or confirmed Crimean-Congo hemorrhagic fever should follow those developed by WHO for Ebola and Marburg hemorrhagic fever

### **Enhancing Surveillance and Case Detection:**

During Eid Aladha and Hajj Season, the human contact with live and slaughtered animals increases the risk for CCHF transmission. Efforts by relevant veterinary and municipal authorities are in place to control Ticks and animal infection and to prevent human exposure. In spite of these measures cases are expected during this season. Healthcare workers are required to consider the diagnosis of CCHF in cases fulfilling the above mentioned clinical criteria with exposure history as follows

- Occupational exposure in Animal markets and Slaughter Houses
- Visiting life Animal markets within last 2 weeks
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Suspected cases should be investigated for CCHF and notified urgently to the respective Health Department.

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