

Crimean Congo Hemorrhagic Fever (CCHF) in the WHO EMR

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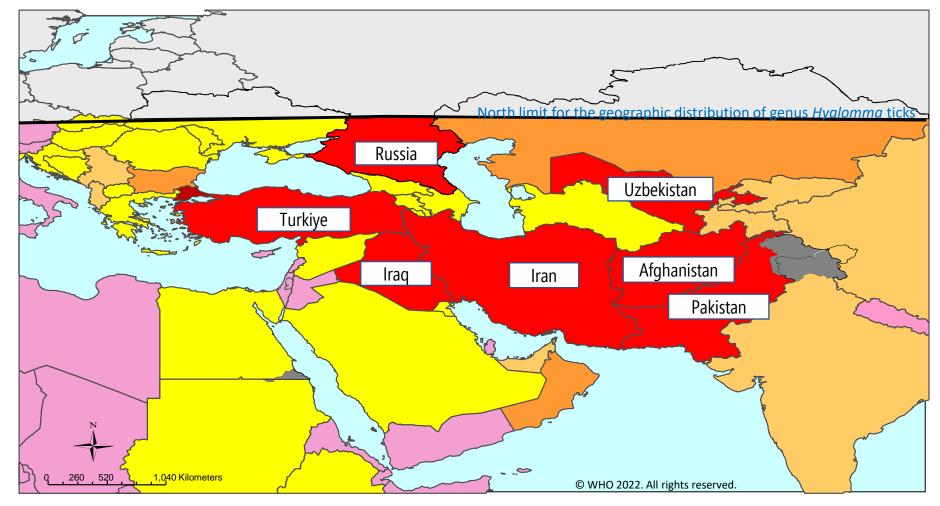






Cross-Border and Cross-Regional Burden of CCHF







CCHF: Eastern Mediterranean Region

- The WHO EMR has reported human cases and outbreaks of CCHF from Iraq, Afghanistan, Iran, Pakistan, Kuwait, Oman, Saudi Arabia, Sudan, and the UAE.
- In some countries, the incidence of CCHF has been increasing steadily in recent years.

Endemicity	Countries
Have reported cases/ outbreak	Iraq, AFG, PAK, Iran, KSA, Oman, Sudan, Kuwait, UAE
Evidence from sero- prevalence studies	Egypt, Morocco, Tunisia, Djibouti, Somalia, Syria
Unknown epidemiological status	Libya, Bahrain, Yemen, Qatar, oPT, Lebanon, Jordan

Year	CCHF reporting Countries
2012	Afghanistan, Pakistan
2013	Oman, Pakistan
2014	Oman, Pakistan
2016	Pakistan
2017	Afghanistan, Pakistan
2018	Afghanistan, Pakistan
2019	Afghanistan, Pakistan
2020	Afghanistan, Pakistan
2021	Afghanistan, Pakistan
2022	Afghanistan, Iraq, Iran
2023	Afghanistan, Iraq, Iran, Pakistan
2024	Afghanistan, Iraq, Iran, Pakistan



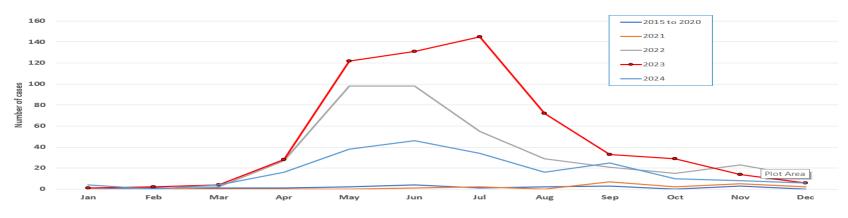
Seasonality and Annual Trend of CCHF in 4 EMR countries

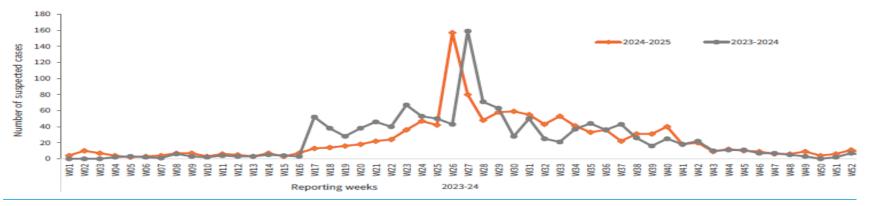
Iraq:

Laboratory confirmed CCHF cases from 2015-2020 to 2024

Afghanistan:

CCHF cases in 2023-2024





Iran:

Iran is considered endemic for CCHF, experiencing ongoing clinical and economic challenges due to the disease. Historically, the southeastern regions, particularly Sistan and Baluchestan province, have reported the highest number of cases. However, in 2019, the first outbreak was documented in northwestern Iran, indicating a potential geographic spread of the virus.

(Reference: Soozangar, N., et al. Molecular characterization and phylogenetic analysis of Crimean-Congo hemorrhagic fever virus, northwestern of Iran. BMC Infect Dis. 2025.)

Pakistan:



Pakistan has faced consistent sporadic outbreaks of CCHF since its first recorded case in 1976. The majority of cases have been reported from Baluchistan province, with subsequent transmissions to non-endemic regions, often through infected animals or ticks.

(Reference: Alam MM, et al. Genetic analysis and epidemiology of Crimean Congo Hemorrhagic fever viruses in Baluchistan province of Pakistan. BMC Infect Dis. 2013.)

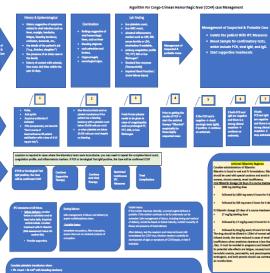
CCHF in EMR: Various Challenges by Context

- Limited resources across human and veterinary sectors in control of CCHF
- Limited social awareness among community in protection and prevention of CCHF
- Cross-border movement of human and animals
- Vulnerable populations living in challenging condition
- Proximity between human and animals
- Limited understanding, capacity and application of CCHF control strategies
- Sub-optimal surveillance, lab confirmation and case management
- Limited operational research in both human and veterinary sectors
- Limited One Health approach
- How can we OPERATIONALIZE One Health?



















Ongoing Response Actions in CCHF Affected Countries in EMR

Responding to Outbreaks and Identifying Evidence-Based Strategies for CCHF Control through a One Health Approach

- Enhanced surveillance: daily reporting of suspected cases, testing and daily report
- **CCHF standard case definition:** distribution to all key HFs
- CCHF case management treatment algorithm: developed and provided trainings to wide range of HCWs. IPC training integrated into case management
- Clinical data collection/observational study: on collected patient data
- A quadripartite meeting between WHO, FAO, MOH and MOA and a joined action plan: developed for the control and response to CCHF through One Health approach
- Laboratory support: procurement of lab supplies, trainings for CCHF diagnosis (PCR, ELISA and sequencing for both human and animal labs)
- Risk Communication and Community Engagement at field level
- Key message through Social Media and the national media outlets

Epidemiological analysis and potential factors affecting CCHF outbreak in Iraq

CCHF virus prevalence in domestic animal

Number of CCHF human cases

Hyalomma tick population

Endeavors to identify the best CCHF control strategy to minimize the morbidity and mortality

Effective and early tick control is the key to prevent and control the CCHF outbreak



