

# Crimean Congo Hemorrhagic Fever Epidemic During COVID-19 in Iraq: A “double whammy”?

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## Abstract

The Nairovirus causing the Crimean Congo Hemorrhagic Fever (CCHF) is transferred mainly via ticks and farm animals. Its incidence is spread over several countries broadly categorized into continents, including Europe, Asia, and Africa. This editorial is shedding light on this concerning pathogen and suggesting several strategies to tackle it.

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## Abstract

The Nairovirus causing the Crimean Congo Hemorrhagic Fever (CCHF) is transferred mainly via ticks and farm animals. Its incidence is spread over several countries broadly categorized into continents, including Europe, Asia, and Africa. This editorial is shedding light on this concerning pathogen and suggesting several strategies to tackle it.

*Keywords: Nairovirus; Crimean Congo Hemorrhagic Fever; COVID-19*

## **Key Clinical Message**

The rapid spread of the Crimean Congo Hemorrhagic Fever in Iraq is a cause of great concern, especially with Eid-ul-Adha being around the corner when the presence of sacrificial cattle acts as an optimum breeding ground for the virus.

## **Dear Editor,**

*Hyalomma marginatum* ticks and farm animals transmit the Nairovirus that causes the Crimean Congo Hemorrhagic Fever (CCHF). Due to the rising incidence of CCHF across the globe, which has been long recognized in a vast geographic area, including Europe, Asia, and Africa, as well as the potential for viral growth into new locations, it has been a serious public health issue.<sup>1</sup>

As the world struggles to contain the devastating COVID-19 pandemic, which has already worn down the underfunded health care systems in the developing world, particularly in Iraq, with more than 2.3 million confirmed cases and 25,000 fatalities as of June 26, 2022.<sup>2</sup>

Iraq has been notified of a CCHF outbreak by WHO, which might prove to be a catastrophic calamity, particularly since Eid-ul-Adha draws near and the majority of Iraq's health initiatives are focused on COVID-19 control. By May 22, 2022, the country reported 212 cases of CCHF since the year began, of which 169 were reported only in the preceding two months. Out of the 212 cases, 97 were confirmed by polymerase chain reaction (PCR), 13 of which were fatal (Case Fatality Ratio: 13%). Twelve of Iraq's 18 governorates indicated CCHF prevalence, with the majority of cases occurring in Thiqr (48%) and Missan (13%), followed by Muthanna (7%) and Wasit (6%).<sup>3</sup>

Every year, during the Islamic occasion of Eid-UL-Adha, countless livestock animals are slaughtered, including goats, cows, sheep, and camels. Worldwide, it is customary to buy animals ahead of Eid-UL-Adha, most of which are kept in residential zones. In addition, untrained butchers, animal slaughter in public locations, improper disposal techniques, and handling of animal blood, tissues, and skin are some variables that aid in the transfer of CCHF from animal to human and pose a significant threat to the general populace.<sup>4</sup>

There is a critical need to control the migration of people and animals from areas where the CCHF is endemic and to provide immediate training for medical personnel so that animal health can be monitored and reported. In addition, conducting public awareness campaigns and ensuring that local authorities effectively collect and dispose of waste and the carcasses of the slaughtered animals hold strategic importance to prevent the disease from becoming more and more burdensome during the current COVID-19 pandemic, along with collaborative efforts between infectious disease researchers, medical professionals, and veterinarians for prompt diagnosis and management of CCHF, are some of the crucial steps that could be taken at the earliest.

## **Declarations**

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## **Conflict of Interest Statement**

The authors have no conflicts of interest to declare.

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### Author Contributions

Omer A. Shaikh, Manahil Shekha, Gulrukh Shaikh, Irfan Ullah, Zoia E. Khattak, Abdulqadir J. Nashwan: Manuscript writing & Editing

All authors read and approved the final manuscript

### Transparency Declaration

The lead author (Dr. Omer A. Shaikh) affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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