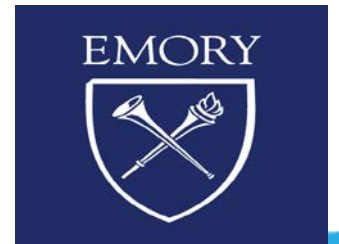


# Case Report

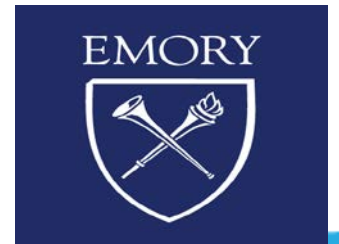
# Crimean-Congo Hemorrhagic Fever

Jessica Tarabay MPH, MHR, CIC  
Manager of Infection Prevention



# Case Presentation: Patient History

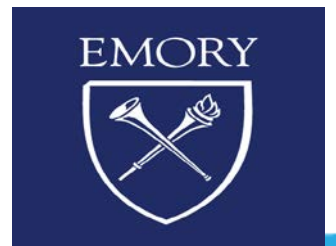
- 39 y.o. male who presents to the ED in August 2022
- Patient reports sudden fever up to 103.2, abdominal pain, headache, and vomiting following his return from Spain 2 days prior.
- Upon arrival, patient reports that while in Spain he volunteered working in a Spanish organic farm for 1 week where he cared for goats, sheep, and cattle.



# Patient information

- Upon further investigation, patient reports on his last day working in the farm (3 days ago) he was bit by something, most likely identified as a tick.

Clinical Course	
Fevers (Tmax: 103.2)	Day 3 from exposure to tick bite
Headache, fever, abdominal pain, vomiting, malaise	Symptom onset: Day 1
Presents to ED	Symptom Day 2
Exam: severe bruising over legs and back, petechiae, blood shot eyes	



# Next Steps

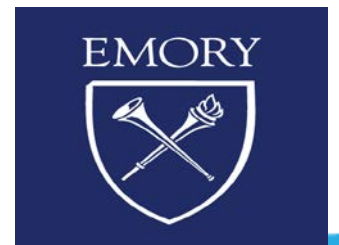
- **Inform:** ED clinical team notify Infection Prevention (IP)



- **IP** reviews patient history and recommends appropriate PPE (respirator, eye protection, permeable gown, gloves)

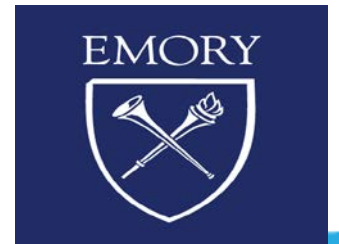


- **IP** notifies hospital epidemiologist/infectious disease physician to consult for special pathogens of concern

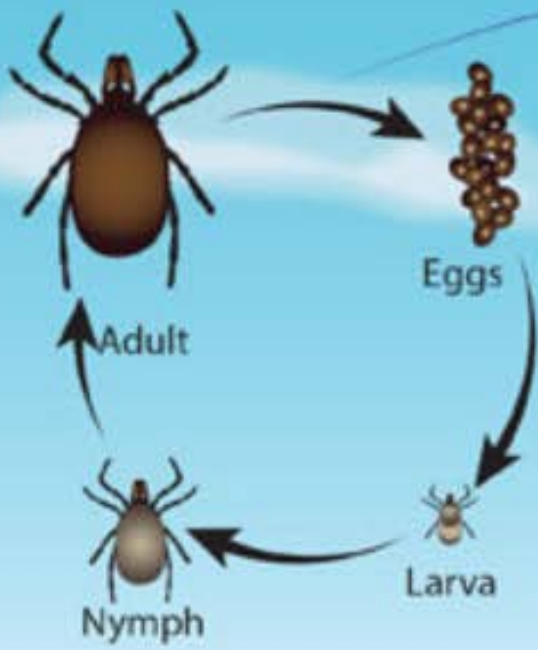


# Crimean-Congo Hemorrhagic Fever (CCHF)

## Outbreak Distribution Map

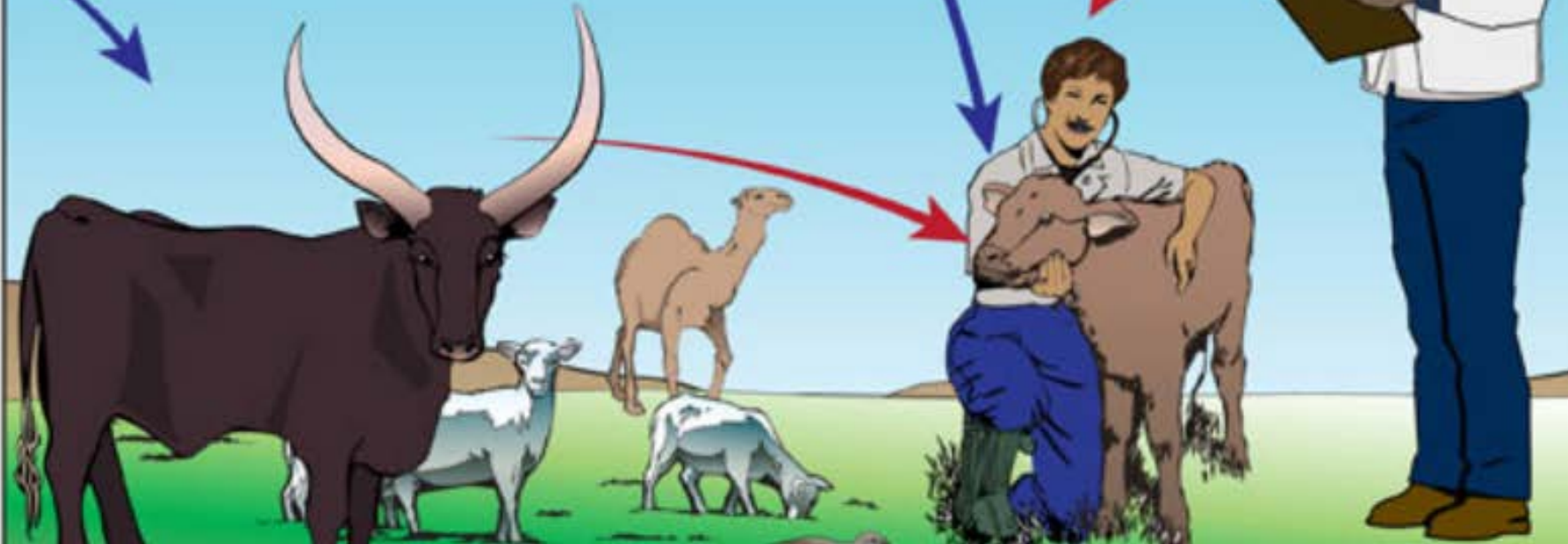


The virus is maintained in nature transovarially and transstadially.



Ticks feed on numerous wild and domestic animals such as cattle, goats, sheep, birds, and hares. These animals serve as both food sources for ticks and amplifying hosts for the CCHF virus.

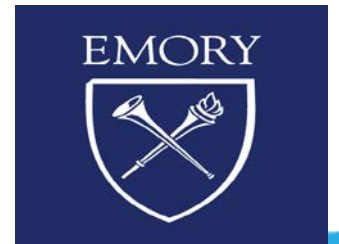
Transmission can occur while slaughtering infected animals, during veterinary procedures, and in hospital settings where proper protective equipment and appropriate disinfection procedures are lacking.





# Crimean-Congo Hemorrhagic Fever (CCHF)

- **Transmission:** Transmission to humans occurs through contact with infected ticks (mainly of the *Hyalomma* genus) or animal blood. CCHF can be transmitted from one infected human to another by contact with infectious blood or body fluids.
- **Signs and Symptoms:** headache, high fever, back pain, joint pain, stomach pain, and vomiting. Red eyes, a flushed face, a red throat, and petechiae (red spots) on the palate are common.
- **Incubation period:** The incubation period of CCHF is 3-7 days (range: 1–14 days), although longer periods have been reported.



# Next Steps: Crimean Congo Hemorrhagic Fever

## IDENTIFY:

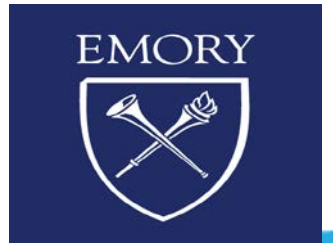
- Patients with sudden onset of fever, abdominal pain, malaise (flu-like symptoms)
- Patients with unexplained bruising, jaundice, blood shot eyes, nose bleeds
- Travel history and/or reports of encounters with livestock, confirmed tick bites.

## ISOLATE:

- Place patients in a private room with door closed

## INFORM:

- Notify Infection Prevention/ Infectious Diseases for PPE guidance and/or indication for biocontainment unit.
- Notify any clinical team providing patient care including laboratory personnel





# References

1. Crimean-congo hemorrhagic fever (CCHF) | CDC. <https://www.cdc.gov/vhf/crimean-congo/index.html>. Updated 2019. Accessed Aug 24, 2022.
2. Factsheet about Crimean-Congo haemorrhagic fever | European Centre for Disease Prevention and Control [https://www.ecdc.europa.eu/sites/default/files/media/en/healthtopics/emerging\\_and\\_vector-borne\\_diseases/tick\\_borne\\_diseases/public\\_health\\_measures/Documents/HC\\_P\\_Factsheet\\_CCHF\\_highres.pdf](https://www.ecdc.europa.eu/sites/default/files/media/en/healthtopics/emerging_and_vector-borne_diseases/tick_borne_diseases/public_health_measures/Documents/HC_P_Factsheet_CCHF_highres.pdf). Updated 2022. Accessed Aug 22, 2022.

