

2-19-2015

Ebola Hemorrhagic Fever (Ebola Virus)

Katie McKee

Maria Hernandez

Follow this and additional works at: https://scholarworks.sfasu.edu/stem_center_student_posters_infectious_diseases_project_2015



Part of the [Diseases Commons](#)

[Tell us](#) how this article helped you.

Repository Citation

McKee, Katie and Hernandez, Maria, "Ebola Hemorrhagic Fever (Ebola Virus)" (2015). *Infectious Diseases Project 2015*. 11.

https://scholarworks.sfasu.edu/stem_center_student_posters_infectious_diseases_project_2015/11

This Poster is brought to you for free and open access by the Student Posters at SFA ScholarWorks. It has been accepted for inclusion in Infectious Diseases Project 2015 by an authorized administrator of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

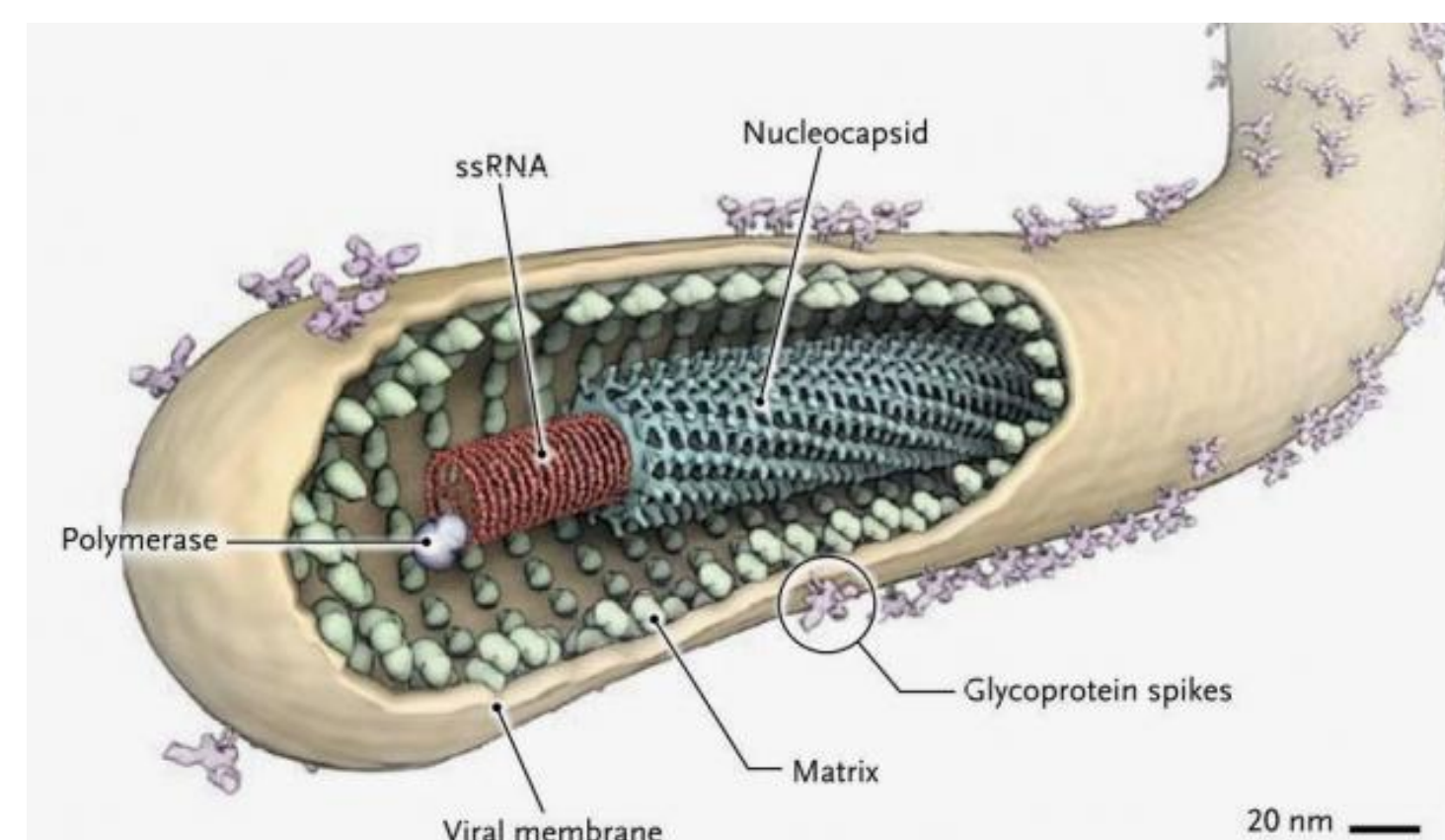


Ebola Hemorrhagic Fever (Ebola Virus)

by: Katie McKee and Maria Hernandez



Importance: Without treatment, the Ebola Virus (also known as hemorrhagic fever) has up to a 90% fatality rate. Understanding this disease could help save a person's life, especially if that person has recently traveled to Africa.



Pictured left: *Ebola Virus*

History: Ebola was first noticed in 1976, in two epidemics in Zaire, near the Ebola river. There were 431 deaths and 597 cases (CNN, 2015). Several other outbreaks have been recorded in countries such as Uganda, Democratic Republic of Congo, Republic of Congo, Sudan, and Gabon. The most recent outbreak in West Africa in 2014 is the largest outbreak of Ebola to be recorded, with an estimated 4,493 deaths and over 8,000 cases (CDC, 2015).

Transmission: Ebola can be transmitted from animal to animal, animal to human, and human to human. Animals such as bats, chimpanzees, birds, rodents, dogs, and pigs can contract Ebola (Discovery News, 2014). Ebola has spread to several countries through health workers and air travel. Although it is not highly contagious, Ebola is mostly transmitted to the skin by infected bodily fluids, such as blood, feces, vomit, and in severe stages of illness, saliva. It can also be transmitted through contact with contaminated surfaces (CDC, 2015).



Pictured left: *Bat being captured to be tested for Ebola.*

The infection: Ebola is a virus, meaning it needs a host to reproduce. It protects its host cell from the immune response, which would destroy the cell. It reproduces inside the host cell, and when the cell bursts, it produces a protein that makes blood leak out of its vessels.



Pictured above: *Ebola Virus*

Symptoms: Symptoms of Ebola appear anywhere from 2 to 21 days of being infected. The first symptoms are headache, fever, fatigue or weakness, and muscle pain. Next is sudden high fever, skin rashes, and vomiting blood. The next stage is characterized by bruising, brain damage, and external bleeding from the nose, eyes, mouth, and anus. The final stage is loss of consciousness, seizures, massive internal bleeding, and death (CDC, 2015).

Life after Ebola: People who survive and recover from Ebola have antibodies in their blood that last around 10 years or more. It is unknown if people are immune for life, and they might be able to get infected by a different species of Ebola. A person who recovers may have long term complications, such as joint and vision problems.



Pictured left: *President Barack Obama meets nurse Nina Pham, survivor of Ebola. She contracted Ebola while caring for a patient in Dallas, Texas.*

Treatment: There are no FDA-approved vaccines or medicines for the treatment of Ebola.

However, supportive care can increase survival if the symptoms are treated early. Supportive care is providing intravenous (IV) fluids to balance electrolytes or salts, treating other infections that occur, maintaining oxygen and blood pressure status, and blood transfusions (CDC, 2015).

There are vaccines and treatments under development, but they have not been tested fully yet.

Prevention: Because there are no medications or vaccinations for Ebola, prevention is crucial. Practicing careful hygiene, washing hands, avoiding items or people that have come in contact with Ebola, avoiding contact with bats and non-human primates, and avoiding places where Ebola is being treated will help people prevent getting infected (CDC, 2015).



Pictured above: *A health official dressed in protective gear examines children suffering from the Ebola virus*