

Review of six modern plagues

[Science](#), [Biology](#)



Title: Six Modern Plagues and How We Are Causing Them Apollo Casco

College of DuPage Abstract This paper is a review of the book “ Six Modern Plagues and How We Are Causing Them”. Discussing about the causative agents of each plague and how we increased the severity of each; Mad Cow Disease (Bovine spongiform encephalopathy), Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS), Salmonella, Lyme Disease, Hantavirus, and West Nile Virus. Millions of people have died because of these diseases that can easily transfer from person to person or from animal to person, by eating half cooked meat, or simply a mosquito bite.

Keywords: mad cow disease, hiv/aids, salmonella, Lyme disease, Hantavirus, west Nile virus Six Modern Plagues and How We Are Causing Them Bovine spongiform encephalopathy, the technical name for mad cow disease, first struck in a cattle farm in England in 1984. The infected cow started acting strangely. As the disease progresses, the cow developed head tremors and became unsteady, then became violent. The veterinarian who is trying to diagnose what is happening with the cows concluded that the disease is attacking the brain. Further study of the brain of the infected animal revealed a sponge like appearance of the brain.

It took sixteen (16) years before the authorities in agriculture pointed out what is causing the disease into the cattle. “ Rendering”, recycling of animal parts that usually go to waste was turned into high protein feed for herbivores like the cows, sheep, and goats. This process was stopped on year 2000. Disregarding the dietary boundaries of animals caused bad effects on the animals itself and into humans as well by consuming their

<https://assignbuster.com/review-of-six-modern-plagues/>

meat. Centers for Disease and Prevention alarmed the public in 1981 about the emergence of an agent capable of suppressing the immune response on humans; a new virus.

Because the virus attacks the immune system, they named it “acquired immunodeficiency syndrome”. The AIDS virus, human immunodeficiency virus (HIV) was first found on the blood of a person from Congo who is a part of malaria research; the year was 1959, and this is currently the earliest documented case of HIV-1 infection. While working at Pasteur Institute in Paris, two French virologists, Françoise Barre-Sinoussi and Luc Montagnier, identified the human immunodeficiency virus (HIV) that causes AIDS in 1983 (Abbott, Allison, & Geoff Brumfiel, 2008).

HIV attacks the immune system by destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital to fighting off infection. The destruction of these cells leaves people infected with HIV vulnerable to other infections, diseases, and other complications (DOH, 2008). A Pan troglodyte troglodytes is a subspecies of chimpanzee was the primary host of human immunodeficiency virus (HIV). Transfer of bodily fluids from handling of meats of infected animals gave rise to AIDS. From the persons who prepare the meats to be sold to the market got themselves infected through cuts on their skin with blood of the infected animals.

The disease will further widen its network through sex from an infected person. Salmonella typhimurium DT104, is a deadly strain that haunted people and livestock agriculture for three (3) years. Salmonella typhimurium bacteria became resistant to antibiotics because of human actions. Farm owners abused the use of antibiotics. Rather than keeping their animals

<https://assignbuster.com/review-of-six-modern-plagues/>

clean, they find it cheaper to use antibiotics to protect them from infection due to crowded and dirty living conditions in the farm. Antibiotics are added into their diet to make them grow a little faster.

Newborn calves are given antibiotics to prevent infection. They are weaned immediately after birth deprived of milk from their mother that is rich and full of antibodies. Through the phenomenon known as natural selection, each generation of the bacteria grows more resistant with the continuous exposure to drugs. Antibiotic Fluoroquinolone worked to treat the bacteria. As most of people know that a bulls-eye rash appears when somebody had a Lyme disease. From the past, the telltale story about the bulls-eye rash was used by physicians as the main diagnostic criteria rendering a negative diagnosis.

The truth is, the bulls-eye rash formation only occurs in 9% of cases (Internet, story) Deforestation decreases the population of keystone species, causing the increase of population of deer that carries the tick that causes Lyme disease. Mouse and chipmunks are also carriers of the tick. Because of radical changes people have made to the landscape, the ecological balance tipped on one side. Muscle pain, stiffness of the spine, lost of appetite, agitated, fever, shivering, are the symptoms of the disease.

If detected early, a three week course of antibiotic will fix the problem. To the Navajos, Hantavirus Pulmonary Syndrome (HPS) is nothing new. A disease usually fatal infection that causes victims to drown on their own fluids. The disease coincides with the phenomenon known as El Nino. Strong rains make the population of mouse to increase. The mouse's urine is the source of infection. References Last, F. M. , Last, F. M. , & Last, F. M. (YEAR).

<https://assignbuster.com/review-of-six-modern-plagues/>

The article title: And the article subtitle. The Journal Title, vol#, page-page
Abbott, Alison, and Geoff Brumfiel. Nobel for AIDS virus discovery, finally. "Nature 455. 7214 (2008): 712+. AcademicOneFile. Web. 23 Feb. 2012. Document URL http://0-go.galegroup.com/lrc/cod.edu/ps/i.do?id=GALE%7CA188847600&v=2.1&u=cod_lrc&it=r&p=AONE&sw=w Department of Health and Human Services. National Institute of Health (2008). National Institute of Allergy and Infectious Diseases. Retrieved from <http://www.niaid.nih.gov/TOPICS/HIVAIDS/UNDERSTANDING/Pages/whatAreHIVAIDS.aspx> (Canadian Lyme Disease Foundation, 2012)