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## INFECTIOUS DISEASES THEN AND NOW: THE PLAGUE AND EBOLA

UN Sustainable Development Goal  
#3

### POSSIBLE ESSENTIAL QUESTIONS

- What implications do global health crises have on other systems – social, political, economic?
- How should other countries respond to infectious disease outbreaks?
- How does culture interact with infectious diseases and their spread, treatment, and aftermath?

### BACKGROUND

According to the World Health Organization, the concept of global health refers to widespread health impacts that affect large numbers of people across boundaries of geography, time and culture<sup>1</sup>. One such impact, with human, social, economic and political consequences, is the outbreak of infectious disease.

Infectious diseases have impacted history, and continue to impact our world on a daily basis. Despite advancements in the medical field, increasing populations and continued lack of healthcare access for many are two contributors to new outbreaks.

One of the most notable infectious disease outbreaks in history was called the Black Death. The Black Death was a plague pandemic in Europe that lasted almost 5 years, from about 1347-1351, and killed about one third of the region's population (around 25 million people). The plague took several forms in the outbreak, including bubonic (spread by rats and fleas) and pneumonic (spread person to person). The Black Death devastated Europe socially, religiously, economically, and otherwise. At that time, the cause was not known and many thought it to be religious. So, and when the outbreak waned, people continued to suffer, such as the thousands of Jewish people who were killed after the outbreak and the others who had to flee their homes. The Black Death is an example of how disease can impact an entire society, and it has not completely disappeared. The bubonic and pneumonic plagues still exist around the world each year, and Madagascar suffered from an outbreak in 2017.

Another recent example of a major infectious disease outbreak that had a large impact on the global community recently is Ebola. The first known case of which appeared in 1976 near the Ebola River in what is now the Democratic Republic of Congo. Marked by its high level of contagion, efforts to control the spread the disease have been compounded by a number of factors, including the fact that there is currently no vaccine or cure. Persons with Ebola experience fever, fatigue, diarrhea, vomiting, and unexplained bleeding or bruising; the disease is spread through direct contact with bodily fluids putting health workers at an increased risk and further complicating treatment.

The most recent outbreak was the West African Ebola epidemic from 2013-2016. This was worse than all previous outbreaks combined; Ebola caused around 11,315 deaths in West Africa<sup>2</sup> and an estimated 28,637 total cases (suspected,

<sup>1</sup> World Health Organization Glossary, "Health", <http://www.who.int/trade/glossary/story046/en/>

<sup>2</sup> CDC Case Counts, <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/>

probable and confirmed) primarily in Guinea, Liberia and Sierra Leone. The outbreak has had effects on communities near and far.

This case study will address global health, largely through an examination of the local and global impacts of the 1347-1351 European plague pandemic, the 2013-2016 Ebola epidemic in West Africa, and the 2017 plague outbreak in Madagascar.

## RESOURCES

### Personal Stories

#### Ebola

- [I had Ebola and Survived \(IFRC\)](#)
- [A nurse's story: on the front lines of the Ebola outbreak \(CBS News\)](#)
- [World Health Organization \(Ebola Diaries\)](#)
- [Ebola survivor hiding from community \(BBC\)](#)
- [I AM A LIBERIAN, NOT A VIRUS \(Shoana Cachelle\)](#)
- [\\* They Helped Erase Ebola in Liberia. Now Liberia Is Erasing Them. Image \(NYT\)](#)

#### Plague

- [PLAGUE | A survivor's story from Madagascar \(MSF\)](#)

### Articles

#### Ebola

- [The Ebola Wars \(New Yorker\)](#)
- [They Helped Erase Ebola in Liberia \(NYTimes\)](#)
- [Economic Impact of Ebola \(World Bank\)](#)
- [\\* Vaccine created to protect Ebola-ravaged chimps \(Newsela\)](#)
- [\\* PRO/CON: U.S. troops in West Africa to help fight Ebola \(Newsela\)](#)
- [\\* Texas Liberians stand together \(Newsela\)](#)
- [\\* Experimental Ebola Vaccine Can Be Used in Latest Outbreak, W.H.O. Says \(NYT\)](#)

#### Plague

- [Explainer: What is the plague? \(Newsela\)](#)

- [What You Might Have Missed in History Class: Black Death is Still Here and Closer Than You May Think \(Health Map\)](#)
- [Echoes of Ebola as plague hits Madagascar \(Science mag\)](#)
- [\\* How Madagascar Took Control Of Its Plague Outbreak \(NPR\)](#)
- [Plague mutation turned harmless bacteria into a devastating killer \(Newsela\)](#)

### Data & Maps

- [Deadliest Pandemics in History infographic](#)

#### Ebola

- [2014 Ebola Outbreak Feature Map \(WHO\)](#)
- [Ebola Data and Statistics \(WHO\)](#)

#### Plague

- [Plague Ecology in the United States \(CDC\)](#)
- [The spread of the bubonic plague in Europe \(U Iowa\)](#)

### Videos/Audio

#### Ebola

- [Ebola: What Does It Do Inside the Body? \(WSJ\)](#)
- [The Story of Ebola \(Global Health Media\)](#)

#### Plague

- [Could the Black Death \(The Plague\) Happen Again? \(Infographics show\)](#)
- [\\* Madagascar: Plague-free prisons \(ICRC\)](#)

### Websites

- [Outbreak News \(Health Map\)](#)

#### Ebola

- [Ebola Fact Page \(WHO\)](#)
- [Ebola Information Page \(CDC\)](#)
- [Ebola Topic Page \(NYTimes\)](#)

#### Plague

- [Black Death \(History.com\)](#)
- [\\* Plague - Madagascar \(WHO\)](#)

### Art and Images

#### Ebola

- [\\* Fever rising: How an illustrator's images helped the fight against Ebola \(CNN\)](#)
- [2015 Pulitzer Prize Winning Photo Collection](#)

#### Plague

- [The Black Death: The Plague, 1331-1770 Image gallery \(University of Iowa\)](#)