

World Health Organization: Ebola Crisis

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Introduction

Welcome to MinuteMUN 2020! My name is Jesse Kolodkin. I'm a Junior journalism major here at UMass Amherst and I'm going to be your Crisis Director. I've been doing Model United Nations since 9th grade and I've done it every year I've been at UMass. I've gone to MUN conferences at The Hague in the Netherlands and NYU in New York City. I'm a major Giants and Nets fan and you can catch me on WMUA Amherst, 91.1FM on Fridays from 4:30-5:30pm.

Hi, I am Anshul Bhargava. I will be chairing the MinuteMUN Ebola Crisis committee this year. I am a Junior Physics major with a minor in Mathematics and Psychology. Apart from academics, I am the President of the Physics Club at UMass, an RA in Johnson Hall, and a research assistant at a condensed matter physics lab headed by Professor Jun Yan. I love reading classic novels in my free time, and you will often find me playing soccer with my friends on the weekend or trying to finish all the side quests for God of War (2018) on my PlayStation.

I started my MUN experience back in the junior year of high school with Harvard MUN which was held in Hyderabad, India and my love for MUN has only grown more over time. I was the chair for the crisis committee called the Indian Struggle for Independence from the British crisis at UMass MUNXVII. My only expectation from the participants is that they be creative and use their MinuteMUN experience to explore how a real-world problem like Ebola can be mitigated using effective diplomatic practices.

In this committee we will be acting as the World Health Organization (WHO). WHO is the directing authority of international health for the United Nations. The overarching goal for WHO is to attain the highest standard of public

health, for the entire world. This organization also funds research on diseases and funds medical aid to countries in need.

Problem

The main topic of debate for this committee will be the Ebola Virus, its treatment, spread and mainstream stigma. Currently, there is an outbreak of Ebola in the Democratic Republic of the Congo (DRC) that the World Health Organization has decreed an international public health emergency.

Not only is the disease itself an issue, but the area in which the disease has originated is in a war zone. The North Kivu province sees heavy militia fighting over its natural minerals and resources. This is the first Ebola outbreak in such an area, making it far more difficult to treat people and quarantine the virus.

Thousands of people have been displaced by the fighting which has led to the rapid spread of the virus.

Logistics and supplies are a major problem in the Democratic Republic of the Congo and Central Africa in general. Governments often don't have the funds or supplies to adequately address health crises. Hospitals are often understaffed and overcrowded, leading to patients being turned away because of a lack of space. In 2014 during the Ebola outbreak in Liberia hospitals turned away patients who were suffering from malaria and typhoid, because they had to concentrate on Ebola victims. While the situation might not be that dire in the DRC, it could be.

Poor infrastructure makes it difficult to transport supplies and people around the country. North Kivu and the Ituri Province both have heavy militia activity which makes providing aid incredibly difficult in the region. Thousands of people have become displaced, making the possibility of the virus to spread exponentially higher, not to mention, it endangers the lives of aid workers.

History

Ebola is one of the deadliest diseases on the planet, with a fatality rate of approximately 50%. There is no definitive knowledge as to how the virus originated, however, most theorize that it was spread through direct contact with infected animals or fruit bats. Other possible animals that could've passed on the infection are chimpanzees, baboons, gorillas, and duikers.

There are multiple strains of the Ebola Virus, the most famous one being the Zaire Ebola Virus; this is most well-known as well as the deadliest strain and is simply called the Ebola Virus or EBOV. The second most well-known is the Sudanese Ebola Virus which originated in Sudan (now South Sudan) and is referred to as SUDV or the Sudan Virus. There are three other strains of the virus, the Bundibugyo Virus, the Tai Forest Virus and the Reston Virus (although the Reston virus is not thought to be harmful to humans, it is harmful to other primates.)

The Ebola Virus has up to a two week incubation period. This means that it can be a long time before a person displays symptoms of the disease, by which time it may be too late to save them. The disease can be easily confused for malaria, cholera and typhoid due to similar symptoms. This makes it particularly difficult to treat because those diseases are common in Western and Central Africa.

One reason why the Ebola virus is so deadly is because it is highly contagious, transmissible through the air, skin-to-skin contact or contact with materials used by an infected person (towels, blankets, clothes). Aid workers are at high risk of contamination and must wear protective clothing at all times.

Corpses are a major issue as well, with dead bodies being highly contagious.

Friends and relatives of the infected have a severe risk of contracting Ebola during burial ceremonies. However, many families don't want to see their loved ones taken away in plastic bags, even though it's the safer option.

Timeline

- ➤ June-November 1976, in Nzara Sudan (now South Sudan) the 1st known case of the Ebola Virus is identified. Later this strand would be called South Sudan Ebola Virus (SUDV) and led to an outbreak of the Ebola virus.
 - This outbreak infected 284 people and killed 151.
- August 26, 1976 a school Headmaster in Zaire (now the Democratic Republic of the Congo) was infected and died September 8th.
- > Due to people coming in contact with his corpse, 318 people were infected with Ebola and 280 died, a fatality rate of 88%.
 - This outbreak was the second strain of the Ebola virus and the better-known variant, called the Ebola Virus (EBOV).
 - The first strain is the Sudan strain (SUDV) which is lesser known and slightly less deadly.
- ➤ 1995 in Zaire the second major outbreak occurred infecting 315 people and killing 254.
- > 2000, Uganda has its first outbreak infecting 425 people, killing 224 (SUDV strain).
- > 2003, an outbreak in the Democratic Republic of the Congo (DRC) infects 143 and kills 128.
 - The fatality rate of this outbreak was 90% which is the highest ever for an outbreak of Ebola.
- > 2004, a Russian scientist accidentally stuck herself with an infected needle and died from Ebola.

- > April-August 2007, a fever epidemic in four villages in the northern region of the Democratic Republic of the Congo infects 264 people and kills 187.
- November 30, 2007, an outbreak in Western Uganda infects 149 and kills 37.
 - This is the first instance of a new strain named the Bundibugyo strain.
- > 2012, Uganda had two minor outbreaks.
 - The first infected 7 and killed 4.
 - The second infected 24 and killed 17.
- > August 17, 2012, an outbreak in the Democratic Republic of the Congo infects 57 and kills 29.
- ➤ August-November 2014, an outbreak in the Democratic Republic of the Congo infects 66 and kills 49.
- ➤ March 2014 the WHO reports that there is a major Ebola outbreak in West Africa.
 - The main countries are Guinea, Liberia and Sierra Leone.
 - o By October 11, 2015 there were 28,454 people infected and 11,297 died.
 - By September 2016 both Guinea and Liberia were declared Ebola free after a several week incubation period
 - o In February 2016 Sierra Leone was declared Ebola free
- > 2017, the Democratic Republic of the Congo had a minor outbreak that saw 4 people die and 4 people survive.
- ➤ August 1, 2018 the Democratic Republic of the Congo reported an outbreak in the North Kivu province.
 - This was the first time that the virus took place in a war zone.
 - The region has heavy military activity due to an abundance of mineral riches with several militia groups in constant conflict making aid extremely difficult to provide.

- Thousands of refugees were left homeless trying to flee the conflict area and the disease, but they are often turned away due to the fear that they are infected.
- November 2018, the Ebola virus (EBOV) has killed 200 Congolese and more than 1000 have been infected.
 - o June 4, 2019, 2,025 were reported as infected and 1,357 died.
- > July 2019, an infected man went to Goma, the capital city of North Kivu and home to 2 million people. One week later WHO declared the Ebola outbreak in the DRC as a Global Health Crisis.

2014 - 2016 Ebola Outbreak

The 2014 Ebola outbreak is the most devastating outbreak to date and the first one to have actively involved multiple countries. The main countries were Guinea, Sierra Leone and Liberia. There were smaller cases of Ebola in neighboring countries like Mali, Nigeria and Senegal. During this outbreak, the United Kingdom, Italy, Spain and the United States of America all reported minor cases of the Ebola virus. These were caused by aid workers who returned to their home countries and were found to have contracted the virus.

Key Players

The current Ebola outbreak is in the northern part of the Democratic Republic of the Congo. Neighboring Uganda, South Sudan, The Republic of the Congo and the Central African Republic are all at risk of the disease spreading to their countries.

While the current outbreak is in Central Africa and not Western Africa, nations like Senegal, Liberia, Sierra Leone, Guinea and Nigeria have all

experienced outbreaks before. They could be valuable resources or potential threats from the disease.

UNICEF, Red Cross, Doctors without Borders and Oxfam are all valuable International Organizations and NGOs that could be potential allies to provide aid and funds to combat the spread of the disease.

Key Questions

- How can the WHO provide aid in a fast and efficient manner?
- The effects of the virus are exacerbated by poor living conditions and a lack of infrastructure. Can you use the incoming aid to help solve the root problem, and not just the issue of the Ebola virus?
- The virus has an incredibly high fatality rate and is extremely contagious.
 Acting quickly, deliberately and efficiently is of the utmost importance.
 How will you do that as an entire body?
- Most of the countries involved are not highly developed economically how can you attract aid and funds internationally?

Citations

- "Transmission". Centers for Disease Control and Prevention (CDC). 17
 October 2014. Archived from the original on 19 October 2014. Retrieved 18
 October 2014.
- 2. https://www.nhs.uk/conditions/ebola/
- 3. https://www.cdc.gov/vhf/ebola/index.html
- 4. https://www.theguardian.com/global-development/2019/dec/13/spike-ebola-cases-alarms-health-officials-drc
- 5. https://reliefweb.int/report/democratic-republic-congo/complex-logistics-e
 bola-response

- 6. https://www.who.int/emergencies/diseases/ebola/drc-2019
- 7. https://www.msf.org/drc-ebola-outbreak-crisis-update
- 8. https://www.theguardian.com/global-development/2019/dec/13/spike-ebola
 -cases-alarms-health-officials-drc
- 9. https://www.youtube.com/watch?v=ANUI4uT3xJI
- 10. https://www.who.int/emergencies/diseases/ebola/drc-2019/situation-report s
- 11. <u>"Ebola virus disease"</u> (Press release). <u>World Health Organization</u> (WHO). 12 February 2018.
- 12. Hoenen T, Groseth A, Feldmann H (July 2012). "Current Ebola vaccines".

 Expert Opin Biol Ther. 12 (7): 859–72. doi:10.1517/14712598.2012.685152. PMC

 3422127. PMID 22559078
- 13. Peterson AT, Bauer JT, Mills JN (2004). "Ecologic and Geographic Distribution of Filovirus Disease". Emerg. Infect. Dis. 10 (1): 40–47. doi:10.3201/eid1001.030125. PMC 3322747. PMID 15078595
- 14. Hewlett, Barry; Hewlett, Bonnie (2007). <u>Ebola, Culture and Politics: The Anthropology of an Emerging Disease</u>. Cengage Learning. p. 103. <u>ISBN 978-1111797317</u>. Retrieved 31 July 2014.
- 15. Feldmann H, Jones S, Klenk HD, Schnittler HJ (August 2003). "Ebola virus: from discovery to vaccine". *Nature Reviews Immunology*. **3** (8): 677–85. doi:10.1038/nri1154. PMID 12974482
- 16. King JW (2 April 2008). "Ebola Virus". eMedicine.
- 17. Formenty P, Libama F, Epelboin A, Allarangar Y, Leroy E, Moudzeo H, et al. (2003). "[Outbreak of Ebola hemorrhagic fever in the Republic of the Congo, 2003: a new strategy?]". *Med Trop (Mars)* (in French). **63** (3): 291–95. PMID 14579469
- 18. Miller J (25 May 2004). "Russian Scientist Dies in Ebola Accident at Former Weapons Lab". The New York Times. Archived from the original on 17 October 2014. Retrieved 12 October 2014.

- 19. <u>"Ebola outbreak in Congo"</u>. <u>CBC News</u>. 12 September 2007. <u>Archived</u> from the original on 19 November 2014.
- 20. "Mystery DR Congo fever kills 100". BBC News Online. 31 August 2007.

 Archivedfrom the original on 11 November 2007.
- 21. <u>"Uganda: Deadly Ebola Outbreak Confirmed UN"</u>. UN News Service. 30 November 2007. <u>Archived</u> from the original on 3 March 2008. Retrieved 25 February 2008.
- 22. <u>"DRC Confirms Ebola Outbreak"</u>. Voanews.com. <u>Archived</u> from the original on 15 September 2012. Retrieved 15 April 2013.
- 23. <u>"WHO Ebola outbreak in Democratic Republic of Congo"</u>. <u>World Health Organization</u> (WHO). 17 August 2012. <u>Archived</u> from the original on 27 October 2013. Retrieved 15 April 2013.
- 24. "WHO Ebola outbreak in Democratic Republic of Congo update". World Health Organization (WHO). 21 August 2012. Archived from the original on 16 December 2012. Retrieved 15 April 2013.
- 25. "Guidelines for Evaluation of US Patients Suspected of Having Ebola Virus

 Disease". Centers for Disease Control and Prevention (CDC). 1 August 2014.

 Archived from the original on 8 August 2014. Retrieved 5 August 2014.
- 26. <u>"Ebola Situation Report"</u> (PDF). World Health Organization. 14 October 2015. Retrieved 22 October 2015.
- 27. Specia M (2 August 2018). <u>"The Latest Ebola Outbreak Is Centered in a War Zone"</u>. *The New York Times*. Retrieved 5 August 2018.
- 28. <u>"Ebola virus disease Democratic Republic of the Congo Disease outbreak news: Update 6 June 2019"</u>. <u>World Health Organization</u> (WHO). 6 June 2019. Archived from <u>the original</u> on 7 June 2019. Retrieved 7 June 2019.
- 29. Larson K (15 July 2019). "Congo tracing contacts of first Ebola case in eastern city". *AP News*. Retrieved 17 July 2019.
- 30. Cheng M, Keaten J (17 July 2019). <u>"Ebola outbreak in Congo declared a global health emergency"</u>. *AP News*. Retrieved 17 July 2019.

- 31. Spickler, Anna. <u>"Ebolavirus and Marburgvirus Infections"</u> (PDF). <u>Archived</u> (PDF) from the original on 30 April 2015.
- 32. <u>"About Ebola Virus Disease"</u>. <u>Centers for Disease Control and Prevention</u>
 (CDC). <u>Archived</u> from the original on 16 October 2014. Retrieved 18 October 2014