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# Ebola: Africa

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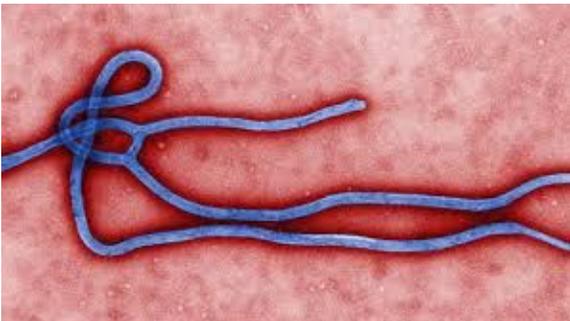
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## Description

Ebola is a rare but deadly virus that causes fever, body aches, and diarrhea, and sometimes bleeding inside and outside the body. As the virus spreads through the body, it damages the immune system and organs. Ebola is a communicable condition, The



Picture Above: Ebola Virus under a microscope, (News 18, 2014)

condition is found mostly in Africa, to be a little more exact, in West Africa. Ebola is a specific Pathogen that is most commonly transferred through direct contact with someone infected, or being in the same



vicinity as someone who is infected with Ebola (close contact). There have been 31,071 cases in Africa since 1976. (NCEZID, 2014)

## Epidemiology of Ebola

Ebola has many symptoms that may appear anywhere from two to twenty one days after exposure. Many early symptoms of Ebola have similarities to a common fever. Symptoms include: fever, headache,

Picture Above: Hot spots in Africa highlighting the Ebola outbreak

muscle pain, fatigue, diarrhea, vomiting, stomach pain, and bleeding/bruising. Transmission happens during close or direct contact.(CDC,2018) A lot of cases come from Africa not knowing how to deal with a dead body with Ebola, or some funeral traditions that some cultures refuse to change(CDC,2018). There have been 31,071 cases in Africa from Ebola and 12,924 confirmed deaths due to Ebola (42%)(CDC,2018). In Africa, The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission.(Khalafallah et al.2017) The average case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.(CDC,2018) The history of Ebola has shown that the disease poses a problem to undeveloped countries.(NCEZID,2014) Although observed modes of transmission mainly include direct contact and contaminated staff, high case fatality ratio and frequent contacts among individuals in developed countries are among determinants.

## Solutions

The World Health Organization saw the massive outbreak of Ebola in 2014 and immediately mobilized and deployed in Africa in late spring of 2014. Later in May, Sierra Leone reported its first 16 cases and 5 deaths, all in Kailahun district.(W.H.O,2015) Within days, that number doubled. By early June, it was clear that large population movements over borders were interfering with control measures, most notably contact tracing and monitoring during the 21-day incubation period.(W.H.O,2015) They couldn't tally and address the people who were in direct contact. To address this problem, WHO introduced a system of cross-border surveillance in the

designated “hot zone”, a triangle-shaped area where the borders of three countries came together. (W.H.O,2015) More epidemiologists were sent to support that effort. This was a strength of the intervention because WHO was able to get in quick to the outbreak and create a plan.

(W.H.O,2015) However, there were some weaknesses that were too much for WHO to handle in that time period of chaos. They needed funding and asked for donors to help get to 100 million. WHO and the leaders who were dealing with the outbreak at the time did not have strong leadership to guide the population to precautions and education of how to stop this massive outbreak. (W.H.O,2015) WHO ended up declaring a level 3 emergency, the highest level, and set in plans to hold an urgent high-level meeting with experienced health officials from African countries, partners, Ebola survivors, representatives of airline and mining companies, and financial donors to try to get the momentum back into prevention’s corner. (W.H.O,2015) That meeting was held in Ghana from 2 to 3 July and resulted in both significant commitments of financial support and new strategies to speed up the WHO response. Key priorities identified included mobilizing community and religious leaders to improve Ebola awareness and understanding, as well as strengthening surveillance and case finding. (W.H.O,2015)



Picture Above: World Health Organization helping the outbreak, 2015

### **New Plan for intervention:**

Ebola was a big scare for many in the United States in 2014, even though only a few cases reached the country. Many wanted to know more and what to do if someone was infected with the virus. If we can get the same interest in Ebola from the United States and other developed countries, funding will be a better situation to help with research and exposure. My plan is to simply educate risk population. From the efforts of WHO, they were not able to get the support because most were uneducated the virus and its severity. If we send educated doctors and researchers to Africa and to the risk population to educate the Doctors in Africa now. Also, setting up a trauma center close to each “hot zone”, and instructing the population to go there to reach out for help.

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