



**Forum:** World Health Organization  
**Issue:** 2019 outbreak of Ebola in Africa  
**Student Officer:** Sean Holt

## Overview

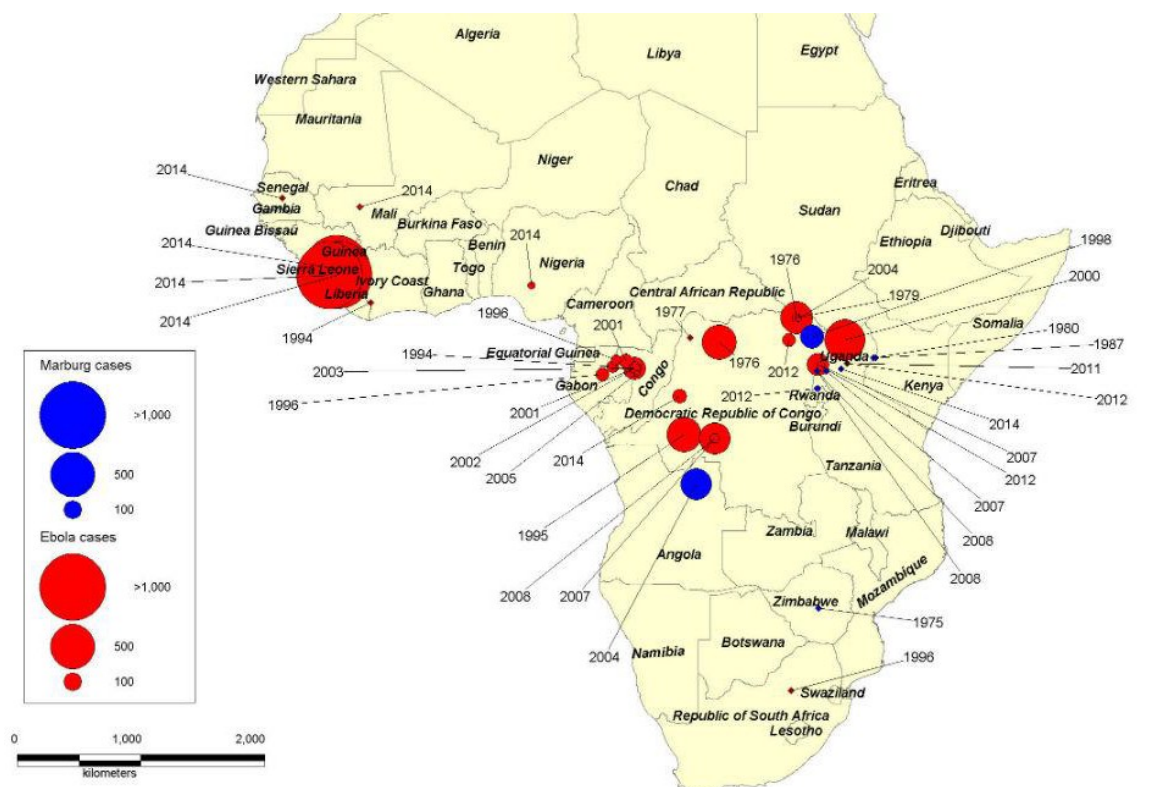
Ebola is a rare and dangerous virus that harms the body's immune system and organs. It causes heavy bleeding inside the body and it kills cells. The disease is infectious and is transmitted via blood and bodily fluids and secretions. Its symptoms include fever, body aches, diarrhea and bleeding inside and outside of the body and is, in most cases, fatal if not treated.

There are five types of Ebola, four of which can make people sick. These types are: Zaire ebolavirus (EBOV), Sudan ebolavirus (SUDV), Tai Forest (TAFV) (formerly known as Ebola Ivory Coast) and Bundibugyo ebolavirus (BDBV). Ebola spreads by touching unclean needles or surfaces, contact with skin and bodily fluids of an infected animal (monkeys, chimps, or fruit bats). Relatives who care for infected people can also get sick. Symptoms of Ebola occur 2 to 21 days after infection and include: flu-like signs, physical weakness, lack of appetite, joint and muscle aches and high fevers. The body will bleed from the eyes, ears and nose as the disease gets worse. Coughing up blood and vomiting is also a sign of Ebola. It is hard to tell if someone has Ebola, but it is recognisable from tests on blood and tissue.

The disease is highly contagious and contracting it you will be isolated and quarantined from the public to prevent it spreading.

In 1976, Ebola was first recognised near the Ebola River (now the Democratic Republic of Congo). Since then, the disease has spread to other African countries and has been identified on other continents. EBOV, SUDV and the BDBV are the three types of Ebola viruses responsible for the outbreaks in Africa. Zaire Ebolavirus (EBOV) is the most deadly form of Ebola, is responsible for the 2014-2016 outbreak in West Africa and hundreds of cases in DRC and Gabon. There have been smaller outbreaks that have appeared in Southern Africa and Uganda. The Sudan Ebolavirus (SUDV) has appeared in Uganda and other countries between DRC and South Sudan. In 2007, there were two outbreaks of Bundibugyo ebolavirus (EBOV), one in DRC and Uganda.





*Location showing the known outbreaks of Ebola in Africa, December 2016.*

Recently, in August 2018, the DRC confirmed its tenth outbreak of Ebola in 40 years in North Kivu and Ituri provinces. It is the country's largest Ebola outbreak ever recorded and the world's second largest, with 3,000 cases diagnosed.

With tens of thousands of responders, volunteers, researchers and scientists, progress has been made by the World Health Organisation (WHO) to control and treat the virus. There is now a vaccine, diagnostics and registered medical teams ready to respond to outbreaks. WHO continue to send help to the 3 most affected countries with Ebola vaccination teams of 4000 members and 1180 recovery support staff of Ebola. 45 laboratories have been built since the last outbreak with WHO supporting 29. These labs have tested over 200,000 patient samples.

## Key Terms

### Ebola

Ebola is a rare and dangerous virus that harms the body's immune system and structures. It causes heavy bleeding inside the body and it kills cells.

### Types of Ebola

There are five types of Ebola, four of which can make people sick, namely:

1. Zaire ebolavirus (EBOV)



2. Sudan ebolavirus (SUDV)
3. Tai Forest (TAFV) (formerly known as Ebola Ivory Coast)
4. Bundibugyo ebolavirus (BDBV)

### **Haemorrhage**

Haemorrhage is bleeding, or the loss of blood from a damaged blood vessel or organs.



### Outbreak

An occurrence of something not wanted such as war or a disease

### Epidemic

A disease that spreads quickly and affects many individuals at the same time.

### Virus

A virus is a microscopic parasite that infects living organisms and causes diseases.

### Symptoms

Signs of an existence of something, disease or virus

## Important Events/Timelines

Recognized Cases of Outbreaks of Ebola Virus Disease, including: year, country, cases, deaths and case fatality rate.

Year	Country	Ebola virus species	Cases	Deaths	Case fatality rate
1976	Zaire (Democratic Republic of Congo)	Zaire	318	280	88%
2000-1	Uganda	Sudan	425	224	53%
2001-2	Gabon and Republic of Congo	Zaire	124	97	78%
2002-3	Republic of Congo	Zaire	143	128	89%
2003	Republic of Congo	Zaire	35	29	83%
2004	Sudan (a)	Sudan	17	7	41%
2005	Republic of Congo	Zaire	12	10	75%
2007	Democratic Republic of Congo	Zaire	264	187	71%
2007	Uganda	Bundibugyo	149	37	25%
2008	Philippines	Reston	0 (c)	0	0%
2008-9	Democratic Republic of Congo	Zaire	32	14	47%
2011	Uganda	Sudan	1	1	100%
2012i	Uganda	Sudan	24	17	70%
2012ii	Uganda	Sudan	7	4	40%
2012	Democratic Republic of Congo	Bundibugyo	57	29	55%



---

2014 (d)	Democratic Republic of Congo	Zaire	66	49	74%
2017	Democratic Republic of Congo	Zaire	8	4	50%

---



2018	Democratic Republic of Congo	Zaire	54	33	61%
------	------------------------------	-------	----	----	-----

## Major Nations/Organizations

### World Health Organization (WHO)

With tens of thousands of responders, volunteers, researchers and scientists, progress has been made by the World Health Organisation (WHO) to control and treat the virus. WHO has developed a vaccine, diagnostics and registered medical teams ready to respond to outbreaks. WHO continue to send help to the 3 most affected countries with Ebola vaccination teams of 4000 members and 1180 recovery support staff of Ebola. 45 laboratories has been built since the last outbreak with WHO supporting 29. These labs have tested over 200,000 patient samples.

WHO have partnered with the African Partnerships for Patient Safety programme (APPS). Their main focus is to establish a strong global hospital and health institution twinning partnerships to connect health workers across borders. WHO and APPS work in service delivery and safety is increasing across the African region.

### Global Outbreak Alert and Response Network (GOARN)

The Global Outbreak Alert and Response Network consists of technical and operational resources from over 200 global, regional and national public health institutions. Since its establishment, GOARN has deployed over 2300 experts to assist and control disease outbreaks in 85 countries. Since the Ebola Virus outbreak in 2014, GOARN has deployed 895 experts (doctors, nurses, infection control specialists and laboratory specialists) in current Ebola outbreak operations in West Africa. The organisation still continues to respond to the ongoing Ebola outbreaks.

### USA

The United States has had several cases of Ebola in recent years. In December 2014, eleven Ebola cases were recognised. Nine of these people contracted the disease outside the country, and spread it to another three people when travelling by plane as passengers or medical evacuees. Two deaths were from these nine cases. Two nurses treating the diseased have now recovered.

## Possible Solutions

No cure for the Ebola Virus has been found, but WHO has recently developed a highly protective



vaccine. The vaccine was trialed with 11841 people. The 5837 people who received the vaccine, had no Ebola infection recorded 10 days after vaccination. But, possible solutions and prevention of Ebola include:

1. Reducing the contact of humans and wildlife animals that carry the virus, stopping the consumption of these animals' raw meats, and cooking the blood and meat before eating, as well as handling these animals with gloves and protective gear.
2. Reducing transmissions via body fluids from humans with symptoms of Ebola. Providing gloves and protective clothing for people handling infected people. Regular hand washing after handling ill patients.
3. Reducing possible sexual transmission from male survivors of the Ebola Virus. Research suggests that male survivors practise safer sex and hygiene for 12 months until their semen tests negative twice for Ebola virus.





---

## Bibliography

- 2019, Crisis Update 23 September. "DRC Ebola Outbreak Crisis Update." *Médecins Sans Frontières (MSF) International*, 2 Aug. 2019, [www.msf.org/drc-ebola-outbreak-crisis-update](http://www.msf.org/drc-ebola-outbreak-crisis-update).
- Banbury, Tony. "Ebola Is Back – What Should Happen Now?" *Centre for Public Impact (CPI)*, 16 Aug. 2019, [www.centreforpublicimpact.org/ebola-back-what-happens-now/?gclid=CjwKCAjwldHsBRAoEiwAd0JybWImGneNlkIhFiOY5Fy0vg8\\_nIJl67SW2gf1t\\_guaLGOB\\_q7ILeM\\_sWxoCukgQAvD\\_BwE](http://www.centreforpublicimpact.org/ebola-back-what-happens-now/?gclid=CjwKCAjwldHsBRAoEiwAd0JybWImGneNlkIhFiOY5Fy0vg8_nIJl67SW2gf1t_guaLGOB_q7ILeM_sWxoCukgQAvD_BwE).
- "Ebola Virus and Marburg Virus." *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 7 Nov. 2017, [www.mayoclinic.org/diseases-conditions/ebola-virus/symptoms-causes/syc-20356258](http://www.mayoclinic.org/diseases-conditions/ebola-virus/symptoms-causes/syc-20356258).
- "Ebola Virus Disease." *World Health Organization*, World Health Organization, [www.who.int/news-room/fact-sheets/detail/ebola-virus-disease](http://www.who.int/news-room/fact-sheets/detail/ebola-virus-disease).
- "Ebola Virus Infection." *WebMD*, WebMD, 22 July 2017, [www.webmd.com/a-to-z-guides/ebola-fever-virus-infection](http://www.webmd.com/a-to-z-guides/ebola-fever-virus-infection).
- "Ebola: Overview, History, Origins and Transmission." *GOV.UK*, [www.gov.uk/government/publications/ebola-origins-reservoirs-transmission-and-guidelines/ebola-overview-history-origins-and-transmission](http://www.gov.uk/government/publications/ebola-origins-reservoirs-transmission-and-guidelines/ebola-overview-history-origins-and-transmission).
- Smith, Nadine. "Target Zero: the Eradication of Ebola." *Centre for Public Impact (CPI)*, 2 Nov. 2016, [www.centreforpublicimpact.org/target-zero/?gclid=CjwKCAjwldHsBRAoEiwAd0JyberZ0JFhBk\\_JNPnYwxGiNYS0FD8m1J4UupJcYwcFQAf81huhMH2JXR0C4jEQAvD\\_BwE](http://www.centreforpublicimpact.org/target-zero/?gclid=CjwKCAjwldHsBRAoEiwAd0JyberZ0JFhBk_JNPnYwxGiNYS0FD8m1J4UupJcYwcFQAf81huhMH2JXR0C4jEQAvD_BwE).