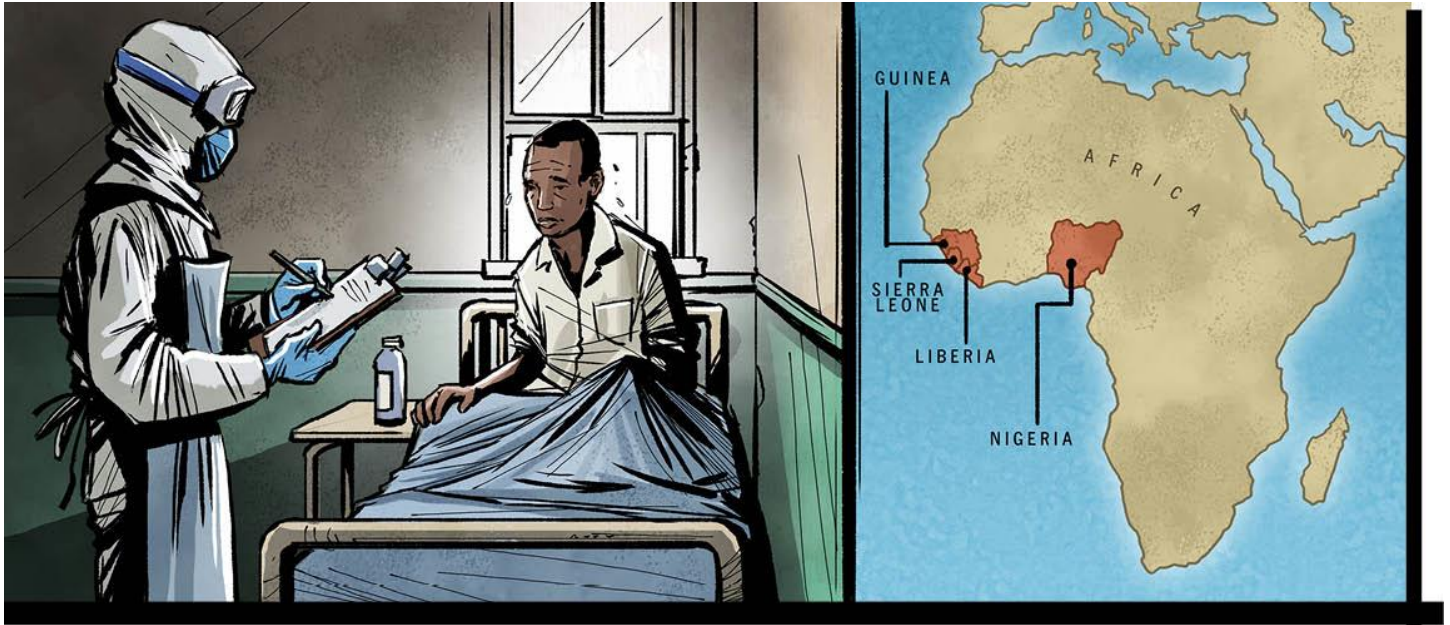


# Battling A Deadly Virus



Over the summer, health officials raced to contain the spread of a deadly virus – Ebola. The outbreak began last December in the four West African countries of Guinea, Liberia, Sierra Leone and Nigeria. By mid-August, 1,069 people had died. Another 1,975 were ill with the disease. It's the largest Ebola outbreak the world has ever seen.

Doctors Without Borders, an aid group treating the **epidemic** in Africa, called the situation **unprecedented**.

## What Is Ebola?

Those infected with Ebola first have flu-like symptoms such as fever, headache, muscle aches and pains, and sore throat. That is followed by vomiting, diarrhea, then external and internal bleeding. There is no vaccine against Ebola, and no known cure. The death rate, up to 90 percent, is among the highest of any disease. This time, about 60 percent of those infected

are dying. Hospital care can greatly improve a victim's chance of survival.

## How Is Ebola Passed On?

Ebola first surfaced in 1976. No one really knows where it came from, but it infects animals such as chimpanzees, gorillas and monkeys. These animals can then pass it on to humans.

Ebola can be spread from human to human too. However, it is not highly contagious. The reason?

Catching it requires direct contact with the blood, urine, sweat, saliva or tissues of those who have the symptoms.

## Stopping The Spread

So why is Ebola spreading so quickly? One explanation: This is the first time it has appeared in West Africa. Many people don't know what causes the disease or how to prevent its spread. For instance, when someone dies from

Ebola, family members often prepare the body for burial. But by handling the body, they sometimes become infected themselves.

Another factor is fear. Some people hide the illness instead of seeking help because they don't trust officials. They think the epidemic is a **hoax**.

"A loved one goes into some green tent, with people in space suits and never comes out again. That breeds a lot of suspicion," said Dr. Richard Olds, a tropical disease specialist on the scene.

Geography also contributes. Earlier outbreaks in Africa were easier to contain because they happened in just one location. This time, Ebola is hitting a large area, in many places at once. These areas also tend to be more densely populated and the people more mobile. All these factors make it easier for the virus to spread.

Meanwhile, health care workers and facilities are in short supply. An 80-bed treatment centre that opened in Liberia in August filled up immediately. Dozens who showed up the next day couldn't get help. Dr. Margaret Chan, head of the **World Health Organization (WHO)**, says the four countries just aren't able to treat everyone who needs help.

### **Response To The Crisis**

On August 8, WHO declared the Ebola outbreak an international health emergency. It urged the world to provide support. With people and resources, Ebola victims can be found and isolated. The disease can be stopped. The **World Bank** pledged up to \$200 million to pay for urgently needed medical supplies and medical staff. Meanwhile, Canada,

the United States and other countries have sent disease specialists, supplies, trial vaccines and funds to West Africa. However, experts say more help is needed, quickly. "The farther this spreads, the more time, energy and human lives are going to be lost. Don't wait for this to get any worse," cautioned Dr. Olds.

### **About West Africa**

Liberia, Sierra Leone and Guinea are neighbours on the western coast of Africa. They are the nations most affected by the Ebola outbreak.

All three are extremely poor. In Sierra Leone, nearly half of the working-age population farms to survive. The countries have minerals and other natural resources. However, poor infrastructure, widespread corruption and political instability make it hard to take advantage of these. Sierra Leone and Liberia are still recovering from a civil war that ended in 2002. All three nations are relying on international funds to rebuild.

### **What's Your Risk?**

Could Ebola spread to Canada? Not likely. All points of entry into Canada are being monitored, and travelers with symptoms are quickly identified. What's more, because the virus doesn't spread easily, even other passengers on the same flight as someone with Ebola are at low risk of being infected.

As well, Canada has effective ways to isolate and treat patients who show symptoms. Our country refined its response to contagious viruses during the 2003 SARS (Severe Acute Respiratory Syndrome) epidemic. That tragedy led to the deaths of 44 people in Canada and 750 worldwide.

"SARS was the perfect wake-up call. Our health care system improved dramatically after SARS," says Dr. Jay Keystone, a doctor working at Toronto General Hospital.

**corruption:** dishonest acts by people in positions of trust  
**epidemic:** a widespread outbreak of an infectious disease  
**hoax:** a trick intended to deceive someone  
**infrastructure:** the systems that help a country operate, such as telephone and transportation networks  
**unprecedented:** never having happened or existed before

**World Bank:** a bank established in 1944 and headquartered in Washington, D.C. that provides loans, advice and assistance to developing countries around the world  
**World Health Organization:** a United Nations agency created in 1948 to provide leadership on global health matters, including monitoring and assessing health trends and providing technical support to countries

## Between The Lines

An *inference* is a conclusion drawn from evidence. A *plausible inference* is supported by evidence in the article and is consistent with known facts outside of the article.

What inference(s) can you draw from the fact that although the mortality rate for Ebola can be as high as 90 percent, in the current outbreak about 60 percent of those infected are dying?

## Beyond The Lines

A key to containing the Ebola outbreak is education and awareness about how the disease is spread. Using the information in the article ‘Battling a Deadly Virus’ and any additional information you’re able to find online, design a poster to inform people about Ebola – what it is, how it is spread, and what people need to do to avoid contracting this illness.

A good poster is *visually appealing and communicates key information clearly and accurately.*

## Just Talk About It

An American company has sent a handful of doses of ZMapp, an experimental drug, to Africa to be administered to a few Ebola patients. It is unknown if this drug is effective in battling Ebola, and if it has any harmful side effects on people. If you were in charge of administering this drug, what criteria would you use to decide who to give it to? If you were an Ebola patient, would you accept or refuse treatment with this drug? Give reasons to support your response.

## On-Line

Visit our student website at [www.news4youth.com](http://www.news4youth.com) and click on the *What in the World?* tab to:

1. View the [WHO fact sheet for Ebola](http://www.who.int/mediacentre/factsheets/fs103/en/) (or visit <http://www.who.int/mediacentre/factsheets/fs103/en/>).
2. Find out [more about Ebola](http://www.bbc.com/news/world-africa-26835233) on the BBC website (or visit <http://www.bbc.com/news/world-africa-26835233>).
3. Learn about [Doctors Without Borders](http://www.doctorswithoutborders.org/), the non-governmental organization working in West Africa on the frontlines of the Ebola outbreak (or visit <http://www.doctorswithoutborders.org/>).