

EBOLA

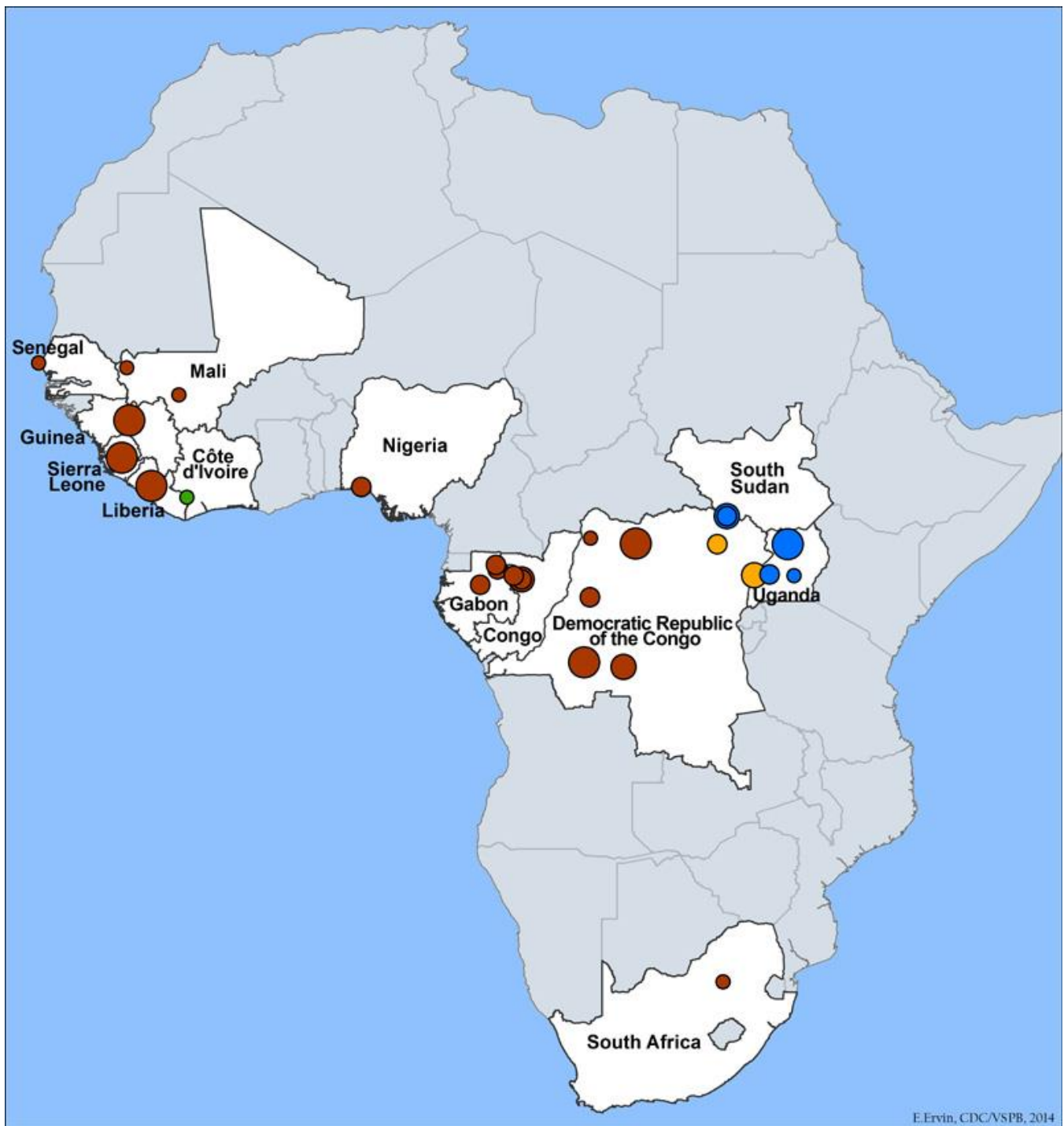
People + Public Health + Political Will

Both a humanitarian and public health crisis, the 2014-16 West African Ebola epidemic was the largest in history, with 28,652 suspected, probable, and confirmed cases, including 11,325 deaths—11 times the number of cases of all previous Ebola outbreaks combined.

While this epidemic was unprecedented, so was the public health response launched by CDC and its partners. Strategies to treat, control, and prevent Ebola in West Africa were similar to those applied to previous outbreaks: we know that we must treat patients in safe environments with strict infection controls. Systems must be in place to detect cases in order to understand how the epidemic is spreading; to isolate patients; and to isolate any persons an Ebola victim has come in contact with until their disease status is known. Responders must work with local communities on grassroots levels not only to bring awareness about Ebola, but also to come up with culturally-appropriate practices to prevent the spread of Ebola.

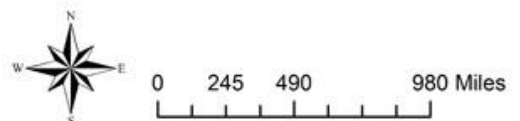
What distinguished this epidemic from past outbreaks was the wide geographic area over which it was spread, and the fact that Ebola occurred in both urban and rural areas in countries that had never experienced the disease. How these control and prevention strategies were applied and implemented by CDC, global partners, governments, non-governmental organizations (NGOs), communities, and individuals is the overarching story of this exhibition. We also tell the story of how the U.S. coped with treating healthcare workers who were infected in West Africa, with an imported case that spread to two healthcare workers, and with another epidemic: public fear.

There is much to criticize about the response, but also much to praise. We hope that the lessons learned will help us respond effectively and humanely to the future global health emergencies that will inevitably occur.



EBOLAVIRUS OUTBREAKS BY SPECIES AND SIZE, 1976 - 2014

Species	Number of Cases
● Zaire ebolavirus	○ 1 - 10
● Sudan ebolavirus	○ 11 - 100
● Tai Forest ebolavirus	○ 101 - 300
● Bundibugyo ebolavirus	○ Greater than 300 reported cases



History of Ebola

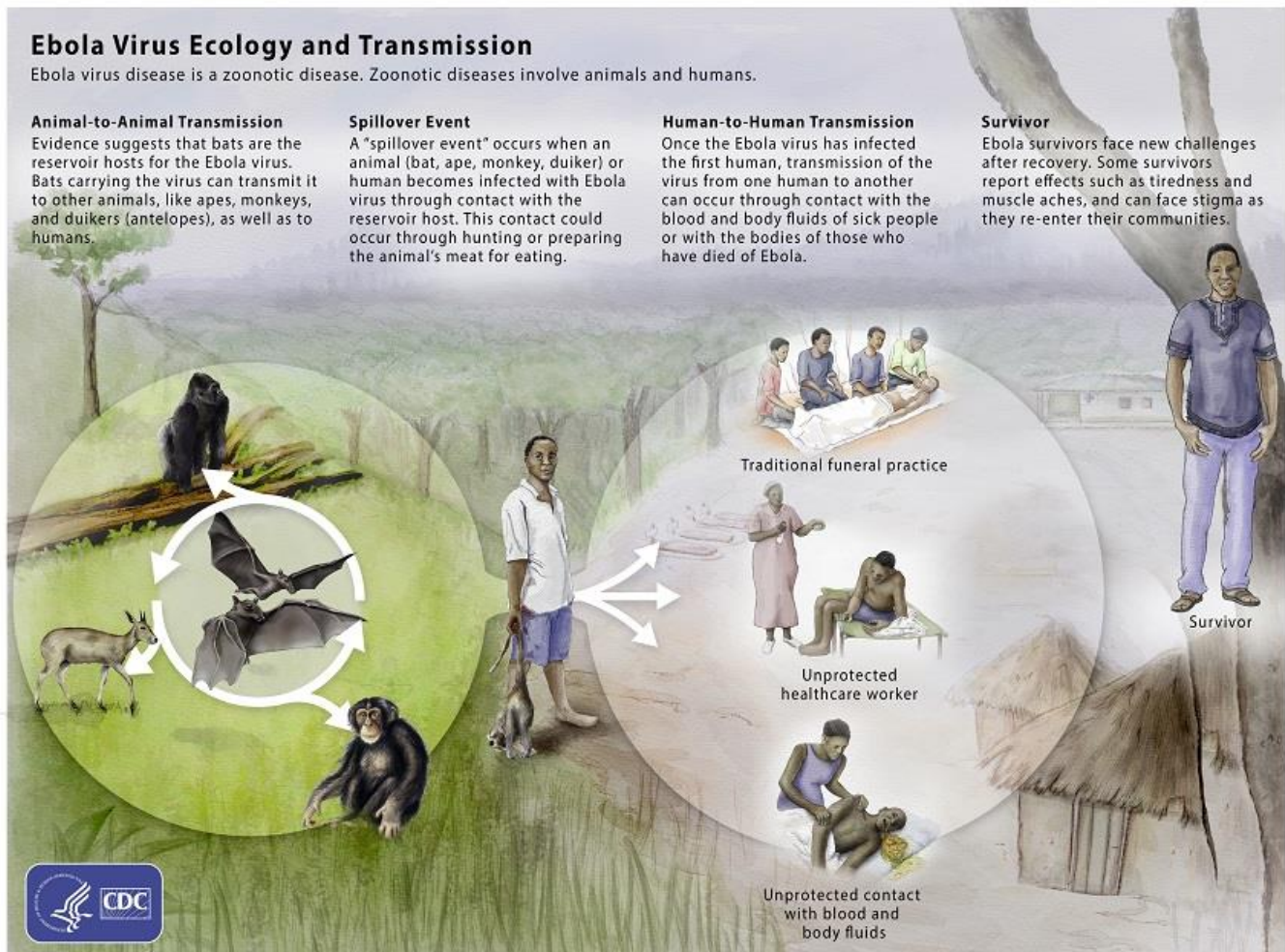
What is Ebola?

Ebola is a rare and deadly disease caused by infection with one of the Ebola virus species. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees).

Ebola is caused by infection with a virus of the family *Filoviridae*, genus *Ebolavirus*. There are five identified Ebola virus species, four of which are known to cause disease in humans: Ebola virus (*Zaire ebolavirus*); Sudan virus (*Sudan ebolavirus*); Tai Forest virus (*Tai Forest ebolavirus*, formerly *Côte d'Ivoire ebolavirus*); and Bundibugyo virus (*Bundibugyo ebolavirus*). The fifth, Reston virus (*Reston ebolavirus*), has caused disease in nonhuman primates, but not in humans.

Ebola viruses are found in several African countries. Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically in Africa.

The natural reservoir host of Ebola virus remains unknown. However, on the basis of evidence and the nature of similar viruses, researchers believe that the virus is animal-borne and that bats are the most likely reservoir. Four of the five virus strains occur in an animal host native to Africa. Humans can become infected when they come into contact with either the reservoir host or other infected animals. Often this is through bushmeat hunting and butchering.



Person-to-person transmission

Once a human is infected with Ebola virus, person-to-person transmission is how the virus spreads and the epidemic grows. People who have Ebola can have virus present in their blood, organs (including skin), and body fluids (sweat, saliva, urine, stool). People who come into direct contact with a person sick with Ebola or their body fluids can become infected themselves. The levels of virus in a person sick with Ebola increase as a person becomes more ill, and patients who die from the disease have very high quantities of virus present. As a result, contact with the corpse of a person who has died can also transmit infection.