

History of Ebola Virus Disease (EVD) Outbreaks

Ebola virus was first described in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, the virus has emerged periodically and infected people in several African countries. Prior known cases and outbreaks of EVD are described below by year or country where they were discovered or imported. Information is also available on [current and recent outbreaks](#), including those that are still ongoing.

Cases and Outbreaks of EVD by Year

2021 

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

October-December

- Species: *Zaire ebolavirus*
- Reported number of cases: 11
- Reported number of deaths and percentage of fatal cases: 6 (55%)

Situation

On October 8, the Ministry of Health in DRC announced an outbreak of EVD in Beni Health Zone, North Kivu Province. Subsequent cases were confirmed in the same health zone and three probable cases were retrospectively identified from September 2021. Sequencing data showed a link to the 2018-2020 outbreak in the same region, suggesting this outbreak was likely caused by a persistent infection in an EVD survivor. This outbreak, the 13th EVD outbreak in DRC, was declared officially over on December 16, 2021, 42 days after the last confirmed patient was released from treatment.

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

February-May

- Species: *Zaire ebolavirus*
- Reported number of cases: 12
- Reported number of deaths and percentage of fatal cases: 6 (50%)

Situation

On February 7, 2021, the Ministry of Health (MOH) in the Democratic Republic of the Congo (DRC) announced that a case of Ebola virus disease (EVD) had been confirmed in Biena Health Zone, North Kivu Province. Subsequent cases were confirmed. North Kivu was previously affected by EVD during the 2018–2020 Ebola outbreak, the largest in DRC's history, which was declared over on June 25, 2020. Sequencing of samples suggests that cases in this outbreak were linked to cases in the area during the 2018–2020 outbreak and likely resulted from persistent infection in a survivor that led to either a relapse or sexual transmission of the virus. The outbreak was declared over on May 3, 2021.

GUINEA

- Species: *Zaire ebolavirus*

- Reported number of cases: **23**
- Reported number of deaths and percentage of fatal cases: **12 (52.2%)**

Situation

On February 14, 2021, the Ministry of Health (MOH) in Guinea announced that cases of Ebola virus disease (EVD) had been confirmed in N'Zérékoré Prefecture, a forested rural region in southeast Guinea. These are the first cases of EVD confirmed in Guinea since the 2014–2016 West Africa outbreak, the largest in history, was declared over. Sequencing of samples from the outbreak was conducted and compared to sequences from cases during the 2014–2016 West Africa outbreak. While researchers cannot definitively determine the cause of the outbreak, findings strongly support the conclusion that the outbreak was likely caused by a persistent source of infection (i.e. a survivor) and not a new introduction of the virus from the animal reservoir. The outbreak was declared over on June 19, 2021.

2020 

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)


- Species: *Zaire ebolavirus*
- Reported number of cases: 130
- Reported number of deaths and percentage of fatal cases: **55 (42.3%)**

Situation

The DRC government declared a new Ebola outbreak in Mbandaka, Équateur Province of western DRC on June 1, 2020. International partners, including CDC, provided technical assistance to the DRC government to support response efforts. This was DRC's 11th Ebola outbreak and distinct from the 10th Ebola outbreak in eastern DRC, which was still ongoing when this one began.

Laboratory sequencing suggests that most cases in this outbreak were likely the result of a new spillover event (i.e. a new introduction of the virus into the community from an animal reservoir) followed by person-to-person spread. Sequencing efforts also identified a few cases which appeared to be linked to the prior [Équateur Province outbreak in 2018](#), possibly due to sexual transmission or relapse of a survivor.

On November 18, 2020, the DRC Ministry of Health and WHO announced the outbreak was over.

2018 

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE), UGANDA

- Species: *Zaire ebolavirus*
- Reported number of cases: 3,470*
- Reported number of deaths and percentage of fatal cases: **2,287* (66%)**

Situation

The DRC government declared its 10th Ebola outbreak on August 1, 2018, in North Kivu province of eastern DRC. Cases were also reported in Ituri and South Kivu provinces, and in Uganda. CDC assisted the DRC government, neighboring countries, and local and international partners to coordinate activities and provide technical guidance related to laboratory testing, contact tracing, infection control, border health screening, data management, risk communication and health education, vaccination, and logistics.

The outbreak was declared over by the World Health Organization (WHO) on June 25, 2020.


*In 2019, four cases confirmed in Uganda were attributed to cross-border movement from DRC and recorded in both countries. These cases died in DRC and are reported in the DRC death count.

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **54**
- Reported number of deaths and percentage of fatal cases: **33 (61%)**

Situation

The DRC government declared the outbreak in the Bikoro region of Équateur Province in the northwestern part of the country on May 8 after two cases were confirmed by laboratory testing at the Institut National de Recherche Biomédicale in Kinshasa. CDC assisted the DRC government and local and international partners, including the World Health Organization (WHO), as they pursued priority areas of support, including establishing an outbreak response platform; implementing surge support for deployment of personnel, supplies, laboratory materials, operational support, logistics, and transportation; and identifying communication needs to support the partners and the response. On July 24, 2018, WHO declared the end of the ninth outbreak of Ebola in the Democratic Republic of the Congo.

2017 

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **8**
- Reported number of deaths and percentage of fatal cases: **4 (50%)**

Situation

On May 11, 2017, the Ministry of Public Health of the Democratic Republic of the Congo notified international public health agencies of a cluster of suspected cases of Ebola Virus Disease (EVD) in the Likati health zone of the province of Bas Uélé. The first report mentioned eight suspected cases, including two deaths, with a third death reported on May 12. Testing of samples was conducted by the Institut National de Recherche Biomedicale (INRB) in Kinshasa, with two samples testing positive for Ebola Zaire. Teams from international agencies, including CDC, WHO, MSF (Doctors without Borders), and others, supported the Ministry of Public Health's epidemiologic, diagnostic, clinical, and communications efforts to respond to the outbreak. The response faced challenging logistical obstacles, including the remoteness of the area and limited services. Mobile diagnostic laboratories provided testing of samples in the affected areas. Following a period of 42 days since the second negative laboratory diagnostic test of the last confirmed patient, WHO declared an end to the outbreak on July 2, 2017.

2014 

DEMOCRATIC REPUBLIC OF CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **69**
- Reported number of deaths and percentage of fatal cases: **49 (71%)**

Situation

The outbreak occurred in multiple villages in the vicinity of Boende town but was limited to the Équateur province in the western part of the country. The Ebola virus variant that caused this outbreak was closely related to the one that caused the 1995 outbreak in Kikwit indicating that this outbreak was not related to the large outbreak happening at the same

the 1996 outbreak in Kinshasa, indicating that this outbreak was not related to the large outbreak happening at the same time in West Africa.¹

¹ Maganga GD, Kapetshi J., Berthet N, et al. [Ebola virus disease in the Democratic Republic of Congo \[PDF – 1.91MB\]](#) [↗](#). *New England Journal of Medicine*. 2014; 371: 2083–91.

GUINEA, LIBERIA, SIERRA LEONE (West African Epidemic)

- Species: *Zaire ebolavirus*
- Reported number cases: **28,610**
- Reported number of deaths and percentage of fatal cases: **11,308 (39%)**

Situation

The West African Ebola epidemic was the largest in history. It started with cases of EVD in the forested rural region of southeastern Guinea, reported by WHO on March 23, 2014. Soon, cases were discovered in Liberia and Sierra Leone, which border Guinea. Identification of cases was difficult because of weak surveillance and fragile public health infrastructure. Poor infection control measures and strained health care systems also contributed to the devastation of this outbreak. By August 2014, WHO declared the situation a Public Health Emergency of International Concern (PHEIC). CDC collaborated with other U.S. government agencies, Ministries of Health of the affected countries, WHO, and national and international partners in the intensive effort to end the epidemic. The outbreak was declared over in June 2016.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

ITALY

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths: **0**

Situation

During the West African Ebola epidemic, an Italian healthcare worker who had volunteered in an Ebola Treatment Unit in Sierra Leone developed symptoms of EVD 72 hours after returning to Rome. The patient had no symptoms while in flight, so other airline passengers were not at risk. The healthcare workers treating the patient were adequately protected and carefully monitored. There were no additional cases in Italy.¹

¹ World Health Organization. [Ebola Virus Disease—Italy](#). *Disease Outbreak News* [↗](#). 13 May 2015.

MALI

- Species: *Zaire ebolavirus*
- Reported number of cases: **8**
- Reported number of deaths and percentage of fatal cases: **6 (75%)**

Situation

During the West African Ebola epidemic, an infected traveler from Guinea brought EVD into Mali. Immediate identification and monitoring of all the contacts of infected people successfully prevented a broader outbreak.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

NIGERIA

NIGERIA

- Species: *Zaire ebolavirus*
- Reported number of cases: 20
- Reported number of deaths and percentage of fatal cases: 8 (40%)

Situation

During the West African Ebola epidemic, an infected person traveling from Monrovia, Liberia brought EVD into Lagos, Nigeria. Unprotected responders were subsequently infected. Fearing a rapid spread within Africa's most populated city, emergency response efforts focused on quickly establishing an Ebola Treatment Unit, training caregivers, and identifying all contacts for each case of EVD. As a result of this rapid response, the outbreak was confined to two cities, and additional spread of the Ebola virus through Nigeria and into other areas in Africa was prevented.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

SENEGAL

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of fatal cases: 0

Situation

During the West African Ebola epidemic, an infected traveler brought EVD into Senegal. Immediate identification and monitoring of all the contacts of the infected person successfully prevented a broader outbreak and no additional cases occurred in Senegal.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11

SPAIN

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths: 0

Situation

This was the first case of human-to-human transmission outside of Africa during the West African Ebola epidemic. A healthcare worker in Spain was infected with Ebola virus while treating a patient recently evacuated from Sierra Leone. The patient later died. The healthcare worker was monitored for signs of EVD and treated in isolation at the start of a fever. Contacts of the healthcare worker and other hospital staff were also monitored. The healthcare worker recovered and there were no other cases reported in Spain.^{1,2}

¹ World Health Organization. [Ebola Virus Disease—Spain](#) . 4 October 2014.

² World Health Organization. [WHO Congratulates Spain on Ending Ebola Transmission](#) . 2 December 2014.

UNITED KINGDOM

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths and percentage of fatal cases: 0 (0%)

Situation

During the West Africa epidemic, a healthcare worker returning to the UK after volunteering in an Ebola treatment center in Sierra Leone became symptomatic upon arrival in the UK. The case was treated in strict isolation and a range of public health measures were implemented by UK authorities. This was the first case of *Zaire ebolavirus* to be detected in the UK.

World Health Organization. [Ebola Virus Disease—United Kingdom](#) . Disease Outbreak News. 30 December 2014.


UNITED STATES

- Species: *Zaire ebolavirus*
- Reported number of cases: **4**
- Reported number of deaths and percentage of fatal cases: **1 (25%)**

Situation

During the West African Ebola outbreak, 11 people were treated for EVD in the U.S., two of whom died. The majority were infected with the Ebola virus outside of the U.S. and either medically evacuated into the U.S. for treatment or entered the country as a regular airline passenger. Two nurses who cared for a sick Ebola patient contracted EVD, marking the first known transmission of EVD in the United States. Both recovered. CDC collaborated with U.S. Customs and Border Protection, Department of Homeland Security, and state and local public health departments to screen travelers returning from Ebola-affected countries, provide safe transport for patients being assessed for EVD, and strengthen preparedness and infection control in hospitals.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

2012 


UGANDA

- Species: *Sudan ebolavirus*
- Reported number of cases: **6***
- Reported number of deaths and percentage of fatal cases: **3* (50%)**

Situation

The outbreak occurred in November in the Luwero, Jinja, and Nakasongola districts. Through a collaboration established in 2010, CDC provided assistance to the Uganda Ministry of Health and Uganda Virus Research Institute (UVRI) laboratory throughout the outbreak.¹

* Numbers reflect laboratory-confirmed cases only

¹ Albarino CG, Shoemaker T, Khristova ML, et al. [Genomic analysis of filoviruses associated with four viral hemorrhagic fever outbreaks in Uganda and the Democratic Republic of the Congo in 2012](#) . *Virology*. 2013;442(2):97–100.

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Bundibugyo ebolavirus*
- Reported number of cases: **38***
- Reported number of deaths and percentage of fatal cases: **13* (34%)**

Situation

The outbreak occurred in the Orientale province in the northeast of the country. CDC and the Public Health Agency of Canada (PHAC) provided laboratory support through a field laboratory in Isiro Health Zone, as well as through the CDC/UVRI (Uganda Virus Research Institute) laboratory in Uganda. This outbreak in DRC had no epidemiologic link to the Ebola outbreak occurring in the Kibaale district of Uganda at the same time.

* Numbers reflect laboratory-confirmed cases only

UGANDA

- Species: *Sudan ebolavirus*
- Reported number of cases: **11***
- Reported number of deaths and percentage of fatal cases: **4* (36%)**

Situation

The outbreak occurred in June in Kibaale District. Laboratory tests of blood samples were conducted by Uganda Virus Research Institute (UVRI) and CDC.¹

* Numbers reflect laboratory-confirmed cases only

¹ Albarino CG, Shoemaker T, Khristova ML, et al. [Genomic analysis of filoviruses associated with four viral hemorrhagic fever outbreaks in Uganda and the Democratic Republic of the Congo in 2012](#) [↗](#). *Virology*. 2013;442(2):97–100.

2011 ^

UGANDA

- Species: *Sudan ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1 (100%)**

Situation

The Uganda Ministry of Health informed the public that a patient with suspected EVD died on May 6, 2011, in the Luwero district. Quick diagnosis of Ebola virus from a blood sample was provided by the newly established CDC Viral Hemorrhagic Fever laboratory at the Uganda Virus Research Institute (UVRI). Factors that helped stop the spread of the Ebola virus and limit the size of this outbreak included: 1) a high suspicion of hemorrhagic fever by clinical staff at the outset, 2) the correct use of personal protective equipment and barrier methods to protect hospital staff, and 3) the ability to rapidly confirm Ebola virus through laboratory testing in-country.¹

¹ Shoemaker T, MacNeil A, Balinandi S, et al. [Reemerging Sudan Ebola Virus Disease in Uganda, 2011](#). *Emerging Infectious Diseases*. 2012;18(9):1480–1483.

2008 ^


DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **32**

- Reported number of deaths and percentage of fatal cases: **15 (47%)**

Situation

The outbreak occurred in the Mweka and Luebo health zones in the Kasai Occidental province. A number of international partners were involved in the response to this outbreak.¹

¹ World Health Organization. [End of the Ebola Outbreak in the Democratic Republic of the Congo](#) . *Global Alert and Response*. 17 February 2009.


PHILIPPINES

- Species: *Reston ebolavirus* (does not cause illness in people)
- Reported number of cases: **6 (asymptomatic)**
- Reported number of deaths: **0**

Situation

This was the first known occurrence of Ebola-Reston virus in pigs. The virus strain was similar to earlier strains. Six workers from a pig farm and slaughterhouse developed antibodies against the virus but did not become sick.^{1,2}

¹ World Health Organization. [Ebola Reston in pigs and humans, Philippines](#)  [PDF – 240KB] . *Weekly Epidemiological Record*. 2009;84(7):49–50.

² Barrette RW, Metwally SA, Rowland JM, et al. [Discovery of Swine as a Host for the Reston ebolavirus](#) . *Science*. 2009;325;204–206.


2007 

UGANDA

- Species: *Bundibugyo ebolavirus*
- Reported number of cases: **131**
- Reported number of deaths and percentage fatal cases: **42 (32%)**

Situation

The outbreak occurred in the Bundibugyo district. This is the first reported occurrence of a new Ebola virus strain. This novel strain appeared similar to other related viruses. However, the case fatality rate was below 50% in this outbreak, compared to 80–90% found in earlier outbreaks caused by other Ebola virus strains, like *Zaire ebolavirus*.¹


¹ MacNeil A, Farnon EC, Morgan OW, et al. [Filovirus Outbreak Detection and Surveillance: Lessons from Bundibugyo](#)  [PDF – 203KB]. *Journal of Infectious Diseases*. 2011;204:S761–S767.



DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **264**
- Reported number of deaths and percentage of fatal cases: **187 (71%)**

Situation

The outbreak was declared in mid-September in Luebo and Mweke health zones in the Kasai Occidental Province. Radio broadcasts were used to deliver accurate and timely messages to the local population about EVD spread and prevention. The last confirmed case was on October 4 and the outbreak was declared over November 20.^{1,2}

¹ [Declaration de son Excellence Monsieur le Ministre de la Santé Publique annonçant la fin de l'épidémie de FHV à virus Ebola dans les zones de santé de Mweka, Luebo et Bulape dans la Province du Kasai Occidental](#)  [PDF- 579KB]. Mardi, le 20 novembre 2007. Dr Victor Makwenge Kaput, Ministre de la Santé Publique.

² World Health Organization. [Ebola virus haemorrhagic fever, Democratic Republic of the Congo—Update](#).  [PDF- 373KB]  *Weekly Epidemiological Record*. 2007;82(40):345–346.

2005 

Republic of the Congo

- Species: *Zaire ebolavirus*
- Reported number of cases: **12**
- Reported number of deaths and percentage of fatal cases: **10 (83%)**

Situation

Two hunters (index patients) died in Etoumbi Medical Center in April 2005. A response team led by the Ministry of Health was rapidly sent to the site. Most cases were hunters, patient caretakers, or funeral attendees.

2004 

RUSSIA

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1(100%)**

Situation

A Russian laboratory worker was injected with the virus accidentally while working on an Ebola vaccine and later died.¹

¹ Akinfeyeva LA, Aksyonova OI, Vasilyevich IV, et al. A case of Ebola hemorrhagic fever. *Infektsionnye Bolezni (Moscow)*. 2005;3(1):85–88 [Russian].

SUDAN

- Species: *Sudan ebolavirus*
- Reported number of cases: **17**
- Reported number of deaths and percentage of fatal cases: **7 (41%)**

Situation

The outbreak occurred in Yambio County at the same time as an outbreak of measles in the same area. Several suspected cases of EVD were later reclassified as measles cases.¹

¹ World Health Organization. [Outbreak of Ebola haemorrhagic fever in Yambio, south Sudan, April–June 2000](#)  [159 KB, 8 pages] . *Weekly Epidemiological Record*. 2005;80(43):370–375.

2003



REPUBLIC OF THE CONGO

November–December

- Species: *Zaire ebolavirus*
- Reported number of cases: **35**
- Reported number of deaths and percentage of fatal cases: **29 (83%)**

Situation

The outbreak occurred in Mbomo district in the Cuvette Ouest Département found in the western part of the country. Community mobilization activities were carried out with meetings held specifically for women in local villages, as they are usually the primary caretaker for patients in their families and communities.¹

¹ World Health Organization. [Ebola haemorrhagic fever in the Republic of the Congo—Update 6](#) . *Weekly Epidemiological Record*. 6 January 2004.

REPUBLIC OF THE CONGO

January–April

- Species: *Zaire ebolavirus*
- Reported number of cases: **143**
- Reported number of deaths and percentage of fatal cases: **128 (89%)**

Situation

The outbreak occurred in Mbomo and Kéllé districts in the Cuvette Ouest Département in the western part of the country. Introduction of the virus into the population occurred after hunters reported close contact with wildlife that was killed or found dead. Direct contact with an infected person, particularly a family member, was the main mode of transmission, with very little spread of the virus within the healthcare setting.¹

¹ Formenty P, Libama F, Epelboin A, et al. Outbreak of Ebola hemorrhagic fever in the Republic of the Congo, 2003: a new strategy? *Médecine Tropicale (Marseille)*. 2003;63(3):291–295.

2001



REPUBLIC OF THE CONGO

- Species: *Zaire ebolavirus*
- Reported number of cases: **59**
- Reported number of deaths and percentage of fatal cases: **44 (75%)**

Situation

The first time EVD was reported in the Republic of the Congo. The outbreak occurred over the border of Gabon and the Republic of the Congo. In the Republic of the Congo, the affected areas included Mbomo and Kéllé districts in the Cuvette Ouest Département located in the western part of the country. The first human cases were associated with hunting and contact with wildlife in the surrounding area.¹

¹ World Health Organization. [Outbreak\(s\) of Ebola haemorrhagic fever, Congo and Gabon, October 2001–July 200](#) [1518 KB](#) [12 pages](#) *Weekly Epidemiological Report* 2003;78(26):222–225

GABON

- Species: *Zaire ebolavirus*
- Reported number of cases: **65**
- Reported number of deaths and percentage of fatal cases: **53 (81%)**

Situation

The outbreak occurred over the border of Gabon and the Republic of the Congo. In Gabon, the affected areas included La Zadié, Ivindo, and Mpassa districts. An abnormal amount of animals, mostly nonhuman primates, were found dead in the area. The first human cases were associated with hunting and contact with wildlife in the surrounding area.¹

¹ World Health Organization. [Outbreak\(s\) of Ebola haemorrhagic fever, Congo and Gabon, October 2001–July 200](#) [\[518 KB, 12 pages\]](#) [↗](#) . *Weekly Epidemiological Report*. 2003;78(26):223–225.

2000 [↗](#)

UGANDA

- Species: *Sudan ebolavirus*
- Reported number of cases: **425**
- Reported number of deaths and percentage of fatal cases: **224 (53%)**

Situation

The outbreak started in Gulu and later spread to Masindi and Mbarara districts. Community action and local government support were critical in controlling this outbreak. As gleaned from previous epidemics, providing correct and timely messaging about the disease was important to limit the spread of harmful rumors.¹

¹ Okware SI, Omaswa FG, Zaramba S, et al. [An outbreak of Ebola in Uganda](#) [↗](#) . *Tropical Medicine and International Health*. 2002;7(12):1068–1075.

1996 [↗](#)

RUSSIA

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1 (100%)**

Situation

A Russian laboratory worker was infected with the Ebola virus while working on an experimental treatment for Ebola.¹

¹ Borisevich IV, Markin VA, Firsova IV, et al. Hemorrhagic (Marburg, Ebola, Lassa, and Bolivian) fevers: epidemiology, clinical pictures, and treatment. *Voprosy Virusologii—Problems of Virology* (Moscow). 2006;51(5):8–16 [Russian].

PHILIPPINES

- Species: *Reston ebolavirus* (does not cause illness in people)
- Reported number of cases: **0**

Reported number of cases: 0

- Reported number of deaths and percentage of fatal cases: 0

Situation

Ebola-Reston virus was identified in a monkey export facility in the Philippines. No human infections were identified.¹

¹ Miranda ME, Ksiazek TG, Retuya TJ, et al. [Epidemiology of Ebola \(subtype Reston\) virus in the Philippines, 1996](#) [↗](#). *Journal of Infectious Diseases*. 1999;179 (suppl 1):S115–S119.

UNITED STATES OF AMERICA

- Species: *Reston ebolavirus* (does not cause illness in people)
- Reported number of cases: 0
- Reported number of deaths and percentage of fatal cases: 0

Situation

Ebola-Reston virus was introduced into a quarantine facility in Texas by monkeys imported from the Philippines. No human infections were identified.¹

¹ Rollin PE, Williams J, Bressler D, et al. [Isolated cases of Ebola \(subtype Reston\) virus among quarantined non-human primates recently imported from the Philippines to the United States](#) [↗](#). *Journal of Infectious Diseases*. 1999;179 (suppl 1):S108–S114.

SOUTH AFRICA

- Species: *Zaire ebolavirus*
- Reported number of cases: 2
- Reported number of deaths and percentage of fatal cases: 1 (50%)

Situation

A medical professional traveled from Gabon to Johannesburg, South Africa, after becoming exposed to the virus while treating Ebola-infected patients. He was hospitalized and recovered. A nurse treating him became infected and died.¹

¹ World Health Organization. [Ebola haemorrhagic fever—South Africa](#) [📄 \[PDF-469KB\] ↗](#). *Weekly Epidemiological Record*. 1996;71(47):359.

GABON

- Species: *Zaire ebolavirus*
- Reported number of cases: 60
- Reported number of deaths and percentage of fatal cases: 45 (75%)

Situation

The outbreak occurred in Booué in the fall. The first case was a hunter living in a logging camp who spread the virus to others. There were reports of several dead chimpanzees in the area. Testing of a skin sample obtained from one of the chimpanzees confirmed the animal was infected with Ebola virus.¹

¹ Georges AJ, Leroy EM, Renaud AA, et al. [Ebola hemorrhagic fever outbreaks in Gabon, 1994–1997: epidemiologic and health control issues](#) [\[PDF -299KB\] ↗](#). *Journal of Infectious Diseases*. 1999;179:S65–75.


GABON

GABON

- Species: *Zaire ebolavirus*
- Reported number of cases: 31
- Reported number of deaths and percentage of fatal cases: 21 (68%)

Situation

The outbreak occurred in the spring in the village of Mayibout 2, located 0.62 miles (1 Km) from Mayibout 1 near the Ivindo River, about 40 km from the site of the 1994 outbreak. The body of a dead chimpanzee found in the forest was consumed by hunters. Eighteen people involved in the butchering of the animal became ill and other cases occurred in family members.¹

¹ Georges AJ, Leroy EM, Renaud AA, et al. [Ebola hemorrhagic fever outbreaks in Gabon, 1994–1997: epidemiologic and health control issues](#) . *Journal of Infectious Diseases*. 1999;179:S65–75.


1995 


DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: 315
- Reported number of deaths and percentage of fatal cases: 254 (81%)

Situation

The outbreak occurred in Kikwit and surrounding areas and began with a charcoal maker in the forested areas near the city. The epidemic spread through families and hospitals. Transmission in the healthcare setting was halted almost immediately once proper protective measures were taken, such as the use of face masks, gloves, and gowns for healthcare personnel.¹

¹ Khan AS, Tshioko FK, Heymann DL, et al. [The Reemergence of Ebola Hemorrhagic Fever, Democratic Republic of the Congo, 1995 \[PDF – 361KB\]](#) . *Journal of Infectious Diseases*. 1999;179:S76–S86.

1994 

COTE D'IVOIRE

- Species: *Tai Forest ebolavirus*
- Reported number of cases: 1
- Reported number of deaths: 0

Situation

High mortality in the chimpanzee population in the Tai Forest was reported. A scientist became ill after conducting an autopsy on a wild chimpanzee. Diagnostic testing suggested a new strain of Ebola. The patient was treated in Switzerland and recovered.¹

¹ Le Guenno B, Formenty P, Wyers M, et al. [Isolation and partial characterisation of a new strain of Ebola virus](#) . *Lancet*. 1995;345:1271–1274.



GABON

- Species: *Zaire ebolavirus*

- Species: *Zaire ebolavirus*
- Reported number of cases: 51
- Reported number of deaths and percentage of fatal cases: 31 (61%)

Situation

The outbreak occurred in several gold mining villages deep in the rainforest around Makakou. It was initially believed to be yellow fever, but some of the characteristics of the outbreak were not typical for yellow fever. In 1995, researchers retrospectively discovered that Ebola virus was involved at the same time.¹

¹Milleliri JM, Tévi-Benissan C, Baize S, et al. [Les épidémies de fièvre hémorragique due au virus Ebola au Gabon \(1994–2002\): Aspects épidémiologiques et réflexions sur les mesures de contrôle](#)  . *Bull Soc Pathol Exot*, 2004, 97, 3, 199–205.


1992 

ITALY

- Species: *Reston ebolavirus* (does not cause illness in people)
- Reported number of cases: 0
- Reported number of deaths and percentage of fatal cases: 0

Situation

Ebola-Reston virus was introduced into quarantine facilities in Sienna by monkeys imported from the same export facility in the Philippines that was involved in the episodes in the United States. People were not infected.¹

¹World Health Organization. [Viral haemorrhagic fever in imported monkeys \[PDF-799KB\]](#) . *Weekly Epidemiological Record*. 1992;67(24):183.

1989 


PHILIPPINES

- Species: *Reston ebolavirus* (does not cause illness in people)
- Reported number of cases: 3 (asymptomatic)
- Reported number of deaths: 0

Situation

High mortality among *Cynomolgus* macaques was discovered in a primate facility responsible for exporting animals to the United States.¹ Three workers in the animal facility developed antibodies but never experienced symptoms of Ebola Virus Disease.²

¹Hayes CG, Burans JP, Ksiazek TG, et al. Outbreak of fatal illness among captive macaques in the Philippines caused by an Ebola-related filovirus. *American Journal of Tropical Medicine and Hygiene*. 1992;46(6):664–671.

²Miranda ME, White ME, Dayrit MM, Hayes CG, Ksiazek TG, and Burans JP. [Seroepidemiological study of filovirus related to Ebola in the Philippine](#) s. *Lancet*. 1991;337:425–426.

UNITED STATES OF AMERICA

- Species: *Reston ebolavirus* (does not cause illness in people)

- Reported number of cases: **4 (asymptomatic)**
- Reported number and percentage of deaths among cases: **0**

Situation

Ebola-Reston virus was introduced into primate-holding facilities in Reston, Virginia; Philadelphia, Pennsylvania; and Alice, Texas by monkeys imported from the Philippines. Four people developed antibodies but never experienced symptoms of Ebola virus disease.

Jahrling PB, Geisbert TW, Dalgard DW, et al. [Preliminary report: isolation of Ebola virus from monkeys imported to USA](#) . *Lancet*. 1990;335(8688):502–505.

Centers for Disease Control. [Update: Filovirus infection in animal handlers](#). *Morbidity Mortality Weekly Report*. 1990;39(13):221.



1979 

SUDAN

- Species: *Sudan ebolavirus*
- Reported number of cases: **34**
- Reported number of deaths and percentage of fatal cases: **22 (65%)**

Situation

The outbreak occurred in the towns of Nzara and Yambio, the same area affected by the 1976 Sudan epidemic. The index patient in this outbreak worked at the textile factory implicated as the source of the first outbreak in Sudan. Absentee and illness records for employees indicated that the factory was not the source of infection for this outbreak.¹

¹ Baron RC, McCormick JB, and Zubeir OA. [Ebola virus disease in southern Sudan: hospital dissemination and intrafamilial spread](#)  [PDF- 864KB] . *Bulletin of the World Health Organization*. 1983;61(6):997–1003

1977 

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1 (100%)**

Situation

Case was noted retrospectively in the village of Tandala. This case had no known connection to the original Ebola outbreak in 1976, suggesting Ebola virus is enzootic in the area.¹

¹ Heymann DL, Weisfeld JS, Webb PA, et al. [Ebola hemorrhagic fever: Tandala, Zaire, 1977–1978](#) . *Journal of Infectious Diseases*. 1980;142(3):372–376.


1976 

UNITED KINGDOM

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths: 0

Situation

This case was a laboratory infection by accidental inoculation from a contaminated needle.^{1,2}

¹ Emond RT, Evans B, Bowen ET, et al. [A case of Ebola virus infection](#)  [PDF – 817KB]  . *British Medical Journal*. 1977;2(6086):541–544.



² Breman JG, Heymann DL, Lloyd G, et al. [Discovery and Description of Ebola Zaire Virus in 1976 and Relevance to the West African Epidemic During 2013–2016](#)  . *The Journal of Infectious Disease*. 2016 Oct 15; 214 (Suppl 3): S93–S101.

SUDAN

- Species: *Sudan ebolavirus*
- Reported number of cases: **284**
- Reported number of deaths and percentage of fatal cases: **151 (53%)**

Situation

The outbreak occurred in the towns of Nzara, Maridi, and surrounding areas. The outbreak is believed to have started with workers in a cotton factory where 37% of workers in the cloth room were infected. The virus spread mainly through close personal contact within hospitals. Many healthcare personnel were infected.¹



¹ World Health Organization. [Ebola haemorrhagic fever in Sudan, 1976. Report of a WHO/International Study Team](#)  [PDF – 5.91MB]  . *Bulletin of the World Health Organization*. 1978;56(2):247–270.

DEMOCRATIC REPUBLIC OF THE CONGO (formerly ZAIRE)

- Species: *Zaire ebolavirus*
- Reported number of cases: **318**
- Reported number of deaths and percentage of fatal cases: **280 (88%)**

Situation

This outbreak was the first recognition of Ebola Virus Disease. It occurred in the Équateur province, with most cases occurring within 70 km of Yambuku village. The index case was treated at the Yambuku Mission Hospital with an injection for possible malaria. Subsequent transmission followed through use of contaminated needles and syringes at the hospital and clinics in the area and close personal contact. There were only 38 serologically confirmed survivors.¹

¹ World Health Organization. [Ebola haemorrhagic fever in Zaire, 1976](#)  [PDF – 3.05MB]  . Report of an International Commission. *Bulletin of the World Health Organization*. 1978;56(2):271–293.

Cases and Outbreaks of EVD by Country

COTE D'IVOIRE



1994

- Species: *Tai Forest ebolavirus*
- Reported number of cases: 1
- Reported number of deaths and percentage of fatal cases: 0

Situation

High mortality in the chimpanzee population in the Tai Forest was reported. A scientist became ill after conducting an autopsy on a wild chimpanzee. Diagnostic testing suggested a new strain of Ebola. The patient was treated in Switzerland and recovered.¹

¹ Le Guenno B, Formenty P, Wyers M, et al. [Isolation and partial characterisation of a new strain of Ebola virus](#) . *Lancet*. 1995;345:1271-1274

DEMOCRATIC REPUBLIC OF THE CONGO (DRC) (formerly Zaire)

2021

October-December

- Species: *Zaire ebolavirus*
- Reported number of cases: 11
- Reported number of deaths and percentage of fatal cases: 6 (55%)

Situation

On October 8, the Ministry of Health in DRC announced an outbreak of EVD in Beni Health Zone, North Kivu Province. Subsequent cases were confirmed in the same health zone and three probable cases were retrospectively identified from September 2021. Sequencing data showed a link to the 2018-2020 outbreak in the same region, suggesting this outbreak was likely caused by a persistent infection in an EVD survivor. This outbreak, the 13th EVD outbreak in DRC, was declared officially over on December 16, 2021, 42 days after the last confirmed patient was released from treatment.

2021

February-May

- Species: *Zaire ebolavirus*
- Reported number of cases: 12
- Reported number of deaths and percentage of fatal cases: 6 (50%)

Situation

On February 7, 2021, the Ministry of Health (MOH) in the Democratic Republic of the Congo (DRC) announced that a case of Ebola virus disease (EVD) had been confirmed in Biena Health Zone, North Kivu Province. Subsequent cases were confirmed. North Kivu was previously affected by EVD during the 2018–2020 Ebola outbreak, the largest in DRC's history, which was declared over on June 25, 2020. Sequencing of samples suggests that cases in this outbreak were linked to cases in the area during the 2018–2020 outbreak and likely resulted from persistent infection in a survivor that led to either a relapse or sexual transmission of the virus. The outbreak was declared over on May 3, 2021.

2020

- Species: *Zaire ebolavirus*
- Reported number of cases: 130
- Reported number of deaths and percentage of fatal cases: 55 (42.3%)

Situation

The DRC government declared a new Ebola outbreak in Mbandaka, Équateur Province of western DRC on June 1, 2020. International partners, including CDC, provided technical assistance to the DRC government to support response efforts. This was DRC's 11th Ebola outbreak and distinct from the 10th Ebola outbreak in eastern DRC, which was still ongoing when this one began.

Laboratory sequencing suggests that most cases in this outbreak were likely the result of a new spillover event (i.e. a new introduction of the virus into the community from an animal reservoir) followed by person-to-person spread. Sequencing efforts also identified a few cases which appeared to be linked to the prior [Équateur Province outbreak in 2018](#), possibly due to sexual transmission or relapse of a survivor.

On November 18, 2020, the DRC Ministry of Health and WHO announced the outbreak was over.

2018–2020

- Species: *Zaire ebolavirus*
- Reported number of cases: 3,470*
- Reported number of deaths and percentage of fatal cases: **2,287* (66%)**

Situation

The DRC government declared its 10th Ebola outbreak on August 1, 2018, in North Kivu province of eastern DRC. Cases were also reported in Ituri and South Kivu provinces, and in Uganda. CDC assisted the DRC government, neighboring countries, and local and international partners to coordinate activities and provide technical guidance related to laboratory testing, contact tracing, infection control, border health screening, data management, risk communication and health education, vaccination, and logistics.

The outbreak was declared over by the World Health Organization (WHO) on June 25, 2020.

*In 2019, four cases confirmed in Uganda were attributed to cross-border movement from DRC and recorded in both countries. These cases died in DRC and are reported in the DRC death count.

2018

- Species: *Zaire ebolavirus*
- Reported number of cases: **54**
- Reported number of deaths and percentage of fatal cases: **33 (61%)**

Situation

The DRC government declared the outbreak in the Bikoro region of Équateur Province in the northwestern part of the country on May 8 after two cases were confirmed by laboratory testing at the Institut National de Recherche Biomédicale in Kinshasa. CDC assisted the DRC government and local and international partners, including the World Health Organization (WHO), as they pursued priority areas of support, including establishing an outbreak response platform; implementing surge support for deployment of personnel, supplies, laboratory materials, operational support, logistics, and transportation; and identifying communication needs to support the partners and the response. On July 24, 2018, WHO declared the end of the ninth outbreak of Ebola in the Democratic Republic of the Congo.

2017

- Species: *Zaire ebolavirus*
- Reported number of cases: **8**
- Reported number of deaths and percentage of fatal cases: **4 (50%)**

Situation

On May 11, 2017, the Ministry of Public Health of the Democratic Republic of the Congo notified international public health agencies of a cluster of suspected cases of Ebola Virus Disease (EVD) in the Likati health zone of the province of Bas Uélé. The first report mentioned eight suspected cases, including two deaths, with a third death reported on May 12. Testing of samples was conducted by the Institut National de Recherche Biomedicale (INRB) in Kinshasa, with two samples testing positive for Ebola Zaire. Teams from international agencies, including CDC, WHO, MSF (Doctors without Borders), and others, supported the Ministry of Public Health's epidemiologic, diagnostic, clinical, and communications efforts to respond to the outbreak. The response faced challenging logistical obstacles, including the remoteness of the area and limited services. Mobile diagnostic laboratories provided testing of samples in the affected areas. Following a period of 42 days since the second negative laboratory diagnostic test of the last confirmed patient, WHO declared an end to the outbreak on July 2, 2017.

2014

- Species: *Zaire ebolavirus*
- Reported number of cases: **69**
- Reported number of deaths and percentage of fatal cases: **49 (71%)**

Situation

Outbreak occurred in multiple villages in the vicinity of Boende town but was limited to the Équateur province in the western part of the country. The Ebola virus variant that caused this outbreak was closely related to the one that caused the 1995 outbreak in Kikwit, indicating that this outbreak was not related to the large outbreak happening at the same time in West Africa.¹

¹ Maganga GD, Kapetshi J., Berthet N, et al. [Ebola virus disease in the Democratic Republic of Congo \[PDF – 1.91MB\]](#) [↗](#). *New England Journal of Medicine*. 2014; 371: 2083-91.

2012

- Species: *Bundibugyo ebolavirus*
- Reported number of cases: **38***
- Reported number of deaths and percentage of fatal cases: **13* (34%)**

Situation

Outbreak occurred in the Orientale province in the northeast of the country. CDC and the Public Health Agency of Canada (PHAC) provided laboratory support through a field laboratory in Isiro Health Zone, as well as through the CDC/UVRI (Uganda Virus Research Institute) laboratory in Uganda. This outbreak in DRC had no epidemiologic link to the Ebola outbreak occurring in the Kibaale district of Uganda at the same time.


* Numbers reflect laboratory-confirmed cases only

2008–2009

- Species: *Zaire ebolavirus*
- Reported number of cases: **32**
- Reported number of deaths and percentage of fatal cases: **15 (47%)**

Situation

Outbreak occurred in the Mweka and Luebo health zones in the Kasai Occidental province. A number of international partners were involved in the response to this outbreak.¹


¹ World Health Organization. [End of the Ebola Outbreak in the Democratic Republic of the Congo](#) . *Global Alert and Response*. 17 February 2009.



2007

- Species: ***Zaire ebolavirus***
- Reported number of cases: **264**
- Reported number deaths and percentage of fatal cases: **187 (71%)**

Situation

Outbreak was declared in mid-September in Luebo and Mweke health zones in the Kasai Occidental Province. Radio broadcasts were used to deliver accurate and timely messages to the local population on EVD spread and prevention. The last confirmed case was on October 4 and the outbreak was declared over November 20.¹

¹ [Déclaration de son Excellence Monsieur le Ministre de la Santé Publique annonçant la fin de l'épidémie de FHV à virus Ebola dans les zones de santé de Mweka, Luebo et Bulape dans la Province du Kasai Occidental](#)  [PDF- 579KB]. Mardi, le 20 novembre 2007. Dr. Victor Makwenge Kaput, Ministre de la Santé Publique.


² World Health Organization. [Ebola virus haemorrhagic fever, Democratic Republic of the Congo – Update](#).  [PDF- 373KB]  *Weekly Epidemiological Record*. 2007;82(40):345-346.

1995

- Species: ***Zaire ebolavirus***
- Reported number of cases: **315**
- Reported number of deaths and percentage of fatal cases: **254 (81%)**

Situation

Outbreak occurred in Kikwit and surrounding areas and began with a charcoal maker in the forested areas near the city. The epidemic spread through families and hospitals. Transmission in the healthcare setting was halted almost immediately once proper protective measures were taken, such as the use of face masks, gloves and gowns for healthcare personnel, were instituted.¹


¹ Khan AS, Tshioko FK, Heymann DL, et al. [The Reemergence of Ebola Hemorrhagic Fever, Democratic Republic of the Congo, 1995](#) . *Journal of Infectious Diseases*. 1999;179:S76-S86.

1977

- Species: ***Zaire ebolavirus***
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1 (100%)**

Situation

Case was noted retrospectively in the village of Tandala. This case had no known connection to the original Ebola outbreak in 1976, suggesting Ebola virus is enzootic in the area. ¹

¹ Heymann DL, Weisfeld JS, Webb PA, et al. [Ebola hemorrhagic fever: Tandala, Zaire, 1977-1978](#) . *Journal of Infectious Diseases*. 1980;142(3):372-376

1976

- Species: *Zaire ebolavirus*
- Reported number of cases: **318**
- Reported number of deaths and percentage of fatal cases: **280 (88%)**

Situation

This outbreak was the first recognition of Ebola Virus Disease. It occurred in the Équateur province, with most cases occurring within 70 km of Yambuku village. The index case was treated at the Yambuku Mission Hospital with an injection for possible malaria. Subsequent transmission followed through use of contaminated needles and syringes at the hospital and clinics in the area and close personal contact. There were only 38 serologically confirmed survivors.¹

¹ World Health Organization. [Ebola haemorrhagic fever in Zaire, 1976](#) [PDF- 3.05MB] [↗](#). Report of an International Commission. *Bulletin of the World Health Organization*. 1978;56(2):271-293.

GABON ^

2001–2002

- Species: *Zaire ebolavirus*
- Reported number of cases: **65**
- Reported number of deaths and percentage of fatal cases: **53 (81%)**

Situation

Outbreak occurred over the border of Gabon and the Republic of the Congo. In Gabon, the affected areas included La Zadié, Ivindo, and Mpassa districts. An abnormal amount of animals, mostly nonhuman primates, were found dead in the area. The first human cases were associated with hunting and contact with wildlife in the surrounding area.¹

¹ World Health Organization. [Outbreak\(s\) of Ebola haemorrhagic fever, Congo and Gabon, October 2001–July 2002](#) [518 KB, 12 pages] [↗](#). *Weekly Epidemiological Report*. 2003;78(26):223–225.

1996–1997

- Species: *Zaire ebolavirus*
- Reported number of cases: **60**
- Reported number of deaths and percentage of fatal cases: **45 (75%)**

Situation

Outbreak occurred in Booué in the fall. Index patient was a hunter living in a logging camp. The virus spread by close contact with infected persons. There were reports of several dead chimpanzees in the area. Testing of a skin sample obtained from one of the chimpanzees confirmed the animal was infected with Ebola virus.¹

¹ Georges AJ, Leroy EM, Renaud AA, et al. [Ebola hemorrhagic fever outbreaks in Gabon, 1994–1997: epidemiologic and health control issues](#) [PDF- 299KB] [↗](#). *Journal of Infectious Diseases*. 1999;179:S65–75.

1996


- Species: *Zaire ebolavirus*
- Reported number of cases: **31**

- Reported number of cases: 51

- Reported number of deaths and percentage of fatal cases: **21 (68%)**

Situation

Outbreak occurred in the spring in the village of Mayibout 2, located 0.62 miles (1 Km) from Mayibout 1 near the Ivindo River, about 40 km from the site of the 1994 outbreak. A body of a dead chimpanzee found in the forest was consumed by hunters. Eighteen people involved in the butchering of the animal became ill and other cases occurred in family members.¹



¹ Georges AJ, Leroy EM, Renaud AA, et al. [Ebola hemorrhagic fever outbreaks in Gabon, 1994–1997: epidemiologic and health control issues](#) . *Journal of Infectious Diseases*. 1999;179:S65–75.

1994

- Species: ***Zaire ebolavirus***
- Reported number of cases: **51**
- Reported number of deaths and percentage of fatal cases: **31 (61%)**

Situation

Outbreak occurred in several gold mining villages deep in the rain forest around Makakou. It was initially believed to be yellow fever, but some characteristics of the outbreak were not typical for yellow fever. In 1995, researchers retrospectively discovered Ebola virus was involved at the same time.¹

¹ Milleliri JM, Tévi-Benissan C, Baize S, et al. [Les épidémies de fièvre hémorragique due au virus Ebola au Gabon \(1994–2002\): Aspects épidémiologiques et réflexions sur les mesures de contrôle](#)  . *Bull Soc Pathol Exot*, 2004, 97, 3, 199–205.

GUINEA

2021

- Species: ***Zaire ebolavirus***
- Reported number of cases: **23**
- Reported number of deaths and percentage of fatal cases: **12 (52.2%)**

Situation

On February 14, 2021, the Ministry of Health (MOH) in Guinea announced that cases of Ebola virus disease (EVD) had been confirmed in N'Zérékoré Prefecture, a forested rural region in southeast Guinea. These are the first cases of EVD confirmed in Guinea since the 2014–2016 West Africa outbreak, the largest in history, was declared over. Sequencing of samples from the outbreak was conducted and compared to sequences from cases during the 2014–2016 West Africa outbreak. While researchers cannot definitively determine the cause of the outbreak, findings strongly support the conclusion that the outbreak was likely caused by a persistent source of infection (i.e. a survivor) and not a new introduction of the virus from the animal reservoir. The outbreak was declared over on June 19, 2021.

2014–2016

- Species: ***Zaire ebolavirus***
- Reported number of cases: **3811**
- Reported number of deaths and percentage of fatal cases: **2543 (67%)**

Situation

The West African Ebola epidemic, the largest in history, started with cases in the forested rural region of southeastern Guinea and reported by WHO on March 23, 2014. Soon cases were discovered in Liberia and Sierra Leone (bordering countries of Guinea). Identification of cases was difficult because of weak surveillance and fragile public health infrastructure. Poor infection control measures and strained health care systems also contributed to the devastation of this outbreak. By August 2014, WHO declared the situation a Public Health Emergency of International Concern (PHEIC). CDC collaborated with U.S. government agencies, Ministries of Health of affected countries, WHO, and national and international partners in an intensive effort to end the epidemic. The outbreak was declared over in June 2016.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

ITALY

2014–2016

- **Species:** *Zaire ebolavirus*
- **Reported number of cases:** 1
- **Reported number of deaths and percentage of fatal cases:** 0

Situation

During the West African Ebola epidemic, a healthcare worker returning to Rome after volunteering in an Ebola Treatment Unit in Sierra Leone developed EVD symptoms 72 hours after his return. The patient had no symptoms while in-flight, so passengers were not at risk. In addition, healthcare workers treating the patient were protected and carefully monitored. There were no additional cases in Italy.¹


¹ World Health Organization. [Ebola Virus Disease—Italy](#). *Disease Outbreak News*  . 13 May 2015.

1992

- **Species:** *Reston ebolavirus* (does not cause illness in people)
- **Reported number of cases:** 0
- **Reported number of deaths and percentage of fatal cases:** 0

Situation

Ebola-Reston virus was introduced into quarantine facilities in Sienna by monkeys imported from the same export facility in the Philippines that was involved in the episodes in the United States. People were not infected.¹

¹ World Health Organization. [Viral haemorrhagic fever in imported monkeys \[PDF-799KB\]](#)  . *Weekly Epidemiological Record*. 1992;67(24):183.

LIBERIA

2014–2016

- **Species:** *Zaire ebolavirus*
- **Reported number of cases:** 10,675
- **Reported number of deaths and percentage of fatal cases:** 4809 (45%)

Situation

The West African Ebola epidemic, the largest in history, started with cases in the forested rural region of southeastern Guinea and reported by WHO on March 23, 2014. Soon cases were discovered in Liberia and Sierra Leone (bordering countries of Guinea). Identification of cases was difficult because of weak surveillance and fragile public health infrastructure. Poor infection control measures and strained health care systems also contributed to the devastation of this outbreak. By August 2014, WHO declared the situation a Public Health Emergency of International Concern (PHEIC). CDC collaborated with U.S. government agencies, Ministries of Health of affected countries, WHO, and national and international partners in an intensive effort to end the epidemic. The outbreak was declared over in June 2016.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4-11.

MALI

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: **8**
- Reported number of deaths and percentage of fatal cases: **6 (75%)**

Situation

During the West African Ebola epidemic, an infected traveler from Guinea brought EVD into Mali. Immediate identification and monitoring of all the contacts of infected people successfully stopped a broader outbreak.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4-11.

NIGERIA

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: **20**
- Reported number of deaths and percentage of fatal cases: **8 (40%)**

Situation

During the West African Ebola epidemic, an infected person traveling from Monrovia, Liberia, to Lagos, Nigeria, brought EVD into Nigeria. Unprotected responders were subsequently infected. Fearing a rapid spread within Africa's most populated city, emergency response efforts focused on quickly establishing an Ebola Treatment Unit, training caregivers, and identifying all contacts for each case of Ebola. As a result of this rapid response, the outbreak was confined to two cities, and additional spread of the Ebola virus through Nigeria and into other areas in Africa was prevented.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4-11.

PHILIPPINES

2008

- Species: *Reston ebolavirus* (does not cause illness in people)

- Reported number of cases: **6 (asymptomatic)**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

First known occurrence of Ebola-Reston in pigs. Strain was similar to earlier strains. Six workers from a pig farm and slaughterhouse developed antibodies but never experienced symptoms of Ebola Virus Disease.^{1,2}

¹ World Health Organization. [Ebola Reston in pigs and humans, Philippines](#) [PDF – 240KB] [↗](#). *Weekly Epidemiological Record*. 2009;84(7):49-50.

² Barrette RW, Metwally SA, Rowland JM, et al. [Discovery of Swine as a Host for the Reston ebolavirus](#) [↗](#). *Science*. 2009;325:204-206.

1996

- Species: ***Reston ebolavirus* (does not cause illness in people)**
- Reported number of cases: **0**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

Ebola-Reston virus was identified in a monkey export facility in the Philippines. No human infections were identified.¹

¹ Miranda ME, Ksiazek TG, Retuya TJ, et al. [Epidemiology of Ebola \(subtype Reston\) virus in the Philippines, 1996](#) [↗](#). *Journal of Infectious Diseases*. 1999;179 (suppl 1):S115-S119.

1989–1990

- Species: ***Reston ebolavirus* (does not cause illness in people)**
- Reported number of cases: **3 (asymptomatic)**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

High mortality among *Cynomolgus* macaques was discovered in a primate facility responsible for exporting animals to the United States. Three workers in the animal facility developed antibodies but did not get sick.^{1,2}

¹ Hayes CG, Burans JP, Ksiazek TG, et al. Outbreak of fatal illness among captive macaques in the Philippines caused by an Ebola-related filovirus. *American Journal of Tropical Medicine and Hygiene*. 1992;46(6):664-671.

² Miranda ME, White ME, Dayrit MM, Hayes CG, Ksiazek TG, and Burans JP. [Seroepidemiological study of filovirus related to Ebola in the Philippine](#) [↗](#)s. *Lancet*. 1991;337:425-426.

REPUBLIC OF THE CONGO [↗](#)

2005

- Species: ***Zaire ebolavirus***
- Reported number of cases: **12**
- Reported number of deaths and percentage of fatal cases: **10 (83%)**

Situation

Two hunters (index patients) died in Etoumbi Medical Center in April 2005. A response team led by the Ministry of Health was rapidly sent to the site. Most cases were hunters, patient caretakers, or funeral attendees.

No healthcare providers were infected. Surveillance and contact tracing of 128 contacts was initiated and by July 8, 2005, WHO reported the outbreak over, 42 days after the last case death. One case was laboratory-confirmed. All other cases were considered probable based on clinical signs and epidemiological links.¹

¹ Nkoghe D, Kone ML, Yada A, Leroy E. [A limited outbreak of Ebola haemorrhagic fever in Etoumbi, Republic of Congo, 2005.](#) *Transactions of the Royal Society of Tropical Medicine and Hygiene.* 2011;105:466-472.

2003

November–December

- Species: *Zaire ebolavirus*
- Reported number of cases: **35**
- Reported number of deaths and percentage of fatal cases: **29 (83%)**

Situation

Outbreak occurred in Mbomo district in the Cuvette Ouest Département located in the western part of the country. Community mobilization activities were carried out with meetings held specifically for women in local villages, as they are usually the primary caretaker for patients in their families and communities.¹

¹ World Health Organization. [Ebola haemorrhagic fever in the Republic of the Congo—Update 6](#) . *Weekly Epidemiological Record.* 6 January 2004.

2003

January–April

- Species: *Zaire ebolavirus*
- Reported number of cases: **143**
- Reported number of deaths and percentage of fatal cases: **128 (89%)**

Situation

Outbreak occurred in Mbomo and Kéllé districts in the Cuvette Ouest Département in the western part of the country. Introduction of the virus into the population started with hunters reporting close contact with wildlife that was killed or found dead. Direct contact with an infected person, particularly a family member, was the main mode of transmission, with very little spread of the virus within the healthcare setting.¹

¹ Formenty P, Libama F, Epelboin A, et al. Outbreak of Ebola hemorrhagic fever in the Republic of the Congo, 2003: a new strategy? *Médecine Tropicale (Marseille).* 2003;63(3):291-295.

2001

- Species: *Zaire ebolavirus*
- Reported number of cases: **59**
- Reported number of deaths and percentage of fatal cases: **44 (75%)**

Situation

The first time EVD was reported in the Republic of the Congo. The outbreak occurred over the border of Gabon and the Republic of the Congo. In the Republic of the Congo, the affected areas included Mbomo and Kéllé districts in the Cuvette Ouest Département located in the western part of the country. The first human cases were associated with hunting and contact with wildlife in the surrounding area.¹

¹ World Health Organization. [Outbreak\(s\) of Ebola haemorrhagic fever, Congo and Gabon, October 2001–July 2000 pdf](#)

RUSSIA

2004

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths and percentage of fatal cases: 1 (100%)

Situation

A Russian laboratory worker was injected with the virus accidentally while working on an Ebola vaccine.¹

¹ Akinfeyeva LA, Aksyonova OI, Vasilyevich IV, et al. A case of Ebola hemorrhagic fever. *Infektsionnye Bolezni (Moscow)*. 2005;3(1):85–88 [Russian].

1996

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths and percentage of fatal cases: 1 (100%)

Situation

A Russian laboratory worker was infected with the Ebola virus while working on an experimental treatment for Ebola.¹

¹ Borisevich IV, Markin VA, Firsova IV, et al. Hemorrhagic (Marburg, Ebola, Lassa, and Bolivian) fevers: epidemiology, clinical pictures, and treatment. *Voprosy Virusologii—Problems of Virology (Moscow)*. 2006;51(5):8–16 [Russian].

SENEGAL

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: 1
- Reported number of deaths and percentage of fatal cases: 0

Situation

During the West African Ebola epidemic, an infected traveler came with EVD into Senegal. Immediate identification of contacts prevented additional cases.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

SIERRA LEONE

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: **14,124**
- Reported number of deaths and percentage of fatal cases: **3956 (28%)**

Situation

The West African Ebola epidemic, the largest in history, started with cases in the forested rural region of southeastern Guinea and reported by WHO on March 23, 2014. Soon cases were discovered in Liberia and Sierra Leone (bordering countries of Guinea). Identification of cases was difficult because of weak surveillance and fragile public health infrastructure. Poor infection control measures and strained health care systems also contributed to the devastation of this outbreak. By August 2014, WHO declared the situation a Public Health Emergency of International Concern (PHEIC). CDC collaborated with U.S. government agencies, Ministries of Health of affected countries, WHO, and national and international partners in an intensive effort to end the epidemic. The outbreak was declared over in June 2016.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

SOUTH AFRICA

1996

- Species: *Zaire ebolavirus*
- Reported number of cases: **2**
- Reported number of deaths and percentage of fatal cases: **1**

Situation

A medical professional traveled from Gabon to Johannesburg, South Africa, after becoming exposed to the virus while treating Ebola-infected patients. He was hospitalized and recovered. A nurse treating him became infected and died.¹

¹ World Health Organization. [Ebola haemorrhagic fever—South Africa](#) [PDF-469KB]. *Weekly Epidemiological Record*. 1996;71(47):359.

SPAIN

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

This was the first case of human-to-human transmission occurring outside of Africa during the West African Ebola epidemic. A healthcare worker in Spain was infected while treating a patient with EVD recently evacuated from Sierra Leone. The patient later died. The healthcare worker was monitored for signs of EVD and treated in isolation at the start of a fever. Contacts of the healthcare worker and other hospital staff were monitored. The healthcare worker survived and there were no other cases reported in Spain.^{1,2}

¹ World Health Organization. [Ebola Virus Disease—Spain](#). 4 October 2014

SUDAN

2004

- Species: *Sudan ebolavirus*
- Reported number of cases: **17**
- Reported number of deaths and percentage of fatal cases: **7 (41%)**

Situation

This outbreak occurred in Yambio county at the same time as an outbreak of measles in the same area. Several suspected cases of EVD were later reclassified as measles cases.¹

¹ World Health Organization. [Outbreak of Ebola haemorrhagic fever in Yambio, south Sudan, April–June 2004](#) [159 KB, 8 pages]. *Weekly Epidemiological Record*. 2005;80(43):370–375.

1979

- Species: *Sudan ebolavirus*
- Reported number of cases: **34**
- Reported number of deaths and percentage of fatal cases: **22 (65%)**

Situation

Outbreak occurred in the towns of Nzara and Yambio, the same area affected by the 1976 Sudan epidemic. The index patient in this outbreak worked at the textile factory implicated as the source of the first outbreak in Sudan. Absentee and illness records for employees indicated that the factory was not the source of infection for this outbreak.¹

¹ Baron RC, McCormick JB, and Zubeir OA. [Ebola virus disease in southern Sudan: hospital dissemination and intrafamilial spread](#). [PDF- 864KB]. *Bulletin of the World Health Organization*. 1983;61(6):997–1003.

1976

- Species: *Sudan ebolavirus*
- Reported number of cases: **284**
- Reported number of deaths and percentage of fatal cases: **151 (53%)**

Situation

Outbreak occurred in the towns of Nzara, Maridi, and surrounding areas. The outbreak is believed to have started with workers in a cotton factory where 37% of workers in the cloth room were infected. The virus spread mainly through close personal contact within hospitals. Many healthcare personnel were infected.¹

¹ World Health Organization. [Ebola haemorrhagic fever in Sudan, 1976. Report of a WHO/International Study Team](#) [PDF- 5.91MB]. *Bulletin of the World Health Organization*. 1978;56(2):247–270.

UGANDA

2018–2020

- Species: *Zaire ebolavirus*
- Reported number of cases: 4*
- Reported deaths: All four cases died in Democratic Republic of the Congo (DRC) and are reported in DRC's final death count

Situation

During the 2018 outbreak in North Kivu, South Kivu and Ituri Provinces, DRC, Uganda detected and responded to four Ebola cases imported from neighboring DRC in 2019. There were no in-country infections or ongoing transmission; all four cases died in DRC. Samples were tested and confirmed at the Uganda Virus Research Institute (UVRI), Entebbe. CDC also assisted the Uganda government and partners by providing technical assistance related to laboratory testing, surveillance, infection prevention and control, border health, risk communication, and vaccination.

The related Ebola outbreak in DRC was declared over by the World Health Organization (WHO) on June 25, 2020.

*All cases were due to cross-border movement from DRC and are also included in DRC case counts.

2012–2013

- Species: *Sudan ebolavirus*
- Reported number of cases: 6*
- Reported number of deaths and percentage of fatal cases: 3* (50%)

Situation

Outbreak occurred in the Luwero, Jinja, and Nakasongola districts. CDC assisted the Ministry of Health in the epidemiologic and diagnostic aspects of the outbreak. Through a collaboration established in 2010, CDC provided assistance to the Uganda Ministry of Health and Uganda Virus Research Institute (UVRI) laboratory throughout the outbreak.¹

* Numbers reflect laboratory confirmed cases only

¹ Albarino CG, Shoemaker T, Khristova ML, et al. [Genomic analysis of filoviruses associated with four viral hemorrhagic fever outbreaks in Uganda and the Democratic Republic of the Congo in 2012](#) [\[↗\]](#). *Virology*. 2013;442(2):97–100.

2012

- Species: *Sudan ebolavirus*
- Reported number of cases: 11*
- Reported number of deaths and percentage of fatal cases: 4* (36%)

Situation

Outbreak occurred in Kibaale District. Laboratory tests of blood samples were conducted by Uganda Virus Research Institute (UVRI) and CDC.¹

* Numbers reflect laboratory confirmed cases only

¹ Albarino CG, Shoemaker T, Khristova ML, et al. [Genomic analysis of filoviruses associated with four viral hemorrhagic fever outbreaks in Uganda and the Democratic Republic of the Congo in 2012](#) [\[↗\]](#). *Virology*. 2013;442(2):97–100.

2011

- Species: *Sudan ebolavirus*

- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **1 (100%)**

Situation

Uganda Ministry of Health informed the public that a patient with suspected Ebola died on May 6, 2011, in the Luwero district. Factors that helped stop the spread of the Ebola virus and limit the size of this outbreak included: 1) a high suspicion of hemorrhagic fever by clinical staff at the outset, 2) the correct use of personal protective equipment and barrier methods to protect hospital staff, and 3) the ability to rapidly confirm Ebola virus through laboratory testing in-country.¹


¹ Shoemaker T, MacNeil A, Balinandi S, et al. [Reemerging Sudan Ebola Virus Disease in Uganda, 2011](#). *Emerging Infectious Diseases*. 2012;18(9):1480–1483.

2007–2008

- Species: *Bundibugyo ebolavirus*
- Reported number of cases: **131**
- Reported number of deaths and percentage of fatal cases: **42 (32%)**

Situation

Outbreak occurred in the Bundibugyo district. This is the first reported occurrence of a new Ebola virus strain. This novel strain appeared similar to other related viruses. However, the case fatality rate was below 50% in this outbreak, compared to 80–90% found in outbreaks caused by other Ebola virus strains, like Zaire ebolavirus.¹


¹ MacNeil A, Farnon EC, Morgan OW, et al. [Filovirus Outbreak Detection and Surveillance: Lessons from Bundibugyo](#)  [PDF – 203KB]. *Journal of Infectious Diseases*. 2011;204:S761–S767.

2000–2001

- Species: *Sudan ebolavirus*
- Reported number of cases: **425**
- Reported number of deaths and percentage of fatal cases: **224 (53%)**

Situation

Outbreak started in Gulu and later spread to Masindi and Mbarara districts. Community action and local government support was critical in controlling this outbreak. As gleaned from previous epidemics, providing correct and timely messaging about the disease was important to limit the spread of harmful rumors.¹

¹ Okware SI, Omaswa FG, Zaramba S, et al. [An outbreak of Ebola in Uganda](#) . *Tropical Medicine and International Health*. 2002;7(12):1068–1075.

UNITED KINGDOM

2014–2016

- Species: *Zaire ebolavirus*
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **0 (0%)**

Situation

During the West Africa epidemic, a healthcare worker returning to the UK after volunteering in an Ebola treatment center in Sierra Leone became symptomatic upon arrival in the UK. The case was treated in strict isolation and a range of public health measures were implemented by UK authorities. This was the first case of *Zaire ebolavirus* to be detected in the UK.

World Health Organization. [Ebola Virus Disease—United Kingdom](#) . Disease Outbreak News. 30 December 2014.

1976

- Species: ***Zaire ebolavirus***
- Reported number of cases: **1**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

Laboratory infection by accidental inoculation from a contaminated needle.^{1,2}

¹ Emond RT, Evans B, Bowen ET, et al. [A case of Ebola virus infection](#)  [PDF - 217KB] . *British Medical Journal*. 1977;2(6086):541–544.

² Breman JG, Heymann DL, Lloyd G, et al. [Discovery and Description of Ebola Zaire Virus in 1976 and Relevance to the West African Epidemic During 2013–2016](#) . *The Journal of Infectious Disease*. 2016 Oct 15; 214 (Suppl 3): S93–S101.

UNITED STATES OF AMERICA

2014–2016

- Species: ***Zaire ebolavirus***
- Reported number of cases: **4**
- Reported number of deaths and percentage of fatal cases: **1**

Situation

During the West African Ebola outbreak, 11 people were treated for EVD in the U.S., two of whom died. The majority were infected with the Ebola virus outside of the U.S. and either medically evacuated into the U.S. for treatment or entered the country as a regular airline passenger. In addition, two nurses who cared for a sick Ebola patient contracted EVD, marking the first known transmission of EVD in the United States. CDC collaborated with Customs and Border Protection, Department of Homeland Security, and state and local public health departments to screen travelers returning from Ebola-affected countries, provide safe transport for patients being assessed for EVD, and strengthen preparedness and infection control in hospitals.¹

¹ Bell BP, Damon IK, Jernigan DB et al. [Overview, Control Strategies, and Lessons Learned in the CDC Response to the 2014–2016 Ebola Epidemic](#). *Morbidity and Mortality Weekly Report*. 2016;65(3):4–11.

1996

- Species: ***Reston ebolavirus* (does not cause illness in people)**
- Reported number of cases: **0**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

Ebola-Reston virus was introduced into a quarantine facility in Texas by monkeys imported from the Philippines. No human infections were identified.¹


¹ Rollin PE, Williams J, Bressler D, et al. Isolated cases of Ebola (subtype Reston) virus among quarantined non-human primates recently imported from the Philippines to the United States. *Journal of Infectious Diseases*. 1999;179 (suppl 1):S108–S114.

1989

- Species: **Reston ebolavirus (does not cause illness in people)**
- Reported number of cases: **4 (asymptomatic)**
- Reported number of deaths and percentage of fatal cases: **0**

Situation

Ebola-Reston virus was introduced into primate-holding facilities in Reston, Virginia; Philadelphia, Pennsylvania; and Alice, Texas by monkeys imported from the Philippines. Four people developed antibodies but never experienced symptoms of Ebola virus disease.

Jahrling PB, Geisbert TW, Dalgard DW, et al. [Preliminary report: isolation of Ebola virus from monkeys imported to USA](#)  . *Lancet*. 1990;335(8688):502–505.

Centers for Disease Control. [Update: Filovirus infection in animal handlers](#). *Morbidity Mortality Weekly Report*. 1990;39(13):221.
