THE DEADLIEST PANDEMICS

1347-1353

Black Death

Death toll: 75 million to 200 million

The Black Death, caused by the bubonic plague, arrived in Europe in 1347 when 12 ships from the Black Sea docked at the Sicilian port of Messina. The plague then spread across Asia and Europe. A second pandemic persisted in Europe until 1750. Plague spreads between animals and humans from the bites of infected fleas, direct contact with infected tissues and inhalation of infected respiratory droplets. Today, antibiotics can treat the plague. Human plague infections have been reported in rural areas in the western U.S.,

but parts of Africa and Asia have significantly more cases, according to the Centers for Disease Control and Prevention.

1614-1979 **Smallpox**

Death toll: 300 million people in just the 20th century

The origin of smallpox is unknown, but it is thought to date back to the Egyptian Empire in the third century because rashes that look like smallpox have been found on three mummies. During the sixth century, smallpox made its way to Japan through increased trade between China and Korea and then spread to Africa, Europe, the Caribbean, the Americas and Australia. European colonization imported smallpox to North America in the 1600s. In 1614, a pandemic struck Europe to the Middle East. Epidemics emerged regularly in Europe throughout the 17th and 18th centuries. It had an estimated death toll of about 30%. Smallpox became one of the first diseases to be controlled by a vaccine in 1976 after experiments by English physician Edward Jenner. The World Health Organization began a global eradication campaign through mass vaccination in 1959. In 1980, the World Health Assembly declared the world free of smallpox.

1918-1919 **Spanish Flu** Death toll: 50 million

The Spanish Flu was the most severe pandemic in recent history. It was caused by an H1N1 virus, but there is no universal agreement on where the virus originated. The influenza spread worldwide in 1918 and 1919, when outbreaks swept through Brazil, Africa, Asia, Europe, the South Pacific and North America. The virus was first identified in the U.S. in military staff in the spring of 1918. An estimated 500 million people, about a third of the world's population, became infected. Of the 50 million deaths worldwide, about 675,000 occurred in the U.S.

541-542

Plague of Justinian Death toll: 25 million The Justinian plague, an outbreak of bubonic plague, is thought to have killed about half of Europe's population, afflicting the Byzantine Empire and Mediterranean port cities. It is generally considered the first written record of the bubonic plague.

1980s to present **HIV/AIDS** Death toll: 32 million

HIV is a sexually transmitted infection that causes AIDS, a chronic, potentially life-threatening condition. It crossed from chimpanzees to humans in the 1920s in Africa and was identified in the 1980s. HIV damages the immune system by interfering with the body's ability to fight infection and disease. There is no cure for HIV/AIDS, but there are medications to slow progression of the disease. About 38 million people worldwide had HIV at the end of 2018, according to data from the World Health Organization. An estimated 1.1 million people in the U.S. had HIV at the end of 2016.



Antonine Plague 165-180

1855-1959 The third plague Death toll: 15 million

The third plague emerged from a wild rodent reservoir in the remote Chinese province of Yunnan in 1855. From there, it spread to other areas in China and then to Hong Kong and India. It reached ports on every continent by 1900 because of infected rats on steamships sailing international trade routes. The third pandemic waxed and waned throughout the 1900s until it finally ended in 1959.



17th century Great Plagues 1600

1.1 million Asian Flu 1957-1958

Middle East respiratory syndrome, another disease caused by a coronavirus, was first

reported in Jordan in 2012. It is thought to have

humans. All reported cases have been linked to countries in or near the Arabian Peninsula. Only

two people in the U.S. have tested positive for

MERS, both in May 2014. Since 2012, 27

transmitted from bats to camels before jumping to

countries have reported cases to WHO. About 2,500 cases and 850 deaths have been reported.

2012 to present

Death toll: 850

MERS

1 million Russian Flu 1889-1890

1 million Hong Kong Flu 1968-1970

1 million Cholera Sixth Pandemic

1817-1923

2002-2003 SARS

Death toll: 800

Severe acute respiratory syndrome, a disease caused by a coronavirus, is thought to have started in bats and jumped to civet cats before spreading to people. It was first identified in Guangdong province in southern China in 2002 and spread to 26 countries. SARS infected more than 8.000 and killed almost 800.

1 million Japanese **Smallpox Epidemic** 745-737

2009-2010 **H1N1 flu strain** Death toll: 151,000 to 575,000

A novel influenza virus emerged in the spring of 2009. It was first detected in the U.S. and spread quickly worldwide. The new H1N1 virus, also called swine flu, had a combination of flu genes not previously identified in animals or people. In June 2009, WHO declared H1N1 a pandemic as it reached 74 countries and territories.

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1800s

600,000

18th Century Great Plague

1700

Yellow fever Death toll: 100,000 to 150,000 Western Africa is believed to be the home of yellow fever, although South America first recorded outbreaks in the 16th century. The virus spreads to people through infected mosquitoes. Yellow fever epidemics struck the U.S. numerous times during the 18th and 19th centuries. The virus was imported by ships from the Caribbean and targeted port cities mostly. The disease is still present in tropical Africa and South America, where vaccine access could be lacking and where forest monkeys carry the virus. It is a rare cause of illness in U.S. travelers and gets its name "yellow" from jaundice (yellowish

pigmentation) that some people develop.

2014-2016, 2018-2020 Ebola

Death toll: 13,350 The first infection appeared in an 18-month-old boy from a small village in Guinea in December 2013 and was believed to be transmitted by bats. WHO reported more cases in March 2014 and declared the outbreak an international emergency in August 2014. The outbreak ended in 2016 after sickening more than 28,600 and killing more than 11,300. The U.S. reported 11 cases during the outbreak. Ebola struck in Congo for the 10th time in August 2018 and sickened more than 3,300 and killed more than 2,250. It has been more than 20 days since the last confirmed case of Ebola in Congo, WHO reported this month.



December 2019 to present COVID-19

Death toll: More than 8,700 so far The novel coronavirus outbreak began in Wuhan, China, in late December. Officials say it originated from a large animal and seafood market in the central Chinese city. Since then, the virus has spread to more than 150 countries and regions. More than 212,000 people have become infected, and more than 8,700 have died. WHO declared a pandemic last week because of the rapid and far-reaching spread of the virus. Countries have instituted lockdowns, closed borders, banned public gatherings, canceled major events and shut down schools, churches and businesses.

