# Flea may have infected an Oregon teen with bubonic plague

By Washington Post, adapted by Newsela staff

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T4 notes

Members of the media photograph one of the skeletons found by construction workers under central London's Charterhouse Square, March 26, 2014. Twenty-five skeletons were uncovered last year during work on a new rail line under the heart of the city. Archaeologists immediately suspected the bones came from a cemetery for victims of the bubonic plague that ravaged Europe. Photo: AP/Lefteris Pitarakis

An Oregon teenager contracted the bubonic plague last month.

Authorities believe a flea infected a girl during a mid-October hunting trip. She became ill, was hospitalized, and, as of Thursday, was recovering in an intensive care unit, the Oregon Health Authority said in a statement. It appears to have been an isolated incident.

"Many people think of the plague as a disease of the past, but it's still very much present in our environment, particularly among wildlife," state public health veterinarian Emilio DeBess said in a statement. "Fortunately, plague remains a rare disease, but people need to take appropriate precautions with wildlife and their pets to keep it that way."

The bubonic plague, which wiped out an estimated 60 percent of the European population during the Middle Ages, typically spreads through flea bites or when plague bacteria comes in contact with an individual's broken skin, according to the CDC. Onset can be sudden and typically involves fever, headache, chills, weakness and swollen lymph glands (known as "buboes").

To avoid contracting the bubonic plague, individuals should avoid contact with - and keep pets away from - wild animals such as squirrels, chipmunks or other rodents, who can carry fleas, DeBess said. Only eight cases of plague have been documented in Oregon in the past two decades.

There were only 1,006 confirmed or probable cases of plague in the United States between 1900 and 2012, nearly 5 in 6 of them of the bubonic variety, according to a paper published earlier this year. In recent decades, the United States has averaged about seven annual cases of human plague, the vast majority in the West. Eleven cases of plague were reported this year from April through August.

When bubonic plague is left untreated, plague bacteria can invade the bloodstream, causing other forms of plague and "can progress rapidly to death," according to the CDC. The advent of antibiotics dramatically reduced the mortality rate of those infected with plague in the United States from 66 percent in the early decades of the 20th century to 11 percent from 1990 to 2010.

T4 notes

Despite its infamy, the "Great Plague" or "Black Death" of the Middle Ages was actually the second of three plague pandemics in recorded history. The first was the Justinian Plague, which began in 541 A.D. and was named for Byzantine Emperor Justinian I. More than 25 million people died over two centuries marked by frequent outbreaks.

The Black Death was next, starting in 1334 in China and spreading along trade routes to Europe. It claimed an estimated 60 percent of the European population. Despite the massive losses, some say it may have played a role in ushering in the Renaissance, as the resulting huge labor shortages created a need for modernization.

The final pandemic, the Modern Plague, also began in China, in the 1860s. It appeared in Hong Kong by 1894 and then spread throughout the world by rats on ships over the next two decades. It was during that pandemic that scientists discovered that the plague was caused by a bacteria and often spread through fleas.