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**(Spanish Influenza Pandemic)**

The influenza or flu pandemic of 1918 to 1919, the deadliest in modern history, infected an estimated 500 million people worldwide–about one-third of the planet’s population at the time–and killed an estimated 20 million to 50 million victims. More than 25 percent of the U.S. population became sick, and some 675,000 Americans died during the pandemic. The 1918 flu was first observed in Europe, the U.S. and parts of Asia before swiftly spreading around the world. Surprisingly, many flu victims were young, otherwise healthy adults. At the time, there were no effective drugs or vaccines to treat this killer flu strain or prevent its spread. In the U.S., citizens were ordered to wear masks, and schools, theaters and other public places were shuttered. Researchers later discovered what made the 1918 pandemic so deadly: In many victims, the influenza virus had invaded their lungs and caused pneumonia.

## **FLU FACTS**

Influenza, or flu, is a virus that attacks the respiratory system. The flu virus is highly contagious: When an infected person coughs, sneezes or talks, respiratory droplets are generated and transmitted into the air, and can then can be inhaled by anyone nearby. Additionally, a person who touches something with the virus on it and then touches his or her mouth, eyes or nose can become infected.

Flu outbreaks happen every year and vary in severity, depending in part on what type of virus is spreading. (Flu viruses, which are divided into three broad categories, can rapidly mutate.) In the U.S., “flu season” generally runs from late fall into spring. In a typical year, more than 200,000 Americans are hospitalized for flu-related complications, and over the past three decades, there have been some 3,000 to 49,000 flu-related deaths in the U.S. annually, according to the Centers for Disease Control and Prevention. Young children, people over age 65, pregnant women and people with certain medical conditions, such as asthma, diabetes or heart disease, face a higher risk of flu-related complications, including pneumonia, ear and sinus infections and bronchitis. A flu pandemic, such as the one in 1918, occurs when an especially virulent new influenza strain for which there’s little or no immunity appears and spreads quickly from person-to-person around the globe.

## **THE FLU STRIKES FAR AND WIDE**

The first wave of the 1918 pandemic occurred in the spring and was generally mild. The sick, who experienced such typical flu symptoms as chills, fever and fatigue, usually recovered after several days, and the number of reported deaths was low. However, a second, highly contagious wave of influenza appeared with a vengeance in the fall of that same year. Victims died within hours or days of their symptoms appearing, their skin turning blue and their lungs filling with fluid that caused them to suffocate. In just one year, 1918, the average life expectancy in America plummeted by a dozen years.

It’s unknown exactly where the particular strain of influenza that caused the pandemic came from; however, the 1918 flu was first observed in Europe, America and areas of Asia before spreading to almost every other part of the planet within a matter of months. Despite the fact that the 1918 flu wasn’t isolated to one place, it became known around the world as the Spanish flu, as Spain was one of the earliest countries to be hit hard by the disease. Even Spain’s king, Alfonso XIII (1886-1931), contracted the flu.

One unusual aspect of the 1918 flu was that it struck down many previously healthy, young people–a group normally resistant to this type of infectious illness–including a number of World War I (1914-18) servicemen. In fact, journalist Gina Kolata has reported that more U.S. soldiers died from the 1918 flu than were killed in battle during the war. Forty percent of the U.S. Navy was hit with the flu, while 36 percent of the Army became ill, notes Kolata in her book on thesubject.

Although the death toll attributed to the 1918 flu is often estimated at 20 million to 50 million victims worldwide, other estimates run as high as 100 million victims. The exact numbers are impossible to know due to a lack of medical record-keeping in many places. What is known, however, is that few locations were immune to the 1918 flu–in America, victims ranged from residents of major cities to those of remote Alaskan communities. Even President Woodrow Wilson(1856-1924) reportedly contracted the flu in early 1919 while negotiating the Treaty of Versailles, which ended World War I.

## **FIGHTING THE FLU**

When the 1918 flu hit, doctors and scientists were unsure what caused it or how to treat it. Unlike today, there were no effective vaccines or antivirals, drugs that treat the flu. (The first licensed flu vaccine appeared in America in the 1940s; by the following decade, vaccine manufacturers could routinely produce vaccines that would help control and prevent future pandemics, according to the U.S. Department of Health and Human Services.)

Complicating matters was the fact that World War I had left parts of America with a shortage of physicians and other health workers. And of the available medical personnel in the U.S., many came down with the flu themselves. Additionally, hospitals in some areas were so overloaded with flu patients that schools, private homes and other buildings had to be converted into makeshift hospitals, some of which were staffed by medical students.

Officials in some communities imposed quarantines, ordered citizens to wear masks and shut down public places, including schools, churches and theaters. People were advised to avoid shaking hands and to stay indoors, libraries put a halt on lending books and regulations were passed banning spitting. According to an April 30, 2009, report in The New York Times, during the pandemic, Boy Scouts in New York City approached people they’d seen spitting on the street and gave them cards that read: “You are in violation of the Sanitary Code.”

## **THE FLU TAKES HEAVY TOLL ON SOCIETY**

The flu took a heavy human toll, wiping out entire families and leaving countless widows and orphans in its wake. Funeral parlors were overwhelmed and bodies piled up. Some people even had to dig graves for their own family members.

The flu was also detrimental to the economy. In the U.S., businesses were forced to shut down because so many employees were sick. Basic services such as mail delivery and garbage collection were hindered due to flu-stricken workers. In some places there weren’t enough farm workers to harvest crops. Even state and local health departments closed for business, hampering efforts to chronicle the spread of the 1918 flu and provide the public with answers about it.

## **FLU PANDEMIC COMES TO AN END**

By the summer of 1919, the flu pandemic came to an end, as those that were infected either died or developed immunity. Almost 90 years later, in 2008, researchers announced they’d discovered what made the 1918 flu so deadly: A group of three genes enabled the virus to weaken a victim’s bronchial tubes and lungs and clear the way for bacterial pneumonia.

Since 1918, there have been several other influenza pandemics, although none as deadly. A flu pandemic from 1957 to 1958 killed around 2 million people worldwide, including some 70,000 people in the U.S., and a pandemic from 1968 to 1969 killed approximately 1 million people, including some 34,000 Americans. More than 12,000 Americans perished during the H1N1 (or “swine flu”) pandemic that occurred from 2009 to 2010.