## HISTORY OF DEATHS DURING PANDEMICS

## Flu outbreaks and past pandemics

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ATLANTA, Georgia (CNN) — While U.S. health officials are taking the recent deadly influenza outbreak seriously, its scope is modest compared with flu pandemics of the 20th century that killed tens of millions of people.

The worst flu pandemic on record — the infamous Spanish flu of 1918 and 1919 — killed an estimated 20 million to 50 million people worldwide and some 500,000 in the United States alone, according to the Atlanta-based Centers for Disease Control and Prevention.

Within just two years, 20 percent to 40 percent of the human race was thought to have fallen ill from the virus.

Almost half of those who died in the plague — which occurred before the development of virus-fighting vaccines — were young and otherwise-healthy adults, according to the CDC.

A flu epidemic happens when a virus spreads rapidly through a population. This happens nearly every year. A pandemic occurs when a virus spreads across the world.

It wasn't until 1934 that scientists were able to isolate the influenza type A virus, and eventually develop vaccines in the 1940s.

Vaccinations may have prevented the 1957 Asian flu from being worse than it was. It was blamed for the deaths of about 70,000 people in the United States — most of them elderly.

According to the CDC, the 1957 pandemic was identified quickly because of scientific advances — also helping to prevent more deaths. Cases multiplied a great deal shortly after the original U.S. outbreak in August of that year because children spread the disease when they returned to school in the fall. The highest infection rates were among school children, young adults and pregnant women.

Flu fatalities diminished greatly by 1968, when the Hong Kong flu raced around the globe. The number of people killed in the United States in this pandemic was about 34,000, according to CDC records, making it the mildest flu pandemic of the century, according to CDC records.

Together, the Hong Kong and Asian flus caused an estimated 1.5 million worldwide deaths, according to the World Heath Organization, and cost \$32 billion in health care and lost productivity.

Flu fears

The 1918 Spanish flu outbreak led to a so-called "pandemic scare" in 1976, when a unique virus called the Swine flu was identified in Fort Dix, New Jersey. Scientists thought the Swine flu was related to the Spanish strain, which had killed so many millions of people 60 years earlier.

The resulting flu fears in the United States prompted President Gerald Ford to authorize a \$135 million national immunization program to fight the latest strain, dubbed Swine flu.

The funds paid for about 200 million doses of vaccine manufactured by private pharmaceutical firms and local officials were given \$26 million for mass inoculations.

All the fears and preparations turned out to be unnecessary. Although 40 million people in the United States were vaccinated, the virus failed to spread, and neither an epidemic nor a full-blown pandemic of Swine flu ever

developed.

More recently, flu scares in the 1990s also failed to erupt into major health threats. A 1997 outbreak of Avian flu - a virus previously seen only in birds - killed six people in Hong Kong and prompted Chinese officials to order the slaughter of all chickens in the region.

Hong Kong also was the focal point of a 1999 flu scare which also was linked to birds. Although no one was known to have died from the strain, two children identified with the virus were hospitalized and later recovered.