

KNW-159
PANDEMIC INFLUENZA

Adapted from a [theark@simplyprepared.com] article.

U.S. Department of Health and Human Services Secretary Michael Leavitt helped clarify the effect of a pandemic when he stated “Pandemics are global in nature, but their impact is local. When the next pandemic strikes, as it surely will, it is likely to touch the lives of every individual, family, and community.”

What is influenza or the flu?

Influenza or the flu is an acute viral infection of the respiratory tract caused by one of three strains of influenza virus – A, B, or C. Symptoms include fever, chills, body aches, headache, fatigue, dry cough, sore throat and congestion.

What is pandemic influenza?

Pandemic influenza is a global outbreak of influenza to which people have little or no immunity and for which there is no vaccine. The infection spreads easily, causes serious disease and can spread world wide very quickly. Symptoms can include diarrhea, nausea, and vomiting as well as normal flu symptoms.

Prerequisites

There are three prerequisites for the start of an influenza pandemic:

1. A new influenza virus needs to be introduced to which humans have little or no immunity.
2. The new virus must be able to replicate in humans and cause disease.
3. The new virus must be able to efficiently transmit itself from one human to another.

There have been about 3 pandemics each century. The three pandemics in the 20th century occurred in 1918-19, 1957-58, and 1968-69.

1968-69	34,000+ deaths in U.S. 700,000+ deaths worldwide
1957-58	70,000+ deaths in U.S. 1 to 2 million deaths worldwide
1918-19	675,000+ deaths in U.S. 50 to 100 million deaths worldwide

The number of deaths depended more on the virulence of the virus than on treatments available. More Americans died of the flu in 1918-19 than died in WWI. In fact, more Americans died of the 1918 flu than died in all the wars in the 20th century.

Vaccines

There are some facts about vaccines that should be understood when discussing pandemic influenza.

- Vaccines are virus specific. They are only effective against one form of one virus.
- They protect but are not 100% effective.
- They do not cure influenza.

- Yearly flu vaccines are developed based on informed predictions of which flu strain will be most predominant that year.
- A pandemic virus is unknown until it infects and it will take at least six months to develop a vaccine against it.

Why should I be concerned about pandemic flu?

- There is no sure way to stop a pandemic from occurring.
- We cannot predict when the next flu pandemic will occur.
- We cannot prepare a vaccine until the flu begins infecting people.
- We cannot prevent the spread of influenza without very exacting measures; it is very contagious.
- We cannot cure influenza.
- We cannot cure viral pneumonia, a possible secondary infection to flu.
- Bacterial pneumonia, another possible secondary infection, has a 20-30% death rate even with antibiotics.
- Flu symptoms may be more severe during a pandemic and the flu may have more complications.
- Even healthy people are at increased risk for serious complications during a flu pandemic.
- The number of deaths could be high.
- We know little more than they did in 1918 about how to cure the flu or how to prevent it. We only know how to lessen the impact IF those measures are implemented.

How will a pandemic affect me?

- 50% of the population could become infected.
- Work absenteeism is expected to be about 40% which could result in disruption of normal utilities, banking, businesses, etc.
- A pandemic could last 12 to 24 months.
- Communities could be affected by several waves lasting 3 to 8 weeks each.
- Vaccines and antiviral drugs will be in short supply and vaccines will not be available until at least the second wave of flu.
- Available healthcare will be limited because of high demand.
- You will probably be on your own or have limited assistance.

You are encouraged to study and be aware of the preparations you should take for a potential Pandemic Influenza.

References:

The Great Influenza: The Story of the Deadliest Pandemic in History by John M. Barry

Influenza Pandemic Preparation and Response: A Citizen's Guide by the Mid-Peninsula Citizen's Preparedness Committee

Eastern Idaho Public Health District

An [interview](#) with virologist Nathan Wolfe when he visited Houston in May 2010 (found in the Houston Chronicle Sunday, May 30, 2010)

[How Prepared Are We for the Next Great Flu Breakout?](#): Why We're Losing the War Against Influenza by John M. Barry from the *World Policy Journal* Summer 2010

A Pandemic Influenza Powerpoint presentation is available upon request from theark@simplyprepared.com