



Your Health and Wellness: Influenza



The history of flue pandemics offer many sobering statistics. There have been three pandemics each century over the last 1000 years; the longest gap between pandemics has been 40 years. The last pandemic was in 1968, 30 years ago.

In 1916, there were just 155 Spanish flu cases worldwide. Two years later in 1918, 40 million people died of the disease in the five months between October, 1918 and March, 1919. In the United States, approximately 675,000 deaths were recorded.

The 1968 pandemic was named the Hong King flu. It began in July in China and arrived the US in September as marines were returning from duty in Vietnam. Between one and three million people died from that pandemic between 1968 and 1970. Typically, the flue affects the very young and the very old. The 1918 pandemic, however, infected healthy people with intact immune systems.

The burden of seasonal influenza worldwide kills 250,000—500,000 people each year. In the US, we typically see 36,000 deaths, greater than 200,000 hospitalizations. The total economic costs of influenza and pneumonia exceed \$37.5 billion each year. If a severe pandemic were to occur in New York State, we would expect 6.75 million ill people, representing 35% of the population. Approximately 771,000 of these people would require hospitalization, of which 15% would require ICU care. An additional 7.5% would need ventilators for respiratory failure. An estimated 153,000 people would die from their illness.

So, what is influenza? It is categorized as an acute, rapidly appearing febrile illness. It is a respiratory illness that affects the nose, throat, bronchi and lungs.

Symptoms include fever, muscle aches, headache, decreased energy, dry cough, sore throat and sometimes a runny nose. Typically, fever and body aches last three to five days with cough and decreased energy that may last several weeks. Some symptoms are similar to other upper respiratory illnesses such as adenovirus, rhinovirus, parainfluenza and legimellosis.

Influenza transmission is via droplet spread. This is usually from coughing and sneezing. The typical incubation is one to four days. Viral shedding may occur 24 hours before symptoms appear. Peak shedding occurs in the first three days and correlates with increases in body temperature.

The most effective prevention for the flu virus is vaccination. The vaccine is 70 to 90 percent effective in adults. In the elderly and immuno-compromised, the vaccine is less effective at



preventing illness, but will reduce its severity, complications and death rate. When used in nursing homes, a 50 percent decrease in hospitalization and an 80 percent decrease in deaths are seen.

If a pandemic occurs and results in large numbers of cases, there are several oral antivirals that may be used to prevent or limit the severity of the disease. The federal government has strategic national stockpiles (SNS) located in many areas of the country if supplies are needed for distribution.

So, how can we prepare for a potential pandemic?

- 1) Vaccinate as many people as possible
- 2) Teach infection control to our staff, patients and families

Practice respiratory hygiene: cover your mouth and nose when sneezing or coughing

- 1) and dispose of tissues properly
- 2) Wash hands after contact with respiratory secretions
- 3) Social distancing, which is keeping yourself 3 feet away from others, may be necessary

In large outbreaks, federal and state governments may close schools, workplaces, office buildings and shopping malls. Recreational facilities such as pools and gyms may also be closed. Schools may be used to isolate and quarantine infected people.

It is essential that you prepare now for what you will do to minimize the effects of a potential pandemic on you and your family. Remember, if you fail to plan, then plan to fail.

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