

Influenza

What is Influenza?

Influenza, also known as "the flu", is a viral infection of the respiratory system, which includes the nose, throat, bronchial tubes and lungs. Influenza viruses are divided into three types, designated A, B, and C. Types A and B are responsible for nearly all of the influenza illness that occurs almost every winter. Infection with type C influenza usually causes either a very mild respiratory illness, or no symptoms at all.

Types A and B are further subdivided into "strains". These are usually named after the geographic location where the strain was first discovered. An example is Influenza A Hong Kong. Different strains have variations in surface markers on the viral particle which are recognized by the human immune system. The influenza virus is able to change these surface markers from year to year through mutation. It is the constant changes in these surface markers which allows the influenza virus to evade the human immune system, and this is why an individual can become ill with influenza each flu season.

When does Influenza occur?

In New Jersey, influenza typically occurs any time between late November through early April. However, the peak season of occurrence is during January and February.

Who gets Influenza and how is it spread?

Anyone can get influenza. Influenza is primarily spread from person to person through the air. Virus particles are released into the air through coughing and sneezing of persons who are ill with influenza. Crowded conditions in enclosed spaces provide ideal conditions for the spread of influenza.

What are the symptoms of Influenza?

The symptoms of influenza are primarily fever, headache, sore throat, body aches, and a severe and often prolonged cough. Intestinal symptoms, such as cramps and diarrhea, are uncommon. What is often called "intestinal flu" is not influenza. Influenza symptoms in children are very similar to those symptoms caused by other respiratory viruses. Although most individuals are ill for only a few days to a week, some individuals have a much more serious illness, such as pneumonia, and may need to be hospitalized. Thousands of individuals die each year in the United States from influenza or influenza-related complications.

How soon do the symptoms of Influenza occur?

Symptoms usually start 1 to 3 days after coming into contact with an individual who is ill with influenza.

How is Influenza diagnosed?

Usually a doctor will diagnose a case of influenza based on the typical symptoms of fever, headache, sore throat, body aches, and cough. Specific laboratory tests to confirm influenza are available, but they are costly and take many days to process. By that time, the patient is usually well on the way to recovery.

What is the treatment for Influenza?

Rest and liquids are usually adequate. A prescription drug, either Rimantadine or Amantadine, may be used to try to reduce the severity of symptoms of Influenza A and is effective only if given early in the illness. It is not effective against Influenza B.

When, and for how long, is an infected person able to spread influenza?

The "contagious" period varies, but it probably begins the day before symptoms

appear and extends for about one week after the first symptoms appeared.

Should an infected person be excluded from work or school?

Because influenza is spread from person to person through the air, individuals who have an influenza-like illness should remain home until they have recovered from their illness.

How can Influenza be prevented?

Routine immunization against influenza is the most important control measure. The influenza vaccine (flu shot) is available through your personal physician, and through a variety of other health care providers, including many local health departments, visiting nurse associations, and senior citizen centers. When Influenza A is circulating in the community, the prescription drugs Amantadine and Rimantadine may be used to prevent illness. These antiviral agents can prevent, or reducing the severity of symptoms of, illness with Influenza A. Neither is effective against Influenza B. Amantadine and Rimantadine should not be considered a replacement for the influenza vaccine.

What is the Influenza Vaccine?

The influenza vaccine is a killed virus vaccine containing three strains of influenza virus, two of Influenza A, and one of Influenza B. The strain components are changed annually based upon worldwide surveillance of circulating influenza strains.

When should I get the influenza vaccine?

The optimal time to receive the influenza vaccine is mid- September to mid- November. It takes about 2 weeks for the vaccine to develop immunity in the body and provide protection.

Are there any side effects to the influenza vaccine?

Most individuals will experience no side effects from the influenza vaccine. Less than one-third of those who receive the vaccine will have some soreness at the vaccination site, and about 5% to 10% will experience a headache or a mild fever. The most serious side effect that can occur after an influenza vaccination is an allergic reaction in individuals who have a severe allergy to eggs. For that reason, people who have an allergy to eggs should not receive the influenza vaccine.

Who should get the influenza vaccine?

Individuals who are at higher risk of developing influenza related complications, such as pneumonia, are strongly encouraged to receive the influenza vaccine.

These individuals are:

1. All individuals 65 years or age or older.
2. Adults and children with long-term heart or lung problems.
3. Residents of nursing homes and other institutions housing patients of any age who have serious long-term health problems.
4. People who have kidney diseases, cystic fibrosis, diabetes, anemia, severe asthma, cancer or immunological disorders and other medical conditions for which they are under the close supervision of a doctor.

Other individuals who are encouraged to receive the influenza vaccine include household contacts of high-risk individuals and health care workers who provide care to high-risk patients.

Finally, anyone who wishes to reduce the likelihood of becoming ill with influenza should receive the influenza vaccine.

Does past infection with influenza make a person immune?

Generally no. Because the influenza virus can change its surface markers to elude the body's immune system, individuals who have had an influenza illness or the influenza vaccine in a previous year may still become infected with a new strain.

Because of this, the influenza vaccine should be given each year.