SEASONAL HUMAN INFLUENZA (THE FLU)

What is Seasonal Human Influenza?

Seasonal Influenza is a viral infection that affects millions of people worldwide. It is transmitted from person to person through direct contact or through droplets from secretions caused by coughing and sneezing. It is highly contagious and can affect all age groups and cause a mild to moderate illness.

In high risk patients, it can lead to serious complications such as pneumonia, with hospitalization and even death. Seasonal Flu is usually not life-threatening in healthy adults and most recover with less than a week of bed rest.

While usually Flu is not serious it can be uncomfortable and inconvenient and be a major cause of absenteeism. It is obviously best to avoid contracting the illness altogether, but there are things one can do to minimize the discomfort.

RECOGNISING THE FLU

Flu is a more severe form of what people generally associate with as “Cough, Cold and Fever” and symptoms are usually incapacitating.

Rapid onset, high fever, and generalized malaise are especially typical. Diarrhea and / or vomiting may also occur but may be more common in children.

If you have four or more of the following you probably have Flu:

- Sudden onset of illness, with severe symptoms developing in the first couple of days;
- Fever (moderate to high);
- Cold chills;
- Cough;
- General malaise and weakness;
- Generalized body aches (often moving from one part of the body to another);
- Recent contact with flu patients (previous one to three days)

There can be secondary infections with other germs, and this can lead to sinusitis, ear, nose, throat, and lung infections (pneumonia). If, this happens, it can be life threatening especially in the elderly and high risk groups.

WAYS TO AVOID ‘FLU’

There are a number of ways to minimize your chances of contracting flu:

- Keep fit.
- Eat a healthy balanced diet.
- Avoid close contact with persons already suffering from ‘flu’.
The primary method of spreading flu virus is through direct contact - such as shaking hands and kissing. While spread of virus in the air does occur (especially during coughing & sneezing attacks), this is usually less effective than physical contact.

Adults with flu can begin infecting others, one day before getting any symptoms and up to 7 days after getting sick. If you are sick with flu avoid shaking hands with and touching people.

**TREATING THE FLU**

There is no specific treatment that can cure flu. Antibiotics are of no use, unless you have developed a secondary bacterial infection. The mainstay of treatment is rest, and attention to the symptoms.

Some advice on what you can do:

- Bed rest until you are fine to go to work
- Drink plenty of fluids, preferably warm
- Use paracetamol (500mg - 1000mg) for adults or aspirin (250mg - 500mg) to relieve fever, headache, and body aches. Do not use aspirin for children unless specifically advised by your doctor.
- If you decide to take Vitamin C, take 250 mg three to four times per day until you feel better;
- Do not take anti-cough syrups if your cough is productive. Try steam inhalation to relieve nasal congestion and a tight chest.
- Use a salt water gargle to relieve a painful throat (a quarter teaspoon of salt in a cup of lukewarm water), and use the same solution in drop form for a congested nose. Alternatively, use betadine gargles (iodine) available locally.
- Don’t spread your ‘flu’ by touching others.

**VISITING A DOCTOR**

Most attacks of flu can be self-managed at home by following the advice above.

However, you should consult your doctor if you:

- do not improve after five days of illness, or if the symptoms seem unusually severe (especially a fever higher than 103 F / 39.5 C);
- cough up green, yellow, or brown mucus;
- begin to feel breathless or get a wheezing sound from the chest;
- develop severe ear-ache, and/or vertigo (giddiness);
- notice enlarged and tender neck glands;
- pulse / heartbeat becomes irregular (palpitations);
- belong to the ‘high risk group’ of patients: children, elderly and health care workers.
PREVENTING FLU BY VACCINATION

In the Temperate zones of the Northern hemisphere, flu season usually begins in November/December and peaks around February/March. In contrast, flu may occur throughout the year in tropical and subtropical regions with peaks of increased activities once or twice a year. In the humid subtropical areas of northern India, flu mainly occurs in the monsoon season with a smaller peak in the winter months.

How effective is the flu vaccine?

The effectiveness of the vaccine can vary and depends in part on the match between the viruses in the vaccine and flu viruses that are circulating in the community. If these are closely matched, vaccine effectiveness (VE) is higher. If they are not closely matched, VE can be reduced. That means that you do still have some chance of contracting flu after taking the vaccination, but the illness will usually be much milder.

A report published in the January 16, 2015 ‘Morbidity and Mortality Weekly Report’ (MMWR) estimates that getting a flu vaccine this season, reduced a person’s risk of having to go to the doctor because of flu by 23 percent among people of all ages.

Since 2004-2005, overall VE estimates for each season have ranged from 10 percent to 60 percent in preventing medical visits associated with seasonal influenza illness. This underscores the need for additional prevention and treatment efforts this season, including the appropriate use of influenza antiviral medications for treatment.

During seasons when vaccine viruses and circulating influenza viruses are well matched, VE between 50 and 60 percent has been observed. H3N2 viruses have been predominant so far this season, but about 70 percent of them have been different or have “drifted” from the H3N2 vaccine virus. This may likely accounts for the reduced VE.

Another factor that influences how well the flu vaccine works is the age and health of the person being vaccinated. In general, the flu vaccine works best in young, healthy people and is less effective in people 65 years and older. This pattern is reflected in the current season early estimates for VE against H3N2 viruses. VE against H3N2 viruses was highest -- 26 percent -- for children aged 6 months through 17 years. While not statistically significant, VE estimates against H3N2 viruses for other age groups were 12 percent for ages 18 to 49 years and 14 percent for people age 50 years and older.

But it is still recommended that people get a flu vaccine even during seasons’ when drifted viruses are circulating because vaccination can still prevent some infections and can reduce severe disease that can lead to hospitalization and death. Also, the flu vaccine is designed to protect against three or four influenza viruses and some of these other viruses may circulate later in the season.

How long does protection last?
Usually about nine months. As the influenza viruses are constantly changing, it is necessary to have a vaccination every year to maintain effective coverage.

**Who should be vaccinated?**

All people 6 months and older are now recommended to receive annual influenza vaccination. The decision is supported by evidence that influenza vaccination is a safe and effective preventive health measure with potential benefit across all age groups. Even healthy adults with no previously identified risk factors can develop influenza-related complications, including adults aged 19-49 years.

While everyone should get a flu vaccine this flu season, it is especially important that the following groups are given priority for vaccination either because they are at high risk for having serious flu-related complications or because they live with or care for people at high risk for developing flu-related complications.

- Pregnant women
- Children younger than 5, but especially children younger than 2 years old.
- People 50 years of age and older
- People of any age with certain chronic medical conditions *
- People who live in nursing homes and other long-term care facilities.
- People who live with or care for those at high risk for complications from flu, including:
  - Health care workers
  - Household contacts of persons at high risk for complications from the flu
  - Household contacts and out of home caregivers of children less than 6 months of age

* Persons with chronic medical conditions like asthma, chronic lung disease, diabetes, kidney disease, liver disease, weakened immune system due to HIV/AIDS or cancer are at a higher risk for complications of Influenza.

**Who should NOT be vaccinated against season flu?**

Some people should not be vaccinated without first consulting a physician. They include:

- Persons with severe allergy
- Persons who had reaction to a vaccine in the past.
- Children younger than 6 months
- Persons with moderate or severe illness with a fever

**Are there negative effects of ‘flu shots’?**

Flu shots are safe and cannot give you the flu because they are made from killed or weakened virus, but there may be some mild side effects, though the benefits usually outweigh the minimal risks.
As with any injection or vaccination, there is a very small risk of an allergic reaction. Flu shots are generally considered safe during pregnancy, but one should consult a doctor before going ahead.

**When should I be vaccinated?**

In order to be fully effective before the peak of the winter flu season, the vaccination should be administered around October-November. However, it is never too late to get the vaccination.