



# Understanding INFLUENZA



INFLUENZA or "flu" is a highly contagious and common illness that is caused by the **influenza virus**. There are three different types of flu viruses: influenza **A, B, and C**, all of which cause illness in humans.

**ILI** stands for "**Influenza Like Illness**", a description used to label those presented with symptoms similar to influenza but yet to be proven to be so.

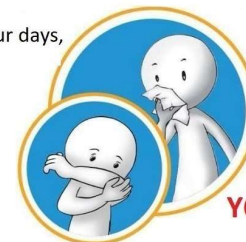


**How does it spread?** An infected person can spread it to others spread mainly by droplets made when people with flu cough, sneeze or talk. A cough can drive droplets to a distance up to about 6 metres away; a sneeze, up to 8 metres!

Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose, or possibly their eyes.

To help stop the spread of the virus:

- ⚠️ Cover your mouth and nose with a tissue when you cough or sneeze. Put your used tissue in a waste basket.
- ⚠️ If you don't have a tissue, cough or sneeze into your upper sleeve, not your hands.
- ⚠️ Wash your hands after coughing or sneezing:



**YOU** can prevent the spread!!

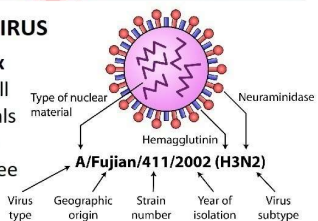
Friday, 12 July 2019, 3:54 PM  
NEW STRAITS TIMES  
Home News Nation  
ILI cases soar in Negri Sembilan

## THE A B C OF INFLUENZA VIRUS

A virus is a simple yet complex organism. Viruses can infect all types of life forms, from animals and plants to microorganisms. A virion (virus particle) has three main parts:

1. **Nucleic acid** – this is the core of the virus with the DNA or RNA (deoxyribonucleic acid and ribonucleic acid respectively).
2. **Protein Coat (capsid)** – This is covering over the nucleic acid that protects it.

Virus Type that causes Influenza are  
**Influenzavirus (Type) A**  
**Influenzavirus (Type) B**  
**Influenzavirus (Type) C**  
**Influenzavirus (Type) D**



Viruses are mainly classified by phenotypic characteristics, such as morphology, nucleic acid type, mode of replication, host organisms, and the type of disease they cause.

Human influenza **A** and **B** viruses cause seasonal epidemics. Influenza type **C** infections generally cause a mild respiratory illness and are not thought to cause epidemics. Influenza D viruses primarily affect cattle and are not known to infect or cause illness in people.

but our concern are the first three.

Influenza A viruses are divided into subtypes based on two proteins on the surface of the virus: the hemagglutinin (H) and the neuraminidase (N). There are 18 different hemagglutinin subtypes and 11 different neuraminidase subtypes. (H1 through H18 and N1 through N11 respectively.)

The **incubation period** for the flu is usually between one and four days, this period can vary from person to person. The average incubation period for the flu is two days i.e. on average, people start to develop flu symptoms about two days after coming into contact with the influenza virus.

### Symptoms of Influenza

- Central**  
- Headache
- Nasopharynx**  
- Runny or stuffy nose  
- Sore throat  
- Aches
- Systemic**  
- Fever (usually high\*)
- Muscular**  
- (Extreme) tiredness
- Respiratory**  
- Coughing
- Arthralgia**  
- Aches
- Gastric**  
- Vomiting

\*39° and above

### Is There a Cure for the Flu?

There is no cure for the flu. There are some prescription antiviral medications, such as Tamiflu, that may help shorten the duration of the illness. However, Tamiflu is only effective if taken within the first 48 hours of the onset of symptoms.

#### Is there a vaccination against Influenza?

There is a vaccination against "Seasonal Influenza" typically available starting in August/September every year. It is not fool-proof because it is based on flu strains researchers believe are most likely to cause illness in the coming season while flu virus mutates (changes its characteristics) so frequently.

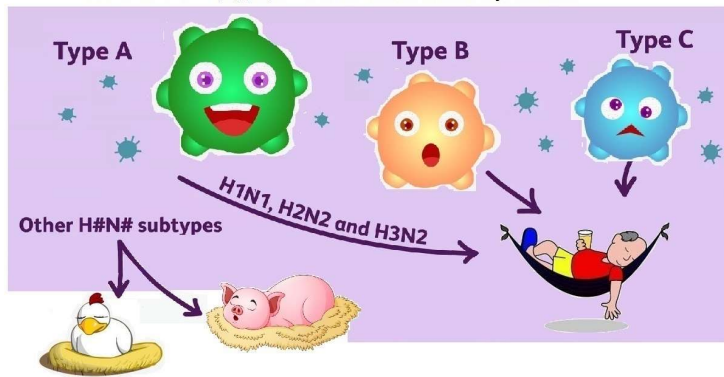
### What about H1N1?

**Influenza A (H1N1)** virus emerged in 2009. It is a new reassortment that has never before circulated among humans. This virus is not closely related to previous or current human seasonal influenza viruses. **The fear** then was it could be very aggressive and thus lethal. Fortunately, it was not as bad and a vaccination was quickly available. In most people, it presented like any other flu and treated accordingly.

Find time to talk to your Panel Doctor.



**DDi informatics**  
For members only



### ⚠️ THE THREAT OF A NOVEL VIRUS

Novel virus refers to a virus not seen before. It can be a virus that is isolated from its reservoir or isolated as the result of spread to an animal or human host where the virus had not been identified before. It can be an emergent virus, one that represents a new strain. Novel and variant influenza A viruses can infect and cause severe respiratory illness in humans. These influenza viruses are different from currently circulating human influenza A virus subtypes and include influenza viruses from predominantly avian and swine origin. Avian influenza refers to the disease caused by infection with avian (bird) influenza (flu) Type A viruses. These viruses occur naturally among wild aquatic birds worldwide.