

## Influenza infection

Influenza viruses cause contagious respiratory tract infections, also known as “the flu”. Most influenza infections are mild diseases of the upper airways but some may be severe due to the involvement of the lower airways and pneumonia, occasionally leading to death. The best way to minimise your risk of acquiring “the flu” is to get an influenza vaccine every year.

### How is flu transmitted?

Flu viruses spread mainly through contact with respiratory droplets from infected person (s) – when he/she coughs, sneezes or talks. Sometimes, a person may be infected by touching a contaminated surface or object and it transfers the virus onto oneself.

### Signs and symptoms

People who have the flu often feel some or all of these signs and symptoms:

- Fever\* / chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches

- Headaches
- Fatigue

\*Not everyone with flu will have a fever

### Influenza vaccine

Vaccination is available at CGH and it is recommended that you receive an influenza vaccination yearly.

There are many flu viruses and they are always changing. Each year a new flu virus vaccine is developed to protect against 3 or 4 viruses that are likely to cause disease in the upcoming flu season. However, even when the vaccine does not match the viruses exactly, the vaccine will still provide some protection.

There is no live virus in the inactivated flu vaccines. They cannot cause the flu. The flu vaccine cannot prevent flu or “flu-like” illnesses that are caused by non-influenza viruses.

It takes about 2 weeks after vaccination for the protection to start.

### Who should be vaccinated?

Everyone should be vaccinated for flu. However, there are groups of people who are at a higher risk of developing serious complications and it is strongly encouraged for these people to be vaccinated.

- People who are at high risk of developing serious complications (like pneumonia):

- Those with certain medical conditions including asthma, diabetes and chronic lung disease
- Pregnant women
- Children younger than 5 years and the elderly who are 65 years and older
- People who are living with or caring for those who are at high risk of developing serious complications (as above) such as caregivers and healthcare workers

**Who are those who cannot receive the Influenza vaccination?**

- Children younger than 6 months of age
- People who have had severe reactions to vaccines previously or severe allergic reactions to eggs

**Please check with your doctor / healthcare provider for advice, should you have these condition(s):**

- A fever or illness that is more than “just a cold”
- A moderate to severe reaction after a previous flu vaccine
- Developed Gullain-Barre syndrome within 6 weeks after receiving a flu vaccine

**When to get vaccinated against flu?**

In Singapore, transmission of influenza occurs throughout the year, hence you should get vaccinated early and yearly. The flu vaccine will usually lose its effectiveness after about a year, so it is important to go for regular and timely vaccinations.

**Side effects from receiving Influenza vaccination**

The vaccine is safe and side effects are usually mild.

About half of those who are vaccinated will have mild side effects, such as redness or pain at the area, where the injection is given.

Less than 1% of those who receive the vaccine develop a fever, muscle aches, or more severe local reactions. The risk of the vaccine causing harm is low.

**What should I do if I encounter a problem after vaccinations?**

- You may call the clinic during office hours
- In the event of emergencies or after office hours, you may seek medical advice from the Accident & Emergency department

## Pneumococcal disease

Pneumococcal disease is caused by the bacteria, *Streptococcus pneumoniae*, also known as Pneumococcus. The infection may be dangerous, causing meningitis (inflammation of the lining of the brain and spinal cord), pneumonia (lung infection), bacteremia (blood infection) and sinusitis (infection of the sinuses). These infections can also lead to hearing loss, learning disabilities, brain damage, paralysis and sometimes, even death.

### How is pneumococcal disease transmitted?

The pneumococcus bacteria is transmitted from person-to-person via respiratory droplets from the nose and mouth (commonly during sneezing, coughing or nasal secretions) of an infected person. Anyone can get pneumococcal disease, but these people are at greater risk than others:

- People 65yrs and older
- Young children
- People with certain health problems eg:
  - Certain kidney problems
  - Asthma
  - Chronic heart or lung disease
  - Asplenia – due to surgical removal of the spleen
  - People with a weakened immune system
  - Smokers

### Signs and symptoms:

- Cough
- An elevated body temperature (fever)

- Breathing problems, such as shortness of breath (rapid breathing)
- Chest pain
- Nausea
- Vomiting
- Headache
- Fatigue (tiredness)
- Muscle aches

### Vaccine

There are 2 main types of pneumococcal vaccines, namely the conjugate vaccine Prevnar 13® (PCV13) and the polysaccharide vaccine, Pneumovax®23 (PPSV23). Prevnar 13® protects against 13 types of pneumococcal bacteria, whilst Pneumovax®23 protects against 23 types of pneumococcal bacteria. These vaccines will not prevent all pneumococcal diseases.

The 13-valent pneumococcal conjugate vaccine (PCV13) is currently recommended for all children under 5 years of age and persons less than 18 years with immune-compromised medical conditions while the 23-valent polysaccharide vaccine (PPSV23) is currently recommended for use in adults 19 to 64 years of age, who smoke cigarettes, have chronic heart, liver, lung or kidney disease. For adults with who are 65 years and older or adults who are younger with significant risk of pneumococcal infection, vaccination with PCV13 initially followed by a dose of PPSV23 later may be recommended by your health provider.

Your healthcare provider will be able to advise you on the type of vaccine that you are suitable for. Most healthy adults develop protection within 2 to 3 weeks of getting the vaccination.

### **Who cannot receive pneumococcal vaccination?**

Those who have had serious allergic reactions to previous vaccination(s) or have allergies to yeast extracts may not be suitable for pneumococcal vaccination. Vaccination in pregnant patients may be delayed till after delivery. Your healthcare provider will be able to advise you if you have these condition(s).

### **Are there side effects from receiving the pneumococcal vaccine (PCV13 or PPV23)?**

The vaccine is safe and side effects are usually mild.

About half of the people who are vaccinated have mild side effects, such as redness or pain at the area, where the injection is given.

Less than 1% of the people receiving the vaccine develop a fever, muscle aches, or more severe local reactions, hence, the risk of the vaccine causing serious harm is low.

### **What should I look out for after receiving the vaccine?**

Look out for unusual reactions, for example, a high fever or changes in your behavior. Signs of severe allergic reactions can include:

- Hoarseness
- Wheezing
- Paleness
- Weakness

- A fast heart beat or dizziness

### **What should I do if I encounter a problem after vaccination?**

- You may call the clinic during office hours
- In the event of emergencies or after office hours, you may seek medical advice from the accident & emergency department

**Protect yourself from influenza and pneumococcal diseases.**

**Vaccines are available in the clinics.**

**You can use MediSave to pay for these vaccines.  
Ask your doctor today.**