

Severe reactions are possible but extremely rare.

- Severe allergic reactions (anaphylaxis) can occur in 1 in a million doses and can happen within minutes to a few hours after vaccination.
- The risk of getting Guillain-Barré Syndrome (GBS), a rare nerve condition, is estimated at 1 or 2 cases per million vaccinations.

Overall, these risks are much lower than the risk of severe complications from pneumococcal infection, which is what we hope to prevent by providing vaccination.

As with any medicine, there is a very low chance of a vaccine causing serious injury or death. However, health authorities in Singapore and around the world recommend vaccination because the benefits are greater than the possible risks.

What Should I do if There is a Serious Reaction to the Vaccine?

Please let the nurse or doctor know immediately, or call an ambulance to go to the hospital immediately, if you experience any of the following:

- Hives
- Face or throat swelling
- Difficulty breathing
- Dizziness

Where can I Learn More About Pneumococcal Vaccine?

For more information on pneumococcal disease and pneumococcal vaccinations, visit

HealthHub



<https://bit.ly/2XU3w5K>

Communicable Diseases Centre (CDC)



<https://bit.ly/2uucQvt>

PHARMACY

Drug Information

Pneumococcal Vaccines



What is Pneumococcal Disease?

Pneumococcal disease is caused by the bacteria *Streptococcus pneumoniae*, resulting in pneumonia (lung infection), meningitis (brain infection), bacteremia (blood infection) and other life-threatening diseases.

Symptoms of pneumococcal disease vary depending on the infected organ. It can range from low-grade fever, cough and chest pain, to more serious symptoms such as confusion and severe headache. It can spread through coughing, sneezing and direct contact with respiratory secretions of an infected person.

Why Should I go for the Pneumococcal Vaccine?

Pneumococcal disease is the leading infectious cause of death worldwide. In Singapore, more than 120 cases of invasive pneumococcal disease are reported every year, with adults aged 65 years and older making up majority of the cases. Invasive pneumococcal disease can be fatal, killing approximately 1 in 5 infected adults in Singapore.

The pneumococcal vaccine protects people at high risk against invasive pneumococcal disease (such as blood infections) and pneumonia.

There are two types of pneumococcal vaccines available:

1. Pneumococcal polysaccharide vaccine (PPSV23)
2. Pneumococcal conjugate vaccine (PCV13)

PCV13 protects against 13 pneumococcal strains that most commonly cause pneumococcal disease, while PPSV23 protects against 23 strains. PCV13, when given before PPSV23, provides an extended protection in selected group of patients as compared to giving PPSV23 alone.

Who Should Receive the Pneumococcal Vaccine?

People at high risk of developing serious complications and death from invasive pneumococcal disease should receive the vaccine.

Both PCV13 and PPSV23 are recommended for:

- All adults aged 65 years and older
- Adults aged 19-64 years with:
 - Chronic kidney failure and nephrotic syndrome
 - Conditions that can weaken the immune system including HIV, cancer, damaged spleen and organ transplant
 - Medications that can weaken the immune system including long-term steroids and certain cancer medications
 - Cochlear implants or cerebrospinal fluid leaks

PPSV23 (without PCV13) is also recommended for:

- Adults aged 19-64 years with chronic diseases including lung, heart, liver disease and diabetes
- Smokers
- Individuals with alcoholism aged 19 years and above

When Should I Receive my Pneumococcal Vaccine?

Your doctor will decide on the type of pneumococcal vaccine and administration schedule for you. For individuals eligible for both PCV13 and PPSV23 who have yet to receive any pneumococcal vaccine, PCV13 should be given first, followed by PPSV23 either 8 weeks or 1 year later for better response.

Where can I get my Vaccine?

Both PCV13 and PPSV23 are available at most polyclinics and hospitals. MediSave can be used to pay for PCV13 and PPSV23 in people at high risk of pneumococcal disease.

What can I Expect After the Vaccine?

You may experience the following 1 to 2 days after the vaccination:

- Soreness, redness, or swelling where the injection was given, slight headache, body aches or tiredness. This usually gets better on its own within 2-3 days.
- Fever (temperature above 38°C) is uncommon and usually gets better in 1-2 days.

Paracetamol (1-2 tablets every 6 hours as needed) may help reduce any discomfort. Do not exceed 8 tablets (500mg per tablet) in a day.

What are the Risks and Complications of the Vaccine?

Vaccines, like any medicine, can have side effects. The side effects may vary from mild to severe adverse reactions and vary between individuals.

Mild side effects include:

- Pain or swelling where the injection was given.
- People taking blood thinners (e.g. warfarin) or with bleeding problems may develop a hematoma (small lump with blood) where the injection was given but this is uncommon.
- Some people may feel faint after the vaccination. Sit for 15 minutes to avoid fainting and any subsequent injuries.