



Pneumococcal vaccine overview

The pneumococcal vaccine protects against serious and potentially fatal pneumococcal infections. It's also known as the pneumonia vaccine.

Pneumococcal infections are caused by the bacterium *Streptococcus pneumoniae* and can lead to pneumonia, septicaemia (a kind of blood poisoning) and meningitis.

At their worst, they can cause permanent brain damage, or even kill.

Who should have the pneumococcal vaccine?

A pneumococcal infection can affect anyone. But some people are at higher risk of serious illness, so it's recommended they're given the pneumococcal vaccination on the NHS.

These include:

- babies
- adults aged 65 or over
- children and adults with certain long-term health conditions, such as a serious heart or kidney condition

How often is the pneumococcal vaccine given?

People aged 65 and over only need a single pneumococcal vaccination. This vaccine is not given annually like the flu jab.

People with a long-term health condition may need just a single one-off pneumococcal vaccination or vaccination every 5 years, depending on their underlying health problem.

The different types of pneumococcal vaccine

The type of pneumococcal vaccine you're given depends on your age and health. There are 2 types.

Pneumococcal conjugate vaccine (PCV) is used to vaccinate children under 2 years old as part of the NHS childhood vaccination programme.

Pneumococcal polysaccharide vaccine (PPV) is given to people aged 65 and over and people at high risk because they have long-term health conditions.

Read the [patient information leaflet for PPV](https://www.medicines.org.uk/emc/PIL.17518.latest.pdf)
(<https://www.medicines.org.uk/emc/PIL.17518.latest.pdf>)

How the pneumococcal vaccine works

Both types of pneumococcal vaccine encourage your body to produce antibodies against pneumococcal bacteria.

Antibodies are proteins produced by the body to neutralise or destroy disease-carrying organisms and toxins.

They protect you from becoming ill if you're infected with the bacteria.

More than 90 different strains of the pneumococcal bacterium have been identified, although most of these strains do not cause serious infections.

The adult vaccine (PPV) protects against 23 strains.

The PPV vaccine is thought to be around 50 to 70% effective at preventing pneumococcal disease.

PPV is an inactivated or "killed" vaccines and does not contain any live organisms. They cannot cause the disease they protect against.

Can the PPV be given at the same time as the shingles vaccine?

The Department of Health advice is that the two vaccines can be given at the same time. This is based on expert advice from the Joint Committee on Vaccination and Immunisation , and on research that showed no evidence that people receiving both vaccines together had any increased risk of developing shingles.

Vaccine allergy

Tell your GP if you have had a bad reaction to any vaccination in the past.

If there's been a confirmed severe allergic reaction, called an anaphylactic reaction, to the pneumococcal vaccine or any ingredient in the vaccine, it may not be possible for you to have it.

Anaphylaxis is a rare, serious side effect that can happen within minutes of the injection. It's very alarming at the time, but it can be treated with adrenaline.

The doctor or nurse giving the vaccine will have been trained to know how to treat anaphylactic reactions.

Provided they receive treatment promptly adults make a complete recovery.

Call your GP if you notice any unusual symptoms in yourself after being vaccinated

But if it was only a mild reaction, such as a rash, it's generally safe to have the vaccine.

Fever at the vaccination appointment

If you are mildly unwell at the time of the vaccination, it's safe to have the vaccine.

But if you or your child are more seriously ill (for example, with a high temperature and feeling hot and shivery), it's best to delay the vaccination until after recovery.

Side effects of the pneumococcal vaccine

Like most vaccines, the adult versions of the pneumococcal vaccine can sometimes cause mild side effects.

These include:

- a mild fever
- redness at the site of the injection
- hardness or swelling at the site of the injection

Other common side-effects include headaches, diarrhoea, decreased appetite, rash, muscle and joint aches, chills, fatigue, limitation of arm movement, vomiting and fever. Less common side-effects include feeling sick, allergic reactions and swollen lymph glands near the injection site.

In the rare event that an allergic reaction occurs at the time of the injection, the Nurse is trained to deal with this.

There are no serious side effects listed for the adult versions of the vaccine, apart from an extremely rare risk of serious allergic reaction.