

Information for patients: Do I have a Penicillin Allergy?

What is a penicillin?

A penicillin is an important type of antibiotic that can be used to treat many common infections.

The first penicillin was discovered many years ago by Alexander Fleming and since then many other penicillin type antibiotics have been developed. Penicillin antibiotics are often the first choice antibiotic for common infections like pneumonia, skin infections and tonsillitis. They are widely used both in hospital and in the community.



What is a penicillin allergy?

A penicillin allergy occurs when the body's immune system responds unusually to a penicillin type antibiotic.



Examples of penicillin antibiotics include:

phenoxymethylpenicillin (penicillin V)	amoxicillin
flucloxacillin	co-amoxiclav (Augmentin)

For most people an allergic reaction will be an unpleasant mild skin reaction or rash that develops slowly after several hours or days of taking the medicine. Sometimes a more severe reaction can occur called anaphylaxis. Anaphylaxis is extremely rare but can be life threatening.



People with anaphylaxis develop symptoms such as:

- A widespread itchy rash (like nettle sting)
- Breathing difficulties
- Swelling and collapse very quickly, often within minutes of taking penicillin and always within two hours

What is the difference between an allergy and side effects?

All medicines may cause unpleasant side effects such as a skin reactions/rashes, vomiting or diarrhoea. Side effects are different to allergic reactions. Having side effects to penicillin, whilst unpleasant, does not mean you need to avoid penicillin antibiotics completely. This is particularly true in severe infections where penicillin may be the best antibiotic. In these situations it is often best to receive penicillin and manage side effects if they happen.

How common is penicillin allergy?

1 in 100

Approximately one in 100 people have a genuine penicillin allergy.

1 in 10,000

The most severe allergy, anaphylaxis occurs in about 1 in 10,000 people taking penicillin, however, it is extremely rare.

1 in 10

Despite real penicillin allergy being uncommon, about 1 in 10 people have either been told or have assumed they have a penicillin allergy.

9 in 10

Most people (about 9 in 10) recorded as having a penicillin allergy are not actually allergic.

I have had a recorded penicillin allergy for a long time. Why should that change now?

Penicillins are very effective treatments for many infections including skin and chest infections. They are also commonly used in patients having a surgical procedure. Being unable to take penicillins may put you at a disadvantage especially if you are admitted to hospital with a severe infection.

What are the benefits to me of finding out whether I am allergic to penicillin antibiotics?

We can carry out a simple test within the hospital that will tell you if you have a penicillin allergy. If your test results show that you are not allergic to penicillin then your medical records will be updated. Removing the penicillin allergy label from your record means you can be given penicillins when you really need them. It also means you will have more treatment options if you have an infection or require antibiotics before an operation.

What does the test for penicillin allergy involve?

Your medical team will ask you about the symptoms you had in the past that led to the penicillin allergy label. If they decide you may have been incorrectly recorded as having an allergy, they will offer you a test to decide if the allergy label can be removed. You will only be offered this test if the medical team believe that it is safe to do so and there is a very low chance of an allergic reaction. The test involves giving you a penicillin antibiotic tablet under careful supervision in hospital. Your pulse and blood pressure will be monitored for one hour after you take the tablet.



What happens after the test?

At the end of the test the hospital team will discuss with you what your test results mean. If you have not experienced any reaction, a letter will then be sent to your GP informing them of the result of the test. Your GP will be asked to remove the penicillin allergy label from your GP record. We will also give you an information leaflet to take home with you explaining the results and what they mean for your future care. If you need an antibiotic now or in the future for either treatment or before surgery, then your doctor will have the option to use a penicillin antibiotic.

If the test confirms that you are allergic to penicillin then we will advise your GP of the test result and ask them to record this in your GP record.

We will also give you a leaflet about avoiding penicillin in future.



Things to think about when deciding if you want to have a penicillin allergy test

Do I have to take this test?

The benefits of having the test have already been outlined. If you do not want to be tested please let the medical team know. Your decision will not affect your ongoing care.

Are there any risks or side effects?

There is a small chance that you may experience an unpleasant side effect such as nausea or an allergic reaction. Allergic reactions will usually be mild but a severe allergic reaction including anaphylaxis, although highly unlikely, is possible. You will be closely monitored during the test by staff trained in the recognition and treatment of allergic reactions and other side effects.

In the unlikely event you experience a severe allergic reaction, the medical team will give you treatment to reverse the reaction.

What will happen if I do agree to have the test?

One of the medical team will ask you to read and sign a permission form indicating your consent to proceed with the test. The doctor will also sign this form and it will be retained in your medical notes as a record of your agreement to the test.

What will happen if I don't have the test?

If you don't have the test then your medical notes will continue to state you are allergic to penicillin and you will not be given penicillin when you are treated for an infection or have a surgical procedure in the future. You can re-consider having the test at any time.