

Penicillin Allergies and Sensitivities: a Guide for Patients Staying in Hospital

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This patient information aims to inform you about penicillin allergy and sensitivities, explaining what an allergic reaction to penicillin is and how to recognise symptoms of an allergic reaction versus a sensitivity.

What is Penicillin?

Penicillin is a family of antibiotics that are commonly prescribed for a wide range of infections. Since discovery of the first penicillin in 1928, this group of antibiotics have been used to treat many infections, ranging from mild to life-threatening. They are the first choice for many infections as they are more effective and less toxic than other antibiotics belonging to other groups.

Do I have a genuine allergy to penicillin?

Millions of people in the UK have penicillin allergy recorded in their medical notes. Having a genuine allergy to penicillin is uncommon. Research has shown that just **1%** of people are truly allergic to penicillin:

- Approximately 1 in 10 people have been told they have a penicillin allergy.
- Only 1 in 100 people have a genuine penicillin allergy.
- The most severe allergy, anaphylaxis occurs in about 1 in 10,000 people and is extremely rare.
- About 9 in 10 people recorded as having a genuine penicillin allergy are not truly allergic.

What is a penicillin allergy?

A penicillin allergy occurs when the body's immune system responds abnormally to a penicillin and this is life-threatening. A small percentage of people experience an allergic reaction, usually within an hour of taking penicillin; this is called anaphylaxis. People with anaphylaxis develop a reaction characterised by:

- A widespread itchy rash which may be red, swollen, blistered or peeling
- Severe tightness of the throat or chest
- Swelling of the mouth, face, lips, tongue or throat
- Breathing difficulties and collapse.

How is a sensitivity to penicillin different to an allergic reaction?

There are possible side effects to any drug. Some people may have difficulty tolerating the side effects of penicillin and may experience mild to moderate reactions that suggest they have a sensitivity and may experience:

- Sickness/vomiting
- Diarrhoea
- Headache
- Bloating and loss of appetite
- Skin reactions

Should I switch to an alternative antibiotic if I experience any of these common side effects?

These side effects are usually mild and stop after treatment finishes. You can get these common side effects from lots of other medications. Although unpleasant, these side effects are not a sign of an allergy to penicillin and does not mean you need to avoid penicillin antibiotics completely.

When should I talk to my healthcare team?

Tell your healthcare team if you do experience any side effects when taking penicillin or any other antibiotic, so these can be recorded in your notes to help identify the most suitable treatment options.

What are the consequences of being incorrectly labelled penicillin allergic?

Patients labelled as penicillin allergic will receive a different choice of antibiotic that could make the infection more difficult to treat.

Having an incorrect penicillin allergy label in your records could increase your risk of:

- Longer hospital stays (longer recovery)
- Increased risk of MRSA colonisation
- Increased risk of acquiring antibiotic-resistant superbugs
- More antibiotic prescriptions

- An increased risk of surgical-site infection
- Risk of serious side effects, which could lead to long term disabilities and even death

What can I do as a partner in my care? Ask your GP, Pharmacist or healthcare provider for information

Many patients are reluctant to question their penicillin allergy. It is important to engage with your healthcare providers, which enables you to be a partner in your own care.

If you are not sure if you are labelled as having an allergy to penicillin, or you cannot remember why or when you were labelled, ask your GP, Pharmacist or healthcare provider to help you find out.

Can you get a list of all the antibiotics you have taken in the past? Did you have difficulty tolerating them and what were the symptoms? Information you provide on antibiotics you have taken and any side effects or reactions you had as a result, will help determine which antibiotics you can safely take. It is better to undergo this careful assessment before needing urgent treatment with antibiotics.

Reviewing your penicillin allergy status

Allergies are included in medical records to safeguard patients against having a reaction.

Therefore, it is crucial to ensure this information is accurate, to safeguard both patients with and without a genuine allergy.

Questions?

If you have any questions or need further support, talk to a member of your healthcare team.

Acknowledgments:

Penicillin Allergy Delabelling Evidence Bundle December 2022 NHS England <u>Are you sure you are</u> allergic to penicillin? - NIHR Evidence

National Institute for Health and Care Research – <u>Are you sure you are allergic to penicillin? -</u> <u>NIHR Evidence</u>

Antibiotic Research UK <u>Support Antibiotic Research | Fight Antibiotic Resistance |</u> <u>ANTRUK</u>

NHS UK – Side effects Antibiotics <u>Antibiotics - Side effects - NHS (www.nhs.uk)</u> South Tees Hospitals NHS Foundation Trust

https://www.southtees.nhs.uk/resources/do-i-have-a-penicillin-allergy/

United Lincolnshire Teaching Hospitals NHS Trust has worked with AccessAble to create detailed Access Guides to facilities, wards and departments at our sites. www.accessable.co.uk/united-lincolnshire-hospitals-nhs-trust

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