

Feel Better. Live Better.

An allergist/immunologist, often referred to as an allergist, is a pediatrician or internist with at least two additional years of specialized training in the diagnosis and treatment of allergies (including drug allergies), asthma, immune deficiencies and other immunologic diseases.

By visiting the office of an allergist, you can expect an accurate diagnosis, a treatment plan that works and educational information to help you manage your disease and feel better.

The AAAAI's Find an Allergist/Immunologist service is a trusted resource to help you find a specialist close to home.



A Trusted Resource

The American Academy of Allergy, Asthma & Immunology (AAAAI) represents allergists, asthma specialists, clinical immunologists, allied health professionals and others with a special interest in the research and treatment of allergic disease.

For More Information

You depend on authoritative, expert resources to make informed decisions.

Patients and health care professionals alike rely on:
www.aaaai.org

The contents of this brochure are for informational purposes only. It is not intended to replace evaluation by a physician. If you have questions or medical concerns, please contact your allergist/immunologist.

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Penicillin Allergy – What do you need to know?

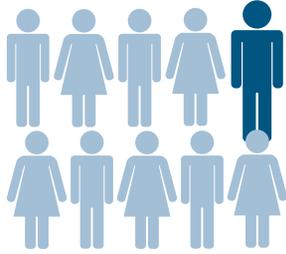


Approximately 10% of the population reports a penicillin allergy, but over 90% of these individuals will tolerate penicillin after undergoing evaluation.



Penicillin Allergy Facts

Penicillins are widely used antibiotics that have important roles in treating bacterial infections. Many patients are diagnosed with penicillin allergy in childhood, where a viral infection may be the cause of a rash, rather than a drug reaction. Even in those with true allergy, 50% will lose this tendency in a 5 year period. Approximately 10% of the population reports a penicillin allergy, but most of these individuals will tolerate penicillin after undergoing evaluation. Penicillins are the safest and most effective antibiotics for many infections, and therefore it is important to find out if you are really penicillin allergic.



Penicillin Allergy Diagnosis

Penicillin allergy can be evaluated by an allergist/immunologist, who will obtain a careful history and perform allergy procedures, such as skin testing and/or a test dose, if indicated. Penicillin skin testing is indicated in patients with a reaction history of hives, itching, rash, swelling, shortness of breath, and/or low blood pressure.

Penicillin Skin Testing

This test involves pricking the skin with the forms of penicillin that are found in the blood when a patient takes the drug, and a subsequent intradermal test (placing a small amount of each form of penicillin just under the skin). If these tests are negative, it is very unlikely that you are allergic to penicillin. However most allergists will follow negative intradermal testing with a challenge dose to completely rule out your risk for an immediate reaction to penicillins.

Penicillin Test Dosing

If a patient's history is very low risk or does not sound allergic, an allergist may introduce penicillin using one or more test doses without prior skin testing. If there is no reaction to the test dose, a full dose of penicillin can be given followed by an observation period. If the full dose is tolerated, the patient is not at risk of having a serious immediate reaction and penicillins can be used. It typically takes about 2 to 3 hours to perform testing.

Continued Penicillin Allergy

In case of a positive penicillin test, either the skin prick or intradermal test will produce a red, raised bump, signifying the presence of an allergy to the medication. If skin testing or test doses are positive, a different antibiotic should be used to treat an infection. Symptoms similar to the initial reaction may occur in the rare case of a positive test dose. An allergist is prepared to treat these reactions. An allergist can also perform a drug desensitization, which temporarily allows a penicillin-based antibiotic to be used in the case of positive skin testing or challenge. This is only done when there is a clear benefit to penicillin treatment for an infection.

Frequently Asked Questions

1. What is penicillin?

Penicillin was first discovered by Alexander Fleming in 1928 and continues to be one of the most important antibiotics today. The penicillin family of antibiotics contains over 15 chemically related drugs (e.g. penicillin, ampicillin, amoxicillin, amoxicillin-clavulanate, methicillin) that are given by mouth or injection for the treatment of many bacterial infections. It is one of the most frequently used classes of antibiotics in the world. There is no relation between penicillin allergy and mold allergy.

2. Is penicillin allergy genetic?

Although some forms of drug allergy may be genetic, there currently is no predictable pattern to inheritance of penicillin allergy. Individuals do not need to avoid penicillin if a family member is allergic to penicillin or drugs in the penicillin family.

3. I was told that I was allergic to amoxicillin, do I still need to see an allergist/immunologist?

Amoxicillin is in the same family of antibiotics as penicillin. An allergist/immunologist can review your history and perform an appropriate evaluation to understand if there is still an allergy to amoxicillin.

4. Is skin testing painful and what are the risks?

A skin prick test, also called a scratch test, checks for immediate allergy and is the first step in skin testing. Skin prick testing is usually not painful. Skin prick testing uses devices that barely penetrate the skin's surface. There is no bleeding or feeling more than mild, momentary discomfort. Intradermal skin testing is the second part of the evaluation and involves injecting the skin. The test, if positive, will cause local itching and redness with swelling at the site where the test is performed. These reactions usually resolve in an hour or so.

5. Do I need to avoid cephalosporins if I am allergic to penicillins?

Although the cephalosporins are close relatives of penicillins and share a structure called the beta-lactam ring, the risk of a cross-reactivity reaction between penicillins and cephalosporins is low. Therefore, even with a true allergy to penicillin, there is an excellent chance you could tolerate cephalosporins.

