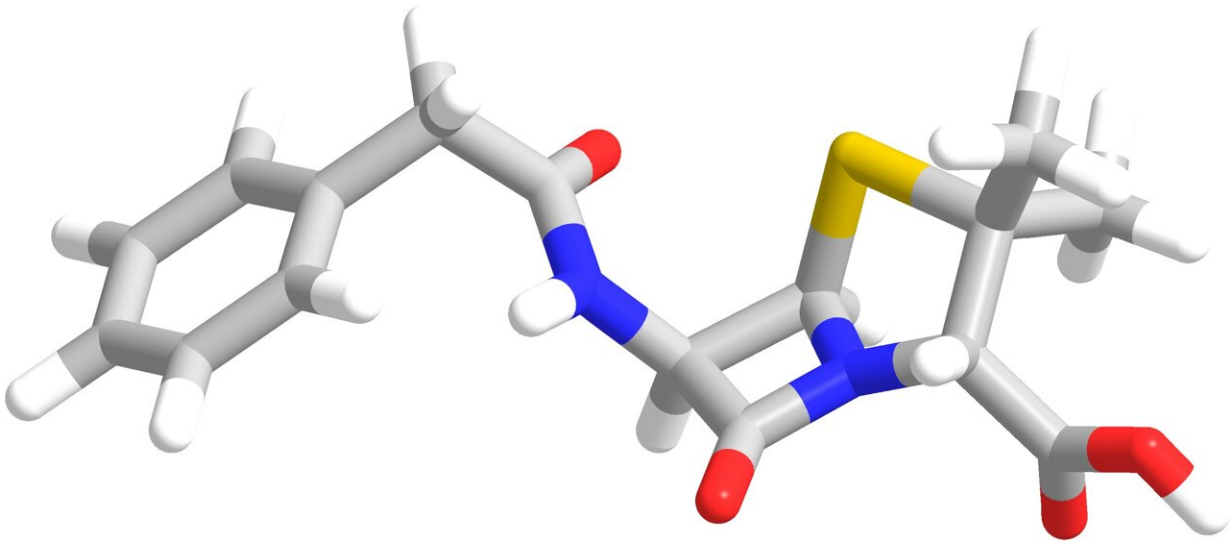


# Why should I be evaluated for a penicillin allergy?

December 16 2022, by Adela Taylor

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Chemical structure of Penicillin G. The sulfur and nitrogen of the five-membered thiazolidine ring are shown in yellow and blue respectively. The image shows that the thiazolidine ring and fused four-membered  $\beta$ -lactam are not in the same plane. Credit: Public Domain

Taking action to be evaluated for a penicillin allergy can impact your health, safety and wallet. According to the Centers for Disease Control and Prevention, 10% of the U.S. population reports a penicillin allergy, but less than 1% is allergic after testing. Common penicillins include ampicillin, amoxicillin and Augmentin.

Penicillin [allergy](#) is an abnormal reaction of your immune system to the [antibiotic drug](#) prescribed for treating various bacterial infections. These medications are used often to treat ear infections, [strep throat](#), sinus infections and to prevent dental infections.

Common signs and symptoms of an allergic reaction can include skin redness, itching, rash or swelling. These symptoms can occur for other reasons. Some symptoms, such as nausea, vomiting or diarrhea, are common when taking antibiotics. They frequently are misdiagnosed as an allergy.

When a penicillin allergy is reported, [health care professionals](#) substitute different antibiotics, often using more expensive and less effective antibiotics. Penicillins are the safest and most effective antibiotics for many infections.

Avoiding penicillin antibiotics is associated with higher [health care](#) costs, increased risk for antibiotic resistance and less effective antibiotic therapy.

## **Potential benefits of penicillin allergy evaluation**

People with a penicillin allergy have their allergy removed with allergy testing more than 90% of the time. Because penicillin allergy often does not persist for life, patients with severe penicillin allergy histories often are able to retake this medication safely if directed by a health care professional.

Approximately 80% of patients with a severe penicillin allergy lose their sensitivity after 10 years. Determining that a patient is not actually allergic to a medication can allow for better treatment options, targeted therapy, and a decrease in hospital stays and medication costs.

## Who should be evaluated for a penicillin allergy?

Any patient with a history of a reaction to a penicillin antibiotic, including amoxicillin and Augmentin, or who does not use certain antibiotics out of concern for such reactions should be evaluated. The best time to be evaluated for an allergy is when you are healthy.

Discussing medication allergies can be a part of routine health maintenance with your primary care team. Addressing medication allergies also is good to do before having surgery and for women considering pregnancy. Pregnant women can be safely evaluated for a penicillin allergy.

## What to expect during penicillin allergy testing

A health care professional will use an FDA-approved skin test to diagnose penicillin allergy. Penicillin skin testing involves pricking the skin, placing a small amount of allergen on the punctured skin and injecting a small amount between the layers of the skin. The test sites are examined for a reaction. If the testing is negative, the patient can safely undergo an oral challenge to amoxicillin.

In an oral challenge, amoxicillin is given to confirm that the patient can safely take the medication. The evaluation process takes three hours. In low-risk people, an oral challenge can be performed without skin testing.

If you have questions about [penicillin allergy](#) and evaluation, talk with your primary care team or an allergy specialist.

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