

# Antibiotic Allergy Common Asked Questions

## 1. I developed a rash in childhood after taking an antibiotic, does this mean I am allergic?

Research by the Canadian Pediatric Society and American Academy of Pediatrics tells us that skin rash is the most common reason a child is labeled allergic to an antibiotic In fact, over 1/20 children develop delayed rashes while using common antibiotics like amoxicillin or penicillin. Although antibiotics are often thought to be the culprit, the most common cause of rashes are actually due to the viral infections themselves Less commonly, interactions between the antibiotic and a person's immune system can lead to mild rashes.

In the vast majority of cases, these rashes are not due to a true allergy. Research in this area demonstrates that when patients are actually assessed and/or by an allergist, up to 95% of people are proved not to be allergic.

# 2. How do care providers decide whether a reaction to an antibiotic was harmful or not?

In most cases, your doctor will be able to determine this just by asking you questions about the timing and description of the symptoms, whether they appeared again with the same antibiotic, and if there were any other symptoms that would point towards a true allergy. Many people will also outgrow allergies with time.

In some cases, patients may benefit from a supervised drug challenge. This involves giving the medication in a supervised medical setting to see if they develop symptoms again.

Skin testing, where a small amount of antibiotic is placed within the skin, is not a reliable way to screen for drug allergies.

# 3. What happens when a person has been mislabeled as allergic to an antibiotic?

Many common childhood infections such as ear, skin, or throat infections are best treated with antibiotics from the penicillin family. If a person has been labeled allergic to penicillin without a proper evaluation by their doctor, other antibiotics are used instead. These antibiotics often have worse side effects and are not as effective. Sometimes the alternative antibiotic used is too broad and can lead to antibiotic resistance.

#### 4. Are penicillin allergies passed down through families?

There is no predictable genetic pattern for passing down drug allergies to children. You do not need to avoid penicillin or other antibiotics based on family history alone.



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## 5. How are penicillin allergies diagnosed?

The diagnosis of an antibiotic allergy is made clinically. This means that your doctor relies on the history and signs and symptoms of the reaction to make the diagnosis rather than a test. In some cases, antibiotic allergies are diagnosed after a patient fails a supervised dose of the medication.

In some cases, your doctor may refer to a board-certified allergist to help clarify the diagnosis or help decide what antibiotics should be used in the future.

# 6. Can I get a test to check if I am allergic?

Skin and blood tests are available to test for penicillin allergy. However, if there has not been any previous exposure to the medicine, or if there is no history of convincing allergic reaction, the tests can be very unreliable. There are many cases of positive results in people who are not truly allergic (we call these false positive test results), leading to unnecessary avoidance of the medication. This is why we don't test to predict allergies.

## 7. What happens if I am diagnosed with a penicillin allergy?

Patients with a true antibiotic allergy will have their medical records updated to ensure they don't receive that antibiotic again in the future. A list of related medications to avoid will be given. They should be referred to an allergist and re-assessed after 5 years time to check if they have outgrown the allergy.