

Penicillin Allergies

What's true and what to do?

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Up to 10% of patients report an **allergy to penicillin or amoxicillin**; however, after thorough evaluation, 90% of these patients do **not** have a true allergy and are able to receive penicillin or related medications including amoxicillin. Unfortunately, these medications are often still avoided unnecessarily which **impacts clinical care**. *When coming across a penicillin-allergic patient, consider the following:*



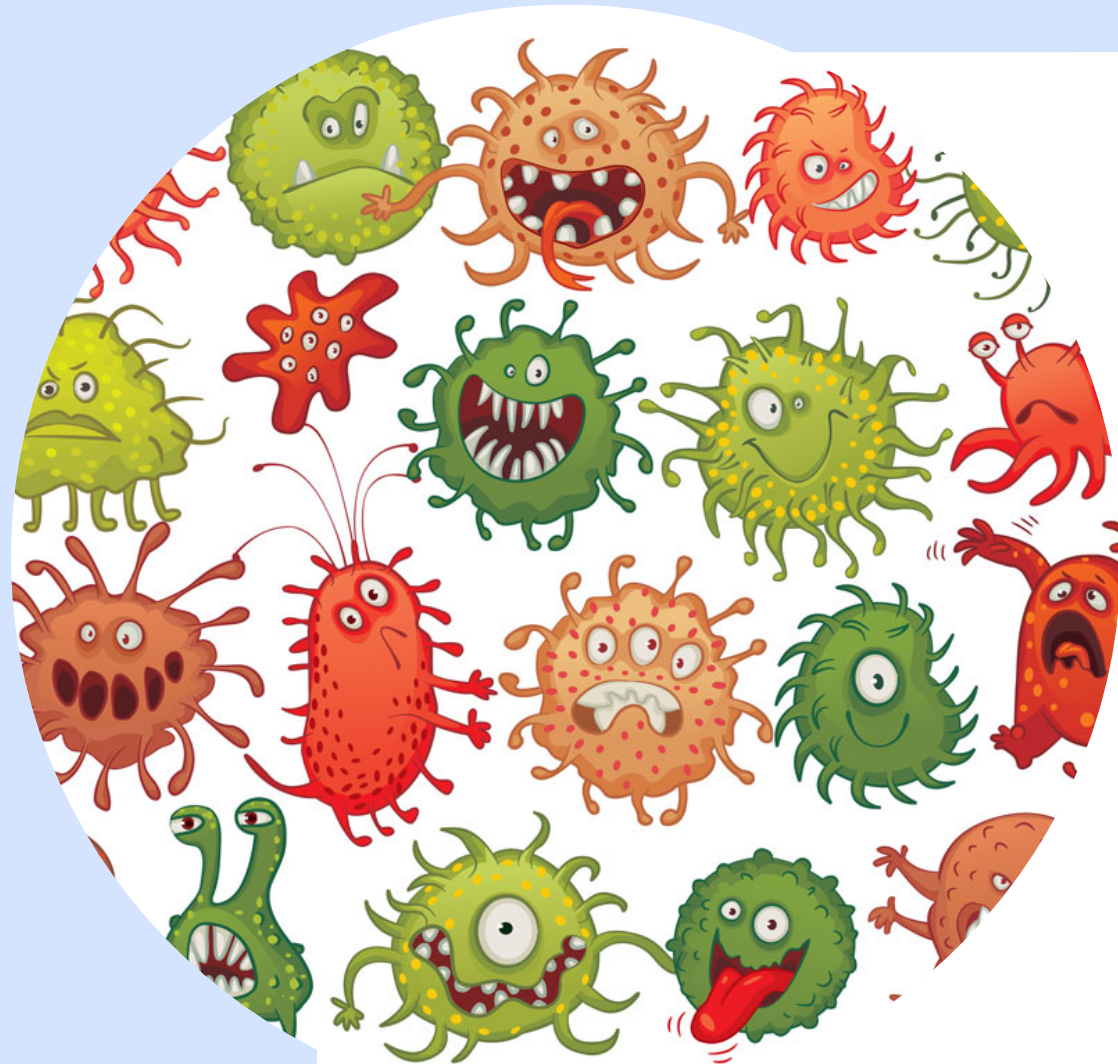
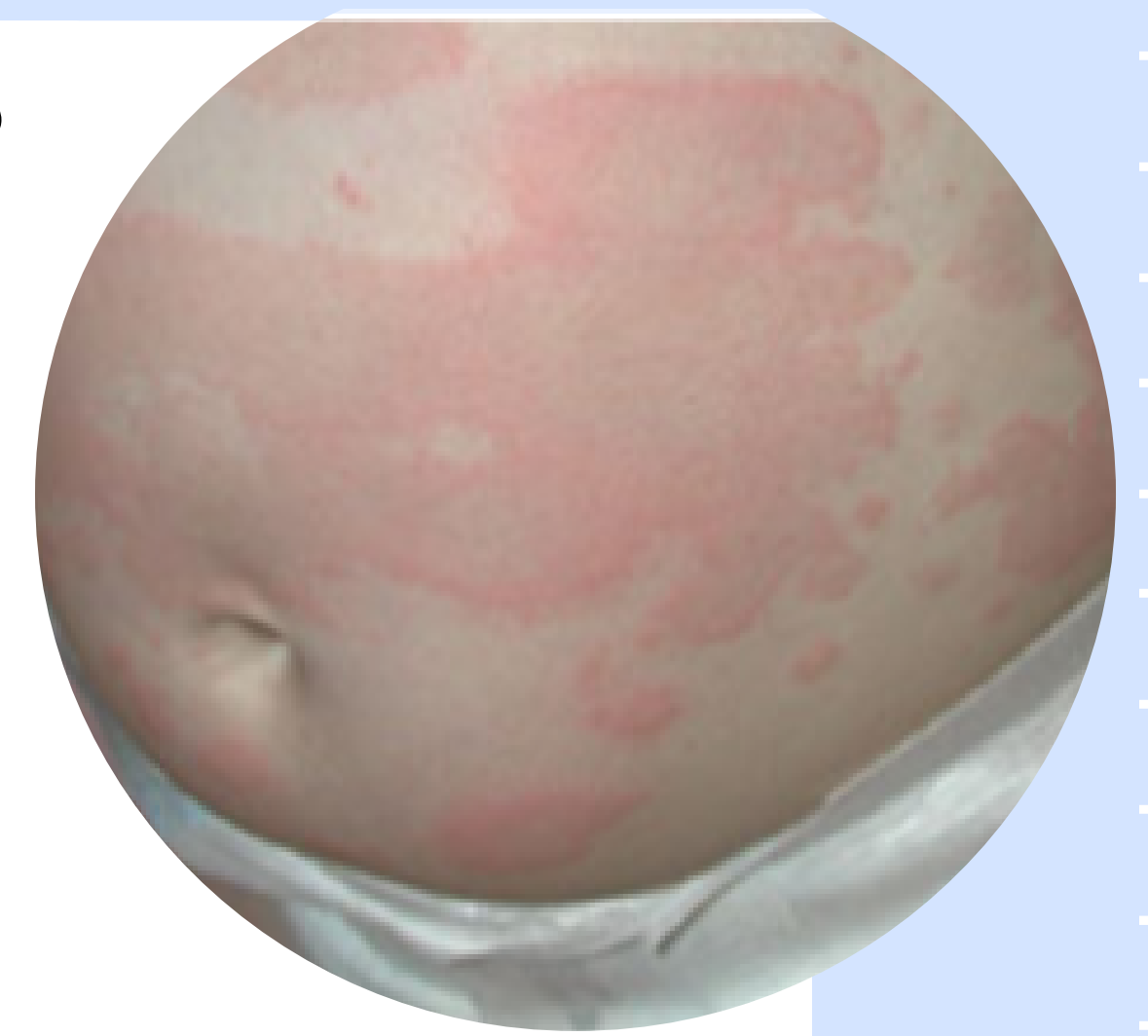
Is it actually an allergy?

Most patients that report a penicillin allergy are found to actually **not have a true allergy** and can take penicillin safely. **Family history or side effects** (e.g., stomach ache or diarrhea) are **not actually allergies** and often penicillin can still be given to these patients.

What are symptoms of a penicillin allergic reaction?

These IgE-mediated allergies can be:

- Reactions occur **immediately or usually within one hour** of dose
- Hives (multiple pink/red raised areas of skin that are itchy)
- Angioedema (localized swelling without hives that affects the face, abdomen, extremities, genital area, or throat)
- Wheezing or shortness of breath
- Anaphylaxis (combination of the symptoms listed above)



What is the harm?

To avoid antibiotics that are similar to penicillin, patients who are labeled as "penicillin-allergic" often receive antibiotics that are **broad-spectrum** or kill more types of bacteria than needed to treat their infections. The use of broad-spectrum antibiotics is associated with increased healthcare **costs**, antibiotic **resistance**, and sometimes **less effective** treatment of infections.

What can I do?

As a **clinician**, it is important to **evaluate patients penicillin allergy** by completing a history and physical. 80% of patients with IgE-mediated penicillin allergy lose their sensitivity after 10 years. Therefore, certain patients may qualify for **penicillin allergy testing**. Patients with severe skin or systemic reactions are not candidates. As a **parent**, ensure your children's allergies are fully evaluated by a healthcare provider. **Educate** yourself on what a true allergy is. **Discuss** options for allergy testing with your provider.



Click [here](#) to take a short quiz



Guest author, Dinh Ho, is a 3rd year Physician Assistant student at UMKC who plans on graduating in May with an interest in primary care. When not studying, she enjoys spending time with her boyfriend, pet cat, Sophie, and trying new restaurants in Kansas City!