

Verify Penicillin Allergy



DID YOU KNOW?

Although 10% of the population in the U.S. reports a penicillin allergy, less than 1% of the population is truly penicillin-allergic. Correctly identifying if your patient is penicillin-allergic can decrease the unnecessary use of broad-spectrum antibiotics.^{1,2,3}

Pharmacists can help verify penicillin allergy by:



1. Asking questions to evaluate if the patient is truly penicillin-allergic.

- ✓ What medication(s) were you taking when the reaction occurred?
- ✓ Can you describe the symptoms you experienced?
- ✓ How long ago did the reaction occur?
- ✓ How was the reaction managed? What was the outcome?
- ✓ Have you been prescribed amoxicillin or another penicillin since your reaction? Did you tolerate the antibiotic?



2. Reviewing the patient's medication profile and prescription history to obtain previous prescription history.

If the patient has tolerated a penicillin, including amoxicillin or amoxicillin with clavulanate, after their reaction, they may not be penicillin allergic.



3. Discussing your findings with the prescribing clinician for patients who:

- ✓ Had a reaction that is not consistent with an allergy.
- ✓ Have tolerated a penicillin antibiotic after their initial reaction.
- ✓ Had a reaction more than 10 years ago.

In these cases, also recommend that the patient talk to their doctor about getting evaluated for penicillin allergy.

You can apply this action plan to other antibiotics that are initiated for penicillin allergy (e.g., fluoroquinolones, clindamycin).

Patients with a history of severe hypersensitivity syndromes, such as Stevens-Johnson syndrome, toxic epidermal necrolysis, serum sickness, acute interstitial nephritis, hemolytic anemia, and drug rash with eosinophilia and systemic symptoms (DRESS), should not use the offending drug in the future. Further evaluation described here is not appropriate for patients with these severe hypersensitivity syndromes.

References:

1. Hong, Mina. "Is It Really a Penicillin Allergy," Centers for Disease Control and Prevention, <https://www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf>.
2. Trubiano J, Phillips E. Antimicrobial stewardship's new weapon? A review of antibiotic allergy and pathways to 'de-labeling'. *Curr Opin Infect Dis.* 2013;26(6):526-37
3. Swearingen SM, White C, Weidert S, Hinds M, Narro JP, Guarascio AJ. A multidimensional antimicrobial stewardship intervention targeting aztreonam use in patients with a reported penicillin allergy. *Int J Clin Pharm.* 2016;38(2):213-7.



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