

PENICILLIN ALLERGY ASSESSMENT TOOL



Does My Patient Have a Penicillin (PCN) Allergy?

Developed by The Johns Hopkins Hospital Department of Antimicrobial Stewardship



START HERE →

Have you ever had a reaction to PCN or PCN derivatives (e.g., amoxicillin, ampicillin, amoxicillin-clavulanate)?

YES

Did the reaction involve at least two of the following within 24 hours of first dose of antibiotic?

- Face swelling (throat, tongue, lips, eyes bilaterally)
- Wheezing and/or severe difficulty breathing
- Urticaria (hives)*: Raised itchy bumps (red or skin-colored); the center of a red hive turns white upon pressure
- Low blood pressure

YES

NO/UNKNOWN

Did you have a PCN skin test or a PCN/amoxicillin challenge, and were you told you were no longer allergic?

YES

NO

Remove/
do not enter
PCN allergy
or
communicate
with
prescriber

Document
patient reports
anaphylaxis, not
confirmed (if
applicable),
communicate to
prescriber

Request Allergy &
Immunology
Consult if
antibiotic needed

Other reactions

Does not recall
the reaction

Rash described as peeling/blistering AND associated with inflammation/blistering in the mouth, eyes or genitals*

YES

Document Stevens-Johnson-like syndrome

Isolated nausea, vomiting, diarrhea, headaches, dizziness or fatigue

YES

Remove/do not enter PCN allergy or communicate with prescriber

Maculopapular rash that appeared ≥ 2 days after antibiotic administration*

YES

Document non-urticarial rash

Reaction was a non-urticarial rash*, document non-urticarial rash

Have you taken amoxicillin or amoxicillin-clavulanate (augmentin)? If patient unsure, search in EMR for prior treatment.

YES

No reaction occurred, remove/do not enter allergy or communicate with prescriber

NO

Reaction was hives*, document hives

Have you taken cephalexin (keflex), cefuroxime (ceftin), or cefazolin? If patient unsure, search in EMR for prior treatment.





YES

No reaction occurred, document historical reaction to PCN, patient able to take cephalosporins, and document any cephalosporins given

NO

* See below for examples of skin reactions

Shenoy ES, Macy E, Rowe T, Blumenthal KG. Evaluation and Management of Penicillin Allergy: A Review. *JAMA*. 2019;321(2):188–199. doi:10.1001/jama.2018.19283

ANAPHYLAXIS	URTICARIA (HIVES)	EXFOLIATIVE DERMATITIS	NON-URTICARIAL RASH
 <ul style="list-style-type: none"> • Bilateral facial swelling • Wheezing and/or severe difficulty breathing • Occurs within 6 hours of antibiotic administration 	 <ul style="list-style-type: none"> • Itchy, red bumps with white centers • Occurs within 6 hours of antibiotic administration • Bumps disappear after a few hours and new ones may appear 	 <ul style="list-style-type: none"> • Skin peeling or blistering • Mucosal (eyes, mouth, genital) involvement • Develops after several days of antibiotics • Eg.,: Stevens-Johnson syndrome 	 <ul style="list-style-type: none"> • Tiny red dots covering a large area of the body • May feel rough to the touch • Appears after 2–3 days of antibiotic administration • Can be treated through and does not contraindicate future antibiotic use