

BACKGROUND

- Up to 10% of patients have penicillin allergy history, but less than 5% are truly allergic
- Penicillin allergy label is associated with adverse outcomes
 - Greater use of wider-spectrum antibiotics
 - Greater cost
 - Mortality
- De-labeling usually involves 2-step skin test followed by oral challenge if negative
 - Cost
 - Supply
 - Training
- PEN-FAST – Clinical decision-making tool developed in 2020 to identify patients with low risk of penicillin reaction
 - Safety and non-inferiority compared to standard procedure demonstrated in PALACE trial (2023) and ORACLE trial (2024)

Methods

- Create an educational pamphlet emphasizing that penicillin allergies are often not permanent and that the allergy label carries several risks to one's health
- Introduce the newly developed PEN-FAST score to patients to help empower them to better understand their condition and work with health-care providers
- Utilize language accessible to all levels of health literacy to broaden the target audience to all affected patients


RESULTS

Check your PEN-FAST Score


PEN	Penicillin allergy reported by patient	Yes/No (Proceed if yes)
F	Has it been Five or more years since your last reaction?	2 points
A	Did you faint, have low blood pressure, or swelling in your face or neck? (Anaphylaxis or Angioedema)	2 points
S	Did you have a Severe skin reaction, like blistering or peeling?	
T	Did you need any Treatment, like epinephrine, steroids, or antihistamines?	1 point
		Total Points (0-5)

Your score tells you how likely you are to have a positive penicillin skin test:


0 points: <1% risk 3 points: 20% risk
1-2 points: 5% risk 4-5 points: 50% risk



Talk to you provider about your penicillin allergy



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Sources


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Penicillin Allergies and PEN-FAST



CONCLUSION

- Having a penicillin allergy label can be detrimental to an individual's health care
- Educating patients on the risk of unnecessary allergy label may improve their healthcare and empower them to better understand and be involved in that care
- Further research may be done to assess the value and effectiveness of this outreach
- Further work could be done to fully implement PEN-FAST into clinical practice, potentially by creating a penicillin allergy management service

References

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About Penicillins

Penicillins are a type of antibiotic, a kind of medication used to fight infections

Penicillins are some of the **safest and yet still effective antibiotics** available

Penicillin Allergies

About **10%** of patients have reported a penicillin allergy

Less than **5%** of reactions are true allergies, with most being temporary sensitivities

Up to **80%** of people with anaphylactic penicillin allergies lose them after 10 years

Risks of having a penicillin allergy

Having a penicillin allergy in your medical records **increases your risk of dying** compared to patients without penicillin allergies

If you have an allergy to penicillin, this can limit the number of safe and effective options for treating infections

Alternative antibiotics are more likely to harm your normal gut bacteria, which can lead to **C. diff infection**

Patients with a penicillin allergy on their record tend to **pay more for healthcare** than those without one

Allergy Delabeling

Since there are many risks with a false penicillin allergy, there is testing available to remove the allergy, called "allergy delabeling"

Sometimes, you can get an oral challenge, or a small test- dose of penicillin

PEN-FAST

PEN-FAST is a tool used to help **safely remove inaccurate and harmful penicillin allergies**

Using PEN-FAST can save **time, money, and resources**