The Importance of Penicillin Allergy Testing
Penicillin allergy skin testing is a novel approach to address the misuse of antibiotics and to support optimal antibiotic utilization.¹

The Threat of Antibiotic Resistance
The number of antibiotic-resistant bacteria continues to increase every year.\textsuperscript{3}

The number of antibiotics in the approval pipeline continues to decrease each year.\textsuperscript{3}

The use of antibiotics is the single most important factor leading to antibiotic resistance around the world.

Antibiotics are among the most commonly prescribed drugs used in human medicine.\(^4\)
Up to 50% of all antibiotics prescribed are not needed or are not optimally effective as prescribed.\textsuperscript{4}
23,000 deaths in the U.S. each year are caused by drug resistant bacteria.\(^3\)

Know the Facts
Penicillin allergy is the most commonly reported drug allergy.\textsuperscript{6}

Ten percent of patients in the U.S. report penicillin allergy.\textsuperscript{5}

But 9 out of 10 patients reporting penicillin allergy are not truly allergic when assessed by skin testing.\textsuperscript{5}
An unverified penicillin allergy is a significant public health problem. ¹

**False reporting of penicillin allergy**

MAY LEAD TO

**Broad spectrum antibiotics use**

WHICH IS LINKED TO

**Increased antibiotic resistance, cost and toxicity.** ¹

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True hypersensitivity to penicillin decreases over time.\(^6\)

**More than half** of skin test positive patients lose sensitivity by 5 years.\(^6\)

**80%** of skin test positive patients lose sensitivity by 10 years.\(^6\)

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The AAAAI encourages more widespread use of penicillin allergy skin testing.²

Unverified penicillin allergy in hospitalized patients is associated with **longer hospital stays** and **increased rates** of serious drug resistant infections.\(^7\)
In the largest study of penicillin allergy testing in hospitalized patients, penicillin skin testing prevented more than 500 inpatient days and more than 600 outpatient days on alternative agents.6

Incorrect penicillin allergies constitute a major barrier to antimicrobial stewardship, with significant clinical and economic implications, including increased:

- Antimicrobial resistance\(^1\)
- Overall care costs\(^1\)
- Length of stay\(^1\)
- Mortality rate\(^1\)

September 28th—the date Alexander Fleming discovered penicillin in 1928—has been designated **National Penicillin Allergy Day**, an annual celebration to raise awareness around the impact of carrying a penicillin allergy label and how it affects a patient’s healthcare treatment.

To learn more about National Penicillin Allergy and how you can get involved, visit [nationalpenicillinallergyday.com](http://nationalpenicillinallergyday.com)
Appendix


