

Antibiotic-Resistant Bacteria Is a Growing Threat, 2023

Where superbugs come from and what can be done to combat them

Antibiotic-resistant bacteria pose an urgent and growing public health threat.

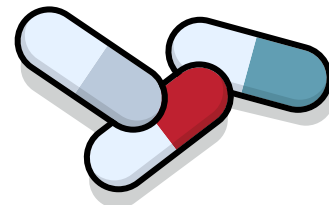


Common bacteria, such as those that cause urinary tract infections and sexually transmitted infections, are becoming **increasingly difficult to treat**.

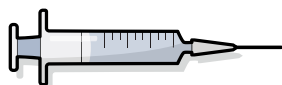
Without effective antibiotics, even **simple infections could become deadly**, making medical procedures like surgery, chemotherapy, and dialysis too dangerous.

2.8 million

antibiotic-resistant infections occur in the U.S. each year.

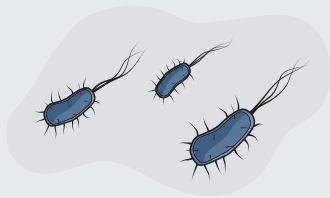


More than 35,000 die as a result.



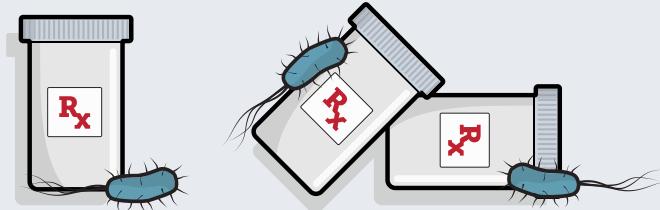
Globally, some 1.27 million people died from antibiotic-resistant infections in 2019.

How do bacteria become resistant to antibiotics?



Bacteria are constantly **evolving** to beat the drugs used to fight them. As bacteria mutate, some develop the ability **to fight off different antibiotics** and survive to multiply and spread resistance.

Sooner or later, those **superbugs will evolve** to defeat every antibiotic on the pharmacy shelf, so **new drugs** to fight infections **will always be needed**.



What is driving the rise in multidrug-resistant superbugs?

The more antibiotics are used, the less effective they become. Unnecessary and inappropriate use accelerates that process.



1 in 3

antibiotic prescriptions written in doctors' offices, emergency rooms, and hospital-based clinics are **unnecessary**—this equals about **47 million prescriptions each year**.

52%

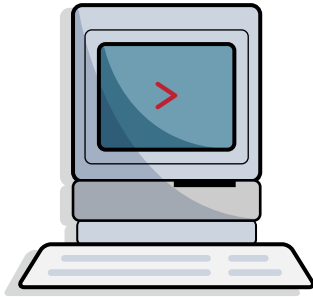


only about half of patients treated with antibiotics for common infections received the recommended antibiotic based on established prescribing guidelines.

The COVID-19 pandemic has intensified the superbug threat.

Early in the pandemic, antibiotics were often given to patients even though these drugs do not effectively treat viral illnesses.

↑ The U.S. saw a **15%** increase in infections and deaths from drug-resistant bacteria in the first year of the COVID-19 pandemic.



Today, there are fewer than 50 antibiotics in global clinical development.

Alarmingly, just a handful of those drugs are targeted against the pathogens that present the most urgent threats.

What can be done to combat antibiotic-resistant bacteria?

Better stewardship for existing antibiotics

Eliminate inappropriate use of these lifesaving drugs.



Innovation to find new types of antibiotics

Address the complex economic barriers hindering the development of **new treatment options** for patients.



Together, these efforts will help save antibiotics and protect the health of patients today and for generations to come.



This infographic was updated in December 2023 to reflect the most current information on the antibiotics pipeline.

For more information, please visit:
pewtrusts.org/antibiotic-resistance-project

The Pew Charitable Trusts

Contact: Heather Cable, manager, communications

Email: hcable@pewtrusts.org

Project website: pewtrusts.org/antibiotic-resistance-project

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