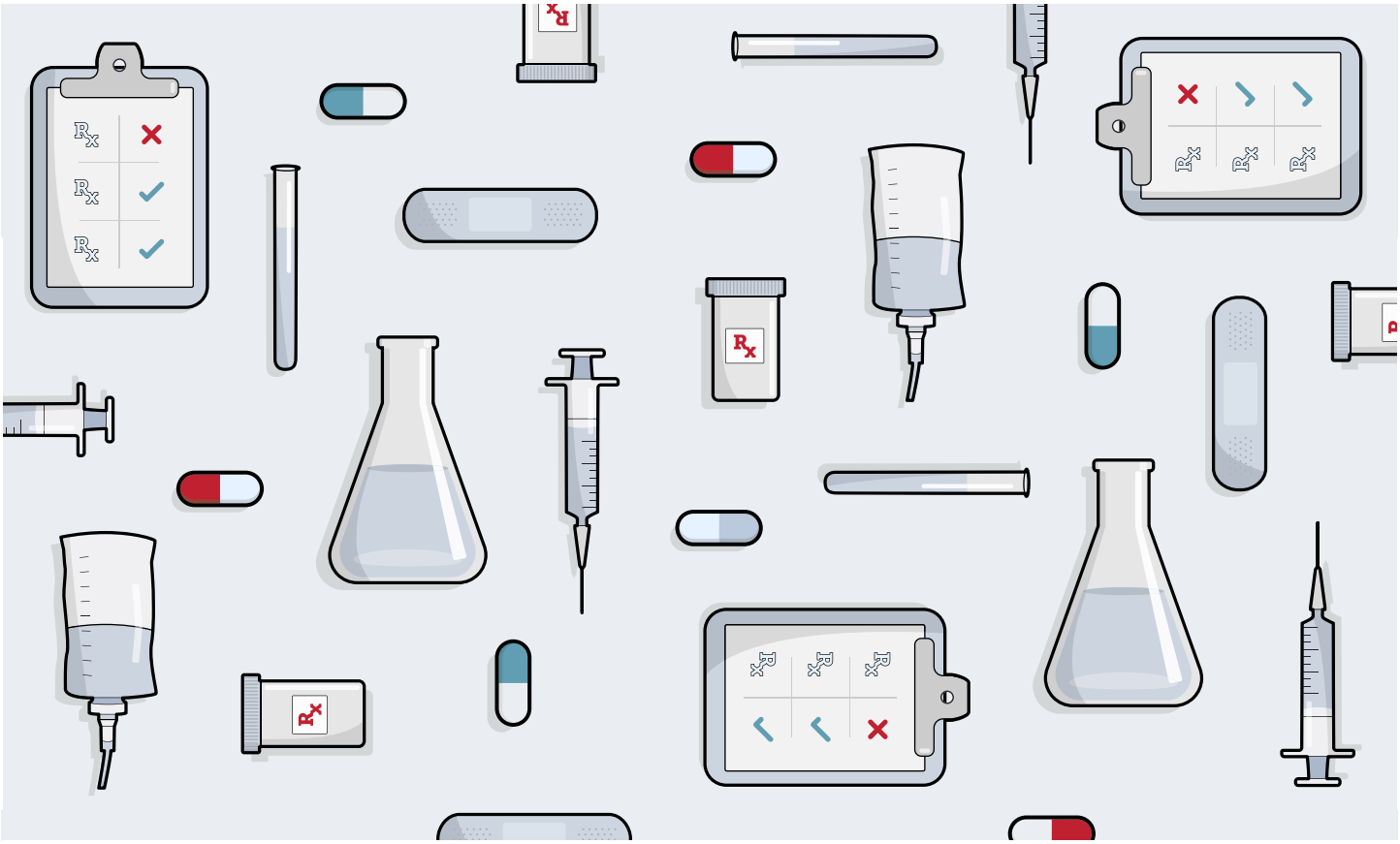


Antibiotic-Resistant Bacteria is a Growing Threat

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

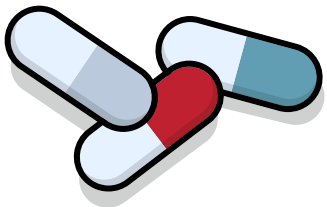
Antibiotic-resistant bacteria pose an urgent and growing public health threat.

Common bacteria, such as those causing strep throat, urinary tract infections, and gonorrhea, 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.

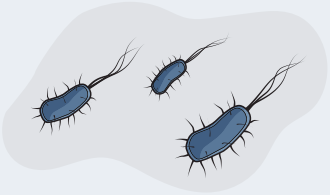
2.8 million

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



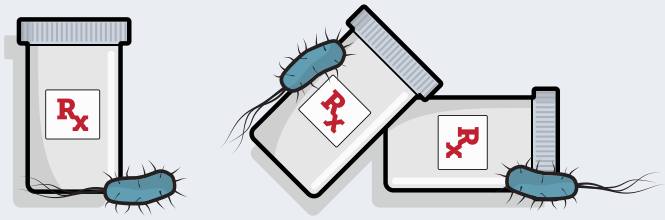
More than 35,000 die as a result.

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.

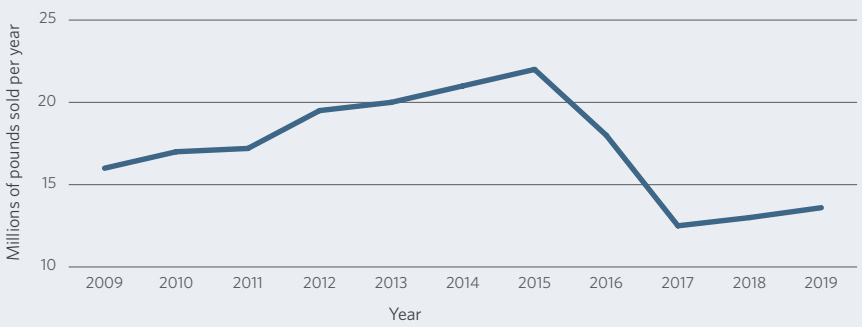
In human health care:

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.**

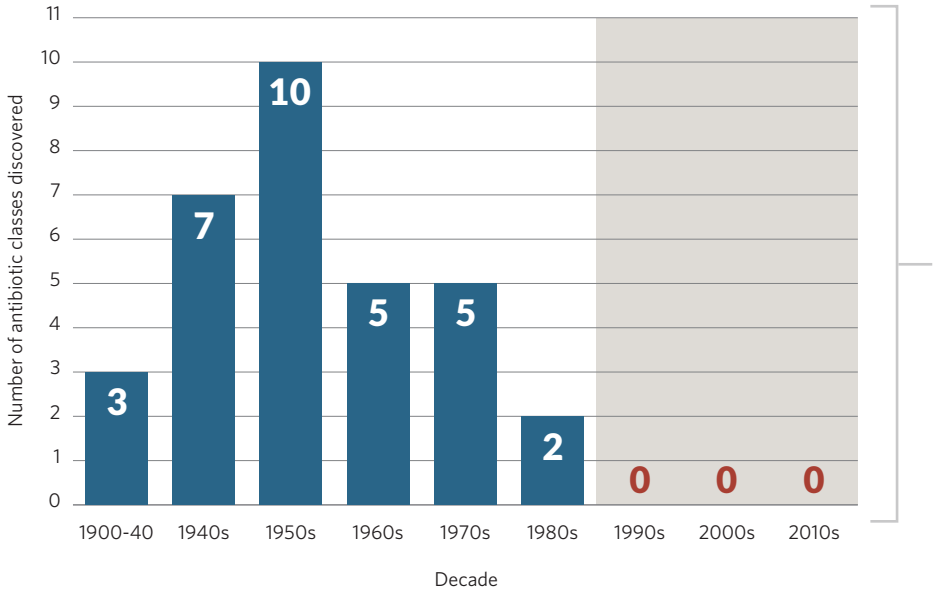
On the farm:

13.6

million pounds of antibiotics important to human medicine were **sold for use in food animals** in 2019.



Meanwhile, discovery of novel antibiotics is not keeping pace with the emergence of new superbugs.



35+
year gap

Every FDA-approved antibiotic in use today is based on a scientific discovery from 1984 or earlier.

What can be done to combat antibiotic-resistant bacteria?

Better stewardship for existing antibiotics

Eliminate inappropriate use of these lifesaving drugs in both humans and animals.

Reduce the need for antibiotics by using **alternative** and **nontraditional approaches** to disease treatment and prevention.

Innovation to find new types of antibiotics

Support **targeted research** initiatives to overcome scientific challenges impeding the discovery of new 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.

Editor's note: This infographic was updated in February 2021 to reflect the release of the most recent data.

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

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