

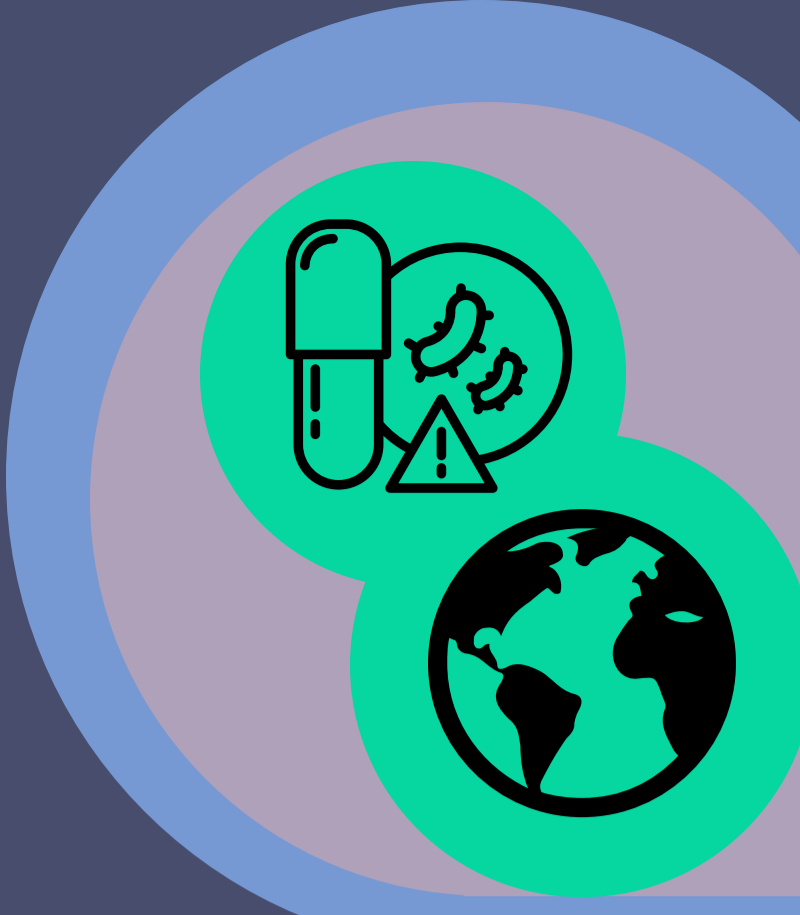
# Antibiotic

## Resistance:

### A Global Threat to Healthcare

By: Hannah Hinrichs

When bacteria defeat the antibiotics designed to kill them, resistance develops. Preventing and minimizing resistance can improve treatment outcomes and prevent deaths across the world.<sup>1,2</sup>



## The Impacts of Resistance:



Antibiotic resistance has been found in all regions of the world.<sup>2</sup>



Named one of the most important threats of the 21st century by the WHO.<sup>3</sup>



2.8 million infections exhibit antibiotic resistance in the U.S. annually.<sup>2</sup>



23,000 deaths in the U.S. annually as a result of antibiotic resistance.<sup>3,4</sup>



270 million antibiotic prescriptions filled annually in the U.S.<sup>4,5</sup>



30% of antibiotics prescribed in the U.S. annually are unnecessary.<sup>5</sup>

## How Resistance Develops and Spreads:



### Incorrect use of antibiotics<sup>6</sup>

With use of incomplete or suboptimal regimens, bacteria may select for resistance.



### Overprescribing of antibiotics<sup>5</sup>

When antibiotics are unnecessarily prescribed, resistance may develop and spread.



### Not finishing antibiotic courses<sup>6</sup>

Finishing antibiotic courses effectively kills bacteria, which minimizes development and spread of resistance.



### Improper disposal of antibiotics<sup>6</sup>

Antibiotics find their way into the environment and may lead to resistance when improperly disposed.



### Wastewater environmental introduction<sup>6</sup>

Often, antibiotics are introduced to the environment where they spread and develop resistance via wastewater.



### Agricultural introduction to environment<sup>7,8</sup>

Like in humans, animals may also develop antibiotic resistance and spread it to humans through contact or waste.

## Proper Disposal of Antibiotics:<sup>9,10</sup>



DO NOT flush antibiotics down the toilet



Check for a drug take-back event in your community

Check with your local pharmacy, trash service, or law enforcement agency to see if this is an option in your community.



Follow these steps for home disposal:

1

Remove medication from its original container.

2

Mix medication with coffee grounds, dirt, or cat litter.

3

Place mixture in a closable bag or container to prevent leakage.

4

Throw bag or container into garbage.

5

Remove personal information from original medication container and dispose of container.

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