



## Antibiotic Overuse



### Overview

Antibiotics are our best defense against bacteria. But did you know many antibiotics don't work as well as they once did? Some no longer work at all. And the reason may surprise you.

### Antibiotic resistance

Antibiotics are losing their effectiveness because they're so popular. When people are sick, they ask for antibiotics. And some doctors prescribe them just to be safe, even when they aren't needed (they aren't effective against viral infections, for example). This is overuse. It leads to something we call "antibiotic resistance." Here's how it happens.

### How it happens

When an antibiotic meets bacteria, almost all of the germs die. But a few may survive. That's because there are slight genetic differences from germ to germ. We call these "mutations." A mutation can make a germ stronger. If the germ isn't killed, it makes copies of itself. The copies all have this same mutation. This is a new strain of bacteria. We say it is "resistant" to the antibiotic. And it takes a stronger antibiotic to kill it.

### Conclusion

The good news is, you can help prevent antibiotic resistance. Use antibiotics only when they're really needed. Don't pressure your doctor into prescribing them. Never take antibiotics that weren't meant for you. When you do take an antibiotic, finish the entire course. And wash your hands to avoid germs. Ask your doctor for more information.