

# Antibiotic Use Questions and Answers

What Everyone Should Know

## What is an antibiotic?

Antibiotics are medicines that fight infections caused by bacteria in humans and animals by either killing the bacteria or making it difficult for the bacteria to grow and multiply.

Bacteria are germs. They live in the environment and all over the inside and outside of our bodies. Most bacteria are harmless and even helpful to people, but some can cause infections, like strep throat.

## What DO antibiotics treat?

Antibiotics **ONLY** treat certain infections caused by bacteria, such as:

- Strep throat
- Whooping cough
- Urinary tract infection (UTI)

Antibiotics are also needed to treat life-threatening conditions caused by bacteria, such as [sepsis](#), which is the body's extreme response to infection.

## What DON'T antibiotics treat?

Antibiotics **DO NOT** work on viruses, such as those that cause:

- Colds and runny noses, even if the mucus is thick, yellow, or green
- Most sore throats (except strep throat)
- Flu
- Most cases of chest colds (bronchitis)

Antibiotics also **ARE NOT** needed for some common bacterial infections, including:

- Many sinus infections
- Some ear infections

This is because these illnesses will usually get better on their own, without antibiotics.

Taking antibiotics when they're not needed won't help you, and their side effects can still cause harm.

## What are the side effects of antibiotics?

Anytime antibiotics are used, they can cause side effects. Common side effects range from minor to very severe health



**Viruses or Bacteria What's got you sick?**

Common Respiratory Infections	COMMON CAUSE		Are Antibiotics Needed?
	Virus	Bacteria	
Common cold/flu/sore	✓		No
Sore throat (except strep)	✓		No
COVID-19	✓		No
Flu	✓		No
Scarlet fever/sore throat in otherwise healthy children and adults*		✓	Yes
Middle ear infection		✓	Maybe
Sinus infection		✓	Maybe
Strep throat		✓	Yes
Whooping cough		✓	Yes

\* Studies show that in otherwise healthy children and adults, antibiotics for scarlet fever rarely are helpful.

To learn more about antibiotic prescribing and use, visit [www.cdc.gov/antibiotic-use](http://www.cdc.gov/antibiotic-use).

Virus or Bacteria What's got you sick?  [PDF – 1 Page]

Viruses are germs different from bacteria. They cause infections, such as colds and flu. However, antibiotics do not treat infections caused by viruses.

For more information on common illnesses and when antibiotics are and aren't needed, visit [Common Illnesses](#).

problems and can include:

- Rash
- Nausea
- Diarrhea
- Yeast infections

More serious side effects can include:

- *C. diff* infection, which causes diarrhea that can lead to severe colon damage and death
- Severe and life-threatening allergic reactions
- Antibiotic-resistant infections

#### More about:

- [C. diff infection](#)
- [Antibiotic-resistant infections](#)

Call your doctor if you develop any side effects while taking your antibiotic.

## Why is it important to take antibiotics only when they're needed?

Antibiotics are important to treat infections and have saved countless lives.

For more information on antibiotic resistance, visit [Antibiotic Resistance Questions and Answers](#).

However, anytime antibiotics are used, they can cause side effects and contribute to antibiotic resistance, one of the most urgent threats to the public's health.

When antibiotics are needed, the benefits usually outweigh the risks of side effects or antibiotic resistance. However, too many antibiotics are prescribed unnecessarily and misused, which threatens the usefulness of these important drugs.

This is why it's important that we all use antibiotics **ONLY** when we need them to protect us from harms caused by unnecessary antibiotic use and to combat antibiotic resistance.

## What is unnecessary antibiotic use?

Unnecessary antibiotic use happens when a person is prescribed antibiotics when they're not needed, such as for colds and flu.

Unnecessary use also happens when a person is prescribed antibiotics for infections that are sometimes caused by bacteria that do not always need antibiotics, like many sinus infections and some ear infections.

**Antibiotics aren't always the answer when you're sick.** It's important to use antibiotics only when they are needed to protect yourself from harms caused by unnecessary antibiotic use and combat antibiotic resistance.

## What is misuse of antibiotics?

Misuse of antibiotics happens when a person is prescribed

- the wrong antibiotic,
- the wrong dose of an antibiotic, or
- an antibiotic for the wrong length of time.

Talk with your doctor about the best treatment for your illness.