

Antibiotic Resistance



What Are Antibiotics?

Antibiotics are medicines that treat illnesses caused by germs (bacteria), such as pneumonia. They do not treat illnesses caused by viruses, such as colds. Antibiotics are strong medicines, can cause side effects, and should be used only when you really need them. When these medicines are used for the wrong reason, such as to treat a cold or flu, they do not help you get better.



What Is Antibiotic Resistance?

Antibiotic resistance means that some antibiotics will no longer work to treat certain illnesses. Antibiotic resistance can lead to:

- Longer and more complicated illnesses
- More doctor visits
- Needing stronger, more expensive medicines
- Needing older medicines with more side effects



When Should I Use Antibiotics?

This depends on the cause of your illness. Antibiotics should *not* be used for:

- Colds and flu. These are caused by viruses, not bacteria. Antibiotics will not work or help you feel better. Ask your doctor which medicines can help you feel better.

Antibiotics may or may not be used for:

- **Sore throats.** Most sore throats are caused by viruses and should not be treated with antibiotics. However, strep throat is caused by bacteria and is treated with antibiotics. If you have a sore throat, contact your doctor to see if you need a strep test or if you should just treat your symptoms with over-the-counter medicines.
- **Coughs.** A cough is usually caused by a virus, not bacteria. This means that it will go away on its own without antibiotics. If you have a cough that lasts longer than 6 weeks or if you have a breathing condition, ask your doctor for advice.
- **Sinus infections.** Most sinus problems clear up without antibiotics. If you have sinus problems for more than 10 days, or if your symptoms get better and then get worse, ask your doctor for advice.

If you have symptoms that concern you, talk with your doctor about which medicines could help.

Antibiotic Resistance



How Can I Stay Safe?

- Do not take antibiotics for viral illnesses, like colds and flu.
- If you are prescribed antibiotics, take all of your medicine, even if you start to feel better.
- Never use someone else's antibiotics.
- Do not take antibiotics leftover from past illnesses.
- Speak up if you have had an allergic reaction to an antibiotic in the past.
- Prevent illness by washing your hands often, especially after using the bathroom and before eating.



Bottom Line

- Antibiotics are strong medicines that treat infections caused by bacteria. It's important to use antibiotics only when you really need them.
- Antibiotic resistance means the medicine no longer works as well as it should. This can happen when you use antibiotics for the wrong illness or do not take your medicine as directed.
- Antibiotics are used for illnesses caused by bacteria, not viruses. Many times they are used even if they are not needed. It's important to speak with your doctor about when antibiotics are right for you.



Questions for My Doctor

- How can I tell if I need antibiotics?
- How long should I take antibiotics?
- What can I do to feel better without using antibiotics?
- When will I feel better?
- How do I know if I feel sick from a virus or bacteria?
- What are the side effects of antibiotics?

For More Information

- **ACP:** <http://annals.org/article.aspx?articleid=2481816>
- **Centers for Disease Control and Prevention:** <https://www.cdc.gov/drugresistance/>
- **Food and Drug Administration:** www.fda.gov/ForConsumers/ConsumerUpdates/ucm092810.htm

Notes: