



A New Threat to Your Health: Antibiotic Resistance

From the Center for Disease Control

This page briefly explains the difference between bacteria and viruses and how bacteria become resistant. It also answers some common questions about when it is and is not appropriate to use an antibiotic.

WARNING: Unnecessary antibiotics CAN be harmful

You do not need antibiotics to fight a cold or the flu. When you are sick your illness is most likely caused by a virus, though some signs like high fever may signal that it could be caused by bacteria. Illness caused by viruses, like most coughs, colds, sore throats, or the flu, will not be helped at all by antibiotics. Illness caused by bacteria, like strep throat, can be treated with antibiotics.

Antibiotics kill bacteria, not viruses

Taking antibiotics when you do not need them can cause antibiotics not to work when you do need them.

Antibiotics are strong medications that can kill bacteria, and by doing so can save lives. Many bacteria can defend themselves against antibiotics by changing their chemical or biological make-up to overpower the antibiotics they are exposed to. Those bacteria are called antibiotic resistant, and exposing them to further antibiotics only increases their ability to develop greater resistance. Infection with antibiotic resistant bacteria may be more difficult to treat, often requiring two or more antibiotics with multiple side effects to overcome the resistance. Worse, your body may still harbor a few bacteria that are resistant that have been suppressed by your own immune system, but if you get another viral illness or other condition that lowers your immune systems function, then these resistant bacteria can again start to cause problems and can lead to serious illness, or even death. The worst possible outcome is that these infections may spread to family and friends.

Some infections, such as strep throat, are best treated with antibiotics. However, taking antibiotics when you don't need them, such as for a cold or the flu, can increase your risk of getting a resistant infection.

"I need an antibiotic so I can get back to work quickly"

If you have a viral cold or the flu, antibiotics will not help you feel better or keep the illness from spreading. The viral infection will need to run its time course and antibiotics will NOT speed you back to work. The infection will be

less likely to spread to others if you avoid close contact and wash your hands frequently.

"But in the past I've taken antibiotics for similar colds and flu and haven't gotten a resistant infection"

Antibiotic resistance is a new and growing threat to your health. It is now important to use antibiotics only when they are needed. Your doctors have also been learning more about antibiotic resistance, and as a result have become more cautious with the prescription of antibiotics. They will ask you questions and examine you to find the cause of your illness, then give you the proper care, which may only require medications to provide comfort and support until the viral infection has been controlled by your bodies' own immune system. If you need antibiotics, and they are used correctly, they are useful and important medicines. Work with your doctor to use antibiotics only when they are needed.

Correct use of antibiotics:

- Take all of your antibiotic prescription - do NOT stop taking them after you start to feel better.
- Take your doses regularly - missing doses that must be taken more than once daily increase the bacteria's ability to develop resistance, even while you are still taking your prescription!
- Do NOT take a few days of antibiotics you have "left over" from a previous infection if you have not discussed this with your doctor - the infection may not be the same, and using only a few days leads to partial treatment and increased chances of drug resistance!

To avoid the threat of antibiotic-resistant infections the CDC recommends that you avoid unnecessary antibiotics.

If you have a viral infection, such as a cold or the flu, taking antibiotics

- will **not** affect the course of or cure the infection
- will **not** keep others from catching your illness
- will **not** help you feel better, but
- will **increase** your risk of infection with antibiotic resistant bacteria.

Use antibiotics wisely. Talk to your doctor about the right medicines for your illness.