

What are antibiotics?

Antibiotics are strong medicines that can stop some infections and save lives. But antibiotics can cause more harm than good when they aren't used the right way. You can protect yourself and your family by knowing when you should use antibiotics and when you shouldn't.

Don't antibiotics work against all infections?

No. Antibiotics only work against infections caused by bacteria. They don't work at all against infections caused by viruses. Viruses cause colds and most coughs and sore throats.

What is "bacterial resistance"?

Usually antibiotics kill bacteria or stop them from growing. However, some bacteria have become resistant to specific antibiotics so the antibiotics don't work against them. Resistant bacteria develop faster when antibiotics are used too often or are not used correctly.

Resistant bacteria sometimes can be treated with antibiotics to which the bacteria have not yet become resistant. These medicines may have to be given intravenously (through a vein) in a hospital. A few kinds of resistant bacteria are untreatable.

What can I do to help myself and my family?

Don't expect antibiotics to cure every illness. Don't take antibiotics for colds or the flu. Often, the best thing you can do is to let colds and the flu run their course. Sometimes this can take 2 weeks or more. Call your doctor if your illness gets worse after 2 weeks.

How do I know when I need antibiotics?

The answer depends on what is causing your infection. The following are some basic guidelines:

- **Colds and flu.** Viruses cause these illnesses. They can't be cured with antibiotics.
- **Cough or bronchitis.** Viruses almost always cause these. However, if you have a problem with your lungs or an illness that lasts a long time, bacteria may actually be the cause. Your doctor may decide to try using an antibiotic.
- **Sore throat.** Most sore throats are caused by viruses and don't need antibiotics. However, strep throat is caused by bacteria and does require antibiotics. A throat swab and a lab test are usually needed before your doctor will prescribe an antibiotic for strep throat.
- **Ear infections.** There are several types of ear infections. Antibiotics are used for some, but not all, ear infections.
- **Sinus infections.** Antibiotics should only be used for severe infections or infections that last more than 2 weeks, since these may be caused by bacteria. Antibiotics may be useful for sinus infections in patients who have other diseases, such as asthma. A runny nose and yellow or green mucus do not necessarily mean you need an antibiotic.

(Cont. on Back)

Once I start feeling better, should I stop taking my antibiotic?

No. As bothersome as it might be to take several pills a day for multiple days, it is extremely important that you take your pills when you are supposed to and that you take all of them. There is a reason why antibiotic prescriptions are as extensive as they are.

When you begin taking an antibiotic, the drug starts by inhibiting the most vulnerable, or susceptible bacteria of the infection. As you take more of the prescription, the more resistant bacteria are also inhibited. Stopping the drug when you start to feel better might leave behind the most resistant bacteria, which can reproduce and cause the infection to recur – this time more (if not totally) resistant to the antibiotic previously used.

This is why it is essential that you take your entire antibiotic prescription. This is also why you should never take a leftover prescription rather than going to your doctor. Not only will you wind up taking too little of the drug, but the infection might be viral (in which case antibiotics are useless), or the antibiotic may be the wrong kind for that particular infection.

The moral of the story is, ***finish your antibiotic prescription, even after you start feeling better***, and ***never take a leftover prescription***. Otherwise, you might contribute to the development of antibiotic resistance.