

## Antibiotics: When They Can and Can't Help

### 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.

### Do antibiotics work against all infections?

No. Antibiotics only work against infections caused by bacteria. They don't work against any infections caused by viruses. Viruses cause colds, the flu, 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. This means that the antibiotics don't work against them. Bacteria become resistant more quickly when antibiotics are used too often or are not used correctly.

Resistant bacteria sometimes can be treated with different 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 viral illnesses like colds or the flu. Often, the best thing you can do is let colds and the flu run their course. Sometimes this can take 2 weeks or more. If your illness gets worse after 2 weeks, talk to your doctor. He or she can also give you advice on what you can do to ease your symptoms while your body fights off the virus.

### 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. Usually you'll have a throat swab and a lab test 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 are often used to treat sinus infections. However, a runny nose and yellow or green mucus do not necessarily mean you need an antibiotic.

