

# Unnecessary Antibiotics Can Be Harmful

## About antibiotics

Antibiotics are among the most powerful and important medicines known. When used properly they can save lives, but used improperly, they can actually harm your child. Antibiotics should not be used to treat viral infections.

## Bacteria and viruses

Two main types of germs—bacteria and viruses cause most infections. In fact, viruses cause most coughs and sore throats and all colds. Antibiotics can cure bacterial infections, but not common viral infections. Your child recovers from these common viral infections when the illness has run its course.

## Resistant bacteria

New strains of bacteria have become resistant to antibiotics. The antibiotic does not kill these bacteria. Some of these resistant bacteria can be treated with more powerful medicines, which may need to be given by vein (IV) in the hospital, and a few are already untreatable. The more antibiotics prescribed the higher the chance that your child will be infected with resistant bacteria.

## How bacteria become resistant

Each time we take antibiotics, sensitive bacteria are killed, but resistant ones may be left to grow and multiply. Repeated use and improper use of antibiotics are some of the main causes of the increase in resistant bacteria. These resistant bacteria can also be spread to others in the family and community.

## When are antibiotics needed, and when are they not needed?

Your doctor best answers this complicated question, and the answer depends on the specific diagnosis. Here are a few examples:

- **Ear infections.** There are several types; some need antibiotics, but some do not.
- **Sinus infections.** Most children with thick or green mucus do not have sinus infections. Antibiotics are needed for some long-lasting or severe cases.
- **Cough or bronchitis.** Children rarely need antibiotics for bronchitis.
- **Sore throat.** One main kind, strep throat, requires antibiotics. This kind must be diagnosed by a laboratory test.
- **Colds.** Colds are caused by viruses and may sometimes last for 2 weeks or more. Antibiotics have no effect on colds, but your doctor may have suggestions for comfort measures while the illness runs its course.

## The infection may change

Viral infections may sometimes lead to bacterial infections. But treating viral infections with antibiotics to prevent bacterial infections does not work, and may lead to infection with resistant bacteria. Keep your doctor informed if the illness gets worse or lasts a long time, so that proper treatment can be given, as needed.

## **Commonly asked questions**

### **What can I do to protect my child from antibiotic-resistant bacteria?**

Use antibiotics only when your doctor has determined that they might be effective. Antibiotics will not cure most colds, coughs, sore throats, or runny noses. Children fight off colds on their own.

### **If mucus from the nose changes from clear to yellow or green, does this mean that my child needs an antibiotic?**

Yellow or green mucus does not mean that your child has a bacterial infection. It is normal for the mucus to get thick and change color during a viral cold.

### **Does this mean I should never give my child antibiotics?**

Antibiotics are very powerful medicines, and should be used to treat bacterial infections. If an antibiotic is prescribed, make sure you take the entire course and never save antibiotics for later use.

### **How do I know if my child has a viral or bacterial infection?**

Ask your doctor. If you think that your child might need treatment, you should contact your doctor. But remember, colds are caused by viruses, and should not be treated with antibiotics.