

## **You, Your Family and Antibiotics: The Untold Story**

### **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 should avoid them.

### **Don't antibiotics work against all infections?**

No. Antibiotics work in infections caused by bacteria. They don't work at all in infections caused by a virus.

### **What's the difference between viruses and bacteria?**

Most infections are caused by viruses or bacteria. Viruses cause colds and most coughs and sore throats. Infections caused by viruses can't be cured with antibiotics. Bacterial infections can be cured with antibiotics.

### **What is bacterial resistance?**

Usually antibiotics kill bacteria or stop them from growing, but some bacteria have grown stronger and antibiotics won't work against them. These stronger bacteria are called "resistant" because they resist antibiotics. Sometimes, resistant bacteria can be treated with more powerful medicines. But, these medicines may have to be given intravenously (through the vein) in a hospital.

### **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 flu. Often, the best thing you can do is to let colds and flu run their course. Sometimes this can take two weeks or more. Call your doctor if your illness gets worse after two weeks.

### **How do I know when I need antibiotics?**

The answer to this question is complicated. The answer depends on the specific diagnosis. The following are some basic guidelines:

Colds and flu - These illnesses are caused by viruses. They can't be cured with antibiotics. Symptoms can last two weeks or more.

Cough or bronchitis - These are almost always caused by viruses. However, if you have a lung condition or the illness lasts a long time, your infection may actually be caused by bacteria instead of a virus. Your doctor may decide to try treatment with an antibiotic.

Sore throat - Most sore throats are caused by viruses. Strep throat is caused by bacteria and requires treatment with antibiotics. A throat swab and a lab test are needed before your doctor will prescribe an antibiotic for a sore throat.

Ear infections - There are several types of ear infections. Antibiotics are used for most ear infections, but not all ear infections.

Sinus infections - Even if you have a runny nose, or yellow or green mucus coming from your nose, you may not have a bacterial infection. Antibiotics should only be used for severe infections or infections that last more than two weeks, since these may be caused by a bacterial infection.

This information provides a general overview on antibiotic resistance and may not apply to everyone. Talk to your family doctor to find out if this information applies to you and to get more information on this subject.

Visit the AAFP Web Site at <http://www.aafp.org/healthinfo> for more useful information.

Eastern Carolina Family Practice Center  
East Carolina University  
School of Medicine  
May 1999  
RL 8.1