

About....Antibiotic Use and Antibiotic Resistance

What are antibiotics?

Antibiotics are powerful medicines prescribed by a health care provider to treat infections caused by bacteria. Antibiotics do not treat viral infections, such as the common cold or influenza (the flu).

How do antibiotics work?

Antibiotics work by killing bacteria that cause infection or by keeping these bacteria from growing. Different antibiotics work for different bacteria. It is important to take antibiotics exactly as directed by your health care provider. Taking antibiotics when they are not needed increases your risk for later developing an infection that will be resistant to antibiotic treatment.

When do I need an antibiotic?

Your health care provider may prescribe an antibiotic if you have a bacterial infection. Your health care provider will review your symptoms and any laboratory tests to prescribe the antibiotic that is right for you. Antibiotics do not cure viral infections, such as the common cold or influenza (the flu). The risk for viral infections can be reduced by avoiding close contact with others and properly washing your hands (see Quick Facts [about Hand Washing](#)).

What is antibiotic resistance?

Antibiotic resistance occurs when bacteria change in ways that reduce or prevent the effectiveness of an antibiotic. The bacteria survive, grow, and you will continue to be ill. Illnesses caused by bacteria resistant to antibiotics can cause serious disability or even death. You can also spread these resistant bacteria to others.

Why should I be concerned about antibiotic resistance?

Antibiotic resistance is a public health concern, because these resistant bacteria can spread from person to person or from objects used by someone who is infected. The bacteria then cause new infections that are more difficult or impossible to cure. Since these resistant infections are harder to treat, they last longer and are more severe. People infected may need more expensive and stronger medications and may need to be hospitalized for longer periods of time.

What can I do to control the spread of resistant bacteria?

Repeated and improper use of antibiotics is the main reason bacteria become drug resistant. [Proper hand washing](#) decreases the risk of spreading these infections. Proper use of antibiotics is extremely important:

- Only take antibiotics to treat bacterial infections. Antibiotics do not treat viral infections. See your health care provider if you think you have a bacterial infection.
- Take the antibiotic exactly as prescribed by your health care provider. Do not skip doses. Complete the entire course of treatment even if you feel better.
- Do not save antibiotics for another illness.
- Do not demand that your health care provider prescribe antibiotics when they are not needed. Ask what else you can do to relieve the symptoms.
- Do not take another person's antibiotic or share your antibiotic with someone else.

All information presented is intended for public use. For more information, please contact:

Centers for Disease Control and Prevention, Get Smart: Know When Antibiotics Work campaign at <http://www.cdc.gov/drugresistance/community/antibiotic-resistance.htm>

Indiana Coalition for Antibiotic Resistance Educational Strategies at www.icares.org

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