

ANTIBIOTICS USE AND ABUSE



Antibiotics, also called antibacterials, are a type of antimicrobial drug used in the treatment and prevention of bacterial infections. They may either kill or inhibit the growth of bacteria. Imagine a world without antibiotics: The cut on your finger might lead to serious infection; the simplest operation could be a perilous undertaking; there would be no effective cures for tuberculosis, cholera, strep throat or sexually transmitted disease; and bacterial meningitis in a child would likely be fatal. It may seem hard to believe, but a century ago — before antibiotic drugs became widely available — these risks were very real.

These omnipresent drugs have been hailed as one of the most significant medical achievements of the 20th Century. However, in recent years, a disturbing trend has been noted throughout the world: The life-saving drugs we once relied on are now less effective at fighting the organisms that cause disease.

The period from the 1950s through the 70's is sometimes called the “golden age” of antibiotics. Many new classes of antibiotic drugs were developed, and they were arguably prescribed rather indiscriminately. This led to the misconception among some patients that antibiotics would work for any ailment, and would always be given. It also led some doctors to adopt a “better-safe-than-sorry” approach, even if it wasn't certain that the drugs would be of value in a particular case. Antibiotics were also recommended as preventive measures when there was risk of infection, and were often given for viral infections, like colds and flu — for which they are not effective at all.

In addition — and perhaps what's most unsettling — they have made their way increasingly into the food chain, as feed additives for animals, designed to prevent disease and promote faster growth; and into the environment, as ingredients in cleaning products and trace contaminants in water. And gradually, that has led to notable change.

Misuse and overuse of these drugs, however, have contributed to a phenomenon known as antibiotic resistance. This resistance develops when potentially harmful bacteria change in a way that reduces or eliminates the effectiveness of antibiotics.

Bacteria evolve and antibiotics don't, giving the bacteria a resistance to the antibiotics, and it's becoming increasingly harder to develop new antibiotics. Doctors are over prescribing them and it is causing super bugs to form. Super bugs are resistant to our antibiotics we use if over prescribed and then we have bacteria we cannot get rid of. Doctors should only give out antibiotics when it is necessary. The problem is when we take antibiotics often, our bodies become immune. Also, bacteria evolve and learn to adapt to the antibiotics. Many disease causing bacteria are becoming resistant to the antibiotics we have and we are losing in the battle of finding new antibiotics to fight these germs. People often insist on getting antibiotics when they are not necessary, and doctors who give them out in this situation should not be condoned. We need to have some measure of control over the prescribing of antibiotics, some sort of oversight organization that monitors the amount of prescriptions written by a doctor, evaluates their necessity and penalizes doctors who over-prescribe

Patients and health care professionals alike can play an important role in combating antibiotic resistance. None of us like to be sick. None of us have the time to be sick. But viral infections — which cause colds as well as many cases of sinusitis and bronchitis — are not treated with antibiotics but with rest, fluids, symptom management and time. There is no substitute for the latter.

Patients should not demand antibiotics when a health care professional says the drugs are not needed. Health care professionals should prescribe antibiotics only for infections they believe to be caused by bacteria.

FDA combating antibiotic resistance through activities that include

- ◆ **Labeling regulations addressing proper use of antibiotics.**
- ◆ **Partnering to promote public awareness.**
- ◆ **Encouraging the development of new antibiotics.**

Antibiotics are sometimes used for the wrong reasons, and are often overused. Antibiotic abuse is a major problem today, resulting in resistance to the life-saving drugs. The development of a new antibiotic takes time, and there are very few new antibiotics in the pipeline. It is therefore important to use whatever antibiotics we already have very carefully and ensure that we keep resistance at bay