



Using antibiotics wisely

Antibiotics fight bacterial infections. They can cure many diseases that, in the past, would have made you very sick—maybe even killed you—like tuberculosis.

Because antibiotics are so effective, some people want to use them for everything from the common cold to a toothache. But, antibiotics don't kill viruses, so they won't help with the common cold, and not every toothache calls for an antibiotic (box).

HELPING ANTIBIOTICS WORK

Not all dental infections require antibiotics

A toothache, for example, might be treated at the site of the infection in the dental office rather than having you take pills at home that won't help fight the infection.

Use only when needed

Talk to your dentist or physician about your symptoms. A fever, for example, can mean that an infection has spread beyond the original site and may respond to antibiotics. An infection that has not spread might be able to be treated at the original site without disturbing the surrounding area.

Don't share medications

Do not share your medicine with others. Antibiotics might not help them feel better, and side effects could occur (like a rash or diarrhea), which could make them feel worse. You should only take antibiotics on the recommendation of a health professional. He or she is trained to recognize the signs of an infection that can be treated with this type of medicine.

RISKS OF ANTIBIOTIC USE

Side effects

Antibiotics can have side effects, including

- diarrhea—from short bouts lasting less than a day to more severe cases caused by *Clostridioides difficile* (or *C. diff*), which may require care in a hospital and could be deadly, especially for older adults;
- yeast infections;
- nausea or vomiting.

Some people are allergic to certain antibiotics. They may develop a rash or have a more severe, even life-threatening reaction.

Antibiotic resistance

When bacteria are antibiotic resistant, they are no longer killed by the antibiotics. This can occur naturally, as bacteria multiply on their own or as a result of being exposed to antibiotics. This can happen when you use antibiotics improperly (for example,

Box. What can be done when your tooth hurts

Many things can cause pain when you bite down or eat or drink something hot or cold. Your tooth may even hurt when you do nothing at all! Causes of tooth pain include

- injuries;
- swelling of the tissues in or around your tooth;
- bacterial infections in or around the tooth.

Injuries or swelling that cause pain without other symptoms may feel better if you take pain relievers (like aspirin or ibuprofen) or use hot or cold packs. In some cases, your dentist might recommend a root canal or other dental treatment.

Antibiotics, though, should only be taken when prescribed by a health professional. Fever, swollen glands, and extreme tiredness are signs that antibiotics might be the right choice.

taking antibiotics when not needed). When bacteria are resistant to antibiotics they can grow quickly, causing illnesses that are difficult—sometimes impossible—to treat.

Antibiotic-resistant bacteria can spread from one person to another, affecting the whole community.

CONCLUSIONS

Antibiotics are helpful medications, and we must use them wisely to ensure that they will continue to work against bacterial infections. ■

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