

**Choosing
Wisely**

An initiative of the ABIM Foundation



Colds, flu, and other respiratory illnesses in adults:

When you need antibiotics—and when you don't

If you have a sore throat, cough, or sinus pain, you might expect to take antibiotics. After all, you feel bad, and you want to get better fast. But antibiotics don't help most respiratory infections, and they can even be harmful. Here's why.

Antibiotics kill bacteria, not viruses.

Antibiotics fight infections caused by bacteria. But most respiratory infections are caused by viruses. Antibiotics can't cure a virus.

Viruses cause:

- All colds and flu.
- Almost all sinus infections.
- Most bronchitis (chest colds).
- Most sore throats, especially with a cough, runny nose, hoarse voice, or mouth sores.

Antibiotics have risks.

Antibiotics can upset the body's natural balance of good and bad bacteria. Antibiotics can cause:

- Nausea, vomiting, and severe diarrhea.
- Vaginal infections.
- Nerve damage.
- Torn tendons.
- Life-threatening allergic reactions.



Many adults go to emergency rooms because of antibiotic side effects.

Overuse of antibiotics is a serious problem.

Wide use of antibiotics breeds “superbugs.” These are bacteria that become resistant to antibiotics. They can cause drug-resistant infections, even disability or death. The resistant bacteria—the superbugs—can also spread to family members and others.

Overuse of antibiotics leads to high costs.

Drug-resistant infections usually need more costly drugs and extra medical care. And sometimes you need a hospital stay. In the U.S., this costs us over \$20 billion a year.

You may need an antibiotic if you have one of the infections listed below.

You have a sinus infection that doesn't get better in 10 days. Or it gets better and then suddenly gets worse.

You have a fever of 102° F accompanied by facial pain for 3 or more days in a row, possibly with discolored, thick mucus.

You have bacterial pneumonia.

- Symptoms can include cough with colored mucus, fever of at least 100.6° F, chills, shortness of breath, and chest pain when you take a deep breath.
- The diagnosis is made with a physical exam and a chest x-ray.

You have whooping cough (pertussis).

- The main symptoms are fits of severe, rapid coughing. They may end with a “whoop” sound.
- The diagnosis should be checked with a swab of the throat.
- Your family may need antibiotics also.

You have strep throat.

- Symptoms include sudden throat pain, pain when swallowing, a fever of at least 100.6 F, and swollen glands.
- The diagnosis should be done with a rapid strep test, which uses a swab of the throat.

If your doctor does prescribe antibiotics, follow the directions carefully and take all your pills. This helps prevent the growth of superbugs.

This report is for you to use when talking with your healthcare provider. It is not a substitute for medical advice and treatment. Use of this report is at your own risk.

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