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 $102^\circ$ F, or fever over $100.6^\circ$ F for 3 days or more, green or yellow mucus, or face pain for three or more days in a row.

You have bacterial pneumonia.
- Symptoms can include cough with colored mucus, fever of at least $100.6^\circ$ 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 $100.6^\circ$ 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.

Advice from Consumer Reports

How to manage respiratory infections

Try to avoid them. Wash your hands often and well with plain soap and water. And get these vaccines:
- Flu (influenza) vaccine. Get this once a year. October or November is best.
- Pneumonia vaccine. When you turn 65, get two shots, a year apart. If you are younger and have heart, lung, or liver disease, diabetes, problems with alcohol, or you smoke, ask your doctor if you should get the shots.
- Tdap vaccine for tetanus, diphtheria, and pertussis (whooping cough). All adults should get this once. Then get a tetanus-diphtheria booster shot every 10 years. Pregnant women should get a Tdap shot during their third trimester.

Relieve symptoms.
- Get plenty of rest and drink lots of fluids.
- Use a humidifier and clean it daily.
- Ease pain and reduce fever with:
  - Acetaminophen (Tylenol and generic)
  - Ibuprofen (Advil and generic)
- For nasal discomfort use saline (salt water) drops or spray.
- To soothe a sore throat, gargle with salt water, drink warm beverages, or eat or drink something cool.
- To ease a cough, breathe steam from a kettle or shower. For mild, short-term relief, try an over-the-counter cough medicine that has dextromethorphan. See a doctor if coughing lasts three days or more.