Colds, flu and most sore throats and bronchitis are caused by viruses. Antibiotics do not help fight viruses. And they may do more harm than good: taking antibiotics when they are not needed — and cannot treat the illness — increases the risk of a resistant infection later.

**Antibiotics Are Not for Colds and Flu**

- Most infections are caused by two main types of germs — bacteria and viruses.
  - Bacteria are organisms found almost anywhere, except normally sterile sites, such as the blood stream and spinal fluid. A few bacteria, known as pathogens, can cause diseases in humans, animals and plants.
  - Viruses are organisms that cause disease by invading healthy host cells. As virus particles multiply, the host cells burst, allowing the viruses to infect other cells.
- Antibiotics kill bacteria, not viruses.
- Antibiotics will not cure upper respiratory viral illnesses, such as:
  - Colds or flu
  - Most coughs and bronchitis
  - Sore throats not caused by strep
  - Runny noses
- Tens of millions of antibiotics prescribed in doctor's offices each year are for viral infections, which cannot effectively be treated with antibiotics. Doctors cite diagnostic uncertainty, time pressure on physicians and patient demand as the primary reasons why antibiotics are over-prescribed.
- Taking antibiotics for viral infections — such as a cold, cough, the flu and most bronchitis — will not:
  - Cure the infections
  - Keep other individuals from catching the illness
  - Help a person feel better
- Taking antibiotics for viral infections will increase the risk of antibiotic resistance.
- The spread of viral infections can be reduced through frequent hand washing and by avoiding close contact with others.

**What To Do For Colds And Flu**

- Children and adults with viral infections recover when the illness has run its course. Colds caused by viruses may last for two weeks or longer.
- Measures that can help a person with a cold or flu feel better:
  - Increase fluid intake
  - Use a cool mist vaporizer or saline nasal spray to relieve congestion
  - Soothe throat with ice chips, sore throat spray or lozenges (for older children and adults)
- Viral infections may sometimes lead to bacterial infections. Patients should keep their doctor informed if their illness gets worse or lasts a long time.
About Antibiotic Resistance

• Antibiotic resistance has been called one of the world’s most pressing public health problems.

• The number of bacteria resistant to antibiotics has increased in the last decade. Nearly all significant bacterial infections in the world are becoming resistant to the most commonly prescribed antibiotic treatments.

• Every time a person takes antibiotics, sensitive bacteria are killed, but resistant germs may be left to grow and multiply. Repeated and improper uses of antibiotics are primary causes of the increase in drug-resistant bacteria.

• Misuse of antibiotics jeopardizes the usefulness of essential drugs. Decreasing inappropriate antibiotic use is the best way to control resistance.

• Children are of particular concern because they have the highest rates of antibiotic use. They also have the highest rate of infections caused by antibiotic-resistant pathogens.

• Parent pressure makes a difference. For pediatric care, a recent study showed that doctors prescribe antibiotics 65 percent of the time if they perceive parents expect them — and 12 percent of the time if they feel parents do not expect them.

• Antibiotic resistance can cause significant danger and suffering for people who have common infections that were once easily treatable with antibiotics. When antibiotics fail to work, the consequences are longer lasting, illnesses; more doctor visits or extended hospital stays; and the need for more expensive and toxic medications. Some resistant infections can cause death.

Reducing Antibiotic Use

Antibiotic prescriptions in outpatient settings can be reduced by more than 40 percent — without adversely affecting patient health — by not prescribing antibiotics for viral illnesses, such as colds, most sore throats, coughs and bronchitis and the flu.

• Parents should not demand antibiotics when the health care provider has determined they are not needed.

• Parents should talk with their health care provider about antibiotic resistance.

• Parents should not give their children antibiotics for a viral infection like a cold, a cough or the flu. Antibiotics should be used only to treat bacterial infections.

• Parents should ensure that their children take all medication as prescribed, even if symptoms disappear. If treatment stops too soon, some bacteria may survive and re-infect.

The Centers for Disease Control and Prevention has begun a multi-faceted campaign to promote appropriate antibiotic use for respiratory tract infections in the U.S. Its objective is to decrease inappropriate use and thereby reduce the threat of antibiotic resistance. Appropriate antibiotic use is defined as the prescription of antibiotic therapy only when it is likely to benefit a patient by treating a bacteria-related illness.