# Colds, Flu, and Other Respiratory Illnesses: Don't Rush to Antibiotics



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.

### 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.

# You may need an antibiotic if you have a respiratory infection. Some examples are:

You have a sinus infection that doesn't get better in 7 days. Or it gets better and then suddenly gets worse.

You have a fever of 39 °C, or fever over 38 °C for 3 days or more, green or yellow mucus, or face pain for three or more days in a row.

## **Bacterial pneumonia.**

- Symptoms can include cough with coloured mucus, fever of at least 38 °C, 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.

### 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.

### Strep throat.

- Symptoms include sudden throat pain, pain when swallowing, a fever of at least 38 °C, and swollen glands.
- The diagnosis should be done with a rapid strep test, which uses a swab of the throat.

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

#### **About Choosing Wisely Canada**

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

#### How this pamphlet was created:

This pamphlet was adapted with permission from a similar pamphlet used in the US Choosing Wisely campaign, organized by the ABIM Foundation. Modifications were made to ensure relevance for a Canadian audience. Canadian reviewers of this pamphlet were Drs. Wayne Gold and Jerome Leis, Association of Medical Microbiology and Infectious Disease Canada.

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

## 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 health care provider 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)
   or 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.