

#### **ASTHMA**

# NEW GUIDELINES DETAIL ANTIBIOTIC USE FOR RESPIRATORY INFECTIONS

January 19, 2016

The American College of Physicians and the CDC has published recommendations for the appropriate use of antibiotics in the treatment of acute respiratory tract infections (http://www.consultant360.com/search? search\_api\_views\_fulltext=antibiotic+respiratory&op=GO).

Acute respiratory tract infection (ARTI) is currently the most common reason for antibiotic use among adults, and antibiotics for ARTI are often inappropriately prescribed.

#### RELATED CONTENT

Dose Counters Reduce Respiratory-Related ER Visits (http://www.consultant360.com/exclusives/dose-counters-reduce-respiratory-related-er-visits)

New Guidelines Discourage Antibiotic Use in Sinus Infections (http://www.consultant360.com/exclusive/new-guidelines-discourage-antibiotic-use-sinus-infections)

In order to present the best practices for antibiotic (http://www.consultant360.com/search? search\_api\_views\_fulltext=antibiotic+respiratory&op=GO) use in adults with ARTI, researchers conducted a narrative literature review of evidence from studies of acute bronchitis, respiratory tract infections, pharyngitis, rhinosinusitis, and the common cold.

The recommendations include the following:

- 1. Testing should not be performed and antibiotics should not be prescribed in patients with bronchitis unless pneumonia is suspected.
- 2. Rapid antigen detection or culture for group A streptococcus should be used to test patients with symptoms suggesting streptococcal pharyngitis. Antibiotics should be given only if streptococcal pharyngitis is confirmed.
- 3. In patients with acute rhinosinusitis and persistent symptoms of more than 10 days, onset of severe symptoms, or high fever lasting 3 consecutive days, antibiotic use is appropriate.
- 4. Antibiotic prescription is not appropriate in patients with the common cold.

"Reducing inappropriate antibiotic prescribing will improve quality of care, decrease health care costs, and preserve the effectiveness of antibiotics," they concluded.

-Michael Potts

Reference:

Harris AM, Hicks LA, Qaseem A, et al. Appropriate antibiotic use for acute respiratory tract infection in adults: advice for high-value care from the american college of physicians and the centers for disease control and prevention. *Ann Intern Med.* 2016 January 19 [epub ahead of print]. doi:10.7326/M15-1840.

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 Cardiology (/search?keywords=Cardiology)
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 January 18, 2016

A specialized oral nutrition supplement was associated with a 50% lower mortality rate in malnourished (http://www.consultant360.com/search/google/malnourished? query=malnourished&cx=012264238924260504643%3Auiebbyy8hja&cof=FORID%3A11&sitesearch=), elderly patients with heart or lung disease following hospitalization, according to a recent study.

Readmission and mortality rates are high among hospitalized, malnourished older adults. In order to test the effectiveness of a high-protein nutritional supplement containing beta-hydroxy-beta-methylbutyrate on outcomes among these patients, researchers conducted a multicenter, randomized, placebo-controlled, double-blind trial of patients over 65 years old with congestive heart failure

(http://www.consultant360.com/search/google/congestive%20heart%20failure?query=congestive%20heart%20failure&cx=012264238924260504643%3Auiebbyy8hja&cof=FORID%3A11&sitesearch=), acute myocardial infarction (http://www.consultant360.com/search/google/myocardial%20infarction?query=myocardial%20infarction&cx=012264238924260504643%3Auiebbyy8hja&cof=FORID%3A11&sitesearch=), pneumonia, or chronic obstructive pulmonary disease (http://www.consultant360.com/search/google/chronic%20obstructive%20pulmonary%20disease?query=chronic%20obstructive%20pulmonary%

20disease&cx=012264238924260504643%3Auiebbyy8hja&cof=FORID%3A11&sitesearch=).

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Study: Herbal Supplement Could Treat Glaucoma (http://www.consultant360.com/exclusives/study-herbal-supplement-could-treat-glaucoma)

The primary endpoint of the study was 90-day postdischarge incidence of death or readmission. Researchers also measured 30- and 60-day postdischarge mortality and readmission rates, body weight, and class of malnourishment on the Subjective Global Assessment scale.

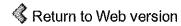
Overall, 90-day mortality was significantly lower among those patients taking the nutritional supplement compared to placebo (4.8% vs 9.7%). The supplement was also associated with improved rating on the nutritional scale and an increase in body weight at day 30.

"Although no effects were observed for the primary composite endpoint, compared with placebo HP-HMB decreased mortality and improved indices of nutritional status during the 90-day observation period," they concluded.

—Michael Potts

Reference:





## Colds and the Flu

## Overview

#### What is the common cold and the flu?

The common cold and the flu are viral infections of the respiratory tract, which includes the throat, nose, airways and lungs.

## **Symptoms**

#### How can I tell if I have a cold or the flu?

Although the common cold and the flu share many similar symptoms, they are 2 different conditions.

The symptoms of a cold develop slowly and can include:

- Fever up to 102°F
- Runny or stuffy nose (often with green- or yellow-colored discharge)
- Sore throat
- Cough
- Sneezing
- Fatigue
- Muscle aches
- Headache
- Watery eyes

Cold symptoms generally are milder than flu symptoms.

Flu symptoms usually appear suddenly and can include:

- Fever over 102°F
- Stuffy nose
- Nausea
- · Chills and sweats
- Fatigue
- · Muscle aches, especially in your back, arms and legs
- Cough
- Headache
- Loss of appetite

#### What is H1N1 flu?

The H1N1 influenza (also called swine influenza or swine flu) is a respiratory infection caused by a virus found in pigs. H1N1 flu can infect humans. For more information, see

H1N1 Influenza.

#### Should I call my doctor?

In most cases, you don't need to see your doctor when you have a cold or the flu. However, if you have any of the symptoms in the box below, call your doctor.

## Call your doctor if you have these cold and flu symptoms:

#### In children:

- High fever (above 103°F), or a fever that lasts for more than 3 days
- Symptoms that last for more than 10 days
- Trouble breathing, fast breathing or wheezing
- Bluish skin color
- · Earache or drainage from the ear
- Changes in mental state (such as not waking up, irritability or seizures)
- · Flu-like symptoms that improve, but return with a fever and a worse cough
- Worsening of a chronic medical condition (such as diabetes or heart disease)
- · Vomiting or abdominal pain

#### In adults:

- A high, prolonged fever (above 102°F) with fatigue and body aches
- Symptoms that last for more than 10 days or get worse instead of better
- Trouble breathing or shortness of breath
- · Pain or pressure in the chest
- · Fainting or feeling like you are about to faint
- Confusion or disorientation
- Severe or persistent vomiting
- Severe sinus pain in your face or forehead
- Very swollen glands in the neck or jaw

## Causes & Risk Factors

#### What causes colds and the flu?

Viruses cause colds and the flu. More than 200 different viruses can cause colds. Not as many viruses cause the flu. That's why there's a shot available for the flu and not for colds.

## Treatment

#### What can I do to feel better?

There's no cure for the common cold. All you can do to feel better is treat your symptoms while your body fights off the virus.

## Ways to treat your cold and flu symptoms

- Get plenty of rest, especially while you have a fever. Rest helps your body fight infection.
- Stop smoking and avoid secondhand smoke, which can make cold symptoms worse
- Drink lots of fluids such as water and clear soups. Fluids help loosen mucus.
  Fluids are also important because they help prevent dehydration.

- Gargle with warm salt water a few times a day to relieve a sore throat. Throat sprays or lozenges may also help relieve the pain.
- · Avoid alcohol.
- Use saline (salt water) nose drops to help loosen mucus and moisten the tender skin in your nose.

For the flu, your doctor will probably recommend that you treat the symptoms until you feel better. In severe cases, your doctor may prescribe an antiviral medicine. Antiviral medicines can shorten the length of time you are sick with the flu. These medicines come as pills, syrup or in an inhaler. The inhaled type may cause problems for some people who have asthma or chronic obstructive pulmonary disease (COPD).

#### What medicines can I give my child?

There is no cure for the cold or the flu, and antibiotics do not work against the viruses that cause colds and the flu.

Pain relievers such as acetaminophen (one brand: Children's Tylenol) can help ease the pain of headaches, muscle aches and sore throats as well as treat fevers. Be sure you are giving your child the correct dose according to his or her age and weight.

Nasal sprays and decongestants are not recommended for young children, as they may cause side effects. Cough and cold medicines are not recommended for children, especially those younger than 2 years of age. There is also little evidence that cough and cold medicines and nasal decongestants are effective in treating children.

To treat a cold or the flu, make sure that your child rests and drinks plenty of fluids. You can use a humidifier to help moisten the air in your child's bedroom. This will help with nasal congestion. You can also use a saline nasal spray to thin nasal mucus, and a bulb syringe to suction mucus out of your baby or child's nose.

#### What over-the-counter medicines can I take for a cold or the flu?

Over-the-counter medicines cannot cure a cold or the flu. Medicine can, however, help relieve some of your cold or flu symptoms. Check with your doctor before giving any medicine to children.

Many cold and flu products are available without a prescription.

#### What's in over-the-counter cold and flu medicines?

The ingredients listed below are found in many cold and flu medicines. Read labels carefully. If you have questions, talk to your doctor or pharmacist.

Analgesics relieve aches and pains and reduce fever. Examples include acetaminophen, aspirin, ibuprofen, ketoprofen and naproxen. Warning: Children and teenagers shouldn't be given aspirin because it can cause Reye's syndrome.

Antitussives (also called cough suppressants) tell your brain to stop coughing. Don't take an antitussive if you're coughing up mucus. Warning: Children younger than 4 years of age shouldn't be given cough medicines.

Expectorants help thin mucus so it can be coughed up more easily.

**Decongestant nasal sprays** shrink the nasal passages and reduce congestion. Adults should only use these medicines for a few days. Overuse can cause symptoms to get

worse when you stop using the nasal spray. Warning: Children shouldn't use these medicines at all.

## Prevention

#### Can I prevent catching a cold or the flu?

You can reduce your risk of catching a cold or the flu by washing your hands frequently, which stops the spread of germs. Eating healthy, exercising and getting enough sleep also play a part in preventing colds and the flu because they help boost your immune system.

Cough and sneeze into the inside of your elbow (rather than into your hand). Clean common surfaces, such as table and counter tops, your child's toys, door handles, and bathroom facilities with anti-bacterial disinfectant. This can help stop the spread of germs.

The best way to avoid getting the flu is to get the influenza vaccine. You should get the vaccine when it becomes available each fall (in October or November), but you can also get it any time throughout the flu season (into December, January and beyond). The vaccine is available by shot or by nasal spray. However, the Centers for Disease Control & Prevention (CDC) recommend the nasal-spray vaccine should not be used for the **2016-2017 flu season**. Data from the CDC and other groups showed poor or relatively lower effectiveness of the nasal spray vaccine during previous flu seasons.

Vaccines work by exposing your immune system to the flu virus. Your body will build up antibodies to the virus to protect you from getting the flu. The flu shot contains dead viruses. The flu shot is safe for adults and all children 6 months of age and older, and it is strongly recommended that all children 6 months of age to 59 months of age get a yearly flu shot. The nasal-spray vaccine contains live but weakened viruses. It is safe for adults and all children 2 years of age and older who do not have asthma or breathing problems. You cannot get the flu from the flu shot or the nasal-spray vaccine. While it is not recommended for the 2016-2017 flu season, there are certain patients who should always talk to their doctor before getting the nasal-spray vaccine. More Info.

Some people who get the vaccine will still get the flu, but they will usually get a milder case than people who aren't vaccinated. The vaccine is especially recommended for people who are more likely to get really sick from flu-related complications.

# Questions to Ask Your Doctor

- How long will I be sick?
- How long should I keep my child home from daycare or school?
- What can I do to make myself more comfortable?
- Are there any medicines you would recommend?
- Should I get the flu vaccine? Should I have my child vaccinated?
- When should I call my doctor?
- How long will I be contagious?
- I'm pregnant. Is there any danger to my baby from the flu?
- Will steam help my congestion?
- · Are cough medicines safe for my child?

# Bibliography

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