COMMON COLD OVERVIEW

The common cold is one of the most frequent illnesses in the United States. Although most colds are mild and resolve within a short time period, colds cost billions of dollars per year, mostly due to lost time at work and school.

This article discusses the common cold in adults. Colds in children are discussed separately. (See "Patient education: The common cold in children (Beyond the Basics)".)

COMMON COLD CAUSES

The common cold is caused by a large number of viruses. It is not a specific disease but rather a group of illnesses with similar symptoms. Rhinoviruses cause the greatest number of colds; there are more than 100 different strains or varieties of rhinovirus. Even though the individual strains of viruses that cause the common cold produce immunity, a person can have a cold many times throughout his or her lifetime because of subsequent infection with other viruses or viral strains. The average adult
experiences two to three colds per year, while otherwise healthy children may have 8 to 12 colds per year. (See "Patient education: The common cold in children (Beyond the Basics)".)

Colds are primarily transmitted from person to person via hands contaminated with nasal secretions. Less often, viruses that cause colds can be transmitted by touching a contaminated surface or via sneezing or coughing.

Direct contact — People with colds typically carry the cold virus on their hands. The virus may remain alive on the skin and capable of infecting another person for at least two hours. Thus, if a sick person shakes someone’s hand and that individual then touches his eye, nose, or mouth, the virus can be transmitted and subsequently infect that person.

Infection from particles on surfaces — Some cold viruses can live on surfaces (such as a counter top, door handle, or phone) for several hours.

Inhaling viral particles — Droplets containing viral particles can be breathed, coughed, or sneezed into the air by a person with a cold. Viruses that cause colds can be transmitted to others if another person is standing close (a few feet) and the droplet touches that person’s eye, nose, or mouth. Covering the mouth while coughing or sneezing reduces this risk. (See ‘Prevention’ below.)

Most cold viruses are not spread by saliva. Thus, kissing itself is not likely to transmit the common cold, but close direct contact can. Colds are not caused by cold climates or being exposed to cold air. However, some viruses cause more colds during certain seasons (eg, fall and winter versus spring).

COMMON COLD SIGNS AND SYMPTOMS

The common cold usually causes nasal congestion, runny nose, and sneezing. A sore throat may be present on the first day but usually resolves quickly. If a cough occurs in a patient with a cold, it generally develops on about the fourth or fifth day of symptoms, typically when congestion and runny nose are resolving. (See "Patient education: Sore throat in adults (Beyond the Basics)".)

COMMON COLD COMPLICATIONS

In most cases, colds do not cause serious illness or complications. Most colds last for three to seven days, although many people have residual symptoms such as coughing, sneezing, nasal or chest congestion for up to two weeks.

Some viruses that cause the common cold can also depress the immune system or cause swelling in the lining of the nose or airways; this can, in turn, lead to a secondary viral or bacterial infection as
COMMON COLD TREATMENT

There is no specific treatment for the viruses that cause the common cold. Most treatments are aimed at relieving some of the symptoms of the cold but do not shorten or cure the cold. Antibiotics are not useful for treating the common cold; antibiotics are only used to treat illnesses caused by bacteria, not viruses. Unnecessary use of antibiotics for the treatment of the common cold can cause allergic reactions, diarrhea, or other gastrointestinal symptoms in some patients.

The symptoms of a cold will resolve over time, even without any treatment. People with underlying medical conditions and those who use other over-the-counter or prescription medications should speak with their health care provider or pharmacist to ensure that it is safe to use these treatments. The following are treatments that may reduce the symptoms caused by the common cold.

Runny nose and nasal congestion — Runny nose and congestion may improve with the use of nasal inhalers. Ipratropium bromide (Atrovent, available by prescription) may relieve runny nose and sneezing, while cromolyn (NasalCrom, a non-prescription medicine) may relieve runny nose, cough, and sneezing. Medications that contain a combination of an antihistamine and a decongestant may also help nasal symptoms.
Products that contain decongestants alone (without an antihistamine) such as pseudoephedrine and oxymetazoline (a nasal spray also called Afrin) may also give temporary relief of nasal congestion. However, decongestant nasal sprays should never be used for more than two to three days; use for more than three days use can worsen nasal congestion. (See "Patient education: Nonallergic rhinitis (runny or stuffy nose) (Beyond the Basics)", section on 'Rhinitis medicamentosa'.)

Saline nasal sprays can also be helpful to relieve runny nose and congestion.

**Sore throat and headache** — Sore throat and headache are best treated with a mild pain reliever such as acetaminophen (Tylenol) or a nonsteroidal antiinflammatory drug (NSAID) such as ibuprofen or naproxen (Motrin or Aleve).

**Cough** — Common cough medicine ingredients include guaifenesin and dextromethorphan; these are often combined with other medications in over-the-counter cold formulas. These cough medications provide only minor benefit for cough in most patients, and excessive use can cause side effects.

**Antibiotics** — Antibiotics should **not** be used to treat an uncomplicated common cold. As noted above, colds are caused by viruses. Antibiotics treat bacterial, not viral infections.

**Alternative treatments** — A number of alternative products, including vitamin C and herbal products such as echinacea, are advertised to treat or prevent the common cold. While none of these treatments is likely to cause harm, none have been proven to be effective in clinical trials; their use is not recommended. Certain products, such as nasal gels that contain zinc (eg, Zicam), have been associated with a permanent loss of smell and thus are also not recommended.

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**PREVENTION**

Hand washing is an essential and highly effective way to prevent the spread of most infections, including the common cold. Hands should be wet with water and plain soap, and rubbed together for 15 to 30 seconds. Special attention should be paid to the fingernails, between the fingers, and the wrists. Hands should be rinsed thoroughly and dried with a single-use towel.

Alcohol-based hand rubs are a good alternative for disinfecting hands if a sink is not available. Hand rubs should be spread over the entire surface of hands, fingers, and wrists until dry. These rubs can be used repeatedly without skin irritation or loss of effectiveness. Hand rubs are available as a liquid or single-use wipes in small, portable sizes that are easy to carry in a pocket or handbag. When a sink is available, visibly soiled hands should be washed with soap and water.
Hands should be washed before preparing food and eating and after coughing, blowing the nose, or sneezing. While it is not always possible to limit contact with people who may be infected with a cold, touching the eyes, nose, or mouth after direct contact should be avoided when possible.

In addition, tissues should be used to cover the mouth when sneezing or coughing. These used tissues should be disposed of promptly. Sneezing/coughing into the sleeve of one's clothing (at the inner elbow) does not contaminate the hands and is a good way of containing sprays of saliva and secretions.

WHERE TO GET MORE INFORMATION

Your healthcare provider is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed on our web site (www.uptodate.com/patients). Related topics for patients, as well as selected articles written for healthcare professionals, are also available. Some of the most relevant are listed below.

**Patient level information** — UpToDate offers two types of patient education materials.

**The Basics** — The Basics patient education pieces answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials.

- [Patient education: Cough, runny nose, and the common cold (The Basics)](www.uptodate.com/patients)
- [Patient education: Acute bronchitis (The Basics)](www.uptodate.com/patients)
- [Patient education: Eustachian tube problems (The Basics)](www.uptodate.com/patients)

**Beyond the Basics** — Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are best for patients who want in-depth information and are comfortable with some medical jargon.

- [Patient education: The common cold in children (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Sore throat in adults (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Acute sinusitis (sinus infection) (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Acute bronchitis in adults (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Pneumonia in adults (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Ear infections (otitis media) in children (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Influenza symptoms and treatment (Beyond the Basics)](www.uptodate.com/patients)
- [Patient education: Nonallergic rhinitis (runny or stuffy nose) (Beyond the Basics)](www.uptodate.com/patients)
**Professional level information** — Professional level articles are designed to keep doctors and other health professionals up-to-date on the latest medical findings. These articles are thorough, long, and complex, and they contain multiple references to the research on which they are based. Professional level articles are best for people who are comfortable with a lot of medical terminology and who want to read the same materials their doctors are reading.

- Acute bronchitis in adults
- Clinical use of echinacea
- Coronaviruses
- Allergic rhinitis: Clinical manifestations, epidemiology, and diagnosis
- Epidemiology, clinical manifestations, and pathogenesis of rhinovirus infections
- The common cold in adults: Diagnosis and clinical features
- The common cold in adults: Treatment and prevention

The following organizations also provide reliable health information.

- National Library of Medicine (available in Spanish)
- The United States Centers for Disease Control and Prevention
- American Lung Association

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**REFERENCES**


### Persistent symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal discharge and congestion</td>
</tr>
<tr>
<td>Facial pressure/pain (especially one sided)</td>
</tr>
<tr>
<td>Decreased or absent ability to smell</td>
</tr>
<tr>
<td>Pain in the teeth</td>
</tr>
<tr>
<td>Ear pressure/fullness</td>
</tr>
</tbody>
</table>

Patients with symptoms that persist (no improvement after 10 days) or worsen (after 5 to 7 days) may require additional treatment. A health care provider should be consulted in all cases.
# Is it a cold or the flu?

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cold</th>
<th>Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Rare</td>
<td>Usual; high (100°F to 102°F; occasionally higher, especially in young children); lasts 3 to 4 days</td>
</tr>
<tr>
<td>Headache</td>
<td>Rare</td>
<td>Common</td>
</tr>
<tr>
<td>General aches, pains</td>
<td>Slight</td>
<td>Usual; often severe</td>
</tr>
<tr>
<td>Fatigue, weakness</td>
<td>Sometimes</td>
<td>Usual; can last up to 2 to 3 weeks</td>
</tr>
<tr>
<td>Extreme exhaustion</td>
<td>Never</td>
<td>Usual; at the beginning of the illness</td>
</tr>
<tr>
<td>Stuffy nose</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Usual</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Chest discomfort, cough</td>
<td>Mild to moderate; hacking cough</td>
<td>Common; can become severe</td>
</tr>
</tbody>
</table>


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