CONDITION

# Common cold

Learn what causes the common cold, how to manage symptoms safely, when to contact a doctor, and how to reduce the spread of respiratory viruses.

**WHAT IT IS**
Short-term upper respiratory infection

**BODY SYSTEM**
Respiratory system

**MAIN SYMPTOMS**
Runny or blocked nose, sore throat, sneezing, cough

**WHAT CAUSES IT**
Respiratory viral infection

**HOW IT IS DIAGNOSED**
Symptoms, history and physical examination

**MAIN TREATMENT**
Supportive care and symptom relief

**CAN IT BE CURED?**
No, no medicine eliminates the infection

**IS IT AN EMERGENCY?**
Sometimes, with severe trouble breathing

**LONG-TERM OUTLOOK**
Usually resolves within one to two weeks

## Overview

The common cold is a short-term infection of the nose, throat, and upper airways. More than 200 respiratory viruses can cause a cold. Rhinoviruses are among the most common.

A cold can cause a runny or blocked nose, sore throat, sneezing, and cough. Symptoms are usually mild and improve without specific medical treatment. They often peak during the first few days and improve within one to two weeks. A cough may last longer as the airways recover.

Colds matter because their symptoms can resemble COVID-19, influenza, allergies, and other illnesses. They can also worsen asthma or other long-term lung conditions. Infants, older adults, and people with weakened immune systems may need closer monitoring.

Antibiotics like amoxicillin or doxycycline do not treat a cold because antibiotics work against bacteria, not viruses. Unnecessary antibiotics can cause side effects and contribute to antibiotic resistance, which means bacteria become harder to treat.

## Symptoms

Cold symptoms can vary from one person to another. They often develop gradually rather than beginning suddenly.

Common symptoms include:

Nasal mucus may become thicker or turn white, yellow, or green during a cold. This color change can be part of the immune response and does not by itself mean that antibiotics are needed.

Adults with a cold often have no fever or only a mild fever. A higher fever, marked weakness, chills, or strong body aches may be more consistent with influenza, COVID-19, or another infection. Symptoms alone cannot always identify the virus.

Young children may be irritable, sleep poorly, or eat less because congestion makes breathing through the nose difficult. Babies should still have regular wet diapers and be able to take enough breast milk or formula to stay hydrated.

- A runny or blocked nose
- Sneezing
- A scratchy or sore throat
- Cough
- Hoarseness
- Watery eyes
- Mild headache or body aches
- Tiredness
- A low-grade fever, especially in children

## Causes and risk factors

A cold spreads when a respiratory virus reaches the moist lining of the nose, mouth, or eyes. This can happen through droplets and small airborne particles released when an infected

person coughs, sneezes, talks, or breathes. Viruses may also spread through hands or objects, although close contact and shared indoor air are important routes.

People can spread a cold before they fully recognize their symptoms. Transmission is more likely during close contact, particularly in crowded or poorly ventilated indoor spaces.

Factors that can increase exposure or the chance of becoming ill include:

Cold weather does not directly cause a cold. Respiratory viruses may spread more easily during colder months because people spend more time together indoors and some viruses survive well under seasonal conditions.

Regular handwashing, better indoor ventilation, and avoiding close contact while ill can reduce spread. Cover coughs and sneezes with a tissue or the inside of the elbow. A well-fitting mask can provide added protection when close contact cannot be avoided, especially around someone at higher risk of severe respiratory illness.

- Spending time near someone with respiratory symptoms
- Attending child care, school, or other crowded settings
- Sharing cups, utensils, or frequently handled items
- Touching the eyes, nose, or mouth with unwashed hands
- Smoking or exposure to tobacco smoke, which irritates the airways
- Having a weakened immune system

## Diagnosis

Most colds can be managed without a medical visit. When an evaluation is needed, a clinician usually makes the diagnosis by asking about symptoms, timing, exposures, and medical history. They may examine the throat, ears, nose, and lungs.

There is no routine test for the many viruses that cause common colds. However, testing for COVID-19, influenza, or another infection may be appropriate when symptoms overlap, there has been a known exposure, or the result could change treatment or precautions.

This distinction can be important for people at higher risk of severe illness. Antiviral medicines are available for influenza and COVID-19, and they work best when considered early. These medicines do not treat an ordinary cold.

A clinician may consider other causes if symptoms are severe, last longer than expected, or repeatedly return. Possible alternatives include seasonal allergies, asthma, sinusitis, strep throat, whooping cough, or pneumonia. A chest X-ray or other test is not usually needed for

uncomplicated cold symptoms.

## Treatment and management

There is no medicine that eliminates a common cold. Treatment focuses on comfort, hydration, and rest while the immune system clears the infection.

Helpful home measures include:

Never give honey to a baby younger than 1 year because it can cause infant botulism, a rare but serious illness.

If using a nasal rinse device, use distilled, sterile, or previously boiled and cooled water. Tap water is not safe for nasal rinsing unless it has been properly treated. Clean the device as directed.

Over-the-counter pain relievers, such as acetaminophen or ibuprofen, may reduce fever, headache, and throat discomfort. Follow the product label. Ask a clinician or pharmacist before using these medicines if you are pregnant, take blood thinners like warfarin or apixaban , have kidney or liver disease, have a history of stomach ulcers, or have other significant medical conditions.

Do not give aspirin to a child or teenager with a suspected viral illness unless a clinician has specifically directed it. Aspirin use during some viral infections has been associated with Reye syndrome, a rare condition that can damage the liver and brain.

Decongestants may provide temporary relief from a blocked nose, but they are not suitable for everyone. Some can increase blood pressure or heart rate. Decongestant nasal sprays can make congestion worse when used longer than the label directs. People with heart disease, high blood pressure, glaucoma, prostate problems, thyroid disease, or pregnancy should check with a clinician or pharmacist before using them.

Multi-symptom cold products may contain several active ingredients. Read labels carefully to avoid taking two products containing the same pain reliever, decongestant, or cough suppressant. Alcohol, sedatives, and some prescription medicines can interact with cold products.

Cough and cold medicines can cause serious side effects in young children. Parents and caregivers should follow the product's age restrictions and ask a pediatric clinician or pharmacist before giving these medicines to a child. Use the measuring device supplied with liquid medicine rather than a household spoon.

Dietary supplements are not a guaranteed treatment. Evidence about products such as zinc,

vitamin C, and echinacea varies by product and study. Supplements can cause side effects or interact with medicines. Intranasal zinc products should be avoided because they have been associated with loss of smell.

Antibiotics do not shorten a cold or prevent routine complications. They may be appropriate only if a clinician identifies a separate bacterial infection.

- Drink enough fluids to avoid dehydration.
- Rest as needed and return to normal activity gradually.
- Use saline nose drops or spray to loosen mucus.
- Breathe humidified air from a clean, cool-mist humidifier.
- Try warm liquids or throat lozenges for throat discomfort.
- Use honey for cough in adults and children older than 1 year.

## Complications

Most colds resolve without complications. In some people, inflammation or mucus buildup can contribute to another problem.

Possible complications include:

A lingering cough does not automatically mean there is a complication. Airways can remain sensitive after the other symptoms improve. However, a cough that is worsening, interfering with breathing, or lasting several weeks should be discussed with a clinician.

Symptoms that improve and then return with a new fever, increasing facial pain, or worsening cough may suggest a new or secondary infection. An examination can help determine whether additional treatment is needed.

- A middle-ear infection, especially in children
- Sinusitis, meaning inflammation or infection of the spaces around the nose
- Worsening asthma or chronic obstructive pulmonary disease
- Dehydration when fever, poor intake, vomiting, or rapid breathing is present
- A lower respiratory infection, such as bronchitis or pneumonia

## Follow up

Routine follow-up is usually unnecessary when symptoms are mild and steadily improving.

Continue supportive care and watch for changes. Consider testing for COVID-19 or influenza based on local public health advice, recent exposure, and personal risk factors.

Contact a healthcare professional promptly if:

Seek emergency medical care for severe trouble breathing, blue or gray lips or face, persistent chest pain or pressure, new confusion, a seizure, inability to wake or stay awake, or another sudden and severe change. Children with severe breathing difficulty, pauses in breathing, unusual limpness, or bluish skin also need emergency care.

While sick, limit close contact with others, especially people at higher risk. Stay home when feverish or too unwell for usual activities. Return to routine activities as symptoms improve, while continuing steps such as hand hygiene, ventilation, covering coughs, and masking when appropriate.

- Fever lasts more than four days.
- Symptoms continue for more than about 10 days without improvement.
- Symptoms improve and then become worse again.
- Breathing is faster, noisier, or more difficult than usual.
- There are signs of dehydration, such as very little urine, a dry mouth, or difficulty keeping fluids down.
- Asthma, heart disease, lung disease, or another long-term condition is getting worse.
- A person with a weakened immune system develops respiratory symptoms.
- A baby younger than 3 months has a temperature of 100.4°F (38°C) or higher.

## Sources

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