

Viral Upper Respiratory Infection (URI): The Common Cold

Cause

The common cold is caused by viruses.

Over 100 serotypes of rhinoviruses are responsible for approximately 50% of all colds.

The other 50% are caused by parainfluenza, RSV, coronavirus and enteroviruses.

Colds are not caused by bacteria or exposure to cold air.

Viruses cannot be killed with antibiotics.

Viruses cause illness by taking over some of the cells in the body in order to multiply.

In the nose this leads to injury of the cells causing a runny nose and congestion.

Fever is a direct result of the immune system fighting the virus.

Typical symptom pattern

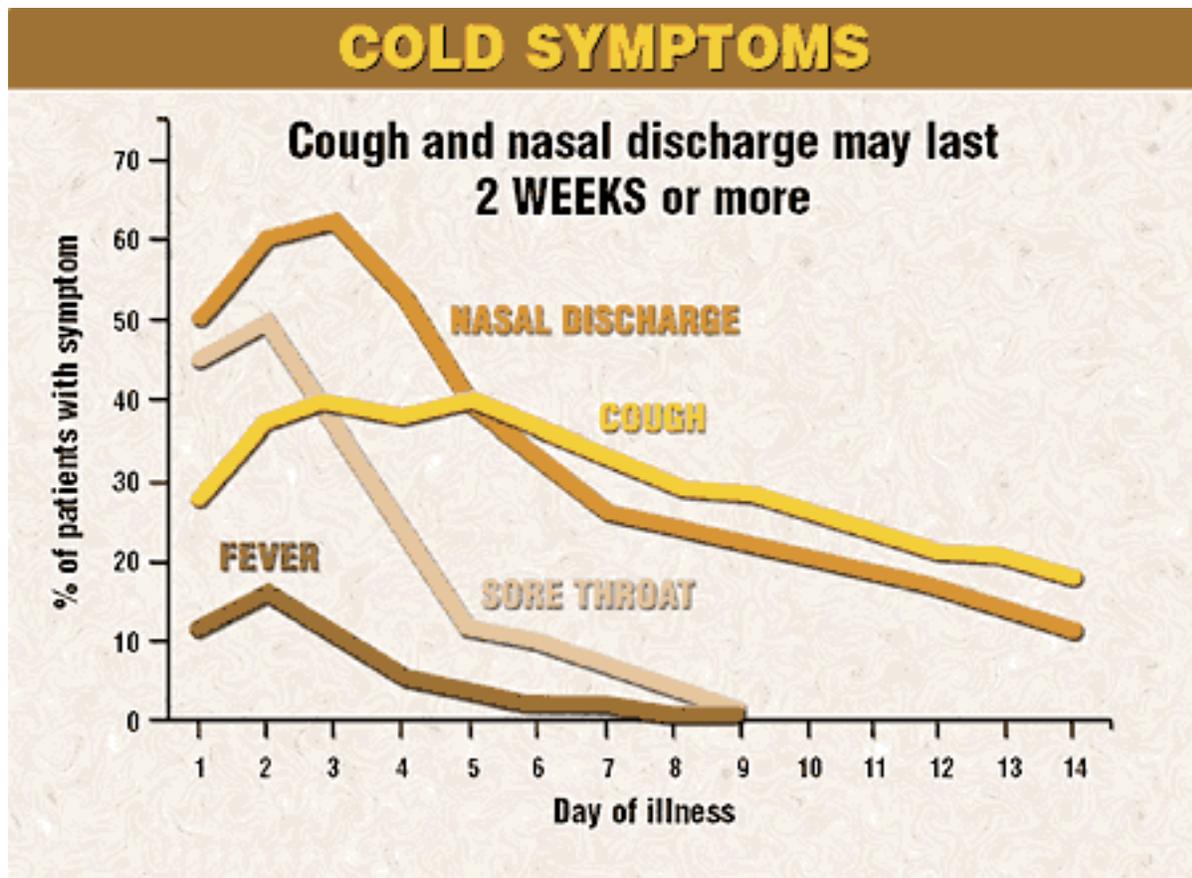
Fever up to 3 days.

Sore throat up to 5 days (with other cold symptoms)

Nasal discharge and congestion up to 14 days.

Cough up to 21 days.

Patients may also have sneezing, irritability, poor sleep and poor appetite.



Source: www.imarcade.com; Gwaltney JM, JAMA 1967; 202: 494-498.

If your child is not following the typical symptom pattern, you should bring her in to be examined or re-examined by one of our doctors.



Typical Timing

6 to 8 colds per year for children 6 years old and younger.

8 to 12 colds per year for children who attend daycare.

Symptoms last an average of 14-21 days.

The highest frequency of colds occurs in the Fall and Winter.

80% of patients with symptoms lasting more than 2 weeks still have an uncomplicated viral URI.

Treatment options

5 things can be done safely:

1. **Nasal suction** with any nasal saline drops. Most parents find that the **NoseFrida** is more effective than the typical bulb suction and can be used to remove mucus from your child's nose. It is available at some local stores or online at www.amazon.com or other retailers.
1. This can be done as frequently as needed (safely). However, if your child's nose begins to bleed, you may want to take a break from this and apply some Vaseline 3 to 4 times day to any raw areas.
2. Putting a **humidifier** in a child's room at night can help their cough.
3. **Elevating the head** of the bed may help with mucous drainage. Be careful that the baby does not roll down!
4. For children over 1 year of age, 1-2 teaspoons of **honey** (mixed with water/lemon or given by itself) can be given every 6 to 8 hours as needed, which may help reduce coughing.
5. For children 2 to 12 months of age, pasteurized **agave nectar (2.5-5 ml)** or flavored, colored water both appear to help reduce cough symptoms at night more than not giving any treatment.

What about Cold and Cough Medicines?

Forest Lane Pediatrics and the American Academy of Pediatrics **DO NOT** recommend cold and cough medicines for children.

1. **Not proven to help**
2. **May cause dangerous side effects.**

There is little to no evidence that cold/cough medicines work in children.

Since October 2008, **no FDA-approved OTC cold and cough medicines are available in the U.S. for children 4 years old or younger.**

Contagiousness & Prevention

Viral URI's are most contagious during the first 2 to 4 days of symptoms.

Cold viruses can be detected on childrens' hands for 2 hours.

Some cold viruses can live on surfaces for 24 hours.

Cold viruses are transmitted through respiratory droplets or touch.

Emphasize hand washing with soap and warm water. (www.cdc.gov/handwashing).

Anti-virus phenol/alcohol cleaning products may help reduce transmission

The development of an effective vaccine for the common cold is unlikely because of the diversity of viruses and virus subtypes responsible.



Symptoms of Secondary Bacterial Infections

5-10% of children with viral URI's develop secondary bacterial infections.

The most common are ear infections, sinus infections and pneumonias.

Suspect a bacterial infection and contact our office if you notice any of the following:

1. Fast, labored or difficult breathing.
2. Fever for more than 3 days.
3. Fever that goes away for 24 hours or longer, but then returns.
4. Ear pain or discharge.
5. Sore throat for more than 5 days.
6. Nasal discharge for more than 14 days.
7. Cough for more than 21 days.

Viral URI symptom details

Nasal congestion and **nasal discharge** usually signal the beginning of a viral URI.

The mucus is usually clear for the first few days, cloudy for several more, and then clear at the end of the cold. Mucus that has been in the nose or throat for longer than one day is usually a cloudy yellow or green color. Enzymes that are a part of your immune system cause the mucus to change color. **Non-clear mucus is not a sign by itself of a bacterial infection or that antibiotics are needed.**

Congestion is usually the worst on days two to six of the illness.

Cough usually begins shortly after the nasal congestion starts.

Most coughs represent the body's effort to protect the airway.

When mucus slides down the windpipe from the nose, it stimulates a cough reflex in order to keep the mucus from going into the lungs.

Babies are not efficient coughers, so they tend to have more difficulty clearing their airway, especially when they are lying down. For this reason, sleeping with the head above the chest can improve coughing in babies. Come in to the office for severe cough, especially with fast or labored breathing.

Sore throats are usually caused by viruses.

Sore throats caused by viruses usually start to improve after several days and are usually gone by day six or seven of illness. Blisters in the mouth or throat are usually caused by viruses.

Group A streptococcus is the bacteria that causes "strep throat" and can usually be distinguished from a viral URI sore throat because strep throat patients usually don't have other viral URI symptoms except fever.

Fever can mark the beginning days of a viral URI.

Usually, fever caused by a virus resolves after two to three days, but it can last up to one week.

Older children can be observed for a day or two if there is no obvious other source of fever (i.e. burning with urination, ear pain, or trouble breathing).

Infants less than three months of age (90 days old) with a temperature of 100.4 or more rectally, should be discussed with a doctor immediately.

If fever persists in any child for longer than 2-3 days, lasts for longer than 2-3 days after a visit in our office, or returns later in the illness, the child should be re-examined and/or discussed over the telephone to be certain that a secondary bacterial infection is the cause of the current fever.

Return to school or daycare

Your child can return after the fever is gone for 24 hours and your child feels well enough to participate in normal activities. The spread of colds cannot be completely prevented.