

A photograph of a garden filled with numerous pink daisy-like flowers with dark brown centers. The flowers are surrounded by lush green foliage. The text "IN THE NAME OF" is overlaid in a pink, bold, sans-serif font.

IN THE NAME OF

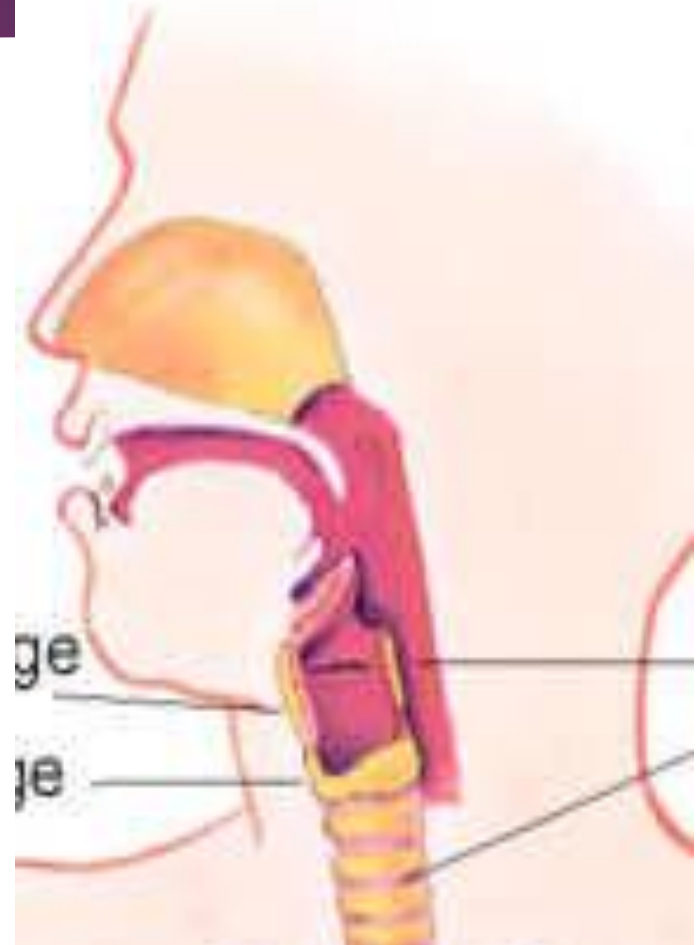
GOD

Upper Respiratory Tract Infections

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Upper Respiratory Tract Infections

- ▶ Common cold
- ▶ Acute tonsillitis
- ▶ Acute pharyngitis
- ▶ Acute sinusitis
- ▶ Acute otitis media
- ▶ **Acute laryngitis**
- ▶ **Otitis externa**
- ▶ **Mastoiditis**
- ▶ **Acute epiglottitis**



The Common Cold


- ▶ *The common cold is a contagious, viral infectious disease of the upper respiratory system.*



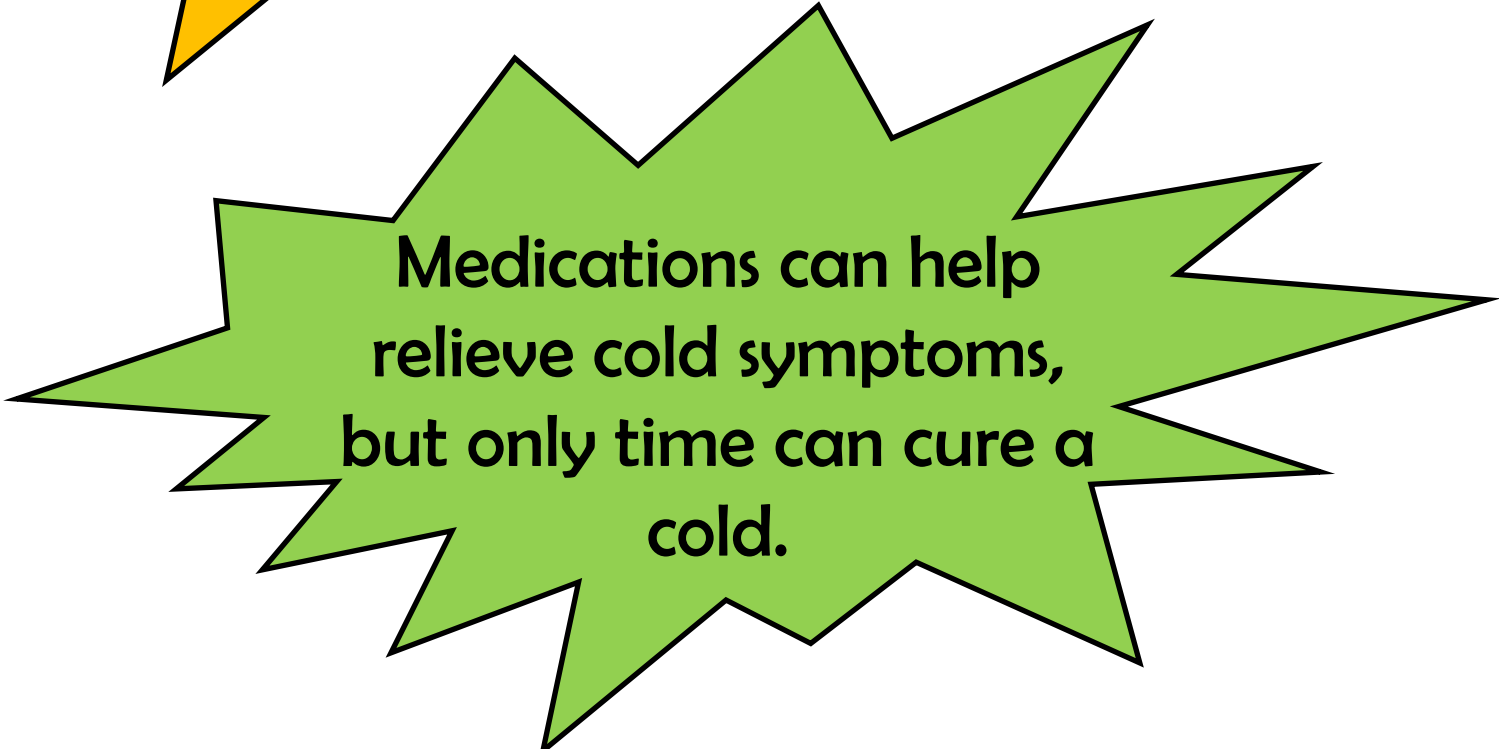
ATTACK RATE

***In preschool children is 5-7
per year but 10% to 15% of
children will have at least
12 infections per year***

In adults 2-4 per year

A yellow starburst graphic with a black outline, containing text. It is positioned in the upper left area of the slide. In the top right corner of the slide, there is a purple rectangular background with a pink vertical bar on its right edge.

The common cold may
be caused by more than
200 different viruses.

A green starburst graphic with a black outline, containing text. It is positioned in the lower right area of the slide.

Medications can help
relieve cold symptoms,
but only time can cure a
cold.

Virus Group	Antigenic Types	Percentage of Cases
Rhinoviruses	Over 100 types	40-50
Coronaviruses	5 types	10-15
Parainfluenza virus	5 types	5
Respiratory syncytial virus	2 types	5
Influenza virus	3 types	25-30
Adenovirus	51 types	5-10
Metapneumovirus	2 types	5
Other viruses: Enteroviruses, Bocavirus ?		

Can Cold Weather Cause A Cold?

Although many people are convinced that a cold results from exposure to cold weather or from getting chilled or overheated, these conditions have little or no effect on the development or severity of a cold.

On the other hand, research suggests that psychological stress, allergic disorders affecting the nasal passages or throat, and menstrual cycles may have an impact on a person's susceptibility to colds.

(National Institute of Allergy and Infectious Diseases)

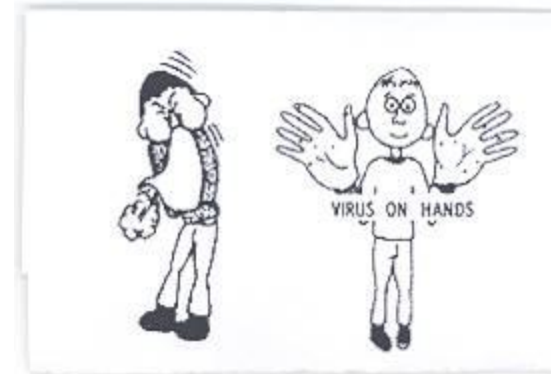


TRANSMISSION

**Small particle
aerosols,**

**Large particle
aerosols,**

Direct contact



Common Cold Symptoms

A cold develops **gradually**. Initial symptoms of runny nose, sneezing, and chills are followed by coughing, headache, sore throat, loss of appetite, and nasal discharge. If **low-grade fever** is present, it will be

Incubation

24-72 hours



Common Cold Symptoms

Day 1: sore or “scratchy” throat, +/- low grade fever

Day 2-3: nasal obstruction, rhinorrhea, sneezing

**thick purulent nasal discharge does NOT mean
bacterial sinusitis!**

**Day 4-5: cough becomes bothersome, nasal symptoms
less severe**

Average duration: 3-7 days

**Virus-induced changes in airway reactivity can persist
for up to 4 weeks**

Differential Diagnosis

☀ **Infections :**

Sinusitis

Pharyngitis (streptococcal)

Pneumonia (viral or bacterial)

☀ **Allergy :**

Allergic rhinitis

● **Structural :**

Foreign Body

Anatomic (polyp , adenoids)

● **Systemic Disease :**

Cystic fibrosis or immune deficiency

Complication

❖ *Acute otitis media*

❖ *Sinusitis*

❖ *Lower respiratory tract
infection*

Treatment



The current treatment

of the common cold relies on symptomatic remedies directed at specific symptoms

*No benefit & the potential toxicity,
symptomatic therapies are not
recommended for children
age < 4 years*

Symptom

Treatment

Nasal obstruction

Topical adrenergic agents

Oral adrenergic agents

Rhinorrhea

1st-generation antihistamines

Ipratropium bromide

Sneezing

1st-generation antihistamines

Sore throat
Fever & pain

Acetaminophen

Ibuprofen and other NSAIDs

Cough

1st-generation antihistamines

Bronchodilators (?)

Treatment

Antihistamines :

***When used to treat cold symptoms,
antihistamines are usually combined with
decongestants, and may help relieve
your runny nose, sneezing and
itchy eyes & nose***

Treatment



***The second-generation
antihistamines have had no effect
on common cold symptoms
in a limited number of studies***

Treatment



The effect of the antihistamines on rhinorrhea is related to the anticholinergic rather than the antihistaminic properties of these drugs

Treatment

*These drugs
make you drowsy, however
and should not be taken if you
need to drive, concentrate well or
operate machinery*



Treatment

Decongestants help shrink swollen blood vessels in the nose and air passages.

contraindication :

High blood pressure

Arrhythmia

Glaucoma

Heart disease.



Treatment

Both topical and oral adrenergic agents are effective nasal decongestants the topical agents are more potent than the oral drugs

Prolonged use of the topical adrenergic

Rhinitis Medicamentosa

Treatment

Ipratropium has been approved
for use for the treatment of rhinorrhea
in the common cold
2 puff TID-QID x 4 days

The most common ***side effects*** :
nasal irritation and bleeding

Treatment

Cough suppressants help prevent the cough reflex and are used to relieve dry coughs. They often contain the ingredient dextromethophan or codeine and frequently used

However, the **efficacy** of these agents has **not been demonstrated** in the common cold

Treatment

Cough in some patients appears to be due to nasal obstruction or postnasal drip and may respond to treatment with an antihistamine or antihistamine/decongestant combination

Treatment

In other patients, cough may be a result of virus-induced reactive airway disease or to viral infection of the lower airways. These patients may have cough that persists for days to weeks after the acute illness and may benefit from bronchodilator therapy.

Treatment

*A single study has described
a modest effect of NSAIDs
on the acute cough of colds*

Treatment

Cough expectorants

help clear phlegm from your throat and are used to relieve wet coughs

Expectorants such as guaifenesin are **not effective antitussive agents**

Treatment

Analgesics :

*such as acetaminophen &
ibuprofen can help relieve headaches,
muscle aches, fever and sore throat
ibuprofen also has anti-inflammatory
effects, but should be avoided by
peptic ulcers because it is
harsh on the stomach*



Echinacea

Echinacea was 3rd leading supplement sold

Grossed \$188 million in sales

“Immune system boosting” function

Most common form

Liquid extracts, Fresh juice , Spray ,

Simple herb powders



Purple Coneflower
Echinacea purpurea

Alternative Therapies



Rest Up!

Get plenty of rest and avoid
fatigue to help the body fight off
the virus



Alternative Therapies



Make it Steamy!

**Inhaling steam can relieve
congestion and cough**



Alternative Therapies

3 **Drink Plenty of Fluids!**

Make sure to drink 8-12 glasses per day. Fluids help thin secretions and keep membranes moist and more resistant to infection. Avoid beverages with caffeine as caffeine can dehydrate you.



Alternative Therapies



Gargle Salt Water

Salt water gargles can help relieve the inflammation and pain of a sore throat.

(Mix $\frac{1}{2}$ teaspoon table salt in 8 ounces of warm water and gargle every two to three hours.)

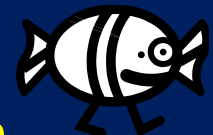


Alternative Therapies



Take your Vitamins from A to Zinc

A potential role for zinc as a treatment for the common cold was first suggested by the observation that zinc is an inhibitor of rhinovirus 3C protease, an enzyme essential for virus replication

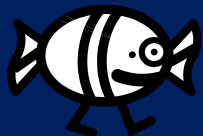


Alternative Therapies



Take your Vitamins from A to Zinc

Zinc lozenges have gotten a lot of publicity recently as a weapon against colds. The lozenges should be started as soon as the first tickle of a sore throat is felt in order to be effective.

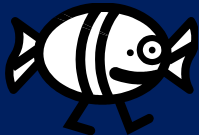


Alternative Therapies



Take your Vitamins from A to Zinc

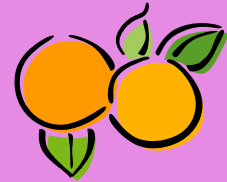
Oral zinc lozenges may be associated with sore mouth and occasional nausea. Intranasal zinc may cause nasal irritation and has been anecdotally linked to anosmia



Alternative Therapies



Vitamin C



The severity of a cold may be limited by regular low doses (250 mg per day) of Vitamin C before you get a cold. Do Not take Vitamin C if you have kidney stones or a stomach ulcer.

Alternative Therapies



Humidify!



Use a cool mist humidifier to relieve congestion and moisten dry mucous membranes. Use a Steam Vaporizer to promote drainage of nasal sinuses.

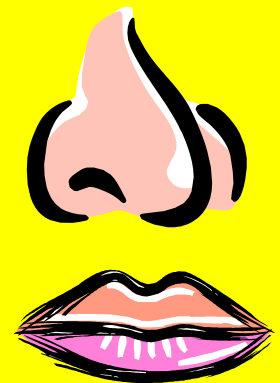


Alternative Therapies



Lotion Up!

Petroleum jelly or skin lotion
can ease chapped skin around
the nose and lips.



It's Time to See the Doctor if:

- *Symptoms have lasted more than 10 days.**
- *Severe sore throat, earache, or headache not relieved by Acetaminophen or Ibuprofen.**
- *History of tuberculosis, rheumatic fever, kidney disease, or heart disease.**
- *Severe chest pain or shortness of breath.**
- *Coughing up thick, green or bloody**



**You are less likely to
develop cold symptoms
if you have a strong
immune system.**

**To keep your immune
system in shape, try to:**

**✦GET 8 HOURS OF
SLEEP EACH NIGHT**

✦MAINTAIN A BALANCED DIET

✦EXERCISE

**✦TRY TO REDUCE THE AMOUNT
OF STRESS IN YOUR LIFE**

✦DON'T SMOKE



Avoid the Common Cold

- Wash your hands frequently with soap and warm water or use a liquid hand sanitizer.
- Try to stay at least one meter away from people who are sneezing and coughing.
- Don't share drinking glasses.
- Check with your doctor about a flu shot.



