

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

UPPER RESPIRATORY INFECTIONS (COLDS)

The common cold is a benign self-limited syndrome caused by respiratory viruses. The majority of upper respiratory infections are due to the common cold. Treatment is aimed at symptom control while the virus runs its course.

The common cold is a separate entity that is distinctly different from other respiratory infections, such as influenza, COVID-19, tonsillitis, bronchitis, and sinusitis.

WHAT CAUSES A COLD?

- ❖ Over 200 different viruses from several viral families can cause the common cold. The rhinovirus family is responsible for 30-50% of all colds.
- ❖ Only a small percentage of upper respiratory infections is caused by bacteria, and fewer than 2% of viral infections become bacterial. Therefore, treatment with an antibiotic is usually not necessary.

HOW ARE COLDS SPREAD?

- ❖ Colds are highly contagious. They are most often spread by direct person-to-person contact via hands contaminated with nasal secretions. Cold viruses can remain alive on the skin and be infectious for at least 2 hours.
 - Colds can also be spread by touching a contaminated surface (eg. phones, door handles, etc.) or being exposed to infected respiratory droplets that are coughed or sneezed into the air.
 - Most cold viruses are not spread by saliva. Therefore, kissing is not likely to transmit common cold viruses; however, close contact can still spread the illness via infected nasal/respiratory secretions.
- ❖ To prevent the spread of infection, wash your hands frequently, avoid touching your eyes/nose/mouth, and avoid coughing/sneezing near others. An alcohol-based hand sanitizer may be used instead of soap if your hands are not visibly soiled.

WHAT ARE THE SYMPTOMS?

- ❖ Most adults develop 2-3 colds each year. The incubation period is typically 1-3 days. Symptoms usually run 3-10 days, but can last up to 2 weeks, especially in smokers. Symptom severity can vary, though most cases are mild:
 - Runny nose and nasal congestion are the most common symptoms.
 - Other symptoms include sore throat, cough, and fatigue.
 - Fever is less common in adults with colds and, if present, tends to be low-grade.
 - Colored nasal discharge is common in colds and does not differentiate from bacterial infections.
 - Cough can persist for weeks after other cold symptoms have resolved.
- ❖ COVID-19 symptoms can be identical to cold symptoms. The only way to tell the difference is with COVID testing. If you test positive for COVID, please isolate and contact Student Health for instructions. More information is available at health.students.vcu.edu/about/updates/covid-19.

HOW ARE COLDS DIAGNOSED?

Colds are diagnosed based on your symptoms and physical exam findings. Lab testing to identify the specific virus causing a cold is usually not necessary. However, lab tests to rule out other infections may be recommended:

- Since colds and COVID-19 infections share very similar symptoms, testing to rule out COVID-19 is usually completed.
- Other lab tests (eg. strep, mono, flu, etc) may be ordered if suspicion for another cause is high.

HOW ARE COLDS TREATED?

Treatment is aimed at symptom control while your body fights off the viral infection on its own. Patients with mild symptoms may not require any treatment. Over-the-counter (OTC) medications may be used to decrease bothersome symptoms. Please refer to the chart at the end of this handout for detailed information.

❖ General Recommendations for Safe Use of OTC Cold Meds

- Consult your medical provider regarding possible drug interactions if you are taking other medications.
- Avoid using “combination” cold medicines. Treat your cold symptoms individually. Taking combination cold medications that treat symptoms you do not have can lead to unnecessary side effects. Examples of combination products include Dayquil, Nyquil, Theraflu, and their generic equivalents.
 - Dayquil (and its generic equivalents) usually contains acetaminophen (Tylenol), a cough suppressant (dextromethorphan), and a decongestant (phenylephrine).
 - Nyquil (and its generic equivalents) usually contains acetaminophen (Tylenol), a cough suppressant (dextromethorphan), and a sedating antihistamine (doxylamine).
 - Do not mix combination products with other medicines that contain the same ingredients. For example, do not take Tylenol with Dayquil or Nyquil; do not take a decongestant with Dayquil.
- Pain relievers and fever reducers that are commonly used include ibuprofen (Motrin or Advil), naproxen (Aleve), and acetaminophen (Tylenol).
 - Take ibuprofen or naproxen with food to avoid an upset stomach. Do not use ibuprofen or naproxen if you have a history of stomach ulcers or kidney disease.
 - Avoid Tylenol if you have a history of liver problems.
 - Avoid products containing caffeine (eg. some forms of Excedrin), which can worsen dehydration.
- A saline nasal irrigation kit or Neti pot can effectively relieve sinus symptoms.
 - ONLY USE distilled, sterile, or previously boiled water to make up the irrigation solution. If boiling water, boil it for at least 5 minutes, then let it cool before use.
 - DO NOT USE unboiled tap water or regular bottled water in the irrigation solution, as this can lead to deaths from brain infections.
 - It is important to clean the sinus rinse bottle or Neti pot after each use, and leave it open to air dry.

❖ Vitamins and Herbal Products

Vitamins and herbal remedies have not been shown by research to be effective treatments for colds.

- Zinc may decrease the severity and duration of colds, but research results have been inconsistent.
 - Zinc lozenges work best if begun within the first 24 hours of symptom onset.
 - Avoid nasal preparations (ie. Zicam, homeopathic zinc gluconate spray) as their use has been associated with permanent loss of smell.
- Vitamin C may help decrease the duration of cold symptoms in adults who regularly take at least 200mg of Vitamin C daily. Starting Vitamin C after cold symptoms have begun is not beneficial.
- Echinacea has shown little benefit in the treatment of the common cold. Studies show that it may have a weak effect on the prevention of colds.
- Elderberry extracts may be helpful, but further research is needed to determine efficacy.

NOTE: Herbal medications and supplements are not regulated by the FDA. Independent testing laboratories (such as www.consumerlab.com) can provide information about the quality and consistency of these products.

RECOMMENDED WEBSITES: familydoctor.org, www.lung.org, www.mayoclinic.org

Cold Symptoms	Over-The-Counter (OTC) Treatments & Self-Care	Seek medical attention if you have...
Fever, Body Aches, Headache, & Fatigue	<ul style="list-style-type: none"> Use <u>ibuprofen (Advil, Motrin)</u>, <u>acetaminophen (Tylenol)</u>, or <u>naproxen (Aleve)</u> to control fever and/or pain. Refer to the previous page for instructions on safe use. Drink plenty of <u>non-caffeinated fluids</u> to prevent dehydration. Get plenty of <u>rest</u>, and sleep 8-10 hours a night. 	<ul style="list-style-type: none"> A fever unresponsive to a fever reducer. A fever accompanied by a rash, stiff neck, or headache. A fever over 101°F for more than 48 hours. Persistent dizziness or the feeling that you are about to faint.
Nasal/Sinus Congestion & Drainage	<ul style="list-style-type: none"> <u>Decongestants</u> can help shrink stuffy nasal passages. <ul style="list-style-type: none"> Avoid decongestant use if you have <u>high blood pressure</u> or are experiencing <u>racing heart or dizziness</u>. Do not take decongestants if you are taking <u>ADHD medications</u>. Oral decongestants include <u>phenylephrine (Sudafed)</u> & <u>pseudoephedrine</u>. Both are available OTC, but pseudoephedrine must be purchased directly from a pharmacist. Decongestants are also commonly found in combination cold medications, such as <u>Dayquil</u> and its equivalents. Do not use <u>nasal decongestant sprays</u> (eg. Afrin) for more than 3 days in a row because congestion can worsen after stopping use. <u>Antihistamines</u> may help decrease a runny nose or postnasal drip. Non-sedating products include <u>loratadine (Claritin)</u>, <u>cetirizine (Zyrtec)</u>, & <u>fexofenadine (Allegra)</u>. Sedating products, like <u>diphenhydramine (Benadryl)</u>, are usually taken at bedtime & can help with sleep. <u>Steroid nasal sprays</u> (eg. Flonase, Nasacort, Rhinocort) can decrease congestion, runny nose, postnasal drip, & cough. <u>Saline (salt water) nasal sprays</u> can help loosen mucus, thin secretions, & soothe irritated skin in the nose. <u>Saline nasal rinses</u> can effectively relieve sinus symptoms. Refer to the previous page for instructions on safe use. Drink plenty of <u>non-caffeinated fluids</u> to thin & loosen nasal secretions. <u>Warm humidified air</u> may help with congestion. Try a vaporizer or hot shower. 	<ul style="list-style-type: none"> Discolored (yellow, green, or brown) nasal drainage that lasts longer than 7-10 days. A headache that does not go away. Severe facial pain.
Cough	<ul style="list-style-type: none"> <u>Expectorants</u> (eg. guaifenesin, Mucinex, or plain Robitussin) may thin & loosen phlegm. Hydrating well with <u>non-caffeinated fluids</u> can also help. <u>Cough suppressants</u> (eg. dextromethorphan or Delsym) can be used for a dry hacky cough that is not improving. <u>Treatments with honey</u> have been shown to decrease cough frequency & severity. Sucking on <u>cough drops or hard candy</u> can help moisten the throat and quiet a cough. <u>Treating nasal symptoms</u> will often help with coughs (see steroid nasal spray and saline nasal rinses above). Coughs associated with colds are usually due to nasal congestion or postnasal drip, rather than a chest infection. <u>Stop smoking/vaping</u>, & avoid second-hand smoke. 	<ul style="list-style-type: none"> Severe cough that lasts more than 2 weeks. A cough accompanied by shortness of breath, wheezing, or chest pain. A cough with blood clots in the phlegm.
Sore Throat	<ul style="list-style-type: none"> Symptoms are best treated with a <u>pain reliever</u>, such as ibuprofen, acetaminophen, or naproxen. Drink plenty of <u>non-caffeinated fluids</u> to keep your throat moist. <u>Warm salt water gargles</u> every 3-4 hours (1/4-1/2 tsp of salt in 8-12 oz of warm water) may help. <u>Lozenges, gargles, and sprays</u> containing antiseptics and topical anesthetics may decrease pain. Sucking on <u>hard candy</u> may help moisten and soothe the throat. 	<ul style="list-style-type: none"> Rapid onset of throat pain (overnight or within hours). Severe throat pain or difficulty swallowing. White patches on your tonsils. A muffled voice or difficulty opening your mouth. Neck glands that are very swollen and tender.
Earache	<ul style="list-style-type: none"> <u>Pain relievers</u> (eg. ibuprofen, acetaminophen, or naproxen) can decrease symptoms. <u>Steroid nasal sprays</u> (eg. Flonase, Nasacort, Rhinocort), <u>decongestants</u>, & <u>antihistamines</u> may help open up eustachian tubes and relieve pressure in the ears. 	<ul style="list-style-type: none"> Ear drainage or bleeding.