INTRODUCTION
- The majority of upper respiratory infections are due to colds caused by viruses. Over 200 different viruses can cause the common cold; however, rhinoviruses are responsible for 30-50% of all colds. Treatment is aimed at symptom control while the specific virus runs its course.
- 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.
- Most adults develop 2-3 colds each year. Cold symptoms can last up to 2 weeks and vary in severity.
  - Typical symptoms include runny nose and nasal congestion. A sore throat, cough, and/or fatigue can also develop. Fever is less common in adults and, if present, tends to be low-grade.
  - Colored nasal discharge is common in colds and does not differentiate from bacterial infections.
  - Coughs may persist for weeks after other cold symptoms have resolved.

HOW ARE Colds SPREAD?
- Colds are primarily spread from 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, doorknobs, 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. If you do not have tissues, cough or sneeze into your elbow or sleeve. An alcohol-based hand sanitizer is a good alternative if your hands are not visibly soiled.

OVER-THE-COUNTER COLD MEDICATIONS
If needed, over-the-counter (OTC) medications can help relieve symptoms while the virus runs its course.
- 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.
  - Be sure to clean the sinus rinse bottle or Neti pot after each use, and leave it open to air dry.
- 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) as their use has been associated with a 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.
<table>
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<th>Symptoms</th>
<th>Over-The-Counter (OTC) Treatments &amp; Self-Care</th>
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| Fever, Body Aches, Headache, & Fatigue | - Use ibuprofen (Advil, Motrin), acetaminophen (Tylenol), or naproxen (Aleve) to control fever and/or pain. Refer to the previous page for instructions on safe use.  
- Drink plenty of non-caffeinated fluids to prevent dehydration.  
- Get plenty of rest, and sleep 8-10 hours a night. | - 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 | - **Decongestants** can help shrink stuffy nasal passages. Avoid decongestant use if you have high blood pressure or are experiencing racing heart or dizziness. Do not take decongestants if you are taking ADHD medications.  
- Oral decongestants include phenylephrine (Sudafed) and pseudoephedrine. Both medicines are available OTC, but pseudoephedrine must be purchased directly from a pharmacist.  
- Do not use nasal decongestant sprays (eg. Afrin) for more than 3 days in a row because it can worsen congestion.  
- **Antihistamines** may help decrease runny nose or postnasal drip. Non-sedating products include loratadine (Claritin), cetirizine (Zyrtec), & fexofenadine (Allegra). Sedating products, like diphenhydramine (Benadryl), are usually taken at bedtime & can help with sleep.  
- Steroid nasal sprays (eg. Flonase, Nasacort, Rhinocort) can decrease congestion, runny nose, postnasal drip, & cough.  
- Saline (salt water) nasal sprays can help loosen mucus, thin secretions, & soothe irritated skin in the nose.  
- Saline nasal rinses can effectively relieve sinus symptoms. Refer to the previous page for instructions on safe use.  
- Drink plenty of non-caffeinated fluids to thin and loosen nasal secretions.  
- Warm humidified air may help with congestion. Try a vaporizer or hot shower. | - 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 | - **Expectorants** (eg. guaifenesin, Mucinex, or plain Robitussin) may thin and loosen phlegm. Hydrating well with non-caffeinated fluids can also help.  
- **Cough suppressants** (eg. dextromethorphan or Delsym) can be used for a dry, hacking cough that is not improving.  
- Sucking on **cough drops or hard candy** can help moisten the throat and quiet a cough.  
- Treating nasal symptoms 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.  
- **Stop smoking/vaping,** & avoid second-hand smoke. | - 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 | - Symptoms are best treated with a **pain reliever**, such as ibuprofen, acetaminophen, or naproxen.  
- Drink plenty of non-caffeinated fluids to keep your throat moist.  
- **Warm salt water gargles** every 3-4 hours (1/4-1/2 tsp of salt in 8-12 oz of warm water) may help.  
- Lozenges, gargles, and sprays containing antiseptics and topical anesthetics may decrease pain.  
- Sucking on hard candy may help moisten and soothe the throat. | - 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 | - **Pain relievers** (eg. ibuprofen, acetaminophen, or naproxen) can decrease symptoms.  
- **Steroid nasal sprays** (eg. Flonase, Nasacort, Rhinocort), decongestants, & antihistamines may help open up eustachian tubes and relieve pressure in the ears. | - Ear drainage or bleeding. |