What is a sore throat?
A sore throat is defined as any discomfort, pain, or scratchiness in the throat that often causes pain when swallowing. Although a sore throat may be a symptom of many medical conditions, viral infections are the most common cause.

What causes a sore throat?
Common viral and bacterial infections that may cause a sore throat include:

Viral
- Flu/Cold
- Mononucleosis

Bacterial
- Strep throat
- Other bacteria

Additional causes may include allergies and environmental irritants. Gastrointestinal reflux and tumors can also cause a sore throat, but are not as common.

What is the difference between a sore throat caused by a viral infection or bacterial infection?
Viral
- A sore throat caused by a viral infection is usually not treated with antibiotics. These types of medications are designed to target bacteria. However, because viral infections lower the body's resistance to bacterial infections, a healthcare provider may recommend the use of antibiotics in certain situations.

Bacterial
- A sore throat caused by a bacterial infection is usually cured with antibiotics. In most cases, tests (e.g., throat cultures) are needed to determine if a sore throat is the result of a bacterial infection.

Note: All medication should be taken as prescribed to help ensure complete recovery, as well as guard against the speeding of dangerous microbial evolution, which fuels increased antibiotic resistance.

Helpful remedies
Sore throats caused by viral infections usually subside in 7-10 days. However, recovery may take weeks to months when suffering from certain viral infections such as mononucleosis. Remedies that may alleviate pain and minimize discomfort include:

- Drink warm liquids (honey or lemon tea is a favorite home remedy)
- Gargle with a warm salt water mix 6 or more times a day (mix 1/2 - 1 tsp of salt in an 8 oz glass of warm water)
- Drink cold liquids or suck on ice
- Suck on throat lozenges
- Use a cool-mist vaporizer or humidifier
- Take over-the-counter pain medications, such as acetaminophen (Tylenol) or ibuprofen (Advil)

Note: Children should not be given aspirin due to the risk of Reye's syndrome.*

Warning
Although many sore throats can be treated with home remedies, a health care provider should be contacted if symptoms last longer than 7-10 days or if any of the following symptoms occur.

- Severe difficulty swallowing or breathing
- Excessive drooling in a young child
- A fever, especially 101°F or greater
- Tender or swollen lymph glands in the neck
- Pus or white patches in the back of the throat
- A red rash on the body that feels rough
- Increased redness in the skin folds

*Reye's Syndrome
This syndrome, most common in children 4-12 years of age, is associated with the use of aspirin to treat chicken pox and/or the flu. Brain damage and liver damage of an unknown cause are a result of this syndrome.
What is strep throat?
Strep throat is a bacterial infection of the throat caused by a particular strain of streptococcus bacteria.

How is strep throat diagnosed?
Strep throat is not easily detected by a physical examination, therefore a throat culture or rapid strep test may be ordered. Results from these tests may be used to make or confirm a diagnosis.

How is strep throat treated?
Strep throat is treated with antibiotics (e.g., penicillin)

What are the signs of strep throat?
Complications associated with strep throat may include:

• Ear infections
• Sinusitis
• Infected lymph nodes in the neck
• Abscess behind the throat or tonsils

If strep goes untreated, the following problems may result:

Rheumatic fever
• A disease which may affect the heart, nervous system, skin, and/or joints
Acute Glomerulonephritis
• An inflammatory attack on the kidneys
Scarlet fever
• An infection of the throat with a bright red rash covering most of the body
Pneumonia
• An infection that inflames one or both lungs, which may fill with fluid

Can strep throat be prevented?
Ways strep throat can be prevented include:

• Practice good hygiene (wash hands frequently)
• Reduce or limit contact with those who are ill
• Avoid close physical contact with an infected person
• Avoid sharing cups, plates, utensils, and napkins with an infected person
• Avoid using shared objects (e.g., telephone) until they are disinfected

<table>
<thead>
<tr>
<th>Sore Throat</th>
<th>Strep Throat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptoms</strong></td>
<td><strong>Symptoms</strong></td>
</tr>
<tr>
<td>Red, swollen throat, pain when swallowing, inflamed tonsils, fever</td>
<td>High fever, chills, vomiting, headache, muscle ache, pus on tonsils, abnormal taste</td>
</tr>
<tr>
<td><strong>Contagious</strong></td>
<td><strong>Contagious</strong></td>
</tr>
<tr>
<td>Possibly, depends on cause</td>
<td>Always very contagious</td>
</tr>
<tr>
<td><strong>Aches</strong></td>
<td><strong>Aches</strong></td>
</tr>
<tr>
<td>Yes, in throat</td>
<td>Headache, throat, muscles</td>
</tr>
<tr>
<td><strong>Fatigue</strong></td>
<td><strong>Fatigue</strong></td>
</tr>
<tr>
<td>Possibly, depends on cause</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Runny Nose</strong></td>
<td><strong>Runny Nose</strong></td>
</tr>
<tr>
<td>Possibly, depends on cause</td>
<td>No</td>
</tr>
<tr>
<td><strong>Sneezing</strong></td>
<td><strong>Sneezing</strong></td>
</tr>
<tr>
<td>Possibly, depends on cause</td>
<td>No</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td><strong>Treatment</strong></td>
</tr>
<tr>
<td>Over the counter pain medicine, throat lozenges, saltwater gargle, antibiotic (if appropriate)</td>
<td>Prescription antibiotics</td>
</tr>
<tr>
<td><strong>Complications</strong></td>
<td><strong>Complications</strong></td>
</tr>
<tr>
<td>None, depends on cause</td>
<td>Infection may spread, abscess, rheumatic fever</td>
</tr>
<tr>
<td><strong>Fever</strong></td>
<td><strong>Fever</strong></td>
</tr>
<tr>
<td>Not Necessarily</td>
<td>High Fever</td>
</tr>
</tbody>
</table>

References
• www.nlm.nih.gov (Medline Plus)
• www.mayoclinic.com (Mayo Clinic)