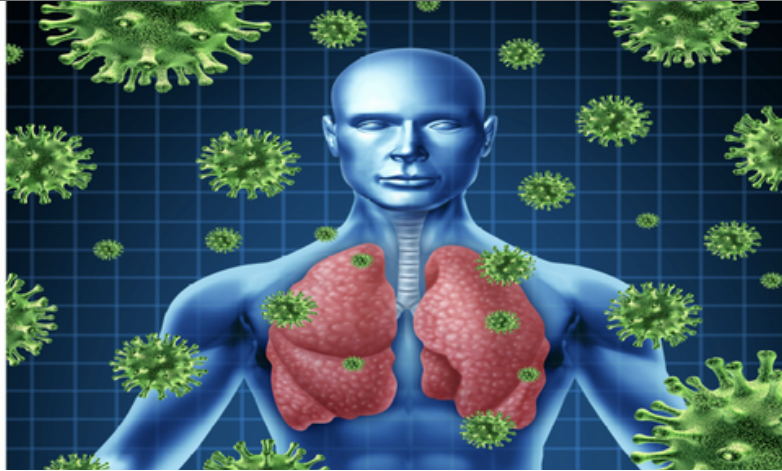




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## Upper Respiratory Tract Infections

A respiratory tract infection affects the part of your body responsible for breathing and speaking. There are two types of respiratory infections, upper respiratory tract, and lower respiratory tract infections. The upper respiratory includes the nose or nostrils, nasal cavity, mouth, throat (pharynx), and voice box (larynx). The lower respiratory infections include the trachea (windpipe), bronchi, bronchioles, and lungs. Bacteria and viruses are the most common cause of both upper and lower respiratory tract infections.

### Upper Respiratory Tract Infections

Upper respiratory tract infections are the most common cause of illnesses seen in an outpatient clinical setting. Infections involve the nose, sinuses, pharynx, larynx, and the large airways. Diseases including acute bronchitis, are the common cold, sinusitis, tonsillitis, laryngitis, and life-threatening illness such as epiglottitis.

### Pharyngitis

Pharyngitis is the inflammation of the pharynx. The pharynx is the tube which sits at the back of the throat between the tonsils and the voice box. Infection can be caused by viruses or bacteria. The main symptom of pharyngitis is a sore throat and other signs of an infection, include discomfort when swallowing, fever, joint pain, muscle aches or tender swollen lymph nodes in the neck may be present. Based on examination, the care provider may decide to request testing for Streptococcus pyogenes (Group A Streptococci). If the test is positive for Group A Streptococci, your PCP will prescribe an antibiotic to kill off the organism.

The common cold caused by rhinoviruses, continues to be a large burden on society, economically and socially. It is the cause of the most cases of pharyngitis. Pharyngitis due to a virus will not resolve with antibiotics. It is important NOT to take antibiotics when a sore throat is due to a viral infection. The use of antibiotics to treat viral infections helps bacteria become resistant to antibiotics, and can also destroy healthy bacteria in the body.

### Tonsillitis

Tonsillitis is inflammation of the tonsils, two oval-shaped pads of tissue on each side at the back of the throat. Tonsillitis most commonly affects children between preschool ages and the mid-teenage years. Most cases of tonsillitis are caused by viruses, but bacteria can cause tonsillitis. Streptococcus pyogenes (group A streptococcus), the bacterium that causes strep throat is a common cause of tonsillitis.

### Sinusitis

Sinusitis, sometimes called rhinosinusitis, is an inflammation of the sinuses.

Sinuses are structures inside your face that are normally filled with air.

Sinuses are structures inside your face that are normally filled with passages in your nose. This drainage helps keep your nose clean and free of bacteria, allergens, viruses, fungi, and allergens which can be irritating causing them to get blocked and filled with fluid. This can cause pressure and pain in your face, nasal congestion, and other symptoms.

The viruses which cause the common cold, rhinoviruses are the etiology of most cases of sinusitis. Other viruses include influenza, parainfluenza, and SARS-CoV-2 virus. Bacterial agents include, Streptococcus pneumoniae, Haemophilus influenzae and Moraxella catarrhalis can also cause sinusitis and can infect after a case of viral sinusitis.

Colds, COVID-19, influenzae, allergies and sinus infections all have similar symptoms and are difficult to specifically diagnosis. Specific laboratory tests might be needed to identify the specific cause of sinus infection. Allergy testing may be performed if there are symptoms of chronic sinusitis.

### Laryngitis

Laryngitis is inflammation of the voice box (larynx). This larynx sits in the neck just past the throat. The common signs of laryngitis are hoarseness, trouble speaking, sore throat, tickling in the throat, dry cough, and low fever. The most common cause of acute laryngitis is cold viruses, influenza, which stem from an upper grade respiratory infection or bronchitis.

### Epiglottitis

Epiglottitis, also termed supraglottitis, is an inflammation of structures above the insertion of the glottis and is most often caused by bacterial infection. Before the availability of the Haemophilus influenzae type b (Hib) vaccination, H influenzae caused almost all pediatric cases of epiglottitis. The disease usually occurs in children 2 to 6 years of age and occurred in rarely adults. In United States, epiglottitis is an uncommon disease with an incidence in adults of about 1 case per 100,000 per year. The disease can occur at any time; there is no one season that it is more prevalent.

### Prevention of upper respiratory tract infection.

Upper respiratory infections are more common during the winter months and difficult to prevent because the etiological agents are in our environment and contagious. There are certain groups of people who are more at risk of getting infected. Children are at a high risk since they are often with other children who may be carrying a virus or bacteria. Children also wash their hands less frequently than adults and they're more likely to put their fingers in their eyes, nose, and mouth, allowing the germs to spread easily.

The best prevention is to practice good hygiene. Therefore, children should be taught to wash their hands thoroughly and frequently, especially after using the toilet and before eating, to cough or sneeze into a tissue or, into their elbow and to wash their hands after sneezing or coughing. Additionally, to avoid sharing food, drinking glasses, water bottles or eating utensils. The toothbrush should be replaced after being diagnosed with an upper respiratory infection. To help children prevent the spread of a bacterial or viral infection to others, ask the doctor when the child should return to school. Additionally, ways to avoid being infected is by always washing hands after contact with an individual who has a sore throat, avoid kissing or sharing cups and eating utensils with people who are sick. Washing hands often reduces the transmission of organisms to coworkers and family members.

Rhinovirus spreads easily from one person to another. The spray from a sick person's cough or sneeze is a big contagion risk. So are handshakes, high-fives, and nose-tweaks from that person. Anyone infected with rhinovirus is likely to have "germy" hands from rubbing or blowing their nose.

Vaccinations are very effective for the prevention of some upper respiratory infections. Vaccinations are available for Influenza, SARS-COV-2 to prevent and reduce the severity of COVID-19, Haemophilus influenzae type b, Streptococcus pneumoniae and respiratory syncytial virus (RSV) are available.