

# Respiratory Infection



جامعة ساووة



كلية التقنيات الصحية والطبية

قسم تقنيات التخدير

المرحلة الثالثة

الطبيب الاختصاص  
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URTI

# Common Cold

is a **viral infection** of the nose and throat also known as an upper respiratory infection.

**SYMPTOMS** may include **sore throat, runny nose, coughing, sneezing, body aches, and headaches.**

**CARE** includes getting plenty of rest and drinking plenty of fluids. There is no cure for a common cold, but over-the-counter medicines may help relieve symptoms.

# Pharyngitis

| Feature                       | Bacterial Pharyngitis                                                    | Viral Pharyngitis                               |
|-------------------------------|--------------------------------------------------------------------------|-------------------------------------------------|
| <b>Cause</b>                  | Bacteria (e.g., Streptococcus pyogenes)                                  | Viruses (e.g., rhinovirus, influenza)           |
| <b>Symptoms</b>               | Severe sore throat, fever, swollen lymph nodes, white patches on tonsils | Mild sore throat, cough, runny nose, hoarseness |
| <b>Onset</b>                  | Sudden and severe                                                        | Gradual                                         |
| <b>Fever</b>                  | High ( $>38^{\circ}\text{C}$ )                                           | Low or absent                                   |
| <b>Cough &amp; Runny Nose</b> | Rare                                                                     | Common                                          |
| <b>Treatment</b>              | Antibiotics if confirmed bacterial                                       | Supportive care (fluids, rest, pain relievers)  |
| <b>Complications</b>          | Possible (e.g., rheumatic fever)                                         | Usually self-limiting                           |

## Viral

Treat at home.  
Gargle with salt water.

RED / SWOLLEN  
TONSILS

RED / SWOLLEN  
THROAT

## Bacterial

Visit FastMed Urgent  
Care immediately.

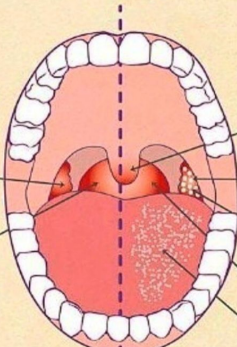
SWOLLEN UVULA

WHITE SPOTS

RED / SWOLLEN  
TONSILS

RED / SWOLLEN  
THROAT

GRAY, FURRY



# Tonsillitis

## Definition :-

- Tonsillitis is the inflammation of the tonsils, usually due to viral or bacterial infection.

## Causes :-

- **Viral:** Adenovirus, Influenza, Epstein-Barr virus
- **Bacterial:** Group A Streptococcus (most common bacterial cause)

# Tonsillitis / Symptoms

- Sore throat
- Fever
- Red, swollen tonsils
- White or yellow coating on tonsils
- Painful swallowing
- Swollen lymph nodes in neck
- Bad breath
- Headache
- Voice changes (muffled or hoarse)

# Tonsillitis / Treatment

- 1. Medical Management:-
  - Viral: Supportive care (rest, fluids, pain relievers)
  - Bacterial: Antibiotics (e.g., Penicillin, Amoxicillin)
  - Antipyretics (Paracetamol)
  - Analgesics (Ibuprofen)
- 2. Surgical:-
  - Tonsillectomy (if recurrent or chronic tonsillitis)

# Sinusitis

## What is Sinusitis?

Sinusitis is inflammation of sinuses because of infection, allergy, or blockage .

## Types of Sinusitis :-

Acute — < 4 weeks

Subacute — 4–12 weeks

Chronic — > 12 weeks (multiple times per year)

# Sinusitis

## Symptoms of Sinusitis :-

Blocked or stuffy nose

Facial pain or pressure

Headache (especially forehead)

Yellow or green nasal discharge

Postnasal drip (mucus in throat)

Loss of smell or taste

Fever or cough

Fatigue or tiredness

Tooth pain (especially upper teeth)

# Sinusitis

## Treatment :-

- Steam inhalation
- Nasal saline spray
- Decongestants
- Antihistamines
- Keep nose clean
- Avoid pollution/smoking
- Wash hands regularly

Prevention :- Treat colds & allergies early Avoid pollution/smoke

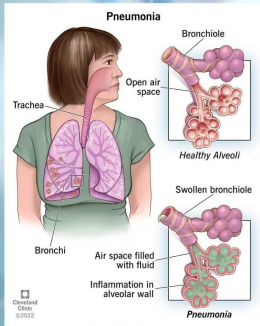
LRTI

# LRTI

**Pneumonia :-** Is an **infection** that inflames the air sacs “ **Alveoli** “ in one or both lungs . The Air sacs may fill with **fluid** or **pus** , causing difficulty in breathing .

# Pathophysiology :

Infectious agents invade the lungs, causing alveolar inflammation, fluid accumulation, and impaired oxygen exchange.



## Causes & Risk Factors:

- **Bacteria** (*Streptococcus pneumoniae*) .
- **Viruses** (flu, COVID-19) .
- **Fungi** (in immunocompromised people for ex. :- D.M , Cancer HIV , Steroid therapy ) .
- **Aspiration of food/liquids** .
- **Chronic illnesses** (COPD, diabetes) .
- **Smoking** .
- **Weakened immune system** .
- **Prolong immobility or bed rest** .
- **Recent surgery or Post Operative status** .

# Signs & Symptoms

- High Grade fever & chills
- Productive cough with purulent (pus- filled) sputum
- Chest pain & Shortness of breath
- Fatigue or loss of appetite

## Physical Examination & Vital Sign

- Coarse crackles on lung auscultation
- Low oxygen saturation (hypoxia)
- Tachycardia (rapid heart rate)
- Tachypnea (rapid breathing)

# Diagnosis :

## **1. Chest X-Ray**

- \_ bacterial = lobar Infiltrates
- \_ viral = diffuse Infiltrates
- \_ pleural effusions

## **2. Gram-stain or sputum culture**

**3. CBC with differeration** “ WBC > 15,000 suggest bacterial “

**4. Additional testing :** Urinary Antigen test , liver enzymes , Blood gas if in Hospital .

# Treatment

- **Antibiotics**; (Penicillin , cephalosporin) If Bacterial .
- **Antiviral**; (ganciclovir, neuraminidase inhibitors, interferons, etc) If Viral .
- **Antifungal** ; (fluconazole, Amphotericin B) If fungal .
- **Supportive care** “ Rest , fluid , Oxygen therapy if needed “ .
- **Hospitalization** “ for sever cases “
- **Vaccination** for Prevention

## Complication

- Respiratory failure
- Sepsis
- Lung abscess
- Pleurisy

