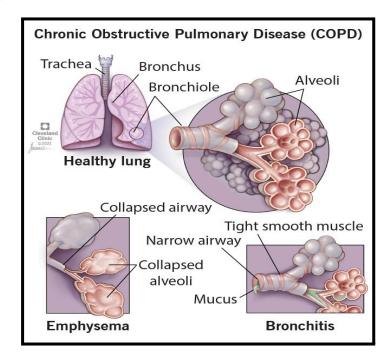




What is COPD?

Chronic Obstructive Pulmonary Disease (COPD) is a group of progressive lung diseases characterised by increasing breathlessness, cough and mucus production. It is a major cause of disability and the third leading cause of death worldwide. COPD encompasses two main conditions:

- Emphysema damages the air sacs (alveoli) in the lungs, reducing elasticity and making it harder for the lungs to function. This results in the destruction of the walls between alveoli, enlarging them and trapping air.
- Chronic bronchitis causes inflammation, scarring, and narrowing of the bronchial tubes, leading to a chronic cough and thick mucus buildup in the airways.



Healthy lungs have open airways, while in COPD, conditions like emphysema and bronchitis result in collapsed and narrowed airways.

Reasons for getting COPD and Who is at risk:

The primary cause of COPD is long-term exposure to lung irritants, particularly tobacco smoke. Other risk factors include:





- 1. Early life events such as poor growth in utero, prematurity, and frequent or severe respiratory infections in childhood prevent maximum lung
- 2. Genetic factors a rare genetic condition called alpha-1 antitrypsin deficiency, which can cause COPD at a young age
- 3. Exposure to secondhand smoke, indoor and outdoor air pollution, and occupational dust and chemicals increases the risk of developing COPD.

Symptoms of COPD:

growth

Symptoms often develop gradually and may not be noticeable until significant lung damage has occurred. The main symptoms of COPD include:

- Shortness of breath, especially during physical activity
- Chronic cough, often with mucus (sputum) production and excessive throat clearing, especially in the morning.
- Wheezing
- Chest tightness
- Frequent respiratory infections

In more advanced stages, some additional symptoms may include fatigue, unintended weight loss, swelling in ankles or feet, coughing up blood and unintended weight loss.

Diagnosis of COPD:

COPD is diagnosed through a combination of medical history, physical examination, and diagnostic tests including:

- **Spirometry:** A breathing test that measures how much air you can breathe in and out and how fast you can blow air out.
- Chest X-ray or CT scan: These imaging tests can help rule out other lung conditions and assess the extent of lung damage.
- **Blood tests:** To check for complications or rule out other conditions.
- Arterial blood gas test: To help assess oxygen and carbon dioxide levels in the blood.





Impact of COPD:

COPD can lead to several complications including:

- **Respiratory infections:** COPD patients are more susceptible to respiratory infections such as pneumonia, which can worsen symptoms and lead to hospitalisation.
- Heart problems: COPD can increase the risk of developing heart disease such as heart failure and arrhythmias.
- Lung cancer: COPD is associated with an increased risk of lung cancer.
- **Depression and anxiety:** Living with a chronic respiratory condition can take a toll on mental health.

Treatment for COPD:

There is no cure for COPD, but treatments can help manage symptoms, contain progress, prevent complications, and improve quality of life. Treatment options include:

- Medications:
 - Bronchodilators to relax airway muscles and make breathing easier
 - Inhaled steroids to reduce airway inflammation
 - Oral steroids in severe cases
 - Antibiotics to treat respiratory infections
- **Oxygen therapy:** For patients with severe COPD who have low levels of oxygen in their blood.
- **Surgery:** In severe cases, options such as lung volume reduction surgery or lung transplantation may be considered.
- **Pulmonary rehabilitation:** A comprehensive program that includes exercise training, nutritional advice, and education on managing COPD.
- Lifestyle changes: Quitting smoking, maintaining a healthy diet, and exercising regularly can help manage COPD symptoms and slow disease progression.





Management of COPD:



To Know More

- <u>Understanding Lung Cancer</u>
- <u>Constant Coughing could be Bronchitis</u>

My Health, My Responsibility