

DISORDERS OF RESPIRATORY SYSTEM

- **Asthma**

Causes: Asthma typically results from an allergic reaction to foreign substances that affect the respiratory tract, known as allergens.

Symptoms: It manifests with spasms of the smooth muscles lining the bronchioles. Common symptoms include coughing, wheezing (audible breathing sounds), and difficulty breathing due to inflammation, characterized by swelling and redness of the bronchi and bronchioles.

- **Emphysema**

Causes: Emphysema, which means 'full of air' or 'inflation,' is a chronic disorder primarily caused by excessive cigarette smoking. Other factors may include prolonged inhalation of smoke or toxic substances.

Symptoms: The condition involves damage to the walls of the alveoli due to prolonged smoking, resulting in a loss of elasticity in the bronchiole and alveoli walls. This leads to a reduction in the surface area available for gas exchange. Alveolar sacs become overinflated, causing difficulty in exhaling. Prevention involves avoiding cigarette smoking.

- **Occupational Respiratory Disorders**

Causes: These disorders arise from continuous exposure to harmful substances, gases, fumes, and dust in the work environment.

- **Pneumoconiosis:**

Causes: Inhalation of mineral dust, such as asbestos or silica, leads to this lung disease characterized by inflammation, coughing, and fibrosis.

Symptoms: Silicosis and asbestosis are common examples resulting from prolonged exposure to silica and asbestos dust, respectively. These disorders cause significant lung damage due to fibrosis in the upper part of the lungs, leading to inflammation and swelling.

Since these conditions develop due to extended exposure to hazardous substances, it is crucial to minimize such exposure. Workers in industries where harmful substances are present should wear protective masks to mitigate the risk.