



OCCUPATIONAL
LUNG DISEASES

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OCCUPATIONAL LUNG DISEASES

- What are **work-related lung diseases**?
- Work-related lung diseases are lung problems that are caused by certain work environments.
- These lung diseases may have lasting effects, even after the **exposure** ends.
- These sources include factories, smokestacks, exhaust, fires, **mining**, construction, and agriculture.
- **2.5 mic =alveolar**

OCCUPATIONAL LUNG DISEASES

- Pneumoconiosis

- Asbestosis=mc Asbest

- Baritosis: benign type of pneumoconiosis, which is caused by long-term exposure to the dust of insoluble compounds of barium, such as ground baryte ore.

- Bauxite fibrosis:Bauxite is the most common ore of aluminium. Extraction of aluminium metal takes place in three main stages

- Berylliosis

- ❖ Caplan's syndrome.....


- Chalcosis:Chalcosis is a medical condition that refers to the accumulation of silica particles in the lungs, primarily affecting workers in industries such as mining, sandblasting, and pottery manufacturing. This condition is also known as silicosis.

- Coalworker's pneumoconiosis (black lung)

- Siderosis

- Silicosis

- Byssinosis

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- OCCU-Copd
 - OCCU-Asthma=15%
 - MFF
 - All
 - Hypersensitivity pneumonitis
 - Bagassosis
 - Bird fancier's lung


OCCUPATIONAL LUNG DISEASES

- **Asbestosis**
- this leads to lung scarring and stiffening of the lungs.
- **Coal worker's pneumoconiosis or black lung disease.**
- This is caused **by breathing coal dust**. It causes lung inflammation and scarring.
- **Silicosis**
- This condition is caused by **breathing in airborne crystalline silica**. This is a dust found in the air of mines, foundries, and blasting operations. It is also found in the air of stone, and glass manufacturing facilities. It causes lung scarring. It can also increase the risk for other lung diseases.
- **History-** Lymph node calcifications
- **Byssinosis or brown lung disease**
- This is caused by **breathing in dust from hemp, flax, and cotton processing**. It affects textile workers, especially those who work with unprocessed cotton.

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- **Hypersensitivity pneumonitis:**
- This is an **allergic lung disease**.
- These include fungus spores, bacteria, animal or plant protein, or certain chemicals.
- They can come from moldy hay, bird droppings, and other organic dusts.
- cork worker's lung, farmer's lung, and mushroom worker's lung.

- **Work-related asthma.** This is caused by breathing in dusts, gases, fumes, and vapors.
- manufacturing and processing operations, farming, animal care, food processing, cotton and textile industries, and refining operations.

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- How are work-related lung diseases diagnosed?
 - The first step is for a healthcare provider to ask about a person's symptoms, **job**, and what kinds of materials they are exposed to at work.
 - Tests that may be needed to figure out the type and severity of the lung disease include:
 - **Chest X-ray**
 - **Pulmonary function tests:**

PULMONARY FUNCTION TESTS:

- In the context of occupational lung diseases, spirometry can help in the following ways:
- **Diagnosis:**
- Spirometry can help diagnose various occupational lung diseases, such as asthma, chronic obstructive pulmonary disease (COPD), and interstitial lung diseases, which may be caused by exposure to workplace hazards.
- **Screening:**
- Periodic spirometry testing can be used as a screening tool to identify early signs of lung function decline in workers exposed to occupational respiratory hazards, such as dusts, fumes, or vapors.
- **Monitoring:**
- Spirometry can be used to monitor the progression or improvement of occupational lung diseases over time, particularly in response to changes in exposure or treatment.
- **Baseline** assessment: Establishing a baseline **spirometry** measurement before exposure to occupational respiratory hazards can help identify any subsequent changes in lung function.

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- **Bronchoscopy**
 - **Biopsy.**
 - **Bronchoalveolar lavage.**
 - **Surgery.**
 - **Blood gas**
 - **CT scan**
 - **DLCO(ASBEST)**