

# **Guide to Interpreting an ILO Structured Report**

The ILO Classification System provides a structured way of describing chest radiographs of workers exposed to dusts such as coal, silica, and asbestos. It does not make a diagnosis but ensures consistency in reporting and supports occupational health decisions.

### **Report Components**

- 1. Film Quality
  - 1 = Good
  - o 2 = Acceptable, minor flaws
  - 3 = Poor, but readable
  - 4 = Unreadable

### 2. Parenchymal Abnormalities (Small Opacities)

- Shape/Size codes:
  - Rounded: p, q, r
  - Irregular: s, t, u
- o Profusion scale: 0, 1, 2, 3 (with subdivisions e.g., 1/0, 2/1)
- Lung zones: right/left, upper/middle/lower

### 3. Large Opacities (Progressive Massive Fibrosis - PMF)

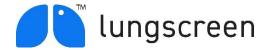
- A = up to 50 mm
- $\circ$  B = >50 mm but <1 lung zone
- C = larger than one lung zone

#### 4. Pleural Abnormalities

- Pleural plaques (circumscribed)
- Diffuse pleural thickening
- o Costophrenic angle obliteration

#### 5. Other Abnormalities

 Non-dust related findings (emphysema, TB, nodules, cardiac or bony changes)



# **Worked Examples**

### **Example 1: Simple Pneumoconiosis (Mild)**

• Quality: 2

• Parenchymal: q/t small opacities, profusion 1/1, bilateral upper zones

• Large opacities: None

• Pleura: Bilateral pleural plaques, costophrenic angles preserved

• Other: None

### Interpretation:

- Adequate film.

- Definite mild pneumoconiosis with irregular small opacities.

No PMF.

- Changes warrant confirmation on HRCT and correlation with occupational exposure for diagnosis.

- Evidence of asbestos-related pleural disease.

### **Example 2: Early Coal Worker's Pneumoconiosis**

• Quality: 1

• **Parenchymal**: p/p, profusion 1/0, bilateral upper zones

• Large opacities: None

Pleura: None

• Other: Mild emphysema

#### Interpretation:

- Good quality film.

- Very few rounded small opacities (borderline, not definite pneumoconiosis).

- May reflect early coal dust changes; smoking may also contribute.

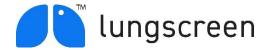
## **Example 3: Silicosis with PMF**

• Quality: 2

• Parenchymal: r/q, profusion 3/3, bilateral upper and middle zones

• Large opacities: Category B, right upper lung

 Pleura: None Other: None



#### Interpretation:

- Acceptable film.
- Dense, widespread small rounded opacities with high profusion.
- Category B large opacity = progressive massive fibrosis.
- Strongly consistent with advanced silicosis.

### **Example 4: Asbestos-Related Pleural Disease**

Quality: 1

• Parenchymal: None, profusion 0/0

• Large opacities: None

• Pleura: Bilateral pleural plaques, left costophrenic angle blunting

• Other: None

#### Interpretation:

- Good quality film.
- No interstitial pneumoconiosis.
- Pleural plagues and costophrenic angle blunting = asbestos-related pleural disease.
- Important finding even without parenchymal changes.

# **Key Takeaways for Clinicians & Employers**

- The **profusion score (0-3)** is the main severity indicator.
- Small vs large opacities distinguish simple pneumoconiosis from PMF.
- Pleural findings are especially relevant in asbestos exposure.
- The ILO report is descriptive, not diagnostic always interpret in context of exposure history, CT, and clinical findings.

### **Disclaimer**

This guide is for educational purposes only and should not be used as a substitute for professional medical interpretation. For more detailed and authoritative information, visit the **NIOSH website**: <a href="https://www.cdc.gov/niosh/topics/ilo/">https://www.cdc.gov/niosh/topics/ilo/</a>