

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
- 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*
- 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
- B = >50 mm but <1 lung zone
- C = larger than one lung zone

4. Pleural Abnormalities

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

5. Other Abnormalities

- Non-dust related findings (emphysema, TB, nodules, cardiac or bony changes)
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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.
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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).
 - No PMF.
 - May reflect early coal dust changes; smoking may also contribute.
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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
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Interpretation:

- Acceptable film.
 - Dense, widespread small rounded opacities with high profusion.
 - Category B large opacity = progressive massive fibrosis.
 - Strongly consistent with advanced silicosis.
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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 plaques and costophrenic angle blunting = asbestos-related pleural disease.
 - Important finding even without parenchymal changes.
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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**: <https://www.cdc.gov/niosh/topics/ilo/>
