# CHAPTER 2-1001, ESTABLISHING THE PRESENCE OF PNEUMOCONIOSIS

<table>
<thead>
<tr>
<th>Section</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Purpose and Scope</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Authority</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Policy</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>References</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Definitions</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Responsibilities</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>The Definition of Pneumoconiosis</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Establishing the Presence of Pneumoconiosis by Medical Evidence</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Establishing the Presence of Pneumoconiosis by Presumption</td>
<td>7</td>
</tr>
<tr>
<td>10.</td>
<td>Establishing Presence of Pneumoconiosis by Lay Evidence</td>
<td>9</td>
</tr>
</tbody>
</table>
1. **Purpose and Scope.**
This Procedure Manual (PM) chapter provides guidelines and standards of proof to be used by the Division of Coal Mine Workers’ Compensation (DCMWC) in determining the presence of pneumoconiosis in a claim for benefits under the Black Lung Benefits Act (BLBA).

2. **Authority.**

3. **Policy.**
Benefits under the BLBA are payable based on total disability or death due to pneumoconiosis. The existence of pneumoconiosis may be proved by medical evidence or by presumption, either method is equally sufficient to establish eligibility under this requirement.

4. **References.**
PM Chapter PM 2-501.

5. **Definitions.**
   a. **Chronic.** Chronic means continuing over an extended period of time. Generally, a chronic disease is not life threatening, though its complications or acute episodes may be. The diagnosis of a disease as chronic is a medical determination and does not depend on the disease existing for a specific length of time.
   
   b. **Pneumoconiosis.** Pneumoconiosis means a chronic dust disease of the lung and its sequelae, including respiratory and pulmonary impairments arising out of coal mine employment.
   
   c. **Sequelae.** Sequelae (pl. "sequelae") means a resultant condition or consequence of another disease, condition, or injury.

6. **Responsibilities.**
   a. **Claimant/Operator/Carrier.** Any party to a claim may submit evidence relevant to the presence or absence of pneumoconiosis within the limitations set by the regulations. See Chapter 2-502 (20 CFR 725.414).
   
   b. **District Director.** The district director (DD) is responsible for developing, processing and evaluating the evidence in each case, including making appropriate findings on the presence or absence of pneumoconiosis.
7. The Definition of Pneumoconiosis.

The BLBA defines pneumoconiosis as a chronic dust disease of the lungs and its sequelae, including respiratory and pulmonary impairments, arising out of coal mine employment. This definition encompasses both medical, or "clinical", pneumoconiosis and statutory, or "legal", pneumoconiosis. Both are recognized as a latent and progressive disease that may first become detectable after exposure to coal mine dust ends. 20 CFR 718.201(c).

a. Clinical Pneumoconiosis. 20 CFR 718.201(c)(1) defines clinical pneumoconiosis as those diseases recognized by the medical community as Pneumoconioses, i.e., the conditions characterized by permanent deposition of substantial amounts of particulate material in the lungs and the fibrotic reaction of the lung tissue to the deposition caused by dust exposure in coal mine employment.

(1) Examples of Clinical Pneumoconiosis. 20 CFR 718.201 provides that the definition of clinical pneumoconiosis includes, but is not limited to, the following diagnoses:

(a) Coal Workers' Pneumoconiosis
(b) Anthracosilicosis
(c) Anthracosis
(d) Anthrosilicosis
(e) Massive pulmonary fibrosis
(f) Progressive massive fibrosis
(g) Silicosis
(h) Silicotuberculosis

Consistent with the statutory definition of pneumoconiosis, the evidence must additionally show that clinical pneumoconiosis arose out of coal mine employment.

Note: A more severe type of clinical pneumoconiosis, referred to as complicated pneumoconiosis, which entitles the miner or survivor to an irrebuttable presumption of total disability or death due to pneumoconiosis, is addressed in PM Chapters 2-1002 and 2-1003.
b. Legal Pneumoconiosis. 20 CFR 718.201(a)(2) defines legal pneumoconiosis as any chronic lung disease or impairment and its sequelae arising out of coal mine employment.
This definition includes, but is not limited to, any chronic restrictive or obstructive pulmonary disease arising out of coal mine employment, including any chronic pulmonary disease or respiratory impairment significantly related to, or substantially aggravated by, dust exposure in coal mine employment. For example, diseases such as emphysema or chronic bronchitis, if found to be significantly related to or substantially aggravated by coal mine dust exposure, would be considered legal pneumoconiosis. The presence of legal pneumoconiosis should be supported by a reasoned medical opinion.

The key elements of the definition of legal pneumoconiosis are:

(1) Chronic Dust Disease of the Lung. It is a central requirement that the disease must be chronic, must be a lung disease and must result from exposure to coal mine dust during employment in the Nation’s coal mines.

(2) Sequelae. Sequelae are consequences or conditions that result from pneumoconiosis. The inclusion of sequelae in the definition of pneumoconiosis means that they are themselves pneumoconiosis. Thus, disability or death proceeding from sequelae of pneumoconiosis is, by law, a result of the disease itself, and potentially compensable. The relationship between pneumoconiosis and its sequelae must be established by medical evidence or reasoned medical opinion.

(3) Respiratory and Pulmonary Impairments. A respiratory or pulmonary impairment, standing alone, constitutes legal pneumoconiosis so long as the impairment arises from coal mine employment. That is true whether or not a specific lung disease responsible for the impairment has been identified. Broadly speaking, a respiratory or pulmonary impairment is any lessening or reduction in the ability to breathe or any loss of function in the lungs. An impairment is established using medical tests and evidence for establishing respiratory disability, namely, pulmonary function tests, arterial blood gas tests, cor pulmonale with right-sided congestive heart failure, or reasoned medical opinion. See 20 CFR 718.204(b)(2). It should be emphasized, however, that an impairment need not be disabling to be considered legal pneumoconiosis. Even a minimal or minor impairment that arises out of coal mine employment is legal pneumoconiosis; whether such an impairment is sufficiently severe to be totally disabling (i.e., prevents the miner from performing his last coal mine job) is properly addressed under Section 718.204. See PM Chapter 2-1002.
(4) **Arising Out of Coal Mine Employment.** A chronic lung
disease or impairment must “arise out of coal mine employment” to
constitute legal pneumoconiosis. The “arising out of coal mine
employment” requirement is met when the chronic lung disease or
impairment is “significantly related to, or substantially
aggravated” by dust exposure in coal mine employment. These are
not difficult standards to meet: where substantial medical
evidence, particularly a reasoned medical opinion, demonstrates
the contribution to or aggravation of a chronic lung disease,
including a pre-existing disease, by dust exposure in coal mine
work, the requirements of the definition are met.

**NOTE:** When the existence of pneumoconiosis is not established by
presumption (see Section 8 below), the claimant bears the burden
of proving the lung disease or impairment arose from coal mine
employment. The claimant may not use the ten-year presumption
(20 CFR 718.203) to satisfy this requirement, or otherwise
establish the existence of legal pneumoconiosis. The ten-year
presumption is used only when the miner has been diagnosed with
clinical pneumoconiosis.

8. **Establishing the Presence of Pneumoconiosis by Medical Evidence.**

a. **Evaluation of Medical Evidence.** The law provides four methods of
establishing the presence of pneumoconiosis by medical evidence,
discussed in PM Chapter 2-501:

(1) **Chest X-ray.** A chest x-ray showing profusion of 1/0 or
greater establishes the existence of pneumoconiosis. To
constitute probative evidence, a chest x-ray and chest x-ray
report must be in substantial compliance with the quality
standards set forth in 20 CFR 718.102. (The claims examiner must
confirm that the quality standards have been met.)

In the typical case, the record will contain multiple chest x-
rays and/or multiple chest x-ray readings of the same x-ray.
Where x-ray reports conflict, consideration must be given to the
radiological qualifications of the physician interpreting the x-
ray. The two most important such credentials are Board
certification in radiology and “B-reader” status (see 20 CFR
718.102(e)(2)). Thus, for example, greater weight may be
accorded the x-ray interpretation of a dually-qualified (B-reader
and Board Certified Radiologist) reader over the reading of a
physician who has no special qualifications as an x-ray reader.

The credibility of a particular x-ray report may be affected by
many other factors as well, such as the quality of the chest x-
ray under consideration, any ambiguity or equivocation in an x-ray report, whether an x-ray reading diverges widely from other readings, and the timing of the chest x-rays (where a significant amount of time exists between x-rays, the later x-ray -- if positive for pneumoconiosis -- may be accorded greater weight due to the latent and progressive nature of pneumoconiosis).

To summarize, the claims examiner must carefully consider all facts in determining whether the x-ray evidence establishes the presence of the disease. In order for the evidence to establish the presence of disease, a preponderance of the evidence must support the disease’s existence, i.e., the evidence supporting the disease must be found more credible than the evidence refuting the disease. If the medical evidence on each side is equally credible, the disease has not been proven in cases where the claimant has to prove the existence of the disease. For cases where pneumoconiosis is established by presumption, see section 9 below.

(2) **Autopsy Report.** An autopsy reporting macules, nodules or fibrosis related to coal mine dust exposure is evidence of clinical pneumoconiosis, although a finding of only anthracotic pigmentation is not sufficient to establish the disease. To constitute probative evidence, an autopsy report submitted in connection with a claim must be in substantial compliance with the quality standards set forth in 20 CFR 718.106. (The claims examiner must confirm that the quality standards have been met.)

An autopsy report is entitled to considerable weight in determining the presence of pneumoconiosis (both clinical and legal) because it is an examination of the actual lungs. An autopsy report that indicates the absence of any chronic lung disease whatsoever strongly militates against a finding of pneumoconiosis (both clinical and legal). Where the autopsy finds clinical pneumoconiosis absent, but shows the presence of a chronic respiratory disease, the claims examiner should review the medical evidence to determine if the disease was significantly related to or aggravated by dust exposure in coal mine employment, and thus establishes legal pneumoconiosis. An autopsy report that diagnoses lung disease but does not expressly address whether the disease is related to coal mine dust exposure is not conclusive evidence of the absence of pneumoconiosis.

(3) **Biopsy Report.** A biopsy reporting macules, nodules or fibrosis related to coal mine dust exposure is evidence of clinical pneumoconiosis, although a finding of only anthracotic pigmentation is not sufficient to establish the disease. To constitute probative evidence, a biopsy report submitted in
connection with a claim must be in substantial compliance with the quality standards set forth in 20 CFR 718.106. (The claims examiner must confirm that the quality standards have been met.)

A biopsy that reports the presence of clinical pneumoconiosis is strongly probative regarding the existence of the disease. A negative biopsy, however, is not conclusive because a biopsy examines only one part of the lungs. Where a large portion is biopsied, such as in a pneumonectomy, the report will carry more evidentiary weight. Otherwise, the guidelines applicable to autopsy reports also apply to biopsy reports.

(4) Reasoned Medical Opinion. The existence of pneumoconiosis may be established if a physician, exercising sound medical judgment, finds that the miner suffers from pneumoconiosis (either clinical or legal). The physician may reach this diagnosis even when an x-ray is negative for the disease. A diagnosis of pneumoconiosis must be based on objective medical evidence such as blood-gas studies, electrocardiograms, pulmonary function studies, physical performance tests, physical examination and medical and work histories. The physician’s finding must be supported by a reasoned medical opinion.

The reasoned medical opinion is assigned evidentiary weight as appropriate in consideration of all evidence. A wide variety of factors may affect the weight to be accorded a medical opinion.

(5) In addition to the above, "other relevant evidence" (Refer to PM Chapter 2-501) may be considered in support of a finding of pneumoconiosis.

b. Conclusion Based on Medical Evidence. A determination regarding the existence of pneumoconiosis must be based on consideration of all relevant medical evidence. The preponderance of medical evidence must support the presence of disease to establish the element. The claims examiner should use a two-step process to evaluate the evidence:

(1) Step One: Evaluate "like" evidence together. The examiner must first separately consider the evidence submitted in each particular section, and determine whether that section’s evidence establishes pneumoconiosis. For example, the examiner must weigh together all x-ray evidence and determine if it establishes pneumoconiosis. The examiner should then turn to the evidence submitted in the other categories and likewise determine if it establishes pneumoconiosis.

(2) Step Two: Weigh all evidence together. The examiner should weigh the conclusions regarding each section’s evidence
against each other. For example, if the x-ray evidence is positive for pneumoconiosis, and autopsy is negative, the examiner must determine which evidence is more persuasive.

CAUTION: In weighing all evidence together, it is particularly important to distinguish evidence of clinical pneumoconiosis from evidence of legal pneumoconiosis. As a general matter, an examiner should not use evidence relevant to one form of the disease to disprove the other form. For instance, autopsy evidence negative for clinical pneumoconiosis will have little or no bearing on a doctor’s opinion diagnosing a respiratory impairment from dust exposure in coal mine employment. On the other hand, if the sole or primary basis for a doctor’s finding of pneumoconiosis is a positive x-ray, and the x-ray evidence in total does not establish the disease, the doctor’s opinion should be rejected.


a. Presumptions. Two presumptions are available to the claimant to ease the burden of proof in establishing the disease:

(1) 20 CFR 718.302. Under this provision, if a miner establishes the existence of clinical pneumoconiosis and at least ten years of coal mine employment, his pneumoconiosis is presumed to be due to his coal mine employment.

(1) 20 CFR 718.305 (Fifteen Year Presumption). A totally disabled miner with 15 or more years of qualifying coal mine employment invokes a rebuttable presumption of disability or death due to pneumoconiosis. See also 30 U.S.C. 921(c)(4).

   (a) Invocation of the 15-year Presumption.

   i. Totally Disabling Respiratory or Pulmonary Impairment. The determination of the presence of a totally disabling respiratory or pulmonary impairment is made in accordance with the standards in 20 CFR 718.204. There is no requirement that the cause of the disability be shown (this is one of the facts presumed; see also section 11 below for rebuttal on the basis of causation).

   ii. Fifteen Years of Coal Mine Employment. The miner must have at least fifteen years of qualifying coal mine employment (Refer to PM Chapter 2-700) for the Section 411(c)(4) presumption to be invoked. For surface coal mine employment to qualify for the
presumption, work conditions must be substantially similar to those in an underground mine. By this, the claimant must demonstrate that the miner was regularly exposed to coal-mine dust. 20 CFR 718.305(b)(2). A miner who performs above-ground work at an underground mine (for example at a tipple) is considered an underground miner.

b. Rebuttal of the Fifteen Year Presumption.

(1) Standards for rebuttal. The Section 411(c)(4) presumption may be rebutted by establishing:

(a) That the miner does not or did not have clinical and legal pneumoconiosis; or

(b) That “no part” of the miner’s respiratory disability or death was caused by pneumoconiosis, 20 CFR 718.305(d)(1)(ii), (d)(2)(ii).

(c) See 20 CFR 718.305(d)(1)(i), (ii); (d)(2)(i), (ii).

(2) Methods of Rebuttal. The methods of rebuttal are applicable to all parties opposing entitlement. The methods are:

(a) Disproving Pneumoconiosis. The party opposing entitlement must disprove the existence of both clinical and legal pneumoconiosis. Disproving only one type will not rebut the presumption (since both forms are presumed on invocation). The claims examiner conducts the same analysis that is performed in determining the existence of pneumoconiosis in a non-presumption case. See Section 8 above. If, after conducting that analysis, the claims examiner finds that the weight of the evidence demonstrates the absence of clinical and legal pneumoconiosis, the presumption is rebutted.

NOTE: The presumption cannot be rebutted by evidence showing the presence of a totally disabling obstructive respiratory or pulmonary disease of unknown origin. The party opposing entitlement must affirmatively demonstrate that the disease is unrelated to dust exposure in coal mine employment.

(b) Disproving Disability Causation. This rebuttal method is considered after the party opposing entitlement
has failed to disprove the existence of pneumoconiosis. Because this Chapter concerns establishing the presence of pneumoconiosis, go to Section 9 above for a discussion of disproving disability causation.

10. **Establishing Presence of Pneumoconiosis by Lay Evidence.** In the case of a living miner, lay evidence alone cannot establish the presence of pneumoconiosis. The minimum amount of evidence required to establish the disease in a living miner's claim is at least one piece of positive medical evidence (see section 8.a) and the credible statements of the claimant, the claimant's spouse, and/or others having knowledge of the miner's condition. However, in a survivor's claim where no relevant medical or other evidence is available, lay evidence can establish presence of pneumoconiosis, as well as eligibility under one of the presumptions of the disease, although such a determination may not be based solely on affidavits or testimony from a person who would be eligible for benefits (including augmented benefits) if the claim were approved.