

## Part B Lung Diseases

### 1. Beryllium Sensitivity

Beryllium sensitivity is an allergic reaction of the immune system to the presence of beryllium in the body because of contact with beryllium dust particles or fumes.

- a. Employment/Exposure Requirements – An employee must have at least one day of verified employment at a Department of Energy (DOE) facility or beryllium vendor.
- b. Diagnostic Evidence - submission of an abnormal beryllium lymphocyte proliferation test (BeLPT) or one beryllium lymphocyte transformation test (BeLTT), performed on blood or lung lavage cells, which shows abnormal or positive findings. A claimant can also establish beryllium sensitivity by submitting the results of one beryllium patch test, which shows a positive reaction.

Benefits Under Part B. Once the medical, employment, and causation criteria are satisfied for a beryllium sensitivity claim under Part B, the employee receives medical monitoring (which includes all tests for CBD), treatment, and therapy for the condition effective on the date of filing.

### Issues –

1. Consistency of testing results amongst different diagnostic facilities
2. Reinterpretation by “normal” test outcomes as abnormal by a consulting physician
3. New and more relevant science on diagnostic tools for evaluating beryllium sensitivity
4. Definition of beryllium medical monitoring i.e. expected medical regimen for monitoring sensitivity to determine if it has progressed to CBD

## 2. Chronic Beryllium Disease

The evidence required to establish a claim for chronic beryllium disease (CBD) under Part B of the Act is statutorily set. Evidence must exist to document at least one day of beryllium exposure at a beryllium vendor or Department of Energy Facility. The Act then requires a decision as to the date of first evidence of chronic respiratory disorder (pre or post 1993). Depending on the answer to that question, the Act then stipulates what diagnostic evidence is necessary to establish CBD.

### a. Pre-1993 CBD

Any three of the following criteria:

- Characteristic chest radiographic (or computed tomography (CT)) abnormalities.
  - o This includes a variety of patterns/conditions such as non-caseating granulomas, nodules, interstitial fibrosis and honeycombing. More clear guidance on chest radiographic abnormalities consistent with CBD would be useful
- Restrictive or obstructive lung physiology testing or diffusing lung capacity defect.
  - o Pulmonary function test (PFT) is used as diagnostic tool for specific illnesses (i.e. asthma, COPD). Are PFT results within certain ranges consistent with CBD?
- Lung pathology consistent with CBD.
  - o In most instances, a physician's statement with medical rationale confirming that pathologic test results are consistent with CBD is sufficient to support claim. Additional guidance on lung pathology findings consistent with CBD would be useful
- A clinical course consistent with a chronic respiratory disorder.

- Immunologic tests showing beryllium sensitivity (e.g., skin patch test or beryllium blood test preferred).
  - o State requirements for establishing a diagnosis of beryllium sensitivity are more stringent than those under our program (e.g. State of Washington requires multiple test results for establishing diagnosis of beryllium sensitivity).

b. Post-1993 CBD Criteria.

Beryllium sensitivity (as established by the criteria already discussed) AND lung pathology consistent with CBD, including:

1. lung pathology showing granulomas or a lymphocytic process consistent with CBD;
2. computerized axial tomography (CAT) scan showing changes consistent with CBD; or
3. pulmonary function or exercise testing showing pulmonary deficits consistent with CBD

A physician's rationalized opinion noting that biopsy findings are consistent with CBD will take precedence over the diagnostic data

Benefits under Part B. Lump sum compensation of \$150,000 to the employee or a survivor is payable. In the case of a living employee, he or she also receives medical benefits for treatment of the condition.

Issues –

1. Clarification of the diagnostic and interpretive meaning of “characteristic of CBD” to differentiate between CBD and other lung disease
2. Consistent and uniform standard for judging medical evidence for the pre or post 1993 as evidence of a “chronic respiratory disorder”

3. Necessitating lung lavages or lung biopsy on critically ill or elderly patients
4. Obtaining clarity on the specific diagnostic markers required for CBD in the pre or post 1993 diagnostic requirements
5. Clearer guidance on the relationship between sarcoidosis and CBD
6. Recommendations or advice relating to conditions that are normal and usual consequential illnesses to CBD
7. Input or suggestion regarding assessment of negative BeLPT as either false-negative or borderline due to drug interference or other treatment modalities

3. Chronic silicosis

Chronic silicosis is a non-malignant disease of the lung caused by prolonged exposure to silica dust. Under Part B, chronic silicosis is covered.

- a. Employment/ Exposure Requirements. The evidence required to establish a claim for chronic silicosis under Part B of the Act is statutorily set. A covered employee must have been exposed to silica in the performance of duty for an aggregate of at least 250 work days during the mining of tunnels at a DOE facility located in Nevada or Alaska.
- b. Medical Requirements. Latency period of 10 years between the date of initial silica exposure and diagnosis date for chronic silicosis **AND** a written medical narrative from a qualified physician that includes a diagnosis of chronic silicosis.
- c. Diagnostic Evidence:

Any of the following criteria:

- A chest radiography, interpreted by a physician certified by the National Institute for Occupational Safety and Health (NIOSH)

as a B-reader (physician's signature not required), classifying the existence of pneumoconiosis of category 1/0 or higher.

- Results from a computer assisted tomograph or other imaging technique that are consistent with chronic silicosis.
- Lung biopsy findings consistent with chronic silicosis.

Issues –

1. Clear guidance on the certification requirements for B-readers and how that is documented on B-reader test results