

pneumoconiosis arose out of employment in the Nation's coal mines; or (2) that the deceased individual was a miner, that he was totally disabled due to pneumoconiosis at the time of his death, and that his pneumoconiosis arose out of employment in the Nation's coal mines.

(c) Total disability is defined in §410.412; the basic provision on determining the existence of pneumoconiosis is in §410.414; and the requirement that the pneumoconiosis must have arisen out of coal mine employment is in §410.416. The statutory presumptions with respect to the burden of proving the foregoing are in §§410.414(b), 410.416(a), and 410.418, and the provision for determining the existence of total disability when the presumption in §410.418 does not apply is included in §410.422.

§410.412 "Total disability" defined.

(a) A miner shall be considered totally disabled due to pneumoconiosis if:

(1) His pneumoconiosis prevents him from engaging in gainful work in the immediate area of his residence requiring the skills and abilities comparable to those of any work in a mine or mines in which he previously engaged with some regularity and over a substantial period of time (that is, "comparable and gainful work"; see §§410.424 through 410.426); and

(2) His impairment can be expected to result in death, or has lasted or can be expected to last for a continuous period of not less than 12 months.

(b) A miner shall be considered to have been totally disabled due to pneumoconiosis at the time of his death, if at the time of his death:

(1) His pneumoconiosis prevented him from engaging in gainful work in the immediate area of his residence requiring the skills and abilities comparable to those of any work in a mine or mines in which he previously engaged with some regularity and over a substantial period of time (that is, "comparable and gainful work"; see §§410.424 through 410.426); and

(2) His impairment was expected to result in death, or it lasted or was expected to last for a continuous period of not less than 12 months.

§410.414 Determining the existence of pneumoconiosis, including statutory presumption.

(a) *General.* A finding of the existence of pneumoconiosis as defined in §410.110(o)(1) may be made under the provisions of §410.428 by:

- (1) Chest roentgenogram (X-ray); or
- (2) Biopsy; or
- (3) Autopsy.

(b) *Presumption relating to respiratory or pulmonary impairment.* (1) Even though the existence of pneumoconiosis is not established as provided in paragraph (a) of this section, if other evidence demonstrates the existence of a totally disabling chronic respiratory or pulmonary impairment (see §§410.412, 410.422, and 410.426), it may be presumed, in the absence of evidence to the contrary (see paragraph (b)(2) of this section), that a miner is totally disabled due to pneumoconiosis, or that a miner was totally disabled due to pneumoconiosis at the time of his death.

(2) This presumption may be rebutted only if it is established that the miner does not, or did not, have pneumoconiosis, or that his respiratory or pulmonary impairment did not arise out of, or in connection with, employment in a coal mine.

(3) The provisions of this paragraph shall apply where a miner was employed for 15 or more years in one or more of the Nation's underground coal mines; in one or more of the Nation's other coal mines where the environmental conditions were substantially similar to those in an underground coal mine; or in any combination of both.

(4) However, where the evidence shows a work history reflecting many years of such coal mine employment (although less than 15), as well as a severe lung impairment, such evidence may be considered, in the exercise of sound judgment, to establish entitlement in such case, provided that a mere showing of a respiratory or pulmonary impairment shall not be sufficient to establish such entitlement.

(c) *Other relevant evidence.* Even though the existence of pneumoconiosis is not established as provided in paragraph (a) or (b) of this section, a finding of total disability due to pneumoconiosis may be made if other

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relevant evidence establishes the existence of a totally disabling chronic respiratory or pulmonary impairment, and that such impairment arose out of employment in a coal mine. As used in this paragraph, the term *other relevant evidence* includes medical tests such as blood gas studies, electrocardiogram, pulmonary function studies, or physical performance tests, and any medical history, evidence submitted by the miner's physician, his spouse's affidavits, and in the case of a deceased miner, other appropriate affidavits of persons with knowledge of the individual's physical condition, and other supportive materials. In any event, no claim for benefits under part B of title IV of the Act shall be denied solely on the basis of a negative chest roentgenogram (X-ray).

§410.416 Determining origin of pneumoconiosis, including statutory presumption.

(a) If a miner was employed for 10 or more years in the Nation's coal mines, and is suffering or suffered from pneumoconiosis, it will be presumed, in the absence of persuasive evidence to the contrary, that the pneumoconiosis arose out of such employment.

(b) In any other case, a miner who is suffering or suffered from pneumoconiosis, must submit the evidence necessary to establish that the pneumoconiosis arose out of employment in the Nation's coal mines. (See §410.110 (h), (i), (j), (k), (l), and (m).)

§410.418 Irrebuttable presumption of total disability due to pneumoconiosis.

There is an irrebuttable presumption that a miner is totally disabled due to pneumoconiosis, or that a miner was totally disabled due to pneumoconiosis at the time of his death, if he is suffering or suffered from a chronic dust disease of the lung which:

(a) When diagnosed by chest roentgenogram (X-ray), yields one or more large opacities (greater than 1 centimeter in diameter) and would be classified in Category A, B, or C (that is, as *complicated pneumoconiosis*), in:

(1) The ILO-U/C International Classification of Radiographs of Pneumoconioses, 1971, or

(2) The International Classification of the Radiographs of the Pneumoconioses of the International Labour Office, Extended Classification (1968) (which may be referred to as the "ILO Classification (1968)"), or

(3) The Classification of the Pneumoconiosis of the Union Internationale Contra Cancer/Cincinnati (1968) (which may be referred to as the "UICC/Cincinnati (1968) Classification"); or

(b) When diagnosed by biopsy or autopsy, yields massive lesions in the lung. The report of biopsy or autopsy will be accepted as evidence of complicated pneumoconiosis if the histological findings show simple pneumoconiosis and progressive massive fibrosis; or

(c) When established by diagnoses by means other than those specified in paragraphs (a) and (b) of this section, would be a condition which could reasonably be expected to yield the results described in paragraph (a) or (b) of this section had diagnoses been made as therein prescribed; *Provided, however*, That any diagnoses made under this paragraph shall accord with generally accepted medical procedures for diagnosing pneumoconiosis.

§410.422 Determining total disability: General criteria.

(a) A determination of total disability due to pneumoconiosis is made in accordance with this section when a miner cannot be presumed to be totally disabled due to pneumoconiosis (or to have been totally disabled due to pneumoconiosis at the time of his death), under the provisions of §410.418. In addition, when a miner has (or had) a chronic respiratory or pulmonary impairment, a determination of whether or not such impairment is (or was) totally disabling is also made in accordance with this section for purposes of §410.414(b).

(b) A determination of total disability may not be made for purposes of this part unless pneumoconiosis is (or is presumed to be) the impairment involved.

(c) Whether or not the pneumoconiosis in a particular case renders (or rendered) a miner totally disabled, as defined in §410.412, is determined from