

(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 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