

The fate of the asbestos fiber once it is inhaled and deposited in the lung is still questionable. The short fibers, less than .5 microns in length, have in the past been ignored, probably because they are much too narrow to be visible under a light microscope. The longer fibers are encrusted in an iron-bearing protein form termed "asbestos bodies," which are more easily visible.

Among asbestos workers, evidence of pulmonary asbestosis, also known as asbestotic pneumoconiosis, an asbestos induced scarring of the lungs, is common. This condition results in a diffuse fibrosis, usually in the lower lobes of the lung. Pulmonary asbestosis has been called a monosymptomatic disease, characterized by painful breathing and lung disorder. See Nicholson statement, Ex. 21, R.35 and following. Litton Ex. 3, p. 4 and following.

Asbestosis usually develops after long exposure to high concentrations of asbestos dust, the risk varying directly with the length of exposure and the dust concentration. Following continued exposure to high concentrations of dust, asbestosis may develop fully in 7 to 9 years and may cause death as early as 13 years after the onset of exposure. The common exposure period before recognition of asbestosis as observed among asbestos workers is 20 to 40 years, with death following about 2 to 10 years later. Once established, asbestosis progresses even after the exposure to dust ceases: illness or death can occur long after exposure to concentrations not producing immediate effects.

The prolonged latency period between exposure and the first signs of asbestosis makes it difficult to establish dose-time relationships.

In 1946, 700 cases of asbestosis were found in Germany among a total of approximately 8,000 employees in the asbestos industry. 125 cases of asbestosis of the lung in X-ray examinations of 476 asbestos workers were found in one company in Finland. The occurrence of asbestosis in members of this worker group appears to rise with the duration of the employment: A morbidity of 80 percent among English asbestos workers with over 20 years of employment has been reported. Selikoff and others investigated 1,522 asbestos insulation workers in the New York-New Jersey metropolitan area. Among 392 individuals examined more than 20 years from the onset of exposure, X-Ray evidence of asbestosis was found in 339. In half of these, the asbestosis was moderate or extensive. In individuals with less than 20 years of exposure, radiological evidence of asbestosis was less frequent and when present, less likely to be extensive.