

and some had left these areas of exposure as young children. The average period between exposure and development of the tumor was 20 to 40 years. Later studies verified this interrelationship between asbestos exposure and mesothelioma. See Litton Report, Ex. 19, p. 12; Nicholson, Ex. 21; Selikoff, Ex. 4.

In an attempt to determine whether mesothelioma of the serosal surfaces was related in any way to asbestos exposure in the United States, Selikoff studied 307 consecutive deaths among asbestos insulation workers in the Northeastern United States. They found 10 deaths caused by four pleural and six peritoneal mesotheliomas. In addition, these workers had a high death rate attributed to cancer of the stomach, colon, and rectum. Of the 307 deaths, 40.4 percent were attributed to cancer, 5.5 percent to asbestosis, and 54.1 percent to other causes. In a second study, the investigators reviewed 26 consecutive autopsies of patients with asbestosis, and found four mesotheliomas of the pleura and three of the peritoneum.

Mesothelioma is now considered a frequent cause of death among asbestos workers. No attempt has been made to summarize the reports of mesothelioma, since they appear almost weekly in the current literature. So far, however, there appear to be few cases among the general population. Selikoff reviewed 31,652 deaths among the general population of over 1,048,183 in the United States and found only three cases of mesothelioma. Moreover, he points out that asbestos is not the only cause of mesothelioma; it has also been produced by silica and polyurethane.

While the exact cause of lung cancer or pleural peritoneal mesothelioma induced by asbestos is not known, air pollution by other pollutants may accelerate the morbidity. One form of air pollution which is easily studied in individuals is smoking. Selikoff recently studied the mortality of 370 asbestos insulation workers. In this group, 24 men died of lung cancer and all had a history of smoking. See Weiss, Ex. 15, "Cigarette Smoking, Asbestos, and Pulmonary Fibrosis", American Review of Respiratory Disease, Vol. 104, 1971. This rate was eight times greater than the expected mortality rate, with age and smoking habits taken into account.

The recent finding of "asbestos bodies" in one-fourth to one-half of the urban population has added new impetus to the examination of asbestos as a general air pollutant.

An "asbestos body" has been defined as "an elongated golden or reddish-brown structure usually with clubbed ends. The shaft, which often shows a segmented or beaded appearance, is usually straight, but sometimes curvilinear with a tendency toward symmetry. Usually it is from 3 to 5 microns in diameter and 20 to 100 microns in length. The coating contains iron demonstrable by