

Nearly all of these cases have been confined to one asbestos mining area. The majority of these people were not employed in the asbestos manufacturing industry. Chemical investigations have shown that oils containing carcinogenic hydrocarbons are present naturally in this particular type of asbestos.

Another study taking much the same approach as that reported by Dr. Elmes of Belfast was reported by Muriel Newhouse of the London School of Hygiene and Tropical Medicine. Dr. Newhouse reported on a series of patients attending a large hospital in the east end of London. Dr. Newhouse's patients were divided into two groups; the first consisted of 83 patients in whom the diagnosis of mesothelioma had been confirmed at autopsy or by biopsy. In all but seven the past occupational and domestic histories were obtained. In 21 patients the tumor was peritoneal in origin and in 62 it was pleural. The earliest recorded death was 1917 but only ten of the series died before 1950; 55% of the males and 42% of the females died under the age of 55. The interval between the first exposure and development of terminal illness ranged between 16 and 55 years, the mean was 37. The second group consisted of 76 patients at the same hospital, matched by sex and date of birth with those traced in the first series; 52.6% of those suffering from mesothelioma had been exposed to asbestos as compared to 11.8% of the control group. Three main types of exposure were recognized: work in factories manufacturing asbestos textiles, insulating materials and other products, employment as ladders or insulators, and exposure to dust brought home by relatives working with asbestos. Eighteen of those employed in factory work or whose relatives were working with asbestos were employed in one factory. This factory opened in 1913 and was until recent years a heavy user of crocidolite. All those whose records could be traced worked with this type of asbestos. Amongst the 36 patients with mesotheliomata with no positive occupational history and no relatives living at home working with asbestos, there were 11 who lived within half a mile of an asbestos factory. Five of the control series also lived in the same area. The difference in the proportion of patients in the two series was statistically significant.

Dr. Ian Webster, of the Pneumoconiosis Research Unit, Johannesburg, South Africa, pointed out in his paper that although animal experiments have succeeded in showing the growth of a mesothelioma-like tumor in animals in which the asbestos was inoculated directly into the pleura, it had not been possible to produce carcinomata by exposing the animals to an asbestos dust cloud.

A further study of pleural mesothelial tumors from autopsy records was given by W. Glyn Owen, of Liverpool, England. Seventeen cases were selected as good examples of diffuse mesotheliomas. Sixteen of these were pleural and one was peritoneal. Evidence of asbestos exposure was obtained in 14 (82%) of the 17 mesothelioma