

lung cancer had been exposed to noxious types of dust during their work (quartz, gold ores, copper ores, tin ores, and coal). The greatest susceptibility to lung cancer was displayed by workers exposed to house dust. Among men engaged in dusty occupations, an especially high incidence of lung cancer exists in grooms (Hudson). In the series reported by Duguid, there were 72 outdoor workers against 71 indoor workers. Since three-fourths of the population is represented by indoor workers, the incidence of lung cancer is three times higher in outdoor workers than in indoor ones, who are exposed to the inhalation of dust to a lesser degree than the former, in the opinion of Duguid. This investigator believed that this evidence supports the causative significance of dust in the development of pulmonary malignancy. Schachter emphasized the etiological importance of a dusty occupation for the production of lung cancer. Among 898 cases of lung cancer, collected by Brochbank, 61 cases had occupational exposure to some kind of dust (18 metal workers, 15 cigar makers, and 28 carpenters); while in Brockbank's own series of 62 cases, 9 or 14.5 per cent were associated intimately with dust and 18 or 29 per cent were exposed to fumes. Among the cases, reported by Ferenszy and Matolsky, 43 per cent came from professions with a dust or fume hazard. Occupational exposure to tobacco dust has figured prominently in the studies of several investigators concerning a carcinogenic dust hazard. Rottman listed cigar makers, metal workers, and spinners among professions most often affected by pulmonary malignancy. Similar claims have been made by Wacker and Schmincke; Krompecher; Langbein; Behla; Heilmann; Benda; Borst; Ferenszy and Matolsky; Enger; Brinkmann; and Seyfarth. Cigar makers, sorters, dealers, and other tobacco workers have been cited as showing an increased liability in this respect and Jaeger and Kolbe considered cancer of the lung as an occupational disease of tobacconists. Cancer of the respiratory tract was found to be especially frequent among male workers of certain Sheffield trades connected with metallurgic industries (machinists, foundry workers, and metal grinders) (Turner and Grace). An occupational exposure to dust was present in 20 per cent of the cases reported by Ask-Upmark, and in 75.4 per cent of those recorded by Rosedale and McKay. From death certificates of England and Wales for the years 1920 to 1932, Kennaway and Kennaway obtained the following correlations between dusty occupations and incidence of lung and larynx cancer. A rather high excess of these neoplasms was statistically found in workers exposed to road dust [paviours, street cleaners, dustmen, and drivers of horse drawn vehicles and automobiles (chauffeurs had a normal rate of larynx cancers)], masons, concretors, council workers, workers exposed to producer coal gas and tar products, pottery makers, French polishers, tobacconists, and metal grinders (silica exposure); while a low lung cancer death rate was found among workers of the agricultural and mining industries, and cotton mule spinners (crude oil exposure), a normal liability existed among carpenters and grooms of horses. As no special occupation