

the clinical approach, it is apparent that studies of the environment in the interest of cancer, especially of the lung, are complicated by a host of variables which cannot always be determined with certainty in the light of present knowledge. The clinical studies are further complicated by divergent susceptibility, the varied intensity of exposure, and the long interval between exposure and diagnosis. While it cannot be denied that environmental cancer occurs it must also be admitted that the full elucidation of occupational cancer awaits further refinement of experimental, clinical and epidemiological studies.

INDUSTRIAL DUSTS

750 Water Infusion. J. Platt. Coll. Guard. 193, 306-307 (Sept. 6, 1956).

Water infusion stands first among steps taken to minimize the production of dust in coal mines. The high pressure of water also loosens the coal and makes it easier to work, giving possibly a 10% greater output. A recently devised infusion tube improves the application of the process. The tube, through which the water is introduced under pressure, is provided with a rubber seal or collar, which expands under the pressure and so prevents the water from escaping. The principle of the tube is illustrated. A new type of pump used in high pressure infusion is also described. High-pressure water infusion has made possible periodical, as opposed to shift-by-shift, infusion. Under suitable conditions high-pressure water infusion combines the ideals of safety and production. -- Cond. from Bull. Hyg.

751 Eliminating Dust in Chemical Plant. R. Hammond. Chem. Age (London) 77, 431-433 (Mar. 9, 1957).

Efficient removal of dust from air and flue gases is of great importance to the chemical industry, both for health of workers and for purity of the products, and many interesting techniques have been developed. Standard equipment comprises a collector, an exhaust fan, ventilating hoods, ducting, and piping to carry the collected material to a place of disposal. The collectors described include a multi-wash collector, a high efficiency filter, and electrostatic precipitators. A number of features of each are discussed.

752 Radiological Surveys of Working Quarrymen and Quarrying Communities in Caernarvonshire. T. F. Jarman, J. G. Jones, J. H. Phillips, and H. E. Seingry. Brit. J. Ind. Med. 14, 95-104 (Apr. 1957).

Results of a radiological survey of 2,432 working quarrymen from five slate quarries are reported and compared with those of an earlier survey of coal miners in the Rhondda Fach district. The prevalence of pneumoconiosis of category 2 and upwards was 83 per 1,000 quarrymen examined, against 300 per 1,000 miners and ex-miners in Rhondda Fach. The prevalence of infectious tuberculosis, however, was higher in the quarrymen; 5.3 per 1,000 in contrast to 1.4 per 1,000 in the miners. A radiographic survey of 75% of the total population of a part of the quarrying district was also conducted. The tuberculosis rates were higher in the quarrying district than in the mining district, for quarry and ex-quarry workers, males not engaged in quarrying, and females, but the ratio was lowest in females. It would appear that quarryers and males not engaged in quarrying but living in quarrying communities are more likely to contract tuberculosis than miners and males not engaged in mining in a coal-mining valley. Though it has not been definitely proved that the pneumoconiosis of quarry workers is responsible for this difference, the findings suggest that working in the slate quarriers may be an important contributory and perhaps a major determining factor. -- Cond. from authors' summary