

possible alternative materials to asbestos should be used whenever possible. A proposal to mix asbestos with tarmacadam for road use is viewed with concern. -- APCA Absts.

Editor's Note: Regarding 554-566, interested readers are referred to the Editorial in the May issue of IHD and IHF Medical Series Bulletins No. 11 and 12 which report progress and planning of IHD asbestos bioeffects research. -- R. T. P. deT.

The Epidemiology and Clinical Features of Asbestosis and Related Diseases. P. C. Elmes. Postgrad. Med. J. 42, 623-635 (Oct. 1966).

Pulmonary fibrosis caused by asbestos dust has become less common since the introduction of dust suppression measures in 1932-33. However, in occupations where these safety measures are not observed, asbestosis is still a threat. Symptoms of asbestosis are breathlessness on exertion, productive cough, tightness in the chest, clubbing of fingers, warts, cyanosis, restricted chest movement, kyphosis, and fine rales heard over the lung bases. Changes in x-rays are not conclusive, since they also occur with other forms of chronic diffuse fibrosis involving the pleura. No laboratory tests except lung biopsy are diagnostic of asbestosis but sputum examination and respiratory function tests help to support the diagnosis. Carcinoma of the lung resulting from exposure to asbestos appears to be common in patients whose exposure to the dust was insufficiently long or intense to cause crippling fibrosis. The rapidly increasing number of cases of fatal mesothelioma of the pleura and peritoneum have been definitely traced to exposure to asbestos dust. The degree of exposure in many cases is slight and there can be a long interval between exposure to the pollutant and the development of the tumor. Preventive measures recommended are restriction of use and greater precaution in the handling of all types of asbestos. Crocidolite fiber, in particular, should be eliminated from commercial use. -- APCA Absts.

Asbestos—An Environmental Health Hazard. W. D. Norwood, P. A. Fuqua and T. F. Mancuso. Northwest Med. 66, 821 (Sept., 1967).

Four Case Reports demonstrate asbestosis with pulmonary emphysema and cor pulmonale, asbestosis with lung cancer, mesothelioma, and rectal cancer. The occupational histories of workers as plumbers, boiler makers, carpenters, pipe fitters, steam fitters, mechanics, stationary engineers, undercoaters, foremen, maintenance electricians, builders, rubber workers, construction workers, cement workers, boiler repairers, sheet metal workers and laborers must all be elicited if diagnosticians hope to record the more than 3,000 different exposures to asbestos. For the sake of workers and their dependents with industrial health compensation rights, the diagnostician must not be misled by recent occupational history nor overlook other work exposures within the lifetime of the patients. The obvious need for decreasing the exposure to asbestos by better occupational hygiene programs is recognized but no detailed criteria were presented. Considering the growing uses of asbestos, this occupational and environmental disease may get worse before it gets better. -- J. Occ. Med. Absts.

Talc in Atmospheric Dusts. H. Windom, J. Griffin, and E. D. Goldberg. Environ. Sci. Tech. 1, 923-926 (Nov. 1967).

The mineral talc has been observed in dusts recovered directly from the atmosphere and in the solid mineral phases of rain and snow. The talc, where detected, attains levels of the order of a per cent by weight in the solid phases. This talc probably arises from agricultural activity where the mineral is used as a carrier and diluent for pesticides. The amounts of talc found in atmospheric dusts appear to reflect a local introduction rather than a generalized global fallout. -- APCA Absts.

Measurement of Asbestos Exposure. J. R. Lynch and H. E. Ayer. J. Occ. Med. 10, 21-24 (Jan., 1968).

As an outcome of an epidemiologic study, a safe level of exposure should be set in terms of a method of exposure measurement which meets the following criteria in the order given: (1) The environmental factor measured should be sufficiently relevant to the disease mechanism to correlate with health status even in environments where exposures to mixed dust occur. (2) The sensitivity of the method should be such as to measure levels well below the Threshold Limit Values (TLV). (3) The method should lend itself to an appropriate sampling strategy; e.g., long-period personal samples in the case of asbestos. (4) The expense of conversion from existing methods should be reasonable. The impinger method of measuring asbestos exposure does not meet any of the criteria well with the exception of expense. Weight methods would be preferred if there were an analytical breakthrough. At present fiber counts on membrane filters are the best method of estimating exposure as related to the risk of asbestosis and the airborne fiber concentration as a factor in the risk of lung cancer. There are 3 references.

-- Cond. from text.