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Asbestosis as Modern Urban Hazard. J. G. Thomson, R. O. C. Kaschula and R. R. Macgregor. S. African Med. J. 37, 77 (Jan. 19, 1963).

In smears from lung bases from 500 consecutive autopsies in subjects of 15 years or over, asbestos bodies were found in 30% of the males and 20% of the females. In most cases these bodies were scanty and not associated with pulmonary changes and are considered to be the result of contamination of the urban atmosphere. In 6% of the males the bodies were numerous and were presumably of occupational origin. In 3 of the 132 positive cases there was associated pulmonary fibrosis and disability. In only one of these a history of exposure to asbestos was obtainable. An increase in the amount of urban air contamination seems to be inevitable in view of the increasing consumption and diversity of uses of asbestos, and of its indestructibility. The tendency for asbestos fibers to concentrate in the bases of the lower lobes of the lungs produces a cumulative effect, and an increase in the frequency of basal asbestosis is probable. This basal asbestosis does not result in pulmonary disease or disability, but appears to be of etiological significance in mesothelioma of pleura or peritoneum.

-- J. Am. Med. Assn. References and Reviews

PHYSICAL ASPECTS OF THE ENVIRONMENT

A Preliminary Study of Some Health Hazards in the Plasma Jet Process. D. E. Hickish and P. J. R. Challen. Brit. J. Ind. Med. 20, 95-99 (Apr. 1963).

A brief technical description is given of the plasma jet process, and reference is made to its likely practical applications in industry. An opportunity has been taken during experiments with a prototype plasma jet to assess some of the health hazards which might arise from these industrial applications and to indicate the type of precautions which should be observed in practice. Measurement and analysis of the noise emitted during the operation of a jet showed that the sound intensities ranged from 79.5 to 90.5 db. (re 0.0002 dynes/sq. cm.) per octave band between 300 and 10,000 cycles/second. Three male volunteers exposed to the noise for a period of one hour were subsequently found to have a mean temporary threshold shift of 19 db. at 4,000 cycles/second. Air sampling and analysis for ozone and nitrogen dioxide in the near vicinity of the jet gave a negative result for the former substance but demonstrated that the latter contaminant was present in concentrations ranging from 0.1 to 9.6 ppm.

-- Authors' abst.

Protection Against Toxic Substances in Space Travel. H. H. Bovee and J. E. Schubert. Am. Ind. Hyg. Assn. J. 24, 168-171 (Mar.-Apr. 1963).

Of the many sources of toxic contaminants in the space cabin atmosphere, thermal decomposition products from elastomers, plastics and other compounds are the most hazardous. A study of the decomposition characteristics and toxicity of several of these materials indicates that the smoke and fumes given off contribute significantly to the toxicity predicted on the basis of gaseous decomposition products only. Removal of normal air contaminants is within the present state-of-the-art capability but protection against thermal decomposition products caused by fire may not be economically feasible except by depressurization and atmosphere replacement.

-- Authors' abst.

The Environment of the Moon. P. A. Campbell. Arch. Environmental Health 6, 724-729 (June 1963).

The natural environment of the moon poses formidable problems from the standpoint of human habitation. Its almost complete lack of atmosphere and magnetic shield nakedly expose its surface to the electromagnetic radiations of space. High energy particles of various