

OCCUPATIONAL HEALTH & SAFETY LETTER

Volume 9, No. 15

GERSHON W. FISHBEIN, PUBLISHER

August 8, 1979

Main Office • 1097 National Press Building • Washington, D.C. 20045 • (202) 347-3868

Published twice a month. Rate: \$100 per year; \$185 in combination with Environmental Health Letter

Rec'd
8/13/79
JCA

Highlights of This Issue

New British study indicates asbestos hazards at even lower exposures.	Page 1
Will the real drafters of asbestos compensation bill please stand up?	Page 2
Bingham to address many unions as NIOSH awaits word—any word—from above.	Page 3
Environmental group urges NIOSH to withdraw radiation criteria document	Page 3
Court rules OSHA warrants must be limited in scope	Page 5
Here's how on-site consultation will work.	Page 5
OSHA may urge criminal prosecution for some willful violations	Page 6
Sen. Schweiker vows to seek further restrictions on OSHA	Page 7

NEW BRITISH STUDY INDICATES ASBESTOS HAZARDS AT EVEN LOWER EXPOSURES:

Clinical evidence of asbestosis may occur in workers exposed to exposure levels as low as 0.3 fibers per cubic meter of air, and OSHA is actively reviewing it for possible revision of its own asbestos standard. The study was reported in the current issue of the British Journal of Industrial Medicine (36, 98-112).

Authors were C. Berry and J.C. Gilson of the MRC Pneumoconiosis Unit, Llandough Hospital, Penarth, Wales; S. Holes and H.C. Lewinsohn of TBA Industrial Products, Ltd., Rochdale, Lancashire, England; S.A. Roach, Imperial Chemical Industries Ltd., Wilmslow, Cheshire. Dr. Berry, the principal author, currently works for Raybestos Manhattan Corp., Trumbull, Conn.

What is interesting about the report is that the follow-up study was conducted at Turner Co., the same asbestos textile factory in England where the data which formed the basis of the OSHA standard was generated. So now the follow-up data indicates that asbestosis—not mesothelioma or lung cancer—can occur at even lower levels of exposure. The new study was called to OSHA's attention by Dr. Irving J. Selikoff of Mt. Sinai Medical Center.

The same factory was examined by the investigators and reported to the British Occupational Hygiene Society in 1968. The follow-up study extended the years of observation and lung function tests were introduced, and multiple readings of x-rays were completed. In addition, former workers cooperated by returning to the factory for a medical examination and chest radiographic. Finally, personnel and departmental records provided details of all the jobs done by all the men.

This is the abstract of the new report:

"A group of 379 men who had worked at an asbestos textile factory for at least 10 years has been followed up. The prevalence of crepitations, 'possible asbestos', certified asbestosis, small opacities in the chest radiographic and values of lung function have been related to dust levels. The type of asbestos processed was predominantly chrysotile although a substantial amount of crocidolite had also been used in the past.

"There was a higher prevalence of crepitations than had been observed previously at the same factory. The presence of crepitations is not a specific effect of asbestos exposure and 'possible asbestosis', a combined judgment of two physicians on whether a man had developed signs which might be attributable to early asbestosis, was preferred.

"Fifty percent of men with a diagnosis of possible asbestosis were certified as suffering from asbestosis by the Pneumoconiosis Medical Panel within 3-5 years. The most reliable data relate to men first

FMSI--0319

FMSI 03462

employed after 1950; 6.6 percent of men in this group had possible asbestosis after an average length of follow-up of 16 years and an average exposure to 5 fibre/cm³ where the dust levels were determined by static area samplers.

"The forced expiratory volume and forced vital capacity declined significantly with exposure, after allowing for age and height, but there was no decline in the total lung capacity. The transfer factor also declined with exposure, but not to a statistically significant extent. The non-smokers and light smokers as a group had less crepitations, asbestosis and small opacities on the chest radiograph than heavier smokers with similar exposure.

"Combining dust concentrations to form the cumulative dose may not be completely satisfactory, and a family of measures was investigated which allows for elimination of dust from the lungs and includes the cumulative dose as a special case. Because the rate of elimination of dust from the lungs is unknown and cannot be estimated from the data, this approach leads to a wide range of possible interpretations of the data; for example, the concentration such that possible asbestosis occurs in no more than 1 percent of men after 40 years of exposure could be as high as 1.1 fibres/cm³ or may have to be as low as 0.3 fibres/cm³.

"This range is wide because the data relate to higher dust levels, and a shorter period of follow-up. Until data are available on groups exposed to lower levels, it will not be possible to assess the effects of the current standard with any certainty. However, the results of this study show that it is important to continue to reduce dust levels to values as low as possible."