

- 411 Silicosis Hazard in a Lead and Zinc Mine in Rajasthan. Report No. 21.
 Government of India, Ministry of Labour and Employment. 78 pp. (1961).
 AVAILABLE FROM: Office of the Chief Adviser of Factories, 2-A/3 Asaf Ali Road, New Delhi,
 India. PRICE: None given.

This is a medical and environmental study of the dust hazard at the Zawar lead and zinc mine in Rajasthan, India. This mine was opened in 1942. Environmental studies included a comparison of the weighted exposures of the different categories of workers. Only mill workers at the crushing plants were exposed to dust concentrations exceeding the threshold limits. The silica content of the rock averaged 22%. The medical study was made on a sample of 173 workers out of 606 miners and 101 workers at the concentration mill. The medical examination included a blood examination, vital capacity measurements, and a 15 x 12 posterior-anterior chest x-ray examination. The results obtained were that 52 (30.4%) of the workers had evidence of dust deposit in the lungs. In workers who had been employed only in the Zawar mine, the percentage was 21.2. On the other hand, 21 (84%) of the 25 workers who had also been employed in other mines showed evidence of pneumoconiosis which was of a higher category than that of the patients from the Zawar mine. The vital capacity measurements were not helpful. The blood examinations revealed that 31.5% of the workers suffered from anemia, the cause of which has to be investigated. Recommendations are given for improving the environmental conditions. Medical measures recommended are examinations of new entrants. The risk of employing workers from other mines is noted. Periodical x-ray examination of miners and certain surface workers is advised.

-- Cond. from Bull. Hyg.

INDUSTRIAL MEDICAL PRACTICE

- 412 The Dispersal of Staphylococci in Hospital Wards. W. C. Noble.
 J. Clin. Pathol. 15, 552-558 (Nov. 1962).

The air of 3 hospital wards was examined frequently for staphylococci for nearly 4 years using slit samplers. "Broadcasts" of staphylococci into the air were observed with the air count rising well above the mean of 0.2 staphylococcal particle per cu. ft., and these broadcasts often appeared to be due to single patients. Eight of the 3,675 patients admitted to the wards possessed an ability to disperse staphylococci into air of the wards which was markedly greater than normal. The actual dispersal about the ward appeared to be mediated by the bedclothes, for when these were disturbed, large numbers of staphylococci were disseminated into the air.

-- Public Health Eng. Abstrs.

- 413 Evaluation of Drugs in Industry. A Method for Comparing the Effectiveness of Drugs in the Treatment of Acute Functional Disorders. L. J. Warshaw and H. J. Bennett.
 Arch. Environmental Health 6, 227-234 (Feb. 1963).

A method has been elaborated for comparing the effectiveness of drugs in the treatment of acute functional disorders that is particularly suitable for clinical pharmacology investigations conducted in the setting of the industrial medical department. Its essential features include: (1) the use of rigid arbitrary criteria for selecting suitable cases of acute functional disorder under investigation; (2) comparison of the drug being investigated with other more or less effective preparations and a placebo; (3) employment of a randomized block design for assigning suitable subjects to the different treatment groups; (4) use of the double-blind technique to minimize observer bias; (5) observation of the number of doses and the amount of time required to obtain the desired effect, the frequency of recurrences of symptoms following initial improvement, and the response of individual symptoms independently of the over-all response of the patient. As a demonstration of the manner in which it may be employed, a study is described in which this method was applied to the evaluation of several drugs in the symptomatic relief of acute gastrointestinal upset.

-- Authors' summary

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