

OCCUPATIONAL FACTORS IN PULMONARY DUST DISEASE. GORDON C. SMITH, M. J. Australia
2:777 (Nov. 25) 1950.

Smith briefly reviews some of the main factors of pulmonary dust disease of occupational origin and adds some evidence from his own experience. He emphasizes that the diagnosis should not be made unless it is known that the patient has been exposed to harmful dusts. The problem is examined from the point of view of dust composition, particle size, and duration of exposure. A short description is given of one of the less frequent dust hazards to basalt workers, biograph operators, and those exposed to talc, graphite, cement, and certain metallic and vegetable dusts. The principles of prevention of pulmonary dust disease are summarized.

J. C. McDONALD, Boston.

NORTHERN RHODESIA SILICOSIS MEDICAL BUREAU: ANNUAL REPORT FOR 1947 (8 PAGES);
ANNUAL REPORT FOR 1948 (10 pages). J. F. C. HASLAM, chairman, Lusaka, Government
Printer.

These two reports trace the steps preparatory to the legal enactment establishing a silicosis medical bureau in Northern Rhodesia, on the plan of that established for the gold mines of the Rand in the Transvaal. This new bureau is concerned with four copper mines where a potential risk of silicosis is held to exist. At the Mufulira mine, where definite cases of silicosis have been reported, 92 per cent of all rock broken is quartz with 70 per cent free silica. At Nkana mine the bulk of the rock broken is composed of dolomites and argillites with only 15 per cent of free silica. At the Roan Antelope mine the bulk is mineralized shale with 15 per cent free silica. Details are lacking for the Nehanga mine. At Broken Hill, where lead, zinc and vanadium are mined; practically no free silica occurs in the ground worked, and dust counts do not suggest danger of pneumoconiosis. A list is given in each report of the cases certified during the course of the year. During 1947 there were 14,500 African and 1,900 European miners, with a labor turnover of 11,000 per annum for Africans and 800 for Europeans. All Africans with five years' service or more in the mines are examined with x-ray; Europeans are examined as new entrants and every six months thereafter. Findings are held to indicate serious need for improved dust control and ventilation at Mufulira mine.

Today no European not properly certified by the Silicosis Medical Bureau can obtain or retain employment as a miner in any Northern Rhodesian copper mine, and the regularity and frequency of periodical examinations insure the earliest recognition of the occurrence of compensable disease. The standard of the activities of the bureau is already good, and the activities are rapidly increasing. Experience indicates that in future it will be practicable to bring Africans from all four mines, which are from 25 to 40 miles (40 to 64 km.) apart, to the new institute at Kitwe for full scale roentgenological and clinical examinations, instead of using a traveling miniature x-ray plant. The point is stressed that silicosis is a disease of very slow development which does not produce disability until the exposure to harmful dust has persisted many years; hence cases which are now being discovered are the product of past conditions. The life of the Northern Rhodesia copper mines, averaging about nine years, is too short to have established the full risk which may be found to exist, especially for Europeans who stay at work for many years. As on the Rand, the African workers do not stay at the mines for more than a few years at the longest.

ADAPTED FROM E. L. COLLIS [BULL. HYG.].

SILICOSIS AMONG POTTERY WORKERS IN LIMOUSIN. DE LEOBARDY, PICOUT-LAFOREST and PASQUET, Arch. mal. profess. 10:483 (May) 1949.

In recent years silicotic patients among the porcelain workers of Limousin have been examined systematically, clinically and roentgenologically. The examination of 2,007 ceramic workers showed that of 180 workers employed in environments containing silica dust 34 (or 18.8 per cent) had silicosis.

Lengthy exposure was necessary to produce pneumoconiosis. The average period of exposure in these cases was about 20 years. Of the various dusts liberated in the industry, only that of free silica seems to be harmful, and the risk of pneumoconiosis is the greater as