10.8% in 1964-67. In some groups of collieries the fall in prevalence is quite marked, while in others the difference between the two periods is small or nil. The overall proportion of newly boarded cases of pneumoconiosis from the coal mining industry has dropped from 3.9 per thousand wage earners in 1962 to 1.8 per thousand in 1967. The rate of fall varies from division to division and is still at the highest level in the south-western division.

Finally, it is pointed out that reorganization of the National Coal Board Divisions will necessitate constructing some of the tables on an area basis instead of a divisional basis.

The Digest illustrates again the slow decline in prevalence of all forms of pneumoconiosis, more marked in the coal mining industry, with the exception of asbestosis which continues to rise. It is pointed out in the Digest that 'a rise in certification figures should not be taken as necessarily indicating that the prevalence of the disease is increasing'. Boardings at which asbestosis was first diagnosed have more than trebled in number since 1962, which could be due to both the recognition of long-standing cases and a true increase in prevalence.

R. I. MCCALLUM

Health Factors Involved in Working under Conditions of Heat Stress. *Tech. Rep. Ser. No. 412.* (Pp. 32; 6s.) Geneva: World Health Organization.

This technical report summarizes the meeting of an international group under the chairmanship of Professor Belding with Dr. Lind acting as rapporteur.

It is a concise and readable review divided into three main sections. The first considers man's responses to heat, the various bodily functions which are affected by exposure to heat, and the extent and significance of the effects. The second section describes various heat stress indices and indicates the circumstances in which each is applicable, and the limitations imposed by the current state of knowledge. The final section considers where future research should be directed.

In its introduction the report remarks, 'Unfortunately, few texts are available that make a serious attempt to provide Governments, industrial management, engineers, medical officers, and hygienists with all the information available, expressed in reasonably understandable language'. While the report does not pretend to supply all the information it does provide a valuable starting point for anyone wishing seriously to study the field.

D. TURNER

A Review of the National Coal Board. Medical Service and Medical Research. Annual Report 1967-1968. (Pp. 43; illustrated; 8s.) London: National Coal Board, Hobart House, Grosvenor Place, S.W.1. 1968.

The Medical Service of the National Coal Board has obviously successfully adapted itself to the new administrative structure of the Board, that is to say, without divisions. Also, the new Institute of Occupational Medicine being set up in association with the University of Edinburgh (opened on April 22, 1969) with the help

of the National Coal Board will bring together the scattered groups that are doing occupational medical research within the Coal Board's Medical Service.

A comparison of the percentage of pneumoconiotics in the pits between the 1959-62 and the 1964-67 surveys shows a drop in all areas, with East and West Wales areas easily top of the list with 24.6/23.3% and 26.6/24.7% respectively; the lowest area is the South Midlands with 3.7/1.9% on the two surveys. Progressive massive fibrosis is again most prevalent in East and West Wales where it was 3.6 and 4.0% respectively during the 1964-67 survey. However, on a progress index the two Welsh areas seem to be in the forefront of those areas showing the best results with their dust suppression measurements.

The Pneumoconiosis Field Research Unit has swung over from particle dust counts to gravimetric measurements and has succeeded in correlating the two methods.

Other prescribed diseases have shown a progressive decline since 1951, except for dermatitis which continues to show a very slight rise. It is thought that this is due either to the loss of elasticity and natural defences in the older miners or to pit water. Investigations are going on in one area to see if, by controlling the wetness of one mine, the incidence of dermatitis can be lowered.

Dr. Duncan Troup, in the Anatomy Department of the Royal Free Hospital, is continuing his studies into the ergonomics of axial rotation of the trunk and the difference in the power developed with legs together and legs apart.

Finally, it should be noted that the National Coal Board is able to make available to other industries its large film mobile units for chest x-rays.

J. GLOVER

Epidemiology of Chronic Non-specific Lung Disease (Chronic Bronchitis). Vol. I: text, pp. 165; Vol. II: tables, pp. 100. By R. van der Lende. (Sewn Hfl. 28.) Assen: Royal Vangorcum Ltd. 1969.

Some of the main difficulties in attempting a comparison between the findings from different field studies of respiratory disease lie in the lack of uniformity of the methods used and in the differing age structure of the study populations. This is not a new discovery but Dr. van der Lende, in his introductory review of earlier field studies, shows how this lack of comparability seriously hinders any detailed international comparisons. It is clear from the description of his Dutch field studies of chronic respiratory disease that he has made a determined attempt to use standardized methods in the collection of his data. For example, he used the European Coal and Steel Community (E.C.C.S.) version of the Medical Research Council's questionnaire on respiratory symptoms, and follows the E.C.C.S. recommendations for spirometers and technique for taking chest x-rays. The three studies he describes were made on a population in a rural area, a country town, and an industrial city with high air pollution near Rotterdam. All subjects had a chest x-ray and interviewer-administered questionnaire. Subsamples of these populations in addition had sputum examination, measurement of ventilatory function, skin tests for evidence of allergy, and a histamine test for bronchial reactivity.