

Book reviews

Diagnosis of diseases of the chest. Vol III. 2nd edn. By R G Fraser and J A P Paré. (Pp 746; £24.00) Eastbourne: Holt Saunders, 1979.

This comprehensive book is designed to facilitate diagnosis of disease from the appearance of the chest radiograph. The provision of a review copy of volume III alone (from a text extending to four volumes) presents the reviewer with an almost impossible task; but consultation with the first edition in the local library has helped to put this volume in perspective. The complete text is a summary of the vast experience of the two authors in interpreting chest radiographs, and must be a required book of reference in radiological departments of all large hospitals. The tables of differential diagnosis constitute volume IV and refer the reader to descriptions of disease contained in volumes II and III. Volume I is concerned with radiographic techniques, the normal radiograph, and developmental diseases. Volume III contains descriptions of pneumoconioses, chemically induced lung diseases, and diseases of the pleura. By and large it is only these conditions that are of interest to the occupational physician, and he will find their discussion to be rather sketchy and superficial; but copious references, numbering nearly 10 000 in all, are given in the text.

The occupational physician, however, is not faced with the problem of deducing an occupation from a chest radiograph, which is the purpose of this book. Thus, excellent though this book is, it cannot be recommended for purchase by occupational physicians. On the other hand, it can be said to give the radiologist a competent and succinct introduction to occupational causes of abnormal chest radiographs.

G L LEATHART

Environmental Health Criteria 8: Sulfur oxides and suspended particulate matter (Pp 108; Sw fr 10); 9: DDT and its derivatives (Pp 175; Sw fr 16); 10: Carbon disulfide (Pp 100; Sw fr 10); and 11: Mycotoxins (Pp 127; Sw fr 11). Geneva: WHO, 1979.

This series of Environmental Health Criteria is proving to be a most valuable addition to the libraries of all those interested in environmental health. Each volume gives a succinct review of sources, chemical pathways, metabolism, toxic effects in man and animals; recommends safe levels of exposure; and makes a number of suggestions for future research.

The four volumes reviewed here are excellent starting points for students and others coming newly to the field and who wish for a comprehensive review of current knowledge. For the environmental specialist, these volumes are essential reading, and it is to be hoped those which follow maintain the same high standard.

H A WALDRON

The Environment at Work. By E C Poulton. (\$12.75) Springfield, Illinois: C C Thomas, 1979.

Dr Poulton is an ergonomist with the MRC Applied Psychology Unit at Cambridge. As he says, this book provides a straightforward description of working environments and of their effects on people, with emphasis on efficiency and comfort. He also says that the book is restricted to the environments in which ordinary people may find themselves at work. While topics do include standard considerations of lighting, noise, heat and cold, and pressure, few ordinary people find themselves working 90 m under water or 600 m up in the air. Even fewer of us will find ourselves on a life raft or surviving free falls of 300 m into deep snow. Still less will we withstand "the extreme limit" of deceleration for a man facing forward in an experimental car crash—25 g in—second. "After impact he (Stapp) was confused, like a boxer who has just been knocked out. . . . Most affected were his eyes, which were almost dragged out of their sockets. He felt a tearing pain, as if one of his back teeth was being extracted without an anaesthetic. . . . But he survived. . . . Beeding in New Mexico survived 80 g for 0.04 second facing backward. . . . These were brave men." Just so. And splendid to read about,

however extraordinary their work.

There is a chapter on harmful atmospheric pollution with paragraphs on dust and fibres (silica, asbestos, cotton), metals (lead, mercury, arsenic), chemicals, gases, methods of investigation and control, TLVs, monitoring, education, ionising radiation, and harmful electromagnetic radiation. All this in under 20 pages, and hence simplistic to the point of falsity. There is an entertaining chapter on physical exertion. "The efficiency of the brain is reduced during and immediately after intense exertion, owing to the shortage of oxygen. The effect is smaller in ultra-fit men." And, as throughout, experimental evidence is given. Conversely, "The brain functions most efficiently in jobs that require a certain amount of physical work. A person who sits still without moving tends to drop off to sleep. . . ."

Finally, there are chapters on work overload and underload, night shifts and loss of sleep, multiple stresses and multiple tasks, and perceived dangers. Thus 20 recruits under test were told their aircraft would have to ditch in the sea; five were not taken in but the remaining 15 had impairments of 10% and 45% on two tests. One is glad to read that in English-speaking countries such experiments are now regarded as unethical. A modern version of "Go East, young man"?

For whom is the book written? The blurb claims it is for all people who go out to work or work at home—professionals, managers, foremen, union representatives, and especially trainees for these jobs. Certainly it is simply written, except for the graphs which require much mental effort. Such a vast field is covered, however, from the commonplace to the esoteric, that it is not specially suited to anyone. But it is a very entertaining read and contains something to interest everyone. Who knows that surface grazing lighting is good for finding dropped buttons; that noise masks the inner speech used in thinking; that lighting codes are related to what countries can afford (and why not TLVs too?); that subjective