greater than that of Great Britain or, indeed, any other European country. Valuable as the report is, the inclusion of better information on the circumstances of the accidents, which is probably available in the files of the Bureau of Occupational Health, would greatly increase its value as a guide to accident prevention.

Copies are available free on request as long as the supply lasts from the Bureau of Health Education, California State Department of Public Health, 2151 Berkeley Way, Berkeley, 4, California.

A. A. B. SWAN

Sick Pay. By E. G. Rutter and K. Ottaway. (Pp. 61; 17s. 6d.) London: The Industrial Society, 48 Bryanston Square, London, W.1. 1967.

A recent survey showed that over half the workers employed in this country are covered by sick pay arrangements although the proportion varied from almost 100% in the nationalized sector to 26% in the construction industry. Moreover, there is wide variation between firms in the amount and periods of payment. This booklet will be welcomed by both personnel managers and doctors in industry, since it sets out clearly and concisely some of the different arrangements in use for sick pay schemes.

The introduction of an Earnings Related Benefit Supplement in October 1966 made many firms recast their sick pay arrangements since they had found that their employees would have had a considerable financial incentive to stay away from work. The Industrial Society collected detailed information from 177 firms known to have sick pay schemes, although only 15 of them were able to provide figures of sickness absenteeism and costs. A lack of data on sickness absence in British industry was deplored by the Industrial Fatigue Research Board in 1923 and it appears that the situation has scarcely improved.

Surprisingly little is known about the effect of sick pay schemes on absenteeism. The report by Denerley, published in this journal in 1952, showed that the introduction of a full wage scheme was rapidly followed by a threefold increase in sickness absence which finally settled down at twice the original level. However, the 5% survey by the Ministry of Social Security showed that employees covered by sick pay had slightly less time off on sick leave than those who were not. The information presented in this booklet does not allow for any conclusions about the effects of different types of schemes and this would be a fruitful field for study.

An interesting feature of this booklet is the way in which pointed reference is made to some of the more glaring inconsistencies and exclusions found in sick pay arrangements. The idea that staff but not manual labour should receive pay during spells of sickness dies hard, and the use of long qualifying periods of up to 25 years for manual workers amounts to the same thing. There are still firms that exclude women and part-time employees, whilst others refuse to pay for specific conditions such as gynaecological disorders or sports injuries. The morals of such exclusions are difficult to support and, as the authors remark, 'Who can justify that a man who has injured his leg in a sport is less

worthy than the man who catches a chill after a swim?'
P. J. TAYLOR

Human Atheroma. By W. I. Ashton. (Pp. 82; 21s.) London: William Heinemann Medical Books. 1967.

The Heinemann Monographs are intended to present the current state of knowledge in highly selected fields of medicine. Dr. Ashton deals primarily with the endocrinological and epidemiological aspects of human atheroma. The author's interest in the subject evolved from his collaboration with Vallance-Owen, and the observations refer mainly to the parts that may be played by substances showing insulin-like activity or insulin antagonism (particularly in association with plasma albumin) in the genesis of atheroma; the influence of ovarian and thyroid hormones is also discussed. The emphasis lies on the basic similarity of the biochemical disturbances in diabetics, their relatives, and individuals with occlusive vascular disease, especially of the coronary system. Prospective surveys of asymptomatic individuals showing excessive synalbumin insulin antagonism and insulin-like activity are now required to determine the proportion that subsequently develops occlusive arterial disease. The nature of the relationship between diabetes mellitus and insulin and other hormones on the one hand and the diabetic state and atheroma on the other is presented as an area for future study. Possible preventive measures are indicated.

The pathogenesis of human atheroma constitutes a major challenge to which vast efforts are now devoted. This brief account of an important connexion with the diabetic state, whether overt or potential, is well worth reading. It is a field which holds great promise of further advances. Other aspects of the atheromatous process, especially those concerning the thrombogenic-fibrinolytic and dietary factors, receive only limited attention.

A. G. HEPPLESTON

Treatment of Common Acute Poisonings. By Henry Matthew and A. A. H. Lawson. (Pp. 151; 16s.) Edinburgh and London: Livingstone. 1967.

In 150 pages the point is made that acute poisoning is an important medical emergency; the basic principles of therapy are detailed and special attention is given to the more common agents which are encountered. There are 29 chapters. Chapter 1 gives some details of the Poisoning Treatment Centre at Edinburgh at which both authors have worked. In Chapter 2 the authors point out that acute poisoning may account for up to 10% of all medical admissions in some general hospitals. In fact, in developed countries the mortality from domestic 'accidents' may be twice that from tuberculosis. In Chapter 3 information on Poison Information Services is listed, and Chapters 5 to 8 are concerned with identification and basic principles of treatment of acute poisoning. Fifteen of the remaining 21 chapters consider specific groups of drugs. In the other six, miscellaneous substances, such as insecticides and poisonous fungi, are considered in addition to steps which might be taken to prevent acute poisoning.

As barbiturates and other hypnotics, drugs used in the treatment of psychiatric diseases, salicylates and

coal gas are the main agents used in self poisoning, it is natural that a considerable portion of the book is devoted to these. The author favours a modification of the Scandinavian method for treating barbiturate poisoning and the results with this method of treatment (mortality less than 1%) are certainly impressive. Nevertheless forced diuresis with frusemide or mannitol, peritoneal dialysis or analeptics might be useful adjuncts to therapy in certain situations, and it is a pity that some indication when they might be of most use has not been more clearly defined. The authors appear to be against the estimation of plasma barbiturate levels on the grounds that, due to difference in tolerance in subjects, a wide range of values might be associated with a specific degree of unconsciousness. Changes in level might be of value in assessing progress, and further information on the correlation or lack of correlation of such levels with clinical symptoms and signs is still urgently needed. It has been suggested that marked pH-dependent excretion of drugs occurs only if the pKa of the drug is between 6.5 and 10.0. A short table giving the pKa range of common poisons would have been of value, especially if this was related to excretion of the drug in acid or alkaline urine.

Salicylates and iron tablets are probably the commonest drugs taken by children and it appears likely that contraceptive pills are the third. The latter group has merited only four lines.

In spite of these omissions I consider this small volume (size 5 × 7 in.), which can fit into a casualty officer's pocket, a most useful work.

H. SCHNIEDEN

The Effects of Abnormal Physical Conditions at Work. By C. N. Davies, P. R. Davis and F. H. Tyrer. (Pp. 185; 21s.) Edinburgh and London: Livingstone. 1967.

This booklet gives the full report of the proceedings of a meeting held jointly by the British Occupational Hygiene Society, the Ergonomics Research Society, and the Society of Occupational Medicine in January 1967.

It begins with papers by the president of each society (Drs. R. J. Sherwood, H. P. Ruffell-Smith, and J. A. Smiley) which set out the attitudes adopted by the practitioners of the three disciplines when faced by a problem of abnormal working conditions. All three papers are short, concise, and a delight to read.

The middle section consists of nine papers on the physiological effects of extremes of cold, heat, and pressure. They provide the reader with a feast of up-to-date physiology and reviews of current knowledge. The topics covered include cold exposure in man, hypothermia, ketogenic effects of cold, man's tolerance to extreme heat, hot environments and performance, military problems of air-transport and tropical service, physiological hazards of low pressure, decompression sickness in tunnel workers, and medical hazards of diving.

The final section, concerned with the industrial implications of abnormal physical conditions at work, describes the practical problems of heat in glass and steel works, protective clothing for cold conditions, and the problem of fatigue engendered by working in abnormal

conditions. This is in many ways the most interesting part of the booklet because it helps to build the much needed bridge between the research orientated physiologists and the practitioners who have to solve very complex everyday problems as they appear in industry.

One is particularly grateful to J. W. Hill, who describes the problems of hot work in the glass industry, for drawing attention to the practical difficulties of setting valid limiting criteria for extreme conditions and the need to consider each situation as a special case.

In view of the all-embracing title, it seems a pity that other abnormal working conditions were not considered—especially, perhaps, noise and air pollution in work spaces.

This little booklet is unpretentious in appearance, but the reviewer predicts it will find its way on to many bookshelves and will be consulted more frequently than many of the larger and more imposing tomes.

R. H. Fox

Potential Carcinogenic Hazards from Drugs. Edited by Rene Truhaut. UICC Monograph Series, Volume 7. (Pp. 249; 24 figs., \$17.00) Berlin, Heidelberg, New York: Springer-Verlag. 1967.

This book is a collection of papers delivered at a Symposium of the International Union Against Cancer held in Paris in November 1965, together with the discussion on some of them. The list of the participants shows that they were selected with an eye to gathering—and to limiting the number to—scientists distinguished in cancer research. The monograph may possibly be overlooked by industrial medical practitioners because the title does not suggest that there is anything of special interest in it to them. Although this is true of some of the material, many of the papers are worthy of their attention.

Berenblum's chapter on the principles of testing compounds for carcinogenicity sets out clearly the difficulties likely to be encountered as well as the benefits to be derived from work in the investigation of carcinogenicity. His paper will be of great help to the medical adviser in industry who is sometimes pressed to produce an impossibly quick answer to a question regarding the potential carcinogenicity of a particular compound. In one of the discussions, Roe points out that the tendency to regard carcinogenicity as an 'all or none' phenomenon has made the subject of chemical carcinogenicity unnecessarily difficult. This has resulted in the present situation, whereby any drug which has produced cancer in any species of animal under any set of experimental conditions and however administered, has come to be regarded as carcinogenic. Roe (1965) has already suggested a system of carcinogenicity rating which offers a prospect of rational appraisal of possible industrial carcinogens. Doll's contribution strengthens this view, and his plea that a balance be struck between harmful and beneficial effects will appeal to physicians, pharmacologists, and radiotherapists as reasonable and valid. He regards prospective studies and systems of record linkage as the most hopeful statistical approach.

Hueper's chapter on the hazards of cancer from arsenic and metal-containing drugs has some relevance