and prevention. In the conclusion the author tries to bring these together by comment-
ing on different methods by which these problems are considered in the United States, Canada, and the United Kingdom.

For the United Kingdom reader there are problems in the second half. Although Bates worked for a considerable time in the United Kingdom at St Bartholomew's Hospital, he left more than 30 years ago. Thus his views of the process of decision making are dated. For the reader the strength of the book is in his description of the importance of different phrases to describe studies, the different approaches to their interpretation by a variety of his perception in a way in which the legislators and others react to epidemiological findings. His plea and emphasis to strengthen epidemiology is particularly welcome.

The book however, does have serious weaknesses. Firstly the analysis of the policy issues and the influence of a variety of "actors" in influencing policy formulation. For example, in the field of air pollution he negates the work of, for example, the National Clean Air Society, which had been active for at least 100 years, and the work done by the MRC Air Pollution Research Unit at St Bartholomew's Hospital, created before 1952. He muddles air pollution due to coal and its derivatives with that due to traffic. He neglects the importance of domestic pollution in the United Kingdom in contrast to the USA. He is also clearly unaware of the intense involvement of the courts and lawyers in the United States in discussions on the work of the Environmental Protection Agency in the 1970s. Moreover, he makes no mention of the similar laws in the USA. The discussion of cigarette smoking is much shorter—and does not touch on most of the policy issues in this field. The discussion on the hazards of lead in petrol, however, epitomises a basic problem in this book: Bates does not always accept that there are good and bad studies. Even though bad studies may all show the same effect, that may be because the same error has been made in all of them. Part of the problem in the use of epidemiology for the determination of environmental or other risks is the need for care in design, execution, and analysis. Not all studies are equal. He is critical of the British interpreta-
tion of studies on the effect of lead in petrol. That was certainly due to the careful evaluation of those studies that had been published. These comments can be applied to all examples. Thus my recommendation is that this book should be read by those scientists involved in translating environ-
mental risks to lay audiences. Epidemiolo-
gists and others should, however, beware of over-statement and find an approach for the individual risk factors or policy issues.

WALTER W HOLLAND


This is a unique encyclopaedia of informa-
tion on chemicals and chemical products. Many chemical names and chemi-
cals are included: some 18 000 having been added since the last edition. The range of coverage is vast: acorn sugar to zootic acid.

If you knew zootic acid was a synonym for hydrocyanic acid you should be congrat-
ulated, but do you also know what zootic is?... Pearstick, Bronco, Golden Bear, and oxy-
cube gases are "Gardner" will tell you.

Who should have a copy of this book?

Occupational physicians, faced with new-
products, clinical toxicologists dealing with poisoning by commercial products and those interested in general toxicology should all have ready access to copies. Much of what is found can be easily found elsewhere and as a first source when dealing with difficult enquiries this book is invaluable. If you need yet more infor-
mation: an excellent set of addresses of producers of chemicals is included.

R L MAYNARD


Work related musculoskeletal disorders (WMSDs) are a significant problem throughout the world and within the United Kingdom they represent a major challenge to all those professions concerned with occupational health and safety (Hodgson et al'). Although WMSDs are diseases like any others, measures, study designs and methods are different. They are also the focus of special legislation and compensation, due to their relation to work. This has had a profound influence on the way that they are understood and this book is a welcome attempt to analyse and social-
cially interpret the scientific evidence on the association between work and WMSDs of the neck and limbs. As such it is the first authoritative source that brings together the work of internationally renowned experts from many disciplines and organisations.

The initial chapters sets the scene in terms of a conceptional framework including a review of the WMSD literature and prevention etc? This is followed by a quite excellent chapter on the epidemiological evidence of selected musculoskeletal disorders. Sections on tendon, nerve, muscle, joint, muscular, and neuromuscular tissue disorders are presented. The accom-
panying tables for each selected disorder are provided with clear descriptions of each study—for example, outcome and exposure measures, study design, methods, results, findings (odds ratios)—together with critical comments. This is followed in chapter 4 by the identifi-
cation, measurement, and evaluation of risk factors for WMSD and covers physical demands, psychological and organis-
ation and psychosocial work factors.

The book provides an excellent inventory of measurement tools for evaluating risk. Similarly the importance of health and risk factor surveillance is also emphasised. Additionally analysis and interpretation of data is well presented. The foregoing material is clearly a prerequisite to any attempts at managing solutions (chapter 6). This preven-
tive approach is within an ergonomics framework that emphasises the need to consider the interrelation between various aspects of the work system—that is, organisational structure, people, technology, work tasks, environment.

Managing change, WMSD related training (as an adjunct to the ergonomic approach), and medical management, pro-
vide further value in the concluding chapters of this invaluable book. Such an authoritative source should be required reading for occupa-
tional medicine and nursing professions and all other professionals in the allied health and safety fields (physiotherapists, ergonomists), also those within the legal pro-
fessions including some High Court Judges might find this excellent text instructive.

DA STUBBS