Child Sexual Abuse in Northern Ireland: a Research Study of Incidence. The Research Team, Royal Belfast Hospital and Queen's University of Belfast. (Pp 186; £18.) Greystoke Books, Antrim. ISBN 1-870175-095.

This book is a detailed account of a study which is perhaps notable in that it was planned and initiated prior to the events in Cleveland. It will be most relevant to those planning similar studies and as the basis of further research in this area.

Both practitioners and policy makers in the field of child sexual abuse require information about the magnitude of the problem and the risk factors involved. This study claims to address the first of these issues by identifying the number of sexually abused children reported during 1987. The recurrent nature of child sexual abuse as well as the proportion of children abused is required if valid statements are to be made about the magnitude of the problem. The study also collected sociodemographic information on cases identified but because of the lack of similar data on the resident population, risk was not calculated for variables other than age and sex.

The authors used a practical method of ensuring confidentiality and their approach probably contributed to the high degree of cooperation they appear to have obtained from a wide range of individuals and bodies. This is likely to have enhanced both the ascertainment of cases and the accuracy of the data. However the social, cultural, and legislative differences between Northern Ireland and other countries, particularly in relation to sexual matters, may limit the extent to which the results can be generalised.

The lack of clarity and agreement on the definition and diagnostic criteria of child sexual abuse continues to hamper the comparability of studies. The authors have taken account of the spectrum of abuse and the varying levels of diagnostic certainty, producing a categorisation which lends itself to comparison.

The study makes a useful contribution but only those with a special interest would be likely to tackle the 100 pages of text contained in this publication.

C K McCAUGHERTY

Department of Public Health Medicine
Belfast

Occupational Exposure to Silica and Cancer Risk. Eds L Simonato, A C Fletcher, R Saracci, T L Thomas. (Pp 124; £19.) IARC Scientific Publications No 97. International Agency for Research on Cancer, Lyon, 1989. ISBN 92-832-1197-9.

One of the products of the IARC Monograph vol 42, *Silica and some silicates* (1987), was a study group which had the task of producing new epidemiological studies to help fill the gaps in knowledge on the relationship between occupational exposure to silica and the risk of cancer, especially of the lung. This scientific publication is the outcome of that endeavour. Besides a foreword and an introductory chapter there are 11 other chapters each consisting of an

epidemiological paper which tends to update or complement earlier work by the same authors. The main and justified emphasis is to present epidemiological studies of workers exposed to silica but with a negligible risk of confounding effects from known carcinogens such as polycyclic aromatic hydrocarbons in foundries or ionising radiation in mining. About half the work clearly achieves this with creditable attempts in the remainder.

Thus there are case-referent studies by Lagorio *et al* in ceramic workers and by Siemiątycki *et al* whose multiexposure multisite monitoring study had less control over potential confounders. Cohort studies on exposed workers are presented by Koskela *et al* in granite workers, Mehnert *et al* in slate quarry workers, and by Thomas and Winter *et al*, both in pottery workers. Lynge and her Nordic colleagues present comparative data from occupational mortality and cancer registers in their four countries while Neuberger and Kundi's potentially confounded cohort is derived from routine "preventive" medical examinations. Finally, three studies by Chiyotani *et al*, Merlo *et al*, and Tornling *et al* studied cancer risk among known silicotics. The first two of these compared the effects of smoking and showed an association between silicosis and an increased risk of lung cancer even in non-smokers.

Most of the data presented are consistent with a statistically significant, modest (less than twofold), excess of lung cancer in workers with a history of occupational exposure to silica. However, the associations between cancer risk and time since first exposure, duration of exposure, and estimated dose are inconsistent. The estimates of exposure are based on occupational histories and on qualitative descriptions of the work, not on quantitative environmental sampling, and strong consistent evidence of a dose-response relationship free from confounders is still absent. The one cohort and one case-referent study investigating silicotics and non-silicotics separately have shown that the excess cancer risk was mainly attributable to the silicotics. However, it is still not possible to distinguish whether silicosis increased the risk of lung cancer or whether it is merely a surrogate for exposure.

In summary, this topic is a difficult one to study, and generally the authors have made commendable efforts to investigate it within the restraints beyond their control. The book is essential reading for those who wish to be updated on epidemiological progress in this field.

RAYMOND AGIUS

Department of Community Medicine
University of Edinburgh Medical School
Teviot Place
Edinburgh

Biostatistics and Epidemiology: A primer for Health Professionals. Sylvia Wassertheil-Smollier. (Pp 119; DM48.) Springer-Verlag, Heidelberg, 1990. ISBN 3-540-97312-5.

This introductory text describes itself as giving an understanding of underlying

principles, as well as practical guidelines of "how to do it" and "how to interpret it", the topics being those most commonly used or referred to in published sources. It is aimed at physicians, undergraduate or postgraduate students, research staff, and anyone interested in the logic and methodology of the discipline. The book is divided into five sections entitled: The scientific method; A little bit of probability; Mostly about statistics; Mostly about epidemiology; Mostly about clinical trials. Following the aims described above the author proceeds through a variety of topics within each section treating each topic as a separate issue. On reading the book from cover to cover, the topics do not follow on very naturally one from another. For example in the section "Mostly about epidemiology" we find the following sequence of topics: mortality rates; age adjusted rates; incidence and prevalence rates; standardised mortality ratio; person-years of observation; sensitivity, specificity and related concepts; and cut off points and their effect on sensitivity and specificity; then we move back to dependent, independent and confounding variables. The book contains several pages defining probability, addition and multiplication rules for probability, and conditional probability, illustrated by Venn diagrams, yet probabilities are not manipulated elsewhere in the book, and the section does not relate easily to the 2x2 tables and p values of the statistics section. Assumptions underlying Normal tests and correlation analysis are not mentioned and there is nothing on non-parametric statistics.

It is a thin book and can thus cover the topics to a limited degree. An accompanying sheet lists 10 errata, but reading through I found several more typographical errors. There are areas where explanations are unclear; for example, having drawn a distinction between the true mean, μ , of a population and its sample estimate, $\bar{x}$, they are then used almost interchangeably. The book does not present the material geared to the context of any specific subgroup of health professionals. In conclusion, there are several competing introductions to medical statistics on the market which cover much of the material of this book, and personally I would prefer to use or recommend one of the others.

R M PICKERING

Medical Statistics & Computing
Southampton General Hospital
Southampton

Mortality and Geography: a Review in the Mid-1980s. England and Wales. Ed M Britton. (Pp 223; £17.50.) Office of Population Censuses and Surveys, London, 1990. ISBN 0-11-691294-4.

This volume is the latest Registrar General's decennial supplement on area mortality. The change in title is well justified by its having a wider scope and more attractive presentation than its predecessors. There are 10 authored chapters illustrating various approaches to the study of areal mortality, with much of the routine tabulations relegated to appendices and microfiche (sold separately). Novel features include analyses from the