Occupational and Environmental Medicine

Adapted as the Journal of the Faculty of Occupational Medicine of the Royal College of Physicians of London

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If requested, authors shall produce the data on which the manuscript is based, for examination by the Editor.

Authors are asked to submit with their manuscript the names and addresses of three people who they consider would be suitable independent reviewers. They will not necessarily be approached to review the paper.

Papers are considered on the understanding that they are submitted solely to this Journal and do not duplicate material already published elsewhere. In cases of doubt, where part of the material has been published elsewhere, the published material should be included with the submitted manuscript to allow the Editor to assess the degree of duplication. The Editor cannot enter into correspondence about papers rejected as being unsuitable for publication, and the Editor’s decision in these matters is final.

Papers should include a structured abstract of not more than 300 words, under headings of Objectives, Methods, Results, and Conclusions. Please include up to three keywords or key terms to assist with indexing.

Papers should follow the requirements of the International Committee of Medical Journal Editors (BMJ 1991;302:338–41). Papers and references must be typewritten in double spacing on one side of the paper only, with wide margins. SI units should be used.

Short reports (including case reports) should be no more than 1500 words and do not require an abstract. They should comprise sections of Introduction, Methods, Results, and Discussion with not more than one table or figure and up to 10 references. The format of case reports should be Introduction, Case report, and Discussion.

Illustrations Photographs and photomicrographs on glossy paper should be submitted unmounted. Charts and graphs should be carefully drawn in black ink on firm white paper. Legends to figures should be typed on a separate sheet of paper.

References References will not be checked by the editorial office; responsibility for the accuracy and completeness of references lies with the authors. Number references consecutively in the order in which they are first mentioned in the text. Identify references in texts, tables, and legends by Arabic numerals. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of a particular table or illustration. Only references essential to the argument being developed in the paper or to the discussion of results, or to describe methods which are being used when the original description is too long for inclusion. Information from manuscripts not yet in press or personal communications should be cited in the text, not as formal references.

Use the Vancouver style, as in this issue for instance, for a standard journal article: authors (list all authors when seven or fewer, when eight or more, list only six and add et al), title, abbreviated title of journal as given in Index Medicus (if not in Index Medicus give in full), year of publication, volume number, and first and last page numbers.

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from experimental studies suggestive of a progression from thyroid nodules to thyroid cancer in animals exposed to radiation. It is necessary, therefore, to perform accurate medical surveillance to prevent this problem in the workers occupationally exposed to radiation.

11 Dean J, Dean A, Burton A, Dick er R. Eps Info software program (Vls. 5.01a). EPO, Atlanta: Center for Disease Control, 1991.

**Vancouver style**

All manuscripts submitted to *Occup Environ Med* should conform to the uniform requirements for manuscripts submitted to biomedical journals (known as the Vancouver style.)

*Occup Environ Med*, together with many other international biomedical journals, has agreed to accept articles prepared in accordance with the Vancouver style. The style (described in full in the *BMJ*, 24 February 1979, p 532) is intended to standardise requirements for authors.

References should be numbered consecutively in the order in which they are first mentioned in the text by Arabic numerals above the line on each occasion the reference is cited (Manson' confirmed other reports). In future references to papers submitted to *Occup Environ Med* should include: the names of all authors if there are seven or less or, if there are more, the first six followed by *et al*; the title of journal articles or book chapters; the titles of journals abbreviated according to the style of *Index Medicus*; and the first and final page numbers of the article or chapter. Titles not in *Index Medicus* should be given in full.

Examples of common forms of references are:

workers was only found among those older than 40 years, in contrast with other countries where the increased risk was found within all age groups.4 12-14 The decreased risk of hepatitis A in our younger workers is unlikely to be attributable to improved working procedures because, unlike hepatitis A, we found that leptospiral infection continues to be a risk for sewer workers regardless of their age. The more likely explanation of our results is that leptospira are still abundant in the sewage system unlike HAV which has only a small probability of being found in sewage as a result of the generalised decrease in incidence of hepatitis A in the past three decades in the developed countries.15

Personal protection of these workers should be improved, especially for those who operate pipe cleaning machines. It is unlikely that even this will totally avoid the risk of infections. Leptospiral vaccines exist, but they are serovar specific, must be repeated every year, and are associated with a high incidence of painful swelling, especially after revaccination.16 Better vaccines should be developed before they can be widely used. In contrast, a safe and effective vaccine exists against hepatitis A. The decision to vaccinate sewer workers against hepatitis A should take into account that it is impossible to avoid all contact with sewage fluid and, despite the fact that the actual incidence of hepatitis A is low, there is a real possibility of sporadic exposure during a future outbreak.

We are indebted to Reine Roy and Rachel Chouinard, and to the supervisors and technicians of the biochemistry and haematology laboratories of the Hôpital St-Sacrement for their support. This study was funded by the Centre de santé publique de Quebec and SmithKline Beecham Pharma.


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in the exposed and unexposed groups. The follow up study has provided no evidence of any further changes in biochemical and haematological indices since the cross sectional study.

Finally, a comparison of the ranges calculated from the control group with the reference ranges supplied from the manufacturers of the biochemical tests show that there were some substantial differences between the two sets of ranges (table 4). In general the control group (and the study group) had higher average results for all the liver function variables than would have been expected from the reference ranges supplied with the tests. The reason for this difference is not completely clear, although it could be due to the use of hospital or laboratory populations to formulate reference ranges. If this is the case, these populations are clearly not comparable with a group of working men in the north west of England and it does emphasise the importance of having a proper control group in this type of study.

We express our particular gratitude to Sisters Debbie Fearnley, Doreen Evans, Win Ashcroft, and Margaret Riley for their role in local organisation, data collection, and verification. Thanks also to Sue Brainbothwaite for her work in data coordination and to Angela Benson for her contribution to the preparation of the report.


Correspondence and editorials

Occupational and Environmental Medicine welcomes correspondence relating to any of the material appearing in the journal. Results from preliminary or small scale studies may also be published in the correspondence column if this seems appropriate. Letters should be not more than 500 words in length and contain a minimum of references. Tables and figures should be kept to an absolute minimum. Letters are accepted on the understanding that they may be subject to editorial revision and shortening.

The journal also publishes editorials which are normally specially commissioned. The Editor welcomes suggestions regarding suitable topics; those wishing to submit an editorial, however, should do so only after discussion with the Editor.
Factors affecting recognition of cancer risks of nuclear workers


Rejected manuscripts

From February 1994, authors whose submitted articles are rejected will be advised of the decision and one copy of the article, together with any reviewers’ comments, will be returned to them. The journal will destroy remaining copies of the article but correspondence and reviewers’ comments will be kept.
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**Author’s reply—**Our short report on the properties of non-differential misclassification of exposure, as judged by computer simulations, has prompted Wacholder et al to make several useful observations.1 These observations include a restatement of what we judged to be the “more important” feature of the simulations. We concluded (to paraphrase) that for any particular epidemiological study that investigates a cause, risk factor and in which each study subject had the same probability of being misclassified (with respect to a single binary exposure variable), it would be incorrect to infer that the measure of effect obtained from the study—for example, relative risk or rate ratio—could only be increased if more reliable information were to be obtained such that all misclassification could be removed. We are pleased to learn that Wacholder et al are of the opinion “that this is an important point for readers to appreciate”. We did not find those results of the computer simulations that supported this conclusion to be “disturbing”; they seemed to us to be intuitively obvious. What disturbed us was the fact that many researchers are convinced that the removal of non-differential misclassification of exposure from their studies can only increase the point estimate of relative risk (or rate ratio).

Why is our conclusion so little known? We have three possible explanations; all could be prompted by the comments of Wacholder et al. It may be because of confusion about the definition of non-differential misclassification. We chose the definition that “all exposed and non-exposed subjects have the same probability of being misclassified (these two probabilities may be different, one must be not zero)”. Wacholder et al describe this as misclassification “treated as a process”. They note that non-differential misclassification may also be defined in terms of “realisation” in a given data set—that is, the same fraction of diseased and non-diseased subjects were, in fact, misclassified. The first definition seems more relevant to study setting. Using the second definition, non-differential misclassification would rarely occur and a researcher would not be aware when it had occurred. (It would never occur when there was an even number of diseased subjects and an odd number of non-diseased subjects!) A second explanation is the influence of textbook examples in which misclassification is invariably shown to operate on a proportionate rather than a random basis. We choose not to believe that errors are made every nth record and prefer to believe that random misclassification is more relevant to study settings.

A third possible explanation is the way in which the word bias is interpreted. Sometimes the word is used to indicate a tendency toward a given distortion, and sometimes (perhaps incorrectly) to indicate a distortion that will occur on each and every occasion—for example, in the game of bowls, the oblique course of a bowl due to its lopsided form is said to be due to bias. If the first definition were in universal use, our conclusion would be well known.

Our short report may be viewed as a call for more appropriate interpretation of study findings.1 The observations of Wacholder et al may be viewed in the same light.

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**NOTICES**


The Congress will present the latest research discoveries in occupational health as well as provide a forum for exchange of ideas between practitioners and researchers. This ICOH Congress will be noted by the introduction of new subjects of great concern to the society of today and tomorrow, such as work organisation, psychosocial factors, and gender research. A large number of minisymposia will form a bridge between the more traditional occupational health research and the new challenges of promoting a good working life.

**MINI SYMPOSIAS**

A large part of the conference will be mini symposia arranged by the permanent Scientific Committees, such as “chemicals and allergies”, “occupational health nursing in the future”, “occupational health in small industries”. More than thirty mini symposia will give the participants a unique opportunity to keep up with the rapid developments in occupational health.

**MORE THAN 1000 PRESENTATIONS**

The Congress also invites participants to present their own papers on many areas of relevance to the working environment. There will be more than 1000 oral presentations and posters.

**PROLIMEN KEYNOTE SPEAKERS**

Eight internationally known scientists are invited as keynote speakers:

- Gender and work. Joan Acker, University of Oregon, USA
- Occupational health—a global perspective. Jerry Jayaratnam, National University Hospital, Singapore
- Participatory approaches in occupational health. René Loewen, Zinbibrew
- What can health professionals do to prevent musculoskeletal disorders? Philippe Mairiaux, Université Catholique de Louvain, Brussels, Belgium
- Working conditions and cardiovascular diseases. Johannes Siegrist, Institut für Medizinisches Soziologie, Düsseldorf, Germany
- Dose concepts in occupational exposure assessments. Thomas J Smith, Harvard School of Public Health, Boston, USA
- Promoting safe behaviour. Carin Sundström-Frisk, National Institute of Occupational Health, Stockholm, Sweden
- Electromagnetic fields and cancer. Gilles Thériault, McGill University, Montreal, Canada

The conference is sponsored by multinational and Swedish companies. Major sponsors are AMF Trygghetsförsäkring, SmithKline Beecham, Pasteur Mérieux MSD and the Swedish Power Association, Svenska Kraftverksföreningens. Other sponsors are Samhäll and SJ, the Swedish State Railways. The official airline is SAS. There will be an exhibition in conjunction with the conference. Companies and organisations interested in taking part should contact the ICOH'96 secretariat.

Authorised press is welcome to cover the Congress.

For further information contact: Arne Wennberg, secretary general ICOH'96, Lars Grönvist, press officer ICOH'96, Elisabeth Lagerlöf, information ICOH'96, Maud Werner, secretaryt ICOH'96, National Institute of Occupational Health S-171 84 SOLNA, Sweden. Tel (+46) 8 730 91 00; Fax (+46) 8 820 05 56.


A three day conference (11–13 December) and two days of continuing education sessions (9–10 December). This conference will run back to back with the 31st Annual Conference of the Ergonomics Society of Australia at the same venue. An exceptional line up of international and local speakers include:

- Professor Morton Lippmann, New York University. Infection Toxicology and Regulatory Policy
- Associate Professor Harriet Burge, Harvard University. Bioeroerosols
- Professor Jens Rasmussen, Copenhagen University. Human Computer Interaction and Human Error
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This book represents a departure from the previous IARC publications in that most of the data are presented in graphical rather than tabular form. Detailed tables are presented in a companion volume, but here one finds an encyclopedic compilation of material on cancer incidence from the six previous IARC volumes of Cancer Incidence in Five Continents along with national cancer mortality data taken from the WHO publications. Cancer incidence data cover the period 1950–1987 and mortality data are available from 1955 to 1988. Incidence data are provided from 60 registries in 29 countries and 36 national mortality data sets are used. Such a broad coverage makes the book daunting for the specialist, but the graphical layout makes it easy to find things, and is particularly useful for developing and preliminary testing of hypotheses about possible causes of cancer. Even in this context, however, it will need to be used in conjunction with the more detailed tabulations published in other IARC volumes. One weakness is the unavoidable delay in compiling international data, so that information on trends is already eight years out of date. Another concern is the choice of rates to plot. The truncated rate and cumulative risk have very similarly shaped curves, the only difference being changes in the age structure of populations. It would have been useful to look at time trends more fully for younger and older age groups, especially for early onset cancers, such as Hodgkin's disease and testicular cancer. The one acknowledgement of this is a final chapter on childhood cancers in which trends in cumulative risk for ages 0–14 years for leukaemia and all cancers are given.

The book is organised by chapters on each specific cancer site and they follow a standard pattern. Each chapter has some explanatory text that describes patterns separately for Europe, Asia and Oceania, and the Americas, but most of the space is filled with graphs. Trends in incidence for the truncated rates (30–74 years) and the cumulative risk from ages 30–74 years are given for each country for men and women separately for most sites. The best fitting age-period-cohort polynomial model is given for each country and graph. Separate graphs then give the percentage change per 5-year period for age bands 30–44, 45–64, 65–74 and the total age group 30–74. This process is then repeated for the mortality data.

This is very much a reference book for specialists. The availability of graphical data is useful and saves time when making lots of comparisons. Its value to the more casual reader is likely to be limited, however, and the sheer mass of material will put off the uninitiated.

JACK CUIZICK


Environmental medicine is now a distinct medical discipline in North America and is increasingly so in Europe and the UK. Unfortunately, in the United Kingdom there is still much debate over the definition, scope and even "ownership" of the subject so that this American book may be a very useful contribution to the development of environmental medicine in this country as it shows the closeness of the subject to occupational medicine.

The book is ambitiously aimed at the needs of students, clinicians in training, and established clinicians who "seek a resource to integrate occupational and environmental medicine into routine clinical practice". In this it does succeed, by presenting a seamless transition from the practice of clinical occupational medicine in the workplace to the application of the same and similar principles to the health effects of physical, chemical, and biological factors in the general environment.

The first section on principles and practice compares and contrasts the knowledge base and the fundamental skills central to good clinical practice. A chapter on communication of risk is especially welcome as this is so frequently lacking in commentators on environmental issues. It was also particularly pleasing to see the role of specific susceptibility, as a factor in risk assessment, fully considered. The chapters that deals with legal and regulatory matters is understandably devoted to American legislation, bearing in mind the origins of the book, and so has little relevance to the British reader.

The next section describes the core disciplines of toxicology, epidemiology, and industrial hygiene. As introductions to these topics, the chapters constitute good succinct reviews and should stimulate the interested reader to refer to other dedicated texts. The paucity of references in these chapters was a little disappointing and indeed, this is a criticism of the book in general. Few references are given in the bibliographies at the end of each chapter so that the stimulated reader may be somewhat frustrated.