

As part of the 50th birthday celebration, we are arranging to reprint 12 papers, *the Editor's Choice*, which have appeared in previous issues of the *Journal*. They have been chosen partly to illustrate the range and scope of the *Journal* over the years and partly because they are or were important in their day. More significantly, they have been chosen because they exemplify some of the best in scientific writing and can all be read with great pleasure and all who wish to communicate their observations, their ideas, or their enthusiasms would do well to study them and learn from them.

We will publish one paper each month through the year and they will appear in the order in which they were originally published.

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## *Editor's Choice*

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# Mortality from lung cancer in asbestos workers

by Richard Doll

(*British Journal of Industrial Medicine* 1955;12:81-6)

It will come as a surprise to many of those reading the *Journal* today to realise that the link between exposure to asbestos and lung cancer had not been settled by the mid-1950s. In the introduction to this paper, Doll notes that only 61 cases of lung cancer had been reported since 1935 in persons with asbestosis and there were still those who were sceptical about the association.

Doll first collected necropsy data on persons who had been employed at "a large asbestos factory" and found that of the 105 cases examined, 18 had died of lung cancer, 15 in association with asbestosis. He then followed up a group of 113 men who had worked for at least 20 years in areas of the factor scheduled under the 1931 Asbestos Industry

Regulations as being "dusty". Among this small group there had been 11 deaths from lung cancer (all with a mention of asbestosis) compared with an expected number of 0.8. Doll was also able to show that the incidence of both asbestosis and lung cancer had declined after the better control of exposure consequent upon the introduction of the 1931 Regulations. He went on to state that the question of "whether the specific industrial risk of lung cancer had yet been completely eliminated cannot be determined with certainty." It still cannot.

Doll is, of course, best known for the work on smoking and lung cancer carried out in association with Bradford Hill. This elegant paper is a good example of his many forays into occupational epidemiology to which he has made many important contributions.

Diagnosis is often delayed. When removed from exposure symptoms do not completely resolve and abnormalities of lung function remain. Earlier diagnosis significantly influences the prospect of recovery.

Workers often remain exposed, however, and the reason may often be financial. Continued exposure means that symptoms are less likely to improve and their lung function is likely to deteriorate. In our opinion compensation should be directed at facilitating relocation and retraining rather than providing inadequate compensation for disability, which is difficult to assess in an asthmatic group.

Requests for reprints to: Dr P S Burge, Occupational Lung Disease Unit, East Birmingham Hospital, Bordesley Green East, Birmingham B9 5ST.

- 1 Adams WGF. Long term effects on the health of men engaged in the manufacture of toluene diisocyanate. *Br J Ind Med* 1975;32:72-8.
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- 16 Industrial Injuries Advisory Council. Occupational asthma (Command 8121). London: HMSO, 1981.
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- 18 Industrial Injuries Advisory Council. Occupational asthma (Command 1244). London: HMSO, 1990.
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### Destruction of manuscripts

From 1 July 1985 articles submitted for publication will not be returned. Authors whose papers are rejected will be advised of the decision and the manuscripts will be kept under security for three months to deal with any inquiries and then destroyed.

chronic interstitial scarring that was unchanged from a 1987 film, but improved from a 1985 film. SM was taking steps to re-enter the workforce.

This patient was evaluated at the Greater Cincinnati Occupational Health Centre in Cincinnati, Ohio.

- 1 Burke GW, Gaensler E, Carrington C, Gupta R, Fitzgerald M. Hypersensitivity pneumonitis or sarcoidosis? *Chest* 1976;70:421.
- 2 Konig G, Baur X, Fruhmant G. Sarcoidosis or extrinsic allergic alveolitis? *Respiration* 1981;42:150-4.
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- 15 Redline S, Barna BP, Tomaszefski JF, Abraham JL. Granulomatous Disease Associated with titanium pulmonary deposition. *Br J Ind Med* 1986;43:652-6.

## Vancouver style

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

The *Br J Ind 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 *Br Med J*, 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<sup>1</sup> confirmed other reports<sup>2-5</sup> . . .). In future references to papers submitted to the *Br J Ind Med* should include: the

names of all authors if there are six or less or, if there are more, the first three 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.

Examples of common forms of references are:

- 1 International Steering Committee of Medical Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Br Med J* 1979;1:532-5.
- 2 Soter NA, Wasserman SI, Austen KF. Cold urticaria: release into the circulation of histamine and eosino-phil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.
- 3 Weinstein L, Swartz MN. Pathogenic properties of invading micro-organisms. In: Sodeman WA Jr, Sodeman WA, eds. *Pathologic physiology: mechanisms of disease*. Philadelphia: W B Saunders, 1974:457-72.

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Requests for reprints to: Dr Ruoling Chen, Department of Biostatistics, Anhui Medical University, Hefei, Anhui 230032, The People's Republic of China.

- 1 Wagoner JK, Miller RW, Lundin FE, Fraumeni JF, Haij ME. Unusual cancer mortality among a group of underground metal miners. *N Eng J Med* 1963;269:284-9.
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- 15 Steenland K, Beaumont J, Halperin W. Methods of control for smoking in occupational cohort mortality studies. *Scand J Work Environ Health* 1984;10:143-9.
- 16 Doll R. Occupational cancer: Problems in interpreting human evidence. *Ann Occup Hyg* 1984;28:291-305.

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## Correspondence and editorials

The *British Journal of Industrial 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. Table 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 now 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.

Occupation	No of cases	Crude SMR	Smoking (95% CI) adjusted SMR
Caretakers	90	963	988 (788-1187)
Other sheet metal workers	16	585	531 (245-818)
Maids	69	317	331 (256-406)
Waitresses	38	337	289 (181-396)
Dressmakers	18	240	248 (137-359)
Housekeepers	24	192	190 (114-267)
Textile fabric workers	26	174	173 (106-239)
Farm workers	22	144	165 (105-225)
Working proprietors	27	151	150 (93-207)
Stock clerks	37	153	146 (96-104)
Sewers	43	151	143 (97-188)
Primary education teachers	53	105	109 (70-147)
Cooks	23	111	105 (59-150)
Shop assistants	110	110	102 (82-122)
Auxiliary nurses	43	105	97 (65-128)
Book keepers	25	86	78 (44-111)
Office clerks	23	71	62 (33-91)
Other clerks	27	61	54 (31-77)
Housemaids	17	20	18 (9-28)

Swedish women with an occupation in the 1960 Census were used. The expected numbers of deaths were standardised for age based on comparisons in five year birth cohorts and standardised mortality ratios (SMRs) were calculated for each occupation. As in our earlier study we calculated smoking adjusted SMRs,<sup>2</sup> based on data from a survey in 1963 of smoking habits in different occupations. We assumed that smokers had a twofold increased risk for asthma compared with non-smokers. Confidence intervals (95% CIs) were calculated based on a Poisson distribution. The analyses were only carried out on occupations with more than 15 observed cases ( $n = 19$ ). The table shows the results.

An increased mortality due to asthma was found in eight occupations. In three, textile fabric workers, dressmakers, and farm workers, occupational exposures such as cotton dust and microorganisms could be risk factors. Textile fabric workers are probably exposed to dust from crude cotton. Hence some misclassification between asthma and byssinosis may exist in that occupation.

With a reservation for waitresses, the increased risks in the other occupations, caretakers, maids, housekeepers, and other sheet metal workers, may be explained by selection factors—that is, subjects with asthma or respiratory symptoms seek physically light occupations.

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1 Torén K, Hörte LG, Järholm B.  
Occupation and smoking adjusted

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*Scand J Work Environ Health* 1978;  
4:85-9.

## NOTICES

The Centers for Disease Control, National Institute for Occupational Safety and Health have released the Work-Related Lung Disease (WoRLD) Surveillance Report, Supplement 1992. The original report, released in 1991, summarises surveillance data for occupational respiratory diseases. The 1992 supplement includes data not previously presented. The report contains information of use to public health officials, researchers, management and labour officials, and others working in occupational health disciplines.

Copies of the original WoRLD report and the 1992 WoRLD supplement may be obtained by calling 1-800-35NIOASH or by writing to: Epidemiological Investigations Branch, Division of Respiratory Disease Studies, National Institute for Occupational Safety and Health, 944 Chestnut Ridge Road, Morgantown, West Virginia 26505, USA.

**Nato advanced study institute on modulation of cellular responses in toxicity, Ponte di Legno, Brescia, Italy, 24 January—3 February 1994**

Composed of an integrated series of invited lectures, the Institute will focus on current concepts and strategies in research on cellular responses in toxicity. Topics for discussion will

include: modern methods in toxicology; milestones in cell toxicology; target organ toxicity; strategic applications. Panel discussions and round tables will be organised to encourage exchange of ideas among participants and faculty. Directors of the course are: professor Corrado Lodovico Galli of the University of Milan and professor Alan Marvin Goldberg of the Johns Hopkins University of Baltimore.

Attendance is restricted to a maximum of 60 participants. A limited number of grants will be available to defray part of the expenses of pre and postdoctoral trainees. Persons wishing to attend the Institute should send a curriculum vitae and a list of publications to the organising secretariat. Deadline: 10 November 1993. The deadline for application for grants is 10 October 1993. For more information contact the organising secretariat: Mrs Daniela Galli, Nutrition Foundation of Italy, Via G. Balzaretto 9-20133 Milano, Italy. Telephone (+39/2) 29404672-20488320; fax (+39/2) 29404961.

**International section of the ISSA for the Prevention of Occupational Risks in the Chemical Industry**

**15th International Symposium, safety pays! Safety in interaction with quality, productivity, and economy, 30 August—1 September 1993 in Lugano, Switzerland.**

Simultaneous translation: German, English, French, and Italian. For further information contact: AISS-Chemistry Section c/o Berufsgenossenschaft der chemischen Industrie, Kurfürsten-Anlage 62, D-6900 Heidelberg, Germany. Fax 06221-523323.

**16th International Symposium, machinery in the chemical, plastics and rubber industries—safe design and safe use, 6 to 8 June 1994 at theACHEMA 94 in Frankfurt am Main**

Simultaneous translation: German, English, and French. Deadline for papers 10 August 1993. For further information contact: AISS Chemistry Section c/o Berufsgenossenschaft der chemischen Industrie, Kurfürsten-Anlage 62, D-6900 Heidelberg, Germany. Fax 06221-523323.