British Journal of

INDUSTRIAL MEDICINE

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Papers are accepted on the understanding that they are contributed solely to this journal and are subject to editorial revision. The editor cannot enter into correspondence about papers rejected as being unsuitable for publication, and his decision is final. Papers should follow the requirements of the International Steering Committee of Medical Editors (*Br Med J* 1979;i:532–5). **Papers should be prefaced by an abstract of the argument and findings which should be more comprehensive than a summary. Papers and references must be typewritten on one side of the paper only, both in double spacing, and with a wide margin. Both SI units and their equivalents must be given throughout** (Baron *et al, J Clin Pathol* 1974;27:590–7). Photographs and photomicrographs on glossy paper should be submitted unmounted. Charts and graphs should be carefully drawn in black ink on tracing linen or Bristol board or stout white paper. Legends to figures should be typed on a separate sheet of paper.

References will not be checked by the editorial office; responsibility for the accuracy and completeness of references lies with the author. 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 above the line. 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. The number of references should be kept to the absolute minimum and only those essential to the argument being developed by the authors or to the discussion or if they describe methods which are being used when the original is too long for inclusion. Usually one reference per typed page of manuscript should be sufficient.

Use the form of references adopted by *Index Medicus*—for instance, for a standard journal article: authors (list all authors when six or fewer, when seven or more, list only three and add *et al*), title, abbreviated title of journal, year of publication; volume number: **first and last page numbers.**

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16 Jeppsson S, Rannevik G. Studies on the gonadotropin response after administration of LH/FSH-releasing hormone (LRH) during pregnancy and after therapeutic abortion in the second trimester. *Am J Obstet Gynecol* 1976;**125**:484–90.
17 Siegle S. *Nonparametric statistics for the behavioral sciences.* Tokyo. McGraw-Hill Kokakusha Ltd, 1956.
18 Waldron HA, Cherry N, Venables H. Solvent exposure and liver function. *Lancet* 1982;ii:1276.
19 Smith CG. Reproductive toxicity: hypothalamic-pituitary Mechanisms. *Am J Ind Med* 1983;**4**:107–12.
20 Mutti A, Vescovi PP, Falzoi M, Arfini G, Valenti G, Franchini I. Neuroendocrine effects of styrene on occupationally exposed workers. *Scand J Work Environ Health* 1984;**10**:225–8.
21 Michon S. Disturbance of menstruation in woman working in an atmosphere polluted with aromatic hydrocarbons. *Pol Tyg Lek* 1965;**20**:1547–649. (In Polish.)
22 Andersson K, Nilsen OG, Toftgård R, *et al.* Increased amine turnover in several hypothalamic noradrenaline nerve terminal systems and changes in prolactin secretion in the male rat by exposure to various concentrations of toluene. *Neurotoxicology* 1983;**4**:43–56.
23 Mutti A, Franchini I. Toxicity of metabolites to dopaminergic systems and the behavioural effects of organic solvents (editorial). *Br J Ind Med* 1987;**44**:721–3.
24 Elofsson S-A, Gamberale F, Hindmarsk T, *et al.* Exposure to organic solvents. A cross-sectional epidemiological investigation on occupationally exposed car and industrial spray painters with special reference to the nervous system. *Scand J Work Environ Health* 1980;**6**:239–73.

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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[1] confirmed other reports[2-5] . . .). 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.

animals in laboratory technicians and animal keepers. *Br J Ind Med* 1986;**43**:192–8.
8 Venables KM, Tee RD, Hawkins ER, Gordon DJ, Wale CJ, Farrer NM, *et al.* Laboratory animal allergy in a pharmaceutical company. *Br J Ind Med* 1988;**45**:660–6.
9 Botham PA, Teasdale EL. Allergy to laboratory animals. *Biologist* 1987;**34**:162–3.
10 Agarwal MK, Yunginger JW, Swanson MC, Reed CE. An immunochemical method to measure atmospheric allergens. *J Allergy Clin Immunol* 1981;**68**:194–200.
11 Davies GE, Thompson AV, Rackham M. Estimation of airborne rat-derived antigens by ELISA. *J Immunoassay* 1983;**4**: 113–26.
12 Price JA, Longbottom JL. ELISA method for measurement of airborne levels of major laboratory animal allergens. *Clin Allergy* 1988;**18**:95–107.
13 Eggleston PA, Newill CA, Ansari AA, Pustelnik A, Lou S-R, Evans III R, *et al.* Task-related variation in airborne concentrations of laboratory animal allergens: Studies with *Rat n* 1. *J Allergy Clin Immunol* 1989;**84**:347–52.
14 Blanchet Y. Evaluation of exposure to mouse and rat urinary proteins amongst employees of the Montreal General Hospital Research Institute. McGill University, 1988. (MSc Thesis School of Occupational Health.)
15 Edwards RG, Beeson MF, Dewdney JM. Laboratory animal allergy: the measurement of airborne urinary allergens and the effects of different environmental conditions. *Lab Anim* 1983;**17**:235–9.
16 Lewis DM, Bledsoe TA, Dement JM. Laboratory animal allergies. Use of the radioallergosorbent test inhibition assay to monitor airborne allergen levels. *Scand J Work Environ Health* 1988;**14**(suppl 1):74–6.
17 Newman Taylor AJ, Longbottom JL, Pepys J. Respiratory allergy to urine proteins of rats and mice. *Lancet* 1977;**ii**: 847–9.
18 Home Office. *Code of practice for the housing and care of animals used in scientific procedures.* London: HMSO, 1989. (House of commons papers 107. ISBN 0 10 210789 0.)
19 Atkinson S, Tee RD, Newman Taylor AJ. Optimisation of filter elution methods for aeroallergen monitoring. *Allergologie* 1989 (Abstr: B 1366E 22:03–04.)
20 Ceska M, Eriksson R, Varga JM. Radioimmunoabsorbent assay of allergens. *J Allergy Clin Immunol* 1972;**49**:1–9.
21 Tee RD, Gordon DJ, Lacey J, Nunn AJ, Brown M, Newman Taylor AJ. Occupational allergy to the common house fly (Musca domestica): Use of the immunologic response to identify atmospheric allergen. *J Allergy Clin Immunol* 1985; **76**:826–31.
22 Swanson MC, Campbell AR, O'Hollaren MT, Reed CE. Role of ventilation, air filtration, and allergen production rate in determining concentrations of rat allergens in the air of animal quarters. *Am Rev Respir Dis* 1990;**141**:1578–81.
23 Lincoln TA, Bolton NE, Garrett MD. Occupational allergy to animal dander and sera. *J Occup Med* 1974;**16**:465–9.
24 Platts-Mills TAE, Heymann PW, Longbottom JL, Wilkins SR. Airborne allergens associated with asthma: allergens measured with a cascade impactor. *J Allergy Clin Immunol* 1986;77: 850–7.
25 Reed CE, Swanson MC, Lopez M, Ford AM, Major J, Witmer WB, *et al.* Measurement of IgG antibody and airborne antigen to control an industrial outbreak of hypersensitivity pneumonitis. *J Occup Med* 1983;**25**:207–10.

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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.

The study has shown that mixers in the polyurethane foam industry may still be exposed to high concentrations of TDI. Besides an increased prevalence of irritative symptoms, they also have an increased diurnal variation in PEFR. Those with 10 or more years of exposure showed evidence of chronic airways obstruction on spirometry.

1 Lander F, Gravesen S. Respiratory disorders among tobacco workers. *Br J Ind Med* 1988;45:500–2.
2 Revsbech P, Anderson G. Duirnal variation in peak expiratory flow rate among grain elevator workers. *Br J Ind Med* 1989;46:566–9.
3 Lee HS, Ng TP, Ng YL, Phoon WH. Duirnal variation in peak expiratory flow rate among polyvinylchloride compounding workers. *Br J Ind Med* 1991;48:275–8.
4 Burge PS, O'Brien IM, Harries MG. Peak flow rate records in the diagnosis of occupational asthma due to isocyanates. *Thorax* 1979;34:317–23.
5 Zee KO. Ventilatory function in normal industrial workers in Singapore. *Proceedings of the XII Singapore-Malaysia Congress of Medicine*. The Academy of Medicine, 1977; 587–95.
6 US Department of Health Education and Welfare. 2,4-Toluene diisocyanate (TDI) in air. Method: P and CAM 141. In: *National Institute for Occupational Safety and Health, manual of analytical methods*. 2nd ed. Vol 1. Washington: US Department of Health Education and Welfare, 1977; 141.1–141.8. (DHEW (NIOSH) publ No 77–157–A).
7 American Conference of Governmental Industrial Hygienists. *Threshold limit values for chemical substances and physical agents and biological exposure indices*. Cincinnati: 1990–1991; 35.
8 National Occupational Health and Safety Commission. *Isocyanates*. Canberra: Australian Government Publishing Service, July 1990.
9 *American Conference of Governmental Industrial Hygienists*. Toluene-2,4-diisocyanate (TDI). In: *Documentation of the threshold limit values*. 4th ed. Cincinnati: ACGIH, 1980; 401–2.
10 Brugsch HG, Elkins HB. Toluene di-isocyanate toxicity. *New Engl J Med* 1963;268:353–7.
11 Paggiaro PL, Lastrucci L, Pardi F, Rossi O, Bacci E, Talini D. Specific bronchial reactivity to toluene di-isocyanate: dose-response relationship. *Respiration* 1986;50:167–73.
12 Butcher BT, Karr RM, O'Neil CE, *et al*. Inhalation challenge and pharmacologic studies of toluene diisocyanate sensitive workers. *J Allergy Clin Immunol* 1979;64:655–7.
13 Banks DE, Sastre J, Butcher BT, *et al*. Role of inhalational challenge testing in the diagnosis of isocyanate-induced asthma. *Chest* 1989;95:414–23.
14 Hjortsberg U, Orbaek P, Arborelius Jr M. Small airway hyperreactivity among lifelong non-atopic non-smokers exposed to isocyanates. *Br J Ind Med* 1987;44:824–8.
15 Wegman DH, Musk W, David MM, Pagnotto LD. Accelerated loss of FEV_1 in polyurethane production workers: a four-year prospective study. *Am J Ind Med* 1982;3:209–15.
16 Peters JM, Murphy RLH, Pagnoto LD, Whittenberger JL. Respiratory impairment in workers exposed to "safe" levels of toluene diisocyanate. *Arch Environ Health* 1970;20:364–7.

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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.

Inhalation fever: a proposed unifying term for febrile reactions to inhalation of noxious substances

Sir,—I write in regard to the paper by Rask-Andersen and Pratt (1992;49: 40). There is a limited repertoire of responses of the respiratory system to noxious agents in terms of signs and symptoms. The number of noxious agents is extensive and several general mechanisms exist by which the effects are mediated, including pharmacological, immunological, and toxicological ones. Some agents have the potential for eliciting more than one mechanism, and none of the clinical presentations is pathognomonic of a mechanism. As better understanding of the underlying causes and mechanisms of disorders of the respiratory system has evolved, scope has been provided for the rational revision of nomenclature both by the "lumpers" and the "splitters".

Rask-Andersen and Pratt state the case for using the term "inhalation fever" as, ". . . we think that the fevers and symptoms represent a common pathway in which the lung reacts to noxious substances." In their brief proposal, they do not provide proof for their hypothesis that all ". . . the colourful but confusing litany of names currently in use" are mediated by a single mechanism. For the sake of intellectual tidiness one might wish that metabolites and breakdown products of microbiological agents, flora and fauna; freshly generated metal fumes and their oxides; finely particulate polymer and its pyrolysis products; in eliciting the same responses, were operating through the same mechanism. Although this is plausible, we do not have the necessary supporting evidence. To accept the "lumping" proposal for the common nomenclature of the cough, fever, malaise, and generalised aches syndrome after the inhalation of a range of agents is, I would contend, premature and has the potential for leading to confusion of greater significance than it hopes to eradicate.

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London NW3 2PF

NOTICES

MSc in Occupational Hygiene, University of Aberdeen and Institute of Occupational Medicine Ltd, Edinburgh

A comprehensive modular programme of occupational hygiene courses will be run jointly by the Institute of Occupational Medicine Ltd, Edinburgh and the University of Aberdeen. These courses are intended for scientists, engineers, occupational health nurses and others interested in pursuing a career in occupational hygiene.

The MSc course is available either full time over one year or part time over two years. The first 10 weeks, which also comprise the University Certificate course, consists of core occupational hygiene modules plus toxicology, epidemiology, and statistics. The second term includes advanced modules in occupational hygiene and modules on related subjects such as ergonomics and safety, indoor air quality and the environment. Students then proceed to the degree of MSc by undertaking a supervised research assignment. Holders of the MSc are exempt from the British Examining Board in Occupational Hygiene Diploma core examinations.

All of the modules within the course, which last between one and five days, can be attended separately. These include: introduction to risk assessment, monitoring hazardous substances, control of hazardous substances, skin exposure, monitoring strategy, ventilation design, and many others.

For further information contact Ms Heather Collins or Mr John Cherrie, Institute of Occupational Medicine Ltd, 8 Roxburgh Place, Edinburgh EH8 9SU. Telephone (031) 667 5131; Fax (031) 667 0136.

Certificate in Occupational Health, University of Aberdeen and Institute of Occupational Medicine Ltd, Edinburgh

A 10 week, full time course will be run jointly by the Institute of Occupational Medicine Ltd, Edinburgh and the University of Aberdeen. It is intended for physicians working full time or part time in industry and is ideal for those who wish to take the examination for the Associateship of the Faculty of Occupational Medicine of the Royal College of Physicians of London. After successful completion of the examination at the end of the course, a University Certificate will be awarded. Successful candidates may then proceed to the degree of MSc by undertaking a supervised research project over the rest of the year (full-time) or over two years (part-time). Course dates for 1992 are 5 October—11 December.

Various topics within the course are available as short modules that can be attended separately. These include epidemiology and statistics; toxicology; occupational hygiene; ergonomics; respiratory diseases.

For further information contact: Mrs L Alexander or Professor A Seaton, Department of Environmental and Occupational Medicine, University of Aberdeen Medical School, Foresterhill, Aberdeen AB9 2ZD. Telephone 0224 681818 ext 52459; Fax 0224 662990.

Workshop on biopersistence of respirable synthetic fibres and minerals. Lyon, France, 7–9 September 1992.

The workshop is organised by Institut National de la Santé et de la Recherche Médicale (INSERM); the International Agency for Research on Cancer (IARC), World Health Organisation, and Centre National de la Recherche Scientifique (CNRS), France.

It will assess the toxicity and carcinogenicity of fibrous and non-fibrous dusts from numerous minerals and synthetic materials in relation to their biopersistence in lung tissue. Problems of deposition, clearance, translocation, and dissolution will be presented at the workshop which will review the state of the art in the light of new experimental data from different disciplines. The workshop will provide a forum for discussion between occupational physicians, epidemiologists, laboratory workers in both the biological and physical sciences, governmental regulators, and industrial producers.

The sessions will cover the current state of the art; in vitro assessment of

biopersistence (acellular and cellular systems); assessment of biopersistence in experimental animals; significance of biopersistence in relation to pathogenic effects in humans; biopersistence in the pathogenicity of solid particles; validation and harmonisation of different methods of assessing biopersistence. Presentations will be in English.

For further information contact Centre International de Recherche sur le Cancer 150, cours Albert Thomas, F-69372 Lyon Cédex 08 (France). Telephone (33) 72 73 84 85; Fax (33) 72 73 85 75.

Continuing medical education and training in Europe: the future. Royal College of Physicians, 11 St Andrew's Place, London NW1 4LE, 1–2 October 1992

This major international congress will bring together the leaders of medical education and health care in Europe. The programme is designed to examine critically the political and educational implications for medical training in Europe after harmonisation in 1992.

Sessions will include presentation and discussion on (1) directives for health professionals, (2) harmonisation of hospital training programmes, (3) monospecialty initiatives, (4) training and quality of care initiatives, (5) educational research and development (including primary care), (6) recommendations and implimentation.

Speakers will be invited from all European Community countries. The programme will include opportunities for free discussion after the formal presentations. The conference language will be English.

For further information contact: Dr M W N Nicholls, Chairman, Organising Committee, Fellowship of Postgraduate Medicine, 6 St Andrew's Place, London NW1 4LB. Telephone 44 071 935 5556; Fax 44 071 224 3219.

International symposium on work related diseases: presentation and health promotion. Linz, Austria, 27–30 October 1992

The symposium will review the current state of research and practical action for the prevention of work-related diseases. It aims at encouraging an international and interdisciplinary exchange of information and co-operation as well as the development of strategies and programmes and their practical implementation.

The symposium will first consider the strains and stresses which might contribute to work-related diseases and disorders, following which information will be given on preventive programmes and actions within enterprises and at regional, national and international levels.

The target groups are safety and health specialists as well as all others concerned with the safety and health of workers—safety and health personnel, safety practitioners and engineers, occupational physicians and medical staff within the enterprises, industrial hygienists, scientists, safety inspectors, managers (including personnel managers), the industry, safety and health associations, social security institutions and labour, health, social and environmental ministries, as well as trade unions and employers' organisations.

The symposium will consider musculo-skeletal disorders and diseases; mental and psychological disorders and diseases; cardiovascular diseases, gastrointestinal disorders, respiratory diseases, and allergic disorders; current state of research into work related strains and stresses and their impact on diseases; importance of work related diseases in the socio-political context of different countries; practical experience in the prevention of work related diseases (motivation, objectives, difficulties, etc); differentiation and interrelationship between health promotion and prevention; role of organisations and institutions and of various professional and concerned groups; economic, social, and psychological aspects; strategies and programmes; concrete actions at enterprise level.

The working languages will be English, French, and German with simultaneous translation.

The organisers are: International Labour Office (ILO), Allgemeine Unfallversicherungsanstalt (AUVA), Bundeskammer für Arbeiter und Angestellte (BAK), International Commission on Occupational Health (ICOH), International Social Security Association (ISSA), World Health Organisation (WHO).

For further information contact: Secretariat, Allgemeine Unfallversicherungsanstalt Kongressbüro, Adalbert-Stifter-Strasse 65, A-1200 Vienna, Austria. Telephone 1 33 111/558 or 537; Fax 1 33 111/469; Telex 136074.