
British Journal of Industrial Medicine

Volume 41, 1984

EDITOR H A Waldron

ASSISTANT EDITORS P J Baxter L Magos A J Newman Taylor

EDITORS, INFORMATION SECTION C Lawrence-Jones D K Lund

EDITOR, BOOK REVIEWS A G Salmon

EDITORIAL COMMITTEE

J A Bonnell

R I McCallum

Editor

Joan M Davies

C White

British Medical Journal

J A Lunn

TECHNICAL EDITOR Elizabeth Bond

BRITISH MEDICAL ASSOCIATION TAVISTOCK SQUARE LONDON WC1

Contents

No 1 FEBRUARY 1984	PAGE
The liquid barrier filter: total protection against particulate contaminants W D Seufert, France Bessette, and G Lachiver	1
Identification of occupational mortality risks for Hanford workers G W Kneale, T F Mancuso, and Alice M Stewart	6
Job related mortality risks of Hanford workers and their relation to cancer effects of measured doses of external radiation G W Kneale, T F Mancuso, and Alice M Stewart	9
Mortality of workers potentially exposed to organic and inorganic brominated chemicals, DBCP, TRIS, PBB, and DDT O Wong, W Brocker, H V Davis, and G S Nagle	15
Incidence of cancer among vinyl chloride and polyvinyl chloride workers S Storetvedt Heldaas, S L Langård, and A Andersen	25
Occupational exposure to hydrazine and subsequent risk of cancer N Wald, Jillian Boreham, R Doll, and J Bonsall	31
Mortality experience of glass fibre workers H S Shannon, M Hayes, J A Julian, and D C F Muir	35
Malignant mesothelioma: incidence, asbestos exposure, and reclassification of histopathology W E Wright, R P Sherwin, Elizabeth A Dickson, L Bernstein, Janine B Fromm, and B E Henderson	39
A spin label study of the effect of chrysotile asbestos on erythrocyte membranes E Gendek, G Bartosz, and W Leyko	46
Occupational asthma from nickel sensitivity: I Human serum albumin in the antigenic determinant J Dolovich, S L Evans, and E Nieboer	51
Occupational asthma from nickel sensitivity: II Factors influencing the interaction of Ni²⁺, HSA, and serum antibodies with nickel related specificity E Nieboer, S L Evans, and J Dolovich	56
Characterisation of textile dust extracts: I Histamine release in vitro J S Douglas and Pamela G Duncan	64
Characterisation of textile dust extracts: II Bronchoconstriction in man J S Douglas, Pamela G Duncan, and Eugenija Žuškin	70
Extrinsic allergic alveolitis in the tobacco industry M S Huuskonen, K Husman, J Järvisalo, O Korhonen, M Kotimaa, T Kuusela, H Nordman, A Zitting, and R Mäntyjärvi	77
Pulmonary granulomatous reaction: talc pneumoconiosis or chronic sarcoidosis? P Tukiainen, J Nickels, E Taskinen, and M Nyberg	84
Respiratory function in tea workers Eugenija Žuškin and Zdenka Skurić	88
Changes in respiratory variables of grain handlers and civic workers during their initial months of employment I Broder, M A Hutcheon, S Mintz, G Davies, A Leznoff, P Thomas, and P Corey	94
Respiratory exposures associated with silicon carbide production: estimation of cumulative exposures for an epidemiological study T J Smith, S Katharine Hammond, F Laidlaw, and S Fine	100
Pulmonary effects of exposures in silicon carbide manufacturing J M Peters, T J Smith, L Bernstein, W E Wright, and S K Hammond	109
In vitro macrophage cytotoxicity of five calcium silicates V Skaug, R Davies, and B Gylseth	116
Effects of impulse noise and continuous steady state noise on hearing S Mäntysalo and J Vuori	122
Symptoms of vibration syndrome and radiographic findings in the wrists of lumberjacks H Härkönen, Hilka Riihimäki, S Tola, T Mattsson, M Pekkarinen, A Zitting, and K Husman	133
X ray anomalies occurring in workers exposed to vibration caused by light tools J Van Den Bossche and D Lahaye	137
Notice	141
Correction: Reversibility of skeletal fluorosis (November 1983)	141
Isolated liver damage in chemical workers M Døssing and L Ranek	142
Information section	145

Contents

No 2 MAY 1984

Editorial	149
Dust exposure and mortality in an American chrysotile asbestos friction products plant A D McDonald, J S Fry, A J Woolley, and J C McDonald	151
Lung cancer mortality among workers making lead chromate and zinc chromate pigments at three English factories Joan M Davies	158
Long term mortality study of chromate pigment workers who suffered lead poisoning Joan M Davies	170
A mortality study of cement workers M E McDowall	179
Mortality of fire fighters in Western Australia E Eliopoulos, B K Armstrong, J T Spickett, and F Heyworth	183
Mortality study of British pathologists 1974-80 J M Harrington and D Oakes	188
Urinary fluoride concentration as an estimator of welding fume exposure from basic electrodes B Sjögren, L Heldström, and Gösta Lindstedt	192
Mobility of diesel versus non-diesel coal miners; some evidence on the healthy worker effect G Ames and B Trent	197
Role of histamine in the aetiology of byssinosis. I Blood histamine concentrations in workers exposed to cotton and flax dusts M H Noweir, H M Abdel-Kader, and F Omran	203
Role of histamine in the aetiology of byssinosis. II Lung histamine concentrations in guinea pigs chronically exposed to cotton and flax dusts M H Noweir, H M Abdel-Kader, and A Makar	209
Exposure to oxides of nitrogen: respiratory symptoms and lung function in British coalminers A Robertson, J Dodgson, P Collings, and A Seaton	214
Extrinsic allergic bronchitis in a bird fancier M G Harries, B Heard, and D Geddes	220
Asthma and other symptoms in cinnamon workers C G Uragoda	224
In vitro cytotoxicity and quantitative silica analysis of diatomaceous earth products E Bye, R Davies, D M Griffiths, B Gylseth, and C B Moncrieff	228
Lead and zinc concentrations in plasma, erythrocytes, and urine in relation to ALA-D activity after intravenous infusion of Ca-EDTA N Ishihara, S Shiojima, and K Hasegawa	235
Urinary cadmium and lead concentrations and their relation to blood pressure in a population with low exposure J Staessen, C J Bulpitt, H Roels, A Bernard, R Fagard, J V Joossens, R Lauwerys, P Lijnen, and A Amery	241
Chromosome analysis from peripheral blood lymphocytes of workers after an acute exposure to benzene M Gillian Clare, A Yardley-Jones, C Maclean, and B J Dean	249
Lipid abnormalities in workers exposed to dioxin J V Martin	254
Raised serum bile acid concentrations after occupational exposure to styrene: a possible sign of hepatotoxicity? C Edling and C Tagesson	257
Genotoxic exposure of workers creosoting wood R P Bos, C T J Hulshof, J L G Theuws, and P Th Henderson	260
Hair chromium concentration and chromium excretion in tannery workers G Saner, V Yüzbaşıyan, and S Çigdem	263
Prognostic value of acetylcholine challenge test: a prospective study Q T Pham, J M Mur, N Chau, M Gabiano, J C Henquel, and D Teculescu	267
Thin layer chromatography of p-aminophenol in urine after mixed exposure to aniline and toluene Grazyna Bieniek, Krystyna Karmańska, and T Wilczok	272
Optimum weights for commercial divers R I McCallum and A Petrie	275
Is chronic detergent ingestion harmful to the gut? L A Mercurius-Taylor, A P Jayaraj, and C G Clark	279
Notes and miscellanea:	
Actual hazard of methyl bromide fumigation in soil disinfection	282
Lung mechanics in relation to radiographic category of coalworkers' simple pneumoconiosis	284
Notice: Royal College of Physicians of Ireland: Faculty of Occupational Medicine	285

Correction: Fibre type and concentration in the lungs of workers in an asbestos cement factory (November 1983)	285
Information section	286
No 3 <i>AUGUST 1984</i>	
Effect of the air hammer on the hands of stonecutters. The limestone quarries of Bedford, Indiana, revisited W Taylor, D Wasserman, V Behrens, D Reynolds, and S Samueloff	289
Chest pain in rubber chemical workers exposed to carbon disulphide and methaemoglobin formers L Christine Oliver and R P Weber	296
Exposure to solvents and outcome of pregnancy in university laboratory employees Gösta Axelsson, C Lütz, and R Rylander	305
High accuracy (stable isotope dilution) measurements of lead in serum and cerebrospinal fluid W I Manton and J D Cook	313
Diesel exposure and mortality among railway workers: results of a pilot study M B Schenker, T Smith, A Muñoz, Susan Woskie, and F E Speizer	320
Epidemiological study of the lung function of workers at a factory manufacturing polyvinylchloride M H Lloyd, S Gauld, L Copland, and C A Soutar	328
Classification of progressive massive fibrosis of coalminers by type of radiographic appearance C A Soutar and H P R Collins	334
Exposure to cotton dust in an experimental cardroom P Haglund and R Rylander	340
Respiratory symptoms and lung function in a group of solderers D Courtney and J D Merrett	346
Occupational lead neurotoxicity: a behavioural and electrophysiological evaluation. Study design and year one results E L Baker, R G Feldman, Roberta A White, J P Harley, C A Niles, G E Dinse, and Catherine S Berkey	352
Ethylene thiourea: thyroid function in two groups of exposed workers Donalda M Smith	362
Telangiectasia in aluminium workers: a follow up G Thériault, Suzanne Gingras, and Simone Provencher	367
Radiographic assessment of pleuropulmonary disease in asbestos workers: posteroanterior, four view films, and computed tomograms of the thorax R Bégin, M Boctor, D Bergeron, A Cantin, Y Berthiaume, S Pélouquin, G Bisson, and G Lamoureux	373
Radiographic changes in a group of chrysotile miners and millers exposed to low asbestos dust concentrations Sylvaine Cordier, G Thériault, and Simone Provencher	384
In vitro biodegradation of chrysotile fibres by alveolar macrophages and mesothelial cells in culture: comparison with a pH effect M C Jaurand, A Gaudichet, S Halpern, and J Bignon	389
Binding of environmental carcinogens to asbestos and mineral fibres G Harvey, M Pagé, and L Dumas	396
A three-frequency audiogram for use in industry A Sinclair and T A Smith	401
Comparison of the in vivo and in vitro effects of lead on the pH-activity relationship of human erythrocytic δ-aminolaevulinic acid dehydratase J P Farant and D C Wigfield	406
Relation between the iodine azide test and the TTCA test for exposure to carbon disulphide J Rosier, G Billefont, C Van Peteghem, M Vanhoorne, R Grosjean, and E Van de Walle	412
Notes and miscellanea:	
HLA Antigens of the A and B locus in relation to the development of silicosis	417
Toxocaral antibodies in personnel occupationally concerned with dogs	419
Methylene chloride burns	420
Information section	421
No 4 <i>NOVEMBER 1984</i>	
Mortality and incidence of cancer of workers in the man made vitreous fibres producing industry: an international investigation at 13 European plants R Saracci, L Simonato, E D Acheson, A Andersen, P A Bertazzi, J Claude, N Charnay, J Esteve, R R Frenzel-Beyme, M J Gardner, O M Jensen, R Maasing, J H Olsen, L Teppo, P Westerholm, and C Zocchetti	425

Contents

Scrotal cancer in the West Midlands 1936-76	
H A Waldron, J A H Waterhouse, and N Tessema	437
Rice millers' syndrome: a preliminary report	
H H Lim, Z Domala, S Joginder, S H Lee, C S Lim, and C M Abu Bakar	445
Wheat flour sensitisation and airways disease in urban bakers	
M G Prichard, G Ryan, and A W Musk	450
Alpha₁ antitrypsin and lung function in British coalminers	
J E Boyd, P Collings, P M Crofton, G Blundell, and J M G Davis	455
Comparison of radiographic appearances with associated pathology and lung dust content in a group of coalworkers	
V Anne Ruckley, June M Fernie, J S Chapman, Paula Collings, J M G Davis, A N Douglas, D Lamb, and A Seaton	459
Quantitative x ray microanalysis of pulmonary mineral particles in a patient with pneumoconiosis and two primary lung tumours	
S Anttila, S Sutinen, P Pääkkö, T Alapieti, R Peura, and S J Sivonen	468
Respiratory morbidity in wollastonite workers	
W Hanke, M-J Sepulveda, Aremita Watson, and J Jankovic	474
Cotton induced bronchoconstriction detected by a forced random noise oscillator	
M-J Sepulveda, J L Hankinson, R M Castellan, and J B Cocke	480
Acute lung function response to cotton dust in atopic and non-atopic individuals	
M-J Sepulveda, R M Castellan, J L Hankinson, and J B Cocke	487
A cross sectional study of employees with potential occupational exposure to ethylene oxide	
M F Currier, G L Carlo, P L Poston, and W E Ledford	492
Acute exposure of symptomatic steelworkers to sulphur dioxide and carbon dust: effects on mucociliary transport, pulmonary function, and bronchial reactivity	
R K Wolff, G Obminski, and M T Newhouse	499
Cell population and histochemistry of asbestos related lesions of rat pleural cavity after injection of various inorganic dusts	
R E Edwards, Margaret M F Wagner, and C B Moncrieff	506
Histological types of malignant mesothelioma and asbestos exposure	
W E Wright and R P Sherwin	514
A further experimental study of the antislilicotic effect of glutamate	
K I Morosova, B A Katsnelson, Yu S Rotenberg, and G V Belobragina	518
Neurophysiological studies on the relation between the structural properties and neurotoxicity of aliphatic hydrocarbon compounds in rats	
J Misumi and M Nagano	526
n-Hexane metabolism in occupationally exposed workers	
A Mutti, M Falzoi, S Lucertini, G Arfini, Magda Zignani, S Lombardi, and I Franchini	533
Uptake, distribution, metabolism, and elimination of styrene in man. A comparison between single exposure and co-exposure with acetone	
E Wigaeus, A Löf, and M Byfält Nordqvist	539
Biological monitoring of workers exposed to 4,4'-methylenebis (2-chloroaniline) (MBOCA)	
J D Thomas and H K Wilson	547
Notes and miscellanea:	
Do amines induce occupational asthma in workers manufacturing polyurethane foams?	552
Notices	538
Information section	554
Index to volume	559

Information section

Grateful acknowledgement is made to the U.K. MEDLARS Centre and to the National Library of Medicine for their help with this project.

The references cited below have not been checked by the publisher.

1 Historical, legislative, and general

- Greenberg M. **Classical syndromes in occupational medicine: the Montague Murray case.** *Am J Ind Med* 1982;3:351-6.
- Corn M. **Regulations, standards and occupational hygiene within the U.S.A. in the 1980s.** *Ann Occup Hyg* 1983;27:91-105.
- Cherry N, Gear R, Waldron HA. **Occupational health and the school leaver.** *Community Med* 1983;5:3-10.
- Orris P, Baron S. **Occupational medicine: a role for the primary care physician.** *Hosp Pract* 1983;18:195-7.
- Hernberg S. **Fact and fiction in occupational epidemiology. The Lucas Lecture 1982.** *J R Coll Physicians Lond* 1983;17:139-43.
- Harris P, Sabban Y. **Impact of OSHA on state and local public employment.** *Psychol Rep* 1983;52:153-4.
- Miller AB. **Trends in cancer mortality and epidemiology.** *Cancer* 1983;51 (12 Suppl):2413-8.
- Simonato L. **Corrective measures and occupational carcinogens.** *Cancer Detect Prev* 1982;5:381-4.
- Beliaev II. **Means for the primary prevention of oncological diseases (25 years' work experience of the Department of General Hygiene of the Gorki Medical Institute).** *Gig Sanit* 1983;3:48-50.
- Green J. **Detecting the hypersusceptible worker: genetics and politics in industrial medicine.** *Int J Health Serv* 1983;13:247-64.
- Atherley G. **Human rights versus occupational medicine.** *Int J Health Serv* 1983;13:265-75.
- Bond GG, Cook RR, Wight PC, Flores GH. **A case-control study of brain tumor mortality at a Texas Chemical plant.** *J Occup Med* 1983;25:377-86.
- Reeve GR, Bond GG, Lloyd JW, Cook RR, Waxweiler RJ, Fishbeck WA. **An investigation of brain tumors among chemical plant employees using a sample-based cohort method.** *J Occup Med* 1983;25:387-93.
- Austin SG, Schnatter AR. **A cohort mortality study of petrochemical workers.** *J Occup Med* 1983;25:304-12.
- Goerth CR. **Genetic screening and the law: question waiting for an answer.** *Occup Health Saf* 1983;52:49-51.
- European Communities. **Health and safety at work: protection of workers exposed to lead.** *Am Ind Hyg Assoc J* 1983;44:B21-2.
- Karrh BW. **The confidentiality of occupational medical data.** *Del Med J* 1983;55:287-8, 291-3.

2 Organisation of medical and nursing services and education

- Bardsley CA, Lichenstein ME, Nusbaum VA. **Industrial hygiene career planning.** *Am Ind Hyg Assoc J* 1983;44:229-33.
- Rest KM, Cordes DH, Hake JC. **Teaching occupational health to medical students.** *J Fam Pract* 1983;16:979-83.
- Rawls GM, Dwiggins GA, Feigley CE. **Application of the microcomputer to occupational health data management.** *Am Ind Hyg Assoc J* 1983;44:301-5.

3 Physiological, psychological, and organisational aspects of work and rehabilitation

- Bear-Lehman J. **Factors affecting return to work after hand injury.** *Am J Occup Ther* 1983;37:189-94.
- Dikmen S, Reitan RM, Temkin NR. **Neuropsychological recovery in head injury.** *Arch Neurol* 1983;40:333-8.
- Davis PR. **Ergonomics in the United Kingdom. Another crossroads.** *Ergonomics* 1983;26:121-2.
- Ogar B. **Recent developments in the care, treatment, and rehabilitation of the chronic mentally ill in Norway.** *Hosp Community Psychiatry* 1983;34:348-52.
- Repko GR, Cooper R. **A study of the average workers' compensation case.** *J Clin Psychol* 1983;39:287-95.
- Psychophysiological risk factors of cardiovascular diseases. **Psychosocial stress, personality and occupational specificity.** International symposium. *Act Nerv Super (Praha)* 1982;Suppl 3 (Pt 2):241-539.
- Rockette HE, Sefcik S, Arena VC. **A computer program for comparing standardized mortality ratios among exposure groups.** *Comput Programs Biomed* 1983;16:105-13.
- Cochrane GM. **Rheumatoid arthritis: vocational rehabilitation.** *Int Rehabil Med* 1982;4:148-53.
- Linke H. **Sociomedical aspects of rehabilitation and expert opinion.** *Med Welt* 1983;34:494-506.
- Mayer TG. **Rehabilitation of the patient with spinal pain.** *Orthop Clin North Am* 1983;14:623-37.
- DiCarlo SE, Supp MD, Taylor HC. **Effect of arm ergometry training on physical work capacity of individuals with spinal cord injuries.** *Phys Ther* 1983;63:1104-7.

4 Traumatic conditions, accidents, and accident prevention

- Scholey M. **Back stress: the effects of training nurses to lift patients in a clinical situation.** *Int J Nurs Stud* 1983;20:1-13.
- Robertson B, Haywood IR. **"Floor layers foot" — an occupational bursa.** *J R Army Med Corps* 1983;129:48-9.
- Lanciani P, Giani E. **Preventive medicine in secondary spondyloarthritis caused by chronic microtraumatism in helicopter personnel.** *Minerva Med* 1983;74:1903-5.

5 Effects of inorganic substances and minerals

- Dement JM, Harris RL Jr, Symons MJ, Shy CM. Exposures and mortality among chrysotile asbestos workers. Part II: mortality. *Am J Ind Med* 1983;4:421-33.
- Nicholson WJ, Perkel G, Selikoff IJ. Occupational exposure to asbestos: population at risk and projected mortality — 1980-2030. *Am J Ind Med* 1982;3:259-311.
- Goldstein JR. Asbestos as a systemic carcinogen: the evidence from eleven cohorts. *Am J Ind Med* 1982;3:341-8.
- Vocaturro G, Colombo F, Zanoni M, Rodi F, Sabbioni E, Pietra R. Human exposure to heavy metals. Rare earth pneumoconiosis in occupational workers. *Chest* 1983;83:780-3.
- Eisenbud M, Lissou J. Epidemiological aspects of beryllium-induced non-malignant lung disease: a 30 year update. *J Occup Med* 1983;25:196-202.
- Siracusa A, Fiore M, Scielzo R, et al. Small airways disease after short term occupational asbestos exposure. *Med Lav* 1983;74:13-22.
- Triebig G, Schaller KH. Neurotoxic effects in mercury-exposed workers. *Neurobehav Toxicol Teratol* 1982;4:717-20.
- Chung CK, Stryker JA, Zaino R, Sears HE. Liposarcoma after asbestos exposure to heavy metals. *Penn Med* 1982;85:47-8.
- Saracci R, Simonato L. Man-made vitreous fibers and workers' health. An overview of the epidemiologic evidence. *Scand J Work Environ Health* 1982;8:234-42.
- Reuter K, Raptopoulos V, Reale F, et al. Diagnosis of peritoneal mesothelioma: computed tomography, sonography, and fine-needle aspiration biopsy. *AJR* 1983;140:1189-94.
- Kagan E, Jacobson RJ. Lymphoid and plasma cell malignancies: asbestos-related disorders of long latency. *Am J Clin Pathol* 1983;80:14-20.
- Blot WJ, Brown LM, Pottern LM, Stone BJ, Fraumeni JF Jr. Lung cancer among long-term steel workers. *Am J Epidemiol* 1983;117:706-16.
- Larsson LG, Damber L. Interaction between underground mining and smoking in the causation of lung cancer: a study of nonuranium miners in northern Sweden. *Cancer Detect Prev* 1982;5:385-9.
- Koskinen H, Tiilikainen A, Nordman H. Increased prevalence of HLA-Aw19 and of the phenogroup Aw19,B18 in advanced silicosis. *Chest* 1983;83:848-52.
- Fischer T, Rystedt I. Cobalt allergy in hard metal workers. *Contact Dermatitis* 1983;9:115-21.
- Fleig I, Rieth H, Stocker WG, Thiess AM. Chromosome investigations of workers exposed to cadmium in the manufacturing of cadmium stabilizers and pigments. *Ecotoxicol Environ Safety* 1983;7:106-10.
- Belokurskaia GI, Berdykhodzhin MT, Aytbetmetov BN, Dzhanaev DD, Paraskevopoulos IaG. Clinical manifestations of chronic occupational phosphorus poisoning. *Gig Tr Prof Zabol* 1983;3:19-23.
- Osińska J, Poborc-Godlewska J, Kieć-Swierczyńska M, Głuszcz M. Six cases of argyria among workers engaged in silverplating radio subunits. *Med Pr* 1982;33:361-4.
- Perry HM Jr, Kopp SJ. Does cadmium contribute to human hypertension? *Sci Total Environ* 1983;26:223-32.
- Davidson AG, Haslam PL, Corrin B, et al. Interstitial lung disease and asthma in hard-metal workers: bronchoalveolar lavage, ultrastructural, and analytical findings and results of bronchial provocation tests. *Thorax* 1983;38:119-28.
- Manuso TF. Mesothelioma among machinists in railroad and other industries. *Am J Ind Med* 1983;4:510-13.
- Enterline PE, Marsh GM, Esmen NA. Respiratory disease among workers exposed to man-made mineral fibers. *Am Rev Respir Dis* 1983;128:1-7.
- Peltonen L, Fräki J. Prevalence of dichromate sensitivity. *Contact Dermatitis* 1983;9:190-4.
- Rystedt I, Fischer T. Relationship between nickel and cobalt sensitization in hard metal workers. *Contact Dermatitis* 1983;9:195-200.
- Clemmensen OJ, Jørgensen J, Jøns O, Menne T, Jørgensen SE. Exposure to chromium from hospital cleaning. *Derm Beruf Umwelt* 1983;31:54-7.
- Potkanjak V, Vishnjich V. Antimoniomiosis: a particular form of pneumoconiosis. II. Experimental investigation. *Int Arch Occup Environ Health* 1983;51:299-303.
- Adams CR, Ziegler DK, Lin JT. Mercury intoxication simulating amyotrophic lateral sclerosis. *JAMA* 1983;250:642-3.
- Mollo F, Andron A, Pira E, Barocelli MP. Indicators of asbestos exposure in autopsy routine. 2. Pleural plaques and occupation. *Med Lav* 1983;74:137-42.

6 Effects of organic substances

- Konopinski VJ. Formaldehyde in office and commercial environments. *Am Ind Hyg Assoc J* 1983;44:205-8.
- Keogh JP. Classical syndromes in occupational medicine: dimethylamino-propionitrile. *Am J Ind Med* 1983;4:479-89.
- Morinaga K, Oshima A, Hara I. Multiple primary cancers following exposure to benzidine and beta-naphthylamine. *Am J Ind Med* 1982;3:243-6.
- Kwong F, Kraske G, Nelson AM, Klausmeyer WB. Acute symptoms secondary to formaldehyde exposure in a pathology resident. *Ann Allergy* 1983;50:326-8.
- Ward MJ, Davies D. Asthma due to grinding epoxy resin cured with phthalic anhydride. *Clin Allergy* 1983;13:165-8.
- Fisher AA. Current contact news. Hydroquinone uses and abnormal reactions. *Cutis* 1983;31:240-4,250.
- Whorton MD, Obrinsky DL. Persistence of symptoms after mild to moderate acute organophosphate poisoning among 19 farm field workers. *J Toxicol Environ Health* 1983;11:347-54.
- Härkönen H, Kärki M, Lahti A, Savolainen H. Early equatorial cataracts in workers exposed to trinitrotoluene. *Am J Ophthalmol* 1983;95:807-10.
- Finelli PF, Morgan TF, Yaar I, Granger CV. Ethylene oxide-induced polyneuropathy. A clinical and electrophysiologic study. *Arch Neurol* 1983;40:419-21.
- Li SC. Pigmentation caused by hydroxypiperazine phosphate. *Chung Hua I Hsueh Tsa Chih* 1983;63:20-2.
- Dahlquist I, Freger S, Trulsson L. Contact allergy to trimethylolpropane triacrylate (TMPTA) in an aziridine plastic hardener. *Contact Dermatitis* 1983;9:122-4.
- Suhonen R. Epoxy-dermatitis in a ski-stick factory. *Contact Dermatitis* 1983;9:131-3.
- van Joost T, Naafs B, van Ketel WG. Sensitization to benomyl and related pesticides. *Contact Dermatitis* 1983;9:153-4.
- Fisher AA. Occupational dermatitis from pesticides: patch testing procedures. *Cutis* 1983;31:483-8,492,508.
- Fardal RW, Curphey ER. Phototypesetting paper as a cause of allergic contact dermatitis in newspaper production workers. *Cutis* 1983;31:509-12,515-7.
- Junghans RP. A review of the toxicity of methylmercury compounds with application to occupational exposures associated with laboratory uses. *Environ Res* 1983;31:1-31.
- Mavrina EA, Zhigalina VN, Loginova LA, Orlova LI, Proshina OV. Various biochemical criteria of exposure to acrylonitrile. *Gig Tr Prof Zabol* 1983;3:23-5.
- Drevenkar V, Stengl B, Tkalčević B, Vasilčić Z. Occupational exposure control by simultaneous determination of N-methylcarbamates and organophosphorus pesticide residues in human urine. *Int J Environ Anal Chem* 1983;14:215-30.
- Reich MR, Spong JK. Kepone: a chemical disaster in Hopewell, Virginia. *Int J Health Serv* 1983;13:227-46.
- Ott MG, Skory LK, Holder BB, Bronson JM, Williams PR. Health evaluation of employees occupationally exposed to methylene chloride. *Scand J Work Environ Health* 1983;9 Suppl 1:1-38.
- Auclair F, Baudot P, Beiler D, Limasset JC. Minor and fatal complications due to treating polytetrafluoroethylene in an industrial environment: clinical observations and physicochemical measurement of the polluted atmosphere. *Toxicol Eur Res* 1983;5:43-8.
- Struwe G, Wennberg A. Psychiatric and neurological symptoms in workers occupationally exposed to organic solvents — results of a differential epidemiological study. *Acta Psychiatr Scand [Suppl]* 1983;303:68-80.
- Wright WE, Peters JM, Mack TM. Organic chemicals and malignant melanoma. *Am J Ind Med* 1983;4:577-81.
- Perrone H, Passero MA. Hydrocarbon aerosol pneumonitis in an adult. *Arch Intern Med* 1983;143:1607-8.
- Conde-Salazar L, Guimaraens D, Romero LV, Sanchez Yus E. Subcorneal pustular eruption and erythema from occupational exposure to trichloroethylene. *Contact Dermatitis* 1983;9:235-7.
- Bardana EJ Jr, Andrach RH. Occupational asthma secondary to low molecular weight agents used in the plastic and resin industries. *Eur J Respir Dis* 1983;64:241-51.
- Tassignon JP, Bos GD, Craigen AA, et al. Mortality in an European cohort occupationally exposed to epichlorohydrin (ECH). *Int Arch Occup Environ Health* 1983;51:325-36.
- Della Torre L, Valsecchi F, Sala C, Cesana MA. Evaluation of environmental risk and effects on health in a factory manufacturing polymethylmethacrylate sheets. *Lav Um* 1982;30:72-9.
- Suciu I, Olinici L. Hepato-renal involvement in acute occupational trichloroethylene intoxication. *Med Lav* 1983;74:123-8.

- Szulc B, Ghuszczowa M. **Poisoning with organic solvents based on data of the Clinic of the Institute of Occupational Medicine in Lodz 1971-1980.** *Med Pr* 1983;34:59-64.
- Phototoxic reaction among dock workers — Tennessee.** *MMWR* 1983;32:153-4.
- Yoshida S, Hirose K, Uono M, Tsubaki T. **A case of myeloneuropathy due to**

- chronic organophosphorus intoxication — with reference to "amyotrophic lateral sclerosis" form.** *Rinsho Shinkeigaku* 1983;23:101-9.
- Przybojewski JZ, Heyns MH. **Acute myocardial infarction due to coronary vasospasm secondary to industrial nitroglycerin withdrawal. A case report.** *S Afr Med J* 1983;64:101-4.

7 Effects of biological hazards

- Cockcroft AE, McDermott M, Edwards JH, McCarthy P. **Grain exposure — symptoms and lung function.** *Eur J Respir Dis* 1983;64:189-96.
- Roberts RC, Nelles LP, Treuhaft MW, Marx JJ Jr. **Isolation and possible relevance of *Thermoactinomyces candidus* proteinases in farmer's lung disease.** *Infect Immun* 1983;40:533-62.
- West KH. **Herpetic whitlow — a new concern for health care professionals.** *J Oper Room Res Inst* 1983;3:6-8.
- Marr JJ. **The professor and the pigeon. Psittacosis in the groves of academe.** *Mo Med* 1983;80:135-6.
- Chatigny MA, Prusiner SB. **Biohazards of investigations on the transmissible spongiform encephalopathies.** *Rev Infect Dis* 1980;2:713-24.
- Lee TH, Wraith DG, Bennett CO, Bengley AP. **Budgerigar fancier's lung. The persistence of budgerigar precipitins and the recovery of lung function after cessation of avian exposure.** *Clin Allergy* 1983;13:197-202.
- Lutsky II, Kalbfleisch JH, Fink JN. **Occupational allergy to laboratory animals: employer practices.** *J Occup Med* 1983;25:372-6.
- Binkley LS. **Hepatitis B: a review (consider the hospitalized patient).** *Nephrol Nurse* 1983;5:22-4.
- Battista G, Cavallucci F, Comba P, Quercia A, Vindigni C, Sartorelli E. **A case-referent study on nasal cancer and exposure to wood dust in the province of Siena, Italy.** *Scand J Work Environ Health* 1983;9:25-9.

8 Effects of physical agents

- McFadden D, Plattsmier HS. **Aspirin can potentiate the temporary hearing loss induced by intense sounds.** *Hear Res* 1983;9:295-316.
- Mills JH, Osguthorpe JD, Burdick CK, Patterson JH, Mozo B. **Temporary threshold shifts produced by exposure to low-frequency noises.** *J Acous Soc Am* 1983;73:918-23.
- Price GR. **Relative hazard of weapons impulses.** *J Acoust Soc Am* 1983;73:566-66.
- Paranko NM. **Noise control in modern metallurgical plants.** *Gig Tr Prof Zabol* 1983;3:47-8.
- Lloyd EL, Henning CB. **Cells at risk for the production of bone tumors in radium exposed individuals: an electron microscope study.** *Health Phys* 1983;44 Suppl 1:135-48.
- Spiers FW, Lucas HF, Rundo J, Anast GA. **Leukaemia incidence in the U.S. dial workers.** *Health Phys* 1983;44 Suppl 1:65-72.
- Thelin JW, Joseph DJ, David WE, Baker DE, Hosokawa MC. **High-frequency hearing loss in male farmers of Missouri.** *Public Health Rep* 1983;98:268-73.

9 Methods of investigation of body function

- Robertson MD, Boyd JE, Fernie JM, Davis JM. **Some immunological studies on coalworkers with and without pneumoconiosis.** *Am J Ind Med* 1983;4:467-76.
- Houthuijs D, Remijn B, Willems H, Boleij J, Biersteker K. **Biological monitoring of acrylonitrile exposure.** *Am J Ind Med* 1982;3:313-20.
- Murray TH. **Warning: screening workers for genetic risk.** *Hastings Cent Rep* 1983;13:5-8.
- Kobatake H, Takatani O. **Computer diagnosis of pneumoconiosis from radiographs.** *Iyodenshi To Seitai Kogaku* 1982;20:307-13.
- Hassler E, Lind B, Nilsson B, Piscator M. **Urinary and fecal elimination of nickel in relation to air-borne nickel in a battery factory.** *Ann Clin Lab Sci* 1983;13:217-24.
- Baddeley H, Thomas BJ, Thomas BW, Summers V. **Liver cadmium concentrations in metal industry workers.** *Br J Radiol* 1983;56:449-51.
- Hoegerman SF, Cummins HT. **Chromosome damage in peripheral lymphocytes from America thorium workers.** *Health Phys* 1983;44 Suppl 1:365-71.
- Grant DC, Seltzer SE, Antman KH, Finberg HJ, Koster K. **Computed tomography of malignant pleural mesothelioma.** *J Comput Assist Tomogr* 1983;7:626-32.
- Dobie RA. **Reliability and validity of industrial audiometry: implications for hearing conservation program design.** *Laryngoscope* 1983;93:906-27.
- Pupo-Nogueira D, Goelzer BF, Cox JW, Pereira da Silva E, Sautia N. **Lung function tests and early prediction of byssinosis.** *Med Lav* 1983;74:129-36.
- Matsushima M, Murakami N, Fukazawa K, et al. **Occupational cancer of the urinary bladder: the diagnostic value of urinary cytology in dyestuff workers exposed to aromatic amine.** *Nippon Hinyokika Gakkai Zasshi* 1983;74:81-99.

10 Environmental measurement, control, and protection of the subject

- Reed CE, Swanson MC, Lopez M, et al. **Measurement of IgG antibody and airborne antigen to control an industrial outbreak of hypersensitivity pneumonitis.** *J Occup Med* 1983;25:207-10.
- Williams WJ, Williams WR. **Value of beryllium lymphocyte transformation tests in chronic beryllium disease and in potentially exposed workers.** *Thorax* 1983;38:41-4.
- Lichtenstein ME, Buchanan TG, Nohrden JC. **Developing and managing an industrial hygiene program.** *Am Ind Hyg Assoc J* 1983;44:256-62.
- Zhang GG, He HZ, Wu Z, Cal RT, Li CK, Zhang W. **Health and safety measures for working in extremely hot environments.** *Acta Acad Med Wuhan* 1983;3:104-9.

11 Miscellaneous

- Hardell L, Johansson B, Axelson O. **Epidemiological study of nasal and nasopharyngeal cancer and their relation to phenoxy acid or chlorophenoxy exposure.** *Am J Ind Med* 1982;3:247-57.
- Hills BW, Venable HL. **The interaction of ethyl alcohol and industrial chemicals.** *Am J Ind Med* 1982;3:321-33.
- Butcher BT, Hendrick DJ. **Occupational asthma.** *Clin Chest Med* 1983;4:43-53.
- Fink J. **A paradoxical and persistent pneumonitis.** *Hosp Pract* 1983;18:114,116,118 passim.
- Descriptive summaries of the data on the basis of which the chemicals, industrial processes and industries were evaluated for carcinogenicity to humans.** *IARC Monogr Eval Carcinog Risk Chem Hum [Suppl]* 1982;4:25-276.
- Henderson J. **What should be done about occupational accidents and diseases?** *Int J Epidemiol* 1983;12:77-83.
- Manning JE, Griggs TR. **Heart rates in fire fighters using light and heavy breathing equipment: similar near-maximal exertion in response to multiple work load conditions.** *J Occup Med* 1983;25:215-8.
- Marsh GM. **Mortality among workers from a plastics producing plant: a matched case-control study nested in a retrospective cohort study.** *J Occup Med* 1983;25:219-30.
- Teasdale EL, Davies GE, Slovak A. **Anaphylaxis after bites by rodents.** *Br Med J [Clin Res]* 1983;286:1480.
- Heinrichs WL. **Reproductive hazards of the workplace and the home.** *Clin Obstet Gynecol* 1983;26:429-36.
- Shepard TH. **Counseling pregnant women exposed to potentially harmful agents during pregnancy.** *Clin Obstet Gynecol* 1983;26:478-83.
- Rachootin P, Olsen J. **The risk of infertility and delayed conception associated with exposures in the Danish workplace.** *J Occup Med* 1983;25:394-402.
- Hemminki K, Axelson O, Niemi ML, Ahlberg G. **Assessment of methods and results of reproductive occupational epidemiology: spontaneous abortions and malformations in the offspring of working women.** *Prog Clin Biol Res* 1983;117:293-307.
- Infante PF, Tsongas TA. **Occupational reproductive hazards: necessary steps to prevention.** *Prog Clin Biol Res* 1983;117:383-90.
- Polednak AP, Janerich DT. **Uses of available record systems in epidemiologic studies of reproductive toxicology.** *Prog Clin Biol Res* 1983;117:329-48.
- Backman AL. **Health survey of professional drivers.** *Scand J Work Environ Health* 1983;9:30-5.
- Ross WD, Sholiton MC. **Specificity of psychiatric manifestations in relation to neurotoxic chemicals.** *Acta Psychiatr Scand [Suppl]* 1983;303:100-4.
- Keil JE, Shmunis E. **The epidemiology of work-related skin disease in South Carolina.** *Arch Dermatol* 1983;119:650-4.
- Keane WT. **Handling occupational disease claims. Common problems for attorneys and physicians.** *Ariz Med* 1983;40:225-7.
- Polednak AP, Stehney AF, Lucas HF. **Mortality among male workers at a thorium-processing plant.** *Health Phys* 1983;44 Suppl 1:239-51.
- Goulding R. **Poisoning on the farm.** *J Soc Occup Med* 1983;33:60-5.
- McMillan GH, Pethybridge RJ. **The health of welders in naval dockyards: proportional mortality study of welders and two control groups.** *J Soc Occup Med* 1983;33:75-84.
- Blair A, Grauman DJ, Lubin HJ, Fraumeni JF Jr. **Lung cancer and other causes of death among licensed pesticide applicators.** *J Natl Cancer Inst* 1983;71:31-7.
- Pearn JH. **Teratogens and the male. An analysis with special reference to herbicide exposure.** *Med J Aust* 1983;2:16-20.
- Petronio L, Negro C, Bovenzi M, Stanta G. **Tumors of the nasal fossae and paranasal sinuses and occupations in Trieste from 1968 to 1980.** *Med Lav* 1983;74:97-105.
- Respiratory illness associated with carpet cleaning at a hospital clinic — Virginia.** *MMWR* 1983;32:378, 383-4.
- Cowles SR. **Cancer of the larynx: occupational and environmental associations.** *South Med J* 1983;76:894-8.