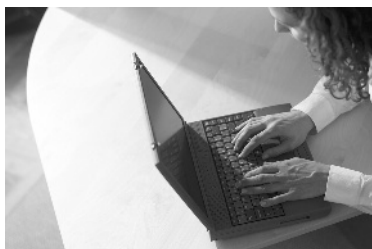


Work in brief

Keith Palmer, Editor



AIR POLLUTION AND CARDIOVASCULAR DISEASE

Particulate air pollution seems to be a risk factor for cardiovascular disease in the general environment and similar risks may apply in relation to particulates generated at work. Toren *et al* have assessed the risks in a cohort of over 176 000 occupationally exposed male construction workers vs some 70 000 unexposed workers from the same industry.¹ Exposures included inorganic dusts, wood dust, fumes and diesel exhaust, and were ascertained using a job exposure matrix, with follow-up running from 1971 to 2002. Deaths from ischaemic heart disease and cerebrovascular disease were reported, with relative risks (RR) controlled for baseline blood pressure, body mass index, age and smoking habits. No specific associations were found for stroke but occupational exposure to diesel exhaust increased risks by some 18 percent (95% CI 13 to 24%) for ischaemic heart disease, with smaller but still significantly elevated RRs for inorganic dust and fumes.

ASBESTOS, MMFS AND LUNG CANCER

Carel *et al* report a multicentre, case-control study investigating the contribution of occupational exposure to asbestos and man-made mineral fibres (MMFs) on population burdens of lung cancer.² Recruitment occurred in six central and eastern European countries and in the UK during 1998–2002 and compared 2205 incident male cases of lung cancer with a similar pool of frequency-matched controls. After adjusting for smoking and other occupational exposures, elevated risks were found for asbestos exposure, but only in the UK (OR 1.85 vs 0.92 in Central and Eastern Europe); the odds in association with MMFs were moderately and non-significantly raised (1.23), with no marked differences between countries. In discussing the contrasting findings for asbestos, the authors suggest that differences in fibre type and exposure circumstances may explain the higher risks seen in the UK.

HAND-WRIST DISORDERS IN REPETITIVE WORK

Mechanical loading is regarded as a risk factor for hand-wrist pain and wrist tendinitis. Seldom, however, have relations been examined prospectively with detailed, objective assessment of load, intensity of hand use, number of wrist movements, force employed and other biomechanical exposures. Thomsen *et al* report findings from the Danish Project on Research and Intervention in Monotonous Work (PRIM) cohort study that incorporated physical examination, video recordings and detailed hand-wrist measurements in employees from 19 industrial settings.³ Higher levels of force were associated with prevalent and incident hand-wrist pain and a case definition of extensor tendinitis (OR 2.9 at follow-up); repetition showed less consistent relations but was also a risk factor for incident hand-wrist pain, while working with the wrist in a non-neutral position seemed not to be an important risk factor for any outcome.

CANCER IN RAILWAY WORKERS

Elsewhere in the Journal, Rööslä *et al* explore the relation between extremely low frequency magnetic fields and mortality from leukaemia and brain cancer, in a cohort study of Swiss railway employees with over 460 000 person-years of follow-up.⁴ Train drivers had higher mortality rates than stationmasters, with hazard ratios increased 3.3–4.7-fold for Hodgkin disease and myeloid leukaemia, and 1.4 for leukaemia. The authors found “some evidence” of an exposure-response association for Hodgkin disease and myeloid leukaemia but not for other blood and lymphatic malignancies or brain tumours.

- 1 Toren K, Bergdahl IA, Nilsson T, *et al*. Occupational exposure to particulate air pollution and mortality due to ischaemic heart disease and cerebrovascular disease. *Occup Environ Med* 2007;**64**:515–9.
- 2 Carel R, Olsson AC, Zaridze D, *et al*. Occupational exposure to asbestos and man-made vitreous fibres and risk of lung cancer: a multicentre case-control study in Europe. *Occup Environ Med* 2007;**64**:502–8.
- 3 Thomsen JF, Mikkelsen S, Andersen JH, *et al*. Risk factors for hand-wrist disorders in repetitive work. *Occup Environ Med* 2007;**64**:527–33.
- 4 Rööslä M, Lörtscher M, Egger M, *et al*. Leukaemia, brain tumours and exposure to extremely low frequency magnetic fields: cohort study of Swiss railway employees. *Occup Environ Med* 2007;**64**:553–9.