

# Work in brief



Keith Palmer, Editor



## SEARCHING FOR THE EVIDENCE

Conducting good occupational intervention studies is a challenge; but locating and retrieving those that have already been conducted is not straightforward either. Verbeek *et al*<sup>1</sup> tested alternative electronic search strategies against a gold standard of hand searching. Through the more labour intensive approach they identified 149 papers on occupational health interventions among 11 022 articles contained in two whole volumes of 19 specialised and other biomedical journals. No single set of electronic search terms retrieved every article, but the best search strings had an acceptable sensitivity and specificity for many purposes. Practitioners and researchers who wish to bypass the considerable effort of hand searching are advised to read and take note of this paper.



## AVOIDING ASSAULTS ON NURSES

Workers in certain occupations, including nursing, are at increased risk of physical assault from members of the public. Several guidelines for preventing workplace violence have been promulgated. Nachreiner *et al*<sup>2</sup> have investigated the relation between preventive policies and assault at work in a two phase investigation called the Minnesota Nurses Study. In phase 1, 6300 nurses reported their experience of physical assault at work in the past year; in phase 2, 1900 nurses including 475 who had been assaulted, reported on eight workplace violence prevention policies. The odds of being assaulted were 50% lower in workplaces that had general policies on zero tolerance of violence and explicit prohibition of certain violent behaviours. Encouragingly, some work related non-violence policies seem to work.



## BLOOD CANCERS AND ANIMAL CONTACT

Several studies suggest that contact with animals and humans could raise the risk of haematopoietic cancer, perhaps via infections that stimulate proliferation of lymphocytes. Farmers, vets, healthcare workers, hairdressers, and teachers are among the groups suspected to be at greater risk. Svec *et al*<sup>3</sup> have explored the hypothesis in a case-control study, based on death certificates from 24 US states. The cases, which comprised 182 500 deaths from lymphoma, myeloma or leukaemia, were matched by age, sex, race, and region with over 900 000 deaths from other causes. Occupational title was used to identify jobs that required contact with the public or with animals. Moderately higher risks of these diseases (OR 1.21–1.33) were found for animal related jobs (mainly in the livestock industry), but no excess risk from human contact. Regional differences in risk raise the possibility of a relation with specific farming and livestock practices and beg further investigation.



## PM<sub>10</sub> AND CAUSE SPECIFIC MORTALITY

Airborne particulates have consistently been shown to increase all-cause mortality and deaths from certain broad categories of disease, but limited information exists on factors that influence cause specific daily mortality. To investigate, Zeka *et al*<sup>4</sup> obtained mortality data from the National Center for Health Statistics and air pollution data from the Environmental Protection Agency for 20 US cities during 1989–2000. Relations with daily PM<sub>10</sub> were explored using a case-crossover design and a variety of lag models. Associations were found with short term increases in mortality and morbidity, and these were modified by several local characteristics—population density, temperature at different calendar periods, and especially proportion of PM<sub>10</sub> from road traffic. The authors emphasise the need to focus control efforts on the relatively more toxic traffic-related form of air pollution.

- 1 Verbeek J, Salmi J, Pasternack I, *et al*. A search strategy for occupational health intervention studies. *Occup Environ Med* 2005;**62**:682–7.
- 2 Nachreiner NM, Gerberich SG, McGovern PM, *et al*. Relation between policies and work related assault: Minnesota Nurses' Study. *Occup Environ Med* 2005;**62**:675–81.
- 3 Svec MA, Ward MH, Dosemeci M, *et al*. Risk of lymphatic or haematopoietic cancer mortality with occupational exposure to animals or the public. *Occup Environ Med* 2005;**62**:726–35.
- 4 Zeka A, Zanobetti A, Schwartz J. Short term effects of particulate matter on cause specific mortality: effects of lags and modification by city characteristics. *Occup Environ Med* 2005;**62**:718–25.