

# Work in brief



Dana Loomis, Deputy Editor



## EXPOSURE AND CANCER MORTALITY IN THE UK SILICA SAND INDUSTRY

Findings reported this month by Brown and Rushton<sup>1, 2</sup> may rekindle debate about the carcinogenicity of crystalline silica. They studied mortality among 2703 workers employed in silica sand quarries in the UK where over 3000 exposure measurements had been taken, and found no consistent association between the level of respirable silica and lung cancer. However, in an accompanying commentary,<sup>3</sup> Steenland finds these negative results unsurprising, primarily because exposures in the UK cohort were quite low. He writes that in light of the prior evidence that silica is carcinogenic, one new study that fails to show excess risk at low exposures does not justify a delay in lowering the level of silica allowed in industry.



## BELIEFS OF HOSPITAL STAFF ABOUT THE EFFECTIVENESS OF PERSONAL PROTECTION AGAINST SARS

Personal protective equipment can be essential for preventing infection among healthcare workers, but its effectiveness depends on correct use. Unfortunately, it seems that hospital workers may be uncertain about which type of protection to use, even during highly publicised disease outbreaks. Chia and colleagues<sup>4</sup> found that half of nurses and a third of doctors surveyed during the SARS epidemic in Singapore believed that simple paper or surgical masks would prevent the disease, despite a Health Ministry bulletin recommending respirators. Staff likely to contact SARS patients were better informed, but a quarter still believed simple masks are effective.



## LONG TERM ASSOCIATIONS OF MORTALITY AND AIR POLLUTION

The long term health effects of air pollution have only been assessed in a few studies, most in North America, but findings reported this month by Filleul and colleagues<sup>5</sup> add a valuable data point from Europe. The authors examined mortality through 2001 among over 14 000 French adults who were enrolled in a cohort study in 1974. They report significant associations of total non-injury mortality with several indicators of air pollution, including total suspended particles, black smoke and NO<sub>2</sub>, and similar patterns for lung cancer and cardiopulmonary disease. Katsouyanni's accompanying editorial<sup>6</sup> points out methodological limitations of the French study, notably the dependence of the findings on excluding six areas with suspect air pollution data. But, she argues, these uncertainties only reinforce the need for research to gauge the long-term consequences of air pollution in Europe.



## EFFECTIVENESS OF POSTURAL INTERVENTIONS FOR COMPUTER USERS

The increasing use of evaluation research to assess the value of occupational health and safety interventions is a welcome trend, illustrated by the study by Gerr and colleagues.<sup>7</sup> The researchers conducted a randomised, controlled trial of 376 computer users assigned to a control group and two others that received interventions aimed at improving posture while working. Surprisingly, there were no significant differences in the incidence of self-reported musculoskeletal complaints between the groups. The authors speculate that the absence of benefit from the interventions may be due to non-compliance or limited adjustability of the workstations.

- 1 Brown TP, Rushton L. Mortality in the UK industrial silica sand industry: 1. Assessment of exposure to respirable crystalline silica. *Occup Environ Med* 2005;**62**:442-5.
- 2 Brown TP, Rushton L. Mortality in the UK industrial silica sand industry: 2. A retrospective cohort study. *Occup Environ Med* 2005;**62**:446-52.
- 3 Steenland K. Silica: déjà vu all over again? *Occup Environ Med* 2005;**62**:430-2.
- 4 Chia SE, Koh D, Fones C, et al. Appropriate use of personal protective equipment among healthcare workers in public sector hospitals and primary healthcare polyclinics during the SARS outbreak in Singapore. *Occup Environ Med* 2005;**62**:473-7.
- 5 Filleul L, Rondeau V, Vandentorren S, et al. Twenty five year mortality and air pollution: results from the French PAARC survey: the influence of the assessment of exposure. *Occup Environ Med* 2005;**62**:453-60.
- 6 Katsouyanni K. Long term effects of air pollution in Europe. *Occup Environ Med* 2005;**62**:432-3.
- 7 Gerr F, Marcus M, Monteilh C, et al. A randomised controlled trial of postural interventions for prevention of musculoskeletal symptoms among computer users. *Occup Environ Med* 2005;**62**:478-87.