

Reduced fertility and solvent exposure in shoe manufacturing

Although shoes are sometimes still produced by traditional, manual methods, workers can be exposed to a variety of potentially toxic agents, including dusts, dyes and solvents. In this issue, Sallmén *et al*¹ report reduced fertility among female shoe manufacturing workers in Portugal. In this study, women working in shoe factories took longer to become pregnant than women employed in other local industries. The time to pregnancy was not appreciably longer for women classified as highly exposed to any of eight organic solvents, however. The authors conclude that their findings provide further evidence that organic solvents, including toluene, acetone and hexane, may be a reproductive hazard.



Are fine or coarse particles responsible for the effects of air pollution?

Numerous studies show associations between fine airborne particles (diameter < 2.5 µm) and increased frequency of cardiorespiratory outcomes. The effects of the coarse fraction of respirable particles (2.5–10 µm), which are different in origin and composition, have not been investigated to the same extent, but a few studies suggest stronger effects for coarse than for fine particles. Most of these

studies were conducted in dry areas, however, making a study of the effect of fine and coarse particles in France reported here by Host *et al*² particularly interesting. The authors studied short-term associations of hospital admissions with particle concentrations in 6 French cities. Coarse particles were more strongly associated than fine particles with admission for respiratory infections in all ages, respiratory diseases among children, and ischemic heart disease among the elderly. These findings provide more impetus for considering the coarse fraction of particles in research and standard setting.



Bladder cancer and textile production

Increased risks of bladder cancer were seen in textile workers as early as the 1950s and have been attributed largely to constituents of certain dyes. Whether risk is increased in other aspects of textile production remains less clear. A large, multi-centre case control study of bladder cancer in Spain reported by Serra and colleagues³ in this issue may help shed light on this question. The authors found no overall excess of bladder cancer among textile workers, but when specific processes and materials were considered, elevated risk was associated with several textile operations, including weaving and winding/warping, and with exposure to cotton and synthetic material. This study emphasizes the value of conducting detailed analyses within industries, even in the absence of quantitative exposure measurements.



Elsewhere in the Journal

This month's Journal also includes a systematic review on predictors of failure to return to work among people with back pain⁴, findings from analysis of a national database on exposure to wood dust in Italy⁵ and a short report on the mortality of Australian asbestos miners and millers⁶.



References

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