# **VOTK** in brief

Dana Loomis, Deputy Editor







www.occenvmed.com

# **CANCER HAZARDS IN DENTISTRY**

Workers in dentists' offices may be exposed to numerous hazards, including solvents, infectious agents, mercury and ionising radiation. In this issue, Simning and van Wijngaarden review the epidemiological literature on cancer among dentists, with special attention to the possible effects of mercury and low-dose radiation.1 Although 19 studies were reviewed, most didn't include information on occupational exposure. Dentists' cancer rates were unremarkable overall but elevated risks were seen for some specific cancers, including those of the skin, brain and female breast. While exposures in dental work are a plausible cause, social class is also a risk factor. The authors conclude that conclusions are difficult in the absence of better exposure data—still a frequent problem in occupational epidemiology.

## RHINITIS AND ASTHMA AMONG CLEANERS

Cleaning is a common occupation worldwide, especially for women, and recent research links some cleaning products and processes with allergic disease. Maçãira et al report on the prevalence of asthma, rhinitis and related symptoms in a population of 341 workers in Brazil doing non-domestic cleaning.2 Women made up 70% of the population and had twice the odds of having asthma or rhinitis compared with men. The prevalence of work-related complaints increased with years of employment in non-domestic cleaning and reported use of certain cleaning products. Interestingly, the latter associations tended to be stronger for men, who on average had less cleaning experience.

# **SOLVENTS AND MALE REPRODUCTIVE FUNCTION**

Glycol ethers are used in a wide range of domestic and industrial products, including antifreeze, coatings, soaps and cosmetics. Exposure to related compounds has been proposed, although amid controversy, as a cause of male infertility. The results of a study by Multigner et al seem to suggest that glycol ethers used in the past may have had such effects, while those in use now do not.<sup>3</sup> The authors measured hormone and semen parameters in 98 men whose exposures to glycol ethers were estimated by expert assessment and biomonitoring. Past exposure was associated with semen changes, but not with hormone levels, while glycol ether metabolites in blood were not associated with either outcome. In a commentary, Olea and Fernandez suggest that precautions have reduced occupational exposures to endocrine disrupting agents and that similar actions are needed, along with more research, in connection with environmental exposures.<sup>4</sup>

# **ELSEWHERE IN THE JOURNAL**

Kriebel reviews exposure modelling in the first of a series of papers on epidemiological methods;<sup>5</sup> an original research paper by Henrotin et al reports associations between ambient ozone and stroke;6 Friedman and Forst describe the effects of recordkeeping rules on occupational illness and injury trends in the US<sup>7</sup> (with a commentary by Rosenman<sup>8</sup>); Sircar et al investigate the clinical importance of selected cutpoints for lung-function decline;9 Mirabelli et al report on occupational risk factors for asthma among health care workers;10 Pedersen and Persson Waye survey complaints among people living near wind turbines;11 and Christensen et al estimate the fraction of long-term sickness absence attributable to the work environment.11

- Simning A, van Wijngaarden E. Literature review of cancer mortality and incidence among dentists. *Occup Environ Med* 2007;64:432–8.
- Maçãira EF, Algranti E, Mendonça EMC, et al. Rhinitis and asthma symptoms in non-domestic cleaners from the São Paulo metropolitan area, Brazil. Occup Environ Med 2007;**64**:446–53. **Multigner L**, Ben Brik E, Arnaud I, et al. Glycol ethers and semen quality: a cross-sectional study among male workers in the
- Paris Municipality. Occup Environ Med 2007;64:467–73.

  Olea N, Fernandez MR. Chemicals in the environment and human male fertility. Occup Environ Med 2007;64:430–1.
- Kriebel D, Checkoway H, Pearce N. Exposure and dose modelling in occupational epidemiology. Occup Environ Med
- ZUU/;04:472-8.

  Henrontin JB, Besancenot JP, Bejot Y, et al. Short-term effects of ozone air pollution on ischaemic stroke occurrence: a case-crossover analysis from a 10-year population-based study in Dijon, France. Occup Environ Med 2007;64:439-45.

  Friedman LS, Forst L. The impact of OSHA recordkeeping regulation changes on occupational injury and illness trends in the US: a time-series analysis. Occup Environ Med 2007;64:454-60.

  Rosenman KD. Are work-related conditions less common or were their definitions changed? Occup Environ Med 2007;64:429-30
- 2007:64:429-30.
- Sircar K, Hnizdo E, Petsonk E, et al. Decline in lung function and mortality: implications for medical monitoring. Occup Environ Med 2007;64:461-6.

  Mirabelli MC, Zock J-P, Plana E, et al. Occupational risk factors for asthma among nurses and related healthcare

- professionals in an international study. Occup Environ Med 2007;64:474–9.

  Pederson E, Persson Waye K. Wind turbine noise, annoyance and self-reported health and well-being in different living environments. Occup Environ Med 2007;64:480–6.

  Christensen KB, Lund T, Labriola M, et al. The fraction of long-term sickness absence attributable to work environmental factors: results from the Danish Work Environment Cohort Study/Danish Research Centre on Education and Advanced Medical Materials. Occup Environ Med 2007;64:487–9.