

Work in brief

Dana Loomis, Deputy Editor



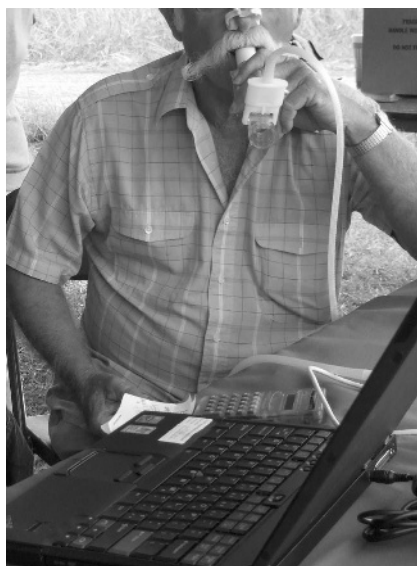
HEALTH AND THE LIFE CYCLE OF SHIPS

Workers exposed to asbestos in shipyards have high rates of lung cancer and mesothelioma, but a new study by Krstev *et al*¹ suggests that the hazards of ship building and repair extend beyond the workers exposed directly to asbestos. The authors found excess mortality from all causes and from asbestos-related cancers among 4700 workers in a US government shipyard. Excess lung cancer was seen among men in almost every occupation, and also among women. The authors conclude that asbestos was at least partly responsible. In a commentary, Beckett² points out that the health hazards associated with shipbuilding may be recycled around the world when ships are dismantled.



ENVIRONMENT, GENES AND PARKINSON'S DISEASE

Both environmental and genetic factors are suspected in the aetiology of Parkinson's disease. Here, Dick and the Geoparkinson Study Group report results from a five-centre case-control study of Parkinson's disease and related syndromes. The authors investigated exposures to pesticides, solvents and metals³ and their interactions with an array of genetic polymorphisms.⁴ Parkinson's disease and parkinsonian syndromes had an exposure-response relationship with pesticides. Most gene-exposure interactions were non-significant, but the relationship of the *GSTM1 null* genotype and solvents was suggestive. The authors conclude that the role of gene-environment interactions in Parkinson's disease is probably small.



ACCOUNTING FOR PRECISION IN INTERPRETING DECLINES IN LUNG FUNCTION

Declines in lung function can signal a need for intervention, but the amount of decline that is significant can be difficult to gauge when measurements are highly variable. Hznido *et al*⁵ take on this problem by proposing a statistical method of accounting for precision of measurement in the definition of reference limits for the annual decline in FEV₁. Use of their method with a large spirometric database suggests that a 10% annual decline can be considered significant if the observation is based on data from a well-conducted programme monitoring largely healthy individuals, but a 15% decline consistent with ATS recommendations is a more appropriate limit when the variability of measurements is large.

ELSEWHERE IN THE JOURNAL

In other original papers, Kivimäki *et al*⁶ explore the separate and combined effects of two psychosocial constructs; Applebaum *et al*⁷ propose a simple method of reducing healthy worker bias; Chia *et al*⁸ investigate a possible link between lead and cardiovascular effects; Telle-Lamberton *et al*⁹ report on mortality among French nuclear workers, and Anderson *et al*¹⁰ investigate xeno-oestrogenic activity as a biomarker for pesticides. Dawson and colleagues¹¹ also review interventions to prevent back pain and injury in nurses.



- 1 Krstev S, Stewart P, Rusiecki J, *et al*. Mortality among shipyard coastguard workers: a retrospective cohort study. *Occup Environ Med* 2007;**64**:651-8.
- 2 Beckett WS. Shipyard workers and asbestos: a persistent and international problem. *Occup Environ Med* 2007;**64**:639.
- 3 Dick FD, De Palma G, Ahmadi A, *et al*. Environmental risk factors for Parkinson's disease and parkinsonism: the Geoparkinson study. *Occup Environ Med* 2007;**64**:666-72.
- 4 Dick FD, De Palma G, Ahmadi A, *et al*. Gene-environment interactions in parkinsonism and Parkinson's disease: the Geoparkinson study. *Occup Environ Med* 2007;**64**:673-80.
- 5 Hznido E, Sircar K, Yan T, *et al*. Limits of longitudinal decline for the interpretation of annual changes in FEV₁ in individuals. *Occup Environ Med* 2007;**64**:701-7.
- 6 Kivimäki M, Vahtera J, Elovainio M, *et al*. Effort-reward imbalance, procedural injustice and relational injustice as psychosocial predictors of health: complementary or redundant models? *Occup Environ Med* 2007;**64**:659-65.
- 7 Applebaum KM, Malloy EJ, Eisen EA. Reducing healthy worker survivor bias by restricting date of hire in a cohort study of Vermont granite workers. *Occup Environ Med* 2007;**64**:681-7.
- 8 Chia SE, Ali SM, Lee BL, *et al*. Association of blood lead and homocysteine levels among lead exposed subjects in Vietnam and Singapore. *Occup Environ Med* 2007;**64**:688-93.
- 9 Telle-Lamberton M, Samson E, Caër S, *et al*. External radiation exposure and mortality in a cohort of French nuclear workers. *Occup Environ Med* 2007;**64**:694-700.
- 10 Andersen HR, Nielsen F, Nielsen JB, *et al*. Xeno-oestrogenic activity in serum as marker of occupational pesticide exposure. *Occup Environ Med* 2007;**64**:708-14.
- 11 Dawson AP, McLennan AN, Schiller SD, *et al*. Interventions to prevent back pain and back injury in nurses: a systematic review. *Occup Environ Med* 2007;**64**:642-50.