Work in brief

Keith Palmer, *Editor*

CLIMATE AND ATOPIC DISEASE

Thundery conditions and short-term changes in temperature and humidity have been linked with exacerbations of asthma. Less is known about the general association between climatic conditions and atopic disease, but Weiland *et al* (p. 609) have now investigated the question extensively in a study that spanned 146 centres worldwide (the International Study of Allergies in Childhood). At each centre some 6000 children completed written and video questionnaires about their symptoms of asthma, rhinoconjunctivitis, and eczema in the previous 12 months. Their responses were related to long-term climatic data from the centres using multilevel modelling. Several striking findings emerged. In Western Europe the prevalence of asthmatic symptoms increased by 2.7% for a 10% increase in annual mean indoor relative humidity, but there was a negative correlation with altitude and annual variation in temperature. The prevalence of eczema was positively correlated with altitude and negatively with mean annual outdoor temperature. The authors find support in the data for the hypothesis that climate affects the prevalence of childhood asthma and eczema.

CATALYTIC CONVERTERS AND ROAD TRANSPORT POLLUTION

In recent years, the widespread use of catalytic converters in road transport vehicles has led to a substantial increase in environmental concentrations of platinum group elements (PGEs—platinum, palladium, and rhodium), detectable even in remote parts of the world. The risk to human health and ecosystems is unclear, however, given the low levels of PGEs usually detected. Further insight into the problem is provided by the report of Iavicoli *et al* (p. 636), in which pre- and post-shift urinary platinum levels were measured in traffic police from the city of Rome and compared with those from indoor police force workers. No significant differences were found between these groups, or between pre- and post-shift levels in the traffic officers. However, levels in both groups were higher than in other historical surveys, so the authors caution that human exposures may be increasing over time.

MORTALITY IN ATOMIC WORKERS FROM UKEA: 50 YEAR FOLLOW UP

In this issue, Atkinson *et al* (p. 577) report a further mortality analysis in workers from the UK Atomic Energy Authority. An earlier survey highlighted higher mortality rates from prostate and uterine cancer in this workforce. The latest analysis incorporates twice the previous number of deaths (10 249), thanks to extended follow up and a 30% growth in size of the original cohort, and so substantially increases the power to examine these health endpoints. The findings were generally reassuring. Radiation workers showed no overall increase in mortality, and the previously detected association with prostate cancer was no longer evident. Mortality rates from endometrial cancer were still increased in female radiation workers, but there was no correlation with dose, leading the authors to conclude that the findings do not arise from radiation exposure.

DEINDUSTRIALISATION AND FATAL WORKPLACE ACCIDENTS IN THE USA

The rate of fatal occupational accidents in the United States declined 45% between 1980 and 1996. ''Deindustrialisation''—the restructuring of business through reduced domestic manufacturing, downsizing, closure of industrial plants, and transfer of jobs to the service sector—may explain a part of this long term trend. Loomis *et al* (p. 616) have quantified the effect of deindustrialisation using death certificate and census data. Standardisation of rates (to the structure of the labour force in 1980) and regression modelling were employed to compare rates adjusted and unadjusted for changes in the labour market. Industries that were contracting and industries that were growing both showed a downward trend in fatal injury rates, but the rate of decline was smaller in shrinking industries (−2.65% *v* −3.43% per year). The shift of jobs from high to low hazard industries explained only 10–15% of the total decline. Deindustrialisation does not appear to have major negative (or positive) effects on occupational safety. The authors speculate that more important factors may include process changes, new technology, the automation of manufacturing, and specific safety interventions.