CORRESPONDENCE

Health risks from exposure to cadmium in soil

We were intrigued by the report and findings from Elliott et al of overall mortality, cancer incidence, and stroke mortality in Shipham village. Their findings are similar to the conclusions we reported in 1982 after work funded by the Department of Health and Social Security. We noted that “the failure to demonstrate any excess morbidity requiring hospital admission is reassuring for Shipham residents”. We identified a small but significant excess of carcinoma of the ovary but thought it extremely unlikely that this could be explained by exposure to cadmium; the histology of the two reported neoplasms was different and one of the patients resided at an address with a natural soil cadmium content. However, the soil cadmium concentrations in Shipham are too low to be of concern, just as publication in the English language of a study of a population in the United Kingdom Government Central Data Centre on Environmental Pollution, Department of the Environment, to widespread media coverage of work being undertaken by the Department of the Environment for the distribution of cadmium in the news media scare and without any public health evidence, property values in the village dropped to half their market value. They took years to recover. Accordingly, we need to remind ourselves that we have a duty of care in planning research to ensure that our efforts to further understand and combat environmental health problems are intended for the public good.

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Correspondence to: Dr R Philipp

5. Harvey TC, Chettle DR, Premlin PR, et al. Cadmium in Shipham and the then ONSGIS study linkage. Br Dent J 1979;i:147:
10. Alderson M. Hospital activity analysis and health information systems. Health Trends 1976;ix:66–8

Author’s reply—We have read with interest the comments to our paper by Philip and Hughes. They note that we did not explore hospital admissions for several diagnoses. We have, however, used hospital admissions data in other Small Area Health Statistics Unit (SAHSU) studies, and found that analyses with such data are far from straightforward. It is doubtful that analysis of health outcomes—such as benign hypertension or calculus of the urinary system—would give any meaningful results, as most cases will not be admitted to hospital. We did not analyse incidence of gastric cancer, as there is no evidence that cadmium is a risk factor for this cancer.

Philip and Hughes state that we “explored blood and urinary markers”, whereas we noted that “biological data (cadmium in blood or urine) were not available for use in the present investigation”. We saw no reason to “discuss the worth of in vivo neutron activation analysis”, because such methods are not particularly useful for exposure assessment in epidemiological studies.

We are fully aware of the historical background, which we described in the introduction to our paper, including a reference to the Wolfson geochemical atlas. We also referred to the original cohort analysis by Inskip et al, and several papers from the complex.

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Correspondence to: Dr P Elliott

We acknowledge the difficulties involved in small area health studies in the 1970s. We are of course grateful for all developments, including postcoded data and new computer hardware and software, that have led to a much more routine use of routinely collected morbidity and mortality statistics and of research resources. Researchers at SAHSU have contributed substantially to this development, for example by enabling rapid computation of small area rates associated with potential environmental pollution to be made.

We are aware of the problems introduced by migration when analysing health effects with long latency times, and we commented on this in relation to the “geographical” study.

Our study was not intended to be a “comprehensive risk assessment”; we do, however, refer to one. The availability of a further 18 years of mortality data since the publication of the paper by Inskip et al appears to be a legitimate reason for updating their analysis. Cancer incidence data had not previously been analysed. We agree with Philipp and Hughes, that our paper most likely is reassuring to the local population, which should be for the public good.

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