



TREATMENT OF SMOKING AS A CONFOUNDER IN LUNG CANCER STUDIES

Smoking is an important potential confounder in occupational studies of lung cancer. Several approaches have been taken to control for its effects in analysis, depending on the quality of information available. Some metrics are more elaborate than others (ever versus never smoked, pack-years, intensity of smoking, duration, etc), but how essential is it to obtain the extra detail? Richiardi *et al*¹ have examined this using data from a case-control study on 956 men with lung cancer and 1253 population controls from northern Italy. The risks of lung cancer associated with 11 jobs and eight activities were estimated with smoking history treated in seven different ways. Odds ratios for the simpler models were compared with the most complex model of cumulative exposure allowing for time of cessation. Bias was less than 10% for the simplest model of “ever” versus “never” smoked, assuming the complex model to provide the best estimate of effect. It seems, therefore, that quite a crude and simple assessment deals with much of the confounding problem.



THE ACCURACY OF SELF-REPORTED DATA ON SICKNESS ABSENCE

Sometimes research on sickness absence has to rely on workers' own accounts, in lieu of employers' records, but how accurate is such information? To assess this, Ferrie *et al*² have compared self-reports with an employer's database for 7995 British civil servants from the Whitehall II study. Agreement was found to be relatively good. Despite some gender differences, with women typically reporting less sick leave in the past year than had actually occurred and men reporting more, about two thirds of self-reports agreed to within two days with the official record. Moreover, the associations with several health measures, including self-rated health, long standing illness, minor psychological disorders, physical illness, and prevalent coronary heart disease were similar under both conditions of measurement. The study suggests that self-report can be an adequate proxy measure of sickness absence.



STILLBIRTH AND HALOACETIC ACIDS IN DRINKING WATER

Chlorination of drinking water results in the formation of several classes of trihalomethane (THMs). One of these by-products, BDCM, has shown modest associations with fetal loss in several previous surveys. King *et al*³ have examined the risk of stillbirth in relation to another THM in drinking water, haloacetic acid (HA), in a case-control study in Nova Scotia and eastern Ontario. Some 112 cases of stillbirth were compared with 398 live birth controls, with daily exposures to haloacetic acids estimated following household water sampling and a questionnaire on patterns of water consumption. Reassuringly, no association between stillbirth risk and HA levels was observed after controlling for concurrent exposure to THM.



AGEING, GENDER, AND PHYSICAL WORKLOAD

It seems plausible, as hypothesised by Aittomäki *et al*,⁴ that older workers tend to undertake less physically demanding work than their younger counterparts, but that those who do and find themselves in manual jobs find the going hard. To test these ideas formally, the authors collected questionnaire data from 5802 40–60 year old workers from Helsinki during 2000–01. Functioning was assessed using a sub-component of the self-reported SF36 health questionnaire. The study was cross-sectional, and provides no direct evidence that workers quit physical jobs as they age, but the findings tended to support both hypotheses. A linear trend was shown between age and physical work demands in the postulated direction, and steeper for men than for women; also, older employees tended to report poorer functioning, especially if they were female or engaged in physically arduous work.

REFERENCES

- 1 Richiardi L, Forastiere F, Boffetta P, *et al*. Effect of different approaches to treatment of smoking as a potential confounder in a case-control study on occupational exposures. *Occup Environ Med* 2005;**62**:101–4.
- 2 Ferrie JE, Kivimäki M, Head J, *et al*. A comparison of self-reported sickness absence with absences recorded in employers' registers: evidence from the Whitehall II study. *Occup Environ Med* 2005;**62**:74–9.
- 3 King WD, Dodds L, Allen AC *et al*. Haloacetic acids in drinking water and risk for stillbirth. *Occup Environ Med* 2005;**62**:124–7.
- 4 Aittomäki A, Lahelma E, Roos E, *et al*. Gender differences in the association of age with physical workload and functioning. *Occup Environ Med* 2005;**62**:95–100.