

EMFs

JMHarrington et al. Occupational and Environmental Medicine. May (2001) Vol.58 #5 p 307.

A study of occupational exposure to low frequency magnetic fields and any association with leukaemia.

Cause-of-death records for 83,977 former employees of CEGB were examined. The outcome period ranged from 1973 to 1997. Eligibility for inclusion in the outcome review was limited to those employees in employment between 1973 to 1982 for a minimum of six months.

Exposures were based on semi empirical calculations and job categories.

Standardised Mortality Ratios (SMR) for all leukaemia types were not statistically significant, but tended to show a protective effect of exposure. SMR for all causes of death showed a similar effect but was statistically significant e.g. SMR = 83 (95% CI = 82,84).

There was no dose response effect, no effect of recent versus historic exposure and no cumulative effect.

Some exposure averages were in a range that may have caused concern in other studies, for e.g. substation linesman 3.3 micro Tesla.

The authors speculate that the apparently protective effect of employment by the CEGB may be due to the healthy worker effect.

Comment

Although the results of this study are reassuring for GEGB employees, the use of calculated exposures remains controversial.

Greater reassurance is provided for domestic exposure: typical domestic exposures are of an order of magnitude lower than those reported in this study.

Whatever the true cause of the low SMR for CEGB employees it is clear that any risk posed by emfs is not sufficient to overpower it.

