

LETTERS TO THE EDITORS

Reply to Comments on “Environmental Power-frequency Magnetic Fields and Suicide”

(Accepted 26 February 1982)

Dear Sirs:

IT IS INDEED well known that suicide rates vary significantly among different sections of the population. Bonnell *et al.*, have simply ignored our extensive discussion of the possible effects of these factors in so far as they might affect the subject's choice of residence. As we described in our report (Pe81), the evidence indicated that there were no apparent differences in type of housing or geographical distribution between the two groups of addresses. We specifically pointed out, however, that the possibility of such differences cannot be completely ruled out until a more detailed survey is conducted.

The measured power-frequency magnetic field strength varies over time at any location, in some cases by an order of magnitude or more. However, provided that there were no differences between the two groups in the times (hour, day, month) at which the measurements were made, these fluctuations can be considered simply as a source of additional variability in the data. As such, they would tend to increase the spread of the measured field strengths in both groups, and render it more difficult than otherwise to observe a real difference between the two groups. Thus, the data seem particularly supportive of the conclusion that there is a nexus between suicides and magnetic fields.

No valid purpose is served by analogizing the magnitude of the magnetic field that we measured to either electric blankets, or the earth's magnetic field. Human beings have walked in the earth's d.c. magnetic field for perhaps a million years, and it might be presumed that the resulting induced currents and fields are not a health risk. On the other hand, neither the CEGB's power-lines nor electric blankets are entitled to the same presumption.

Our calculations were correct: the interested reader is referred elsewhere for a more detailed analysis (Ha82).

We did not either assume or conclude a causal relation between magnetic-field exposure and the event of suicide: we simply described a statistical correlation. It would be premature, in our view, to speculate on the mechanism of action that might be involved. Rather than do this, and perhaps elicit unfound and emotional reactions, we think it prudent to wait until more data has been obtained.

Dr. Bonnell is an industry representative on at least two committees dealing with possible health risks from exposure to electromagnetic fields of high voltage transmission lines. The gist of his position has been that there has been “no evidence” of any adverse effects (Jo78). In point of fact there *is* evidence (Pe81; As66; No70; We79; Fi78; Ha81; Be82), even though Dr. Bonnell personally accepts none of it (Bo80). We think it is incumbent upon the CEGB, and other power companies, to provide no-strings-attached support to independent investigators so that the safety question can be independently resolved to everyone's satisfaction.

A. A. MARINO
F. S. PERRY
R. O. BECKER

School of Medicine
Louisiana State University Medical Center
P.O. Box 33932
Shreveport, LA 71130

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