

REJECTED CANCER CAUSES AND CONTROL LETTER

Low cancer incidence in Amish living without electricity

The paper "Low Cancer Incidence rates in Ohio Amish", by Westman et al [1] shows that the low cancer incidence in the Amish can't be solely explained on the basis of tobacco abstinence. I think that another major factor is that many Amish, including the Old Order Amish (OOA), live without electricity.

In 2001, Ossiander and I [2] showed that the childhood leukemia mortality peak at ages 2-4 which emerged in the US in the 1930s, was correlated with the spread of residential electrification from urban to rural areas. In 2009 I showed [3] that in the first half of the 20th century, urban areas which were completely electrified by 1900 had much higher death rates from cancer, cardiovascular diseases, diabetes and suicide than rural areas, many of which had very low rates of residential electrification. Rural death rates were significantly correlated with the level of residential electrification by state for most causes examined. The current cancer incidence pattern among the Amish is like the cancer mortality pattern of rural US residents before their residences were electrified.

The (OOA) have been reported to have about half the type 2 diabetes prevalence as other US citizens in spite of having the same body mass index [4]. Cardiovascular disease mortality [5], prevalence of Alzheimer's disease [6], and suicide [7] are reported to be less common in the OOA than in non-Amish populations. Cancer [8], Alzheimer's disease [9] and suicide [10] have each been linked with electromagnetic field (EMF) exposure.

Given the increasing incidence of a number of cancers in the US population, and the rapid spread of electrically based technologies, the Westman paper should serve as a wake-up call for the funding and study of EMF exposure and human diseases, especially cancer.

References

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