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EMFs and other health effects

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Part of the SAGE process included investigating the other health effects implicated as a result of proximity to powerlines and exposure to power frequency magnetic fields of a similar level. The findings showed a number of studies finding serious and significant effects for adult skin cancer^[1], breast cancer^[2], Lou Gehrig's disease (ALS - Amyotrophic Lateral Sclerosis) ^{[3][4][5]} and miscarriage^{[6][7][8]}.

The [California Department of Health](#) looked at the literature in 2002 and concluded that "EMFs were responsible for an increase in childhood leukemia, adult brain cancer, Lou Gehrig's disease, and miscarriage". They also concluded that "they did not find there was a strong enough association between EMFs and birth defects and low birth weight, and were divided on the evidence for suicide and adult leukemia" ^[9]. This disagrees with the 2001 IARC review that classified EMFs as only "possible carcinogens", giving the following reason:

"there were reasons why animal and test tube experiments might have failed to pick up a mechanism or a health problem; hence, the absence of much support from such animal and test tube studies did not reduce their confidence much or lead them to strongly distrust epidemiological evidence from statistical studies in human populations. They therefore had more faith in the quality of the epidemiological studies in human populations and hence gave more credence to them."

This does have important implications from a cost benefit analysis however. If the increases found in these other conditions are confirmed to be real, it will impact a far greater proportion of the population and will have real costs in terms of the NHS expenditure required to deal with the issues. SAGE members estimated that the maybe slightly negative cost-benefit ratio transforms into a large positive benefit when the other health effects are taken into consideration. Taking this into account makes a more precautionary response make much more pragmatic sense with regards to safeguarding the British population.

Longer, much more detailed articles on 1) Childhood leukaemia 2) EMFs and childhood leukaemia and 3) Powerfrequency EMFs and health risks. Microwave radiation is also covered in 4) Radiofrequency EMFs and health risks, are available for free download in our [article library](#).

References

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- [9]** - *"An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations and Appliances"*, California EMF Program - [[View Report](#)]