



Policy briefing note – Electromagnetic fields

Modern systems for power transmission and for telecommunications are essential for all our lives and for the life of the country; the ability to heat and light our homes, workplaces etc, to power equipment and to share and exchange information almost instantly are of benefit to all of us, individually and collectively. The electric and magnetic fields from electricity supply lines and the radio waves from mobile phone transmitters can, however, sometimes cause concerns to people living close to those installations.

Those concerns have led to a large and still growing body of high-quality international research, which to date, nevertheless, has not shown that everyday exposure to electric and magnetic fields generated by the transmission of electricity and by mobile telephone base stations is a cause of human disease, including especially cancers.

The CIEH believes consequently that there remains no necessity except on security grounds for restricting the public use of land other than immediately around power and mobile telecommunications installations; conversely, there is also no scientific justification for restricting the siting of such apparatus in proximity to other land uses.

Public concerns about the effects of electromagnetic fields, while in our current state of knowledge apparently without foundation, should nonetheless be recognised as genuine and if possible allayed by:

- the withdrawal of Permitted Development rights and, in their place, the use of the planning process in respect of new electricity equipment and telecommunications masts
- avoiding the ‘overflying’ of homes and schools by new power lines wherever possible
- the use of planning conditions which strike an appropriate balance between the intrusion by, and numbers of, telecommunications antennae and the power of their outputs
- the universal adoption of current ICNIRP exposure guidelines for public exposure to electromagnetic fields
- the publication of equipment operators’ own statutory risk assessments
- publication of the results of independent auditing of field strengths at sites of concern
- the labeling of telephone handsets with their standardised specific absorption rates (SAR) referenced to the lowest available, and
- the better education of the public about all kinds of electromagnetic radiation

We nevertheless accept that the full effects of electromagnetic fields on human health may simply not yet be realised and, though it can never be conclusive, believe there remains a need for continuing, properly funded, independent research into the nature, extent and relevance of those effects and the consequent adequacy of prevailing exposure guidelines.