

Electromagnetic Fields: A Hazard to Your Health?

Household Appliances:

For most people, their highest magnetic field exposures come from using household appliances with motors, transformers, or heaters.



- If a parent is concerned about electric and magnetic field exposure from appliances, identify the major sources of exposure and limit a child's time near those appliances.
- Manufacturers have reduced magnetic field exposures from electric blankets (since 1990) and from computers (since the early 1990s).
- Because magnetic fields decline rapidly with increasing distance, an easy measure is to increase the distance between children and the appliance.

Power Lines:

A Massachusetts study published back in 1993 showed a significant association between proximity to power lines and depressive symptoms; that is, people who were able to see the towers from their house or yard were nearly 3 times more likely than those living farther away to experience depression. A Finnish study done a few years later confirmed a much higher risk of severe depression among those living within 100 yards of a power line.

There remains some degree of uncertainty in the literature on electric and magnetic field exposure and developing cancer (/English/healthissues/conditions/cancer/Pages/default.aspx). This uncertainty should be considered in the context of the low individual risk and the comparable environmental risks (eg, traffic accidents) in other locations. Obtaining magnetic field measurements in the home sometimes will show that field levels are at approximately the average level despite proximity to the power line.

Cell Phones:

In recent years, concern has increased about exposure to radio frequency electromagnetic radiation emitted from cell phones and phone station antennae. An Egyptian study confirmed concerns that living nearby mobile phone base stations increased the risk for developing:

- Headaches (/English/health-issues/conditions/head-neck-nervoussystem/pages/Headaches.aspx)
- Memory problems
- Dizziness (/English/health-issues/conditions/head-neck-nervoussystem/Pages/Dizziness-and-Fainting-Spells.aspx)
- Depression (/English/health-issues/conditions/emotionalproblems/pages/Childhood-Depression-What-Parents-Can-Do-To-Help.aspx)
- Sleep problems

Short-term exposure to these fields in experimental studies have not always shown negative effects, but this does not rule out cumulative damage from these fields, so larger studies over longer periods are needed to help understand who is at risk. In large studies, an association has been observed between symptoms and exposure to these fields in the everyday environment.

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