



Electric Fields

Information Sheet

Scientific Background

In the course of evolution, all living organisms have adapted themselves to this very unique radiation climate prevalent on planet earth. This natural balance is being threatened now because over the last 100 years humans have been very busy adding their own versions of electromagnetic energies without giving due considerations to the biological implications.



The belief that low-level electric, magnetic and other electromagnetic fields, such as those emanating from electric home wiring systems and common appliances, have biological effects is an established scientific fact. The “only” question that remains is how great and how harmful those health effects are, especially in the long run. Since technical advancements tend to develop much faster than the scientific research proving their safety or harmfulness, the following discussion is based on the motto: *Prevention is better than a cure!*

‘Electromagnetic Hypersensitivity (EHS) is characterized by a variety of non-specific symptoms, which afflicted individuals attribute to exposure to electromagnetic fields (EMF). The symptoms most commonly experienced include dermatological symptoms (redness, tingling, and burning sensations) as well as neurasthenic and vegetative symptoms (fatigue, tiredness, concentration difficulties, dizziness, nausea, heart palpitation, and digestive disturbances). The collection of symptoms is not part of any recognized syndrome. EHS resembles multiple chemical sensitivities (MCS), another disorder associated with low-level environmental exposures to chemicals.¹

Any device that is at a higher potential than ground will emit an electric field. Picture this as a bunch of hair-like lines springing forth from the source in all directions. Anything or person between the source and the earth will be influenced by these lines. The human body functions on electricity; it is composed of conductive and semi-conductive materials, so that if it is exposed to a high electric field, a voltage will be induced that upsets the natural communications.

Discovery



AC electric and magnetic fields occur wherever there is electricity. AC electric fields are most commonly found in the vicinity of wiring — either running inside a wall or mounted on its surface, and especially around two-wire extension cords. It is worse when near high voltage transmission lines, but household appliances and wiring can also create problems. The good news is that the field strength, and therefore health impact, decreases with distance.

Most frequently it is the sleeping area where people unknowingly try to rest their tired heads against highly radiating walls. This all too common scenario can be caused by a single source or a combination of the following: an electric water heater, freezer or stereo system right behind the wall of the bedroom; an electric main panel in the same room or on the other side of the wall; unshielded wiring inside the walls; two-conductor wiring for three-way switches; bundles of extension cords underneath the bed; and/or wiring errors.

1. If the Body Voltage is high, use the Electric Field sensor to locate the source of the high Electric fields.
2. This sensor can also be used in cars, offices, play areas, or other areas where you may have relatively long term exposure.

Fixing the Problem



In those places where we spend most of our time, we should avoid exposure to power frequency fields. This is especially true for sleeping areas, when the human body is particularly vulnerable to external electromagnetic stressors. All wiring, lighting and electronic equipment in close proximity to a person should ideally be shielded. If this is not feasible, it is highly recommended to cut off electric circuits and devices affecting the sleeping area.

¹ <http://www.who.int/mediacentre/factsheets/fs296/en/> (World Health Organization)