



# Electromagnetic Hypersensitivity

Some people report a variety of symptoms that they attribute to exposure to very low-level electromagnetic fields. The World Health Organization (WHO) has concluded that while the symptoms are real there is no scientific basis to link the symptoms to exposure to electromagnetic fields. Furthermore WHO says that treatment of affected individuals should focus on the health symptoms and the clinical picture, and not on the person's perceived need to reduce or eliminate electromagnetic fields in the workplace or home.

## Background

Some people report that they experience a range of symptoms, including headaches and sleeping difficulties, when exposed to very low-level electromagnetic fields (EMFs) from a variety of sources, including mobile phones and their antenna sites.

These signals are often well below the allowable levels in international human exposure recommendations.

These conditions are sometimes described as electrosensitivity or electromagnetic hypersensitivity (EHS). The WHO has suggested that a more appropriate term for sensitivity to environmental factors is Idiopathic Environmental Intolerance (IEI).

## WHO EHS Workshop

The WHO convened a workshop on this topic in Prague in October 2004 to review what was known about the condition and develop advice for to help people with the reported symptoms. A key outcome was WHO fact sheet 296 that concluded:

*'...Whatever its cause, EHS can be a disabling problem for the affected individual. EHS has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem.'*

The fact sheet goes on to provide advice to EHS individuals, physicians, governments and researchers. For physicians it states:

*'Treatment of affected individuals should focus on the health symptoms and the clinical picture, and not on the person's perceived need for reducing or eliminating EMF in the workplace or home.'*



### Research

One way to assess whether the reported symptoms are caused by exposure to electromagnetic fields is to conduct a provocation study. In such a study the self-reported EHS subject exposed to an EMF source without knowing whether the source is on or off and asked about symptoms. This is termed *blinding*. When the subject does not know the source status it is termed *single blind*, when neither the subject nor the investigator knows it is termed *double blind*.

A review in 2010 found that 46 single or double-blind studies have been conducted with 1175 self-reported EHS volunteers. The reviewers concluded that the reported symptoms could not be confirmed under controlled conditions. They also found evidence that the subjects experienced symptoms when they thought the source was on, whether it was or not. This is termed the *nocebo effect*.

### No Medical Recognition

It is sometimes claimed that medical authorities in Sweden recognise EHS as a specific medical condition. However, an expert report for the Irish government explained that this is incorrect. Electromagnetic hypersensitivity has not been accepted as a work injury by the Swedish National Board of Health and Welfare.

In Sweden the focus is on the symptoms presented by the afflicted person and the right to sickness benefits is based on the degree of ill health and functional handicap of the person regardless of known or unknown cause for the condition.

The Swedish Board of Health and Welfare is the authority to grant financial support to disability organisations. The Swedish Association for the Electrosensitive was granted financial support as a disability organisation. This fact has sometimes been misinterpreted as if electromagnetic hypersensitivity is a recognised medical diagnosis in Sweden.

### GSMA Position

The WHO has concluded that there is no scientific basis to link symptoms to exposure to electromagnetic fields.

GSMA supports the WHO recommendation that treatment of affected individuals should have the aim of helping them to develop strategies for coping and to encourage them to lead a normal social life.

Importantly, this should be distinguished from the person's perceived need to reduce or eliminate electromagnetic fields in the workplace or home.

### Sources

Health Effects of Electromagnetic Fields, Expert Group on Health Effects of Electromagnetic Fields, Department of Communications, Marine and Natural Resources (Ireland). March 2007.

WHO: <http://www.who.int/emf>



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Where to go for more information

GSMA: <http://www.gsma.com/health>