

Human exposures to [electromagnetic fields](#) are ubiquitous in modern society, and the number of new applications is constantly increasing.

Introduction of new technologies, such as mobile telephony, has raised public concern about potential health effects from exposures to electromagnetic fields at levels far below current guidelines <sup>1) 2)</sup>.

This has led to a substantial increase in [research](#) efforts within this area, despite the absence of known biological mechanisms by which disease would occur at such low exposure levels.

The energy generated by electromagnetic fields at such low exposure levels is too weak to break chemical bonds, and well-known interaction mechanisms of electromagnetic fields with the human body induce health effects at considerably higher exposure levels than those encountered in everyday life.

Reference levels of international guidelines for workers and the general population are set to protect against such health effects <sup>3) 4)</sup>.

<sup>1)</sup>

AGNIR (2012) Health effects from radiofrequency electromagnetic fields. Report from the Independent Advisory Group on NonIonising Radiation. Documents of the Health Protection Agency, Radiation, Chemical and Environmental Hazards. RCE 20, Health Protection Agency, London

<sup>2)</sup>

SCENIHR (2015) Scientific Committee on emerging and newly identified health risks: potential health effects of exposure to electromagnetic fields (EMF). [http://ec.europa.eu/health/scientific\\_committees/emerging/docs/scenihhr\\_o\\_041.pdf](http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihhr_o_041.pdf). Accessed 15 Aug 2015

<sup>3)</sup>

ICNIRP (1998) Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz). International Commission on Non-Ionizing Radiation Protection. Health Phys 74:494-522

<sup>4)</sup>

ICNIRP (2010) Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz). Health Phys 99: 818-836. doi:10.1097/HP.0b013e3181f06c86

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