



Recent scientific publications relevant to mobile telephony

## July 2010

### Details

**Australia:** Epidemiological Evidence for a Health Risk from Mobile Phone Base Stations, [Khurana et al., International Journal of Occupational and Environmental Health](#), 16(3):263-267, 2010.

*'...We found that eight of the 10 studies reported increased prevalence of adverse neurobehavioral symptoms or cancer in populations living at distances < 500 meters from base stations.'*

**Austria:** Increased protein synthesis by cells exposed to a 1,800-MHz radio-frequency mobile phone electromagnetic field, detected by proteome profiling, [Gerner et al., International Archives of Occupational and Environmental Health](#), 83(6):691-702, August, 2010.

*'...Our observations do not directly imply a health risk. However, vis-a-vis a synopsis of reports on cells stress and DNA breaks, after short and longer exposure, on active and inactive cells, our findings may contribute to the re-evaluation of previous reports.'*

**Austria:** Tinnitus and mobile phone use, [Hutter et al., Occupational and Environmental Medicine](#), Published Online 23 June 2010.

*'...Mobile phone use up to the index date (onset of tinnitus) on the same side as the tinnitus did not have significantly elevated ORs for regular use and intensity or for cumulative hours of use. The risk estimate was significantly elevated for prolonged use ( $\geq 4$  years) of a mobile phone...'*

**Denmark:** Effects of alternative styles of risk information on EMF risk perception, [Nielsen et al., Bioelectromagnetics](#), Published Online: 1 Jun 2010.

*'...information may increase concern among a large proportion of the population, and that discrepancies exist between expressed concern and intended behavior.'*

**Europe:** Comparison of personal radio frequency electromagnetic field exposure in different urban areas across Europe, [Joseph et al., Environmental Research](#), Available online 18 July 2010.

*'...Exposure levels were of the same order of magnitude in all countries and well below the international exposure limits...Exposure levels were in general lower in private houses or flats than in offices and outdoors...'*

**Hungary:** Polluted places or polluted minds? An experimental sham-exposure study on background psychological factors of symptom formation in 'Idiopathic Environmental Intolerance attributed to electromagnetic fields', [Szemerszky et al., International Journal of Hygiene and Environmental Health](#), Available online 9 June 2010.

*'...The results confirm that there is considerable nocebo effect in symptom reports related to 50 Hz frequency EMFs. IEI-EMF seems to be formed through a vicious circle of psychosocial factors, such as enhanced perception of risk and expectations, self-monitoring, somatisation and somatosensory amplification, causalization and misattribution.'*

**Japan:** Short-term exposure to a 1439-MHz TDMA signal exerts no estrogenic effect in rats, [Yamashita et al., Bioelectromagnetics](#), Published Online: 6 Jul 2010.

*'...Although negative effects of long-term EMF exposure must be thoroughly investigated before a final conclusion can be reached, our results do not support the assumption that the high frequency EMF used in cellular phones exerts estrogenic activity.'*

**South Korea:** The lack of histological changes of CDMA cellular phone-based radio frequency on rat testis, [Lee et al., Bioelectromagnetics](#), Published Online: 6 Jul 2010.

*'...Based on these results, we concluded that subchronic exposure to 848.5 MHz with 2.0 W/kg SAR RF did not have any observable adverse effects on rat spermatogenesis.'*

**South Korea:** Evaluation of RF electromagnetic field exposure levels from cellular base stations in Korea, [Kim et al., Bioelectromagnetics](#), Published Online: 3 Jun 2010.

*'...The highest field level was 1.5 V/m, which corresponds to 0.15% of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for human exposure.'*

**Sweden:** Assessment of general public exposure to LTE and RF sources present in an urban environment, [Joseph et al., Bioelectromagnetics](#), Published Online: 6 Jul 2010.

*'...LTE exposure levels up to 0.8 V/m were measured, and the average contribution of the LTE signal to the total RF exposure equals 4%.'*

**Switzerland:** Effects of Everyday Radiofrequency Electromagnetic-Field Exposure on Sleep Quality: A Cross-Sectional Study, [Mohler et al., Radiation Research](#), Published Online: June 17, 2010.

*'...The results of this large cross-sectional study did not indicate an impairment of subjective sleep quality due to exposure from various sources of RF EMFs in everyday life.'*

**UK:** Absence of nonlinear responses in cells and tissues exposed to RF energy at mobile phone frequencies using a doubly resonant cavity, [Kowalczyk et al., Bioelectromagnetics](#), Published Online: 6 Jul 2010.

*'...these results do not support the hypothesis that living cells can demodulate RF energy, since second harmonic generation is the necessary and sufficient condition for demodulation.'*

**USA:** Computational Electromagnetic Analysis in a Human Head Model with EEG Electrodes and Leads Exposed to RF-Field Sources at 915 MHz and 1748 MHz, [Angelone et al., Radiation Research](#), 174(1):91-100, July 2010.

*'...This enhancement confirms the validity of the question whether any observed effects in studies involving EEG recordings during RF-field exposure*

*are directly related to the RF fields generated by the source or indirectly to the RF-field-induced currents due to the presence of conductive EEG leads.'*

**USA:** Association between number of cell phone contracts and brain tumor incidence in nineteen U.S. States, [Lehrer et al., Journal of Neuro-Oncology](#), June 29, 2010.

*'...The very linear relationship between cell phone usage and brain tumor incidence is disturbing and certainly needs further epidemiological evaluation...'*

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The MMF is an international association of wireless communications manufacturers established to support scientific research in relation to mobile telephony and health [www.mmfai.info](http://www.mmfai.info)

The GSM Association (GSMA) is the global trade association that exists to promote, protect and enhance the interests of GSM mobile operators throughout the world. <http://www.gsmworld.com/health>

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