

## Review on studies of brain physiology and EMF exposure PART I: ELF

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Evaluating and understanding the potential effects of time-varying magnetic fields on biological structures in general, and on the human nervous system in particular, are challenging missions. However, it is crucial that international regulation agencies, such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP) or the Institute of Electrical and Electronics Engineers (IEEE), can rely on reliable scientific results to support their existing and forthcoming guidelines, to adequately protect the public as well as workers. This presentation will give an overview of the results from the literature related to human central nervous system exposure to Extremely Low Frequency (ELF – mainly 50 and 60 Hz) magnetic fields in the low (1-3 mT) and high (up to 50 mT) milliTesla range, with a particular focus on the recent studies and current developments from our Canadian group.

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