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**IEEE Database**

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Over the last few decades, the use of electromagnetic energy in the radiofrequency range to support wireless voice and data information has rapidly proliferated. In addition to carrying information, however, energy in the microwave range of the radiofrequency spectrum (generally considered from a few hundred MHz up to several tens of GHz) is also readily absorbed by human tissues as heat. Although humans are very good at dissipating thermal energy, at some rate of energy absorption microwaves will overwhelm thermoregulatory mechanisms and cause cell and tissue damage. The limits for human exposure to radiofrequency energy have been defined by two international limit setting organizations, the Institute for Electrical and Electronic Engineers, International Committee for Electromagnetic Safety (IEEE ICES) and the International Commission for Non-Ionizing Radiation Protection (ICNIRP). These limits are then adopted by government regulatory agencies around the world (e.g., US FCC) as compliance requirements for the sale of radiofrequency transmitting devices. The limit values themselves are currently based upon tissue heating, although there has been significant public concern regarding potential “non-thermal” effects that might accumulate with long-term exposure to devices such as mobile phones and wireless laptop (e.g., WiFi) signals. The IEEE EMF literature database contains a current collection of relevant biological and health effects publications and has been developed as the core tool for IEEE ICES to monitor the science and confirm or revise the existing radiofrequency exposure limits contained within the IEEE C95.1 standard.