



Biological Effects of AC Magnetic Fields Measured in Milligauss (mG)
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| 9040 mG | Institute of Electrical and Electronics Engineers (IEEE) Recommended Limit for Public Exposure (there are no US federal standards for limiting ELF-EMF AC magnetic field exposure). |
| 2000 mG | International Commission on Non-Ionizing Radiation Protection (ICNIRP) Recommended Limit for Public Exposure. |
| 16 mG | Intermittent exposure to AC magnetic fields results in an 80% increased risk of miscarriage for pregnant women (Li et al 2002). |
| > 5 mG | Building Biology Severe Concern Level |
| ≥ 4 mG | A 560% increased risk of all major cancers in Danish children living near high voltage power lines (Olsen et al 1993). |
| 3-4 mG | In 2001, ELF-EMF (AC magnetic fields) classified as a Class 2B possible carcinogen by the International Agency for Cancer Research (IARC) of the World Health Organization based on an increased occurrence of childhood leukemia (Kheifets, 2005). |
| ≥ 3 mG | Children in remission from leukemia had a 450% increased risk of dying when recovering in homes with 3 mG or greater (Foliat 2006). |
| > 3 mG | An 87% increased risk of hematological cancer in adults living near high voltage power lines (Youngson 1991). |
| > 2 mG | Magnetic field exposure during pregnancy results in a 3.5 fold increased rate of asthma in child (Li et al 2011). |
| ≥ 2 mG | A 710% increased risk of childhood leukemia in children under four years of age sleeping in 2 mG or above (Michaelis 1997). |
| 1.9 mG | A 70% increased risk of acute myeloid leukemia and chronic myeloid leukemia for adults living near high voltage power lines (Feychting 1994). |
| ≥ 1.4 mG | A 570% increased risk of leukemia in children under six years of age than for children with exposure under 0.3 mG (Green 1999). |
| ≥ 1.3 mG | A 200% increased risk of ADHD diagnosis in children living in homes ≥ 1.3 mG; a 338% increase when ADHD persists into adolescence (Li et al 2020). |
| 1-5 mG | Building Biology Severe Concern Level |
| 1 mG | Bioinitiative 2007 Precautionary Target Level |
| 0.2-1 mG | Building Biology Slight Concern Level |
| < 0.2 mG | Building Biology No Concern Level |

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For further reading: Briefing Report on Electromagnetic Fields: Health Effects, Public Policy and Site Planning by CL Sage, MA and SA Sage, BS. *J. Aust. Coll. Nutr. & Env. Med.* Vol. 25 No.2 (August 2006) pages 3-6 & 9.