

Bibliography of Experimental Studies on Animals Concerning Electric and Magnetic Fields and Reproductive RisksLatest Update: February 5th, 2013

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Al-Akhras, M. A., Elbetieha, A., Hasan, M. K., Al-Omari, I., Darmani, H. et Albiss, B. 2001. Effects of extremely low frequency magnetic field on fertility of adult male and female rats. *Bioelectromagnetics* **22**, 340-344.

Anonyme. 2001. Carcinogenicity test using offspring from mice exposed to magnetic fields. In *Biological and Health Effects from Exposure to Power-Line Frequency Electromagnetic Fields - Confirmation of Absence of Any Effects at Environmental Field Strengths* (H. Takebe, T. Shiga, M. Kato et E. Masada, Eds.), pp. 176-212. Ohmsha Ltd, Tokyo.

Anselmo, C. W., Silva, T. L., Holanda, T. G., Prado, L. V., Cabral-Filho, J. E., Catanho, M. T., and Medeiros, M. C. 2008. Influence of a 60 Hz, 3 microT, electromagnetic field on the somatic maturation of wistar rat offspring fed a regional basic diet during pregnancy. *Braz J Biol* **68**, 641-648.

Bernabo, N., E. Tettamanti, Russo, V., Martelli, A., Turriani, M., Mattoli, M. et Barboni, B. 2010. Extremely low frequency electromagnetic field exposure affects fertilization outcome in swine animal model. *Theriogenology* **73**(9): 1293-1305.

Burack, G. D., Seto, Y. J., Hsieh, S. T. et J.L., D. 1984. The effects of prenatal exposure to a 60-Hz high-intensity electric field on postnatal development and sexual differentiation. *J Bioelec* **3**, 451-467.

Chung, M. K., Kim, J. C. et Myung, S. H. 2004. Lack of adverse effects in pregnant/lactating female rats and their offspring following pre- and postnatal exposure to ELF magnetic fields. *Bioelectromagnetics* **25**, 236-244.

Chung, M. K., Kim, J. C., Myung, S. H. et Lee, D. I. 2003. Developmental toxicity evaluation of ELF magnetic fields in Sprague-Dawley rats. *Bioelectromagnetics* **24**, 231-240.

Cox, C. F., Brewer, L. J., Raeman, C. H., Schryver, C. A., Child, S. Z. et Carstensen, E. L. 1993. A test for teratological effects of power frequency magnetic fields on chick embryos. *IEEE Trans Biomed Eng* **40**, 605-610.

de Bruyn, L. et de Jager, L. 2010. Effect of long-term exposure to a randomly varied 50 Hz power frequency magnetic field on the fertility of the mouse. *Electromagn Biol Med* **29**(1-2): 52-61.

Dundar, B., Cesur, G., Comlekci, S., Songur, A., Gokcimen, A., Sahin, O., Ulukut, O., Yilmaz, H. R., Sutcu, R. et Caliskan, S. (2009). The effect of the prenatal and post-natal long-term exposure to 50 Hz electric field on growth, pubertal development and IGF-1 levels in female Wistar rats. *Toxicol Ind Health* **25**, 479-487.

Bibliography of Experimental Studies on Animals Concerning Electric and Magnetic Fields and Reproductive Risks*Latest Update: February 5th, 2013*

2

- Elbetieha, A., MA, A. L.-A. et Darmani, H. 2002. Long-term exposure of male and female mice to 50 Hz magnetic field: effects on fertility. *Bioelectromagnetics* **23**, 168-172.
- Fam, W. Z. et Mikhail, E. L. 1996. Lymphoma induced in mice chronically exposed to very strong low- frequency electromagnetic field. *Cancer Lett* **105**, 257-269.
- Farrell, J. M., Litovitz, T. L., Penafiel, M., Montrose, C. J., Doinov, P., Barber, M., Brown, K. M. et Litovitz, T. A. 1997. The effect of pulsed and sinusoidal magnetic fields on the morphology of developing chick embryos. *Bioelectromagnetics* **18**, 431-438.
- Fournier, N. M., Mach, Q. H., Whissell, P. D., and Persinger, M. A. (2012). Neurodevelopmental anomalies of the hippocampus in rats exposed to weak intensity complex magnetic fields throughout gestation. *Int J Dev Neurosci* **30**, 427-433.
- Jaffe, R. A., Lopresti, C. A., Carr, D. B. et Phillips, R. D. 1983. Perinatal exposure to 60-Hz electric fields: effects on the development of the visual-evoked response in rats. *Bioelectromagnetics* **4**, 327-339.
- Juutilainen, J., Huuskonen, H. et Komulainen, H. 1997. Increased resorptions in CBA mice exposed to low-frequency magnetic fields: an attempt to replicate earlier observations. *Bioelectromagnetics* **18**, 410-417.
- Juutilainen, J., Laara, E. et Saali, K. 1987. Relationship between field strength and abnormal development in chick embryos exposed to 50 Hz magnetic fields. *Int J Radiat Biol Relat Stud Phys Chem Med* **52**, 787-793.
- Juutilainen, J., Matilainen, P., Saarikoski, S., Laara, E. et Suonio, S. 1993. Early pregnancy loss and exposure to 50-Hz magnetic fields. *Bioelectromagnetics* **14**, 229-236.
- Juutilainen, J. et Saali, K. 1986. Development of chick embryos in 1 Hz to 100 kHz magnetic fields. *Radiat Environ Biophys* **25**, 135-140.
- Kowalcuk, C. I., Robbins, L., Thomas, J. M., Butland, B. K. et Saunders, R. D. 1994. Effects of prenatal exposure to 50 Hz magnetic fields on development in mice: I. Implantation rate and fetal development. *Bioelectromagnetics* **15**, 349-361.
- Kowalcuk, C. I., Robbins, L., Thomas, J. M. et Saunders, R. D. 1995. Dominant lethal studies in male mice after exposure to a 50 Hz magnetic field. *Mutat Res* **328**, 229-237.
- Kowalcuk, C. I. et Saunders, R. D. 1990. Dominant lethal studies in male mice after exposure to a 50-Hz electric field. *Bioelectromagnetics* **11**, 129-137.

Bibliography of Experimental Studies on Animals Concerning Electric and Magnetic Fields and Reproductive RisksLatest Update: February 5th, 20133

- Krueger, W. F., Giarola, A. J., Bradley, J. W. et Shrekenhamer, A. 1975. Effects of electromagnetic fields on fecundity in the chicken. *Ann N Y Acad Sci* **247**, 391-400.
- Mevissen, M., Buntenkotter, S. et Loscher, W. 1994. Effects of static and time-varying (50-Hz) magnetic fields on reproduction and fetal development in rats. *Teratology* **50**, 229-327.
- Negishi, T., Imai, S., Itabashi, M., Nishimura, I. et Sasano, T. 2002. Studies of 50 Hz circularly polarized magnetic fields of up to 350 microT on reproduction and embryo-fetal development in rats: exposure during organogenesis or during preimplantation. *Bioelectromagnetics* **23**, 369-389.
- Orendacova, J., Racekova, E., Orendac, M., Martoncikova, M., Saganova, K., Lievajova, K., Abdiova, H., Labun, J. et Galik, J. (2009). Immunohistochemical study of postnatal neurogenesis after whole-body exposure to electromagnetic fields: evaluation of age- and dose-related changes in rats. *Cell Mol Neurobiol* **29**, 981-990.
- Pafkova, H., Tejnorova, I. et Jerabek, J. 1994. Study of the effects of 50 Hz magnetic field on embryonic development: dependence on field level and field vector. *Rev Environ Health* **10**, 225-233.
- Rommereim, D. N., Kaune, W. T. eterson, L. E. et Sikov, M. R. 1989. Rats reproduce and rear litters during chronic exposure to 150-kV/m, 60- Hz electric fields. *Bioelectromagnetics* **10**, 385-389.
- Rommereim, D. N., Kaune, W. T., Buschbom, R. L., Phillips, R. D. et Sikov, M. R. 1987. Reproduction and development in rats chronologically exposed to 60-Hz electric fields. *Bioelectromagnetics* **8**, 243-258.
- Rommereim, D. N., Rommereim, R. L., Miller, D. L., Buschbom, R. L. et Anderson, L. E. 1996. Developmental toxicology evaluation of 60-Hz horizontal magnetic fields in rats. *Appl Occup Environ Hyg* **11**, 307-312.
- Rommereim, D. N., Rommereim, R. L., Sikov, M. R., Buschbom, R. L. et Anderson, L. E. 1990. Reproduction, growth, and development of rats during chronic exposure to multiple field strengths of 60-Hz electric fields. *Fundam Appl Toxicol* **14**, 608-621.
- Ryan, B. M., Mallett, E., Johnson, T. R., Gauger, J. R. et McCormick, D. L. 1996. Developmental toxicity study of 60 Hz (power frequency) magnetic fields in rats. *Teratology* **54**, 73-83.
- Ryan, B. M., Symanski, R. R., Pomeranz, L. E., Johnson, T. R., Gauger, J. R. et McCormick, D. L. 1999. Multigeneration reproductive toxicity assessment of 60-Hz magnetic fields using a continuous breeding protocol in rats. *Teratology* **59**, 156-162.

Bibliography of Experimental Studies on Animals Concerning Electric and Magnetic Fields and Reproductive RisksLatest Update: February 5th, 2013

4

Salzinger, K., Freimark, S., McCullough, M., Phillips, D. et Birenbaum, L. 1990. Altered operant behavior of adult rats after perinatal exposure to a 60- Hz electromagnetic field. *Bioelectromagnetics* **11**, 105-116.

Sienkiewicz, Z. J., Larder, S. et Saunders, R. D. 1996. Prenatal exposure to a 50 Hz magnetic field has no effect on spatial learning in adult mice. *Bioelectromagnetics* **17**, 249-252.

Sienkiewicz, Z. J., Robbins, L., Haylock, R. G. et Saunders, R. D. 1994. Effects of prenatal exposure to 50 Hz magnetic fields on development in mice: II. Postnatal development and behavior. *Bioelectromagnetics* **15**, 363-375.

Sikov, M. R., Montgomery, L. D., Smith, L. G. et Phillips, R. D. 1984. Studies on prenatal and postnatal development in rats exposed to 60-Hz electric fields. *Bioelectromagnetics* **5**, 101-112.

Sikov, M. R., Rommereim, D. N., Beamer, J. L., Buschbom, R. L., Kaune, W. T. et Phillips, R. D. 1987. Developmental studies of Hanford miniature swine exposed to 60-Hz electric fields. *Bioelectromagnetics* **8**, 229-242.

Tenorio, B. M., Jimenez, G. C., de Moraes, R. N., Peixoto, C. A., de Albuquerque Nogueira, R., and da Silva, V. A. J. (2012). Evaluation of testicular degeneration induced by low-frequency electromagnetic fields. *J Appl Toxicol* **32**, 210-218.

Tenorio, B. M., Jimenez, G. C., Moraes, R. N., Torres, S. M., Albuquerque Nogueira, R., and Silva Junior, V. A. (2011) Testicular development evaluation in rats exposed to 60 Hz and 1 mT electromagnetic field. *J Appl Toxicol* **31**, 223-230.

Terol, F. F. et Panchon, A. 1995. Exposure of domestic quail embryos to extremely low frequency magnetic fields. *Int J Radiat Biol* **68**, 321-330.

Vallejo, D., and Hidalgo, M. A. (2012). Growth variations in OF1 mice following chronic exposure of parental and filial generations to a 15 muT, 50 Hz magnetic field. *Electromagn Biol Med* **31**, 19-33.

Veicsteinas, A., Belleri, M., Cinquetti, A., Parolini, S., Barbato, G. et Molinari Tosatti, M. P. 1996. Development of chicken embryos exposed to an intermittent horizontal sinusoidal 50 Hz magnetic field. *Bioelectromagnetics* **17**, 411-424.

Vera, R., Picazo, M. L., Royuela, M., Romo, M. A., Alpuente, J. et Bardasano, J. L. 1999. Bone density changes in mouse offspring after 50-Hz, 15-μT electromagnetic field long-term exposure of two generations. *Electro Magnetobiol* **18**, 79-92.

Bibliography of Experimental Studies on Animals Concerning Electric and Magnetic Fields and Reproductive Risks

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Whissell, P. D., Tsang, E. W., Mulligan, B. P. et Persinger, M. A. (2009). Prenatal exposures to LTP-patterned magnetic fields: quantitative effects on specific limbic structures and acquisition of contextually conditioned fear. *Int J Neurosci* **119**, 1-14.

Zhang, Q., Tabrah, F. L. et Whittow, G. C. 1993. Effect of 60-Hz sinusoidal electromagnetic field on avian embryonic growth and oxygen consumption. *Electro Magnetobiol* **12**, 27-37.
biol **12**, 27-37.