

Can EMFs Affect Sleep?

- Fatigue, depressive tendency, sleeping disorders, concentration difficulties, cardiovascular problems reported with exposure to GSM 900/1800 MHz cell phone signal at base station level exposures.

Oberfeld, 2004 vws.org

- In adults (30-60 yrs) chronic exposure caused sleep disturbances, (but not significantly increased across the entire population).

Mohler et al., 2010 ncbi.nlm.nih.gov

- RFR from cell towers caused fatigue, headaches, sleeping problems.

Navarro et al., 2003 emf-portal.org

- Adults (18-91 yrs) with short-term exposure to GSM cell phone radiation reported headache, neurological problems, sleep and concentration problems.

Hutter et al., 2006 ncbi.nlm.nih.gov

- RFR related to headache, concentration and sleeping problems, fatigue.

Kundi, 2009 emf-portal.org

- An 18% reduction in REM sleep (important to memory and learning functions).

Mann and Roschke, 1996 emf-portal.org

- Delayed REM sleep in rats.

Mohammed et al., 2013 sciencedirect.com

- Impaired sleep.

Huber et al., 2003 ncbi.nlm.nih.gov

- GSM cell phone use modulates brain wave oscillations and sleep EEG.

Huber et al., 2003 ncbi.nlm.nih.gov

- Cell phone RFR during waking hours affects brain wave activity. (EEG patterns) during subsequent sleep.

Achermann et al., 2000 emf-portal.org

- Sleep patterns and brain wave activity are changed with 900 MHz cell phone radiation exposure during sleep.

Borbely et al., 1999 emf-portal.org

- Reduction in deep sleep.

Lowden et al., 2011 emf-portal.org

- Pulse-modulated RFR and MF affect brain physiology (sleep study).

Schmid et al., 2012 ncbi.nlm.nih.gov

Can EMFs Affect Brain Cancer Risks?

- Increased risk of brain tumors, especially on the same side

Bortkiewicz et al., 2017 ncbi.nlm.nih.gov

- Increased risk of brain tumors

Myung et al., 2009 ncbi.nlm.nih.gov

- Increased risk of brain tumours especially in long-term users (≥ 10 years)

Prasad et al., 2017 ncbi.nlm.nih.gov

- Increased risks of glioma

Carlberg and Hardell, 2012 ncbi.nlm.nih.gov

- Possible association between heavy mobile phone use and brain tumours

Coureau et al., 2014 ncbi.nlm.nih.gov

- Occupational magnetic field exposure increases the risk of glioblastoma

Villeneuve et al., 2002 ncbi.nlm.nih.gov

- Glioma and acoustic neuroma should be considered to be caused by EMF emissions from cellphones

Carlberg and Hardell, 2013 ncbi.nlm.nih.gov

- Mobile phone radiation causes brain tumors and should be classified as a probable human carcinogen (Class 2A)

Morgan et al., 2015 ncbi.nlm.nih.gov

Can EMFs Affect Breast Cancer Risks?

- Increased risk of breast cancer in radio operators

Tynes et al., 1996 ncbi.nlm.nih.gov

- Women under 50 were 7X more likely to develop oestrogen receptor-positive breast cancer when exposed to magnetic field levels over 1 mG

Feychting et al., 1998 ncbi.nlm.nih.gov

- Plausible link between EMF and breast cancer

Caplan et al., 2000 ncbi.nlm.nih.gov

- Occupational exposure to magnetic fields over 25 mG increases risks of breast cancer by 3 folds

Carlberg and Hardell, 2012 ncbi.nlm.nih.gov

- Cluster of male breast cancer in of ce workers exposed to high levels of magnetic fields

Milham, 2004 ncbi.nlm.nih.gov

- Long-term significant occupational exposure to ELF MF may certainly increase the risk of both Alzheimer's disease and breast cancer

Davanipour and Sobel, 2009 ncbi.nlm.nih.gov

- Possible link between magnetic fields exposure and breast cancer

Chen et al., 2013 ncbi.nlm.nih.gov

- EMF exposure may be associated with the increase risk of male breast cancer

Sun et al., 2013 ncbi.nlm.nih.gov

- Low levels of magnetic fields increase risks of breast cancer

Zhao et al., 2014 emf-portal.org

Can EMFs Affect Your Children? (RF)

- Short-term exposure in children and teens caused headache, irritation, concentration difficulties in school.

Heinrich et al., 2010 emf-portal.org

- Increase in ADHD.

Calvente et al., 2016 ncbi.nlm.nih.gov

- Motor function, memory and attention of school children affected.

Kolodynski and Kolodynska, 1996 ncbi.nlm.nih.gov

- Two-fold increase in leukemia in children.

Hocking et al., 1996 emf-portal.org

- Decreased survival in children with leukemia.

Hocking et al., 2000 emf-portal.org

- Impaired kidney development in rats (in-utero exposure).

Pyrpasopoulou et al., 2004 ncbi.nlm.nih.gov

- Impaired bone growth in mouse embryos.

Fragopoulou et al., 2010 emf-portal.org

- Combined exposure to environmental lead and mobile phone increases risks of ADHD.

Byun et al., 2013 journals.plos.org

- Associations between cell phone use and behavioural problems in young children.

Divan et al., 2012 emf-portal.org

- Children skulls absorb way more radiation than those of adults.

Gandhi, O. P., 2015 ieeexplore.ieee.org

- 10 year-old children absorb 153% more radiation than adults.

Gandhi, O. P. et al., 2012 tandfonline.com

- Children 11-15 years old using cellphones suffer have an increased risk for headaches, migraines and skin itches.

Chiu et al., 2015 emf-portal.org

- Cellphone use in teenagers increase behavioral problems.

Thomas et al., 2010 emf-portal.org

- Cellphone use increases risks of brain tumors, even at low exposures.

Söderqvist et al., 2011 ehjournal.net

- Positive relationship between cell phone use in children and increased risk for brain tumors.

Morgan et al., 2012 researchgate.net

- The relationship between MF and childhood leukemia remains consistent with possible carcinogenicity in humans.

Schuz et al., 2016 ncbi.nlm.nih.gov

- 500% increase brain cancer risk for teenagers using cellphones before age 20.

Hardell and Carlberg, 2013 ncbi.nlm.nih.gov