

## RF Effects at Low-Intensity Exposures Similar to Cell Towers and Wireless Smart Meters

Author/Date	SAR	Power Density	RFR effects at Low-Intensity Exposures
Akoev (02)		0.8 - 10	RFR caused emotional behavior changes (free-radicals)
Belyaev (05)	0.037	92.5	RFR caused genetic changes in human white blood cells
Boscolo (01)		5	RFR caused drop in NK lymphocytes (immune function decreased)
Capri (04)	0.07	175	RFR affected cell proliferation and membrane chemistry
Chiang (89)		4.0 - 15	RFR slowed memory/altered immune function in children
D'Inzeo (88)	0.008	2.0 - 4.0	RFR changed cell membrane acetylcholine-induced ion channels
Dolk (97)		1.3 - 5.7	RFR caused doubling of leukemia in adults
Dumansky (74)		5.0 - 10	RFR caused impaired nervous system activity
Dutta (89)	0.005	12.5	RFR caused calcium-efflux in cells - affects many cell functions.
Fesenko (99)		1	RFR caused significant effect on immune function (mice)
Forgacs (06)	0.018	45	RFR affected serum testosterone levels in mice
Hocking (96)		0.2 - 8	RFR caused two-fold increase in leukemia in children
Hocking (00)		0.2 - 8	RFR decreased survival in children with leukemia
Hutter (06)		.01 - .05	RFR caused headaches, concentration problems, sleeping problems
Ivaschuk (99)	0.026	65	RFR affected a gene related to cancer
Kolodynski (96)		0.16	RFR negatively affected memory, attention, motor function
Kesari (08)	0.0008	2	RFR induced double-strand DNA damage in rat brain cells
Khurana (2010)		0.05 - 0.1	RFR related to adverse neuro, cardio symptoms and cancer risk
Kundi (2009)		0.05 - 0.1	RFR related to headache, concentration and sleep problems, fatigue
Kwee (01)	0.0021	5.25	20 minutes of RFR at cell tower frequencies induced stress response
Lerchl (08)	0.08	200	RFR caused metabolic changes in hamsters
Magras (97)		0.17	RFR caused irreversible infertility (in mice at 5 generations)
Marinelli (04)	0.0035	8.75	RFR at 900 MHz fo 2-12 hours caused DNA breaks in leukemia cells
Navarro (03)		0.01 - 0.11	RFR from cell towers caused fatigue, headaches, sleeping problems
Novoselova (99)		1	RFR affected functions of the immune system
Oberfeld (04)		0.01	RFR (cell tower) = sleep disorders, poor concentration, fatigue
Nittby (07)		1.5	RFR reduced memory function in rats
Perssson (97)		1	RFR induced pathological leakage in blood-brain barrier
Phillips (98)	0.0024	6	RFR induced DNA damage in cells
Pyrpasopoulou (04)	0.0005	1.25	RFR exposure affected kidney development in rats (in utero exposure)
Salford (03)	0.02	50	RFR caused pathological leakage in blood-brain barrier
Sarimov (04)	0.0054	13.5	RFR affected human lymphocytes - stress response in cells
Schwartz (90)	0.00015	0.38	RFR affected calcium metabolism in heart cells
Somosy (91)	0.24	60	RFR caused structural changes in cells of mouse embryos
Stagg (97)	0.0059	14.75	RFR increased biomarker for cell division in glioma brain tumor cells
Stankiewicz (06)	0.24	60	RFR affected immune function of white blood cells
Tattersall (01)	0.0016	4	RFR caused changes in hippocampus, part of brain memory, learning.
Velizarov (99)	0.00002	0.00005	RFR decreased cell proliferation
Veyret (91)		37.5	RFR affected immune function
Wolke (96)	0.001	2.5	RFR affected calcium concentrations in heart muscle cells
Yurekli (06)	0.011	28.2	RFR affected production of free radicals in rat cells
Zwamborn (03)		0.13	RFR from 3G cell towers decreased cognition, well-being