

Radiofrequency Electromagnetic Microwave Radiation Exposures

We are constantly bombarded with pulsed, data-modulated, Radiofrequency Electromagnetic Microwave Radiation (RF-EMR) exposures due to the proliferation of cellular wireless, radio and television signals. The emergence of densified 4G/5G will exponentially increase these RF-EMR exposures, resulting in scientifically-established melatonin-suppression, immuno-suppression, immediate and direct neurological damages and acceleration of the growth of cancerous tumors. (In the table, below, $\mu\text{W}/\text{m}^2$ is millionths of a Watt spread over a one-square-meter area and **x** is a multiplier).

Power Output Scale	Consequences on Human Health (based on thousands of published studies)	$\mu\text{W}/\text{m}^2$
0.0005x	EEG altered in humans; alters brain waves	0.000001
1	FIVE BARS ON CELL PHONE	0.002
15,000x	Sleep disorders, weakness, fatigue, pain	30
50,000x	Human sensation	100
500,000x	Decreased cell growth, humans	1,000
600,000x	Childhood leukemia	1,200
1,250,000x	Impaired motor function, reaction time, memory, attention	2,500
3,750,000x	Altered white blood cells, humans	7,500
5,000,000x	Headache, dizziness, fatigue, weakness, insomnia, humans	10,000
15,000,000x	Microwave hearing	30,000
25,000,000x	Leukemia, skin, melanoma, bladder cancer	50,000
50,000,000x	Impaired memory, visual reaction time, humans	100,000
5,000,000,000x	FCC Maximum Permissible RF-EMR Exposure Guidelines, General Pop.	10,000,000

Conclusion: The measurements above explain why **close proximity** to the proposed million+ of microwave cell towers for the U.S. would be hazardous to the health of U.S. citizens. We need only **0.002 $\mu\text{W}/\text{M}^2$ (-85 dBm)** of RF microwave radiation for wireless telecommunications service. A locality can, therefore, set a **maximum output limit** from all frequencies/ antennas from Wireless Telecommunications Facilities (WTFs) in the public rights-of-way or in close proximity to where people live, sleep and heal at **0.1 Watt of Effective Radiated Power (ERP)** because that provides -85 dBm signal strength at a 1/2-mile down the street, with five bars on a cell phone and the **capacity needed** for everyone to make a call.

A typical WTF in the public rights-of-way outputs Effective Radiated Power at 1,500-7,500 watts ERP, which is between 15,000 and 75,000 times more power than is necessary to make "five-bar" cellular connections.