



## International Radio Frequency "RF" Exposure Limits for 1800 MHz Range

(Cell Phone, WiFi, Smart Meters, etc)

Location	Reference	Exposure Time	Limit Based On	Lower By	$\mu\text{W}/\text{m}^2$	V/m
USA	(FCC) IEEE C95.1-1999 and ICNIRP	30 minutes	Thermal / Heating	-	10,000,000	61.4
Most of Western Europe	IEEE C95.1-1999 and ICNIRP	30 minutes	Thermal / Heating	-	10,000,000	61.4
Canada	Safety Code 6 (2015), Table 5	6 minutes	Thermal / Heating	2.28 x	4,393,278	40.7
Russia	Sanitary Norms and Regulations 2.2.4/2.1.8.055-96	3 hours +	Biological Effects	100 x	100,000	6.14
China	UDC 614.898.5 GB 9175 -88	3 hours +	Biological Effects	100 x	100,000	6.14
Italy	Sanitary Norms and Regulations 2.2.4/2.1.8.055-96	3 hours +	Biological Effects	100 x	100,000	6.14
Most of Eastern Europe	Sanitary Norms and Regulations 2.2.4/2.1.8.055-96	3 hours +	Biological Effects	100 x	100,000	6.14
Switzerland	Ordinance on Protection from Non-ionising Radiation (NISV)	Long Term	Precautionary	100 x	100,000	6.14
Toronto Board of Health, Canada	Proposed 1999	Long Term	Precautionary	100 x	100,000	6.14
Salzburg Resolution on Mobile Telecommunication	Preventive public health protection, Salzburg, June 7-8, 2000	Long Term	Precautionary	10,000 x	1,000	0.614
European Parliament	Resolution 1815, Strasburg, May 27, 2011	Long Term	Precautionary	10,000 x	106	0.2
Bio-Initiative Report recommendation	Bio-Initiative Report 2012	Long Term	Biological / Precautionary	1666667 x	6	0.048
Europe	Europe AEM 2016 EMF Guidelines Day Time (Night Time) [Sensitive Populations]	Long Term	Biological / Precautionary	10,000,000 x	100 (10) [1]	0.0614 (0.00614) [0.000614]
Building Biology Guidelines Germany (Sleeping Areas)	SBM2015 - Level of Slight Concern (No Concern)	Long Term	Precautionary	100,000,000 x	10 (0.1)	0.006,14
Cell Phone Operational Requirements				10,000,000,000 x	0.001	0.000,061,4
Natural Cosmic Radiation	MAES 2000	Long Term	Natural Exposure	10,000,000,000,000 x	0.000,001	0.000,000,061,4
Average Indoor Urban Exposure (Toronto, & Calgary)	Safe Living Technologies Inc. / EMF Aware	Long Term	Measured		200 - 5000	0.3 - 1.4

## International EMF Exposure Limits for AC Electric and AC Magnetic Fields

50/60z (High Voltage Power Lines, Home Electrical Wiring, Power Cords, Appliances)

Location	Reference	Limit Based On	ELF (Frequency < 2KHz)		VLF (>2kHz) Dirty Electricity	
			AC Magnetic Field (mG)	AC Electric Field (V/m)	AC Magnetic Field (mG)	AC Electric Field (V/m)
Canada	ICNIRP 1998	Nerve and Muscle Stimulation	833	5,000		
USA	ACGIH 1998	Nerve and Muscle Stimulation	1,000	25,000		
Germany	DIN/VDE	Nerve and Muscle Stimulation	50,000	20,000		
Sweden	MRP	Biological / Precautionary	3	25		
Sweden	TCO	Biological / Precautionary	2	10		
Switzerland		Biological / Precautionary	10			
WHO "possibly carcinogenic"		Biological / Precautionary	3-4			
Bio-Initiative Report recommendation	Bio-Initiative Report 2007	Biological / Precautionary	1			
US Congress	Recommendation 1996	Biological / Precautionary	2	10		
Building Biology Guidelines Germany (Sleeping Areas)	SBM2015 - Level of Slight Concern (No Concern)	Biological / Precautionary	1.0 (0.2)	1.5 (0.3)		
Europe	EUROPAEM EMF Guideline 2016 Where people spend > 4hrs Day time (Night Time) [EHS Sensitive Population]	Biological / Precautionary	1 (1) [0.3] 4hr Avg 10 (10) [3] 4hr Max	10 (1) [0.3] 4hr Max	0.01 (0.01) [0.003] 4hr Avg 0.1 (0.1) [0.03] 4hr Max	0.1 (0.01) [0.003] 4hr Max
Natural Radiation	MAES 2008	Natural Exposure	0.0002	0.0001		
Average Indoor Urban Exposure (Toronto & Calgary)	Safe Living Technologies Inc. / EMF Aware	Measured	0.4 to 2.0	5 to 25		