

# EMF / RF Radiation Presentation

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# INTRODUCTION

Attention to Electro Magnetic Fields and Radio Frequencies is critical because increasingly more devices emitting EMF's and RF's are installed in homes, offices and public spaces. The cumulative effect poses serious biological consequences. Everyone should be educated of the consequences to themselves and their neighbours of EMF and RF emitting devices in their houses, apartments and condominium units. Indeed, exposure to these fields is being exacerbated by installation of devices, including the Fibre optic fibers, to support wireless 5G Modem TV services.

## Identification and Radiation Warnings

- Since the 1930's, **Non-thermal** effects of microwave radiation have been recognized by the former Soviet Union and Germany.
- Over the past 80 years, there has been substantial credible evidence from over 6,000 research studies showing biological damage from exposure to Electromagnetic Radiation and non-ionizing radiation from radio frequencies and microwave radiation.
- In May 6, 2011, more than 180 scientists and doctors from 36 countries warned of the dangers of 5G, that it will lead to massive increase in involuntary exposure to electromagnetic microwave radiation. Reference: EU 5G Appeal – Scientists warn of potential serious health effects of 5G.
- In May 31, 2011, The World Health Organization (WHO) International Agency for Research for Cancer (IARC) declared RF electromagnetic fields (EMFs) as potentially carcinogenic to humans (Group 2B).
- “WIRELESS WARNINGS FOR ALL: The continued rollout of wireless technologies and devices puts global health at risk from unrestricted wireless commerce unless new and far lower exposure limits and strong precautionary warnings for their use are implemented.” Reference: BioInitiative 2012 Conclusions Report, <http://www.bioinitiative.org/conclusions/>

## Identification and Radiation Warnings (Continue)

- October 10, 2016
- In a publication, ‘ No One is Protecting Canadians from Man-Made Radiation’, **Canadian Armed Forces Electronics Warfare Expert - Captain, Jerry G. Flynn (Retired)**, claims “1-5 GHz, which militaries have known for decades are “the most dangerous to humans, as they penetrate all organ systems of the body, thus putting all human organs at risk !”
- **Dr. Zory Glaser (Retired) of the US Naval Surface Weapons Centre**, Navy’s Bureau of Medicine and Surgery, at the Naval Medicine Research and Development Command, Non-Ionizing Radiation Bio-effects Laboratory, provided crucial evidence in his “Bibliography on the Biological Effects of Microwave and Radio Frequency Radiation.” **The 1971 – 1972 Glaser Documents** contained **2311 International references on the biological responses to microwave and radio frequency radiation.**
- **Barrier Trower, former Royal Navy Microwave Weapons Expert, UK.**, said the same and produced a video on “Microwave, WIFI, Cell Phone Danger and Avoiding It!”
- In 2012, **Barrie, Ontario City Councilor, Mr. John Brassard** raised this issue on CBC and a **Conservative MP** also raised this issue in the Canadian Parliament.
- Michigan, USA Senator Patrick Colbeck Testifies on Health Risks of 5G  
<https://www.jrseco.com/michigan-senator-testifies-on-health-risks-of-5g/?c=d214aac060fa>

## Which is the Canadian regulating body?

- Industry Canada – Safety Code 6: Health Canada's Radio Frequency Exposure Guidelines

## What are 'Safe' Levels of Magnetic Fields for Us? Who Do You Believe?

By Canadian Armed Forces Electronics Warfare Expert - Captain, Jerry G. Flynn

### “Non-Industry EMF Experts Recommend

- 0.1 mG is the desired level for homes, schools and workplaces.
- <0.2 mG is the maximum level Dr. Neil Cherry recommended for schools!
- <1 mG is the maximum level he considered 'safe' for the general public!
- <1 mG is considered by scientists to be a 'safe' level for homes.
- >3 mG is known to be associated with leukemia in children!
- <3 mG is the current US Industry standard.
- 1 mG is recommended in the BioInitiative 2012 Report.



## What are 'Safe' Levels of Magnetic Fields for Us? Who Do You Believe Continue?

By Canadian Armed Forces Electronics Warfare Expert - Captain, Jerry G. Flynn

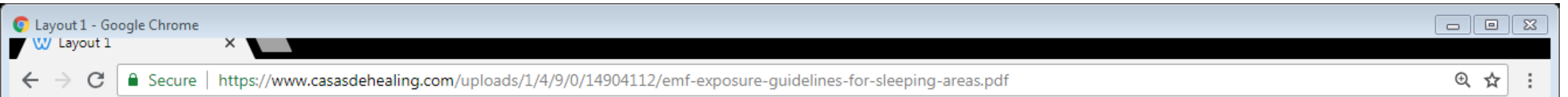
### US Military-Industry Controlled Agencies and Allies Say

- 2,000 mG for Public and 10,000 mG for Workers says **ICNIRP**!
- 2,000 mG for Public and 10,000 mG for Workers says **WHO** (even though in 2002, its own International Agency for Research on Cancer (**IARC**) classified LF magnetic fields a Class 2B ("Possible") carcinogen!
- 2,000 mG for Public and 10,000 mG for Workers, says the **UK**!
- 9,040 mG for Public and 27,100 mG for Workers, says **ICES**! [25]
- No ceiling required -----says **USA Federal Gov't**!
- No ceiling required -----says **Health Canada**!
- Because Canada does not have its own national guidelines, Health Canada, instead, follows ICNIRP's recommendations and says that magnetic fields of **833 mG for Public Exposure and 4,200 mG for Occupational Exposure are safe!** [26]"

## International regulating bodies and their Exposure Guidelines

- Precautionary EMF / RF – Exposure Guidelines for Sleeping Areas
- <https://www.casasdehealing.com/uploads/1/4/9/0/14904112/emf-exposure-guidelines-for-sleeping-areas.pdf>
- International EMF Exposure Guidelines
- <https://www.casasdehealing.com/uploads/1/4/9/0/14904112/international-emf-exposure.pdf>
- International RF Exposure Guidelines
- <https://www.casasdehealing.com/uploads/1/4/9/0/14904112/rf-exposureguidelines-international.pdf>

# RADIOFREQUENCY / MICROWAVE EXPOSURE GUIDELINES



Creating Healthy Living Spaces

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## RADIOFREQUENCY / MICROWAVE EXPOSURE GUIDELINES

(High Frequency Electromagnetic Waves)

### 1> BUILDING BIOLOGY PRECAUTIONARY GUIDELINES (SBM-2015) For Sleeping Areas

Power density	No Concern	Slight Concern	Severe Concern	Extreme Concern
microWatts per square meter $\mu\text{W}/\text{m}^2$	< 0.1	0.1 - 10	10 - 1000	> 1000
microWatts per square cm $\mu\text{W}/\text{cm}^2$	< 0.000,01	0.000,01 - 0.001	0.001 - 0.1	> 0.1
milliWatts per square meter $\text{mW}/\text{m}^2$	<0.000,1	0.000,1 - 0.01	0.01 - 1	> 1
Signal strength				
Volts per meter V/m	< 0.006,14	0.006,14 – 0.061,4	0.061,4 – 0.614	> 0.614

## 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	AC Magnetic Field mG	AC Electric Field V/m
Canada	ICNIRP 1998	Nerve and Muscle Stimulation	833	5,000
USA	ACGHI 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)	SBM2008 - Level of No Biological Concern	Biological / Precautionary	0.2	0.3
Natural Radiation	MAES 2008	Natural Exposure	0.0002	0.0001
Average Indoor Urban Exposure Toronto, Canada	Safe Living Technologies Inc. 2011		0.4 to 2.0	5 to 25

## Cable TV and Fibre Optic TV differences

- **Cable TV**

- TV Signals are through coaxial cable, thus no microwave radiation.

- **Fibre Optic TV**

- Signals to TV Sets are through wireless medium of a 5 GHz microwave modem box.

- Note: All wireless modems operate on 2.4 GHz. Newer boxes are now with the more powerful microwave signals of both frequencies of 2.4 GHz and 5GHz.

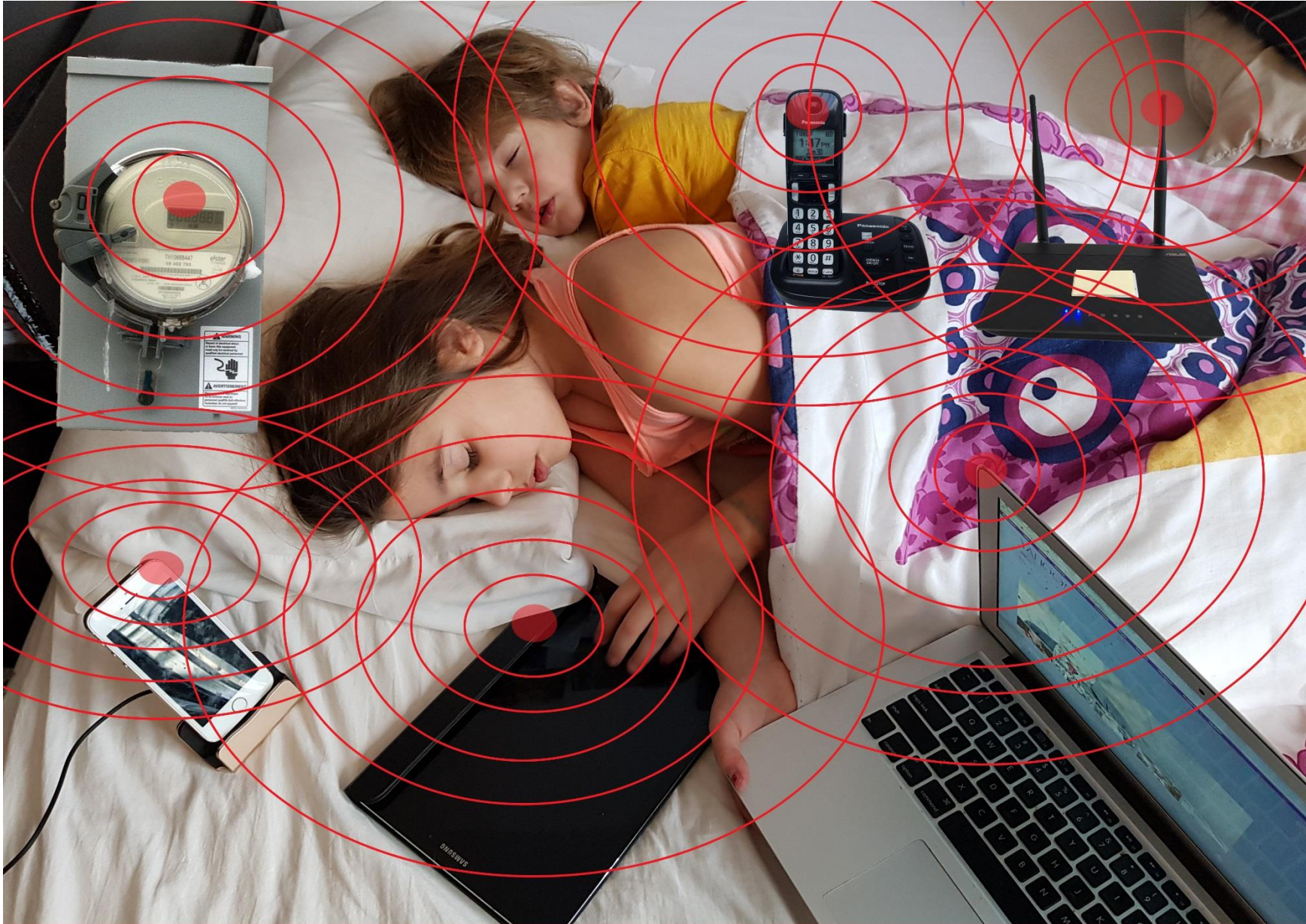
## What about service wires located behind our walls throughout the building? Do they not emit radiation?

- Yes, but generally very low - less than 2mG and should not be of a concern.
- *The precaution is not to sleep or sit close to the main Fuse Panel – keep a distance of 10 feet away.*
- *Sitting / working next to a wall or post that carry Hydro Power Feeds can be a concern. Between 1994 – 1996, in Telecommunication Hamilton, Ontario Building (7 Floors) in Canada, six female employees on the same floor at the location developed breast cancer. Lora Wilson was exposed to 27 mG. During that time, chemotherapy and medicines to treat those conditions were not readily available or affordable as they are today. Those employees and their families, including their children, continue to suffer the severe consequences of the ailments due to unsafe EMF exposure. Reference: Everyday Carcinogens – Stopping Cancer Before It Starts by Lora Wilson.*
- Lora Wilson document presented at McMaster University, March 26, 1999.

## Radiation Emitting Devices :

- Fibre Optic TV Wireless Modem Box – emits over 2,000 uW/m<sup>2</sup> (microwatt per meter square) radiation.
- Cordless phones - emits over 2,000 uW/m<sup>2</sup> radiation.
- Cell Phones
- According Dr. Dietrich Klinghardt, “Smart Meter is No. 1 and Cordless phone is no. 2 ...” “It is absolutely destructive to the human health.”
- Wi-Fi Modems – emit over 2,000 uW/m<sup>2</sup> radiation.
- Wireless baby monitors
- Wireless mouse
- Wireless keyboards
- Bluetooth devices
- Microwave oven
- CFL (Compact Fluorescent Lamp) energy-saving light bulbs. The CFL contains toxic mercury vapour, which emits high frequency Ultraviolet radiation. The mercury vapour goes into the air and onto the skin, which is devastating to good health.





EMF Radiation



- **Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation**  
**Dr. Dietrich Klinghardt MD, PhD Smart Meters and EMR RADIATION: Health Crisis Of Our Time!**

- 6,000 research studies, Reference to Dr. Dietrich Klinghardt MD, PhD presentation
- Smart Meters and EMR RADIATION: Health Crisis Of Our Time!
- <https://www.youtube.com/watch?v=8RP7vmFeo0k>
- Mobile and Cordless Phone Radiation Alters Brain Proteins
- “This permanently destroys and alters the manufacturing of these proteins – meaning it completely changes the human organism permanently.”
- “So in Neurological disease there is an exponential increase to Parkinson, MS ...
- ... Body Weight increase ....”
- Autism: Dr. Dietrich Klinghardt is possibly the only medical doctor who has treated autism cases successfully. A study done by Dr. Dietrich Klinghardt found the microwave exposure was elevated for mothers with autistic children than mothers who gave birth to healthy children. Dr. Dietrich Klinghardt was not able to publish this study, “because of the special interest that have found their way into the medical journals... It is important to say now the Communications Industry has become the largest lobbying industry in politics, larger than big pharma. In fact, 3 times more powerful than the pharmaceutical industry which use to be the most powerful arm bending the decision in Washington and in all Western government of that purpose.”

## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

**Dr. Dietrich Klinghardt MD, PhD Smart Meters and EMR RADIATION: Health Crisis Of Our Time!**

- The Greek study by Adamantia F. Fragopoulou

“Adamantia F. Fragopoulou, M.Sc., PhD Candidate, in the Dept. of Cell Biology and Biophysics at University of Athens, Greece, lead author of the study, says,”

- “We have demonstrated that 143 proteins are altered after electromagnetic radiation, including proteins that have been correlated so far with Alzheimer’s, glioblastoma, stress and metabolism. In its perspective, this study is anticipated to throw light in the understanding of such health effects like headaches, dizziness, sleep disorders, memory disorders, brain tumors, all of them related, to the function of the altered brain proteins.”
- Cyprus removes Wi-Fi from Kindergartens and halts wireless deployment into public elementary schools.
- List of 123 Reviews on Non-thermal Effects of Microwave/Lower Frequency EMFs by Martin L. Pall
  - <http://mercola.fileburst.com/PDF/123ReviewsNonthermalEffectsMicrowaveLowerFrequencyEMFs-MartinPall.pdf>
- Incidence of glioblastoma brain tumor increased tenfold between 1985 and 2015 in the U.K.
- <https://www.jrseco.com/incidence-of-glioblastoma-brain-tumor-increased-tenfold-between-1985-and-2015-in-the-u-k/?c=d214aac060fa>

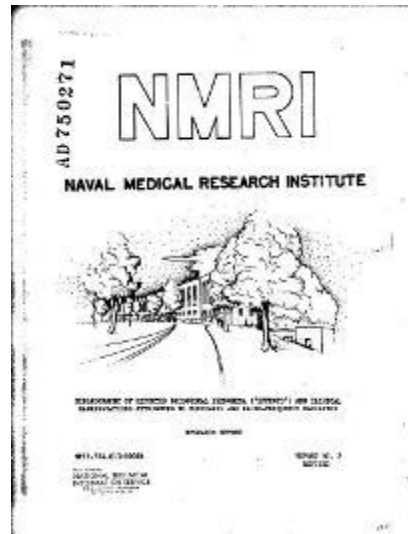
## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

Dr. Devra Davis' presentation, "The truth about mobile phone and wireless radiation"

- Case Reports of tumors that were linked to cell phones: 38 + Cases (38:15)
- <https://www.youtube.com/watch?v=BwyDCHf5iCY> 1:01:29
- "Increased Glioma risk 3 found in all case-control studies published since IARC 2011 (40:44). This study (Sweden – Hardell et al. and ... in France) showed that the risk is 3 times higher for those who use mobile phone that those who do not use them.
- **India** 2012 Exposure Limits lowered to 1/10 of ICNIRP SAR labeling mandated on phones.
- 2013: Indian Supreme Court upheld Rajasthan State Court decision to remove all cell towers from the vicinity of schools, hospitals and playgrounds because of radiation "hazardous to life." (54:19)
- **Israel** national institute on non-ionizing radiation
- No Wi-Fi in kindergarten (54:56)
- Prefer wired over wireless in schools
- **Belgium** Law Implemented 2014 .No phones designed or sold to children under age 7
- Children's mobile phones may no longer be sold. (55:20)
- **Canada**
- Canadian Parliamentary Health Committee urges that test systems be updated & public education about risks (55:59)
- Microwave radiation is now a "serious public issue" June 18, 2015"

## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

- Zory Glaser, 1972, Bibliography,  
**2311 References of Biological Responses**
- by Dr. Magda Havas, BSc, PhD
- July 5, 2010.
- <http://www.stayonthetruth.com/zory-glaser-1972-bibliography-biological-responses.php>
  - **Naval Medical Research Institute MF12.54.015-004B,  
Report No. 2, revised. 106 pp.**  
[NOTE: this document was shorted to 25 pages to post it  
and does not contain all the 2311 references.]
- [\[PDF\] Glaser, Z.R. 1972. Bibliography of reported biological phenomena \('effects'\) and clinical manifestations attributed to microwave and radio-frequency radiation](#)



## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

- Below is a list that was taken from Lora Wilson article on the biological effects from EMF exposure. The Zory Glasier 1972 Bibliography classified the biological effects into 17 categories. **The illnesses listed below are included in the Glasier List.**
- **EMF exposure. A list Lora Wilson compiled from her research.**

EMFs has been linked to:

1. Parkinson's disease
  2. Autism (prenatal exposure is suspected)
  3. Downs syndrome
  4. Factor X Syndrome
  5. Attention Deficit Disorder (ADD)
  6. Behavioural problems
  7. SIDS (low melatonin levels in the brain)
- Idiopathic Environmental Intolerance (hypersensitivity to EMF's)
    8. Leukemia
    9. Allergies with symptoms of:
      - Debilitating fatigue
      - Depression
      - Decreased memory
      - Sleep disturbance
      - Disorientation
      - Unusual behaviours and
      - Convulsions (Symptom's which dissipate when exposure stops)

## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

- 10. Chronic Fatigue Immune Dysfunction Syndrome also known as: Chronic Fatigue Syndrome, Low natural killer cell syndrome, Epstein-Barr virus, Chronic mononucleosis and Yuppie flu.

The symptoms are:

- Debilitating fatigue
- Low grade fevers
- Sore throats
- Tender or swollen lymph nodes
- Heart irregularities
- Inability to concentrate
- Mental disorientation
- Visual and sleep disturbances
- Abnormal weight change +/-
- Profound muscle pain and weakness
- Brain tumors are considered to be markers for EMF exposure.

## Biological damage due to exposure to Electromagnetic Radiation, non-ionizing radiation (continue)

With EMF exposure, the following can be observed:

- An increase in miscarriages and birth defects
- Increases in cancer incidence
- Altered blood pressure
- Chronic stress
- Immune system dysfunctions
- Changes in white and red blood cell counts
- An increased metabolism
- Stimulation of the thyroid
- Chronic fatigue and
- Headaches

According to Dr. Dietrich Klinghardt MD, PhD, 80 percent of the health problems that we see today are attributable to the exposure to man-made Electro Magnetic Fields.

## EMF / RF Safety Recommendation to minimize radiation exposure:

- Resort to wired Cable over wireless.
- Place Wi-Fi at least 10 feet away from your computer.
- Turn off Wi-Fi when not in use.
- Turn off Wi-Fi when going to sleep or buy a timer switch and program it to your On – and – Off time.
- Stop using wireless phone and change back to corded telephone, especially for those who suffer from any neurological related illness. 6.0 Wireless phone means that it operates on 6.0 GHz microwave frequency. Note, microwave ovens operate at a frequency of 2.45 GHz.
- Unplug the power cord of Wireless phones in the night, it is when most of the damage is being done, as the Para-sympathetic nervous system is active and sympathetic nervous system is withdrawing.
- Stop using other wireless devices such as computer mouse, keyboards, blue tooth devices, speakers, headsets, etc.
- Turn off Cell phones before sleeping or place away from bedroom.
- Use a corded headset or speakerphone when using a cell phone. This advice is contained in the fine print of the cell phones literature, not to place against the body. For example, in an Apple iPhone, go to Settings > General > About > Legal > RF Exposure > Here you will find complicated information pertaining to the SAR (Specific Absorption Rate) at which the body absorbs RF Radiation. This is why in Europe, Israel and North America cell phones come with a corded headset.
- Keep or hold mobile phones 30-40 cm distance away when in use. Reference: World Health Organization: Electromagnetic fields and public health: mobile phones. Fact sheet No. 193, Reviewed October 2014.  
<http://www.who.int/mediacentre/factsheets/fs193/en/>
- No cell phone in pockets if possible, turn off or put in Airplane Mode. Cell phone is an active Microwave device that constantly sends and receives microwave frequency from the various cell towers, even when in idle state. A Gauss meter can be used to demonstrate / measure the microwave radiation emitting from the cell phone.



## EMF / RF Safety Recommendation to minimize radiation exposure (continue):

- Turn off the wireless option on cell phones, laptops, printers and other related wireless devices. These devices emit microwave signals, even when not in use. Go to Settings, Wi-Fi and turn off the wireless option.
- Exercise extreme caution with young children and cell phone exposure - it is best for them not to use it at all.
- Put children wireless gadgets in Airplane Mode to avoid exposing them to unnecessary radiation.
- Do not rest personal computers/laptops, or other wireless gadgets on laps or against the body.
- Turn cell phone off in or put in Airplane Mode when in elevators, as the elevator car becomes a big microwave oven.
- In May 2011, The World Health Organization (WHO) International Agency for Research for Cancer (IARC) declared RF electromagnetic fields (EMFs) as potentially carcinogenic to humans (Group 2B).
- Maintain a distance of 12 inches or more away from work and personal computer screens.
- Turn cell phone off in or put in Airplane Mode when in elevators, as the elevator car becomes a big microwave oven.
- For those with autism, neurological disorders and EHS, turn off the circuit breaker/s for the bedroom at night.
- Pregnant mothers should wear protective EMF clothing over their belly.
- No wireless microwave baby monitors.
- See complete list on EMF / RF Safety Recommendation at
- <https://www.casasdehealing.com/emf-safety-recommendations.html>

Thank you very much!

By Satesh Narain

For more related information on EMF, please see website below under the EMF Tab.

**Casas de Healing**  
**[www.casasdehealing.com](http://www.casasdehealing.com)**