The Health Dangers of Wi-Fi Radiation

Dr. Fathi Neana, MD Chief of Orthopaedics Fakhry and Algarzaie Hospital Saudi Arabia July, 14 - 2017



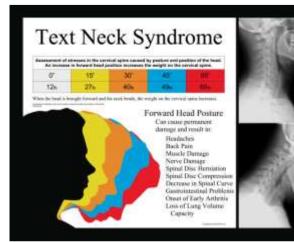
Text neck syndrome

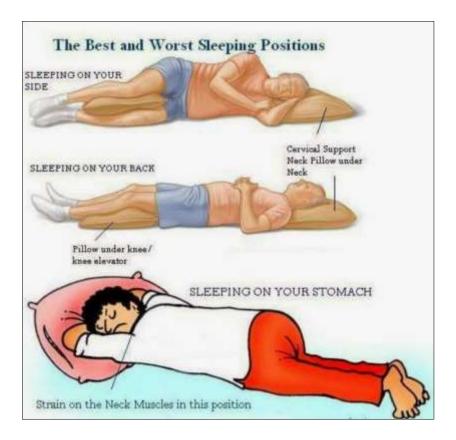


photos courtesy of @ BackCare











Understand the Effects of Wi-Fi Wi-Fi Dangers Made Worse by <u>Cumulative Effect</u>

Wi-Fi does not immediately cause diagnosable illness. For this reason, many of us choose to ignore that it can have any affect at all. However, it can interfere with our bodily functions which eventually progresses into diseases like cancer and neurodegenerative diseases

These complex diseases develop over decades, it is difficult to conclusively show that the increase in wireless signal exposures directly cause the diseases. International Agency for Research on Cancer (IARC) <u>considers wireless radiation as a class 2B possible</u> <u>carcinogen</u> due to limited evidence.

Small number of studies are leaning towards showing that electromagnetic radiations, including Wi-Fi, are not safe

Epidemiological studies that follow humans who use Wi-Fi and cell phones for a few years are not conclusive. However, rodent studies that follow the animals throughout their lifetime find that wireless radiation does cause cancer or worsen cancer prognosis. The same animal studies also observed other changes in the brain and <u>blood brain barrier</u> in animals that are exposed to the radiation.

Understand the Effects of Wi-Fi Wi-Fi Dangers Made Worse by <u>Cumulative Effect</u>

Wireless routers – as well as Bluetooth and similar wireless systems – give off electromagnetic radiation in the low-gigahertz frequency. This level is considered potentially dangerous to people. And the danger is compounded by several factors:

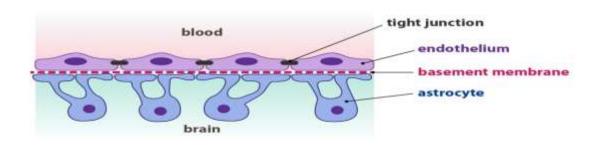
Just like the wireless signals themselves, the EMFs can pass through walls.

Most routers are not turned off at night, so you are exposed 24/7.

You are not only exposed to EMFs from your own router. Did you ever search for a wireless signal and see not only your wireless network, but also your neighbor's and the one from the business down the street? All of them emit EMFs.

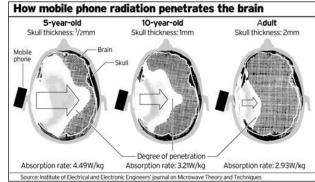
Scientists and researchers are uncovering the health risks of EMFs. Depending on the level and the length of exposure, Those risks can range from insomnia and headaches to tumors.

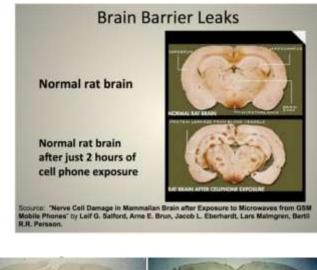
The Brain and Wireless Radiation Blood Brain Barrier Permeability



Blood Brain Barrier

- Brain capillaries show no fenestrations or pinocytotic (transportation) vesicles and have tight junctions that almost fuse adjacent cells. This anatomy creates the blood-brain barrier (BBB).
- The BBB separates plasma from the interstitial space of the CNS and affects in a critical fashion the traffic of molecules in and out of the brain.
- Lipophilic compounds cross the BBB easier than hydrophilic ones do; small lipophilic molecules diffuse freely.
- Some hydrophilic compounds enter the brain with the help of transporters; larger molecules enter via receptor-mediated endocytosis.
- The BBB protects the brain from toxic substances but impedes also the entry of drugs.
- Hypertonic stimuli and chemical substances including glutamate and certain cytokines can open the BBB.
- HIE and inflammatory mediators produced in sepsis disrupt the BBB.







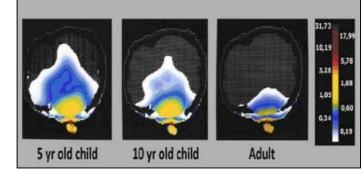
The Brain and Wireless Radiation

Children's Risk of ADHD, Autism and Neurological Problems

EMF/RFR from wifi and cell towers can exert a disorganizing effect on the ability to learn and remember Can also be destabilizing to immune and metabolic function

-Martha Herbert MD, pediatric neurologist, Harvard Medical School







International Agency for Research on Cancer

World Health Organization

PRESS RELEASE Nº 208

31 May 2011

IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

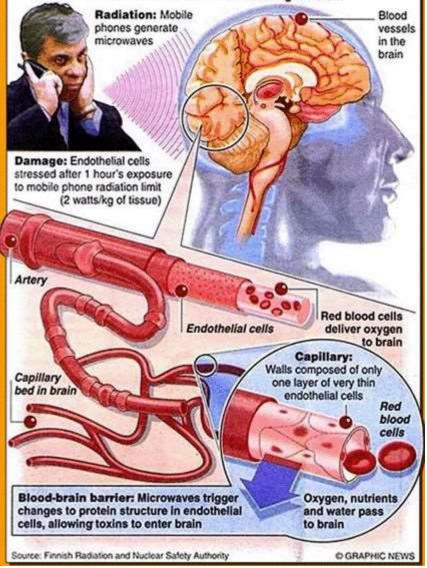
Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for clioma, a malignant type of brain cancer¹, associated with wireless phone use.

Background

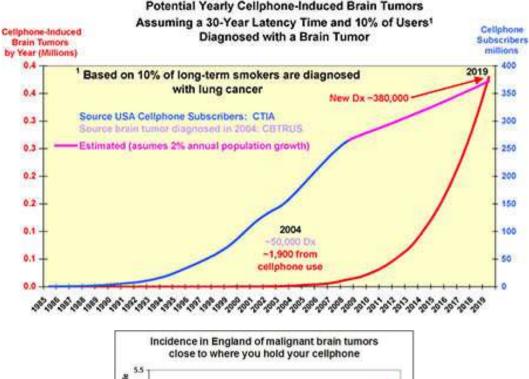
Over the last few years, there has been mounting concern about the possibility of adverse health effects resulting from exposure to radiofrequency electromagnetic fields, such as those emitted by wireless communication devices. The number of mobile phone subscriptions is estimated at <u>5 billion globally</u>.

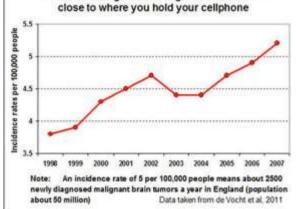
Potential new risk from mobile phones

Scientists have discovered that exposing human endothelial cells – which line the minute blood vessels in the brain – to mobile phone radiation can damage the blood-brain barrier, a vital safety barrier that stops harmful substances in the blood from entering the brain



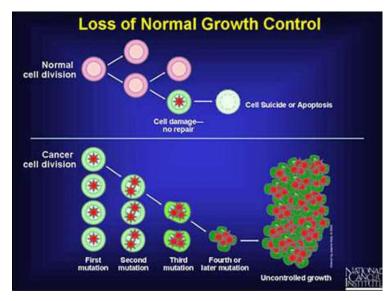
Cancer and Wireless Radiation











<u>44 Reasons To Believe Cell Phones Can Cause Cancer</u>

From Global Research - By Lloyd Burrell

Global Research, February 27, 2016

Cell phones emit microwave radio-frequency radiation. Fact.

This radiation has the ability to penetrate our bodies. Fact.

Our governments do virtually nothing to protect us from these dangers. Fact.

And yet there is strong evidence, multiple peer reviewed studies, to indicate that cell phones cause cancer and other diseases.

Take a look for yourself at these facts.

But first let's just consider what cancer is.

Cancer And DNA

The National Cancer Institute says,

"Cancer is a term used for diseases in which abnormal cells divide without control and are able to invade other tissues.....all cancers begin in cells.....cells grow and divide in a controlled way to produce more cells as they are needed to keep the body healthy. When cells become old or damaged, they die and are replaced with new cells. However, sometimes this orderly process goes wrong. The genetic material (DNA) of a cell can become damaged or changed, producing mutations that affect normal cell growth and division. When this happens, cells do not die when they should and new cells form when the body does not need them."

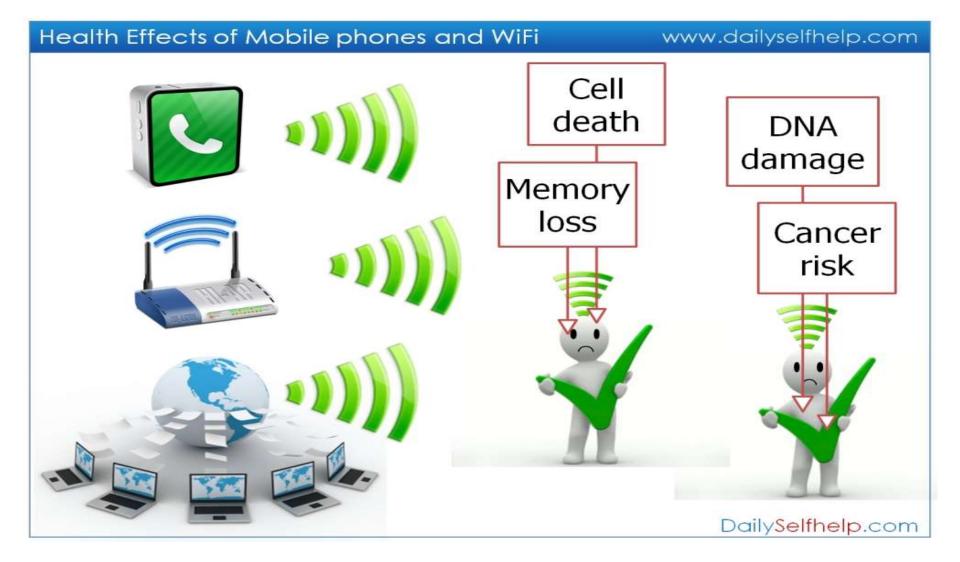
So cancer typically involves abnormal cell division and DNA damage and in some cases cells may form a mass of tissue called a tumor.

Types Of Brain Tumor

In the studies done to date cell phone radiation exposures are principally linked to two types of brain tumor, gliomas and acoustic neuromas.

Gliomas, a type of tumor that starts in the brain or spine are typically malignant. Gliomas are particularly deadly. Most people survive only 1 to 3 years after diagnosis.

Acoustic neuromas though non-malignant (low-grade cancer), are in many cases life threatening given that they are an intracranial tumor.





IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as **possibly carcinogenic to humans (Group 2B)**, based on an increased risk for **glioma**, a malignant type of brain cancer¹, associated with wireless phone use.

This classification applies to all RF-emitting devices, including WiFi.

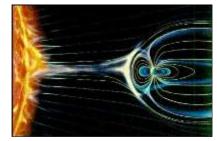
- Robert A. Baan, PhD, IARC

This classification justifies the implementation of the Precautionary Principle.

- Dr. Darius Leszczynski, IARC

What is true is we are cornered in a forest of pollutants

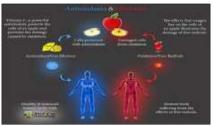
Not only atmospheric +ve charges, the wireless Wi-Fi devices + Cell Phone Radiation (EMF – RF) and the static electricity But also other pollutants

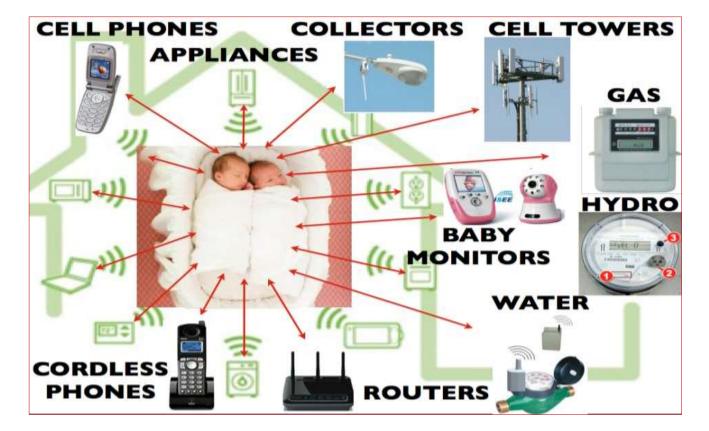




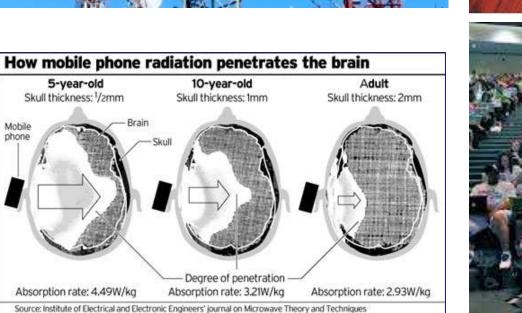


















The American Academy of Environmental Medicine Statement on WiFi in Schools

Adverse health effects from wireless radio frequency fields, such as learning disabilities, altered immune responses, and headaches, clearly exist and are well documented in the scientific literature. Safer technology, such as hard-wiring, is strongly recommended in schools.

Health Effects From Wireless Microwave Radiation Transmitters





Effects on Wildlife: Impaired Fertility in Birds

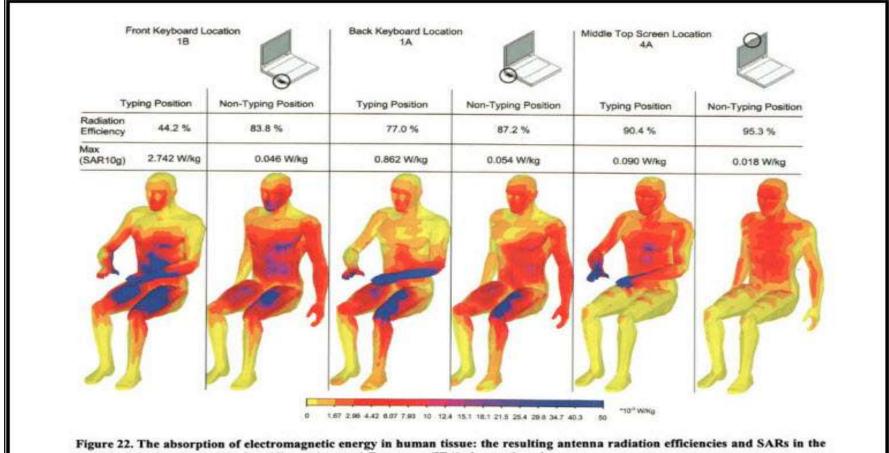


In Malindisk, Spain, a study compared the productivity of stories reading slower and farther from a cell phone lower site 30 meets when 200 makers of the antennae, were compared with 30 meets gradier than 300 meters from the



BEES, BIRDS AND MANKIND Destroying Nature by 'Electrosmog'

Radiation absorption rates from Wi Fi - enabled labtops exceed the SAR level of many cell phones SAR : specific absorption rate



operator's body at 2.44 GHz for different inverted-F antenna (IFA) element locations.

10 Shocking Facts about the Health Dangers of Wi-Fi

Dr. Edward Group DC, NP, DACBN, DCBCN, DABFM Published on April 2, 2014, Last Updated on October 2, 2015

- 1. Contributes to the Development of Insomnia
- 2. Damaging to Childhood Development
- 3. Affects Cell Growth
- 4. Derails Brain Function
- **5. Reduces Brain Activity in Females**
- 6. Neutralizes Sperm
- 7. May Impact Fertility
- 8. Provokes Cardiac Stress
- 9. Linked to Cancer?
- **10. You Can Protect Yourself**
- Limiting Exposure and Staying Healthy

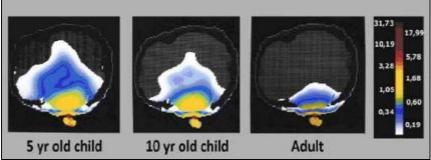




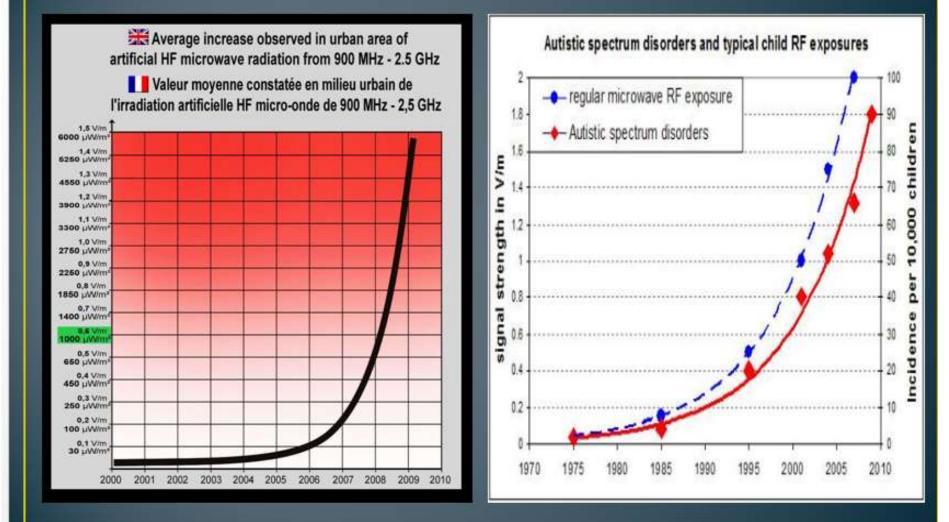
Recognizing the Symptoms of Wireless Radiation Sickness

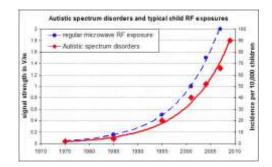
Fatigue **Headaches/Migraines Nose Bleeds Difficulty Concentrating Dizziness - Nausea - Vertigo Visual and Auditory Distortion Racing Heart Rate (Tachycardia)** Anxiety **Depression Memory Loss Attention Deficit** Skin Rash Hyperactivity, ADD, ADHD **Night Sweats** Insomnia

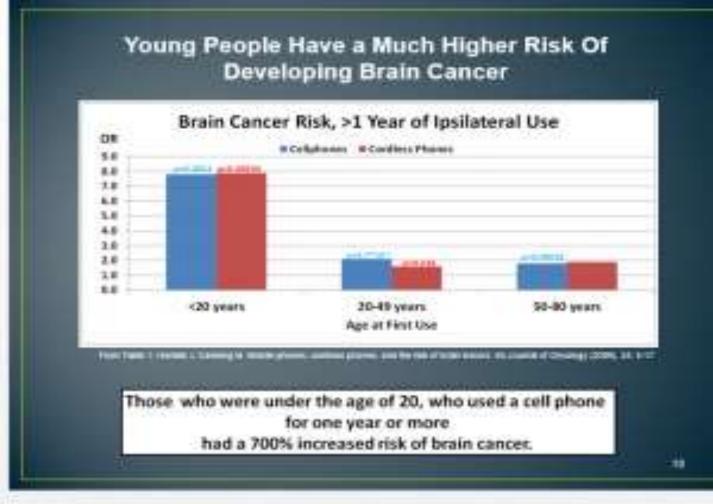




Increases in RF Exposure and Autism







Melatonin Reduction Powerful antioxidant, antidepressant and immune system enhancer that regulates circadian rhythm. > 25 min/day -**↓**Melatonin production **Prolonged use** (Burch 1997, 2002, Graham C 2000) arthritis ↑cancer miscarriage increased eye stress renal impairment **DNA** damage chronic fatigue, depression childhood leukemia sleep disturbance cardiac, reproductive and neurological diseases



Attention All Parents:

Does your child have any of the following symptoms during or after school?

Headaches/Migraines Mood/Behavior Problems Hyperactivity Learning Problems Dizziness/Nausea Memory Loss Erratic Heart Rate Asthma/Shortness of Breath Difficulty Concentrating Frequent/Chronic Illness Blood Sugar Fluctuations Muscle Spasms Muscle Aches/Joint Pain Distorted Hearing Allergies Anxiety/Depression Skin Rashes Numbness/Tingling Sleep Difficulties Night Sweats Weakness/Fatigue

If so, your child may be suffering from radiation sickness.

Microwave transmitters for wireless Internet (Wi-Fi) are installed in many area schools. These devices are exposing your child to non-ionizing radiation for 6 hours per day, 184 days per year.

Non-ionizing radiation has been confirmed through thousands of scientific studies to cause all of the above symptoms and chronic, cumulative exposure can lead to serious, life-threatening health problems such as cancer, leukemia, brain tumors, and diabetes.

Have you given consent for your child to be exposed to this health risk?

The fact that Wi-Fi is in widespread use does NOT mean it is safe.

Cumulative Classroom Radiation

- 30 Children, each on a wireless computer
- Exposure of any one child in the room
- Estimated power density
 60,000 to 80,000 μW/m²

Bill Curry, PhD, Consulting Physicist, EMSciTrek, 2/24/2000



NEWS

TRENEONS Haches, croeper, soldier, spy | Rodger | Fard | Canadiens | Derates | Backberry | Ostares

Ontario Catholic teachers' union recommends pulling plug on Wi-Fi in schools

20 March 2013

France: Electromagnetic Waves: The Precautionary Principle Soon to be Applied in Schools

Voted 19 March 2013 at the French National Assembly (Lower House), an amendment of the law stipulates that the establishment of the digital educational program foreseen by the text lawors "wired" connections, that is, Ethernet, rather than WiFFi, in order to protect children. This amendment still has to be passed in the French Senate (Upper House); it is not certain that this will happen because the industrial lobby is powerful and has "contaminated" a number of members of Parliament.



Electromagnetic Waves : The Precautionary Principle Soon in Schools Le Pavisien.fr / AFP, 19 March 2013 (translated from French)

It is the first time that the precautionary principle will be applied in France to children. Failing to succeed with adoption of their draft legislation on electromagnetic waves in January, the ecologist deputies have obtained approval of draft school referm legislation for precautionary measures in schools.

Voted Tuesday at the National Assembly, an amendment of the law stipulates that the public service establishment of the digital educational program foreseen by the text favors "wired" connections, that is, Ethemet, rather than Wi-Fi.

Ontario Teachers Union wants cell phones turned off in the classroom

Thu, 15 Aug, 2013 4130 FM EDT

TORONTO, Aug. 15, 2013 /CNW/ - This afternoon the Elementary Teachers Federation of Ontario voted at its annual general meeting that student cell phones abould be turned off and stored during school hours, unless a teacher gives permission.

The vote was part of a series of motions requesting that radiation from cell phones and WiFi be recognized as a potential workplace hazard for teachers.

"There is cause for concern for members' health and safety, especially women," said Sandra Wash, a teacher representing Peel. District who spoke at the meeting.

Ontario school cuts Wi-Fi over safety concerns

ient 🖸 🖸 🖨 🖾

ctvforonto.ca

Published Thursday, September 8, 2011 10:05PM EDT

A private school in Ontario has cut its wireless internet network over concerns that the technology causes health issues in students

Pretty River Academy in Collingwood, Ont., a private school with 150 students attending. kindergarten to Grade 12, is the first Ontario school to remove Wi-Fi from campus.

The school's old WI-FI system was taken out over the summer and replaced with Ethernet connections ahead of the first day of the school year.

01 July 2013

Switzerland: Teachers Vote to Keep Wi-Fi Out of School

This recently published article in a La Chaux-de-Fonds newspaper (canton Neuchâtel) is revealing regarding wi-fi in schools in the canton, the opinion of a doctor and geneticist at Geneva's university hospital, and the current recommendations of the Swiss Federal Office for Public Health.

Teachers Are Out to Get Wi-Fi

by Sylvia Freda, L'Impartie/, 27 juin 2013 (translated from French by the Editor of this blog)



Blaise-Cendrars High School, La Chaux-de-Fonds

At the Blaise-Cendrars High School, wi-fi is not taken for granted

Teachers at the Blaise-Cendrars High School in La Chaux-de-Fonds, have all recently decided that there will be no wi-fi, neither in the cafeteria nor in classrooms as a precautionary approach to everyone's health. "In the beginning, we had selected installation of a wireless network for the sake of educational convenience", explains Patrick Herrmann, Director of the establishment. "We wanted to allow teachers and students to work on tablets and other computers in the cafeteria and in classrooms. The work had already begun."

NEWS Winlaw parents win lobby for no Wi-Fi in school

Environment & Human Health, Inc. February 2012

- Significant health risks to children & pregnant women
- Human brain especially susceptible to irreversible damage

 Nervous systems changes include diminished learning and reaction time, decreased motor function, reduced memory accuracy, hyperactivity and diminished cognition Lead Author:
 John Wargo, PhD, Professor of
 Environmental Risk and Policy at Yale



What are common reported symptoms of ELECTROSENSITIVITY?

- Headaches, Migraines
- Insomnia, Difficult Sleep
- Racing & Irregular Heart
- Agitation, Anxiety, Panic Attacks
- Tinnitus, Ringing in ears
- Dizziness, Vertigo
- Skin rashes
- Nausea & Vomiting
- Digestive problems easily confused with IBS
- Poor blood sugar regulation
- Nose bleeds (esp. children)
- Flushing
- Painful teeth and bleeding gums

- Memory loss, confusion
- Inability to concentrate
- Extreme fatigue
- Pain in joints, muscles
- Depression, Mood changes
- Visual disruptions
- Shortness of Breath, Asthma like symptoms
- Sharp stabbing pains in head
- Tingling, prickling skin or pain
- Easily confused with Fibromyalgia/Chronic Fatigue symptoms
- Pains in the eyes

Awareness campaign is needed on Cell phone Use, Wi-Fi Radiation Risks amid Conflicting Government Reports BY: LEE RICKWOOD July 30, 2015



Insurance Coverage Cancelled

- In 2002, Lloyds of London insurers cancelled personal liability injury insurance for the telecommunications industry based on perceived future health risks.
- AUVA Austrian Insurance Company has confirmed they will not insure cell phone providers due to "incalculable health risks" and confirm hazardous non-thermal effects.
- Insurance industry predicts greater risk than asbestos and tobacco combined in future
- Risk is shifted from industry to individual sources of wireless exposure

Simple Steps to Reduce The Negative Effects



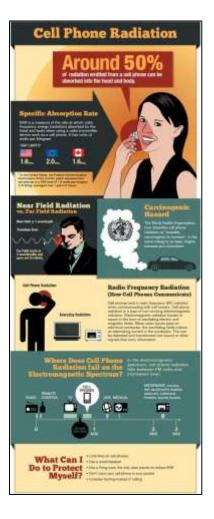
SIMPLE STEPS TO REDUCE THE NEGATIVE EFFECTS

First

Try to **reduce use** as much as possible, until we know more about the long-term effects of Wi-Fi

Second Learn how to reduce exposure while keeping everyone happy

Third Know how to neutralize positive charges



Turn off Wi-Fi Before Going to Bed (Good)

Everyone should be sleeping at bed time, and WiFi signal may interferes with the brain during sleep, so it is a good idea to turn it off before going to bed.

This allows the body to rest more deeply. By turning it off at night, you are effectively cutting down exposure by 33%. (Aside from the WiFi reduction, many security experts also recommend turning off your internet when not using it).

Many router models will have features that make it possible to automatically shut off Wi Fi connection and turn it back on at the same time every day, which will be useful for this purpose.

Turn On Wi-Fi Router Only When in Use (Better)

If you and your family members are up for giving up Wi-Fi for the most part, but still insist on connecting some devices from time to time, then having an option to switch on the router when in use is a better option as this reduces Wi-Fi exposure only to a few hours a day

Give Up Wireless and Hardwire All Your Connections (Best)

Giving up WiFi altogether is the healthiest option. It may sound daunting but it is possible and may mitigate several health issues down the line. In addition, you will enjoy more consistent and faster internet when directly hardwired in. It is certainly more work and not doable for everyone, but something we are (slowly) attempting.

You'll need to pick up some affordable tools, including:

•<u>Ethernet hub</u> – if the one you have doesn't have enough ports for every device and everyone to use. They can be plugged into an existing hub that you already have in order to expand the number of ports.

<u>Long ethernet cables</u> – to allow everyone to connect from anywhere in your home.
 <u>Ethernet adaptors</u> – makes it possible to connect devices that don't have ethernet ports, including tablets, smart phones, and some computers.

It is also a good idea to use wired peripherals like keyboards, mice, and headphones instead of wireless ones to reduce exposures to electromagnetic radiation.

If that all seems complicated to set up, I'd recommend asking someone to help. My techsavvy brother was the lucky recipient of my questions.

Hold Up on Adding Gadgets or Upgrading to Smart Homes, Offices, and Cars

With new wireless technology, wireless-enabled devices with bells and whistles are on sale every single day. Smart home thermostats, bluetoothcontrolled cookers, wireless baby monitoring system, and smart beds might make life easier, but they may not be as safe as we think.

Such technologies are still very new. These devices use many forms of wireless technologies, for which we don't fully understand the long term health consequences. For these, less is more.

Turn Devices on Airplane Mode

Cell phones and tablets emit electromagnetic frequency when the receivers are turned on. Because we typically use these devices very close to our bodies for extended periods of time, exposure levels can be very high. Therefore, important to keep them on airplane mode, especially when they are around children. Remember to also teach children and caregivers to turn these devices on airplane mode to reduce Wi Fi and electromagnetic exposures.

How to Mitigate the Harmful Effects of Wi-Fi Exposure

It may be difficult to completely eliminate exposure, especially if you live or work in an urban area. In addition to taking the steps above to reduce Wi-Fi exposures, there are many ways to mitigate the harmful effects of Wi-Fi signals, including:

1- Use a Dirty Electricity Filter to Reduce Electromagnetic Radiation

Dirty electricity occurs when electronic devices need to manipulate the electric currents into the format and voltage that the devices need. This can create electrical surges throughout the wiring system.

Electronic devices, including WiFi Routers, phone chargers, and computers all produce dirty electricity, which can be a significant source of harmful electromagnetic frequencies (EMF) in the building.

In order to mitigate this effect, consider installing <u>dirty electricity filters</u> on outlets throughout the home and work environment.

How to Mitigate the Harmful Effects of Wi-Fi Exposure

Ultimate

2- Earthing

Wireless devices emit unhealthy positive ions and also interfere with the waves in our own bodies, such as our brain waves and the electrical system that runs our cells. By <u>earthing</u>, the positive ions in our bodies can be equalized with negative ions from earth, which can mitigate the harmful effects of EMFs.

In addition, earthing allows our bodies to synch with the Schumann resonance (7.83 Hz), which is earth's own electromagnetic frequency that we are naturally built to be exposed to. A Japanese study in 2005 showed that the Schumann resonance can reduce blood pressure and produce some positive health outcomes. By synching with earth's natural frequency, we reduce the risks of WiFi waves interfering with our bodily functions. You can earth simply by <u>standing barefoot on the ground</u> for 20 minutes daily. Alternatively, you can also use a grounding <u>shoes with an earthing metal piece</u>, or <u>bed sheets</u> that connects to the ground ing port of your home electrical outlets.

THE ULTIMATE GUIDE TO Antioxidants

Are You Getting Your Daily Dose of Vitamin G?





0 (Stock / Thinksbock





How to Mitigate the Harmful Effects of Wi-Fi Exposure

3- Adding Negative Ions

Exposure to WiFi can result in a buildup of **positive ions** in your body, which can promote inflammation. Therefore, if you are regularly exposed to WiFi and EMFs, it is even more important to regularly **expose yourself to negative ions** to to neutralize the positive ions. You can find naturally occurring negative ions near moving water, <u>such as at the beach</u> or moving streams of water.

In addition, you can use a <u>Himalayan salt lamp</u> or negative <u>ion generator</u> in your home to increase your exposure to healthful negative ions and mitigate the negative effects from Wi Fi exposure.

Sources of Antioxidants (Electron donors)





Earthing

The process of absorbing earths free flowing electrons from it's surface through the soles of ones feet.







Authorised Australian Educator and Distributor





<u>10 simple steps</u> that women can take to reduce their exposure to wireless radiation emitted by cell phones, wireless devices and smart meters

- 1- Avoid carrying your <u>cell phone</u> on your body (e.g. in a pocket or bra).
- 2. Avoid holding any wireless device against your body when in use.
- 3. Use your cell phone on speaker setting or with an "air tube" headset.
- 4. Avoid using your wireless device in cars, trains or elevators.
- 5. Avoid cordless phones, especially where you sleep.
- 6. Whenever possible, connect to the internet with wired cables.

7. When using Wi-Fi, connect only to download, then disconnect and disable Wi-Fi.

- 8. Avoid prolonged or direct exposure to nearby Wi-Fi routers.
- 9. Unplug your home Wi-Fi router when not in use (e.g. at bedtime).

10. Sleep as far away from wireless utility meters (i.e. "smart" meters) as possible.



Authorised Australian Educator and Distributor





Dangers Of Wireless & Cell Phone Radiation to Pregnant Women <u>How Earthing Can Help</u>

Below is a great article from Natural News which highlights the dangers of pregnant women using Wi-Fi and mobile phones, however, it's not just pregnant women who should be concerned, young children are still developing and growing and need to stay away from this harmful radiation as much as possible

Earthing will not protect or shield you from Wi-Fi or mobile phone radiation, however, it will allow your body's own electrical system to cope better with what's being thrown at it day and night from these invisible sources. When we sleep earthed or grounded at night our body is put into the right electrical potential to heal and repair how it should do. Inflammatory build up from the positive charge of radiation (free radicals) on your body is neutralized by the negative charge (anti-oxidants) from the earth The fire is put out before it can start smouldering and lead to a destructive bush fire, so to speak.

Let your environment work with you, not against you.



We are surrounded by power-frequency and wireless radio-frequency telecommunication devices 24/7 that have detrimental effect upon sleep patterns and our cells' power generating capacity. EarthPulse[™] under any type of mattress makes power frequency, microwave telecommunication and all other electropollution relatively harmless, allowing much deeper sleep and far more cellular energy for enhanced immune function, memory consolidation, hormone production and daytime vitality.

