

About This Magazine

ReWireMe is the official emagazine of the Electrosensitivity Society (ESS), a society created to raise awareness about and to help those suffering from electrohypersensitivity (EHS). Electrosmog, unlike air pollution, is invisible to the eye and now permeates our indoor and outdoor environments. Broadcast TV news journalists can remotely radiate into space electromagnetic waves containing audio and video from a war zone, reflect these waves back to earth via satellite, retransmit the digital data via microwave to a cell phone tower, which allows us to view the newscast on a receiving devise, such as an iPhone.

While most of us appreciate these miracles of science and communication technologies, it's important to understand that ALL life on earth is electromagnetic in nature and can be affected by these artificially generated frequencies. Electrical engineers set the guidelines for exposure, but health care professionals are finding that current levels of electromagnetic radiation from our modern technology is making a large part of the earth's population ill. This illness is called electrohypersensitivity. The symptom for one may be a simple headache and for another a life-threatening brain tumor. This emagazine is dedicated to the "canaries in the coal mine" who can warn us all of the imminent danger of electrosmog.

-Dr. Magda Havas

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Please note:

Rewire.me eMagazine takes no responsibility for the information provided in external websites.

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Add your story and share it with a friend.





A New illness Emerges - EHS

The invention of electricity is only a few hundred years old and in the beginning it was not used to power our homes. The first industry to report electricity's unpleasant side effects were the telegraph crews who strung up the telegraph lines on poles that ran alongside the train tracks. These workers complained of headaches, fatigue, joint pain and other ailments that were not suffered by the crews who were setting the railroad ties. Later on, the next wave of unexplained illnesses manifested in the Bell telephone switchboard operators who placed the jacks manually into sockets to "connect" the electricity from one phone to the other. The symptoms were called **"Neurasthenia."** The Russians found similar symptoms in workers exposed to microwave or radio frequency radiation and they decided to call it "Radio Wave Sickness."

Today, if you bring the following complaints to your doctor, the diagnosis will often be stress or "anxiety" - symptoms that are "psychological" in origin:

- sleep disturbance
- fatigue
- depression
- headaches
- restlessness
- irritability
- difficulty concentrating
- forgetfulness
- learning difficulties
- · difficulty finding words
- frequent infections

- sinusitis
- lymph node swellings
- joint and limb pains
- nerve and soft tissue pains
- numbness or tingling
- allergies
- tinnitus
- impaired balance
- visual disturbances
- eye inflammation

- dry eyes
- episodic hypertension
- hormonal disturbances
- · thyroid disease
- night sweats
- frequent urge to urinate
- weight increase
- nausea
- loss of appetite
- nose bleeds
- skin complaints

There are doctors and clinics that recognize these symptoms and specialize in their treatment, such as:

Click here to read an ABC News article about EHS

Colorado and Connecticut Governors declare Electromagnetic Sensitivity Awareness Month. Click to view: Colorado Connecticut



Before the invention of modern electricity, man walked upon the earth bathed only in the natural electromagnetic fields that surround our planet.

The cells in our bodies are biomagnetic, living and multiplying in harmony with the earth's resonating frequencies, which vary from 7.83Hz to 33.8Hz, known as the "Schumann Resonance." Scientists have discovered that there is only a very narrow range of frequencies (3-25Hz) to which brain cells respond to favorably.

Unfortunately for us, our modern technology such as wireless computing and cell phone towers create vast amounts of "electrosmog" which now disrupts our connection to the Earth's natural magnetic fields.

Earth Frequencies - Schumann Resonance



Unseen Essential Nutrient - Magnetics

In the early 1960s after the first space flights, the press reported on space sickness due to the astronauts' significant health problems upon returning to earth. Today it is widely acknowledged that one of the major causes of the astronauts breakdown of health was the absence of the geomagnetic field, which is nonexistent outside the earth's atmosphere.

The returning astronauts were all suffering from rapid loss of bone density, called osteoporosis. Russian scientists speculated that the absence of earth's magnetic field was one cause of this problem and they devised electromagnetic medical devises that "pulsed" the earths resonating frequencies into their body to heal them. The treatment is known as PEMF - Pulsating Electromagnetic Field Therapy.

The Adey Window

If you want to fully understand the information provided in this magazine, it is important to understand the basic principle of \$\frac{1}{8}\$ frequency. Frequencies are measured in \$\frac{\color Hertz}{\color Hertz}\$, which are the number of waves at cycles per second at which a frequency vibrates. (See top of this page) Lower frequencies generated by the earth are considered to be healthy for humans, while some higher frequencies are harmful, such as UV radiation which can cause skin cancer.

The power of the frequency is measured in watts and gauss (a magnetic field strength measurement for any frequency). In 1975 research was initiated by W.R. Adey and S.M. Bawin to determine the

effect of electromagnetic waves on brain tissue. They discovered that there is only a very narrow range of frequencies (3-25Hz) to which brain cells from human and animals respond to favorably. This range of beneficial frequencies was called the "Adey Window" or the "biological window."

Within the biological window, humans, plants and animals exhibit a positive reaction. Outside of this window, some frequencies appear to be neutral while others create a negative effect which manifests primarily as long term health problems. Three percent of the population is said to be electro-hypersensitive to non-biological "electrosmog" frequencies and feel great discomfort when near them. Households run on electricity at 60Hz in the US and 50Hz in Europe, while cell phones range from 800 Megahertz to 3 Gigahertz, far outside of the biological window. While most of us might not feel the immediate effects of electrosmog, there is a growing body of scientists that report we are all being harmed by man-made frequencies emitted from our modern inventions.

The Heating Effects of Electricity

The electrical engineers who have designed most of our cell phone technology were also responsible for providing the safety limits. Instead of consulting biologists, the governing bodies looked to their electrical experts and asked "How much is too much?" Not wanting to limit the progress of modern technology it was generally decided that if the electronic device in question did not heat the body - it had no biological effect on it. For example: if the output power of the cell phone

towers that broadcast our cell phone data is not enough to heat our body, it is said to have no biological effect.

But, there are many medical

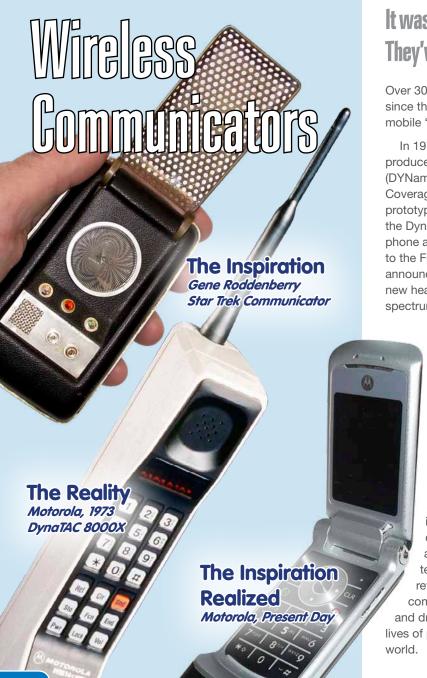
devices in hospitals that use pulsating electromagnetic fields to mend our bones and relieve depression. These devices do not raise our skin temperature but they do have a very dramatic biological effect on our cells. Broken bones and mental disorders can be cured by electromagnetic

A Read a report about magnetic therapy.

waves.

The biologists and electrical engineers are currently in "heated" disputes, and unfortunately the public is in the dark as to the research that proves we will soon suffer from electrosmog pollution.





It was 30 years ago today, Motorola taught us how to play. They've been going in and out of style, but they're guaranteed to....

Over 30 years has passed since the invention of the first mobile "cell" phone.

In 1973, Motorola produced a working DynaTAC (DYNamic Adaptive Total Area Coverage) portable phone prototype and presented the DynaTAC prototype phone and system concept to the FCC, which soon announced that it would hold new hearings on allocating spectrum for cellular service.

On September 21, 1983, Motorola made history when the FCC approved the DynaTAC 8000X phone, the first commercial portable cell phone available in the United States. After more than 10 years and a US\$100 million investment, Motorola's commitment produced an innovative portable technology that revolutionized the communications industry and drastically changed the lives of people around the

Although the first cell phone cost over \$4,000.00 and had many drawbacks such as size, weight and battery life, there was a big lag time to actually use it because the cell towers that were needed to service the phone were non-existent. People also complained of poor reception since the distances from the phone to the tower were so great, the wattage of the phone would need to be quite high to keep it from dropping the connection.

Now, cell phone towers are sprouting up everywhere. In some developing countries they don't even bother to install land lines and have opted for an all-wireless service. Cell phones save lives. Cell phones can be used to find lost persons, as they can be located using the hands-off switching system. With the invention of the iPhone, you also now have an extremely powerful hand held computer.

But this explosive growth does come with challenges in regards to their safe use. Recently, scientists studying human biology have released findings that show these life saving devices could be life threatening because they are being used by young children for hours on end. It's no longer the replacement for the pager or the salesman's mobile car phone.

While most governing bodies that are responsible for public health have decided to take the "heating effect" safety protocol, Toronto's Department of Public Health has decided to break ranks and is advising teenagers and young children to limit their use of cell phones, in order to avoid potential health risks. This advisory is the first of its kind in Canada.

Toronto City officials have studied newly released research that points to possible side effects from radio frequency radiation. They feel that children under eight should only use a cell phone in emergencies. On the following page, we have provided the warning from the Toronto Board Of Health website.

From: Toronto Public Health Fact Sheet July 2008 Contact Toronto Public Health: 416-338-7600 \$ Website

Children and Safe Cell Phone Use

Toronto Public Health wants to make parents aware of how their children can take simple precautions to minimize exposure to radio frequency (RF) waves if they use a cell phone.

What are radio frequencies?

Radio frequencies (RFs) are energy waves that are part of the electromagnetic spectrum. RFs occur between FM radio waves and microwaves. People are exposed to many sources of RFs. Cell phone towers, cordless phones, pagers, remote control devices, wireless Internet services (also known as Wi-Fi) and cell phones all emit low levels of RFs.

How am I exposed to RFs from using a cell phone?

When you make a call with a cell phone, a radio signal travels to the closest base station antenna. The signal is eventually sent from the antenna to the phone you are calling. This radio signal is sent by way of RFs. The antenna inside the cell phone gives off RFs and some of these are transferred to and absorbed into the head when you are using the phone. The closer the antenna is to your head or body, the greater the exposure to RF energy. Exposure to RFs is greater if you use the cell phone for long calls or if the closest antenna is far away.

Do cell phones affect health?

Health Canada's guidelines for exposure to RFs (known as Safety Code 6) protect the public from short-term, high exposure effects of RFs. Studies of adults who have been using cell phones generally conclude that there are no effects on their health; however, ongoing research is exploring what

impacts there might be from using a cell phone for many years. Health Canada currently states however, that "there is no firm evidence to date that RF emissions from cell phones cause ill health."

Are children more likely to experience health effects from cell phone RFs than adults?

Research on the health effects from cell phone RFs on children is very limited since the use of cell phones by young people is a relatively new trend. Scientists are not yet sure what the health effects in children are from using a cell phone. While research continues in this area, some scientists feel that children may be more susceptible to harmful effects of RFs from cell phones for several reasons:

Pre-teen children have a smaller head and brain size, thinner skull bones, skin and ears.

Their nerve cells also conduct energy like RFs more readily than an adult's or teenager's nerve cells. Children's brains and nerves are also still developing so they are likely to be more sensitive to exposures of RFs.

Today's children have started to use cell phones at a younger age, therefore their lifetime exposure to cell phone RFs will likely be greater. As a result, the chances that a child could develop harmful health effects from using a cell phone for a long time may be greater.

Should children use cell phones?

While cell phones are important for communication and for safety reasons, parents should be aware of what they can do to reduce any risks from their child's use of a cell phone.

The World Health Organization (WHO) suggests that if parents have concerns they can encourage their children to limit the length of phone calls, or use "hands-free" devices like headsets or ear phones, to keep the cell phone away from the head and body. The amount of RF energy absorbed decreases guickly with increasing distance between the antenna and the user. People can also use the speakerphone mode if appropriate, or use text messaging instead.

Parents who buy cell phones for their children should look for ones with the lowest emissions of RF waves. According to the United States Food and Drug Administration (US FDA), the level of RF waves emitted can be obtained by using the FCC ID number usually printed on the case of the phone. For more information about each individual ID number and corresponding cell phone, visit www.fcc.gov

Are there certain times when children should avoid using cell phones?

When cell phone reception is low (this happens when the base station antenna is far away) and when a cell phone is being used during high-speed travel (i.e. driving in a car) power being emitted from the cell phone must be increased in order to maintain reception. Cell phone use by children should be limited during these times in order to reduce exposure to RFs.





Cancer Specialist Warns Staff Of Improper Cell Phone Use

Alarming rates of brain cancer are now showing up in children and there seems to be no explanation as to why this is happening. In the early 90s, a well known cell phone manufacturer was brought to court when a complainant sued the company with the claim that her use of a cell phone had caused her brain cancer. A congressional hearing ensued, which caused the cell phone industry to create a \$29 million study that would determine the safe limit for cell phone emissions. The study began in 1993, headed up by Pr. George Carlo who found significant risks with cell phone use. Unfortunately it was ignored by the cell phone industry.

Up until now, most government health agencies were dismissive of any risk related to cell phone

use. But with the release of recent studies which we will address later, a pattern is now emerging that suggests people who have used their cell phones for ten years, are at greater risk of certain kinds of brain tumors. Cancer research centers are advising their staff not to allow their children to use a cell phone, except for emergencies. The developing organs of a fetus or child are most likely to be sensitive to any possible effects of exposure to electromagnetic fields.

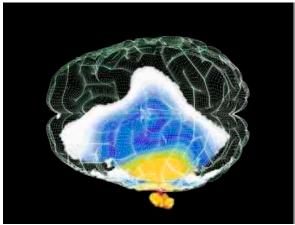
Ronald B. Herberman, MD, the first director of the University of Pittsburgh Cancer Institute, a National Cancer Institute (NCI)-designated Comprehensive Cancer Center, is an internationally recognized tumor immunologist who has made

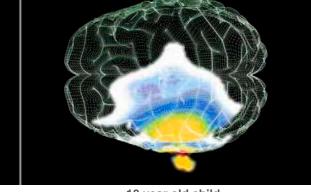
major discoveries in his field and has fostered the application of this information to novel approaches to cancer therapy.

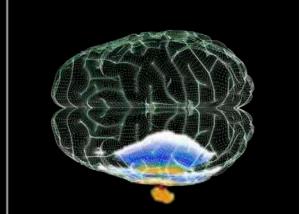
On the following page is his memorandum that was sent on July 23, 2008 to 3000 staff members to warn them about the health effects related to cell phone use.

Click to visit the University of Pittsburgh Cancer Centre website

Click to watch 60 Minutes Australia for a broadcast about cell phone dangers







5 year old child

10 year old child

adult

Electromagnetic fields from cell phones are estimated to penetrate the brain, especially in children. Model estimate of the absorption of electromagnetic radiation from a cell phone based on age (Frequency GSM 900 Mhz).

www.Rewire.me

Memorandum: Ronald B. Herberman, Memo on Cell phones

To: UPCI Faculty and Staff From: Ronald B. Herberman, MD Subject: Important Precautionary Advice Regarding Cell Phone Use

1. The Case for Precaution in the Use of Cell Phones Advice from University of Pittsburgh Cancer Institute.

Based on Advice from an International Expert Panel, available at www.preventingconcernow.org

Ronald B. Herberman, MD

Recently I have become aware of the growing body of literature linking long-term cell phone use to possible adverse health effects including cancer. Although the evidence is still controversial, I am convinced that there is sufficient data to warrant issuing an advisory to share some precautionary advice on cell phone use.

An international expert panel of pathologists, oncologists and public health specialists, recently declared that electromagnetic fields emitted by cell phones should be considered a potential human health risk. To date, a number of countries including France, Germany and India have issued recommendations that exposure to electromagnetic fields should be limited. In addition, Toronto's Department of Public Health is advising teenagers and young children to limit their use of cell phones, to avoid potential health risks.

More definitive data that covers the health effects from prolonged cell phone use has been compiled by the World Health Organization, International Agency for Research on Cancer. However, publication has been delayed for two years. In anticipation of release of the WHO report, the following prudent and simple precautions, intended to promote precautionary efforts to reduce exposures to cell phone electromagnetic radiation, have been reviewed by UPCI experts in neurooncology, epidemiology, neurosurgery and the Center for Environmental Oncology.

Practical Advice to Limit Exposure to Electromagnetic Radiation Emitted from Cell Phones

- 1. Do not allow children to use a cell phone, except for emergencies. The developing organs of a fetus or child are most likely to be sensitive to any possible effects of exposure to electromagnetic fields
- 2. While communicating using your cell phone, try to keep the cell phone away from the body as much as possible. The amplitude of the electromagnetic field is one-fourth the strength at a distance of two inches and fifty times lower at three feet.
- Whenever possible, use the speaker-phone mode, which may reduce radiation exposure.
- 3. Avoid using your cell phone in places, like a bus, where you can passively expose others to your phone's electromagnetic fields.
- 4. Avoid carrying your cell phone on your body at all times. Do not keep it near your body at night such as under the pillow or on a bedside table, particularly if pregnant. You can also put it on "flight" or "off-line" mode,

- which stops electromagnetic emissions.
- 5. If you must carry your cell phone on you, make sure that the keypad is positioned toward your body and the back is positioned toward the outside so that the transmitted electromagnetic fields move away from you rather than through you.
- 6. Only use your cell phone to establish contact or for conversations lasting a few minutes, as the biological effects are directly related to the duration of exposure. For longer conversations, use a land line with a corded phone, not a cordless phone, which uses electromagnetic emitting technology similar to that of cell phones.
- 7. Switch sides regularly while communicating on your cell phone to spread out your exposure. Before putting your cell phone to the ear, wait until your correspondent has picked up. This limits the power of the electromagnetic field emitted

- near your ear and the duration of your exposure.
- 8. Avoid using your cell phone when the signal is weak or when moving at high speed, such as in a car or train, as this automatically increases power to a maximum as the phone repeatedly attempts to connect to a new relay antenna.
- 9. When possible, communicate via text messaging rather than making a call, limiting the duration of exposure and the proximity to the body.
- 10. Choose a device with the lowest SAR possible (SAR = Specific Absorption Rate, which is a measure of the strength of the magnetic field absorbed by the body). SAR ratings of contemporary phones by different manufacturers are available by searching for "SAR ratings cell phones" on the internet.

The INTERPHONE Project

Dr. Herberman is citing works not yet officially published to the mainstream media, known as the INTERPHONE Project. This is a 13-country epidemiological study of tumors among users of mobile phones. The results of this study may be the most important documents ever released, as institutions such as the World Health Organization and the European Commission have cautioned that conclusions about possible cancer risks cannot be presented until the INTERPHONE Project is published. If wrong conclusions are presented, the resulting lack of warnings to the public could have disastrous consequences for generations to come.

The researchers that have supplied their findings to the project have grown frustrated because it is already lagging four years behind its scheduled completion date. Part of the delay in putting together the final report now appears to be internal disagreements, as scientists are joining opposing camps of "safe" vs. "unsafe."

Read news article

The BioInitiative Report

The BioInitiative Report, published on August 31, 2007, was created by an international working group of scientists, researchers and public health policy professionals. They feel that the INTERPHONE Project was having serious challenges meeting their publishing deadlines and that the public needed to be aware of the risks of Electro Magnetic Fields (EMF) without further delay. They documented serious scientific concerns about the current limits regulating how much EMF is allowable from power lines, cell phones, and

many other sources of EMF exposure in daily life, concluding that the existing standards for public safety are completely inadequate to protect our health.

Their report also includes studies showing evidence for effects on genes and protein expression, genotoxic effects – DNA damage, effects on immune function, neurology and behavior, brain tumors, childhood cancers (leukemia), magnetic field exposure, melatonin production, alzheimer's disease, breast cancer and a variety of other illnesses.

One of their main contributors of the BioInitiative Report is Cindy Sage, head of Sage EMF Design, a division of Sage Associates, an environmental consulting firm located in Montecito, California.

Click to view a video of Cindy Sage describing the BioInitiative Report

Click here is read the public summation of the report

Mobile Phones: It's Not Just About Brain Tumors!

Head of the INTERPHONE study, Elisabeth Cardis, and scientists in Israel link mobile phones to parotid gland tumors.

It begins as a lump or mass on the side of the face in front of the ear, at or above the jawbone. If the growth is slow and the lump is painless it is likely to be benign (80% of cases). If the area is painful or numb (nerve paralysis) it may be malignant (20% of cases) and the prognosis is poor with average survival of 2.7 years and a 10-year survival of 14-26%. It affects between 1 to 3 people per 100,000 each year in the Western world. What I am referring

to is a parotid gland tumor (PGT), also known as salivary gland tumor (SGT).

Parotid tumors have not received much attention until recently.



Roger Ebert, 63, Pulitzer prize-winning movie critic in the Ebert & Roeper show, had his cancerous parotid gland tumour removed June 16, 2006.



Lebron James, 24, basketball MVP for the Cleveland Cavaliers, underwent surgery for a benign parotid tumor in June 2009.



Adam Yauch, 44, of the Beastie Boys was diagnosed in July 2009 with a malignant parotid tumor. His band had to cancel engagements as a consequence. Click here to view his statement on YouTube.



Senator **John McCain** had part of his left parotid gland removed in 2000 in conjunction with removal of lymph nodes because of his bout with cancer. Recent photographs of McCain (April, 08) show an enlarged mass where his parotid gland is located.

The Unofficial Reports





Dr. Siegal Sadetzki testifies at US Senate Hearing for Cell Phones and Health

Watch the Video on You Tube

Download the Hi-Res Video

Salivary gland tumors have been associated with ionizing radiation including X-rays and gamma radiation following environmental exposure. For example, survivors of the atomic bomb in Nagasaki and Hiroshima experienced an increase rate in salivary gland tumors. Radiation therapy, including x-ray of the head or radiation for enlarged tonsils in children or for various types of cancers, has also been implicated in this type of tumor, as has inhalation of carcinogens (asbestos mining, plumbing, rubber manufacturing, and wood dust); and various types of viral infections (herpes and possibly HIV).

In 2008, another culprit contributing to PGT was identified – the mobile phone. Dr. Siegal Sadetzki, who testified in September 2009 at a US Senate Hearing on cell phones, is the Principle Investigator of this report that was based on a Nationwide Israel CASE CONTROLLED STUDY for the period 2001 to 2003. One of the co-authors of this report, Elisabeth Cardis, is the coordinator of the \$15 million plus dollar, 13-country INTERPHONE epidemiological study of tumor risk for adult mobile phone users. She is also the co-ordinator of the European Commission project MOBI-Kids, which is evaluating the possible association between communication technology and risk of brain tumors in young people.

"For the entire group, no increased risk of PGTs was observed for ever having been a regular cellular phone user (odds ratio = 0.87; p=0.3) or for any other measure of exposure investigated." The odds ratio is scientific notation that identifies the degree of risk (above 1 is higher risk and below 1 is lower risk) and the probability value (p) indicates whether this finding is statistically significant (generally when p is less than 0.05 it is considered significant). So the above quote agrees with previous studies that there was no association between salivary gland tumors and cell phone use.

BUT – The very next sentence shows that there is a danger for some individuals and reads: "However, analysis restricted to regular users or to conditions that may yield higher levels of exposure (e.g. heavy use in rural areas) showed consistently elevated risks."

So what does this elevated risk amount to?

The report states that your risk of getting a parotid tumor on the same side of your head that you use for listening to the mobile phone increases by...

- 34% if you are a regular cell phone user and have used a mobile phone for 5 years.
- 58% if you had more than 5,479 calls in your life-time.
- 49% if you have spoken on the phone for more than 266.3 hours during your life-time.
- 47% if you have used a mobile phone for 5 years or more and have had more than 5,479 calls in your life-time.
- 50% if you have used a mobile phone for 5
 years or more and have spoken on the phone
 for more than 266.3 hours.

And if you live in a rural away from major cities area your risk increases by...

- 81% if you have made more than 18,996 calls in your life-time
- 96% if you have a life-time exposure of more than 1,035 hours



The Unofficial Reports



Other Reports Back Up This Study

A study conducted by the Israeli Dental Association between 1970 and 2006 reports a large increase in cancers of the salivary gland in Israel which may be related to use of cell phones (cited in the daily Haaretz July 2009).

"Between 1980 and 2002, the number of parotid salivary cancers has remained stable at 25 per year, whereas this figure rose to 75 during the next five years," said Avi Zini, Hadassah School of Dental Medicine. Every fifth patient was under the age of 20. While this study did not include information on cell phone use, researchers plan to collect these data in the next stage of their study.

The message from these reports are the same... the higher the exposure, the longer the exposure, the greater the risk! That is why scientists are finding an association with ipsilateral (same side of the head) tumors generally after 10 years of regular or heavy mobile phone use. This is the case for tumors of the brain (gliomas), the nerve leading to the ear (acoustic neuroma), the eye (uveal melanoma), and now the salivary gland (parotid tumor).

The statement above is also why some studies don't find an association and is the cause for so much confusion in the media... Most studies that find cell phones are safe, allow for an exposure period that is too short, and the users are defined as anyone who uses a cell phone at least once a week for 6 months or more. This dilutes the data in favour of "no effect." The same logic can be used for cigarettes. We now know tobacco is carcinogenic but we would not expect to find lung cancer among those who smoke one cigarette a week and have been smoking for just over 6 months.

While individuals can reduce their use of mobile phones, or follow the advise of scientists who suggest using hands free or wired air-tube headsets, some of the onus needs to be placed at the feet of the telecom industry that makes huge profits from selling these devices. If mobile phones can be designed to take photographs and videos, to record voices or play music, to tell you where you are and what time it is, then surely they can be re-designed to emit less radiation and to prevent the phone being placed adjacent to the head.

As a scientist, I'm disturbed knowing that policy makers largely ignore studies showing adverse health effects of microwave radiation. What will it take for officials in regulating agencies to recognize that exposing the head to microwave radiation at current levels may be as foolish as X-raying children's feet to fit them with shoes as was done in recent past?

With 4 billion mobile phone users worldwide, if we don't react in a timely fashion to these "early warnings" we will face a human health tsunami. But, unlike natural tsunamis that happen quickly and - once the devastation ends - survivors can rebuild their lives. The microwave tsunami is likely to be a slow, silent, unseen killer taking a few lives at a time. The longer we ignore this threat, the more lives that will be lost, unnecessarily. While I hope I am wrong, I fear... I might be right. Time will tell.

Sources:

Video of US Senate Hearing courtesy of CSPAN. For a hi-resolution copy of the video seen here please email Magda Havas at mhavas@trentu.ca

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Images: Parotid Gland, Roger Ebert, Lebron James, Adam Yauch, John McCain

The Dangers of Unsafe Cell Phone Use - Infertility





Cell Phone Use Creates Male Infertility

Recent laboratory studies are showing a direct connection between cell phone use and fertility, especially in men. Although this issue isn't as serious as brain cancer, which

> is a hotly debated subject, there is positive proof that cell phone radiation does have a biological effect on the human reproductive system.

Dr. Agarwal, who is the Director of Reproductive Research at the Centre for Reproductive Medicine in Cleveland, Ohio, has found that sperm count and sperm quality decreased as cell phone use increased. He has conducted several studies on the subject.

The first study was released in January 2008. It found a correlation between the amount of cell phone use and the quality of semen, but at that time it was not known how the cell phone actually effected the sperm. Eight months later, another study was released by Dr. Agarwal, and this time, the question was asked: what happens when sperm outside of the human body is directly exposed to microwaves from a cell phone?

In this next study, a cell phone was used to directly radiate sperm inside of a test tube. One hour of cell phone exposure was used on the test samples to simulate the average daily use of a cell phone.

The results revealed a distinct effect on the mobility of the sperm to swim, which greatly effects the chances of the sperm reaching the egg and fertilizing it. In addition to this there was a significant increase in oxidative stress, which can lower the genetic quality of the sperm. Men who are most likely to be affected in this way are those who talk

on a Bluetooth headset while their phone is in their pants pocket, on a belt clip, or otherwise near their groin.

According to the BlackBerry user manual, if you wear a BlackBerry on your body, always put the phone in a holster approved by Research In Motion (RIM). When using any data feature of the BlackBerry, with or without an accessory cable, position the phone at least 0.98 inches (25 mm) from your body. Using accessories not supplied or approved by RIM might cause your BlackBerry device to exceed radio frequency (RF) exposure guidelines.

Take off the Bluetooth headset when you're not on a call.
Remove your cell phone from your pocket and hold it in your hand, or place it on a table or desktop.

Generation X-Ray

According to a Danish study, children who were exposed to cell phones before and/or after birth were 80 percent more likely to have behavioral problems than other children who were not exposed to cell phones. Symptoms became severely evident after 7 years on average. Exposure to cell phones prenatally (and, to a lesser degree, postnatally) was associated with emotional difficulties, inattention, hyperactivity and problems with







A new study shows that carrying a cell phone in your pocket or clipped to your belt at the waist when in talk mode *will* affect male fertility (damaged sperm).



peers.



Are Wired Headsets Safe?

The ongoing research surrounding the risks of cell phone use will naturally prompt cell phone users to seek out a safe solution. If the cell phone is a source of radiation, removing it away from the body during conversation is a good idea. If Bluetooth is harmful, can it be assumed that no radiation is transferred to the head when using a wired headset? It turns out that a wired headset has essentially become an aerial, an extension of the radiation from the cell. This energy is carried all the way up the body and emits from the earbud directly into the ear canal. This information has been known for many years by cell phone manufacturers and is one reason why some do not include a headset.

On October 26, 2000 a patent was submitted by Orrin Klitzner and Samuel Geffen to develop a new headset that used the same principle as a doctor's stethoscope: a speaker on the bottom of a surgical tube filled with air, through which only sound passes. No radiation.

Click here to view the patent

It consisted of a hollow sound tube, which links the speaker to the earpiece. A transducer in the speaker produces a high sound pressure level, allowing the sound to be audible through the tube. The housing that holds the speaker also contains a microphone. Such a device solves the radiation leakage of normal wired headsets and still maintains the functionality of the original.

But where is it?

It seems that the first design didn't actually make it to the market. A second patent was published in July 2002. Based on the initial patent, it offers a much better design and functionality.

Click here to view the patent

This product has been very slow to come to the market, and is not offered by mainstream cell phone communication and electronics retailers. They would have to explain that by using the traditional headphones for the iPod, the radiation will travel from the phone and along the wire and up your body to your ear canal.

Most doctors that understand the danger of cell phone radiated frequencies will use an "AirPhone." They don't have the high fidelity and clarity that is provided by a wired headset, but you can have a private conversation.

Several companies offer them online, including:

RF3NOW - \$rf3now.com

Mercola - #mercola.com

EMF Review - \$emfreview.com

EMF Safety 28 lessemf.com



U.S. Patent

US 6,453,044 B1























Safe & Smart Cell Phone Use







Dropped calls, poor reception, a skipping voice on the other line. These are the common complaints heard by mobile communication providers. Their solution? Increase the number and power output of cell phone masts and cell phones, so much so that reception is available in an underground concrete parking garage.

This high energy output brings with it a very high SAR. SAR stands for \$\frac{1}{8}\$ Specific Absorption Rate, a measure of the rate at which radio frequency (RF) energy is absorbed and heats the body when exposed to radio-frequency electromagnetic field.

Tested for use at the ear and for body worn operation (with iPhone positioned 15 mm (5/8 inch) from the body).

Did you know that many cell phones recently tested exceeded the regulated SAR ratings? If you touch them to your body the radiation limits are higher than the safe levels. Its only when you keep them at least 5/8 inch away from your body (as with the iPhone) that they fall within the "considered safe" SAR rating. Does anyone read the user manual that comes with their phone?

LG 150 Phone Is Recalled, "Deregulated"

The cell phone cancer warnings are starting to have an effect on the governing bodies that are here to protect our safety. 129,000 cell phones made by Korean conglomerate LG have been recalled across Canada because they do not meet federal guidelines for radio frequency exposure.

LG issued a voluntary recall on January 27, 2009 after tests found the LG 150, a black flip phone, did not meet Industry Canada specifications for radio frequency emissions, resulting in the device being decertified. Scientists and doctors who see how cell phone manufacturers bend the

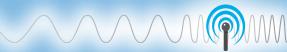
rules are now voicing their complaints. Health boards and their a watchdogs are starting to send a warning signal to the industry. It's a start, but the safety limits

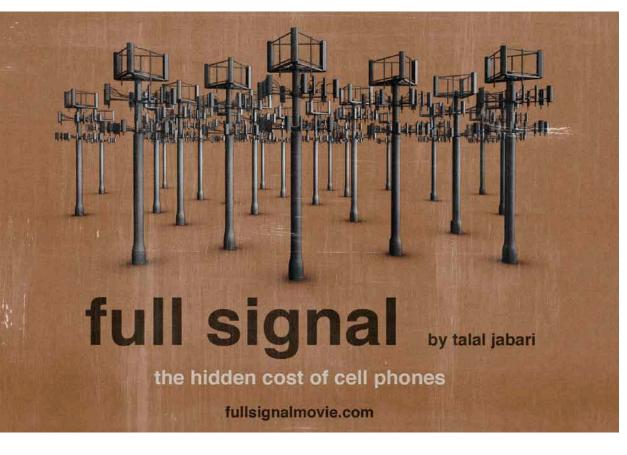
need to be changed.

The Smart Chatter

The best way to use your cell phone is to treat it like a Star Trek communicator. Hold it away from your head and talk into it. Or better yet, put it on your desk and talk in speaker phone mode. "Beam me up Scottie."

or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine For Vehicles Equipped with an Air Bag An air bag inflates with great force. Do not store iPhone or any of its accessories in the area over the air bag or in the air bag deployment area **Exposure to Radio Frequency Energy** iPhone has been tested,2 and meets the FCC, IC, and European Union RF expos nes for cellular, Wi-Fi, and Bluetooth operation. When tested for use at the ear and for body-worn operation (with iPhone positioned 15 mm (5/8 inch) from the value for each frequency band is outlined below body), iPhone FCC & IC 1g SAR





Full Signal

Every once in awhile a movie comes along that sparks controversy, like Food Inc. or The Cove. Full Signal is a eye-opening documentary about the telecommunications industry.

FULL SIGNAL aims to elevate the voices, stories and successes of those fighting to regulate cell

antenna placement, as well as to inform the general public about the real dangers potentially affecting every human being.

The movie hears from Dr. David Carpenter, Professor Olle Johansson, Professor Leif Salford, Dr. Zamir Shalita, B. Blake Levitt and Dr. Louis Slesin; world-renowned health professionals and experts on cellular radiation in the United States, Europe and the Middle East on the reality of their findings as well as those of their peers. The science is brought to life through simple-yet-catchy 2D/3D hybrid motion graphics animation and is brought home through the stories of Rigmor Granlund-Lind, a sufferer of a condition known as ElectroHyperSensitivity, Sue and Michael Scott a husband and wife who bought an apartment in New York where the cellular radiation readings are very high, and Samira Azzam, a woman whose neighborhood was crowded with 70 cellular towers, and who suffered from cancer as a result. They talk about their experiences, but also about the fact that they are not the only ones to battle illnesses related to cellular technologies.

FULL SIGNAL talks to Evie Hantzopoulos, Leonore Gordon, Shimona Tzukernik, Suleiman Abu Rukun, two stories of success and two of failure in individuals trying to take on the cellular industry; and to Whitney North Seymour, Jr, a former NY State Senator and Independent Counsel, and Gabriel north Seymour, a Constitutional and environmental lawyer about their attempts to challenge the FCC in the Nation's Supreme Court.

Since 1997 and the onset of GSM telephony, more and more cellular antennas have been popping up in neighborhoods, near children's schools and on neighbor's rooftops all around the world to support an ever-growing number of cell phone users. Today with over 3.5 billion cell phone users around the world and hundreds of thousands of cell phone towers people are starting to feel the effects. In fact they have become so prolific in some parts of the world that they disappear into the landscape with the same subtlety as cars on the street. And those that don't 'disappear' are cleverly disguised as chimneys, flagpoles, or water towers.

Movie Review

FULL SIGNAL talks to a number of leading scientists that have been studying the effects of cellular technology on human beings for years; sheds light on the triumphs and tribulations of lawmakers, lawyers and activists fighting to regulate antenna placement; and hears from those who have suffered and lost due to cellular technology. Filmed in ten countries, Full Signal examines the contradiction between health and finance, one of the many ironies in the fight to regulate antenna placement.

Director's Comment:

My relationship with cell phones started pretty early on; I started using one in the mid-90's, back when dropped calls were more frequent than not. But one day in 2002, I thought that it was ridiculous that I had to practically stand on the roof of my house to receive a proper signal. I made a quick call to the customer service number of my cell phone company at the time, and I was reassured: there were plans underway to install a new cell tower in my neighborhood. At the time I thought this was fantastic. Fast forward about 5 years, and my wife and I have had a baby; absolutely the best thing to happen to us!

However, I became a little more "aware" of potential dangers that my baby might face. I won't go into the list, but about 150 feet away from our bedroom windows, on our neighbor's roof is a cell antenna. And with rumors beginning to circulate on the potential hazards of cell antennas, I felt I needed to do some research on the subject, and Full Signal was born out of that research. The film started as a short documentary based in Israel

after I had heard accounts of riots occurring in various parts of the country where cell towers were burnt down. But I quickly realized that this was not just a film about some people that burnt down some cell towers.

We asked the Director of Full Signal, Talal Jabari, to comment about the film.

1. Since this subject is not well understood or publicized - how are you going to make this movie known?

Well I think there is a definite increase in the level of awareness that I have been able to see just over the last 2 years or so. It is also interesting that the issue has become featured in more "mainstream" media like Prevention and GQ Magazines. Nevertheless it does remain an uphill battle to try to spread the word faster and get some legislation which will better protect us. We chose to spread the word through Full Signal and the website, and like most things, this has spread by word of mouth through the internet. In fact we've had visitors to our site from 85 countries around the globe so far.

2. How is the movie being received by the general public?

I feel the film has been really well received by the public, and increasingly so. Recently I have received some emails from people that question the science in the film, and other emails from saying the film doesn't take a tough enough stance, and to me that means we have a debate. On a recent trip to Portland, OR I was privileged to testify before the Portland City Council on this issue, which prompted one of the Commissioners to come to view the film and then write and adopt legislation, so that was definitely a victory and a direct result of the debate. And this was really the primary goal behind Full Signal. We felt that this technology wasn't being debated, wasn't being questioned and I felt that this was the biggest danger.

3. You must have a lot on the cutting floor what have you gone through to make the final product?

As with any film, you shoot a lot more than you ever use. I wouldn't say what we used is more important that what we cut, it just facilitated our ability to tell the story. And some of this material that was cut from the film will be included as bonus scenes on the DVD.

4. What is your next project?

Right now we are working on a project that is focused in the Middle East and the issue of water. We are at the development and fund-raising stage and have received some backing, but need a significant amount more to embark on this issue.

For more information about the movie please visit the website at: www.fullsignalmovie.com



Positive Change In Europe



Unlike governments in North America, the European Union is taking a big step to study the possible harmful consequences from wireless technology. On April 2, 2009, the **European Parliament voted on a resolution** which focuses on health concerns associated with

EMFs. The resolution was adopted with 559 "yes" votes to 22 "no" votes (and 8 absentees). The resolution acknowledges the wide use of wireless technologies and their benefit to society, but raises concerns over their "continuing uncertainties about possible health risks;" particularly, concerns about the exposure of children and teens to EMFs. Therefore, the Members of the European Parliament (MEPs) have called for stricter regulation and protection for residents and consumers. The resolution brings many important issues to the forefront of political awareness:

Optimal placement of devices: industry stakeholders influence a number of safety factors, including the direction of the transmitting antenna in relation to living spaces, and the distance between the site and the transmitter. Industry actors are being encouraged to use this power to give better protection to people living nearby, and to prevent a "proliferation of poorly positioned masts and transmitters."

Placement of antennas, mobile phone masts and high-voltage power lines should be negotiated between industry actors, public authorities and residents' associations to minimise health risks and legal action cases. This will ensure that EMF-transmitting devices are kept clear of schools, day care centers, retirement homes and health care centers. In addition to this, it is recommended that mobile phone providers negotiate agreements to share towers for their antennas (using one as opposed to each having their own tower).

Increased access to reliable information: A recently published Eurobarometer study suggests that "the majority of citizens do not feel that the public authorities inform them adequately on measures to protect them from FMFs."

In light of this, the report makes a number of suggestions to improve EU

citizen's access to reliable information. These suggestions include making maps available on the internet, which show areas of exposure to EMF transmitting devices. In conjunction with this, the Commission should produce a yearly report on the "level of electromagnetic radiation in the EU" and its sources.

MEPs also call for an improvement to consumer information, by amending the technical standards of the European Committee for Electrotechnical Standardisation to impose labelling requirements, which would show the transmitting power of every wireless-operated device.

The Commission is urged to review "the scientific basis and adequacy of the EMF limits as laid down in Recommendation 1999/519/EC" and to then report back to Parliament. This is in light of the fact that many member states have voluntarily introduced much stricter regulations than are required by the EU. The resolution also refers to the Interphone study, which began in 2000, a wide ranging scientific project to look into the links between mobile phones and certain types of cancer, including brain, auditory and parotid gland tumors. The results have been expected since 2006, but have been repeatedly postponed. The European Parliament is particularly concerned by the "appeal for caution" from Elisabeth Cardis, the coordinator of the World Health Organization INTERPHONE Study, stating that "as far as children are concerned, mobile phones should not be used beyond reasonable limits."

The report therefore calls on the Commission, who has made significant financial contributions towards this study, to ask those who are in charge of the project "why no definitive findings have been published." Parliament and Member States should be informed without delay if a response is given.

Children and young people aged 10 to 20 are amongst the highest users of mobile phones, which is of concern to the House as there are uncertainties remaining about the possible health risks, "particularly to young people whose brains are still developing." The report suggests that in order to raise awareness of the dangers of mobile phones, and to encourage good mobile phone techniques, such as using hands-free kits, keeping calls short and switching off phones, that "the Community funding earmarked for studies on EMFs be partly switched to finance" an awareness raising campaign.

Aggressive marketing campaigns by telephone operators, including "the sale of mobile phones designed solely for children or free call time packages aimed at teenagers" are also condemned by MEPs.



The Brave Make Waves, Too

People like Eileen O'Connor are making a difference by putting the "heating effect" on the cell phone service providers who are in the midst of a revolution that is shaking the foundations of their towers.

In France, lawsuits against the towers are brought to court and the cell providers must

now prove that the radiation they emit is safe. No longer is the word of an electrical engineer accepted as the "official" testimony in court. Some judges now listen to and side with the scientists that have been warning of the dangers from the microwave radiation that is broadcast 24 hours a day down onto schools and hospitals.

Knowing that there is now a growing international resistance to any new tower erections, the providers have become professionals in disguising them to blend into the landscape. They erect

them in the middle

of the night while the population is sleeping. They offer huge sums of money to landlords to place them on the rooftops of their buildings. This practice of placing them so close to other properties in dense urban populations is practically criminal.

Cell Tower Studies

One study in Egypt identified the neurobehavioral deficits among inhabitants living nearby mobile phone base stations. A crosssectional study was conducted on 85 inhabitants living nearby the first mobile phone station antenna in Menoufiya governorate, Egypt. 37 people live in a building under the station antenna while 48 live opposite the station.

The results show a prevalence of neuropsychiatric complaints: headache (23.5%), memory changes (28.2%), dizziness (18.8%), tremors (9.4%), depressive symptoms (21.7%), and sleep disturbance (23.5%) were significantly higher among exposed inhabitants living in the building next to the towers.

The subjects living under the cell phone towers experienced less effects (10%), (5%), (5%), (0%), (8.8%) and (10%), respectively (P<0.05). The conclusion of this study was that inhabitants living nearby mobile phone base stations are at risk for developing neuropsychiatric problems.

Other studies show much more dire consequences - even cancer.



Watch a video about cell towers



This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Digital Enhanced Cordless Technology



Learn more at Wikipedia.org

Cordless Phones

The convenience of mobile cell phones has introduced the consumer to a whole new experience by enjoying a good conversation while relaxing in the bath or in the backyard patio where telephone plugs are rarely installed. This luxury has caused many to purchase portable cordless phones to save on their mobile phone bills. In some households, they have decided to eliminate their wired telephones altogether.

Researchers have shown that insects such as bees will not return to their hive when exposed to radiation from DECT phones. Some researchers say that Colony Collapse Disorder (CCD) is caused by cell phone tower radiation. These popular DECT phones have base stations that * constantly broadcast out high levels of radiation - even when they are not in use.

The German Federal Radiation **Protection Agency advises their** citizens not to use DECT phones.

Digital Enhanced Cordless Technology (DECT) phones work from a base station, usually with a single handset. Some DECT phone models allow additional handsets to be added to the base station. You can also have additional cordless handsets in different areas of the house.



If this is one scenario you recognize, you now have cell phone-like towers all over the inside of your house or apartment broadcasting 24 hours a day. And they are so powerful, they will even penetrate through concrete walls into your neighbor's apartment or transmit (radiate) for several city blocks.

If you are serious about getting a good nights sleep, don't keep a base station in your bedroom (or your house at all). Rewire your house and use a telephone plug.





Cell phone hazards seem to carry the most attention grabbing headlines in the media, but there are other wireless devices that are now becoming a standard and are exposing us to massive amounts of microwave radiation. Most major office buildings, libraries, schools and homes now have Wi-Fi devices to connect computers to the Internet without the need of wires - Wireless computing.

In cities like San Francisco,
Minneapolis and Toronto, Wi-Fi is
broadcast from hydro poles and
blankets the downtown core so
subscribers can surf the Internet
on city streets and in public parks
for a small fee or free in some
cases. In many urban areas, the
combined cell phone and WiFi
radiation levels are so high, they
do not meet regulated safety
limits imposed by governing
bodies.

In your home, the Wi-Fi base stations are always on, even when you are not using your computer. It's microwave radiation travels through concrete walls into your neighbors home. And remember, you need two to tango - your Wi-Fi equipped laptop computer is also radiating your lap (and your reproductive organs).

Oh, and just in case you lose your wireless internet connection once and a while, check to see if someone is using the microwave oven. The oven and Wi-Fi base station often broadcast on the same frequency.

Read WiFi BBC TV News article.



Wi-Fi • Wireless Computing Dangers



Canadian Lakehead University Bans WiFi, Favors Fiber Optic

$\mbox{\ensuremath{\sharp}}$ Click here to read the university policy on the dangers of Wi-Fi.

WiFi has been a hot issue on the Thunder Bay Lakehead campus throughout the past few years. They have decided to go fiber optic like many institutions in Japan. The policy has been that there will be no use of WiFi in those areas of the University that are already served adequately by hard-wire. Until such time that the potential health effects have been scientifically rebutted, or there are adequate protective measures that can be taken, the policy will remain in effect.

The concern about WiFi health hazards is not isolated to Lakehead University. The concern is now global. One of the elements of that concern has been expressed in the Benevento resolution, which was signed by 31 international scientists.

North American standards are based on the amount of heating it takes to raise the temperature in a portion of tissue, the human body in this case. The no WiFi issue for Lakehead is really about the non-thermal effects, which are not part-and-parcel of any of these standards, except for some of the low standards like the Russian standards and the Salzburg standards.

 $^{\oplus}_{\phi}$ Click here to view a website dedicated to WiFi information for nurseries, schools, and colleges

Salzburg Bans Wi-Fi and DECT

The following letter is written by Dr. Gerd Oberfeld and addressed to schools within the region of Salzburg, Austria.

December, 5th 2005

Dear Governor/Head Teacher/Concerned Parent

I was kindly asked by some parents to inform you about health effects from WLAN Networks in schools. I will do this in a very short summary.

WLAN antennas are emitting microwave radiation in the frequency range 2400-2485 MHz - it is the same as used by microwave ovens. The pulses change their amplitude 10 times per second in stand by (10 Hz) with a very sharp rise. The exposure depends on the distance to the antenna which could be very small in the case of antennas built in the notebook. Despite the widespread use of WLAN there are no studies available on short or long-term effects from WLAN exposures. Based on first empirical evidence from sensitive people the signal seems to be very "biologically active." The symptoms seen so far are the same seen in base station studies: headaches, concentration difficulty, restlessness, memory problems etc.

The official advice of the Public Health Department of the Salzburg Region is not to use WLAN and DECT in Schools or Kindergartens.

Best regards,

Dr. Gerd Oberfeld, M.D. Salzburg Region Public Health Department





The Science Behind Wi-Fi Radio Waves & Your Health

The greatest biological danger from Wi-Fi routers, cell phones and land-based portable phones comes from the modulated digital signals that are carried on the carrier microwave. Downloading large files can be dangerous to your health if you are in close proximity to wireless WiFi devices.

These waves resonate in biological frequencies ranging from a few cycles to several million cycles per second, and can stimulate your vibrational cellular receptors, causing a whole cascade of pathological consequences that can culminate in headaches, fatigue, anxiety, nausea and depression. Many people 'burnout' and become Electro-Hypersensitive (EHS) from the constant effects of Wi-Fi exposure at their place of work, home or school.

How Do Radio Waves Hurt You?

Studies have shown that microwaves do affect your hormone levels and can break down the blood brain barrier. Increased deposits of heavy metals such as mercury and aluminum begin to accumulate in your brain. This opens up the doors to a whole host of symptoms, the most dangerous being cancer.

Electro-hypersensitive people are like canaries in a coal mine who immediately feel the effects of the micro radio waves. Others feel nothing - in the beginning. Many school teachers are starting to complain of headaches after Wi-Fi was installed in their classroom and have decided to remove all of their Wi-Fi "hot" spots and install ethernet connections.

Some hotels and health spas that once promoted Wi-Fi connections throughout the building have now returned to the previous method and offer ethernet wired connections instead. "It's a form of smog" sites one hotel manager. "We want to offer a safe and sound sleep or healing experience for anyone who wants to escape the electrical pollution. We are sensitive to Electro-hypersensitive vacationers."

As more people become unwell and suspect that they have symptoms of EHS, the dangers of city wide WiFi and cell phone radiation will weigh in. There will be a similar trend to escape both the air pollution and the electrical pollution that blanket our cities.



Look for these warning signs!



Microwave Ovens - The History and Hazards



Microwaves and The War Effort

Microwave oven technology has existed for decades. The roots of the invention is hotly debated but there are records that show the Nazi's utilized it in their mobile support operations to feed the troops during the invasion of Russia. Captured German medical research and working ovens were studied by the Allies and the Russians after the war. The information became "classified" in the United States, while thorough research in Russia revealed a negative effect upon the biological welfare of humans.

The research showed that when food or blood was heated in a microwave, the cellular information was altered and the vitamin content was depleted. In 1976, Russia enacted legislation to ban all microwave ovens in Russia and they also decided to adapt a policy of limiting all microwave radiation from broadcast towers. Today, Russia has one of the best safety limits for microwave radiation, but with the downfall of communism in favour of capitalism - the modern convenience of microwave ovens has returned to Russia.

Bad Vibrations

In addition to the damage that microwaves are causing to our food, the vast majority of microwave ovens do leak some radiation. According to the FDA, 5 milliwatts/cm² of leakage is "permitted." Microwaves operate on a frequency of 2.45GHz. The same frequency is used by cordless phones



and Wi-Fi. These devices compete for function when they are operating near to each other. Many people have experienced dropped calls and poor internet connections when the microwave oven is turned on. You can try this experiment for yourself. Just take your microwave oven and plug it in a few feet away from your WiFi and see if you can get an internet connection when you turn the oven on. Better yet, purchase an inexpensive RF smog detector. Turn the oven on, walk away, and see how much leakage your oven has. You might be surprised.

Why does the public not know this?

Microwave ovens have been around for so long, they have become ingrained into our society. Only recently has the public been able to purchase inexpensive meters to measure the radiation that leaks from them to prove it's not the seal. Brand new ovens leak hazardous levels. Thankfully, microwave oven cooking has been getting a bad rap in most health magazines

and the consumer is getting the message that the oven and the food is not healthy for us. No need for mass panic or recalls we are told.

A Swiss doctor, Dr. Hans Hertel, tried to bring the real details and hazards of microwave cooking to the attention of the public. He was quickly silenced by the consumer appliance industry. He worked as a food scientist for several years with one of the many major Swiss food companies that do business on a global scale. In the early 90's, he was fired from his job for questioning procedures in processing food.

Working with Bernard H. Blanc of the Swiss Federal Institute of Technology and the University Institute for Biochemistry, Hertel not only conceived of a study of microwave oven safety, he was one of the eight participants.

Nevertheless, for all this time, Hertel has been effectively gagged by the manufacturers of microwave ovens who have effectively used trade laws and the Swiss court to muzzle him - even to threaten him with personal ruin.

Click here to read a detailed report on microwaves and their biological effects.

"There is extensive scientific literature concerning the hazardous effects of direct microwave radiation on living systems."

Dr. Hans Hertel









Prevention Magazine

Is Dirty Electricity Making You Sick? By Michael Segell

Prevention Magazine is a leading healthy lifestyle magazine which has been published since 1950. It gives up-to-date research on food, nutrition, exercise workouts, beauty, cooking, and more. The information is verified by leading experts.

This highly controversial article on dirty electricity examines the harmful health effects experienced by a number of teachers who mysteriously became ill in one school in California. The overwhelming evidence of the Bioinitiative Report released by an international group of scientists cites more than 2000 studies detailing the toxic effects of EMFs features prominently in the article.

Included is an overview of the history of harmful effects of EMF, and how different countries are revising their exposure standards.



GQ Magazine

Warning: Your Cell Phone May Be Hazardous to Your Health By Christopher Ketcham

GQ (Gentlemen's Quarterly) is a monthly men's magazine focusing upon fashion, style, and culture for men. Articles on food, movies, fitness, sex, music, travel, sports, technology, and books are featured.

This GQ article highlights individual case histories of people suffering from various symptoms related to microwave exposures and notes that scientific debate is heated and far from resolved. Interphone researchers in Israel have found that cell phones can cause tumors of the parotid gland.

There is an explanation of how radiation from cell phones and wireless transmitters affect the brain and provides an in-depth history of the problem.



Popular Science Magazine

The Man Who was Allergic to Radio Waves By James Geary

Popular Science, a successful and long-running monthly magazine aims to disseminate scientific knowledge to the educated layman or the just plain curious.

Per Segerbäck lives in a modest cottage in a nature reserve outside of Stockholm. Human technology makes him physically ill, so ill that on one occasion, he ran into a neighbor and when his cellphone rang, he became nauseous and it rendered him unconscious. Segerbäck suffers from electrohypersensitivity (EHS), meaning he has severe physical reactions to electromagnetic radiation. In extreme cases he can have breathing problems, heart palpitations and loss of consciousness.

See Prevention article here

See GQ article here

See Popular Science article here

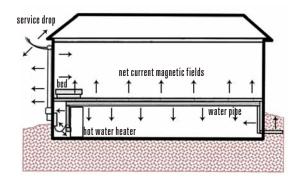


Electricity in your water?

If you live in an urban area and your home wiring is grounded to your plumbing, you are likely being exposed to a very high level of magnetic fields emanating from the metal pipes under your floor. When the city's power grid can't keep up with the demand for electricity, it's distribution system often becomes overloaded.

When excess current returns to a distribution transformer via the grounding circuit - instead of the neutral conductor of the line, net current develops. It contains 60Hz and unwanted harmonics as 90, 180, 300, 420 Hz and even variable oscillating crescendos of extremely low frequencies. The currents also can include digital cablevision, telephone, radio frequency/microwave, as grounding return "noise". The radio frequency and microwaves infiltrate water main currents through electric power transmission/distribution systems, Broadband over power line systems, including Wi-Fi.

The magnetic field produced by this net current is not canceled and is usually a major



source of magnetic fields nearby. Surveys of the electromagnetic fields of industrial, commercial, institutional, and residential buildings across North America have revealed an enormous amount of beloctrical current being channelled into the ground.

Stray current is a problem with farmers whose properties share the electrical distribution towers. The electricity can travel into the ground and can cause significant problems to the livestock. The farmers "ground" their homes and barns into grounding rods that are placed into the earth. The stray current can travel into the ground and into the machines that feed and milk the animals.

In the city we are 'grounded' to our water intake. Many houses are built with these "electrified pipes" running directly under the floor of the main level of the house, as opposed to running through the basement floor. This brings the magnetic fields which are being emitted from these pipes much closer to the common living areas of the house, such as the bedroom, increasing the biomagnetic effects on the occupants of the residence.

To bring this into simple terms, imagine living under high tension power transmission towers. You would not want to do that would you? Well, there is a good possibility that you are living right above one if you live in the city and your electricity is grounded to your water pipes. The only way to really know if you are safe is to buy a gauss meter or hire a specialist and measure the magnetic radiation from your water intake. If it is high, you can rewire your ground to a stake in the earth.

View video about rewiring your ground.

RF radiation from your power lines?

The frequency of the electricity that originates from North America's power plants is 60 Hz. Along the way, radio frequencies from cell phone towers and other forms of microwave devices become captured in the transmission lines. By the time it reaches your house, the 60 Hz signal becomes corrupted with other biologically harmful frequencies, and your homes wiring system becomes a microwave aerial.

Your electronic computers and the new low energy fluorescent light bulbs also add unwanted frequencies into your house wiring resulting in all sorts of problems. Some external computer hard drives are getting corrupted and are failing from the radio frequencies that travel up the cables into your external drives. Many years ago - everything in our home, such as electric lighting was running on 60 hertz and mostly feeding that 60 hertz frequency back into the power system.

Today, our electricity is very corrupted with many harmful frequencies and our bodies are absorbing this just by siting next to it. We are bio-electromagnetic, our bodies attract this energy and it is absorbed into our cells. Electrosensitive people, can feel these added radio frequencies.

There are filters that you can place in the electrical outlets that will eliminate the unwanted frequencies so that only the 60 Hertz will remain. Some people that are electrosensitive report major improvements in their health once they have been installed.

Lick here to read a study by Magda Havas on dirty electricity and electro-hypersensitivity.





If we could all see the electrosmog that surrounds our cities we would most likely not be in the predicament that we are faced with. Seeing is believing for most people. Smokestacks produce smog, but the fields that are emitted from cell towers, cell phones and the wiring in your home are invisible to humans.

We are now entering an age where EMF websites are flourishing. They carry hundreds of items that will protect you from hidden & unwanted radiation. There is *EMF shielding paint that you can put on your walls. EMF gels that you can put on your windows. EMF clothes that you can wear.

Beware of the "shielding" devices that clip to your phone to offer you protection. There

are many companies that offer products which just don't work. If they did, the cell phone companies would probably use similar technologies instead of placing warnings in printed safety manuals suggesting that the user keeps their phone at least 1 inch away from their body.

Until recently, inexpensive meters that could measure radiation levels of computers, microwaves, cell phones & cell phone masts were hard to find. The internet has opened up a whole new avenue for the public to locate information about EMF - and ways to locate it in your home and community.

You can hire a professional - or you can become one.

Electrosmog Detector (RF)

sensoryperspective

If you're a Star Trek fan, you will enjoy this inexpensive (\$99 USD) hand-held RF detector that provides an audible warning when you are within range of devices that produce microwave frequencies, such as microwave ovens, cell towers, DECT phones, Wi-Fi, and cell phones. The device, which resembles and sounds like a Star Trek phaser, can detect frequencies from 5 MHz to 3 GHz, and is sensitive down to 0.01 Volts/meter. 360° view

It provides a different sound for different frequencies of radiation, allowing you to determine the difference between a Wi-Fi device, microwave oven, cell tower, etc. It's small, lightweight and fits in your pocket. Great at parties.

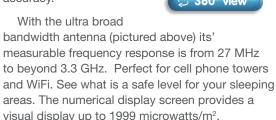
This device does not aim to tell you what level is safe for you. It is not an emergency warning device. Nor is it an alarm. It is a health care aid and an educational tool. It provides you with an impression of your personal exposure to microwave signals, encouraging you to go find out where they are coming from so that you can reduce your exposure.

Click here to listen to audible alarms.

HF-Analyser (RF)

Gigahertz Solutions

If you are looking for something that will show you the amount of radiation as a quantifiable number and the unique sound of the type of radiation, the HF-Analyser by Gigahertz Solutions is a good bet. It is a relatively expensive unit for the home user (over \$1000 USD), but if you are a professional EMF consultant or serious about reducing your exposure, this is something you may want to consider because of its' accuracy.



The sad part of this devise is that it will only display up to 1999 microwatts. Assuming that the manufacturers thought that 2000 microwatts would be outrageously high - if you purchase this model and test it in an large urban downtown setting - you will see that some citizens are living in a situation that is extremely hazardous to their health.





Digital Electrostress Analyzer (EMF)

Gigahertz Solutions

This is a dual function gauss/ tesla meter for AC electric and magnetic field EMF meter. It allows you measure EMF radiation ranging from 16 Hz to 2 KHz. For about \$100 USD, you can get an accurate digital readout of the magnetic fields that emanate from your portable computer keyboard, water pipes, electrical panel, hair dryer, electric stove, electric baseboard heater, high power distribution lines, transformers and even your new electric car or scooter.



360° view

There is a setting for sound that warns you with a clicking tone that gets faster as you get closer to higher fields. It's not a 3 dimensional meter, so you need to rotate it to get an average reading. Its 9 volt battery provides you with a fair amount of use but it would be nice to have a built in rechargeable battery just so you don't need to keep buying and changing the batteries.

For the price, it's a good starter unit for the user that wants to locate problem areas in their home or work and save the cost of hiring a professional.





Vapor From Your Mouth To Your Brain

Many people living in the world today have dental mercury amalgam fillings. When dentists started using them over 100 years ago they insisted the mercury was harmless, and the American Dental Association (ADA) still says they are safe once it is blended into an amalgam. Others in the medical profession believe that the mercury leaches out of the filling and is a neuro toxin. Several studies done in the US on children and university students confirm that mercury vapor from amalgams does leak into the body even when it is inside the amalgam.

Click to read the scientific study on urinary mercury in children.

Another study reveals a darker side of mercury that few people are aware of: dental amalgams exposed to electromagnetic fields of any kind, such as MRIs, microwave towers, WiFi, and especially cell phones because of their close proximity to the mouth leak even more mercury than normal. The magnetic fields vaporize the mercury from the tooth, which is then inhaled through the mouth, into the lungs, and then travels into the brain.

Because cell phones can break down the bloodbrain barrier, the mercury vapor can travel directly to the brain.

Click to read the PubMed report: cell phones cause mercury leakage in amalgams.

The mercury vapor causes an electrical interference in your nervous system and throughout your entire body. Once this vapor enters the cells of the brain the person becomes more sensitive to electromagnetic fields. Here the symptoms of EHS can be amplified many times over.

People with mercury amalgams would benefit from seeing a **\$ holistic dentist** who practices the safe removal of amalgam mercury fillings. You can't just drill it out, because the mercury vapor will be released into your system.

It would also be a good idea to evaluate your diet to remove foods which bring with them high levels of mercury, such as tuna fish. The mercury from burning coal in the hydro power plants rises from the smoke stacks, condenses in the clouds, rains down into our lakes, and settles on the bottom. This is where mercury enters the food chain.

The consumer is now aware of the toxins originating from the smoke stacks, and the green generation is calling for their replacement. Unfortunately, there is a new form of pollution. The smoke stacks that once produced visible smog are gradually giving way to cell phone towers. Instead of visible pollution, we are poisoning the air with unseen electrosmog. One vicious circle is replaced by another, and most people can't see the change.

We were told that mercury is safe, and it took hundreds of years to prove them wrong.

Many people suffered and died along the way. Are we going to trust the cell phone industry, like we trusted the dental industry - or the tobacco industry?

Toxic Light Bulbs

While we are on the subject of mercury (and the conservation of energy), compact fluorescent bulbs contain mercury vapor. If they are dropped the vapor can cause serious health problems. It is for this reason that they can't be thrown away in the garbage to go to land fills. They must be returned for recycling at places like Home Depot.

In addition to the **toxic hazards of CFLs**, they also produce ultraviolet radiation, and some people have suffered rashes on their body when they

are near the bulb. They also produce radio frequencies from a tiny transformer that is used to excite the gas inside the tube, which provides light.

They may save you money on your energy bill, but could end up increasing your medical costs.



First Radation-Free Retreat in France



The Drôme located in Eurre, in the southeast of France, is a temporary refuge for EHS sufferers where everything is free, even the water and electricity.

The vast estate is a private emergency Refuge Zone put at the disposal of EHS sufferers in distress, temporarily and without charge, on a humanitarian basis.

It is not a true White Zone, but an area of low radiation without any EMF beams or lobe. The topography of the property eliminates most radiation, but there is still a variable residue 15 kilometres away, with a major TV relay mast with mobile phone relay antennas. You will need to have your own caravan (aluminium body) with WC, or a camping car (no tents).

In France, the illness is simply ignored by the authorities, they protest. As a result of a recent government round-table consultation on the environment, an experiment is planned to test relay

antennas with a lower radiation level in several French cities.

According to \$\frac{1}{8} \text{Next-Up.org}, 8\% of France's population is electro-hypersensitive (EHS). One of the retreat inhabitants is Claire Andrina, a nurse, and she recalls her first crisis in 2005: "I thought I had multiple sclerosis. My legs twitched about when I was resting, I couldn't sleep and had chest pains." "It's a sort of burning feeling", explains Philippe, 48, who finds that "even going to get a paper in town is often unbearable. You don't see your friends any more, you don't go out, it cuts you off completely from everyone," adds this exteacher, who takes refuge "when he doesn't feel good" in the woods near his house.

Those who come to the retreat must be able to look after themselves physically and financially. It is essential for anyone wishing to stay, to come for "a preliminary test" of a few days. Places are limited. For more information about the refuge, \$\frac{1}{2}\$ click here.



EHS ZONE REFUGE

WELCOME - BIENVENUE
HEALTH ZONE ZONE SANTE

Avoir la 3G est un choix, être irradié 24h sur 24 par les CEM de la 3G ne l'est pas Recevez par mails gratuitement les News Nationales www.next-up.or



A U.S. Mid-Western Oasis

Green Bank, West Virginia is the site of the world's largest fully steerable single aperture antenna. The Robert C. Byrd Green Bank Telescope (GBT) collects radio waves emitted by stars, galaxies and other objects in the universe. It receives signals from space, and it can be pointed with an accuracy of the equivalent of the the width of a human hair from 66 feet way.

Because of the sensitivity of the equipment, there is absolutely no electronic interference allowed

anywhere near the telescope. This means that cell towers, WIMAX, and even radio transmission is prohibited. This has resulted in a entirely EMF-free zone in Green Bank, West Virginia.

The website has this friendly reminder:

Simple film cameras are welcome all over the NRAO site, but digital cameras, or 35mm cameras with advanced electronics, cannot be used near the telescopes. Digital cameras and other electronics create radio pollution which can ruin astronomers' data. We thank you for your understanding and for helping us provide quiet skies at Green Bank.

Green Bank Cabins

Green Bank Cabins in West Virginia were built in 1810 and have been restored with full kitchen, full bath, all linens, utensils, pots and pans, coffee pot, and sleeps six.

So, if you want to escape the fast pace of life and electro-smog for a few nights or a couple of weeks consider this sanctuary as your EMF-free zone home.

& Click here to visit their website

Click here for Google maps





Help Spread The Word!

Contribute to our magazine!

Do you have an interesting story about EMFs to share with your friends?

In the box to the right we have provided you with an opportunity to type in your thoughts and comments. So speak your mind! When you're done, press 'SAVE' to save this PDF and hit the 'SEND' button to email it to a friend.

Thank you for reading and taking part in our magazine.





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