





About this eMagazine

ReWireMe is the official emagazine of the Electrosensitive 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

#3 EHS - A New Illness Emerges

It started with telegraph technicians. Now we are all feeling the effects of an electrified world.

4 Earth Frequencies

Natural electricity, the way it was meant to be.

Wireless Communicators

Yesterday's science fiction is today's must-have technology, (and tomorrow's enemy)?

B EMF News

Health departments and cancer specialist warns staff of improper cell phone use.

10 The INTERPHONE Project

A 13-country epidemiological study of tumors among users of mobile phones.

Dangers Of Unsafe Cell Phone Use

High powered electrical devices and their effect on your (and your children's) future.

🖣 🖊 Safe & Smart Cell Phone Use

Directions for safe use.

18 From Zory's Archive

The history of microwave radiation.

20 Cell Phone Masts

Are they safe? Anti-cell tower crusaders have taken to the streets to alert us of the dangers.

2 Portable Phone Dangers

Having trouble sleeping? Could be the cordless phone base station on your night stand.

23 WiFi: How does it affect your health?

Entire cities are now providing wireless access for your computer. To some it is "electrosmog." Could it have serious consequences to public health?

25 Microwave Ovens: History & Hazards

Bad beginnings, bad vibrations. Fast food = less vitamins = short lifespan.

26 Magazine Article Reviews

Enlightening articles to increase your knowledge but you will find many sources in the printed word.

№ 27 Dirty Electricity

Electricity in the air and in the water?

28 Detecting & Measuring Radiation

Uncover the invisible, see the unseen, hear the unheard.

30 EHS & Body Toxins: Mercury

Dentistry and the effects of radiation on your fillings.

The Drôme, Eurre, France

The Drôme located in Eurre, France is a temporary refuge for EHS sufferers.

Featured Travel Destination: The Green Bank, West Virginia

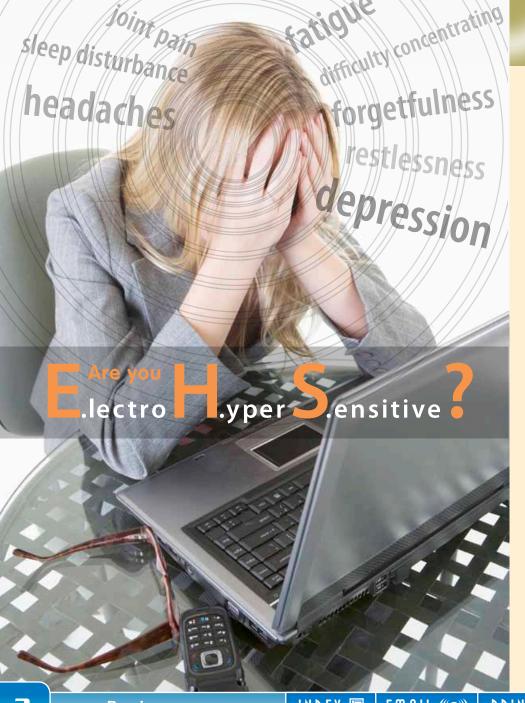
A radio antenna has resulted in a entirely EMF-free zone in Green Bank, West Virginia.

33 Help Spread The Word!

Add your story and share it with a friend.

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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.

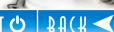
devices in hospitals that use pulsating electromagnetic fields to mend our bones and relieve depression. These devices do not raise our skin temperature but they do have a very dramatic biological effect on our cells. Broken bones and mental disorders can be cured by electromagnetic

But, there are many medical

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.

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.

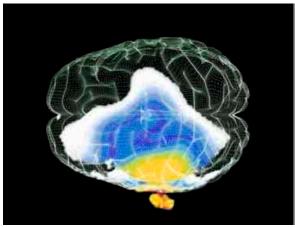
Ronald B. Herberman, MD, the first director of the University of Pittsburgh Cancer Institute, a National Cancer Institute (NCI)-designated Comprehensive Cancer Center, is an internationally recognized tumor immunologist who has made

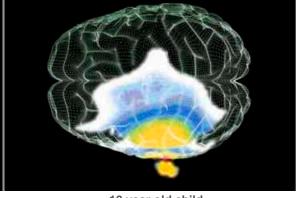
major discoveries in his field and has fostered the application of this information to novel approaches to cancer therapy.

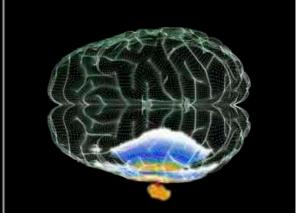
On the following page is his memorandum that was sent on July 23, 2008 to 3000 staff members to warn them about the health effects related to cell phone use.

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).

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

The recent article, "Brain tumour risk in relation to mobile telephone use: results of the INTERPHONE international case-control study" that appeared in the International Journal of Epidemiology on May 18, 2010, (2010:1-20) clearly demonstrates the flaws with the way we fund, conduct, review and report on science that deals with products that fetch billions of dollars and place at risk, at least potentially, billions of lives.

Click HERE to view the study in PDF

The **INTERPHONE study**, the largest (5,117 brain tumor cases) and most expensive (\$25 million dollars) study on cell phones and brain tumors, involving scientists from 13 countries, was flawed from the very beginning. Whoever designed the protocol did it in such a way as to minimize finding any adverse effects. Despite this, adverse effects were reported — a 40% increased risk of glioma (a type of brain tumor that affects the glial cells in the brain) for those who used a cell phone for at least 1,640 hours with the highest risk for tumors in the temporal lobe and on the same side of the **head** that one exposes to the cell phone. In other words most of the tumors occurred in the part of the brain receiving the greatest radiation for those who had the longest exposure. And what did the authors do with this result?

They attributed it to biases and error. Why?

Study design to minimize finding adverse effects of cell phones

First example: A regular cell phone user was defined as anyone who made at least one call on

their cell phone each week for at least 6 months! Would you expect a person to develop lung cancer if s/he smoked at least one cigarette a week for at least 6 months? By setting the number of calls so low (at least 24 calls on a cell phone) it dilutes the effect and favors a "no-effect" result.

Second Example: People who use cordless phones are exposed to virtually the same type of radiation yet they were not identified as exposed in this study. The cigarette analogy is comparing those who smoked one brand of cigarettes with those who smoked a different brand but this second group is labelled as "non-smokers". This also favors a "no-effect" result. We must recognize that even those people who do not use mobile phones (cell and cordless phones) are exposed to the radiation from nearby users, from nearby cell phone antennas and now from wireless routers as well as city-wide WiFi in a growing number of communities. So the best we can do is compare users with those who are exposed to the equivalent of second-hand smoke. This also under estimates the real risk of microwave exposure.

These two biases were so powerful that the final result showed that cell phones prevented brain tumors!

Third example: brain tumors take decades to develop in adults yet only a small fraction (less than 10%) of those people in this study used cell phones for more than 10 years. Just as you wouldn't expect to find lung cancer in a smoker after 4 to 5 years, you would not expect to find a brain tumor for a cell phone user during this short period of exposure either.

Forth example: participants were restricted to those between the ages of 30 to 59. Younger and more vulnerable participants were excluded from this study. This flaw is now being addressed with a new study based on younger users.

These experimental flaws and the obvious bias in the experimental design should have been caught early and corrected. But it wasn't. Why?

How could so many of the leading scientists in this field allow this to happen? Were they lured by the funding, which came-in part-from the very industry whose product was being studied? There were so many flaws in the experimental design that this article in the International Journal of Epidemiology should not have been accepted for publication by a peer-reviewed journal. Indeed, the reviewers, whoever they were, should have recommended that this article be rejected or accepted only after major revisions. This demonstrates problems with our peer-review process that the scientific community values so highly but that process is deeply flawed, and this is just one example.

This study demonstrates that funding (25% of which was provided by the wireless industry) can have a effect on the outcome of a publication. This has been shown time and again (with microwave radiation and with other environmental toxins including cigarettes) so why would we expect this study to be different. Indeed several of the authors identified conflicts of interest and associations with the wireless industry that went beyond the funding of this study.

It shows that a flawed experimental design

The Official Reports

produces unreliable results. The two major results from the Interphone study is that short-term use of cell phones provides protection against brain tumors and long-term use increases the risk of gliomas. The authors attributed both of these findings to biases and error!

Why were Interphone related documents called Appendix 1 and 2 published separately in the same journal? Why were these appendices not part of the original report? Was it because they showed higher levels of risk for both types of brain tumors?

We have included these important documents in PDF format for you to view.

Appendix 1 Interphone: While the original INTERPHONE study stated there was a decreased risk of meningiomas or no effect with cell phone use, Appendix 1 showed an 84% increase risk of meningiomas for those who used a digital phone for 1640 hours or more and those who used both digital and analogue cell phones or if type of phone used was unknown had a 343% increased risk or meningiomas!

Appendix 2 Interphone: In an attempt to try to "correct" the "downward bias" a mini report entitled Appendix 2 was published as a separate document in the same journal. This appendix compares regular users who used cell phones for less than 2 years (as the reference population) with those who used cell phones for longer periods.

The table in Appendix 2 provides some disturbing results. It shows that there is a statistically significant increased risk (68%) of developing gliomas for those who used a cell phone for as little as 2-4 years and 118% increased risk for those who used a cell phone for 10+ years. In the original study these exposure categories were shown to reduce risk of gliomas! See the highlighted areas in this table with comments. Indeed the 40% increased risk of glioma mentioned in the original study for those who used a cell phone for 1640 hours or more becomes an 82% increase when compared with regular cell phone users.

So what can we learn from this experience?

We learn that funding can influence the results of a study no matter how much scientists attempt to be objective.

We learn that bigger is not necessarily better. Had the \$25 million dollars been given to independent scientists in various disciplines to determine the biological effects of cell phone use we would have been much further ahead than with the INTERPHONE study.

We learn that a flawed experimental design produces unreliable results. Even the authors of this study claim it is inconclusive and unreliable (since they state that the effects of due to biases and error).

We learn that **compromise is necessary for** setting standards and establishing policy but not for conducting science. Science is not done by committee or by consensus and compromise. The majority is not always right and we have plenty of examples from various scientific disciplines to demonstrate this.

As I read the INTERPHONE report and interviews with participating scientists, I sensed the frustration with the process and can now understand why it has taken so long to produce this document. I expect that some of those involved are deeply frustrated and perhaps even embarrassed by the outcome.



DVD about cell towers now available

Full Signal is a eye-opening documentary about the telecommunications industry and talks to a number of leading that have been studying the affects of cellular technology on human beings for years. It sheds light on the triumphs and tribulations of lawmakers, lawyers and activists fightling to regulate attenna placement.

Filmed in ten countries, it examines the contradiction between health and finance, one of the many ironies in the fight to regulate their placement. www.fullsignalmovie.com

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



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

Watch the Video on You Tube

Download the Hi-Res Video

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.

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.



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 Official Reports

"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

Elizabeth Cardis, head of the INTERPHONE study, was quoted as stating: "In my personal opinion, I think we have a number of elements that suggest a possible increased risk among the heaviest users, and because the heaviest users in our study are considered the low users today, I think that's something of concern. Until stronger conclusions can be drawn one way or another it may be reasonable to reduce one's exposure."

This is a wise comment that we should all heed.

Click HERE to listen to an interview with Elizabeth Cardis.

Cardis is a co-author of a paper showing an increase in Salivary Gland Tumor on the same side of the head that one exposes to a cell phone after a 10-year latency period. She is also now heading up a study with young users, called Mobi-Kids. Let's hope that this new study corrects the flaws of the INTERPHONE study and produces reliable results.

Major advances in science often start with individuals who are curious and want to come as close as possible to understanding the truth about some aspect of our physical reality; individuals who are able to put aside their preconceived notions when they stumble across an unexpected result. Indeed it is these unexpected results that propel our understanding of science and it is those who recognize the value of the unexpected who become known for their "discoveries".

Thomas Kuhn described this process and called it a paradigm shift. It refers to a revolutionary change in the way we understand some aspect of science. It is often opposed until the evidence becomes so overwhelming that it can no longer be denied.

We are currently in the midst of a paradigm shift when it comes to understanding the biological effects of non-ionizing radiation. The evidence that this form of energy causes biological and health effects that are unrelated to heating is now overwhelming. It won't be long before the "old school" of thinking is replaced with the new, and when this happens we will see rapid growth in our understanding of both the harmful and healing effects of this type of radiation. It is my hope that we will also see a shift to safer technology and improved guidelines for protecting public health.

To ensure this happens within the next decade rather than the next century we need independent funding of science on the biological effects of non-ionizing electromagnetic energy. The money spent on research will be repaid many times with the money saved on health care costs, disability compensation for those who develop electrohypersensitvitiy, and improved performance at work and school.

The Official 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.

By Magda Havas

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 | lessemf.com



U.S. Patent

US 6,453,044 B1













Safe & Smart Cell Phone Use





More Bars Are Better? Not Necessarily.

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{\pi}{\pi}\$ 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"

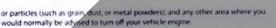
The cell phone cancer warnings are starting to have an effect on the governing bodies that are here to protect our safety. 129,000 cell phones made by Korean conglomerate LG have been recalled across Canada because they do not meet federal guidelines for radio frequency exposure.

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 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."



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

Prone has been tested, and meets the FCC, IC, and European Union III. exposure quidelines for cellular. Wi-Fi, and Bluetooth operation. When tested for use at the ear



The History of RF/Microwave Radiation



From Zory's Archive by Magda Havas

At the beginning of April 2010, a friend sent me a scanned document entitled "Bibliography of Reported Biological Phenomena ('Effects') and Clinical Manifestations attributed to Microwave and Radio-Frequency Radiation."

This document first appeared on October 4, 1971, and what I received was the second printing with revisions, corrections, and additions, dated April 20, 1972. It was a Research Report (Project MF12.524.05-0004B, Report No. 2) commissioned by the Naval Medical Research Institute, and was authored by Zorach ("Zory") R. Glaser, Ph.D., LT, MSC, USNR.

To my surprise, I learned that by 1971 there were more than 2,300 references to documents that detailed the biological effects of radio frequency and microwave radiation from various technologies including radar and mobile communications, navigational devices, and physical therapy devices such as microwave and shortwave diathermy. What an amazing find, especially since the World Health Organization and the wireless telecommunication industries continually state that there is no credible research showing that non-ionizing, non-thermal microwave radiation is harmful at levels below our existing thermal guidelines.

As I flipped through the report and the citations, I found hundreds of references translated from Czech, Russian, German and Polish laboratories; references from the U.S. Navy, Army and Air Force; as well as government reports and documents, many of which had not been published or mentioned in other literature.

I wondered if Dr. Glaser was still alive, and/ or still active in the field of radio frequency (RF)/ microwave bioeffects, as I had no idea how old he was back in 1972. Consequently I looked him up on the Internet, found a phone number, and called. I wanted to thank Dr. Glaser for the remarkable work he did pulling together so many references on this topic.

We had a long, animated conversation about his research during the past few decades and my research interests, which were remarkably similar. He informed me that he had produced 9 supplements to the original 1971 bibliography, and now had cited well over 6,000 studies on the bioeffects and health effects of radio frequency and microwave radiation, and a number of these were studies showing that exposure to RF/microwave radiation was able, under certain conditions/ circumstances, to produce changes, some of which could be considered dangerous (even at low levels where such exposure did not heat the body). He said he would send me copies or the references for the supplements he had in his possession.

For those of you who are new to the dangers of RF/microwave radiation, federal guidelines in Canada, the United States, the United Kingdom, Germany, Japan, New Zealand, and those recommended by the World Health Organization (WHO) are based on thermal effects. "If it does not heat you, it does not hurt you", the saying goes. These countries/organizations deny that electromagnetic fields (EMFs) cause biological effects below the thermal threshold for microwave radiation.

Countries such as Russia, Bulgaria, Hungary, Poland, the Czech Republic, Switzerland, China, Italy, Luxemburg, and Salzburg in Austria believe that non-thermal microwave radiation may harm you, and consequently have more conservative human safety guidelines.

Dr. Glaser compiled his first RF/microwave bioeffects bibliography in 1971 (after earning his PhD degree), as a result of his studies following helping to establish the RF bioeffects laboratory at the Naval Medical Research Institute, when he was assigned by the U.S. Navy, as the military wanted to know if non-ionizing radiation exposure from RF/ microwave sources could have adverse effects on military personnel. His superiors were impressed with his report (which included Soviet research; note that the Cold War was on-going at that time), and they asked him to update the bibliography regularly.

Dr. Glaser then funded, managed, and performed RF/microwave bioeffects research as part of his next assignments at the Navy's Bureau of Medicine and Surgery (as Radiation Medicine Program Assistant), and then at the Naval Medical Research and Development Command (as Electromagnetic Radiation Program Manager), and as Officer-in-Charge and Senior Scientist (at the Non-Ionizing Radiation Bioeffects Laboratory, at the Naval Surface Weapons Center).

He then transferred to the U.S. Public Health Service, and began work as manager of the RF/ Microwave Radiation Criteria Document, for NIOSH (the National Institute for Occupational Safety

The History of RF/Microwave Radiation



and Health), where he continued his research on the human health effects of radio frequency and microwave radiation. He later transferred to the Bureau of Radiological Health, where he served as Executive Secretary of the Technical Electronic **Product Radiation Safety Standards Committee** (an advisory committee to the Commissioner of the U.S. Food and Drug Administration, FDA). A few years later he became Associate Director of the Division of Life Sciences, at the National Center for Medical Devices and Radiological Health, where he had responsibilities for (among other) evaluating/assessing the safety and effectiveness of applications for devices that used or generated electromagnetic energies to diagnose and/or treat illness.

In Dr. Glaser's very early Navy career, he was trained and served as an electronics technician. He is also a charter member of the international Bioelectromagnetics Society, and for many years provided the 'microwave bioeffects bibliography' update (referred to by many as the "centerfold") for the Society's monthly newsletter.) Dr. Glaser continued publishing his bibliographic supplements after he left the Navy, with supplements published by NIOSH, and by the Bureau of Radiological Health of the FDA.

He was, and is still considered to be one of the international experts in the RF/microwave bioeffects field, and I was most impressed with his knowledge, his insights, and his historical perspective.

Just before we finished our long insightful telephone conversation into both of our careers, I asked him if, by chance, he had any paper copies of those references.

Dr. Glaser said, "funny you should ask. As a matter of fact I have them all. I kept the reports in my home (basement, attic and garage) for a number of years following my retirement from FDA, and then moved them into two large commercial storage spaces, and over the years offered them (consisting of about 45-50 large boxes) to scientists performing research in this field, and to governmental and university libraries, but no one seemed to want them. I was planning to discard them, as I am now looking toward real retirement, and storing them is quite costly."

Dr. Glaser mentioned that a number of lawyers, and a few individuals working for the wireless industry have asked him for parts of his collection but he declined to give the collection to them because he felt the information would be buried. He indicated that he wanted the collection to be available to the public.

Before I knew what I was saying, I asked if I could have them. I would digitize them as PDF, put them online, and make them available to the public via the Internet. He thought for a long moment, and finally said "yes", with the provision that I would pick them up or pay for their delivery. For a university research scientist like me, this was an opportunity equivalent to winning a lottery!

I learned that he lived in Maryland (between Baltimore and Washington, DC), and, as it happened, I was giving a lecture on the health effects of microwave radiation at the Johns Hopkins School of Public Health (his university, where he teaches, and where he earned the MPH degree in 1990) at the end of April, and we decided to meet. He came to my lectures, and actually became part of the lectures by joining me, at my invitation, in answering some questions raised by the audience, and sharing his expertise with the students, in the hope that the concerns for the possible dangers of RF/microwave radiation exposure would be considered by the public.

We then later visited the commercial storage unit, which was overflowing with many boxes containing thousands of reports and printed documents, and-after a quick peek at this treasure house of knowledge-we decided that once the documents was sorted to remove unrelated material I could pick them up. A few weeks later, I flew to Baltimore, rented a U-haul truck, and brought back the first of about 25 boxes overflowing with reports and printed documents.

The plan is to have the documents scanned (starting with ones that are more difficult to access, including government and military reports and translations of foreign technical articles) as searchable PDFs, and then make them available at the Electrosensitive Society website (www.rewire.me).

The series will be posted under the heading "From Zory's Archive", and the articles will appear weekly as "Pick of the Week.

The very first article that I will summarize (and make available) is the document that first brought Dr. Glaser's work to my attention, his bibliography dated 1971/1972.

Click HERE to read the original document.



The Brave Make Waves, Too

Movies like **\$ Full Signal** 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 growing to any ne providers in disgu

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 cross-sectional 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.







DEET PHONE DANGERS



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

Digital Enhanced Cordless Technology





The convenience of cordless DECT phones have 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 rare. Mothers can do their chores and listen to their infant using a wireless DECT baby monitor. 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 and baby monitors have base stations that constantly broadcast out high levels of radiation - even when the device is 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



broadcasting microwave radiation 24 hours a day all over the inside of your house and right beside your baby's crib. 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 the health of you and your baby, don't keep a base station in your bedroom, or your house at all. Rewire your house and use a telephone plug for your phone and a wired intercom system for your baby.





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



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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.

The article on dirty electricity points out a number of teachers who mysteriously got sick 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 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 there is 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 whose 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

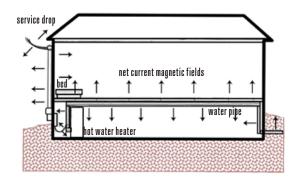


Electricity in your water?

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 electrical 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.

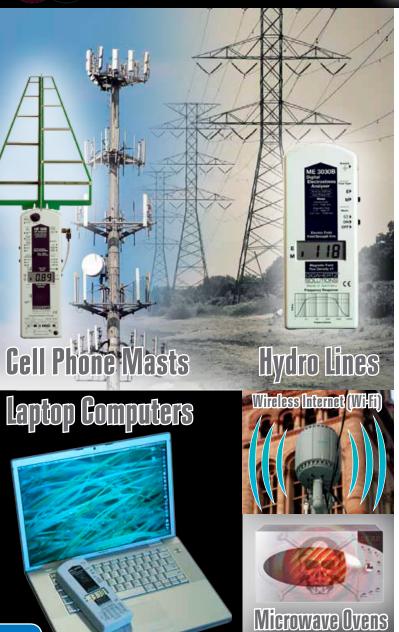
Your electronic computers and the new low energy fluorescent light bulbs also add unwanted frequencies into your house wiring resulting in all sorts of problems. Some external computer hard drives are getting corrupted and are failing from the radio frequencies that travel up the cables into your external 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.

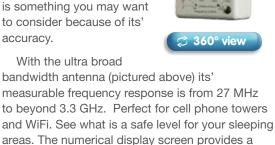
This device does not aim to tell you what level is safe for you. It is not an emergency warning device. Nor is it an alarm. It is a health care aid and an educational tool. It provides you with an impression of your personal exposure to microwave signals, encouraging you to go find out where they are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

visual display up to 1999 microwatts/m².

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.









No ElectroSmog

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.

According to the organization, 8% of the country's population is electro-hypersensitive (EHS). Claire Andina, a nurse of 49, recalls her first EHS 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 ex-teacher, who takes refuge "when he doesn't feel good" in the woods near his house.

As for some of his fellow visitors, "In my house everything is wired," says Mickael Heiming,

41, a German who used to be a mobile phone engineer, who adds, "It took me some time to realize there was a connection between my headaches and the work I was doing." The action group Robin des Toits ("Robin Hood of the Roofs") declares on its Internet site that "EHS is a pathology recognized and described by the World Health Organization (WHO). In Sweden it is classed as a handicap, in the UK as an illness.

In France, it is simply ignored by the authorities," they protest. As a result of the recent government round-table consultation on the environment, an experiment is planned to try out relay antennas with a lower radiation level in several French cities between November 2009 and April 2010.

Last June a large group of members of the public recommended reducing the limit to 0.6 V/m (BioInitiative Group), a measure considered "unrealistic" by the Association of Mobile Phone Operators (AFOM). Places are limited.



Featured Travel Destination: Green Bank • West Virginia



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 only receives signals from space, never sends them 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.

Pass it on!



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