

## **TO THE FEDERAL COMMUNICATIONS COMMISSION**

**RE: Proceeding Number with 03-137 12-357.**

**Below is simply a very short list of current research, medical commentary and brief update of legislative motions all indicating the health dangers to the American public due to their involuntary and often constant exposures to the electromagnetic fields and radiation emitted by cell towers, cell phones, WiFi and Smart Meters. A more complete listing or research would include 25,000 studies done by the US Navy, and thousands of other peer-reviewed findings published over the past three decades.**

**Your Commission is holding the lives of the American people in your hands, and history will be the judge of your ethics in resolving to protect your families and ours.**

**Yours truly, Felicia N. Trujillo, ND  
DOCTORS W.A.R.N., (Wireless and Radiation Network)**

### **SHORT SUMMARY OF PEER-REVIEWED PUBLISHED RESEARCH AND MEDICAL COMMENT ON THE HEALTH EFFECTS OF EMF/EMR**

**1) The World Health Organization** already categorized EMF/EMR from such products as Smart Meters, baby monitors, cell phones, WiFi as a Class 2B: possibly human carcinogen along with DDT, lead and HIV virus.

#### **2) 900 MHz Radiation Induces Hypothyroidism and Apoptosis (cell suicide) in Thyroid Cells**

Results of this study indicated that whole body exposure to modulated RFR similar to that emitted by GSM mobile phones caused pathological changes in the thyroid gland by altering gland morphology and inducing apoptotic [cell suicide] pathways.

[http://www.scribd.com/fullscreen/73089352?access\\_key=key-13jthil1zs36giwufvbo](http://www.scribd.com/fullscreen/73089352?access_key=key-13jthil1zs36giwufvbo)

#### **3) NEW RESEARCH: Brain Tumor Pandemic—DNA Impacts from Mobile Phones Implicated in New Analysis**

December 24, 2011, Berkeley, CA, USA & Stockholm, Sweden. An important new analysis, The Potential Impact of Mobile Phone Use on Trends in Brain and CNS Tumors, was published today in the journal Neurology & Neurophysiology. It can be downloaded without cost at <http://www.omicsonline.org/2155-9562/2155-9562-S5-003.pdf>. The paper is in a Special Issue of the journal titled “Brain Tumor.”

Neurology & Neurophysiology Journal, 12/24/11:...these preliminary findings suggest that we should prepare for about a doubled brain cancer incidence rate and possibly as high as 25 times the incidence we have today. One result of such a worldwide increase in brain cancers would be a dramatic shortage of neurosurgeons leading to increased mortality. Any statement about harmless cell phones based on only 5-10 years of years of use has no scientific basis due to the long latency times involved.

The paper, by researchers Örjan Hallberg in Sweden and L. Lloyd Morgan in the U.S., first reviews biological effects from mobile phone use reported in peer-reviewed studies, such as increased permeability of the blood-brain barrier, deleterious effects on sperm, double strand breaks in DNA, stress gene activation (indicating an exposure to a toxin), and increased risk of an acoustic nerve tumor (acoustic neuroma) and brain cancer after 10 or more years of mobile phone use. It then considered two established mechanisms for the development of brain cancer—that mobile phone use decreases the efficiency of the repair of mutated DNA and that mobile phone use increases the rate of DNA mutations.

Based on a 30-year time between first mobile phone use and diagnoses of brain cancer (latency time), the model predicts that there will be a 100% increased incidence of brain cancer (2-fold) if DNA repair efficiency is decreased by mobile phone use, and a 2,400% increase in brain tumors (25-fold) if mobile phone use mutates DNA. The figure below, from the paper illustrates these predictions.

The public health risk modeling process used in this analysis was developed by Örjan Hallberg and has been successfully applied in other illnesses, including Alzheimer's disease and melanoma. Hallberg says, "Such modeling, or risk projection, is important, whether for the climate or for diseases, in that it allows public health contingency planning, should the model be reasonable accurate. For example, will there be sufficient neurosurgeons should brain tumors increase as the model predicts?"

Morgan says, "What this analysis shows is that, unless mobile phone usage behavior patterns change significantly, we can reasonably expect a pandemic of brain tumors, for which we are ill-prepared, beginning approximately 15 years from now. Governments, as well as parents, physicians, schools and all citizens, would be well advised to educate all persons under their care or influence about the need to curtail the use of mobile phones and other radiation-emitting consumer devices."

<http://www.omicsonline.org/2155-9562/2155-9562-S5-003.pdf>.

**4) THE INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS, passed a policy in 2004 to not allow cell towers or antennas on any of their facilities**

**due to proven negative health effects on fire fighters.** They also provide worldwide research to substantiate this:  
<http://www.iaff.org/hs/Facts/CellTowerFinal.asp> , excerpted below:

WHEREAS, the brain is the first organ to be affected by RF radiation and symptoms manifest in a multitude of neurological conditions including migraine headaches, extreme fatigue, disorientation, slowed reaction time, vertigo, vital memory loss and attention deficit amidst life threatening emergencies; and

WHEREAS, most of the firefighters who are experiencing symptoms can attribute the onset to the first week(s) these towers/antennas were activated; and

\*Note: A pilot study was conducted in 2004 of six California fire fighters working and sleeping in stations with towers. The study, conducted by Gunnar Heuser, M.D., PhD. of Agoura Hills, CA, focused on neurological symptoms of six fire fighters who had been working for up to five years in stations with cell towers. Those symptoms included slowed reaction time, lack of focus, lack of impulse control, severe headaches, anesthesia-like sleep, sleep deprivation, depression, and tremors. Dr. Heuser used functional brain scans – SPECT scans – to assess any changes in the brains of the six fire fighters as compared to healthy brains of men of the same age. Computerized psychological testing known as TOVA was used to study reaction time, impulse control, and attention span. The SPECT scans revealed a pattern of abnormal change which was concentrated over a wider area than would normally be seen in brains of individuals exposed to toxic inhalation, as might be expected from fighting fires.

## **5) PUBLISHED COMMENTS BY DR. LEAH MORTON, FAMILY PRACTITIONER**

Current FCC regulations controlling human exposure to radio frequency radiation, emitted by every communication antenna, are based on research conducted before 1986. These regulations are long out of date. The national wireless infrastructure has expanded enormously since then. No medical or health studies were done for this, only engineers were consulted.

A recent review of the scientific literature on cell phones points out that 68% of studies have found one or more biological effects from levels of radiation previously deemed “safe.”<sup>1</sup> This radiation is now being associated with attention deficit disorder, autism, sleep disorders, multiple sclerosis, Alzheimer’s disease and epilepsy, as well as asthma, diabetes, malignant melanoma, breast cancer, and other illnesses that have become increasingly more common. Diabetics who are exposed to cell phones and antennas require higher doses of insulin to control their blood sugar. The symptoms of people with multiple sclerosis worsen.

Many people are not aware that the Telecommunications Act, a federal law passed by the U.S. Congress in 1996, prohibits municipalities from regulating

wireless technology on the basis of health or environment.

As a physician, this alarms me. I believe health and environmental effects are the main issues for us to consider when we evaluate new technologies.

It is research in Europe that has established:

1) Young people who use cellphones--especially to the ear--have a 500% increase in brain gliomas (the cause of the highest mortality rate in kids in Australia) and

2) 360% increase in tumors of the eye nearest the cell phone, and

3) Now research in China and Israel found a soaring rise in parotid gland tumors (salivary glands in the cheek used.) This is happening to adults as well. This is my fav as the patients are hardy Aussie men and it features leading researchers in this field:

[http://www.youtube.com/watch?v=\\_fDPZPIaT\\_4&feature=player\\_embedded](http://www.youtube.com/watch?v=_fDPZPIaT_4&feature=player_embedded)

In Canada the parents are fighting to pull WiFi out of the schools but in Switzerland, France they already have due to the high death rate of children after ten years of cell phone use--now even 4 minutes a day raises cancer risk

## **6) Changes of Clinically Important Neurotransmitters under the Influence of Modulated RF Fields—A Long-term Study under Real-life Conditions**

Klaus Buchner and Horst Eger

ELECTROMAGNETIC FIELDS Journal

Original study in German: BUCHNER K, EGER H (2011) Umwelt-Medizin-Gesellschaft 24(1): 44-57.

Introduction

Despite the distribution of numerous wireless transmitters, especially those of cell phone networks, there are only very few real-life field studies about health effects available. In 2003, the Commission on Radiation Protection was still noticing that there are no reliable data available concerning the public's exposure to UMTS radiation near UMTS base stations (1).

Since the 1960s, occupational studies on workers with continuous microwave radiation exposures (radar, manufacturing, communications) in the Soviet Union

have shown that RF radiation exposures below current limits represent a considerable risk potential. A comprehensive overview is given in the review of 878 scientific studies by Prof. Hecht, which he conducted on behalf of the German Federal Institute of Telecommunications (contract no. 4231/630402) (2, 3).

As early as the 1980s, US research projects also demonstrated in long-term studies that rats raised under sterile conditions and exposed to “low-level” RF radiation showed signs of stress by increased incidences of endocrine tumors (4, 5).

Concerned by this “scientific uncertainty” about how radiofrequency “cell tower radiation” affects public health, 60 volunteers from Rimbach village in the Bavarian Forest decided to participate in a long-term, controlled study extending about one and a half years, which was carried out by INUS Medical Center GmbH and Lab4more GmbH in cooperation with Dr. Kellermann from Neuroscience Inc.

This follow-up of 60 participants over one and a half years shows a significant effect on the adrenergic system after the installation of a new cell phone base station in the village of Rimbach.

After the activation of the GSM base station, the levels of the stress hormones adrenaline and noradrenaline increased significantly during the first six months; the levels of the precursor dopamine decreased substantially. The initial levels were not restored even after one and a half years. As an indicator of the dysregulated chronic imbalance of the stress system, the phenylethylamine (PEA) levels dropped significantly until the end of the study period.

**The effects showed a dose-response relationship and occurred well below current limits for technical RF radiation exposures. Chronic dysregulation of the catecholamine system has great relevance for health and is well known to damage human health in the long run.**

**Rimbach (Bavaria).**

## **7) Israel Requires WARNINGS on Cell Phones**

A bill that requires cell phones to carry a warning label passed

its first review in the Israeli Knesset. March 1.

"Warning - the Health Ministry cautions that heavy use and carrying the device next to the body may increase the risk of cancer, especially among children."

The law also requires that all phones be sold with headsets, that advertisements feature this warning and that industry fund public educational campaigns. Israel has also created the first national Institute to study the potential health effects of cell phones and other wireless devices and make recommendations to to minimize exposure to microwave radiation. (read more)

EHT Submits Amicus Brief in Support of San Francisco "Right to Know" Ordinance CTIA Wireless Association has sued to block San Francisco's "Cell Phone Right to Know" ordinance, which would require retailers to post materials about cell phone radiation and safety measures next to devices, passed in July. The CTIA calls the law "alarmist and false." The Environmental Health Trust, in conjunction with the California Brain Tumor Association, filed an amicus brief to the United States Court of Appeals in support of the City.

Like the Israeli Knesset, EHT believes that the public has the right to know about cellphone dangers so that they can make informed decisions about their purchases and take precautionary measures. Lead attorney for the brief, James Turner says, "San Francisco's disclosure rules for cell phones should be supported by everyone, including the courts. The First Amendment demands no less. A democracy depends on the free flow of information."

[Int J Occup Med Environ Health](#). 2012 Mar 11. [Epub ahead of print]

## **8) Legislative Activity Opposing Smart Meters**

As you know, smart meters are mandatory for utility customers in most states. California, Nevada, and Maine Public Service Commissions have adopted opt-out programs. During the most recent legislative session, smart meter opt-out bills have circulated through state legislatures in Georgia, Michigan, Maryland, Pennsylvania and Vermont.

GEORGIA: March 26, Georgia Power spokesman said if those remaining customers want to retain their analog meters, they will not be replaced with smart meters. Find current information about smart meters in Georgia at <http://www.stopsmartmetersgeorgia.org>.

HAWAII: In response to a lawsuit filed against Kauai Island Utility Cooperative, the utility announced it will "indefinitely defer" smart meter installations for customers opposed to them

MICHIGAN: and [www.michiganstopsmartmeters.com](http://www.michiganstopsmartmeters.com).

PENNSYLVANIA: HB 2188 was introduced. The bill has one simple paragraph about smart meter opt out which states, "Customers may request opt-out of smart meter technology under subparagraph iii by notifying in writing the electric distribution company. Meters for customers who opt out will be replaced according to a useful life depreciation schedule." You can track the bill at <http://tinyurl.com/blpchum>

VERMONT: On Friday, March 23, the Vermont Senate passed bill S 214 that would require the Vermont Department of Public Service to study smart meter removal costs, analog meter reading fees and produce a report by March 1, 2013. The Vermont Department of Public Service, which represents the public in proceedings before the Vermont Public Service Board, is generally supportive of an opt-out program. [www.wakeupoptout.org](http://www.wakeupoptout.org)

MAINE: Four ten-person complaints about the costs associated with a Maine opt-out program were consolidated. Negotiations broke down resulting in the Public Utilities Commission determining that those who select opt outs will be charged a \$40 initial fee and \$12 monthly fee.

Ed Friedman filed another complaint that he is taking to the Maine Supreme Court. On May 7th oral arguments will be held in the Friedman case. You have permission to use his brief on your website or to support your educational materials.

WASHINGTON, DC: The Washington, DC Office of the People's Counsel requested the Washington, DC Public Service Commission to investigate the technical and economic feasibility of an opt-out program for Advanced Metering Infrastructure. In February 2012, the PSC announced that that no investigation was necessary. In response, on March 19, 2012, the Office of the People's Counsel filed an application for reconsideration in case 1065 arguing that the PSC is not fulfilling its public interest obligation.

WISCONSIN residents want state legislation preserving their right to retain their analog meters. A sample letter to state delegates requesting this legislation can be found at: <http://firstdonoharmblog.blogspot.com/2012/03/wisconsin-smart-meter-opt-out.html>

Here's a video about rejecting smart meters for Wisconsin citizens: <http://www.youtube.com/watch?v=ReliT1aMTiA&feature=youtu.b>

NEW MEXICO LEGISLATURE 2011, Released 2012: Rep. Brian Egolf passed HM32, mandating that the New Mexico Department of Health examine the current research on health effects of cell towers and cell phones. The NM Department of Health released a statement that with regard to cancer risks, the survey recommended that because exposure to radio frequencies and/or electromagnetic frequencies "is possibly carcinogenic," cell phone users might want to use a hands-free device or use the text function more frequently, make fewer and shorter cell phone calls, and use a land line when available.

The report also recommends not using a cellphone while driving or when around someone with a pacemaker.

NM Smart Meter rollout: NM residents have been fortunate in being allowed a "self-read" program by the New Mexico Gas Company, arranged by public advocate, Felicia N. Trujillo, of Santa Fe DOCTORS W.A.R.N. (Wireless and Radiation Network).

### **9) *New study: direct link to 7191 cancer deaths from cellular antennas radiation***

#### **Science of the Total Environment Journal Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil**

The study established a direct link between cancer deaths in Belo Horizonte, the third largest city, with the antennae of the mobile telephone network, reported in Science Hoje site, the news portal of the Brazilian Society for Progress Science (Sociedade Brasileira para el Progreso de la Ciencia.)

According to the study, more than 81 percent of people who die in Belo Horizonte by specific types of cancer live less than 500 meters away from the 300 identified cell phone antennas in the city.

Scientists found between 1996 and 2006 in Belo Horizonte, a total of 4924 victims within 500 meters and 7191 within 1000 meters died of cancer types that may be caused by electromagnetic radiation, such as tumors in the prostate, breast, lung, kidneys and liver.

**10) The Board of the American Academy of Environmental Medicine opposes the installation of wireless "smart meters" in homes and schools based on a scientific assessment of the current medical literature (references available on request). Chronic exposure to wireless radiofrequency radiation is a preventable environmental hazard that is sufficiently well documented to warrant immediate preventative public health action.**

As representatives of physician specialists in the field of environmental medicine, we have an obligation to urge precaution when sufficient scientific and medical evidence suggests health risks which can potentially affect large populations.

The current medical literature raises credible questions about genetic and cellular effects, hormonal effects, male fertility, blood/brain barrier damage and increased risk of certain types of cancers from RF or ELF levels similar to those emitted from "smart meters".

Children are placed at particular risk for altered brain development, and impaired learning and behavior.

Existing safety limits for pulsed RF were termed "not protective of public health" by the Radiofrequency Interagency Working Group (a federal interagency working group including the FDA, FCC, OSHA, the EPA and others). Emissions given off by "smart meters" have been classified by the World Health Organization International Agency for Research on Cancer (IARC) as a Possible Human Carcinogen.

Hence, we call for:

- An immediate moratorium on "smart meter" installation until these serious public health issues are resolved. Continuing with their installation would be extremely irresponsible.
- Modify the revised proposed decision to include hearings on health impact in the second proceedings, along with cost evaluation and community wide opt-out.
- Provide immediate relief to those requesting it and restore the analog meters.

**Members of the Board of American Academy of Environmental Medicine**