

An Activist's Journey to Raise Awareness about Electromagnetic Pollution

Part 1, Part 2 in next Issue 19.5

© By Eve Greenberg, LPC, CTN, CN, Explore Staff Reporter, USA

Electromagnetic Pollution is now acknowledged as a concern for all of us, with increasing news coverage, funding for studies being called for in Congress and even new legislation at the local level being passed to help educate the public on radiation risks. One of the foremost advocates is Camilla Rees, MBA, who has devoted herself to bringing the threat of electrosmog to our health into our consciousness and into the public domain.

For several years, Camilla has packaged EMF education for distribution to many audiences: Congress, state legislatures, health practitioners, patients, schools, businesses and parents. She has also been a radio and print journalist, reporting on important EMF science through her website, www.ElectromagneticHealth.org. And with Dr. Magda Havas, PhD, she co-authored **"Public Health SOS: The Shadow Side of the Wireless Revolution"** (<http://sn.im/z9dd6>), a book that with the help of four foundations was sent to over 200,000 journalists globally to ignite interest in this new emerging public health issue.

"The issue wasn't being covered in the media, and we needed to sensitize journalists and governments to its importance", says Rees. "Despite the extraordinary influence of the telecom industry on global governments; significant telecom ad revenue received by media outlets resulting in disincentives to cover cell phone and wireless hazards; and the fact that consumers really like a lot of these new communications technologies, I still trusted that with consistent, credible scientific and medical information delivered to those who could influence change, that we could open up peoples eyes, and once people understood the seriousness of the human health consequences, the right things would eventually be done to protect public health. This was my hope."

Many experts in the field of reducing electromagnetic pollution praise and appreciate the work Camilla has done to bring this issue to public attention. According to Eileen O'Connor, Director, Radiation Research Trust in the UK (<http://www.radiationresearch.org/>) and an active mobilizer of members of the British and European Parliaments

on this issue, "Camilla is a dynamic driving force for good, working with doctors, scientists, politicians and activists throughout the world in the movement to disseminate information and provide scientific evidence in an easy to understand language, helping to create a deeper understanding of the causes and numerous harmful effects associated with EMR and the potential health risks associated with cell phones. This is of crucial importance to each and every one of us. Camilla's work will help to protect future generations, especially the lives of our children who are at enormous risk."

"Wireless communications and microwave radiation from cell phones are clearly part of a major emerging public health issue. Rees is a tireless advocate for safer technologies and is one of the leading experts in this field. Her organization, ElectromagneticHealth.org is a tremendous resource of EMF knowledge," says Joseph Mercola, DO, founder of Mercola.com, the most visited natural health site in the world. "Her efforts have had a profound impact on public knowledge about the potential health ramifications of our unchecked infatuation with wireless technologies."

"Ms. Rees brings strong critical thinking and leadership skills to public advocacy efforts on electromagnetic fields and health from her former career as an investment banker. She is a force to be reckoned with as she knows how to break through walls of denial and neglect about emerging health problems like electrical hypersensitivity, brain cancers and other EMF related diseases and conditions," says Elizabeth Kelley, Director, Electromagnetic Safety Alliance, Inc., of Tucson, Arizona, herself a long-time EMF health policy expert and producer of the award-winning documentary, "Public Exposure: DNA, Democracy and the Wireless Revolution" (View the film at www.ElectromagneticHealth.org).

Not only is Rees a communications pro, who is well versed in most health disciplines, but this former high-heel wearing business executive, and New York City debutante, who used to jet about with CEOs of companies

in the most posh of circumstances, now finds herself traveling with big black, hard plastic suitcases filled with meters to the homes of patients to help get to the bottom of their health challenges. Her first meter was bought for her by Stan Hartman of Radsafe in Boulder, CO. He told her he was going to buy it for her and would send her the bill.

"I stared at Stan for a long time when he said he was ordering me an expensive EMF meter. I figured this was his way of telling me that despite EMF knowledge, one can't really be in this field in a serious way unless one learns to measure. It was like a right of passage and I couldn't turn it down. When I decided it was okay to learn about things like volts per meter, microwatts per meter squared, milligauss, picowatts, nanowatts, femptowatts, high frequency transients, hot spots, smart meters and much, much more, the fantastic experiential learning began."

Rees now says there is no substitute for getting out there with meters and figuring out for certain what is going on. "Meters are a reality check". She is regularly asked by physicians with difficult cases to determine if there might be electromagnetic fields at play, and sure enough, she says, there often is.

When visiting her hometown, New York City, recently for educational EMF salons and fundraising for her advocacy, Camilla faced an enthusiastic audience from Manhattan parents, many of whom have since gone out and ordered meters for themselves.

In one case, after learning the importance of keeping the cell phone radiation away from the body in Camilla's talk, as well as from the new movie *FULL SIGNAL* she played for the parents, one mom named Helen reported no longer having the daily headache that had plagued her for five years. It was gone after about two weeks of keeping the cell phone away from her brain, and it never came back. Inspired, Helen proceeded to buy her own set of meters to measure select fields (RF, magnetic fields and dirty electricity), and has been educating friends and neighbors ever since.

Another woman, Maria, who had had longstanding disrupted sleep, discovered there was a wireless router behind the armoire in her bedroom. When she turned the router off, she slept through the night for the first time in many years. Her husband decided, as a precautionary measure, to stop keeping his cell phone in his pants pocket all day long, and their waning romantic life rapidly blossomed. Maria says, "Since Camilla was here in May, we have been like newlyweds. Well rested, happy to be together and just feeling a quality of life we haven't experienced in years. We hard-wired all the routers immediately, use safe cell phone practices, bought EMF shielding canopes for the beds in our apartments from Camilla's site, www.EMF-SafetyStore.com, and have bought RF and dirty electricity meters. I measure everywhere—friends apartments, outdoor ambient levels and our children's schools—and keep



Manhattan Mom Learning to Use a Meter
Source: ElectromagneticHealth.org

wanting to learn more about this subject." She adds, "And my husband, a venture capitalist, doesn't miss a beat. He immediately got his investment firm investigating fiber optics and other potentially safer communications technologies. From our experience, it's clear we must change the way we use cell phone and wireless technologies to prevent a major public health catastrophe."

Maria says a similar thing happened to her father, a prominent New York surgeon. "When he turned off the router at night, for the first time in ages he slept well, his mood greatly improved and his longstanding headaches disappeared."

Given the majority of people today are ignorant of the health consequences of microwave radiation (a subset of radiofrequency radiation emitted by wireless technologies), measurements on a meter can go a long way to educating people and motivating them to become actively engaged in creating electromagnetically clean environments.

Camilla is a graduate of Choate Rosemary Hall, Barnard College of Columbia University, Georgetown University Graduate School of Business Administration, and, she says, "the school of hard knocks". After a career in investment banking, venture capital and marketing communications, and many years trying to resolve her own autoimmune condition (exacerbated by a hidden wisdom tooth root infection that remained in the jaw for eight years), for over a decade Camilla has organized many panels on health care reform and environment and health top-

ics. A consistent theme is that the U.S. can never solve the health care cost problem until it acknowledges the roots of imbalance, including environmental factors.

Camilla has addressed the White House Commission on Complementary & Alternative Medicine Policy, Young President's Organization, Bioneers, World Congress of Integrative Medicine, Health Freedom Expo, Wainwright House, Columbia University Law School and the Commonwealth Club of California, the nation's leading public affairs forum. For many years she has also been a curriculum developer for and invited guest at a private invitational forum of leading international CEOs focused on productivity, performance and sustainability, and is a recent invitee to the *Renaissance Weekends*, retreats building bridges among innovative leaders from diverse fields. She is a founding member of the Galen Institute's Consumer Choice Community, member of the Collaborative for Health and the Environment, and a Charter Member of the Heartland Network.

One of the accomplishments of which Camilla is most proud of is her role in co-authoring and promoting a report, **"Cellphones and Brain Tumors: 15 Reasons for Concern, Science, Spin and the Truth Behind Interphone"**.

When L. Lloyd Morgan, B.Sc., now Senior Research Fellow of Environmental Health Trust, came to her last spring and confided he was frustrated to learn that the long-awaited Interphone study results on cell phones and brain tumors were finally going to be published (after the European Parliament had called the study's unexplained, 5-year delay "deplorable"), Camilla saw Lloyd's concern that the media would spin the study in favor of the telecom industry not as a reason for dismay, but actually as a big opportunity.

"Camilla said if I was so certain that the many serious design flaws in the industry-funded Interphone study resulted in gross underestimation of risk of brain tumors, why not write a paper outlining those flaws and get it to the media?", says Morgan. "She reasoned responsible journalists would then have to report the findings in a balanced way. They would be put on notice."

Taken aback, Morgan asked, "You mean we can do that? Preempt the Interphone study results with our own critique of the study's design?" Morgan says he was astounded by that possibility, to which Camilla said, "Of course we can! Why not?"

"Camilla told me to have faith," says Morgan. "In fact, Camilla seems almost led by faith, smooth in her conviction that public health will prevail on the hazards of cell phone and wireless radiation with time and good communications. She told me that if we write up the 11 design flaws of the 13-country Interphone study, clearly and credibly, in language that the lay person can understand, and get it out before the industry funded study was released, that it would likely get wide media coverage."

And so the International EMF Collaborative was

formed, a group of eight health advocates on two continents, including Morgan and Rees, who set out to write the landmark 50-page "Cellphones and Brain Tumors: 15 Reasons for Concern" report. This collaborative effort, that sprang up to meet the communications need at hand, and then dissolved just as quickly, turned out to be the home run Rees had predicted.

Last fall, at one point, there were over 1.5 million mentions of this report on the internet. And after a decade of scientists and activists trying to get the hazards of wireless technologies into the major news, suddenly the subject was in newspapers and magazines and on radio and television globally, and the news coverage of this issue has not abated, but has since grown dramatically. Other important contributors to the report included Brian Stein, CEO of Samworth Brothers in the U.K. and Chairman of Radiation Research Trust (U.K.), Eileen O'Connor, Director of Radiation Research Trust, Alasdair and Graham Philips of Powerwatch (U.K.), Elizabeth Barris of The People's Initiative Foundation and Janet Newton of the EMR Policy Institute, a long-time advocate for change in the U.S.

An important part of the "Cellphone and Brain Tumors" report's success was its endorsement by over forty leading international, institutionally affiliated scientists from fourteen countries, as well as by members of the European Parliament. And, of course, another factor in its success was Rees' media savvy, and the fact that the report got into the personal email boxes of 350,000 journalists world-wide, with a heavy emphasis on countries in which the Interphone research was performed.

The release of the "Cellphones and Brain Tumors" report was also followed within weeks by a major international scientific conference on this issue organized by Devra Davis, PhD, and the Environmental Health Trust, in Washington, D.C., in which Rees participated, as well as by Senate hearings on cell phones and health presided over by Senators Arlen Specter and Tom Harkin. Senator Harkin had just taken over Senator Kennedy's role as head of the Senate Health Committee when Senator Kennedy fell ill with a brain tumor.

Not surprisingly, after release of the International EMF Collaborative's report, the long awaited Interphone study, expected about that time, was nowhere in sight. And in fact, it would not be until May 2010 that the study would finally be released.

When the Interphone study was published in the *International Journal of Epidemiology* in May 2010, the International EMF Collaborative, with Rees leading the media strategy, was fully prepared to remind the media of the study's short-comings. They had been waiting for this moment for nine months. Several communiqués were released, including a video of Morgan designed to clearly walk journalists through the study's design flaws. Morgan's analysis of the Interphone study, showing at least a 25% underestimation of the risk of brain tumors, and discrepancies of risk within the published study itself, presented

by Morgan at the Bioelectromagnetics Society in Seoul, Korea weeks later, again made the news globally, including front page news in the U.K.

“All the headlines would have said ‘No risk found’”, Morgan said, “And while some news sources still parroted the Interphone study’s press release, which emphasized overall results, not the significant risks of brain tumors (gliomas) and meningiomas in heavy cell phone users (durations considered light users today), many journalists around the world told the deeper truth.” The first reporting occurred in the U.K., where three headlines heralded the news: “Heavy Mobile Users Risk Cancer” (*Sunday Times*), “Landmark Study Set to Show Potential Dangers of Heavy Mobile Phone Use” (*The Telegraph*) and “Study Links Mobile Phone Use to Brain Tumors” (*The Scotsman*).

Morgan says Camilla is a maverick when it comes to media communication. “She is certainly not restricted by the concept of a 400-word press release. She does what makes sense to her, which means thorough, clear communications, and whatever it takes to get the messages across. She respects the intelligence of her audience.” He adds, “Whether it is longer written communication, complementary audios or videos, or walking someone through the numbers on a table to make their significance understood, Camilla will go to all lengths to get the message out clearly. It is really a talent to be able to do this with complex scientific material.”

In November 2009, Camilla participated by invitation in a pow-wow of leading scientists and health advocates in Norway, out of which emerged the International EMF Alliance (<http://international-emf-alliance.org/>), a consortium of global advocacy groups Chaired by Sissel Halmøy of Citizens’ Radiation Protection in Norway, and to which Camilla serves as an Advisor. She is also EMF Advisor to Citizens for Health, Mercola.com, FrankLipmanMD.com and is EMF expert at the Human Health Project.

In April Camilla organized a three-hour briefing in the U.S. Congress on wireless hazards, organized through the office of Congressman Dennis Kucinich, allocating a full hour to screening the new film, FULL SIGNAL. She says, “A picture says a thousand words. If every parent and every school, and every patient with chronic illness, and every health care provider, could see this film, we would rapidly accelerate health-protecting changes in this country. Democracy would kick in and we would together rapidly take a strong stand for our safety, and for the health of our ecosystem, once we understood the consequences of chronic exposures to our bodies and our planet of electromagnetic fields.”

According to Camilla, “The U.S. spends over \$2.5 trillion dollars on health care each year, of which about 78% is from people with chronic illnesses, without adequately exploring and understanding what factors, including EMF/RF, contribute to imbalances in peoples’ bodies’ in the first place”. She says, “This percentage will certainly increase with increasing levels of electrosmog from cell phones,

Wi-Fi, Wi-Max, Broadband Over Power lines (BPL) used in Smart Grids, uncontained ground current, due to increasingly lax utility standards, the National Broadband Plan, which has very significant wireless components, etc. It is imperative our government leaders become more cognizant of the role electro-magnetic factors are playing in the

incidence of disease, health care costs, and in the erosion of quality of life and productivity in America.”

Right now, Rees says approximately 17.6% of GDP is from health care costs. “What an incredible waste, if you think about this number, when so many illnesses could be prevented if people were warned about the root causes of illness. This includes everyday electromagnetic fields. We’d have so many more human and financial resources to create a better society. Its really a travesty that we talk about ‘prevention’ without first acknowledging all of the sources of imbalance we are trying to prevent, including the environmental ones.”

“Camilla came into the movement just at the moment that it needed, really truly needed, someone with the ability to push the information about EMF’s health and environmental effects out into the public eye.” explained Chellis Glendinning, PhD, psychotherapist and the author of six books, including *When Technology Wounds* and the forthcoming Luddite.com: *A Personal History of Technology*, “The important news about EMFs’ effects had for several years been bogged down within a smallish group of scientists, their advocates, and disparate communities fighting isolated towers and antennas. So Camilla’s ability to organize and promote the information as if it were some new corporate product was just the ticket for us all. Her can-do attitude has propelled the issue into the minds and hearts of all kinds of people, from opinion makers to cell phone users, and she brims with energy and hope.”

Olle Johansson, Assoc. Professor in the Department of Neuroscience at the Karolinska Institute in Sweden and Professor of the Royal Institute of Technology concurs. He says “Camilla is a very unique combination of brain and heart. She definitely has the capacity of a true scientist and at the same time sees the true needs of people in health and disability despair. She has brought the investigative



Camilla Rees
Photo credit: Barbara Vaughn

frontier of man-made electromagnetic fields' impact on health many, many miles." Dr. Johansson adds, "It is an honour for me, at the prestigious Karolinska Institute, with its Nobel Prize in Physiology of Medicine, to communicate with Camilla and share her ideas and insights. She is exceptional in several ways, and notably unselfish, focused on the higher purposes and goals, something that is very uncommon in today's world."

What Constitute the Radiofrequency (RF) EMF Problem?

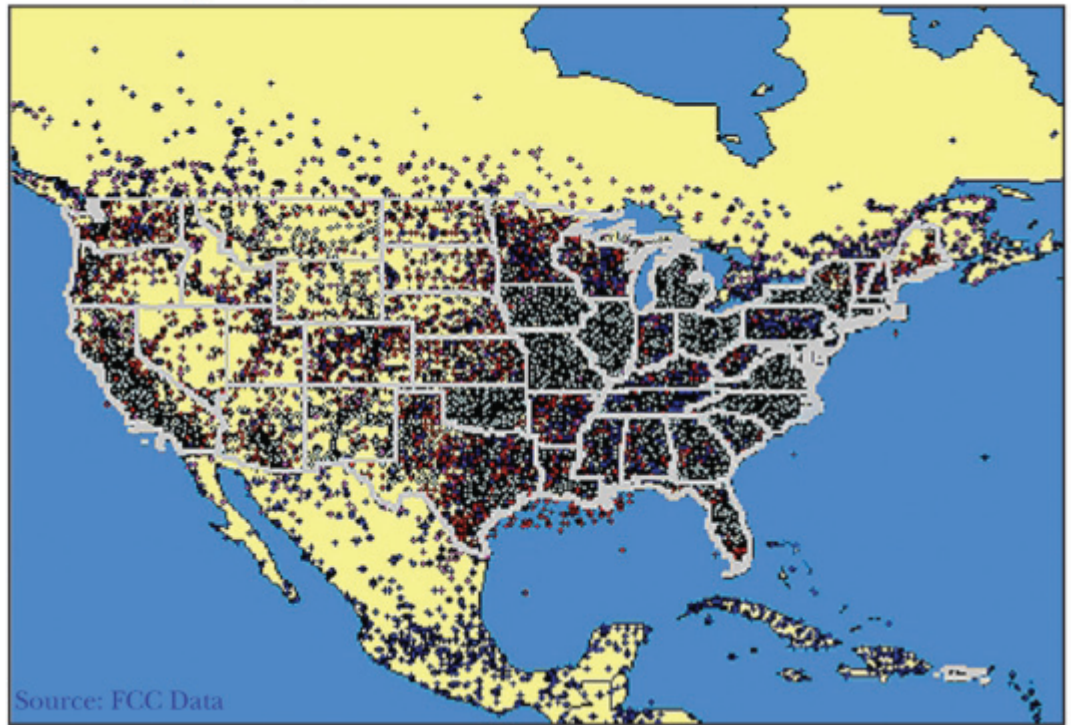
Common Sources of Radio Waves include:

- **Outdoors:** broadcast and cell phone antennas, radar, people using cell phones, pagers systems, two-way radios, Smart Meters and Smart Grids
- **Indoors: cell phones,** cordless telephones and their base units, wireless computers and their wireless routers, mice and printers, Compact Fluorescent Bulbs, microwave ovens, wireless security systems, wireless fax machines and answering machines, wireless assistive listening systems and devices for the hearing impaired, wireless microphones, wireless baby monitors, some electronic games, and a wide range of medical monitoring equipment

There is also a newly appreciated type of EMF exposure called "Dirty Electricity", which means high frequency transients on electrical wiring. Dirty electricity has been linked to cancer in a school in La Quinta, CA by epidemiologist, Sam Milham, MD, who will be coming out with a book on this subject in the fall. Dirty electricity on wiring, which can be filtered within different ranges of frequencies, is created by electronic equipment, where there is a transformer converting between alternating and direct current; dimmer switches; solar panels; high external RF environments; Compact Fluorescent Bulbs, and much more. Magnetic and electric fields are entirely different issues than Radiofrequency and dirty electricity, but are also equally important.

B. Blake Levitt, Former New York Times writer and author of **Electromagnetic Fields, A Consumer's Guide to the Issues and How to Protect Ourselves**, and Editor

Radiofrequency Towers and Antennas Across the U.S.



Source: Public Health SOS: The Shadow Side of the Wireless Revolution Based on FCC Data

of Cell Towers, Wireless Convenience? Or Environmental Hazard? explains in Rees' book, "Public Health SOS: The Shadow Side of the Wireless Revolution" that "... It turns out that most living things are fantastically sensitive to vanishingly small EMF exposures. Living cells interpret such exposures as part of our normal cellular activities (think heartbeats, brainwaves, cell division itself, etc.) The problem is, man-made electromagnetic exposures aren't "normal". They are artificial artifacts, with unusual intensities, signaling characteristics, pulsing patterns, and wave forms. And they can misdirect cells in myriad ways."

In expert testimony for Mt. Ulla, North Carolina in 2005 on placement of antennas, Dr. Magda Havas explained that biological effects of radio frequency radiation have been documented and range from cancers to cognitive disorders and sleeping dysfunction among humans, and abnormal behavior, reduced milk yield, miscarriages and premature death among farm animals. People who live near broadcast antennas and cell phone antennas have a higher risk of developing leukemia. An increasing number of individuals are also becoming sensitive to this form of radiation and exhibit signs of *electrohypersensitivity* (EHS), which has been recognized as a disability, called a functional impairment, in Sweden. This illness appears to be increasing and may already affect approximately 35% of the population according to one estimate in the United Kingdom.

Havas also presented a 50-page report in 2007 to the San Francisco Board of Supervisors, that was then considering a proposed San Francisco Earthlink Wi-Fi Network.

Recent summaries of the science showing biological effects of electromagnetic fields can be found in **Campaign for Safer Cell Phones' Briefing Book**, which includes what other countries are doing to protect their citizens, as well as in the new **BRAG Antenna Ranking of Schools Report** (<http://sn.im/yd9jz>), to which Rees was a major contributor. This report, which ranks schools in all state capitols with

a grade depicting the proximity and density of antennas near each school, teaches how to calculate a measure of risk for neighborhood radiation exposure for any location. Scientific references for biological effects from radiofrequency radiation, magnetic fields and dirty electricity in the report are found on pages 166-172.

Local governing bodies need access to this scientific information so they can make intelligent decisions regarding health policy and public health education. While it is critical that antennas not be placed near residential areas and near schools, since children seem to be particularly vulnerable to this form of energy, section 704 of the Tele-

communications Act of 1996 specifically preempts state and local governments from limiting antennas on health or environmental grounds, meaning local governments must find other grounds to influence antenna sitings, such as wetlands issues, real estate deeds, migratory bird issues, etc., or face a potential lawsuit.

Farm animals are also sensitive and exposure can result in economic hardship to farmers in the form of sick animals and reduced milk production. Neither Canada nor the United States has non-thermal guidelines for RF and the existing thermal guidelines do not protect life as they are not taking into consideration the biological effects



Electrosensitivity Case Stories
Source: Next-Up Organisation



'Criminal' to Expose Children - Quote by Thomas Rau, MD, Paracelsus Clinic

"...Exposing children in schools to radiation, known to impair brain function and learning, is criminal. It is unethical to expose children to electromagnetic load in this way. We know that power stations for electromagnetic waves like mobile phones are hurting the brains of children, so to put such stations into schools is really...very, very bad."

Source: ElectromagneticHealth.org Interview

Home Bound Electrically Sensitive Norwegian Boy Living In Shielding Fabric
Source: Next-Up Organisation

Why are Children More Vulnerable to Cell Phone Radiation?

Cell Phone Radiation Penetrating Skull



ADULT Head

CHILD - 10 Years Old

CHILD - 5 Years Old

Study by Gandhi et al. University of Utah. 1996.

1. Children **absorb** more **energy** than adults from the same phone.
2. Tumors in **mid brain** are more deadly than those in **temporal lobe**.
3. Children's **cells** are **reproducing** more quickly than adults.
4. Children's **immune system** is not as well developed as adults.
5. Longer potential for **life-time exposure** for children than adults.

Penetration of the Brain by Cell Phone Radiation

Source: Public Health SOS: The Shadow Side of the Wireless Revolution, based on Research by Om Ghandi, PhD, University of Utah

of the 'frequencies', instead only the power. But a growing body of research exists showing biological effects in adults at non-thermal levels of exposure, including a wide range of symptoms of electrosensitivity, as well as cancers, within 0.25 mile of a cell phone tower. Of course, children are expected to be more vulnerable.

The BRAG Antenna Ranking of Schools Report, for example, recommends a setback of 1,500 feet for all wireless infrastructure near schools. This is the distance at which the scientific literature indicates acute symptoms of electrohypersensitivity are not noticeable and background levels of radiation return to normal from most cellular infrastructure. The BRAG report notes, however, that this setback will not apply to Wi-Max, a high-powered series of antennas being installed now across the U.S., for which the "return to background level" distance is likely to be much greater than 1,500 feet.

The Public Health Office of the government of Salzburg recommended that levels for the sum total of all antennas at a particular site not exceed a power density of 1,000 microwatt/m² (0.0001 microwatts/cm²). In a presentation at Columbia University Law School last December, Rees presented evidence that exposures over the past decade in a typical urban area have gone from less than 30 microwatts/m², a level considered of extreme concern, to average exposures of 6,000 microwatts/m², a level six times higher than the Salzburg Guidelines and the Building Biology standard for 'extreme concern'. Note that there is no end in site, and the proliferation of antennas is occurring rapidly and deliberately, without our informed consent.

Until new guidelines are introduced in North America, proposed recently by Congressman Dennis Kucinich, the Precautionary Principle needs to be applied by all those in positions to influence exposures. Currently we are con-

ducting a human experiment on a massive scale by exposing a large population worldwide to radio frequency radiation without understanding the long-term biological and health consequences.

Symptoms of Electrohypersensitivity, once known in military circles as 'Radio Wave Sickness', described in Rees and Havas' book, include:

- **Neurological:** headaches, dizziness, nausea, difficulty concentrating, memory loss, irritability, depression, anxiety, insomnia, fatigue, weakness, tremors, muscle spasms, numbness, tingling, altered reflexes, muscle and joint pain, leg/foot pain, flu-like symptoms, fever. More severe reactions can include seizures, paralysis, psychosis and stroke.
- **Cardiac:** palpitations, arrhythmias, pain or pressure in the chest, low or high blood pressure, slow or fast heart rate, shortness of breath
- **Respiratory:** sinusitis, bronchitis, pneumonia, and asthma
- **Dermatological:** skin rash, itching, burning, and facial flushing
- **Ophthalmologic:** pain or burning in the eyes, pressure in/behind the eyes, deteriorating vision, floaters, and cataracts
- **Others:** digestive problems; abdominal pain; enlarged thyroid, testicular/ovarian pain; dryness of lips, tongue, mouth, eyes; great thirst; dehydration; nosebleeds; internal bleeding; altered sugar metabolism; immune abnormalities; redistribution of metals within the body; hair loss; pain in the teeth; deteriorating fillings; impaired sense of smell; ringing in the ears.

ELF and RF: Common Biological Effects

It is interesting to note that extremely low frequency (ELF) and radiofrequency (RF) electromagnetic fields have very similar biological effects, according to Dr. Henry Lai, Research Professor, Department of Bioengineering, University of Washington. In a presentation given on March 21, 2008 at the Council on Wireless Technology Impacts EMF Panel, in San Francisco, CA he described the common biological effects from RF and ELF as:

- Genetic Effects
- Cancer
- Cellular/Molecular effects
- Electrophysiology effects
- Behavioral effects
- Nervous System changes
- Blood-brain barrier permeability
- Calcium changes

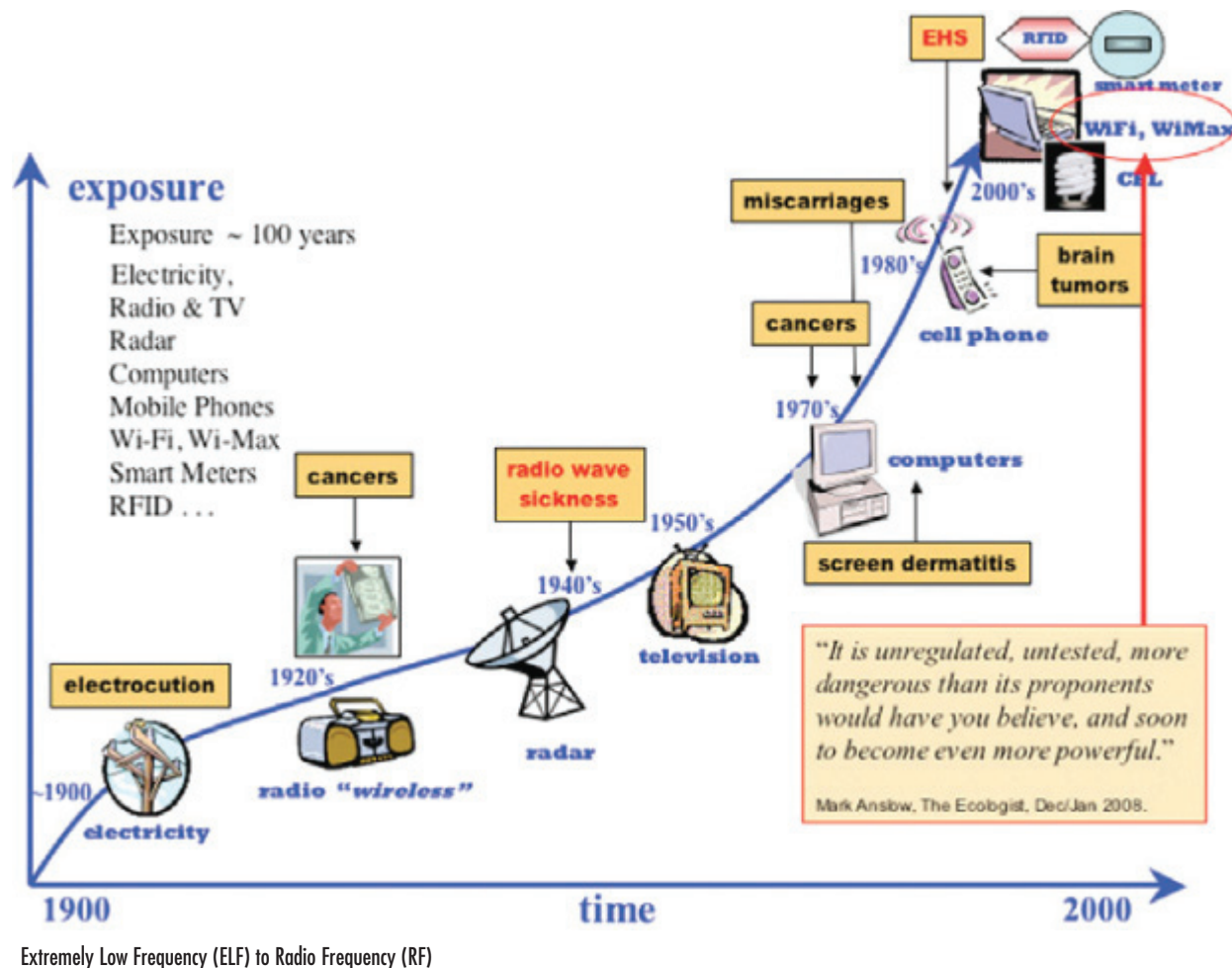
- Cardiovascular irregularities
- Warm sensations
- Hormonal changes
- Immunological changes
- Metabolic rate/effects
- Reproduction/growth
- Subjective symptoms
- Stress

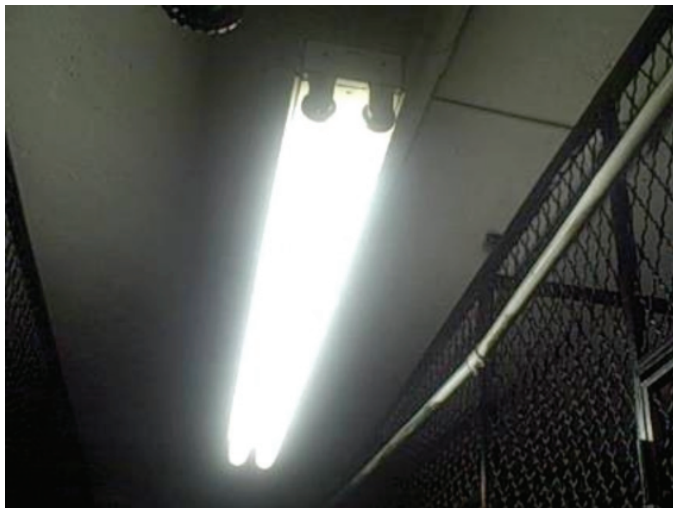
Below is a chart displaying our exposure for the last hundred years to ELF and RF, prepared by Dr. Magda Havas, taken from **Public Health SOS**.

According to Rees, "Throughout history, unintended consequences have frequently accompanied technological advances, such as with pharmaceutical, nuclear and coal mining technologies, for example, where there have been very serious human and environmental consequences, otherwise seen by society and scientists as 'advances'. Problems arise when there is a narrow focus on the technology, instead of appreciating the 'whole' impact. It is hard to put the brakes on once an industry is creating tremendous economic growth and jobs, and easier to put the blinders on, without very significant pressure from either consumers or government. And that's what we desperately need now when it comes to the proliferation of microwave radiation from cell phones and wireless technologies."

Camilla pioneered educational content in this area for media, physicians, governments and patients: "I started by organizing an early forum on EMF and health at the nation's largest public affairs forum, the **Commonwealth Club of California**, sponsored by its Health and Environmental Forums. I did this because I was personally affected by my cell phone (getting sharp sudden pains in my head while on the phone, feeling dizzy around the radiation being emitted, including radiation from other people's phones in the same room) and then I started to become seriously impaired by what turned out to be a wireless router on the other side of the wall from my bed in a neighbor's apartment (dizzy on waking, mysterious heart irregularities, blurred vision, focus/concentration problems, neurological problems, that only happened in that apartment). I isolated the problem and left. I was too impaired to deal with it otherwise, and I assumed there was no legal precedent that would allow me to dictate what kind of router my neighbors used."

"When Camilla became ill and eventually figured out what was happening to her, she began to share her understanding of this insidious illness and to warn others about exposure to electrosmog, explained Dr. Havas, who is Professor of Environmental and Resource Studies at Trent University in Canada. "She organized panel dis-





Magnetic Fields from Basement Fluorescent Lighting Impact Apartment Above
Source: ElectromagneticHealth.org

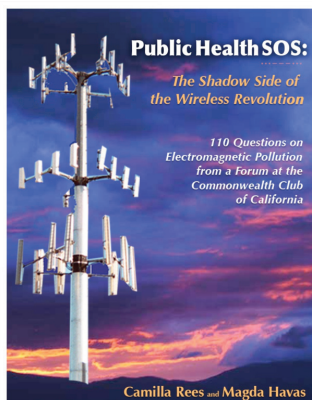


Girl With Neurological Problem in Left Leg Sitting By Wireless Router All Day
Source: ElectromagneticHealth.org



Common Site: Antennas On Apartment Buildings
Source: ElectromagneticHealth.org

cussions at major health conferences and invited experts to share their research and their expertise. She very quickly became a major player in this field. Her website (www.ElectromagneticHealth.org); her interviews with scientists, doctors and lawyers; and our book (**Public Health SOS: The Shadow Side of the Wireless Revolution**) are all helping to bring vital information to the public and policy makers. She



Rees and Havas' Book Which Ignited Awareness of EMF & Health Problems

is well known and respected. Camilla is a remarkable woman. She is intelligent, resourceful, well connected, and a strategic and creative thinker who is highly motivated to improve health care in the United States."

Fortunately for Rees, her insights from many years studying health and wellness allowed her to restore her health and greatly minimize electrosensitivity. Important parts of her health restoration regimen included a raw food diet, 6-8 oz of wheat grass a day and an hour swim in an outdoor Olympic lap pool in the southern California sun. "Everything I did was aimed at restoring the communication systems in my body. I knew that no medicine or doctor could help me more than working actively to revitalize my body naturally, and I did what it took."

Who Suffers?

Olle Johansson, of the Department of Neuroscience, Karolinska Institute in Sweden, says, "What we have found is that among persons with the functional impairment electro-hypersensitivity as well as among normal healthy volunteers you find, in the first group, a highly significant increase in mast cell basal level numbers, and in the second group 2/3 get a similar increase when placed in front of normal household TVs and computer screens. The latter group did not report any subjective sensations, however, they still revealed a classical irradiation damage picture in their skin biopsies. I agree, everyone is EMF sensitive, but only 2-10% (depending on report) reports to have the functional impairment electro-hypersensitivity."

Dr. Johansson wrote to the Maine State Legislature in February 2010, when cell phone warning label legislation was under consideration, saying

"At the Karolinska Institute, we have for many years observed very serious biological changes from exposure

to microwave radiation and extremely low-frequency magnetic fields of the kind emitted by cell phones. These include increased risks for cancer, neurological diseases, impairments to immune function, and neurological function (cognition, behaviour, performance, mood status, disruption of sleep, increased risk for auto collisions, etc.). We also know that this kind of radiation impacts DNA, leading to possible mutations and cancer development, as well as affecting fertility and reproduction, causing a dramatic decline in sperm count.

Personally, I believe it was a terrible oversight to not require pre-market health testing of these technologies. But now that wireless communications devices are pervasive in society, the prudent step is to warn citizens of their risks so that health conscious citizens may take precautionary measures. We especially need to protect children, pregnant women and fetuses, as well as fertile men.” 🌸

BIBLIOGRAPHY

Public Health SOS: The Shadow Side of the Wireless Revolution, Camilla Rees and Magda Havas, 2009. (Amazon: http://www.amazon.com/Public-Health-Sos-Wireless-Revolution/dp/1441458794/ref=sr_1_1?ie=UTF8&s=books&qid=1278997300&sr=8-1)

EMF WEBSITES

ElectromagneticHealth.org - www.ElectromagneticHealth.org
 EMF Facts Consultancy - <http://www.emfacts.com/>
 Microwave News - <http://www.microwavenews.com/>
 Powerwatch - www.Powerwatch.org.uk
 Radiation Research Trust - www.RadiationResearch.org
 List of Global EMF Websites - <http://emfsafetynetwork.org/?p=120>
 FULL SIGNAL – www.fullsignalmovie.com - Discount code (10% off): EMHorg

ABOUT THE AUTHOR



Eve Greenberg, MA, LPC, CTN, CN is a Licensed Counselor, Certified Traditional Naturopath and Certified Nutritionist who directed the Klinghardt Academy of Neurobiology from 2008 to 2010 and is widely credited for a significant growth in attendance and interest in the teachings of

Dietrich Klinghardt, MD, PhD. She has now accepted a position as director of the newly established Healthy Medicine Academy, where she will devote her considerable skills and commitment developing seminars and on-line classes to practitioners and lay people. Eve has studied with Robert Zieve, MD, Lee Cowden, MD, Donnie Yance, MH, CN, and Dickson Thom, ND, among others. Eve has been an adjunct faculty member of several colleges including Naropa University in Boulder.

Eve was formerly assistant to Robert Zieve, MD, which whom she is still affiliated. Dr. Zieve is an integrative physician practicing in Prescott and Phoenix, AZ. Eve has been a staff reporter for Explore Magazine since 2005, has appeared on the Wisdom Network's Journeys into Healing, is a workshop presenter and has trained therapists internationally in action-oriented methods.

PLEASE SUPPORT OUR ADVERTISERS WHO HELP MAKE THIS JOURNAL POSSIBLE!

EXPLORE! *For the Professional and Health Conscious*

is now accepting new articles for 2010 — **Volumes 19-5 through 19-6**

All articles will go through the review board before acceptance

Call 800-320-6035 for an Article Submission Guidelines

or email us – **info@explorepub.com**

Regretfully we can no longer accept handwritten or typewritten articles.

Explore!
 For the Professional and Health Conscious

www.explorepub.com

