Electrical Pollution Solutions

People exposed to excessive "dirty" power may develop radio wave sickness. Clean power enters the home at 60 Hz. Electrical pollution is 60 Hz electricity polluted with high frequency signals or "dirty" power flowing on the wires and through the earth.

News

Sign Petition Today! - Protect YOUR Health

Wireless.

Smart Meters.

Is Your Health Protected?

It is absolutely critical that all Americans actively support biologically-based safety limits for radiation from wireless devices.

Why should EVERYONE actively support biologically-based safety limits for radiation from wireless devices and therefore sign the petition to Hold hearings to fire FCC and hire EPA to set RF radiation safety limits?

Because YOUR health could be on the line. Please take the time to watch the videos below about the toxic effects radiation from wireless devices has. Surely your health is worth 20 minutes or so. Most people are completely unaware of the toxic soup they live in which might
cause them to experience headaches, poor sleep, and various other symptoms. The damage is progressive and dose is related to physical characteristics, including mass, and 24 hour exposure levels. These exposures have changed rapidly over the last few years.

**Cellphones cause cancer even on standby (the setting wherein the phone receives calls).** The short news story centers around young women with breast cancer from their cellphones, compelling medical imaging included. Risks of testicular, abdominal, and pancreatic cancer may well be elevated because cellphones are typically carried nearby.

**Fetal exposure to cellphone radiation linked to later behavior and cognitive problems similar to ADD in mice - a controlled study.** These findings support the findings of a large (over 13,000 child) epidemiological study that found that children whose mothers use cellphones during and after pregnancy are at greater risk for behavior problems.

**In just 5 minutes, cardiologist Dr. Sinatra discusses why wireless radiation and electromagnetic pollution is the #1 cause of inflammation of the cells in your body; how EMF causes cell death, and premature aging; and how it can lead to diseases like brain cancer, heart disease, chronic fatigue, fibromyalgia, and more.**

**Cardiac Arrhythmias in response to a DECT cordless phone unequivocally documented.** Many people report similar effects from wifi and are, in fact, excluded from social events and civil society by the ubiquitous presence of wifi and sources of wireless radiation.

**Radiation dangers in your home - Most people have no idea!** You do have control over many of your most immediate RF radiation exposures. Watch this video to get an eye-opening look at how much radiation beloved wireless devices emit. Biologically the levels are not low.

**Why wifi should not be in schools**

**Many people are paying an awful price for the world's love affair with wireless technology.** Our lack of meaningful biologically-based RF safety limits are forcing individuals who have become overexposed and therefore highly reactive to RF radiation to seek shelter in rural areas, undeveloped areas, or areas with limited wireless availability.

The FCC has shown again, even as it opens a docket to determine whether it should take another look at its RF radiation limits, that it cannot do so in an unbiased manner.

The FCC's primary function is to promote telecommunications technologies by licensing providers of these technologies. By its own statements, its expertise is not public health. **Public health is too important to let the fox continue to guard the henhouse.**

**It is time for the responsibility for public health to be separated from the promotion of the wireless industry.**
With the almost-ubiquitous exposure of the entire US population to RF radiation, it is past time that US policy for non-ionizing radiation protection follow the model in place for the ionizing radiation protection.

It is extremely important that EPA's research funding and RF regulatory authority be unequivocally supported, because the FCC cannot both promote wireless technologies and regulate RF radiation. This inherent conflict was recognized when the Atomic Energy Commission was disbanded and its prior development/promotional responsibilities were separated from its responsibility to protect the public health and safety. (The former was transferred to the Department of Energy and the later to the Nuclear Regulatory Commission.)

A recent report released by The EMRadiation Policy Institute (http://www.marketwire.com/press-release/-1770139.htm) shows not only that the FCC has not modernized its RF radiation safety limits to reflect current science, but that it does not even enforce its own outdated thermally-based RF radiation safety regulations, highlighting the need for another agency to take over responsibility for the public health.

Until the late 1980s the EPA carried out it own non-ionizing radiation research program. Unfortunately, the EPA's mandate for developing non-ionizing radiation safety regulations was never fully funded. Its non-ionizing radiation regulatory authority has been eroded by industry lobbying, most significantly in the lead-up to passage of the Telecommunications Act of 1996 which gave the FCC sole authority for adopting RF safety regulations.

Hundreds of comments to recent FCC dockets (http://apps.fcc.gov/ecfs/comment_search/input?z=iw0f and search proceedings 03-137 and 12-357) support the need for biologically-based RF radiation safety limits NOW!

Additional information available at the petition site.

Sign the petition to Hold hearings to fire FCC and hire EPA to set RF radiation safety limits and pass it on widely.

BioInitiative 2012 - A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation

Please help circulate the press release and information about the BioInitiative 2012 widely.

Press Release:
A new report by the BioInitiative Working Group 2012 says that evidence for risks to health has substantially increased since 2007 from electromagnetic fields and wireless technologies (radiofrequency radiation). The Report reviews over 1800 new scientific studies. Cell phone users, parents-to-be, young children and pregnant women are at particular risk.

“There is a consistent pattern of increased risk for glioma (a malignant brain tumor) and acoustic neuroma with use of mobile and cordless phones” says Lennart Hardell, MD at Orebro University, Sweden. “Epidemiological evidence shows that radiofrequency should be classified as a human carcinogen. The existing FCC/IEEE and ICNIRP public safety limits and reference levels are not adequate to protect public health.”

A dozen new studies link cell phone radiation to sperm damage. Even a cell phone in the pocket or on a belt may harm sperm DNA, result in misshapen sperm, and impair fertility in men. Laptop computers with wireless internet connections can damage DNA in sperm.

Based on strong evidence for vulnerable biology in autism, EMF/RFR can plausibly increase autism risk and symptoms. "While we aggressively investigate the links between autism disorders and wireless technologies, we should minimize wireless and EMF exposures for people with autism disorders, children of all ages, people planning a baby, and during pregnancy,” says Martha Herbert, MD, PhD.

Wireless devices such as phones and laptops used by pregnant women may alter brain development of the fetus. This has been linked in both animal and human studies to hyperactivity, learning and behavior problems.

According to David O. Carpenter, MD, co-editor:

“There is now much more evidence of risks to health affecting billions of people world-wide. The status quo is not acceptable in light of the evidence for harm.”

This study covers EMF from powerlines, electrical wiring, appliances and hand-held devices; and from wireless technologies (cell and cordless phones, cell towers, ‘smart meters’, WI-FI, wireless laptops, wireless routers, baby monitors, and other electronic devices). Health topics include damage to DNA and genes, effects on memory, learning, behavior, attention, sleep disruption, cancer and neurological diseases like Alzheimer’s disease. New safety standards are urgently needed for protection against EMF and wireless exposures that now appear everywhere in daily life.

Visit BioInitiative 2012 Conclusions to read a summary of the conclusions of this detailed review of the literature.

Please circulate the BioInitiative 2012 press release widely.

For a video about the very real consequences of not having meaningful biologically-based safety limits for radiation from wireless devices, please watch this video about cellphones causing breast cancer.

Read "Is your beloved cell phone killing you? Turn it on, keep it close and watch the results" by Steve Elwart, P.E., Ph.D. He is the executive research analyst with the Koinonia Institute and a subject matter expert for the Department of Homeland Security.

What can you do to protect your family, friends, and loved ones?

- First, pass on the information and press release above.
- Second, visit the Solutions page to find out what steps you can take within your own home to significantly reduce your family's exposure to radiofrequency radiation - you will be surprised how much control you do have to significantly reduce your family's exposure.
- Third, support biologically-based radiofrequency radiation safety limits. Follow this link to find out how.
- Fourth, support universal access to fiber optic internet to the premises (with no wireless router at the premises) - similar to telephone service or electrification. It is the safe, green, state-of-the-art internet connection. Follow this link to find out more.
- Fifth, help stop the use of Transmitting Utility Meters.

Fund Fiber Optic Broadband, NOT Wireless Broadband

The United States is planning its future broadband infrastructure. Public input asking for safe, secure, reliable, extremely high speed, and energy efficient is needed. Fiber optic broadband delivers all these. Support Fiber Optic Broadband.

Why?

Fiber optic broadband is the state-of-the-art gold standard in broadband. It is far and away the highest speed, highest capacity, and most reliable option for broadband. Wireless isn’t even close. Furthermore, it is safe, secure, and energy efficient.

(Find out more)
People, including us, who are contending with illness due to exposure to radiofrequency radiation either from "dirty" power or transmitted radiofrequency radiation (wireless technology) often think that going off-grid with a DC (direct current) electrical system will solve their problems.

Unless the system is carefully researched and engineered, meticulously installed, and then appropriate filtering is installed to eliminate the radiofrequency signals that inevitably result from the operation of most components available today, this will NOT be the case.

To read more, please visit Going Off-Grid Safely

Great Videos on wireless technology and health

Videos often have an emotional impact lacking in print material. Below are a few videos, some of which can be streamed live and some available as DVDs, that have really helped improve understanding of the serious effect that wireless technology can have on health. Please pass links on to others.

**KTVU Special Report on breast cancer being caused by cellphones on standby** - It is about two young women (21 and 39) with no family history of or genetic predisposition toward breast cancer who got breast cancer just where they always put their phones. It is only a few minutes long. It is a perfect example of the very real consequences of the outdated thermally-based FCC regulations. Real lives are damaged by dangerous products on the market being used commonly in ways that are hazardous. It highlights the need for immediate passage of legislation to establish meaningful biologically-based safety limits for radiation from wireless devices to replace the outdated thermally-based safety limits put in place by the FCC.

**RESONANCE - BEINGS OF FREQUENCY** By James Russell - This movie has helped technically minded people to understand why radiation from wireless devices is so dangerous. It may be the movie for the technically-minded skeptic in your life.

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**FULL SIGNAL (2009/2010)**
Phone: +1 302 565-4948
Skype: captureproductions
http://fulsignalmovie.com/
http://www.facebook.com/FullSignal
**Full Signal** is a great educational tool. Buy a copy for yourself and your local and national lawmakers ([http://dvd.fullsignalmovie.com/catalog/](http://dvd.fullsignalmovie.com/catalog/)). To read a synopsis of the movie please go to [http://www.fullsignalmovie.com/](http://www.fullsignalmovie.com/). This movie makes a good tool to introduce lawmakers to the public health threat posed by the microwave radiation that is the basis for wireless technology. If you or your organization want to hold a public viewing, it is easy to arrange at [http://dvd.fullsignalmovie.com/catalog/](http://dvd.fullsignalmovie.com/catalog/). Versions of the DVD are now available for global audiences.

If you buy the DVD and use the promo code SAFETY1 in addition to receiving 15% off, a portion of the proceeds of the sale will be donated to The EMR Policy Institute (www.emrpolicy.org) to support their work toward public health based safety standards for radiation from microwave communications.

If you would like to receive periodic emails with new information and action opportunities, please email me at webmaster@electricalpollution.com with "Join email list" in the subject heading.

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**Transmitting Smart Meters Pose A Serious Threat To Public Health**

Transmitting smart meters are being installed nationwide, driven in part by funding for the Smart Grid Program approved as part of the American Recovery and Reinvestment Act of 2009.

This is of great concern because the exposure to microwave and radiowave radiation from these meters is involuntary and continuous. The transmitting meters do comply with Federal Communications Commission (FCC) "safety" standards. However, those standards were initially designed to protect an average male from tissue heating (cooking) during a brief exposure. These standards were not designed to protect a diverse population from the non-thermal effects of continuous exposure to microwave and radiowave radiation. Therefore, these "safety" standards were not designed to protect the public from health problems under the circumstances which the meters are being used. The transmitting meters most often being used transmit continuously, every 4 to 28 seconds or so. This is picked up by a receiver and logged by the utility. Thus, the exposure is continuous and the "safety" standards the meters comply with are irrelevant to the situation. Please read [this letter](http://www.fullsignalmovie.com/) from the Radiation Protection Division of the Environmental Protection Agency (EPA) regarding the limitations of the FCC standards.

The un-safeness of the "safety" standards for the continuously transmitting smart meters is apparent from the reports of health problems ranging from headaches to poor sleep to heart palpitations that begin after their installation.
Modern Wind Turbines Generate Dangerously "Dirty" Electricity

Wind turbines are causing serious health problems. These health problems are often associated, by the people having them, with the flicker and the noise from the wind turbines. This often leads to reports being discounted.

Residents of the area around the Ripley Wind Farm in Ontario where Enercon E82 wind turbines are installed feel that the turbines are making them ill. Residents suffer from ringing in the ears, headaches, sleeplessness, dangerously elevated blood pressure (requiring medication), heart palpitations, itching in the ears, eye watering, earaches, and pressure on the chest causing them to fight to breathe. The symptoms disappear when the residents leave the area. Four residents were forced to move out of their homes, the symptoms were so bad. Residents also complain of poor radio, TV and satellite dish reception. There is no radio reception under or near the power lines from the wind turbines because there is too much interference. Local farmers have found that they get headaches driving along near those power lines.

To read the rest of the article please click here: Wind Turbines

Melrose-Mindoro School District in western Wisconsin found "sick" building syndrome caused by electrical pollution, not mold

Teachers at a school in the Melrose-Mindoro School District noticed a marked improvement in their health after Graham-Stetzer Electrical Pollution Filters were installed in the school. Superintendent Ron Perry said "The staff were unaware what work was being done. They only knew an electrical contractor was working in the building. Within days I had people asking me what had been done, they knew something had been, since they felt so much better."

The school had previously been categorized as a "sick" building and the Wisconsin Department of Health had blamed a supposed mold problem. Extensive and costly cleaning and painting was done to clean up the mold problem, but did nothing to alleviate the symptoms the staff experienced.

Due to knowledge one of the board members had about the human health effects of electrical pollution, Mr. Stetzer was called in to do measurements and ultimately to install Graham-Stetzer filters, eliminating exposure to high frequencies from the electrical pollution. The increase in modern electronics inside the school and "dirty" power from similar sources outside the school were to blame.

Installing the electrical filters turned out to be much less expensive than completing what would
have been the next phase of the mold cleanup. The school district is also saving money because teacher absences were dramatically reduced after the filters were installed. In addition to saving money, greater continuity due to few teacher absences leads to better quality education. In short, Superintendent Perry was very happy with the results and felt others should be made aware of the problem.

"Electrical pollution takes its toll on school" is a recent article that ran in the Melrose Chronicle.

"School staff ill from electricity use" is the original article that ran in the Melrose Chronicle. You may have to scroll down to read the original article since commentary is also posted there.

A letter from the school nurse, Char Sbraggia R.N., regarding changes in the health of faculty and students in the Melrose-Mindoro School District since the installation of the Graham-Stetzer Electrical Pollution Filters.

A follow-up letter from the school nurse, Char Sbraggia R.N., written two years after the installation of the Graham-Stetzer Electrical Pollution Filters in the Melrose-Mindoro School District.

An essay by Angela Olstad, Mindoro Fourth Grade Teacher/Building Principal, about electrical pollution and their experience: Explainable Health Conditions.

A follow-up essay by Angela Olstad, Mindoro Fourth Grade Teacher/Building Principal, written two years after filters discovering electrical pollution was the cause of her illness: Surviving in this world....

Related news from other schools:


"Bangor School District spends $15,000 on electrical filters" is a recent article that ran in the West Salem Coulee News, Wisconsin.

A paper titled "Teacher and Student Response to the Removal of Dirty Electricity by the Graham/Stetzer Filter in Willowood School in Toronto, Canada"

Analysis of a waveform from a Minnesota school

Letter sent to Chairperson Jensen by a fourth grade class in Wisconsin in support of the
"Electrical Consumer Bill of Rights," Wisconsin Assembly Bill 529 (AB529)

Let others know about the dangers posed by high frequencies with these handouts:

**Summary of the effects of electrical pollution in schools and the benefits of cleaning it up**

**Open letter on the dangers of WiFi**

Here is a parent-run website dedicated to getting WiFi out of schools due to the serious hazards it poses to students:

http://www.safeschool.ca

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### Mitigation of Electrical Pollution in the Home

In "Mitigation of Electrical Pollution in the Home," released on 19 April 2002, Professor Emeritus at University of California in Berkeley Dr. Martin Graham discusses how people can cheaply and easily identify whether they are exposed to electrical pollution, as well as, a safe easy way to mitigate the problem once it is identified.

In the paper, he discusses the use of small portable filters which plug into standard electrical outlets to reduce/eliminate exposure to electrical pollution. Dr. Graham provided pictures of spectra of electrical pollution from a spectrum analyzer that also demonstrates the filter efficacy.

Approximately 20 such filters are needed to reduce exposure to electrical pollution in the average home. In order to adequately filter the home, it is important to install a sufficient number of filters from the start. The installation instructions below can be used to help determine how many are needed.

The **Microsurge Meter**, developed and patented by Dr. Graham, plugs into an electrical outlet giving a continuous reading of the electrical pollution levels on the wiring. The meter measures the energy in the radio frequency range riding on the 60 or 50 Hz sine wave.

The Microsurge Meter has been standardized against the existing sanitary standards for exposure to high frequencies for the Republic of Kazakhstan. In November 2003, the government of the Republic of Kazakhstan issued sanitary norms governing electrical pollution on building wiring which set the highest allowable reading for building wiring at 50 on the Microsurge Meter. ("Permissible levels of high-frequency electromagnetic pollutions' voltage in a wires of industrial frequency alternating current: Sanitary-epidemiologic..."
norms" and the decree on "On measures of decreasing of negative influence of physical factors on human health") Readings over 50 are required to be reduced to less than 50 using filters or some other means. They recognize that an acceptable level of 50 is not the same as a safe level.

My personal experience, corroborated by others recovering from radiowave sickness, has been that levels need to be below 20 for me not to be sick, the farther below 20 the better.

Instructions for filter installation can be found at http://www.stetzerelectric.com/filter/

UL approved filters and the Microsurge Meter are available from Stetzer Electric, Inc.
Stetzer Electric can be reached by phone at (608) 989-2571 or at their website http://www.stetzerelectric.com/. Questions can be directed to sales@stetzerelectric.com

Disclaimer: The webmaster is a recovering patient, motivated by a desire to learn and teach about electrical pollution, who does not make filters or possess any financial interest in the company that produces them.

Some Important Sources of High Frequencies Can Be Easy and Relatively Inexpensive to Mitigate

Large motors with variable-speed frequency drives (VFD) generate large amounts of high frequencies if the proper filters have not been installed. Pacific Gas & Electric even has a page on their website dealing with problems caused by unfiltered VFDs. Installation of the filters, called harmonic noise filters, is required in many European countries. In the United States, however, filters are frequently omitted to save money or because their importance is not understood or both. The filters can cost as little as $35, depending on the manufacturer and model of the VFD (relatively little compared to the initial cost of the VFD motor itself).

Variable speed frequency drives are used in various commercial, industrial, and agricultural applications. On the commercial/industrial side applications are numerous and can include assembly lines, ventilation fans, and pumps. In agriculture, motors with variable-speed frequency drives can be found in various applications including milking machines and ventilation fans.

Many other sources of high frequencies can be found in industry. One such example is arc furnaces. They generate large amounts of high frequencies which can be relatively easy to
"clean up" in consultation with a power quality specialist. A competent power quality specialist can identify and remedy sources of high frequencies.

Why bother? The July 5, 1999 issue of *Fortune* (industrial issue) states that "Dirty power costs U.S. industry anywhere from $4 billion to $6 billion a year, according to Karl Stahlkopf, a vice president at the utility financed Electric Power Research Institute (EPRI)." Due to insufficient isolation between the phase wires and the primary neutral, "cleaning up" the power returning to the utilities will "clean up" the power coming from the utilities. "Cleaner" power can pay great dividends by extending equipment lifetime and reducing down time. Furthermore, "cleaner" power would reduce human and animal exposure to high frequencies, thereby reducing the incidence and severity of symptoms of radio wave sickness, leading to a healthier more productive future.

**Strobing cell-tower lights installed without the RF Choke are hazardous to your health.**

In May 2001 some very high frequency signals appeared on equipment monitoring electrical ground currents at a few dairy farms in Wisconsin. The signal was traced to a nearby cell tower whose rotating beacon light had just recently been changed to a strobing light. The origin of the signal was verified by shutting off the strobing light momentarily. The signal on the monitoring equipment disappeared while the light was off. The signal starts at about 25 MHz and rings down from there. It is produced when the capacitors, which store up the 1000 volts or more needed to strobe the light, release that energy all at once to strobe the light. Therefore, a high frequency and high voltage impulse is released each time the light flashes. If the RF Choke is in place and the utilities wires are adequate to carry the current back to the substation, there is no problem. However, many companies, not realizing the problem they cause, have opted to save the approximately $30 and omit the filter. The utility system, in many areas, cannot return such a high frequency high voltage impulse to the substation on the neutral wire, as it should. Therefore, it takes the path of least resistance back to the substation. The path of least resistance is not always the shortest path. Problems have been found as far as 6 miles from the tower.

People unfortunate enough to live in the return path may experience symptoms of Radiofrequency Sickness.

These can include: sleeplessness or disturbed sleep, fever, rash, nausea, inability to concentrate, thinking in a fog, short-term memory problems, sore joints particularly hip joints, irritable bowel syndrome, miscarriage, and birth defects. Symptoms, particularly the fever, clear up outside of the exposure area as long as there is not continued exposure to high frequencies from another source. Dairy farms unfortunate enough to be in the path may experience decreased milk production, longer milking time, poor cow coat and health, miscarriages, difficulty breeding cows...
back, and difficulty getting cows to eat and drink properly.

These problems can be substantially cleared up by the cell tower companies if they install the approximately $30 filter. Additionally, cell tower companies should install filters on the electronic equipment running at the towers, so that they are in compliance with the IEEE-519 rules. An ordinance requiring compliance with the IEEE-519 was passed recently at the county level in a county in Wisconsin. Follow the link to obtain information to assist with passage of a similar ordinance by your local zoning board.

"Stray Voltage," not stray at all

"Stray Voltage" is merely another name for electrical ground current. Electrical ground current is electrical current returning to the substation through the earth. Electrical ground currents occur when the utility's wire is no longer the path of least resistance back to the substation. Electricity always follows the path of least resistance. Once it is off the wire, that path often includes plumbing, people, and animals, in addition to the earth. Calling the returning electrical ground currents "stray voltage" was a stroke of genius. The name "stray voltage" trivializes the problem and suggests unknown and unknowable origin, which is not true at all. Preliminary data suggest that dairies with "stray voltage" problems actually have both "dirty" power and electrical ground currents.

The Electrical Power Research Institute (EPRI) and the Institute of Electrical and Electronics Engineers (IEEE), as well as some individual utility companies have identified solutions for electrical ground currents and "dirty" power. The solutions include larger primary neutral wires and/or filters to reduce the amount of high frequencies present. According to EPRI "A method that practically eliminates ground currents associated with primary distribution lines and still maintains the advantages of a four-wire multi-grounded system, is the five-wire system...(excerpt from Handbook for the Assessment and Management of Magnetic Fields Caused by Distribution Lines)." An April 2002 IEEE paper entitled "Five-wire Distribution System Demonstration Project" contains similar findings.

The review article by Dr. Donald Hillman, Professor Emeritus, Department of Animal Science, Michigan State University Effects of Electrical Shock on Cattle and abstract for the paper entitled Milk Production of Dairy Herd Decreased by Transient Voltage Events contain important information about electrical pollution for dairy producers.
An article in Wisconsin State Journal on Monday, August 23, 2004 by Tom Sheehan, "Current May Have An Effect On Cows
Exposure May Affect Immune Systems But Study Can't Conclude Whether It Affects Cows' Ability To Fight Disease"
discusses research at University of Wisconsin - Madison on the effect of exposure to low levels of electrical current.
(As you read the article, keep in mind that the exposure period was only three weeks. Most cows live in the polluted environment 24 hours a day, 7 days a week all year. Imagine what they might have found with a realistic exposure length. It is also unclear if the current used was representative of the current waveform found on farms with ground current problems when a sensitive oscilloscope with a large frequency range is used.)