

My name is Jon Nelson and I live in Penn Valley.

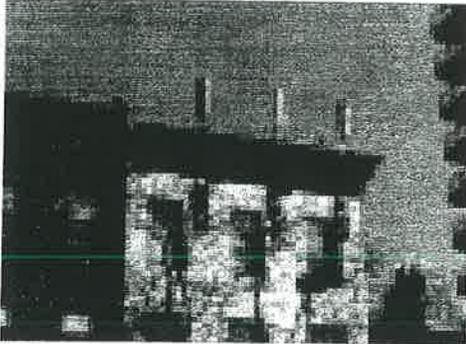
I'm here to voice my opposition to the proposed cell towers. In doing so I must play by the rules as they exist and on the playing field as it has been established. This forces me and you to gloss over the 800 pound gorilla in the room. That 800 pound gorilla is not the numerous Telecom employees in the room, it is the ridiculous rule that health concerns, no matter how well founded and researched, are not admissible. There is an impressive amount of research accumulating documenting the health hazards associated with cell towers, especially from countries with socialized medicine where the government bears the cost of healthcare and funds research designed to find the truth and lower healthcare costs. There is also conflicting research, primarily from countries with a strong Telecom interest where that research has a very different agenda and outcome. So before making my objections to these new cell towers I want to state my moral outrage at having to play on this playing field that we all know was created by a hijacking of the democratic process that forces us to talk about aesthetics when people are getting sick and dying. The tobacco industry for years denied the health impact of smoking, but eventually the truth about smoking and cancer became well known and was acted upon. Imagine how much longer this would have taken if they had been able to legislate that health concern was not a valid reason to use government policy to curb smoking. The Telecom industry of today is very much like the Tobacco industry of yesterday. But they have given us a much more tilted playing field. You can't lie to nature and eventually, when the health burden becomes too obvious and costly the truth prevails.

On to my reasons for objecting to this placement of new cell towers. They will possibly reduce land values in the area, do not align with historic guidelines. Contrary to the staff report, cell towers do result in substantial air pollutant emissions. Radiation is considered a pollutant by the EPA. It has not been well and independently established that there is a need for them and they are part of a huge and wasteful expansion of energy use. Cell phone calls use about three times more electricity than land line calls. During a time of increased concern about conserving energy it seems short sighted to blindly move toward a technology that wastes 2/3's of the energy consumed and results in microwave energy that bombards us from all sides. But I'm getting off topic. We aren't entitled to be concerned about health in this context.

Thank You

## Real Estate Survey: Do Cell/Grid Towers Impact a Property's Desirability?

*94% of respondents said a nearby cell tower or group of antennas would negatively impact value or interest in a property*



The National Institute for Science, Law and Public Policy's survey "Neighborhood Cell Towers & Antennas—Do They Impact a Property's Desirability?" initiated June 2, 2014, has now been completed by 1,000 respondents as of June 28, 2014. The survey, which circulated online through email and social networking sites, in both the U.S. and abroad, sought to determine if nearby cell towers and antennas, or wireless antennas placed on top of or on the side of a building, would impact a home buyer's or renter's interest in a real estate property.

**The overwhelming majority of respondents (94%) reported that cell towers and antennas in a neighborhood or on a building would impact interest in a property and the price they would be willing to pay for it. And 79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antenna.**

- **94% said a nearby cell tower or group of antennas would negatively impact interest in a property or the price they would be willing to pay for it.**
- **94% said a cell tower or group of antennas on top of, or attached to, an apartment building would negatively impact interest in the apartment building or the price they would be willing to pay for it.**
- **95% said they would opt to buy or rent a property that had zero antennas on the building over a comparable property that had several antennas on the building.**
- **79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antennas.**
- **88% said that under no circumstances would they ever purchase or rent a property with a cell tower or group of antennas on top of, or attached to, the apartment building.**
- **89% said they were generally concerned about the increasing number of cell towers and antennas in their residential neighborhood.**

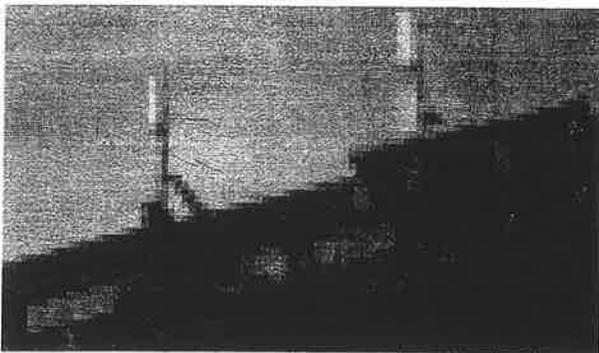
The National Institute for Science, Law and Public Policy (NISLAPP) was curious if respondents had previous experience with physical or cognitive effects of wireless radiation, or if their concern about neighborhood antennas was unrelated to personal experience with the radiation.

Of the 1,000 respondents, **57% had previously experienced cognitive effects from radiation emitted by a cell phone, wireless router, portable phone, utility smart meter, or neighborhood antenna or cell tower, and 43% had not experienced cognitive effects. 63% of respondents had previously experienced physical effects from these devices or neighborhood towers and antennas and 37% had not experienced physical effects.**

The majority of respondents provided contact information indicating they would like to receive the results of this survey or news related to the possible connection between neighborhood cell towers and antennas and real estate decisions.

"I am a real estate broker in NYC. I sold a townhouse that had a cell tower attached. Many potential buyers chose to avoid purchasing the property because of it. There was a long lease." "I own several properties in Santa Fe, NM and believe me, I have taken care not to buy near cell towers. Most of these are rental properties and I think I would have a harder time renting those units... were a cell tower or antenna nearby. Though I have not noticed any negative health effects myself, I know many people are affected. And in addition, these antennas and towers are often extremely ugly—despite the attempt in our town of hiding them as chimneys or fake trees." "We are home owners and real estate investors in Marin County and have been for the last 25 years. We own homes and apartment building here in Marin. We would not think of investing in real estate that would harm our tenants. All our properties are free of smart meters. Thank you for all of your work." "I'm a realtor. I've never had a single complaint about cell phone antennae. Electric poles, on the other hand, are a huge problem for buyers."

#### **Study: 21% reduction in property value if cell phone tower built**



Concern was expressed in the comments section by respondents about potential property valuation declines near antennas and cell towers. While the NISLAPP survey did not evaluate property price declines, a study on this subject by Sandy Bond, PhD of the New Zealand Property Institute, and Past President of the Pacific Rim Real Estate Society (PRRES), [The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods](#), was published in *The Appraisal Journal* of the Appraisal Institute in 2006. The Appraisal Institute is the largest global professional organization for appraisers with 91 chapters.

The study indicated that **homebuyers would pay from 10%–19% less to over 20% less for a property if it**

were in close proximity to a cell phone base station. The 'opinion' survey results were then confirmed by a market sales analysis. **The results of the sales analysis showed prices of properties were reduced by around 21% after a cell phone base station was built in the neighborhood.**"

#### **Additional comments**

*The Appraisal Journal* study added,

**"Even buyers who believe that there are no adverse health effects from cell phone base stations, knowing that other potential buyers might think the reverse, will probably seek a price discount for a property located near a cell phone base station."**

James S. Turner, Esq., Chairman of the National Institute for Science, Law & Public Policy and Partner, Swankin & Turner in Washington, D.C., says,

**"The recent NISLAPP survey suggests there is now a high level of awareness about potential risks from cell towers and antennas. In addition, the survey indicates respondents believe they have personally experienced cognitive (57%) or physical (63%) effects from radiofrequency radiation from towers, antennas or other radiating devices, such as cell phones, routers, smart meters and other consumer electronics. Almost 90% are concerned about the increasing number of cell towers and antennas generally. A study of real estate sales prices would be beneficial at this time in the United States to determine what discounts homebuyers are currently placing on properties near cell towers and antennas."**

Betsy Lehrfeld, Esq., an attorney and Executive Director of NISLAPP, says,

**"The proliferation of this irradiating infrastructure throughout our country would never have occurred in the first place had Section 704 of the Telecommunications Act of 1996 not prohibited state and local governments from regulating the placement of wireless facilities on health or environmental grounds. The federal preemption leaves us in a situation today where Americans are clearly concerned about risks from antennas and towers, some face cognitive and physical health consequences, yet they and their families increasingly have no choice but to endure these exposures, while watching their real property valuations decline."**

The National Institute for Science, Law, and Public Policy (NISLAPP) in Washington, D.C. was founded in 1978 to bridge the gap between scientific uncertainties and the need for laws protecting public health and safety. Its overriding objective is to bring practitioners of science and law together to develop intelligent policy that best serves all interested parties in a given controversy. Its focus is on the points at which these two disciplines converge.

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If you can support NISLAPP's work, please donate at the bottom of [this page](#).

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**Commentary from ElectromagneticHealth.org:**

**Response to EMF real estate survey conducted by The National Institute for Science, Law and Public Policy:**

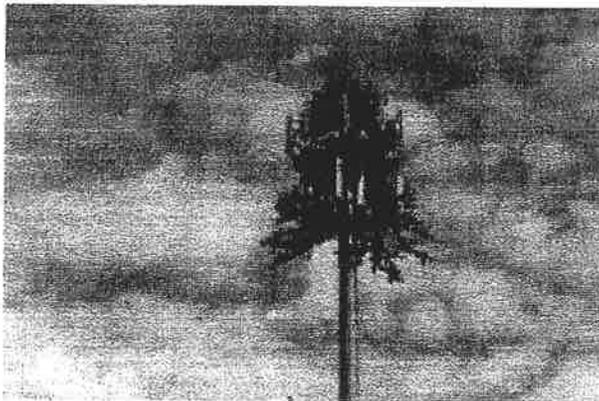
ElectromagneticHealth.org suggests real estate agents and homebuyers be aware at this time that there are indeed perceived risks associated with real estate properties located in proximity to cell towers and antennas impacting both 1) interest in a given property and 2) a property's price.

Real estate agents are advised to:

1. Familiarize themselves with AntennaSearch.com to **be able to find antennas and hidden antennas** in a neighborhood,
2. Learn to work with an RF meter to **be able to competently assess a property and neighborhood** for RF electromagnetic fields from both external infrastructure sources and in-home devices,
3. Learn how real estate properties with high RF exposures can be physically remediated or mitigated (and when this is not practical),
4. Understand **at what distance from cell towers and antennas research is indicating biological and health effects**, including the increased incidence of cancer. (See cell tower studies in "Some Studies Showing Cell Tower Health Impacts")
5. Learn the potential health consequences of the **new radiating utility meters**, called 'smart meters', and be able to identify and evaluate them.
6. Understand the special **importance of low RF in bedrooms**, from all sources, and especially in the bedrooms of children.
7. Be able to advise clients on **improving home safety from internal and external electromagnetic fields**.

Given there are over 220,000 cell phone towers in the United States, over 50 million wireless networks and untold numbers of antennas on or even inside buildings, and new risks from utility meters and the wireless networks that support them, real estate agents would best be conversant in the risks, and perceived risks, of electromagnetic fields. If ElectromagneticHealth.org can be of help to real estate agents, please do not hesitate to be in touch at info@ElectromagneticHealth.org.

## Property Values Declining Near Cell Towers



When it comes to cell phone towers, there is increasingly the perception that a family does not want to live next to one. There is good reason for this as the research on health effects shows.

The following are articles and studies related to declining property values around cell tower installations.

1.) 94% of people surveyed would not buy or rent

Get the 7 Most Important Steps to Protect Your Family



Welcome. I have a master's degree in engineering and had a successful career in Silicon Valley before I

a home next to a cell tower:

[http://www.businesswire.com/news/home/20140703005726/en/  
National-Institute-Science-Law-Public-Policy](http://www.businesswire.com/news/home/20140703005726/en/National-Institute-Science-Law-Public-Policy)

2.) Palo Alto community successfully stops a proposed AT&T cell tower at a Catholic church. They cite a 20% drop in property values in other communities. A very effective campaign for any neighborhood to model:

<http://www.nocelltowerat1095channing.com/>

3.) Here is an excellent study in *The Appraisal Journal* that shows cell tower installations negatively impact property values.

4.) NY Times article on how realtors have a hard time selling homes next to cell towers:

<http://www.nytimes.com/2010/08/29/realestate/29Lizo.html>

Liberty Township neighbors fig...



*This community woke up one morning to find cell phone companies putting up towers right in their front yards.*

began to experience negative health effects from wireless technology and electrical pollution.

My wife is a medical doctor and we created this website to help you quickly and easily reduce the electro-magnetic field (EMF) pollution in your life. We also provide solutions if you are already experiencing the effects of EMF pollution.

READ MORE

5.) This is what the National Association of Realtors has to say on this issue:

<http://www.realtor.org/field-guides/field-guide-to-cell-phone-towers>

6.) Nolo Press article noting successful litigation against cell phone tower installations related to declining property values:

<http://www.nolo.com/legal-encyclopedia/emf-radiofrequency-exposure-from-cell-32210-2.html>

7.) Excellent summary of various press articles from around the country related to declining property values around cell towers:

<https://sites.google.com/site/nocelltowerinourneighborhood/home/decreased-real-estate-value>

8.) Study using the mapping software GIS to show that property values were higher on average away from cell phone tower installations:

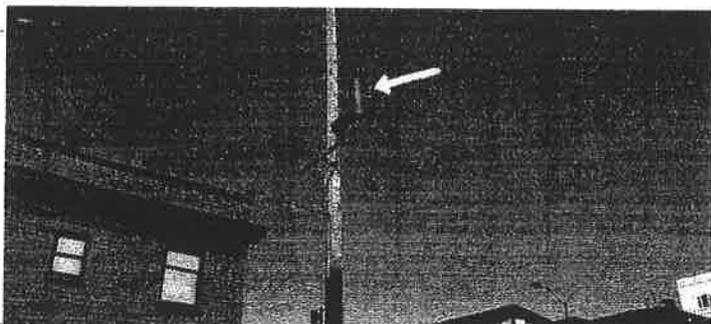
[http://www.prrs.net/papers/Bond\\_Squires\\_Using\\_GIS\\_to\\_Measure.pdf](http://www.prrs.net/papers/Bond_Squires_Using_GIS_to_Measure.pdf)

9.) New Zealand study showing that property values decrease after cell phone tower installations:

New Zealand Study on Declining Property Values  
Around Cell Towers

10.) Community stops new DAS cell tower system from being installed based on concerns of property values declining (December 15, 2015):

Homeowners speak out again...



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*This is a Distributed Antenna System (DAS) cell tower antenna. Cities like San Francisco are placing these every block, right in front of people's homes. They may look innocent, but they are very powerful emitters of microwave radiation that can cause health effects for homeowners.*

## My Story



My name is Jeromy Johnson and I am a safe technology advocate. The purpose of this website is to help you reduce the EMF pollution in your life and to help people who have already had their health negatively affected by electromagnetic fields (EMF). I had to learn this the hard way and my hope is that you will learn from my experience.

In 2011, I was on top of the world. Healthy, happy and active with a successful career in Silicon Valley that provided ample time for my wife, who is a medical doctor, and I to travel and pursue our many interests. As a civil engineer and as a manager at a large Silicon Valley firm, I was around multiple computers, Wi-Fi and cell phones nearly 24/7 for over a decade without feeling any ill effects. That all changed when we returned from summer vacation that year.

Within days of being back in our San Francisco home I began to experience intense headaches, heart palpitations, tinnitus and insomnia. This is something I had never experienced before. Oddly, the symptoms diminished when I left our home. After a week of this, I mentioned the situation to a friend at work and she said the exact same thing happened to her husband when a wireless "smart" meter was installed on their home.

I went home that evening and found that while we were away that summer our utility had installed a bank of wireless "smart" meters directly below our bedroom.

Could this really be the source of my unusual symptoms? The wireless "smart" meters were the only thing that had changed at our home of five years.

After some research, I was shocked. Thousands of people around the world were experiencing the exact same thing once wireless "smart" meters were installed on their home. I also learned that biologists and medical doctors were saying that these symptoms are precisely what one should expect when humans are over-exposed to microwave radiation and electrical pollution (that which is emitted from Wi-Fi, cell phones, cell phone towers, cordless phones, and wireless "smart" meters).

## Get the 7 Most Important Steps to Protect Your Family

Name

E-Mail Address

**SIGN UP**



Welcome. I have a master's degree in engineering and had a successful career in Silicon Valley before I began to experience negative health effects from wireless technology and electrical pollution.

My wife is a medical doctor and we created this website to help you quickly and easily reduce the electromagnetic field (EMF) pollution in your life. We also provide solutions if you are already experiencing the effects of EMF pollution.

**READ MORE**

**Here is my recent TED Talk:  
"Wireless Wake-up Call"**

What exactly was going on? How could we not have been aware of this?

We asked our utility company immediately and repeatedly, but it took four months for PG&E to remove the "smart" meters (yes, that same, corrupt PG&E from the film "Erin Brockovich"). During that time we had to abandon our home because my health diminished to a point that frightened us. We moved temporarily to a town without smart meters for relief, however, the damage to my body had already been done.

After 10+ years of using wireless technology with no worries and no problems at all, I could now feel when I was near a cell phone tower. I experienced a splitting headache when attempting to use my cell phone (I used to love my Droid "Smart" Phone). Within minutes of using Wi-Fi, I had a headache that would last all day. Even using a computer became painful. Being in a city became very difficult. My only refuge was nature – where the symptoms would go away completely within 24 hours.

I had become what medical doctors call electro-hypersensitive (EHS), a condition that currently affects 3-10% of the population and affects me to this day. For decades, the military and other countries have called this condition "microwave sickness". I still experience frequent headaches and take many precautions to avoid wireless technology and electrical pollution. If I do not take precautions, I can have an exposure that will take me days, weeks or even months to recover from.

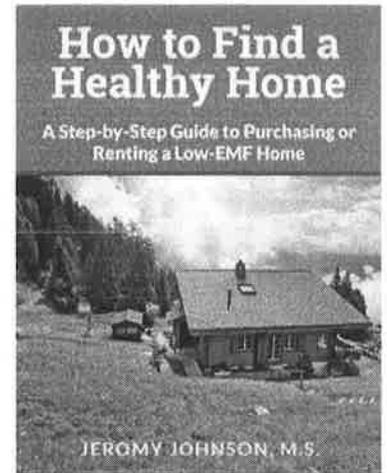
However, I am learning to manage and am able to provide help to many people around the world who are experiencing the exact same thing. Judging from the amount of responses this website receives, EHS is growing exponentially as wireless technology and electrical pollution increases throughout our communities.

The past 4+ years have been an intense learning experience that has completely changed our lives. We still do not have a permanent place to call home. You could call us EMF Refugees and I have spend several months each of the past few years living in a tent. We had to leave our home in San Francisco as it is one of the most heavily EMF polluted cities in the world. I had lived in this beautiful city for 15 years, but wireless technology is now the primary economic engine of San Francisco. Life becomes amazingly difficult when you cannot live near a cell tower, stay in a home or hotel with Wi-Fi and cordless phones, or in neighborhoods that are now filled with electrical pollution from "smart" meters and their wireless infrastructure.

Our situation has forced us to find solutions that work. And, that is what this website is about – providing solutions and education so that your family is protected from EMF pollution. I have spent thousands of hours researching and understanding this issue, including testing dozens of ideas and products. Only the best and most effective solutions that I have personally tested are recommended throughout this website.

Hopefully our pain is your gain.

## My Background:



Over the past year, I have written a book that will help you navigate the process of finding and creating a low EMF home. This is the EMF guide I wish had been available to me when I first started learning about this topic. It will save you a lot of time and money. With this book, you will gain the confidence to find and create a home that is healthy for you and your family.

[LEARN MORE](#)

I have a master's degree in Civil & Environmental Engineering and have worked at a large Silicon Valley firm for 15 years. One of the focuses of my studies was air pollution. Little did I know that I would be revisiting this topic later in life. Even though it is invisible to the naked eye, man-made pulsed digital microwave radiation is one of the most potent and fastest growing sources of air pollution in our world. It may seem invisible to you now, but perceptions shift as humanity evolves. Within our lifetimes, the truth about this toxin will become evident.

Welcome to seeing the world in a completely new way. It may seem overwhelming at first, like it was for my wife and I. However, this will pass in time and you will be able to take the necessary actions. Once you do, your children and grandchildren will have a much safer and healthier world in which to live. There are many solutions and most are easy to implement.

This is a leading edge of the health, environmental sustainability and social justice movements. Thank you for being a part of such an important issue.

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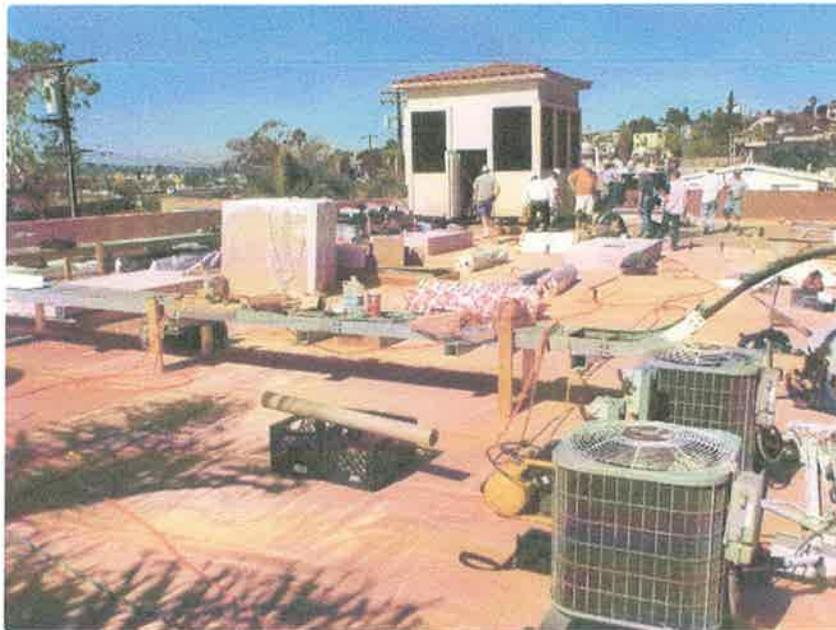
<input type="text" value="Name"/>
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## Recent Work by EMF & RF Solutions

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### RF Shielding Commercial Building from Cell Tower Radiation

The new owner of a [commercial building](#) located in San Diego was concerned about the presence of a cellular base station mounted on its roof top and the exposure to its tenants. We conducted a [RF survey](#) exposure assessment and based on the measurement results, the building owner requested to implement and RF shielding systems. We recommend Cuprotect®, a Germany-based patented copper wire mesh [RF shielding system](#) for buildings.

The roof was going to be replaced, so [RF exposure reduction methods](#) were being considered as part of the building improvements. In conjunction with Cuprotect® and Premier

Roofing completed the first commercial radiofrequency (RF) shielding project in the United States. Sprint, the cellular service provider, cooperated in the effort and lifted the antenna array off the roof so that the shielding material could be installed underneath the array. The project was successfully completed and significant reduction to tenants RF exposure was achieved.

Cuprotect® is available in the United States. The Cuprotect® material is pliable and light weight, and any commercial, institution or residential building can be retrofitted to reduce exposure to building occupants. ET&T is proud to be the Technical Consultant for Cuprotect® in the United States.

## WI-FRIED?



### **AUSTRALIAN BROADCASTING COMPANY: CATALYST**

Forbidden Knowledge TV | Jul 14, 2016 | Alexandra Bruce

This documentary by Australia's ABC TV may change the way you look at your cell phone.

A scientific paper bravely published by a leading radiation biologist, Prof. Dariusz Leszczynski now allows top neurologists, like Keith Black, MD of Los Angeles' Cedars-Sinai Hospital to issue warnings to their patients about the dangers of cell phone use, which he describes as "Cooking the brain".

The cell phone industry retaliated against Leszczynski by lobbying to have his funding stopped and in the meantime, insurance companies in the US stopped coverage for health damages related to cell phone use.

Brain tumors associated with cell phone use has replaced leukemia as the number one child-killer. Men who store cell phones in their pockets are assured lower sperm counts and there is a rash of young women contracting breast cancer, in the very spot where they tuck their cellphones in their bras.

You can expect to receive the following measurable doses of radiation, using a standard radiation measuring device: 1) Microwave oven: 800 microvolts, 2) WiFi Router: 800 microvolts, 3) Tablet PC: 2,000 microvolts (watching a movie), 4) Smartphone: 40,000 microvolts (Samsung S3). This last device emits over a thousand

times the normal background radiation level of 30 microvolts.

The use of cell phones and other wireless technologies is being called the next 'casualty catastrophe,' after tobacco and asbestos. iPhones now all contain a legal disclaimer page with fine print, which cannot be enlarged and which is relatively difficult to locate within the phone's navigation. It discloses the dangers of radiation exposure from cell phones and advises users to keep the device at least 10mm from the body – but it's next to impossible to find on the device.

After conducting studies, the International Agency for Research on Cancer (IARC) in Lyon, France has officially classified the radio wave radiation emitted by cellphones and other household devices (to say nothing of SmartMeters – which is a whole other video!) as a Class 2B Carcinogen (a possible cause of cancer). At the same time, a US wireless lobbying group called the CTIA assures us that "Radio waves from cell phones are safe" and studies paid for by the cell phone industry claim that, "Cell phone use causes no biological damage."

However, independent studies consistently report serious health effects, ranging from DNA damage, a 300% reduction in sperm counts, 290% more brain tumors, autism and birth defects.

Former senior White House adviser, Epidemiologist, Dr. Devra-Davis, who appears in this film testified to the US Senate and has given a hair-raising reports about the back-stories behind these contradictory scientific reports: The independent scientists who reported on the ill effects of cell phones found themselves under attack by the cellphone industry, who would attempt to get them fired and to get their funding taken away or else accuse them of fraud. When that didn't work, they hired inexperienced scientists who didn't know anything about the subject to \*look\* like they were replicating the incriminating experiments – and when all of the above didn't work, they wrote an internal memo, in which they stated, "We war-gamed the science." To prove a point, one scientist wrote a paper on the subject, laden with obvious errors, which was published in numerous science journals and translated in over 15 countries.

Journalist, Anthony Gucciardi had previously proven how easy it is for industry to plant fake science in such publications in the very similar case involving the drug Prozac, which was long ago proven to increase the incidence of suicide among users and to cause violent behavior in the 1980s – but hidden from the public until 2005 until there was a BBC exposé.

In response, the manufacturers hired their own scientists to prove how "great" Prozac was. However, producers of anti-depressants today are forced to disclose these side effects, which one reads in their accompanying manuals or overhear, in the blindingly-fast and unintelligible disclosure statements that run during television advertisements for these products.

People who know the details believe that once the public becomes aware of these dangerous side effects, the public outcry will be worse than it was for cigarettes.

Dr. Louis Slesin, editor of Microwave News since 1981 says, "The system is broken, nobody has been told the truth. It's crazy."

He says that it's one thing for the tobacco industry to finally admit to the dangers of smoking tar and nicotine, after centuries of being on the market because the science, which would eventually prove that cigarettes and

secondhand smoke damaged human health did not yet exist when tobacco was initially marketed – but cell phones were launched after preliminary science was already available as to its inherent dangers and these products were released into the public without any safety studies, whatsoever!

The point is to take action. Action is already being taken in Europe: In Italy, a landmark supreme court ruling found a “causal link” between cell phone use and brain tumors. In France, WiFi is being taken down and replaced with cabled Internet in schools and countries from Germany to Israel and Finland are moving to stop cell phone sales to kids. In the UK, children under the age of 18, have been barred from cell phone use for several years, already.

But of course, in the Good Ol' USA, the former chief lobbyist for the wireless industry, Thomas Wheeler was appointed by President Barack Obama to head up the Federal Communications Commission (FCC), which regulates the safety of wireless devices, in yet another astonishing conflict-of-interest in the choice of appointed US Federal Regulators, who better resemble wolves guarding the sheep than advocates for the health of the public at-large.

Source

# REAL-WORLD VERIZON EMF RADIATION MEASUREMENTS PERTINENT TO LOCAL FACILITIES

Measurements performed with an HP model 8560a spectrum analyzer and an 8 db gain log periodic antenna tuned to the 800-900 MHz cell phone frequencies

- **Wolf Mountain cell site – approx. 1000 ft. away:**  
-38 dbm, used as a reference
- **Iphone 4 – signal approx. 1000 ft. from cell site:**  
-23 dbm measured 2 inches from phone (simulating a phone user)  
This equates to an EMF radiation level to the user of approx. 50 times the radiation absorbed by the emission from the cell site itself.
- **Iphone 4 – signal at workplace in Downtown Nevada City:**  
-10 to -12 dbm measured 2 inches from phone (simulating a phone user)  
This equates to an EMF radiation level to the user of approximately 600 times the level experienced across the street from a cell site.

It should be noted that all of these levels are well below what the government considers to be “safe” and therefore this is anecdotal information, not to be officially used in a decision. These readings are provided because it is important to understand that by placing a cell site in close proximity to a cellular phone user the actual amount of EMF received by the average individual who lives/works in Nevada City and uses a cellular device will be significantly reduced.

## IMPORTANT PLEASE READ NOW

Page 38 of the staff report on 8 cell antennas:

*“Result in substantial air pollutant emissions or deterioration of ambient air quality? NO IMPACT”*

That, NO IMPACT, statement is NOT TRUE:

Radiation is considered a pollutant by the EPA

### **EPA lists radiation as an air pollutant**

<https://www3.epa.gov/air/airpollutants.html>

<https://www.epa.gov/regulatory-information-topic/regulatory-information-topic-air#radiation>

<https://www.epa.gov/laws-regulations/summary-clean-air-act>

<https://www.epa.gov/aboutepa/about-office-air-and-radiation-oar>

**And there is an abundance of radiation in the City now and these 15,000+ watts of microwave radiation is only going to increase the air pollution.**

The PC staff report on page four states under:

Recommendations

I. C. That the project does not have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly.

II. C. The proposed use as conditioned will not jeopardize, adversely affect, or be detrimental to public health, safety, and welfare or to the surrounding property and residents;

II. E. The conditions provided in Attachment 1 are deemed necessary to protect the public health, safety, and general welfare.

I.C & II.C. are not correct according to the recently published preliminary report on their 2 year, \$25 million, using thousands of rats study designed to show long term cellphone use using non-thermal radiation, which has shown a direct link to cancer.

<http://biorxiv.org/content/early/2016/05/26/055699>

GET VISIBLE! Advertise Here. Find Out More

**Prodovite**<sup>®</sup> A Genuine Breakthrough  
in Daily Nutrition That Delivers  
Quality Ingredients Into Your  
Blood in Less Than 5 Minutes

[Prodovite revitalizes the blood in 5 minutes, see video](#)

rense.com

## My Son Died - Smart Grid Meters

From Virginia Farver, Fort Collins, CO, US

3-14-13

I lost my beautiful, 29-year-old son Rich to glioblastoma multiforme (GBM) brain cancer on October 11, 2008.

Early in 2008, Rich was working as a teaching assistant in Political Science at San Diego State University (SDSU), where he had received his master's degree. He was a very kind young man who would occasionally go golfing with the professors.

He was in the process of applying for law school, but had confided to me, "I don't know that I can make it through law school because I can't remember things." He was having headaches, memory problems, nosebleeds and excessive sweating and fatigue. I had been noticing that something was off with him. He needed to sleep all the time. There was a blood vessel coming from the right side of his head through his hairline and protruding across this forehead. His girlfriend Jennifer told me he would sleep for hours, curled up like a cat during the day by the patio window. This was not like him.



At the time of Rich's GBM diagnosis in March 2008, Dr. V. Tantuwaya from Poway, CA told us that his cell phone was the culprit. Rich's tumor was located in his right frontal lobe and he was right-handed. This is referred to as an ipsilateral tumor, one on the same side as where the phone was held.

Rich wanted to live. He had always been a good kid, never drank or did drugs. At 6'2", he'd been on varsity basketball in high school, and was very healthy. So cancer was unthinkable. I told Rich I'd do anything to keep him alive. But after surgery, chemo and radiation, with nine MRIs, multiple hospitals and hospice, he died, seven months following diagnosis.



I learned that similar brain cancers were happening to others on campus. An English teacher, Laurel Amtower, thanked SDSU colleagues for their support before she went through chemo and radiation. She died, too, leaving a 12-year-old daughter. She didn't realize that some she thanked were probably partly responsible for her death.

On August 7, 2009, nine months after Rich's death, I found articles and a video about a "Brain Cancer Cluster on the San Diego State University Campus." I read these (listed below) several times before ending up on the floor. I contacted the SDSU Administration, but was bounced around from one person to another. I then drove to San Diego and stayed the whole month of October 2009. I met off-campus with some professors mentioned in the articles. They told me they had asked for a toxicology study, as there is a huge cell tower right next to the building where Rich spent most of his time grading papers and doing research: Nasatir Hall.

After I returned home, the SDSU Administration sent me an epidemiological report written by a Dr. Thomas Mack. In the third paragraph, Dr. Mack stated he has, "no known knowledge of any chemical or radiation concerns and therefore there are none." That's not a scientific conclusion, it's a cover-up.

I e-mailed Dr. Mack, and he called me at home! I asked him about this cell tower on top of the Communications Building. This

rises over Nasatir Hall, where most of the brain cancer victims were located. Dr. Mack quickly denied the connection to the cancer cluster. I then told him of everyone's concerns. He said, "They should be concerned." This made me furious. It didn't make any sense. And the SDSU Administration would not conduct a toxicology study because of Dr. Mack's report! Like some professors, I have requested a study on several occasions, but have received no response.

I then looked into the tower on my own. Owned by Sprint, it has HPWREN or High Performance Wireless Research and Educational Network on it, with a BackBone Node to the UC-SD Supercomputer Center. It also has a GWEN, or Ground Wave Emergency Network, with emissions known to hug the ground. These towers are capable of sending signals hundreds of miles, including to several remote laboratories across California. There is an additional tower on campus on the KPBS News Station. Similar towers are on many college campuses across the US, via the Lambda or Tera Grid, also called the 'smart' grid. Engineers are developing "smart", or "AMI" meters, appliances and whatever else they can dream up to deploy microwave radiation everywhere. This grid is the "military-industrial complex" of which President Dwight Eisenhower warned US citizens of in his 1961 Farewell Speech. He warned of its grave consequences. I know of these consequences.

After Laurel Amtower died of brain cancer on August 29, 2010, I contacted NBC in San Diego. At first, Producer Paul Krueger was interested in doing another story. After I gave him this new information, SILENCE.

I then contacted the San Diego Tribune. A reporter called me at home. He told me that this story would NEVER get out in San Diego. I asked, "Why?" He said, "Because of money." I also contacted the CA Governor's office and area Representative Marti Emerald. Both referred me back to SDSU.

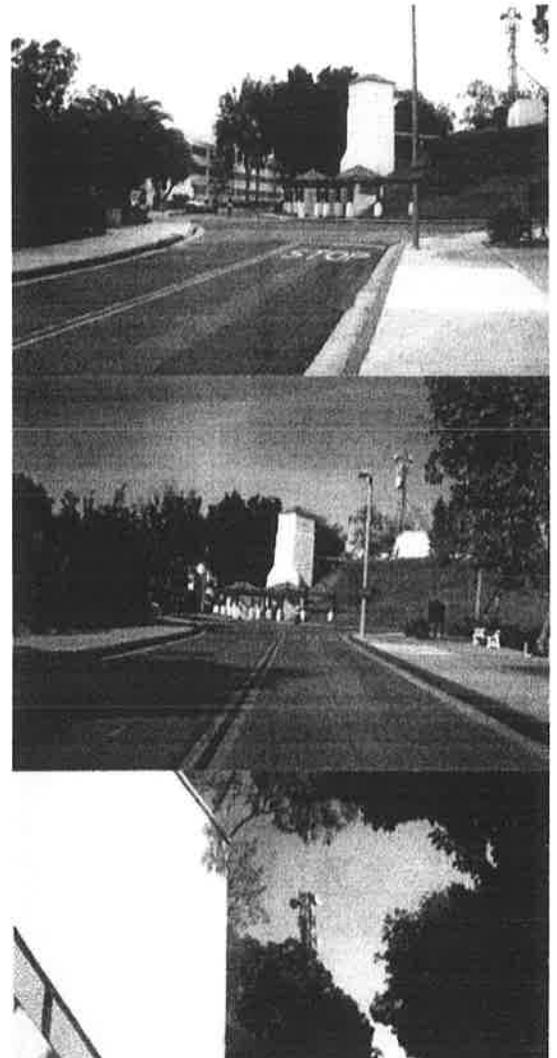
For a month in October 2011, I stood hours each day outside the campus cafeteria, where the kids would congregate and walk to get to their classes. I had about 15 signs taped up against the wall. One said, "Will you be the next victim?" Others said, "Read your cell phone manuals. They say not to hold the phone to your head. Don't keep it in your pocket. It will do genetic damage." Others warned about wi-fi and more.

They looked frightened, but they would still grab their cell phones. They would text while walking and ignore everything around them. Some would take pictures, or would peek out of the side of their eyes. A few talked with me.

While there, I walked to Nasatir Hall. Kids were sitting all around. The leaves were dying on the trees. Measurements on an RF meter were beyond the range of the meter. Some kids were high up on outdoor balconies at their dorms, near the levels of the massive discs and antennas on the towers.

When I went directly to Room 131, where Rich and others who died of cancer had worked, I found it all closed up. A policeman asked me what I was doing there. I told him about my son. He asked me about the towers and told me he has two young children.

The known SDSU brain cancer victims are listed below. In addition to the brain cancers there are also breast cancers in the vicinity. The professors are afraid for both their health and their jobs. I've told the SDSU Administration, "I'm not going away!"



RICH FARVER - DIAGNOSED AND DIED FROM GBM BRAIN CANCER, 2008/ NASATIR HALL, ROOM 131  
 CHARLES CUTTER - DIAGNOSED AND DIED FROM GBM BRAIN CANCER, 2008/ NASATIR HALL, ROOM 131  
 LOU TERRELL - DIAGNOSED WITH LYMPHOMA BRAIN CANCER, 2008/ NASATIR HALL, ROOM RIGHT NEXT TO 131  
 DWIGHT ANDERSON - DIAGNOSED WITH DIFFERENT FORM OF CANCER AND DIED 2008/ NASATIR HALL, ROOM 131  
 RICHARD FUNSTON - DIAGNOSED AND DIED FROM GBM BRAIN CANCER IN 90'S WITH CELL TOWER

PRESENT/ NASATIR HALL, ROOM 131

MRS. KATHY O'HARA - DIAGNOSED WITH GBM BRAIN CANCER MAY 2008/ KPBS NEWS STATION ON CAMPUS

MS. LAUREL AMTOWER - DIAGNOSED WITH GBM NOVEMBER 2009, DIED AUGUST 29, 2010/ ARTS AND LETTERS BUILDING, RIGHT NEXT TO NASATIR HALL

SDSU brain cancer articles and video:

[www.nbcsandiego.com/news/local-beat/Coincidence-or-Cluster.html](http://www.nbcsandiego.com/news/local-beat/Coincidence-or-Cluster.html)

[www.nbcsandiego.com/news/health/SDSU\\_Room\\_Haunted\\_by\\_Cancer\\_\\_San\\_Diego.html](http://www.nbcsandiego.com/news/health/SDSU_Room_Haunted_by_Cancer__San_Diego.html)

[www.healthjournalism.org/blog/tag/brain-cancer](http://www.healthjournalism.org/blog/tag/brain-cancer)

[www.healthjournalism.org/blog/2009/03/san-diego-cancer-clusters-hazard-o...](http://www.healthjournalism.org/blog/2009/03/san-diego-cancer-clusters-hazard-o...)

See: Eric Holland-Sloan Kettering, More on SDSU Cancer Cluster

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## Cell Phone Antennae Alert

### ***Do you live, work, or shop within 1500 feet from the Verizon proposal of 8 cell phone antennae on top of the Friar Tuck Building owned by Nevada County?***

The National Toxicology Program (NTP) has just completed a \$ 25 million long-term study of cancer effects from cell phone radiation. Thousands of rats unfortunately were the victims of this study. The results? A significant percentage of the irradiated rats developed either glioma (brain) tumors, or schwannoma (heart) tumors. The control rats were cancer free. This is a direct linking of cell phones to cancer. The glioma tumors are the ones independent researchers and scientists have been attributing to cell phone use for many years.

*"This is by far—far and away—the most carefully done cell phone bioassay, a biological assessment. This is a classic study that is done for trying to understand cancers in humans,"* says Christopher Portier, a retired head of the NTP who helped launch the study.

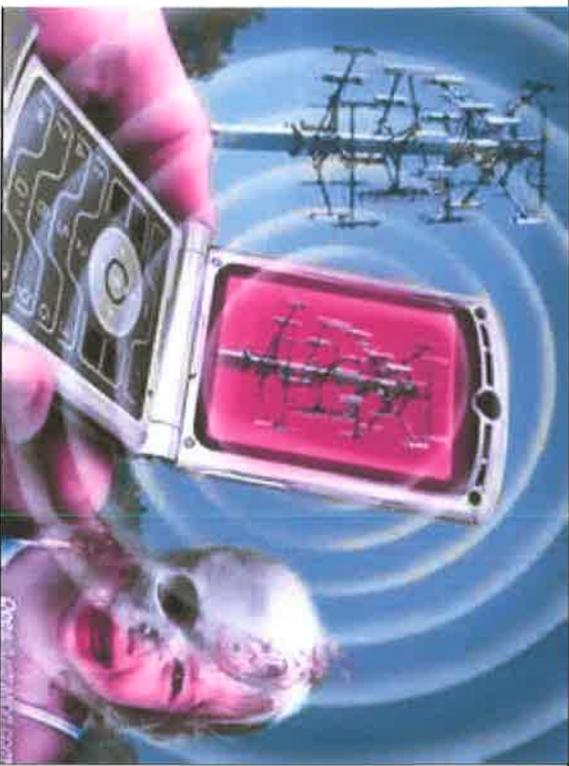
#### **Some Data on Living near a cell tower:**

1. Living within 1500 feet or 500 meter of a tower/antenna can lower your property value up to 25% depending on how close to the tower you are.
2. Living within 1500 feet of a cell tower/antenna is now a disclosure item to buyers when you go to sell your home.
3. Cancer cluster surveys around cell towers/antennas indicate that cancer death rates increase dramatically (300%).
4. This radiation adversely affects your pets and plants.
5. This radiation adversely affects wild birds, insects (bees), and bats.

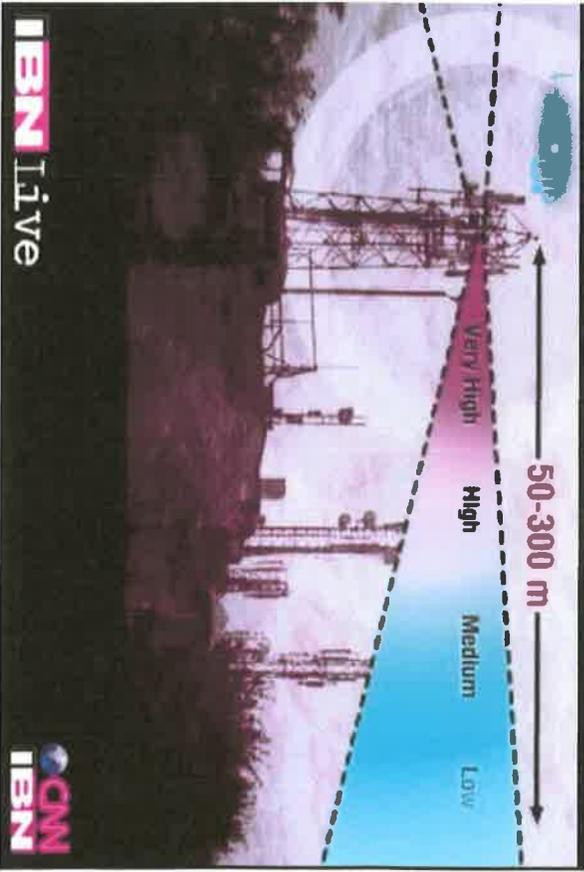
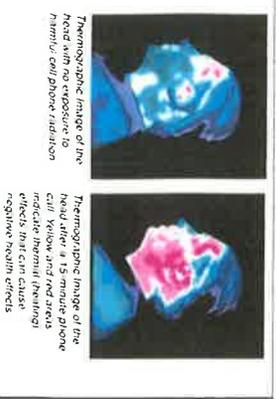
A 10- year study (1996-2006) in Belo Horizonte, Brazil's third largest city, established a direct link between cancer deaths and cell towers. Of the 7191 cancer deaths during that time, over 80 percent resided approximately a third of a mile (500 meters) away from a cell tower.

Other disorders that have been reported for living close to cell towers are: Genetic mutations, Memory disruptions, Hindered learning, ADD, Insomnia, Brain disorders, Hormonal imbalances, Infertility, Dementia, and Heart complications.

Please join us to protest this unnecessary radiation of Nevada City citizens by attending the **June 16, 1:30 pm Planning Commission Meeting in the City Council Chambers at City Hall, 317 Broad St. in Nevada City. Thank you.**



a baby's brainwaves are disturbed for hours after being exposed to a cell tower. Hyperactivity is associated with cell phone EMF's.



### CASE STUDY

Usha Kiran Building, Worli, Mumbai

The cell phone towers installed on the Vijay Apartments terrace at Carmichael Road plot/Bilpin Kulkarni

Usha Kiran Building

Six cancer cases in consecutive floors (5th, 6th, 7th, 8th and 10th) directly facing and at similar height as the mobile phone towers of four telecom companies placed on the roof of opposite building.

Blood irregularities, Brain disturbances, Neurological symptoms, Cancer and sterility are just a few of the syndromes now associated with Cell tower and phone Radiation. We must protect our Communities from excessive EMF's until we know more. This is common sense.

See our page on [EHS](#)

See our [page on alarmist cell tower studies](#)

See our page on [EMF emission standards](#) and alarmist misrepresentation (in French)



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[Critique of Levitt & Lai article on  
cell phone towers and WiFi](#)

## Alarmist Studies: Cell Towers

Alarmist studies: Cell Towers

A new Brazilian study was recently released entitled: "[Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil](#)" by Dode et al, Science of the Total Environment 409 (2011) 3469 - 3665. This paper examined mortality rates cancer in the vicinity of cellular telephone base stations. The study concludes that the risk of death from cancer increases in close proximity to these base stations. This finding has been seized upon by a number of alarmist groups who are using it to question the safety of wireless technology. [See our comprehensive critique of this study.](#)

The following are some examples of the kind of poor quality studies that have helped fuel the concern of alarmists. We have chosen these particular studies because they were highlighted in Radio-Canada program Découverte last year. See [our web page](#) dedicated to this program. The following quote from the [WHO Fact Sheet on base stations and wireless technologies](#) is important: "Media or anecdotal reports of cancer clusters around mobile phone base stations have heightened public concern. It should be noted that

geographically, cancers are unevenly distributed among any population. Given the widespread presence of base stations in the environment, it is expected that possible cancer clusters will occur near base stations merely by chance. Moreover, the reported cancers in these clusters are often a collection of different types of cancer with no common characteristics and hence unlikely to have a common cause."

1. Israeli Study entitled "[Increased Incidence of Cancer near a Cell Phone Transmission Station](#)" was one of two alarmist studies on the Radio Canada program *Découverte* last year. This is a study done in Israel on the incidence of cancer near a cell tower in the town of Netanya. This study was published in 2004, but examined cancer data only for the period from July 97 to June 98, which was only one year after the cell tower entered service in July 96. The study concludes that the risks of developing cancer near the tower were 4.15X higher than the control based on a total of only 8 cancer cases, which in this context is not statistically relevant. A variety of cancers are implicated. There was no follow up for subsequent years. If the cancer rate was so high for this one single year, why didn't they publish the data for subsequent years? It is preposterous to suggest that this cell tower caused these cancers only one year after entering service when the gestation period for most cancers is at least several years. This study is a clear example of cherry picking of data.

2. German study entitled "[The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer](#)" was the second of two alarmist studies on the Radio Canada program *Découverte* last year. As the [WHO Fact Sheet on base stations and wireless technologies](#) states: "Over 1.4 million base stations exist worldwide and the number is increasing significantly with the introduction of third generation technology.....Given the widespread presence of base stations in the environment, it is expected that possible cancer clusters will occur near base stations merely by chance."

Apart from cherry picking a single base station, this German study contains the following anomaly. The study states that the average age for developing cancer in the "dangerous" inner zone near the cell tower is 64.1 years, and it is 72.6 years in the outer zone, at a safe distance from the tower. However, the study also mentions that the average age for developing cancer is 66.5 years for Germany as a whole (see P 4 of the study) . So the average age of developing cancer in the "dangerous" inner zone is very close to the German average. This difference is not statistically significant.

Both the above Israeli and German studies are contradicted by much more robust and comprehensive studies such as the Moulder et al. study and the SCENIHR report described on our [cell tower page](#).



SECTION 1

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## **Summary for the Public (2014 Supplement)**

**Cindy Sage, MA  
Sage Associates  
Co-Editor, BioInitiative Report  
Santa Barbara, CA USA**

Prepared for the BioInitiative Working Group  
March 2014

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## **I. SUMMARY FOR THE PUBLIC**

### **A. Introduction**

The BioInitiative Working Group concluded in 2007 that existing public safety limits were inadequate to protect public health, and agreed that new, biologically-based public safety limits were needed five years ago. The BioInitiative Report was prepared by more than a dozen world-recognized experts in science and public health policy; and outside reviewers also contributed valuable content and perspective.

From a public health standpoint, experts reasoned that it was not in the public interest to wait. In 2007, the evidence at hand coupled with the enormous populations placed at possible risk was argued as sufficient to warrant strong precautionary measures for RFR, and lowered safety limits for ELF-EMF. The ELF recommendations were biologically-based and reflected the ELF levels consistently associated with increased risk of childhood cancer, and further incorporated a safety factor that is proportionate to others used in similar circumstances. The public health cost of doing nothing was judged to be unacceptable in 2007.

What has changed in 2012? In twenty-four technical chapters, the contributing authors discuss the content and implications of about 1800 new studies. Overall, these new studies report abnormal gene transcription (Section 5); genotoxicity and single- and double-strand DNA damage (Section 6); stress proteins because of the fractal RF-antenna like nature of DNA (Section 7); chromatin condensation and loss of DNA repair capacity in human stem cells (Sections 6 and 15); reduction in free-radical scavengers, particularly melatonin (Sections 5, 9, 13, 14, 15, 16 and 17); neurotoxicity in humans and animals (Section 9); carcinogenicity in humans (Sections 11, 12, 13, 14, 15, 16 and 17); serious impacts on human and animal sperm morphology and function (Section 18); effects on the fetus, neonate and offspring (Section 18 and 19); effects on brain and cranial bone development in the offspring of animals that are exposed to cell phone radiation during pregnancy (Sections 5 and 18); and findings in autism spectrum disorders consistent with EMF/RFR exposure. This is only a snapshot of the evidence presented in the BioInitiative 2012 updated report.

There is reinforced scientific evidence of risk from chronic exposure to low-intensity electromagnetic fields and to wireless technologies (radiofrequency radiation including microwave radiation). The levels at which effects are reported to occur is lower by hundreds of times in comparison to 2007. The range of possible health effects that are adverse with chronic exposures has broadened. There has been a big increase in the number of studies looking at the effects of cell phones (on the belt, or in the pocket of men radiating only on standby mode) and from wireless laptops on impacts to sperm quality and motility; and sperm death (fertility and reproduction). In other new studies of the fetus, infant and young child, and child-in-school – there are a dozen or more new studies of importance. There is more evidence that such exposures damage DNA, interfere with DNA repair, evidence of toxicity to the human genome (genes), more worrisome effects on the nervous system (neurology) and more and better studies on the effects of mobile phone base stations (wireless antenna facilities or cell towers) that report lower RFR levels over time can result in adverse health impacts.

Importantly, some very large studies were completed on brain tumor risk from cell phone use. The 13-country World Health Organization Interphone Final study (2010) produced evidence (although highly debated

among fractious members of the research committee) that cell phone use at 10 years or longer, with approximately 1,640 hours of cumulative use of a cell and/or cordless phone approximately doubles glioma risk in adults. Gliomas are aggressive, malignant tumors where the average life-span following diagnosis is about 400 days. That brain tumors should be revealed in epidemiological studies at ONLY 10 or more years is significant; x-ray and other ionizing radiation exposures that can also cause brain tumors take nearly 15-20 years to appear making radiofrequency/microwave radiation from cell phones a very effective cancer-causing agent. Studies by Lennart Hardell and his research team at Orebro University in Sweden later showed that children who start using a mobile phone in early years have more than a 5-fold (more than a 500%) risk for developing a glioma by the time they are in the 20-29 year age group. This has significant ramifications for public health intervention.

In short order, in 2011 the World Health Organization International Agency on Cancer Research (IARC) classified radiofrequency radiation as a Group 2B Possible Human Carcinogen, joining the IARC classification of ELF-EMF that occurred in 2001. The evidence for carcinogenicity for RFR was primarily from cell phone/brain tumor studies but by IARC rules, applies to all RFR exposures (it applies to the exposure, not just to devices like cell phones or cordless phones that emit RFR).

## **B. Why We Care?**

The stakes are very high. Exposure to electromagnetic fields (both extremely low-frequency ELF-EMF from power frequency sources like power lines and appliances; and radiofrequency radiation or RFR) has been linked to a variety of adverse health outcomes that may have significant public health consequences. The most serious health endpoints that have been reported to be associated with extremely low frequency (ELF) and/or radiofrequency radiation (RFR) include childhood and adult leukemia, childhood and adult brain tumors, and increased risk of the neurodegenerative diseases, Alzheimer's and amyotrophic lateral sclerosis (ALS). In addition, there are reports of increased risk of breast cancer in both men and women, genotoxic effects (DNA damage, chromatin condensation, micronucleation, impaired repair of DNA damage in human stem cells), pathological leakage of the blood-brain barrier, altered immune function including increased allergic and inflammatory responses, miscarriage and some cardiovascular effects. Insomnia (sleep disruption) is reported in studies of people living in very low-intensity RF environments with WI-FI and cell tower-level exposures. Short-term effects on cognition, memory and learning, behavior, reaction time, attention and concentration, and altered brainwave activity (altered EEG) are also reported in the scientific literature. Biophysical mechanisms that may account for such effects can be found in various articles and reviews (Sage, 2012).

Traditional scientific consensus and scientific method is but one contributor to deciding when to take public health action; rather, it is one of several voices that are important in determining when new actions are warranted to protect public health. Certainly it is important, but not the exclusive purview of scientists alone to determine for all of society when changes are in the public health interest and welfare of children.

### **C. Do We Know Enough to Take Action**

Human beings are bioelectrical systems. Our hearts and brains are regulated by internal bioelectrical signals. Environmental exposures to artificial EMFs can interact with fundamental biological processes in the human body. In some cases, this may cause discomfort, or sleep disruption, or loss of well-being (impaired mental functioning and impaired metabolism) or sometimes, maybe it is a dread disease like cancer or Alzheimer's disease. It may be interfering with one's ability to become pregnant, or to carry a child to full term, or result in brain development changes that are bad for the child. It may be these exposures play a role in causing long-term impairments to normal growth and development of children, tipping the scales away from becoming productive adults. The use of common wireless devices like wireless laptops and mobile phones requires urgent action simply because the exposures are everywhere in daily life; we need to define whether and when these exposures can damage health, or the children of the future who will be born to parents now immersed in wireless exposures.

Since World War II, the background level of EMF from electrical sources has risen exponentially, most recently by the soaring popularity of wireless technologies such as cell phones (six billion in 2011-12, up from two billion in 2006), cordless phones, WI-FI, WiMAX and LTE networks. Some countries are moving from telephone landlines (wired) to wireless phones exclusively, forcing wireless exposures on uninformed populations around the world. These wireless exposures at the same time are now classified by the world's highest authority on cancer assessment, the World Health Organization International Agency for Research on Cancer to be a possible risk to health. Several decades of international scientific research confirm that EMFs are biologically active in animals and in humans. Now, the balance has clearly shifted to one of 'presumption of possible adverse effects' from chronic exposure. It is difficult to conclude otherwise, when the bioeffects that are clearly now occurring lead to such conditions as pathological leakage of the blood-brain barrier (allowing toxins into the brain tissues); oxidative damage to DNA and the human genome, preventing normal DNA repair in human stem cells; interfering with healthy sperm production; producing poor quality sperm or low numbers of healthy sperm, altering fetal brain development that may be fundamentally tied to epidemic rates of autism and problems in school children with memory, attention, concentration, and behavior; and leading to sleep disruptions that undercut health and healing in numerous ways.

In today's world, everyone is exposed to two types of EMFs: (1) extremely low frequency electromagnetic fields (ELF) from electrical and electronic appliances and power lines and (2) radiofrequency radiation (RFR) from wireless devices such as cell phones and cordless phones, cellular antennas and towers, and broadcast transmission towers. In this report we will use the term EMFs when referring to all electromagnetic fields in general; and the terms ELF or RFR when referring to the specific type of exposure. They are both types of non-ionizing radiation, which means that they do not have sufficient energy to break off electrons from their orbits around atoms and ionize (charge) the atoms, as do x-rays, CT scans, and other forms of ionizing radiation. A glossary and definitions are provided in this report to assist you. Some handy definitions you will probably need when reading about ELF and RF in this summary section (the language for measuring it) are shown in Section 26 – Glossary.