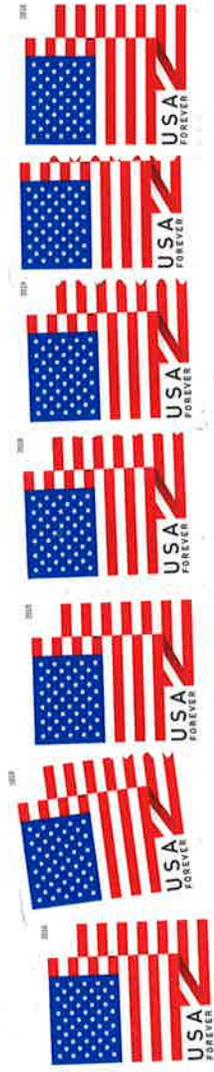


ina Casanova  
Home Ave  
CA 93703



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City of Fresno

Development and Resource Management Dept.  
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Fresno, CA 93727-3604

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DARIN DEVELOPMENT SERVICES  
CITY OF FRESNO

This letter is for the Mono-pine telecommunication tower. Permit NO. P19-00974 located on 3199 E. McKinley avenue. I am appealing the telecommunication tower that will be located on first street. My name is Christy Casanova and I live within range limits of it. My address is 3134 E. Home Ave. I disagree about having a Mono-pine tower because of many bad effects it can cause. A Mono-pine tower should never be in neighborhoods or near school or anywhere that can harm people, animals, plants, or anything else. A mono-pine tower is known to be bad and cause cancer and many other effects. Towers have radiation and waves and can cause harm.

Thank you  
Christy Casanova

The launch of 5G will be similar to turning on your microwave, opening its door, and leaving it on for the rest of your life. There's good reason why hundreds of scientists are taking action against the wireless industry.

## Are 5G Towers Dangerous?

For the past ten years, 5G technology has been in development. Originally planned as a layer atop 3G and 4G, 5G is fast becoming a world of its own.

Every cell tower in your neighborhood emits radio frequency (RF) radiation. Radiation causes cancer. By 2021, every city will have 5G towers and cell stations. These devices will be on the top or side of millions of buildings throughout the world.

The wireless industry is not just building an infrastructure that provides faster downloads; it's building a global microwave oven.

Yes, 5G towers and mini-stations are extremely dangerous. Not only are the shorter millimeter waves more hazardous to human beings, because of the intensity of the technology, it will require millions more mini cell towers than before, potentially one tower per 2 to 8 houses. This means a human being's RF radiation exposure will not only increase, it will exponentially increase within months.

These towers are not only dangerous; they're lethal – and should be considered a crime against humanity.

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43 mins

## Health Risks Of 5G Technology

While there is a lot of chatter against the anti-5G community, there are also a lot of compelling discussions between scientists who are waging war against the untested technology.

In general, radiation does one major thing to human beings and animals – it destroys our DNA, either by forcing the DNA to mutate or by killing specific groups of cells, all of which lead to cancer.

Here's What To Expect If You Experience Prolonged Exposure To Radiation:

1. Nausea
2. Swelling
3. Hair Loss
4. Decreased appetite
5. Low energy
6. Damaged bone marrow
7. Damaged organs
8. Deep depression
9. Confusion
10. Infections
11. Incapacitation and Death

## How To Protect Yourself From 5G

Besides moving to Mars or the Moon, we are limited in ways to protect ourselves from this dangerous technology. Cell tower radiation health effects are real.

Because there will be thousands of these towers and stations in every city, it will be almost impossible to avoid them. Given how addicted we are to our devices, the general public will tend toward risking life and limb to support our screen-related addictions.

That said, there are some things we can do to protect ourselves from radiation. The more we focus on our health and diet, the more our immune systems can defend against the challenges related to 5G radiation.

Spirulina, Wheat Grass, Vitamin C, and similar supplements are consumable forms of sunlight, which will always improve our health and raise our vibrations. Yoga, meditation, chanting, mantras and other forms of prayer can also be beneficial in protecting our life-energies.

While fear can weaken our electromagnetic fields, love, intimacy and social vulnerability can strengthen them. The most important thing we can do is to focus on improving our health, states of mind and exposure to nature. We always have control of our future, even if the general public is headed in another direction.

Here are a few ideas to give you a fighting chance:

12. Do not live near a cell tower or mini station.
13. Purchase an EMF shield, and continue to measure the levels of radiation within 100 feet of your home.
14. Eat healthily and take immune-boosting supplements.
15. Spend lots of time in the forest.
16. Refrain from using your cell phone for long periods, including never keeping your cell phone in your bedroom.
17. When traveling with your cell phone, store it in an EMF protective bag.
18. Consider purchasing some Orgonite, which reportedly scatters electromagnetic fields and turns them into beneficial ones. Dr. Wilhelm Reich developed this unique composite.
19. Continually educate yourself about the wireless industry and the global government support of this insane endeavor.
20. Remain strong, stay out of fear and continue to improve your vibration through positive thinking, forgiveness, and increased attention toward your mental, emotional and physical health.

\*Correction 6/24/19: A previous version of this article made it seem as though “Resolution 1815 of the Council of Europe” recommended the moratorium on 5G, when it was actually the consortium of 180 scientists and doctors mentioned in the opening paragraph.

### About the Author:

Paul Wagner is an Intuitive-Empath, clairvoyant reader, and a 5-time EMMY Award winning writer. He created “The Personality Cards,” a powerful Oracle-Tarot deck that’s helpful in life, love and relationships. Paul studied with Lakota elders in the Pecos Wilderness, who nurtured his empathic abilities and taught him the sacred rituals. He has lived at ashrams with enlightened masters, including Amma, the Hugging Saint, for whom he’s delivered keynotes at Her worldwide events. Paul tours the world lecturing about spiritual liberation, and lovingly offers intuitive readings and inspirational coaching to help others with self-discovery, decision-making, healing, and forgiveness. Learn more at [PaulWagner.com](http://PaulWagner.com).



## Is 5G dangerous?

Although 5G may improve our day to day lives, some consumers have voiced concern about potential health hazards. Many of these concerns are over 5G's use of the higher energy millimeter-wave radiation.

"There's often confusion between ionizing and non-ionizing radiation because the term radiation is used for both," said Kenneth Foster, a professor of bioengineering at Pennsylvania State University. "All light is radiation because it is simply energy moving through space. It's ionizing radiation that is dangerous because it can break chemical bonds."

Ionizing radiation is the reason we wear sunscreen outside because short-wavelength ultraviolet light from the sky has enough energy to knock electrons from their atoms, damaging skin cells and DNA. Millimeter waves, on the other hand, are non-ionizing because they have longer wavelengths and not enough energy to damage cells directly.

"The only established hazard of non-ionizing radiation is too much heating," Foster said, who has studied the health effects of radio waves for nearly 50 years. "At high exposure levels, radio frequency (RF) energy can indeed be hazardous, producing burns or other thermal damage, but these exposures are typically incurred only in occupational settings near high-powered radio frequency transmitters, or sometimes in medical procedures gone awry."

Many of the public's outcries over the adoption of 5G echo concerns over previous generations of cellular technology. Skeptics believe exposure to non-ionizing radiation may still be responsible for a range of illnesses, from brain tumors to chronic headaches. Over the years, there have been thousands of studies investigating these concerns.

In 2018, the National Toxicology Program released a decade-long study that found some evidence of an increase in brain and adrenal gland tumors in male rats exposed to the RF radiation emitted by 2G and 3G cellphones, but not in mice or female rats. The animals were exposed to levels of radiation four times higher than the maximum level permitted for human exposure.

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Many opponents to the use of RF waves cherry-pick studies that support their argument, and often ignore the quality of the experimental methods or inconsistency of the results, Foster said. Although he disagrees with many of the conclusions skeptics have about previous generations of cellular networks, Foster agrees that we need more studies on the potential health effects of 5G networks.

"Everyone I know, including me, is recommending more research on 5G because there's not a lot of toxicology studies with this technology," Foster said.

For the proponents of 5G, many believe the benefits 5G can provide to society far outweigh the unknowns.

"I think 5G will have a transformational impact on our lives and enable fundamentally new things," Krishnaswamy said. "What those types of applications will be and what that impact is, we can't say for sure right now. It could be something that takes us by surprise and really changes something for society. If history has taught us anything, then 5G will be another example of what wireless can do for us."

**Additional resources:**

- Learn more about previous generations of cellphones and [why 5G is the next step](#).
- What do other health experts [have to say](#) about cellphone usage?
- Find out if [5G is available in your area](#).

How to oppose 5G “small cell” towers  
“small cell” tower in Santa Rosa CA.

The telecom industry has switched from primarily installing large, macro cell towers to deploying significantly more “small cell” towers (**5G**). *The following information is focused on the “small cell”, but the “how to oppose” can apply to larger towers too.*

The Federal Communications Commission and the federal government have been promoting and supporting rapid expansion of 5G. Some states have already passed laws forcing them onto communities. However people are pushing back and defeating installations. In Hillsborough California 16 cell towers were denied. Danville CA denied Verizon based on the placement was not the least intrusive means. (*see video excerpt below*). In California SB649, which would have restricted cities ability to regulate 5G, was vetoed by Governor Jerry Brown.

The industry wants wireless everywhere with “small cell” towers every couple hundred feet apart! That means cell towers in our neighborhoods, near schools and parks, where we live, work and play. The industry vision for 5G is to enable the Internet of Things, Smart Communities, driverless cars (*and more*), where roads and appliances (*even baby diapers!*) are embedded with wireless radiation transmitters that connect to cell phones, smart meters and the internet.

***There’s already too much harmful wireless radiation in our environment.*** People are already getting sick from wi-fi, cell towers, smart meters and cell phones. Peer reviewed published science shows harmful effects of cell tower radiation include: **fatigue, headaches, sleep problems, anxiety, ringing in the ears, heart problems, learning and memory disorders, increased cancer risk, and more.** Studies found wireless radiation harms trees, birds, bees and insects. (See links to studies in this letter.)

Hundreds of scientists and public health experts are calling for a moratorium on 5G. They state, *“We the undersigned, more than 180 scientists and doctors from 35 countries, recommend a moratorium on the roll-out of the fifth generation, 5G, for telecommunication until potential hazards for human health and the*

*environment have been fully investigated by scientists independent from industry.”*

5G would use a combination of microwaves and millimeter waves, which are scientifically shown to harm people and nature. For a quick overview of the problem see this [video of a press conference](#) with U.S. senator Blumenthal, who demands proof of safety from the FCC, and listen to comments by Blake Levitt. For more information on 5G see [What is 5G?](#)

*We need a moratorium on 5G, and we need to reduce wireless radiation throughout our communities.*

Artwork by Shelley Masters

**We strongly urge people to oppose 5G!**The following information has been compiled to help you stop 5G to protect your neighborhood, community, people, pets, and environment.

- 1. Keep a watch on your [city or county] planning or permit department for applications for “small cell” towers.** *You’ll need to call the city or county to find out who handles the telecommunications applications. Note they might deny the “small cell” is 5G.*
- 2. Educate and engage the community about EMF/wireless health risks.** Here is a [brochure](#) about EMFs and a [Stop 5G fact sheet](#) and a [Stop 5G bee flyer](#) you can use to start a conversation. Mobilizing other people to get involved to take action is important. Even a few people can make a big difference. It is important to educate decision makers on the science of harm, because this will motivate them to find ways to deny the application. People can also argue aesthetics, location, loss of scenic views, property devaluation, and no significant coverage gap.
- 3. If you live in California:** This legal letter from Best Best and Krieger, outlines what a California community can do to legally deny “small cell” towers in the public rights of way. \* [April 24 2018 Letter to EMF Safety Network re small cells](#). *Update: FCC WT Docket 17-79 went into effect on 1/13/2019. This info is not included in the above letter.* The order adopts: new deadlines [shot clocks] for actions on small cell applications; limits on fees and rents that can be charged for small cells; new standards governing when a locality can say “no”; new standards for permissible aesthetic,

under grounding, and spacing requirements. See:

<https://www.bbklaw.com/BBK/media/Library/pdf/IMLA-General-Presentation-Final.PDF>

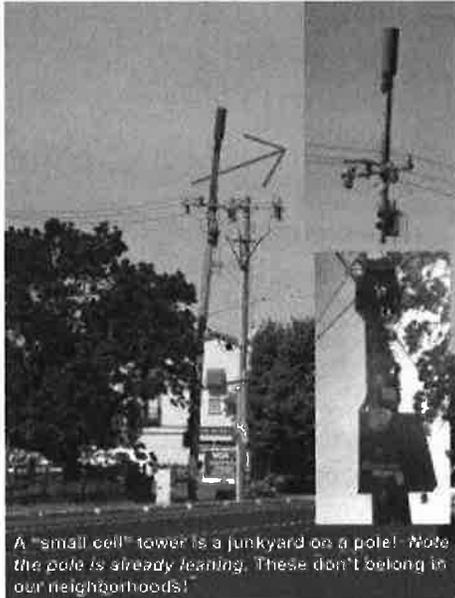
- 4. Speak at public comments at city and county meetings and meet in person with city and county decision makers.** Speak to those issues with the strongest science, boil it down to basic terms and concepts, and document the claims you make. For example: Peer-reviewed published science shows harmful effects of cell tower radiation include: fatigue, headaches, sleep problems, anxiety, ringing in the ears, heart problems, learning and memory disorders, increased cancer risk, and more. Children, the ill and the elderly are more vulnerable. This **Letter to Sebastopol 5G includes studies and quotes you can use.** See also: Biological Effects from Radiofrequency Radiation and www.emfscientist.org Studies of radiation impacts on wild birds documented nest abandonment, plumage deterioration and death.

[https://www.ntia.doc.gov/files/ntia/us\\_doi\\_comments.pdf](https://www.ntia.doc.gov/files/ntia/us_doi_comments.pdf) Peer reviewed published science shows millimeter waves adversely affect health.

<https://goo.gl/gbBKHL> More studies here. See also: EU 5G Appeal. International Society of Doctors for Environment 5G Appeal



Santa Rosa on Link Lane, this one is partly dismantled due to resident protests and the city halting the installation.



5. Santa Rosa on Sebastopol Road.
6. **"Small cell" tower is a junkyard on a pole!** In reality these often do not look like the representational drawings the industry presents. Click on the photos to the left for a closer look.
7. **Share important news:** Democracy Now reported on an investigation by The Nation "How Big Wireless Made Us Think That Cell Phones Are Safe." and "How Big Wireless War-Gamed the Science on Risks, While Making Customers Addicted to Their Phones" For current news follow EMF Safety Network on Facebook.
8. **When there is an application pending:** Send a letter by mail and email to the decision makers and go to the public meetings to speak out and oppose. Gather others to go to the meeting to also speak out. *Please note: decision makers are often volunteers and they need to be educated about complex EMF science and laws. While some people feel aggressive tactics is the only way to get them to understand, practicing courtesy is also effective.* You may want to ask the city to hire an independent RF specialist to prove there is a coverage gap. Here is an independent RF firm: <http://www.emfservices.com/cell-towers.htm>

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“small cell” tower in Santa Rosa CA.

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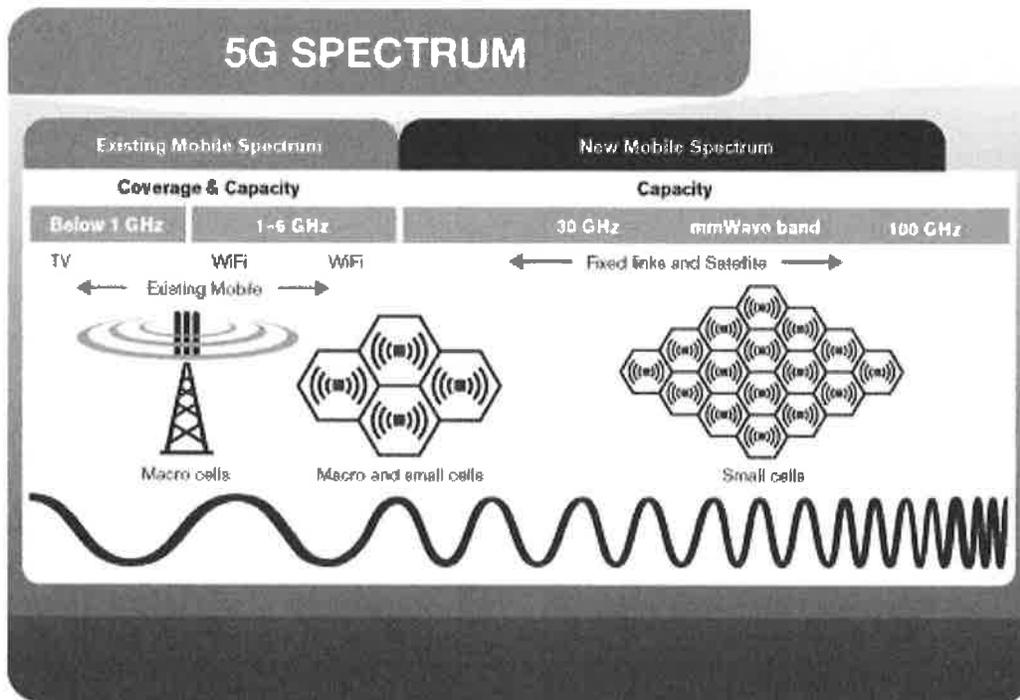
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This is a big deal. It turns out that our eyes and our sweat ducts act as antennas for absorption of the higher-frequency 5G waves.[1] And because the distances these high-energy waves can travel is relatively short, transmitters will be required closer to homes and schools than earlier wireless technologies: the build-out will add the equivalent of a cell tower every 2-10 houses.

But former FCC Chairman Tom Wheeler has made it clear the Telecom-dominated FCC does not put health first: “Stay out of the way of technological development,” he said. “Unlike some countries, we do not believe we should spend the next couple of years studying... Turning innovators loose is far preferable to letting committees and regulators define the future. We won’t wait for the standards.” In response to questions about health concerns, Mr. Wheeler said: “Talk to the medical people”. [2]

Good idea.

The “medical people” have conducted over 2,000 international evidence-based studies that link health impacts with pulsed radiowave radiation from cell towers, routers, cell phones, tablets, and other wireless devices. These studies tell us that RF radiation is harmful at even low and short exposures, and that it impacts children and fetuses more rapidly than adults. Among the findings are that RF radiation is carcinogenic, causes DNA damage, affects fertility and the endocrine

system, and has neurological impacts. Pulsed electromagnetic frequencies have also been shown to cause neurological symptoms: depression, anxiety, headaches, muscle pain, attention deficits, insomnia, dizziness, tinnitus, skin tingling, loss of appetite, and nausea.[3]

The U.S. Government has known of these risks since at least 1971, when the Naval Medical Research and Development Command published a bibliography containing 3,700 references reporting 100 biological and clinical effects attributed to microwave and radio-frequency radiation.

Recent findings, such as the \$30 million 2018 U.S. National Toxicology Program (NTP) Study, have corroborated the findings of all well-designed heart and brain cancer studies of people with 10 or more years' exposure to cellular radiation from cell towers and cell phones. They all agree: RF radiation causes cancer.[4]

What has been the response to these findings?

Scientists are urging the World Health Organization (WHO) to update its classification of RF from a Group 2B Carcinogen to a Class 1 carcinogen – making RF and 5G comparable to arsenic and asbestos. Annie Sasco, former Chief of WHO's Research Unit of Epidemiology for Cancer Prevention, says, "Enough is enough, how many more deaths would be needed before serious action is taken? Evidence just continues to accumulate."

Ronald Melnick, the designer of the NTP study, says that the study "shows clear evidence of a causal link between cancer and exposure to wireless cell phone signals." He adds that "An important lesson that should be learned from the NTP studies is that we can no longer assume that any current or future wireless technology, including 5G, is safe without adequate testing." [5] Meanwhile, 231 scientists from 42 nations have signed the 5G Appeal, which urgently calls for a moratorium on the technology. Steps are being taken to slow the deployment of 5G in Italy, Belgium, Israel, Switzerland, and The Netherlands, and in the states of California, New Hampshire, Massachusetts, and Oregon.

But so far, not enough political leaders have been willing to heed the warnings. Or perhaps they are deferring to President Trump, who said that 5G antennas "must cover every community and they must be deployed as soon as possible.... No matter where you are you will have 5G and it is going to be a different life. I don't

*Palmdale*  
E. Home Ave  
19 CA, 93703



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City of Fresno

Development and Resource Management Dept.

Planning Division

2600 Fresno, st Third Floor, Room 3043

Fresno, CA. 93721-3604



Permit NO. P19-00974

My name is Debbie Poblano and I live  
On 3134 E. Home Ave Fresno, CA 93703.

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I am appealing permit no. P19-00974  
for the property located at 3199 E. McKinley  
Ave.

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The mono-pine tele communication tower  
should not be constructed near people or  
children these towers cause cancer and  
other side effects. The mono-pine  
telecommunication tower would be  
constructed near a school called Mayfair  
School and around Apartments And near  
my home. If you care about people and  
children you would put safety first.

The researched papers that I am  
attaching to my Appeal will explain  
more of why mono-pine telecommunication  
towers should not be located or constructed  
near people or children.

Thank You

Debbie

Put people and children safety first.



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# EMF Health Effects

## Is Cell Tower Radia Dangerous?



### Cell Phone Tower Exposure Overview

You are exposed to 100 million times more electromagnetic radiation than your grandparents were, and part of the reason is radiation from cell phone towers and microwave antennas.

Human population centers are flooded with massive amounts of powerful wireless microwave radiation. Cell phone towers emit high-frequency radio waves, or microwaves, that can travel as far as 45 miles over level terrain. The closer you are, the greater the danger.



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own EMFs, causing a variety of potential health problems, including:

- Headaches
- Memory loss
- Cardiovascular stress
- Low sperm count
- Birth defects
- Cancer

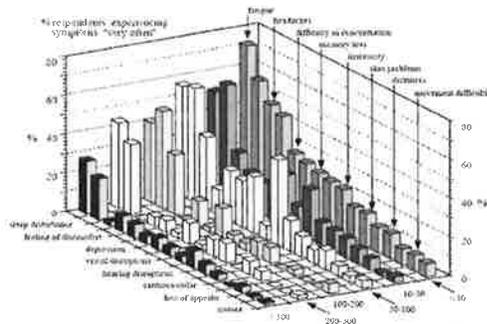


Figure 9. Response of residents living in the vicinity of a cellular phone base station in France.

### A Closer Look at Cell Tower Exposure

Cell towers (or cell sites) that hold antennas and other communications equipment flood the area for miles around with powerful high frequency radio waves (known as microwaves) to support the use of cellphones as well as Wi-Fi, WiMax, Wireless LANs, 802.11 networks, Bluetooth supported devices and more.

Cell tower microwaves might travel for as few as two miles in hilly areas, and up to 45 miles where there are fewer obstructions; and of course, they easily penetrate brick and metal

### Know Your EMF Health Risks

- [Cell and Smart Phones](#)
- [Electrostress from Computers](#)
- [EMFs in the Home](#)
- [Electrostress and Travel](#)
- [Wi-Fi Router Dangers](#)
- [Power Lines Radiation from the Earth](#)
- [EMFs from Underground Pipes](#)
- [Smart Meters](#)

### Choose Products to Protect Yourself

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800-1300 feet apart.

**Mobile towers** - Sometimes installed on the tops of buildings.

Mobile towers are especially dangerous because they emit microwaves at a frequency of 1900 MHz. Recent studies have shown that the intense radioactivity from mobile phone towers adversely impacts every biological organism within one square kilometer.

**Cellphone tower microwaves** have a significantly higher frequency than even radio waves. The higher the frequency, the more powerful the wave—and the more powerful effect on biological organisms (recall that a mobile tower emit microwaves at 1900 MHz).

### Protecting Yourself and Your Family

Cell phone towers and power lines are virtually everywhere. However, SafeSpace offers a range of effective, affordable products that can help you protect yourself and your loved ones against the dangers from hallmarks of the modern world. For more information, **click here**.

### Know Your EMF Health Risks

[Cell and Smart](#)

[Phones](#)

[Electrostress](#)

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[EMFs in the](#)

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Cell Towers are the base stations which control cell (or mobile) phone communication. The term "cell site" can also be used – to include all cell phone towers, antenna masts and other base station forms.

Each cell tower serves a small area around it, known as a cell. Service providers are scrambling to improve their coverage and to service more users, so they need to keep on building more cell sites.

Increased cellphone traffic also contributes to cell tower density. When a cell becomes too busy, a frequent solution is to divide it into smaller cells, which then require more cell sites.

There are over 300,000 cell sites in the USA alone, and in the U.K. over 60,000, and these figures are more than doubling every 10 years.

## Cell tower radiation from chimneys?



Cell sites may take the form of a mast or tower, but may also be disguised, in some cases so they cannot be visually discerned at all.

You might notice the camouflaged "trees", but perhaps not the cell sites on top of buildings, looking like elongated loudspeaker boxes.

You'd very likely fail to notice cell sites installed around chimneys, church steeples, even flagpoles. I have even seen a small cell site installed on the wall of a private house. No doubt the owner was collecting a useful rental, and probably had some screening from the radiation.

But his neighbours were unprotected.

**Where a base station is installed on top of a building where people live or work, those people are usually quite unaware that there is a cell site close by, and of the high levels of radiation that they are subjected to every day.**

## Cell tower health dangers

The cellular phone industry continues to maintain that cell phone towers pose no health risk, but fewer people believe that these days. Almost all scientists in this field would disagree that cell towers are safe, except those employed by the industry, perhaps

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Individuals differ in their response to electromagnetic radiation.

**For some people, short term effects from cell tower radiation exposure may include headaches, sleep disorders, poor memory, mental excitation, confusion, anxiety, depression, appetite disturbance and listlessness.**

A small group of doctors from Bamberg, Germany, conducted their own study in 2005. They found increasing levels of both minor and serious health problems in patients exposed to higher radiation levels.

These health problems included tumours, diabetes, heart rhythm disturbances, inflammatory conditions, joint and limb pains, frequent infections, headaches, sleep disturbances, depression and memory problems.

Makes you wonder how much more information would be revealed by a well-designed and well-funded government study!

So don't just worry about cancer. Those doctors found that all kinds of illnesses showed a similar pattern: a higher incidence in patients with higher radiation exposure.

The American Academy of Environmental Medicine reports that studies demonstrate "significant harmful biological effects occur from non-thermal RF exposure", and these effects may include genetic damage, reproductive defects, cancer, neurological degeneration and nervous system dysfunction, immune system dysfunction, cognitive effects, protein and peptide damage, kidney damage, and developmental effects – all of which have been reported in peer-reviewed scientific literature. Further Info.

## Legal Cell Tower Radiation Levels



The current legal limit for cell site radiation in the US and the UK is 1000 microwatts per square centimetre.

Other countries have set limits as low as 1 microwatt per square centimetre! Switzerland, Italy, China and others manage perfectly well with a limit of 10 microwatts per square centimetre.

Why such a huge difference? It appears that some governments are more concerned about EMF safety than others.

The truth is that no one really knows what level of cell tower radiation will prove to be safe in the long term.

But isn't that a good reason to set a low limit, not a high one?

It appears that current EMF limits in the US and UK may have been influenced more by economic and political motives than by health and safety concerns.

## Cell towers safe distance

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- Radiation from a single cell tower may be different in different directions.
- Radiation is affected by the lie of the land too, and by shielding and reflections from buildings.
- And finally, the construction of your house affects its resistance to radio-frequency EMF.

It can also happen that the cell tower you are aware of in your neighbourhood is not actually the closest cell site to your house.

Cell sites are often disguised. And many units are much smaller than the old familiar towers (though not necessarily less potent), and installed in unexpected locations.

So start off by making a careful check of your area, to find all the cell sites. Then use a map to work out the distance from each cell site to your house.

If the closest cell site is more than 400 metres away, you are probably not being harmed by it – although high risk groups and electro-sensitive people may need to be more cautious.

## Cell tower – Personal Protection



If you are still concerned, try to get hold of an RF (radio frequency) gauss meter designed for measuring electromagnetic radiation in the cell phone frequency (microwave) range.

Another alternative is to order an EMF survey of your property. (EM Watch conducts EMF surveys in the southern half of England.)

Be aware that in every house there are rooms (and areas within rooms) where EMF radiation is higher or lower, just as some parts of your house may be brighter or darker because of window placement.

An EMF meter, or a survey will tell you which places in your home are safe, and which are not ideal for spending lots of time in.

When you next change your job or your house, find out how far away you are going to be from the nearest cell site, and let that influence your decision. Do the same when you decide where to send your child to school.

If you are still worried about cell tower radiation – here are some things you can do

- Spend less time in rooms where you can see the tower from a window. Rooms on the far side of the house from the tower will usually have lower EMF levels.
- EMFs are cumulative. You can't control the radiation coming from the cell tower, but do what you can to reduce EMF from other sources.
- Get a radio-frequency EMF meter and measure the radiation levels in different parts of your house. (Measurement with a suitable meter is the only sure way to know how much radiation you are receiving at any particular spot.)
- Consider shielding to reduce cell tower EMF – it can be shielded with special window film, metallic mesh curtaining, EMF paint, and metal foil in the roof.

EMF Shielding Video

### Shielding RF Radiation with Aluminum Screening

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Example: A study into the effects of a cell tower on a herd of dairy cattle was conducted by the Bavarian state government in Germany and published in 1998.

The erection of the tower caused adverse health effects resulting in a measurable drop in milk yield.

Relocating the cattle restored the milk yield. Moving them back to the original pasture recreated the problem. [DairyCowStudy.pdf](#).

A human study (Kempton West) in 2007 measured blood levels of serotonin and melatonin (important hormones involved in brain messaging, mood, sleep regulation and immune system function) both before, and five months after, the activation of a new cell site.

Twenty-five participants lived within 300 metres of the site. Substantial unfavourable changes occurred with respect to both hormones, in almost all participants. [Kempton West Study](#).

## Can Cell Towers Cause Cancer?

A study performed by doctors from the German city of Naila monitored 1000 residents who had lived in an area around two cell phone towers for 10 years. During the last 5 years of the study they found that those living within 400 meters of either tower had a newly-diagnosed cancer rate three times higher than those who lived further away.

Breast cancer topped the list, but cancers of the prostate, pancreas, bowel, skin melanoma, lung and blood cancer were all increased. [NailaStudy.pdf](#)



**Very few studies have specifically concentrated on cancer risk from cell phone towers. This lack of studies is in itself a cause for concern, especially since anecdotal evidence is plentiful.**

For example, in a case known as "Towers of Doom", two cell masts were installed (in 1994) on a five story apartment building in London. Residents complained of many health problems in the following years. Seven of them were diagnosed with cancer.

The cancer rate of the top floor residents (closest to the tower) was 10 times the national average. [Further info](#).

Even the World Health Organisation has conceded that [radio-frequency](#) radiation may cause cancer. See [this report](#).

If cell towers are causing cancer, you would expect it to occur after several years of exposure, because damage from radiation exposure accumulates over time. Cancer only occurs when all body defences and repair mechanisms have been exhausted and overwhelmed.

During those years, our bodies would be stressed by that radiation every day. This affects our health in other ways,

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# A Effects of telecommunication towers on environment

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## Introduction

### 1.1: Background of the Study

Telecommunication Towers: is a large antenna that used to communicate mobiles and internet without wire and connecting with the cell phones and internet.

Towers communicate with the mobiles and internet routers with large areas, for example one district is enough in one antenna of telecommunication tower.

According report in the office of the Auditor General of the Canada, Every day there are more cellular telecommunication antennas being erected close to or even upon schools, daycares, retirement homes and residential buildings that are affecting the health and well being of everyone. It has been mentioned that we are now virtually living within a microwave oven!!! Although the effects of the radiation that cell phone towers emit are harmful and above all it has not been proved safe by the telecommunication companies, there are more and more towers being approved by the municipal governments, Scientifically evidence shows that the electromagnetic radiation caused by cellular telecommunications, has now become the worst man-made hazard for all life and the environment. Moreover, the negative effects of this radiation have been shown by scientists as of yet there has been nothing done to protect or make the public aware of the dangerous they are confronted with. For instance, studies like the one conducted by Dr. George Carlo and published in his book Cell phones invisible hazards in the wireless age demonstrated the unwillingness of the cell phone companies to admit in public the results and to be responsible for the impacts this technology has in the human body. Unfortunately, studies such as this one are consistently ignored by the Government and by the Cell Phone Industry who claim that cell phones and antennas respect the "safe limits" of exposure of radiofrequency radiation and there is no need to worry or any concern about health risks. That is why the so called "safe limits" need to be reevaluated since they are much too high and are not difficult to comply with. Rather than being based on medical criteria, they are merely based on technical feasibility and commercial interest of the Cellular Telecommunications Industry. There is **no** proof that cell phones and cell phones masts radiation do not cause any harm to human life and environment.

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## 1.2: Problem Statement

The main reason study **Effects of Telecommunication Towers on Environment**, there is an increase of the use of towers that can cause day after day establish more places use, like homes, areas more people stay.

Problem of the telecommunication towers is a evidence that come after more years or after long time, but don't see in suddenly and this problem is importance to avoid and make ways to decrease.

Telecommunication towers emits more and more microwaves and these higher energy waves can actually destroy chemical and molecular bonds, creating chaos in our basic biochemical structures and these cause damage of the birth child, infant and also genes of the people near the place of these tower.

Telecommunication towers can effect to the environment and cause to the damage of the health of the society, also damage environmental amenity.

## 1.3: Purpose of the Study

The purpose of the study is to know effects of Telecommunication Towers on Environment in Hargeisa city, that's increase day after day in our country and to define how telecommunication towers destruct human health.

## 1.4: Research Objectives

**General Objective:** This study will correlate telecommunication towers and effects of

# A Effects of telecommunication towers on environment

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The biggest immediate concern is that the cellular telecommunications companies are targeting the younger generation, the teenagers and children of tomorrow who are more sensitive towards radiation because their skulls do not block as much radiation and are affected by these rays much more than adults

These particular groups of people have:

- Thinner skulls which do not block as much radiation and an adult's skull does
- A more sensitive nervous system
- Not such a strong immune system
- An increased rate of cell division, which is the reason why cell damages spread faster

Some of the most powerful cell tower installations are on mountains and hilltops outside of urban areas. These EM fields have impacted humans, animals as well as the ecological balance. Studies of people and farm animals living around high voltage wires point to extreme hazards of living up close to a powerful electromagnetic field (EMF) - exhibiting everything from stress and sleep disorders to birth defects, cancer and Alzheimer's. All cell site exposure risks.

Cell towers (known as mobile phone masts (Britain) or base stations) typically contain transmitter/receivers transceivers, control electronics, a GPS receiver for timing, digital signal processors as well as various types of electrical power sources.

Cell phone tower wavelengths, microwaves have a significantly higher frequency than even radio waves, the higher the frequency, the more powerful the wave and the more powerful effect on biological organisms, EMF (Electromagnetic field) is effect human health and cause damage of the Enzymes, DNA, Metabolism, Genes, Hormones and more.

Cell tower radiation has also been linked to Headaches, Memory loss, Low sperm count, Cancer birth defects, Heart conditions and Alzheimer's, one of the problems is that this damage is cumulative in the tissues, and can take years, even decades to show up.



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## DANGERS OF LIVING NEAR CELL PHONE TOWERS RAISED

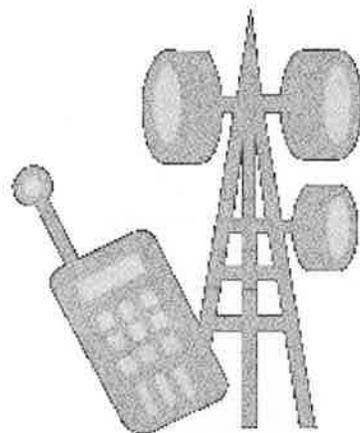
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November 2008 Articles

### La Mesa Council holds hearing Nov. 5 on proposal to erect cell phone tower in Lake Murray area

By Miriam Raftery



When Mom asked me to look into possible health hazards posed by cell phone panel antennas that a church in her neighborhood wants to put up, I expected to find reassuring facts to allay Mom's concerns. Instead, I found deeply disturbing data that makes me wonder why the public is not being informed about health risks—and why our government seems intent on covering up troubling truths.

Cell phone companies and the U.S. Food and Drug Administration assert that cell phone towers don't pose health risks to the public. Some studies support this assertion, but other studies suggest just the opposite.

Harvard-trained Dr. Andrew Weil at the University of Arizona's medical center recently observed, "In January 2008, the National Research Council (NRC), an arm of the National Academy of Sciences and the National Academy of Engineering, issued a report saying that we simply don't know enough about the potential health risks of long-term exposure to RF energy from cell phones themselves, cell towers, television towers, and other components of our communications system. The scientists who prepared the report emphasized, in particular, the unknown risks to the health of children, pregnant women, and fetuses as well as of workers whose jobs entail high exposure to RF (radiofrequency) energy....Because so much of cell phone technology is new and evolving, we don't have data on the consequences of 10, 20 or 30 years worth of exposure to the RF energy they emit," Weil concluded. The report called for long-term safety studies on all wireless devices including cell phones, computers, and cell phone towers.

A 2006 report issued by the World Health Organization (WHO) offered some reassurance and found no scientific evidence that radiofrequency signals from cell towers cause adverse health effects. The report noted that up to five times more of the RF signals from FM radio and television (than from cell towers) are absorbed by the body with no known adverse effects on health in the more than 50 years that radio and TV broadcast stations have been operating.

But an Australian study found that children living near TV and FM broadcast towers, which emit similar radiation to cell towers, developed leukemia at three times the rate of children living over seven miles away.

If you live within a quarter mile of a cell phone antenna or tower, you may be at risk of serious harm to your health, according to a German study cited at [www.EMF-Health.com](http://www.EMF-Health.com), a site devoted to exposing hazards associated with electromagnetic frequencies from cell phone towers and other sources.

Cancer rates more than tripled among people living within 400 meters of cell phone towers or antennas, a German study found. Those within 100 meters were exposed to radiation at 100 times normal levels. An Israeli study found risk of cancer quadrupled among people living within 350 meters (1,148 feet) of a cell phone transmitter—and seven out of eight cancer victims were women. Both studies focused only on people who had lived at the same address for many years.

Other studies have found that levels of radiation emitted from cell phone towers can damage cell tissues and DNA, causing miscarriage, suppressing immune function, and causing other health problems.

Astoundingly, the federal government does not allow rejection of a cell phone tower based on health risks, according to a 2005 article. A Google search found no evidence that this situation has changed.

Yet over 1.9 million cell phone towers and antennae have been approved nationwide without federal studies to assure safety of those living nearby.

How many cell phone towers and antennas are in your neighborhood? Find out at [www.antennasearch.com](http://www.antennasearch.com). I plugged in my address on Mt. Helix, hardly an urban stronghold, and was astounded to discover that there are 96 cell phone towers, 286 antennas and 2 proposals for new towers within four miles of my home!

So how about Mom’s neighborhood, where an Evangelical church insists a new tower is needed? Mom gets perfectly fine cell phone reception, and so do the neighbors she’s spoken with—not surprising since there are already 113 towers and 335 antennas within a four-mile radius.

Churches, schools, fire stations, and other buildings are increasingly erecting cell phone towers or antennas because cell phone companies are willing to pay rental fees of hundreds or even thousands of dollars a month—welcome infusions for cash-strapped budgets. But at what cost to the public’s health? There are young children in Mom’s neighborhood, less than one block from the proposed cell phone antenna site.

In Sweden, the government requires interventions to protect the public from electromagnetic frequencies. Why isn’t the U.S. government paying attention to this potential risk to public safety?

If you wish to share your views on the T-Mobile proposed cell phone tower at 5777 Lake Murray Blvd. (near Marengo Avenue), the La Mesa City Council will hold a public meeting on Wednesday, November 5th at 7 p.m. in Council Chambers at the La Mesa City Hall, 8130 Allison Ave., La Mesa.



Search

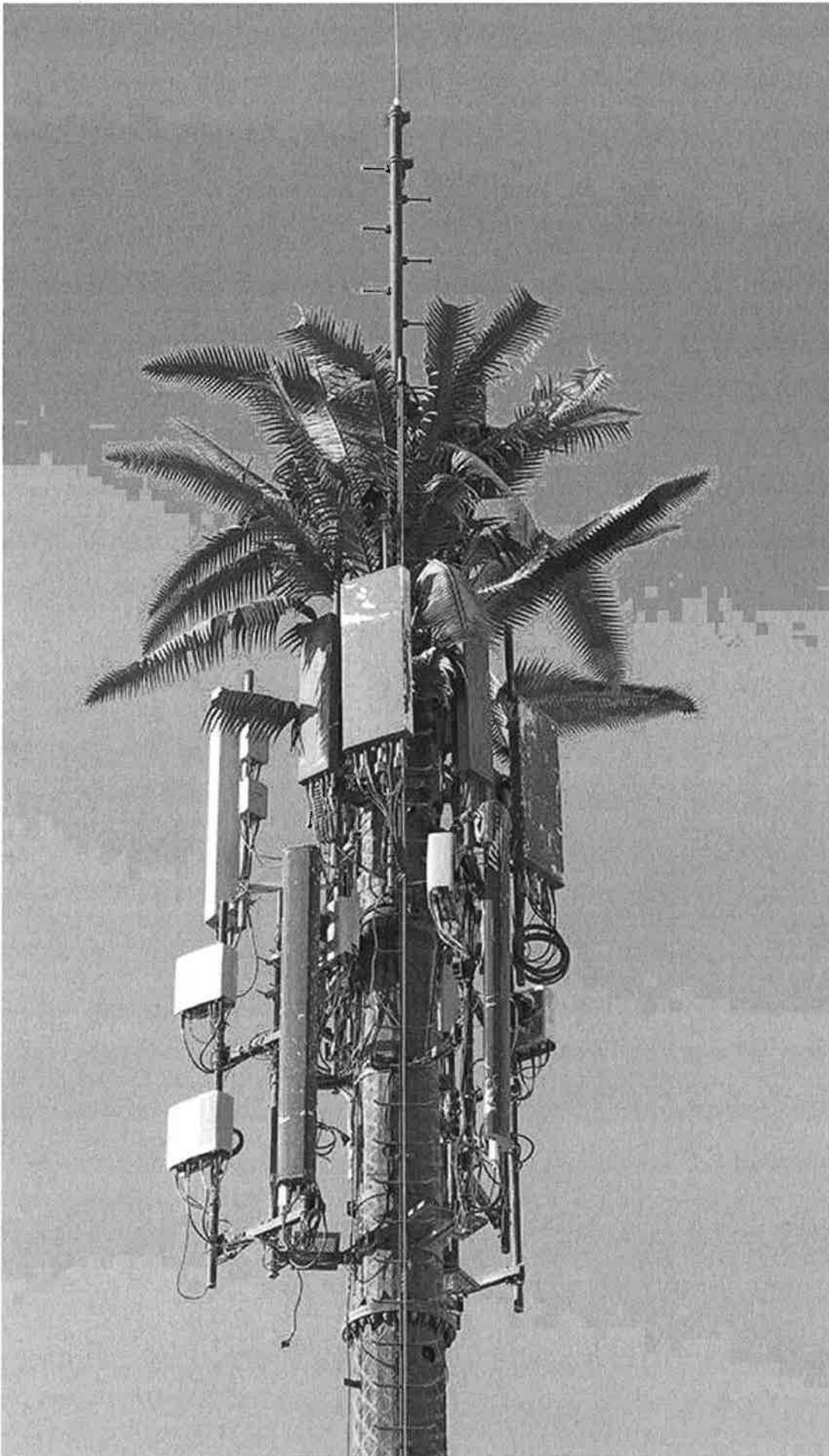




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# Cell Tower Health Effects



Updated 8/4/19

## Scientific Literature

The number of cell towers worldwide has had exponential growth since the 1990's. In the U.S. large cell tower numbers have risen from about 900 in 1985 to over 308,334 cell sites in service in 2016. This is according to the Cellular Telecommunications Industry Association (CTIA), established in 1984 just before the rollout of cell towers. The telecommunications industry places cell towers in cities but also leases rooftops on schools, churches, businesses and apartment buildings with antennas for one or more carriers. This co-location can create clusters of antennas with different frequencies in close proximity to where people live, work, study and play. These base stations emit a continuous stream of microwave radiofrequencies exposing residents to whole body exposures. More cell towers are being proposed throughout the US now on a statewide and federal level to accommodate proposed 5G high frequency telecommunications with cell towers about every 250 meters (~750 feet).

The rise in cell towers has been accompanied by scientific observations and reports of both human health and environmental decline in many countries.

See also

- [5G Telecommunications Science \(https://mdsafetech.org/5g-telecommunications-science/\)](https://mdsafetech.org/5g-telecommunications-science/)
- [5G Mobile Communications \(https://mdsafetech.org/problems/5g/\)](https://mdsafetech.org/problems/5g/)
- [Cell Towers and City Ordinances \(https://mdsafetech.org/cell-tower-and-city-ordinances/\)](https://mdsafetech.org/cell-tower-and-city-ordinances/)
- [New Legislation Cell Towers \(https://mdsafetech.org/new-legislation-small-cell-towers/\)](https://mdsafetech.org/new-legislation-small-cell-towers/)

## Adverse Health Symptoms Near Cell Towers

The majority of published studies in different countries have shown a relationship between distance from base stations and a variety of health complaints. They have found that the closer to the towers people live there is an increase incidence of reported physical symptoms including those below. These are the same symptoms that military personnel working on radar have experienced, people who have microwave illness (AKA electrosensitivity) experience and also similar to what Cuban and Chinese Diplomats reported in unusual "attacks in 2017. See

(Cuban Diplomats Likely Hit by Microwave Weapons -New York Times )

(<https://mdsafetech.org/2018/09/04/cuban-diplomats-likely-hit-by-microwave-weapons-new-york-times-reports/>)

- headaches
- insomnia
- dizziness
- irritability
- fatigue
- heart palpitations
- nausea
- loss of appetite
- feeling of discomfort
- loss of libido
- poor concentration
- memory loss
- neuropsychiatric problems such as depression.

## **Blood Cell Abnormalities Found**

**Zothansiana 2017** – (<https://www.ncbi.nlm.nih.gov/pubmed/28777669>) In a recent study from India by Zothansiana et al (2017), researchers examined abnormalities in blood samples in people living at different distances from cell towers. They identified a significant increase blood cell damage in those living within 80 meters of a cell tower versus those living greater than 300 meters from a cell tower. They found 1) A significant increase in micronuclei, which are small remnants of DNA nuclear material appearing within blood cells and a sensitive indicator of genotoxicity and chromosomal abnormalities 2) An increase in lipid peroxidation indicating free radical formation and cell membrane damage 3) A reduction in levels of internally produced antioxidant capacity (glutathione, catalase and superoxide dismutase).

The author concluded **“The present study demonstrated that staying near the mobile base stations and continuous use of mobile phones damage the DNA, and it may have an adverse effect in the long run. The persistence of DNA unrepaired damage leads to genomic instability which may lead to several health disorders including the induction of cancer.”** As more base stations are deployed with higher density and with ubiquitous wireless

devices at home it will be difficult to find control groups that have not been significantly exposed. The **Antenna Search** website allows people to identify registered cell towers in their area.

## School Cell Tower Study in 2018 Study Shows Cognitive Decline in Students

**Meo 2018 (<https://journals.sagepub.com/doi/10.1177/1557988318816914>)**– A recent case controlled 2 year scientific study examining the neurologic effects of children, aged 13-16, in schools with nearby cell towers revealed significant decline in cognitive scores when the radiation from the cell tower was higher but still at non-thermal levels. Students in School 1 (124 students) were exposed to cell tower radiation at  $2.010 \mu\text{W}/\text{cm}^2$  at a frequency of 925 MHz for 6 hr a day, 5 days a week. Students at School 2 were exposed to cell tower radiation at  $10.021 \mu\text{W}/\text{cm}^2$  at a frequency of 925 MHz for 6 hr a day, 5 days a week. Both groups had exposure for 2 years. Cognitive functions tasks were measured by the Cambridge Neuropsychological Test Automated Battery (CANTAB). Participants were excluded who had any confounding factors, i.e. those with any pre existing illness, on any medications, with history of anxiety or attention problems, frequent use of cordless or cell phones, use of Wi-Fi routers in their bedrooms, or those who lived near high transmission lines or cell towers.

The researchers used the Cambridge Neuropsychological Test Automated Battery (CANTAB) to measure cognitive functions tasks. They found “a significant impairment in Motor Screening Task (MOT;  $p = .03$ ) and Spatial Working Memory (SWM) task ( $p = .04$ ) was identified among the group of students who were exposed to high RF-EMF produced by MPBSTs. High exposure to RF-EMF produced by MPBSTs was associated with delayed fine and gross motor skills, spatial working memory, and attention in school adolescents compared to students who were exposed to low RF-EMF. Most notable is that the current FCC safety “guidelines” for 30 minute exposure are  $1000 \mu\text{W}/\text{cm}^2$ . This FCC limit is 100 times more RF than the students experienced in the highest exposure group that showed cognitive decline and with non-thermal effects.

Study here-“**Mobile Phone Base Station Tower Settings Adjacent to School Buildings: Impact on Students’ Cognitive Health**. Mao SA et al. American Journal of Men’s Health. December 7, 2018. <https://journals.sagepub.com/doi/10.1177/1557988318816914> (<https://journals.sagepub.com/doi/10.1177/1557988318816914>)

## Cancer and Cell Towers

The cell towers were about 200 feet from each school. One school had about 10 times higher radiation levels. They found a significant increase in elevated levels of HbA1c and risk of type 2 diabetes mellitus in the school with higher RF levels.

**Eskander (2012)** (<https://www.sciencedirect.com/science/article/pii/S0009912011027330?via%3Dihub>) looked at long term exposure to RF from cell towers over a 6 year period.

They showed a reduction in volunteers' plasma ACTH, serum cortisol levels and a decrease in the release of the thyroid hormones especially T3. In addition prolactin in young females (14–22 years), and testosterone levels [in males] significantly dropped.

## Biological Effects from Exposure to Electromagnetic Radiation From Cell Towers

Blake Levitt, an award-winning medical and science journalist and former *New York Times* contributor is author of **Cell Towers-Wireless Convenience? or Environmental Hazard? (2000)** The book lists different chapters from different authors who contributed to a “Cell Towers Forum: State of the Science/State of the law” environmental conference December 2, 2000. Her book has valuable information on FCC safety guidelines, legal aspects of the Telecommunications Act, cell tower sitings and case law. She also co-authored **Biological effects from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays.** (2010) *Environmental Reviews*, 2010, 18(NA): 369-395. [Biological effects from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays](http://www.nrcresearchpress.com/doi/full/10.1139/A10-018#.WYUIOHeZNo4) (<http://www.nrcresearchpress.com/doi/full/10.1139/A10-018#.WYUIOHeZNo4>)

## Conclusions From Research Health Effects of Cell Towers

A brief review of some of the research listed is below. Wildlife is even effected by cell towers.

**Santini 2002** (<https://www.ncbi.nlm.nih.gov/pubmed/12168254>), in a French study, reported an increase in fatigue at 300 meters from the cell towers and remaining symptoms at 200 meters. A follow up [study](https://www.ncbi.nlm.nih.gov/pubmed/12948762) (<https://www.ncbi.nlm.nih.gov/pubmed/12948762>) by Santini in 2003 revealed that older subjects reported more symptoms and were more sensitive. Duration of exposure of 1 to 5 years did not have an effect on frequency of symptoms but after 5 years there was a significant increase in irritability reported.

**Navarro (2003)**

(<https://pdfs.semanticscholar.org/c284/2cc49dcb87d4ca9f9a2d485236a103b2e3f0.pdf?ga=2.148991350.1785924807.1565025138-1589774163.1565025138>) indicates much lower

levels of exposure cause adverse health symptoms. The Navarro (2003) study

(<https://www.researchgate.net/publication/237410769> THE MICROWAVE SYNDROME -

FURTHER ASPECTS OF A SPANISH STUDY) on cell towers and “Microwave Syndrome” in Spain

found that in those living near cell towers symptoms occurred at low power. He looked at distance from the towers and electromagnetic field exposures and concluded, “Based on the data of this study the advice

(<https://www.researchgate.net/publication/237410769> THE MICROWAVE SYNDROME -

FURTHER ASPECTS OF A SPANISH STUDY) would be to **strive for levels not higher**

**than 0.02 V/m** for the sum total, which is equal to **a power density of 0.0001  $\mu\text{W}/\text{cm}^2$  or 1**

**$\mu\text{W}/\text{m}^2$** , which is the indoor exposure value for GSM base stations proposed on empirical evidence by the Public Health Office of the Government of Salzburg in 2002.”

**Hutter (2006)**. ([https://oem.bmj.com/content/63/5/307.abstract?ijkey=9ae18f97484bfbf95e6f8c3eb92b69fe356ef640&keytype2=tf\\_ipsecsha](https://oem.bmj.com/content/63/5/307.abstract?ijkey=9ae18f97484bfbf95e6f8c3eb92b69fe356ef640&keytype2=tf_ipsecsha))

in an Austrian study, looked at cognitive performance, insomnia and well being in relation to power density of radiofrequency radiation versus reported symptoms in those in rural vs urban settings for more than a year. His study showed an increase in health effects with higher radiofrequency exposure. Important conclusions were that these complaints were independent of patients concern over health effects and that at levels well below current safety standards.

**Abdel-Rassoul (2006)** (<https://www.ncbi.nlm.nih.gov/pubmed/16962663>)

Researchers looked at neurologic effects of inhabitants living under or across from cell tower base stations versus those far away. They found “The prevalence of neuropsychiatric symptoms such as headache (23.5%), memory changes (28.2%), dizziness (18.8%), tremors (9.4%), depressive symptoms (21.7%), and sleep disturbance (23.5%) were significantly higher among exposed inhabitants than controls: (10%), (5%), (5%), (0%), (8.8%) and (10%).” In addition, “the exposed inhabitants exhibited a significantly lower performance than controls in one of the tests of attention and short-term auditory memory” also, “the inhabitants opposite the station exhibited a lower performance in the problem solving test (block design) than those under the station.” All readings were within the standard guidelines. They recommend revision of standard guidelines for public exposure to RER from mobile phone base station antennas.

### **Sivan and Sudarsanam 2012 Review of Literature-**

([http://www.biolmedonline.com/Articles/Vol4\\_4\\_2012/Vol4\\_4\\_202-216\\_BM-8.pdf](http://www.biolmedonline.com/Articles/Vol4_4_2012/Vol4_4_202-216_BM-8.pdf)) The Inter-Ministerial Committee (IMC) covered scientists to review the literature of the effects of RF-EMF radiations on wildlife, humans and the biosphere. In their 2010 MOEF Report they found that out of the 919 research papers collected on birds, bees, plants, other animals, and humans, 593 showed impacts, 180 showed no impacts, and 196 were inconclusive studies

They concluded, "Based on current available literature, it is justified to conclude that RF-EMF radiation exposure can change neurotransmitter functions, blood-brain barrier, morphology, electrophysiology, cellular metabolism, calcium efflux, and gene and protein expression in certain types of cells even at lower intensities. They noted as well that, "Identification of the frequency, intensity, and duration of non-ionizing electromagnetic fields causing damage to the biosystem and ecosystem would evolve strategies for mitigation and would enable the proper use of wireless technologies to enjoy its immense benefits, while ensuring one's health and that of the environment."

### **Percentage of studies that reported harmful effect of EMR in various groups in MOEF Report**

**Human Effects-** 62% showed effects, 13% no effect and 25% inconclusive

**Plant Effects-** 87% showed effects and 13% were inconclusive

**Wildlife Effects-** 62% showed effects, 4% no effect and 36% inconclusive

**Bee Effects**—85% showed effects and 15% no effect

**Bird Effects-** 77% showed effects, 10% no effect and 13% inconclusive

### **Shinjyo and Shinjyo 2014**

(<https://www.slt.co/Downloads/News/1086/Shinjyo%202014%20Significant%20Decrease%20of%20Clinical%20Symptoms%20after%20Mobile%20Phone%20Base%20Station%20Removal%20.pdf>) in an independent cell tower study from Japan, looked at health effects of residents living in a condominium complex from 1998-2009, noting health symptoms before placement of cell towers, during cell tower functioning and after removal of different antennas on the rooftops. They found a significant development of symptoms with placement of the cell