

September 8, 2016

(Provided to Clerk
after the hearing by
Suzanne Montez)

PC 9/8/15
#3
28 pages

Roger Trout
County of El Dorado Planning Commission
Community Development Agency
2850 Fairlane Court
Placerville, CA 95667

Dear Roger:

Per the attached, my husband and I object to a cell tower placement on Helva Lane.

Cell phones and tower placement has steadily increased since the 1990's. There is not a lot of history and conclusive studies as to the impact on our health (Biological Resources and Toxic/Hazardous). There are some studies that point to health risk. Why would we even want to risk our health? Our neighbor who wants the tower on their property will be compensated financially. We will not. They have financial incentive to take the risk. The reality is that some patients with cancer can't buy a cure. This tower placement is not worth the risk to our neighborhood.

My husband and I also have Land/Fire Hazard concerns. Cell towers get very hot and require a lot of cooling. We know someone who services cooling systems in cell towers.

Last but not least, Zillow has postings that reflect a negative impact on property values in the vicinity of power and cell towers. Buyers simply choose to purchase elsewhere to minimize health risk and to avoid unsightly towers (Aesthetic/Visual). Please clarify if disclosure of the cell tower would be required in the event we wanted to sell our home.

Please do not allow placement of the Verizon Cell Tower on Helva Lane.

Thank you.

Dominic and Suzanne Montez
4120 Rancho Montes Drive
Placerville, CA 95667

- Suzanne Montez*
- Please move tower further down Sand-ridge to larger parcels / less populated
- Residential generators do NOT run at night. Verizon's generator would be the only one.
 - We do lose power for more than 24 hrs.
 - Trees - mostly oaks and gray pines not near height of proposed tower

Real Estate
Devaluation:

- Noise
- Traffic
- lighting
- Health Risk

EMF-Health.comAdvanced EMF Protection Solutions
to the Dangers of Electropollution**Q-Link**Concerned about cell phone radiation?
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SOLUTIONS****Personal Protection****Home Protection**[QLink Home](#) > [Pressroom Main](#) > [Articles](#) >**Cell Phone Towers: How Far is Safe?**
by Taraka Serrano

If you or people you know live within a quarter mile of a cell phone tower, this may be of concern. Two studies, one in Germany and the other in Israel, reveal that living in proximity of a cell phone tower or antenna could put your health at significant risk.

German study: 3 times increased cancer risk

Several doctors living in Southern Germany city of Naila conducted a study to assess the risk of mobile phone radiation. Their research examined whether population living close to two transmitter antennas installed in 1993 and 1997 in Naila had increased risk of cancer.

Data was gathered from nearly 1,000 patients who had been residing at the same address during the entire observation period of 10 years. The social differences are small, with no ethnic diversity. There is no heavy industry, and in the inner area there are neither high voltage cable nor electric trains. The average ages of the residents are similar in both the inner and outer areas.

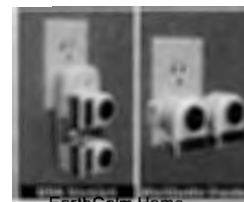
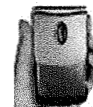
What they found is quite telling: the proportion of newly developed cancer cases was three times higher among those who had lived during the past ten years at a distance of up to 400m (about 1300 feet) from the cellular transmitter site, compared to those living further away. They also revealed that the patients fell ill on average 8 years earlier.

Computer simulation and measurements used in the study both show that radiation in the inner area (within 400m) is 100 times higher compared to the outer area, mainly due to additional emissions coming from the secondary lobes of the transmitter.

Looking at only the first 5 years, there was no significant increased risk of getting cancer in the inner area. However, for the period 1999 to 2004, the odds ratio for getting cancer was 3.38 in the inner area compared to the outer area. Breast cancer topped the list, with an average age of 50.8 year compared with 69.9 years in the outer area, but cancers of the prostate, pancreas, bowel, skin melanoma, lung and blood cancer were all increased

Israel study: fourfold cancer risk

Another study, this one from Israel's Tel Aviv University, examined 622 people living near a cell-phone transmitter station for 3-7 years who were patients in one

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Protection System](#)**Cell Phone EMF Protection**[BiOPRO Cell Phone
Radiation Protection
w/ Patented Technology](#)

clinic in Netanya and compared them against 1,222 control patients from a nearby clinic. Participants were very closely matched in environment, workplace and occupational characteristics. The people in the first group live within a half circle of 350m (1148 feet) radius from the transmitter, which came into service in July 1996.

The results were startling. Out of the 622 exposed patients, 8 cases of different kinds of cancer were diagnosed in a period of just one year (July 1997 to June 1998): 3 cases of breast cancer, one of ovarian cancer, lung cancer, Hodgkin's disease (cancer of the lymphatic system), osteoid osteoma (bone tumour) and kidney cancer. This compares with 2 per 1 222 in the matched controls of the nearby clinic. The relative risk of cancer was 4.15 for those living near the cell-phone transmitter compared with the entire population of Israel.

Women were more susceptible. As seven out of eight cancer cases were women, the relative cancer rates for females were 10.5 for those living near the transmitter station and 0.6 for the controls relative for the whole town of Netanya. One year after the close of the study, 8 new cases of cancer were diagnosed in the microwave exposed area and two in the control area.

Locate the Cell Phone Towers and Antennas Near You

Do you know how many cell phone transmitters are in your neighborhood? You'd be surprised. Visit antennasearch.com to find out where the towers and antennas are in your area and how close they are to your home or place of work. The site will also pinpoint future tower locations, additional helpful information for those considering buying a home.

For clarity, towers are tall structures where antennas are installed. A typical tower may easily hold over 10 antennas for various companies. Antennas, on the other hand, are the actual emitters of signals for various radio services including cellular, paging and others. Antennas are placed on high towers or can be installed by themselves (stand alone) on top of buildings and other structures.

Using where I live as an example, I've located 3 cell phone towers and 22 antennas within a quarter mile from our home, with the closest one at 845 feet.. And this is in a relatively quiet residential neighborhood by the ocean in the small city of Hilo in Hawaii. As you may guess, I did my research only well after we've moved in. Fortunately, we're here on just a lease and we'll be a bit wiser next time we look for a new home.

What to Do If You Live Near a Cell Phone Transmitter

Short of relocating, there are some things you can do to fight the effects of electromagnetic radiation (EMR). The Safe Wireless Initiative of the Science and Public Policy Institute in Washington, DC, outlines three levels of intervention in accordance with the public health paradigm that everyone can apply. Here are our suggestions based on these guidelines:

The primary means of intervention is through avoidance or minimizing exposure. This simply means to avoid contact with EMR as much as possible. In case of a cell phone tower close to your home, this could mean using specially formulated RF shield paint, shielding fabric, shielding glass or film for windows, etc. Although they may sound extreme, these measures are a life-saver for someone who suffers from electrosensitivity, a condition in which a person experiences physical symptoms aggravated by electromagnetic fields. (Sweden is the only country so far that recognizes electrosensitivity as a real medical condition, and their government pays for measures to reduce exposure in their homes and workplaces).



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PhilipSigitov

2 contributions

Is living near a cell phone tower dangerous

Hello, I recently found a 1 ac lot for sale. When I was driving by it I found that one of neighbors has a cell phone tower on their property. The cell phone tower would be about 50 to 100 meters away from where I'd what to build the house. There are also plenty of neighbors there living close to the tower. I was wondering If that is safe, and if you would buy the lot if you had the choice to.

February 24 2014 - Spokane Valley 0

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Answers (33)

SORT Newest

BY:



1hothead

0 contributions

My own study: 7 people in 7 months 2016 have died living 1 to 2 blocks away. Tower put up about 5 years ago. Main street and west Cypress in Oakley, Ca

July 20 0



sunnyview

35301 contributions

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Fair Housing Act
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"Here is an international study by concerned scientists..."

Unfortunately, conclusive research is not available. The trouble is that effects from environmental factors are often subtle so they can be hard to study. It doesn't mean they don't exist, it just is not clear cut.

What is not hard to study is buyer reactions to houses that are near visible high voltage power lines or prominent cell towers. They don't like them. Unless the market is high and tight, many choose to buy a different house or make a low offer if they cannot afford other areas. In a slow market, those houses sit and sit.

Health effects may be undetermined, but the negative difference in resale is enough reason to consider other houses.

May 17  0 



jstahl524



0 contributions

I wouldn't!

Here is an international study by concerned scientists about effects on cells by EMF radiation, low pulsing radiation.

<http://www.bioinitiative.org/>

Also see Overpowered by Dr. Martin Blank.

May 17  0 



Blue Nile

38718 contributions



As for the pies, most of the positive benefits of apples have been "cooked out" of most pies, and the added sugar and corn starch cause added health problems. Unless one knows how the pies have been prepared, one is best off steering away from the pies.

And if artificial sweeteners were used in the pies as

Be A Good Neighbor

Zillow Advice depends on each member to keep it a safe, fun, and positive place. If you see abuse, flag it. More on our Good Neighbor Policy.

well? One popular artificial sweetener turns into formaldehyde when heated, so eat it at your own risk if you enjoy stuffing yourself with "poison".

December 16 2014  0 





Blue Nile

38718 contributions

A huge number of studies have been done regarding the health impacts of various kinds of apples as well. Generally, most apples have positive health benefits in reasonable quantities and help improve the immune system. "Reasonable" would be less than 10 per day. "Unreasonable" would be more than 3000 per day per person. Fuji apples would be on the positive benefits list, mostly due to the pectin in the apples. On the negative impact list, "red delicious" has very little positive benefit, and ranks at the top of the list for negative health impacts.

And that is even before considering treatment during growing, harvesting, transportation, and distribution. If treated with pesticides and eaten without sufficient washing, the negative effects are multiplied.

December 16 2014  0 



user55320395

1 contribution

Few people in the world know that no form of eating 2 apple pies per day, over a long period of time, does NOT cause cancer, so the obvious

conclusion is that: "eating 2 apple pies per day, over a long period of time COULD cause cancer". No more apple pies for me.

RF, microwave radiation is NOT ionizing radiation. I really hope that the millions of mice that gave their lives to save ours, didn't die in vain

because ignorant people haven't taken the time to read the thousands of studies, on both sides of the radiation fence, that have been



performed over the years to solve the mysteries of all

<http://www.zillow.com/advice-thread/is-living-near-a-cell-phone-tower-dangerous/529880/>

kinds of radiation.

"Garsh, I'm too stupid to read, but You don't have to know how to read to know it's a guvmint cover up".

Don't get Me started on Mercola.

December 16 2014  0 





victoriousproductins

1 contribution

Hundreds of cell phone towers have been removed from neighborhoods in India to protect citizens, and in Brazil 7000 death have been linked to living too close to a cell phone tower.

The sources is "Natural News".

However, the WHO says such radiation is only 'possibly' carcinogenic, and classed as a class B carcinogen equal to being in an enclosed room filled with second hand smoke or drinking DDT, an illegalized insecticide that wiped out bird populations all over the world about 20 years ago..



September 03 2014  1 



Blue Nile

38718 contributions

The FCC licensing doesn't even attempt to cover long term health impacts for those susceptible. It is the cumulative impact of the energy absorbed at a given frequency that is the issue for such things as soft-tissue cancers, and the time between exposures so that the body has time to heal and recover.

August 05 2014  0 



Robert Harvey, "Bob Harvey KVR" Agent

1 contribution



★★★★★ (2 reviews)

There is no reason to use a Geiger counter, for one it measures radiation not radio frequency... According to what I have found I'm pretty sure you can have the FCC measure it to ascertain if it is within safe limits.

9/8/2016

Is living near a cell phone tower dangerous | Zillow

[http://www.cancer.org/cancer/cancer-causes/other-carcinogens/another-cellular-](http://www.cancer.org/cancer/cancer-causes/other-carcinogens/another-cellular-phone-towers)
phone-towers

August 05 2014  0 





Blue Nile

38718 contributions

Another product (from a company that rents):

<http://www.atecorp.com/products/rohde-schwarz/fsh3.aspx>

(You really need to do a search and call around, and do comparative price checking, Hundreds of products on the market that would do what you need from multiple manufacturers; and many companies to buy or rent from, new or used).

February 28 2014  0 



Blue Nile

38718 contributions

As you are looking for an EMF meter (or spectrum analyzer) and **NOT** a Geiger Counter, you might want to check aArizonaUSA.com

<http://www.aaroniausa.com/spectranalyzers.shtml?gclid=C17C7dub77wCFY6Rfgodd0MA6Q>

OR

Techtronics

<http://www.tek.com/spectrum-analyzer>

OR

Microlease.com

<http://www.microlease.com/ProductSpecification.aspx?basemodelID=4024>

(I think that specific product is a substantial "overkill" for your needs...)

(The Yellow pages did not turn up any local electronics rental or measurement or test company in Spokane Washington)

February 28 2014  1 



sunnyview

<http://www.zillow.com/advice-thread/is-living-near-a-cell-phone-tower-dangerous/529880/>

5/19



35301 contributions

"Does anyone know where I can rent a geiger counter?"

That is a good question. Hospitals have them in specific labs so do universities. You may be able to ask them, but it is unlikely that they would loan or rent them out. I would ask a local granite dealer or even a home inspector.

Some people were concerned with radiation from certain types of granite so one of those people or businesses may have one that they use for that purpose. It might be worth a few phone calls. If that doesn't work, you can also find geiger counters on ebay and there are videos on YouTube about how to use them. Hope it helps.

February 28 2014 0



Blue Nile

38718 contributions

"I would also note that since that 2008 study the signals emitted by the towers are likely considerably different, now containing more data" -

The study included transmissions both in the 800 Mhz range and the 1.5 Ghz range. Data transmissions are typically in the Giga Hertz range, as they have more bandwidth; and that was the portion of the frequency spectrum that the FCC allocated to them. A meter measuring EMF power per cross section area up to the 3.5 Ghz range should be sufficient.

(WiFi is typically in the 2.4 Ghz range. That is what the FCC allocated to them).

Yes, more data may mean more power; but as the data is sent in digital packets, it may not. The issue is the power is inversely proportional to the square of the distance, so a phone transmitting next to your ear will typically have more power at sensitive soft tissue, than a tower antenna 100 feet away... but it again depends on aiming... so measure it!

February 27 2014 0

**Blue Nile**

38718 contributions

You don't use a Geiger counter to measure EMF... you use it primarily to measure alpha particles and beta particles from radioactive materials, like granite counter tops, and Radon in the soil. Sure, you can also use it to measure gamma rays in the EMF spectrum at the high end, mostly from radioactive sources; but the Cell tower EMF transmissions are not in the Gamma Ray part of the spectrum, but down it 800 Mhz, or 1.5 Ghz range.

(Gamma rays are in the 30Ehz to 300Ehz range.)

M is 10^6

G is 10^9

T is 10^{12}

P is 10^{15}

E is 10^{18}

(Visible light is in the 400 Thz to 790 Thz range).

You generally want a EMF meter or EMF probe or RF field strength meter, or EMF radiation Dosimeter for measuring EMF; and you want it to measure it power per area (such as micro Watts per square meters). Ideally you want a scanner to scan a large set of frequencies and measure that power at each frequency level. Recorders are also available, for setting it up for a time period, to measure changes in EMF power over extended time periods (hour, day, week...)

Some test labs will measure for you, and some will rent the equipment.

Lutron (a dimmer manufacturer) has a nice digital EMF meter for power (30 hz to 300 hz), but that would be useless in the cell phone transmission range.

Some ghost hunter shops sell some low cost equipment. Radio Shack has typically had one for the Microwave frequencies (for checking leakage on microwave doors).

A TES92 would do a good job for cell phone transmission signals.

Local electronic rental shops should be able to give you some clues who stocks them. And you can always do an internet search.



February 27 2014  1 



Philip Sigitov

2 contributions

Does anyone know where I can rent a geiger counter?

February 27 2014  0 



Kary Krismer, "Krismer" Agent



2948 contributions

☆☆☆☆☆ Write a review

Pasadenan wrote: "I'm not about to try to interpret their study; there are way too many factors that determine increased risks, including family history, stress, specific genetics, . . ."

I wonder if you'd also have to account for the brand of cell phone tower (or other type of signal), since different companies use greatly different frequencies (or at least they used to).

I would also note that since that 2008 study the signals emitted by the towers are likely considerably different, now containing more data (as opposed to voice) transmission. And for data, I don't think LTE was even implemented in the US back in 2010, so yet another change.

February 27 2014  1 



Blue Nile

38718 contributions

I noticed a post today on a thread about home proximity to high voltage power lines that referenced a study in the British Journal of cancer. The post

<http://www.zillow.com/advice-thread/is-living-near-a-cell-phone-tower-dangerous/529880/>



indicated a 1.14% increase in risk of cancer for every 0.2 micro Tesla.... but that is not even the right units for measuring EMF; that is for measuring Magnetic Fields... so even if there was such a study, the poster remembered the conclusion data wrong or copied it wrong, or made it up.

So, I went looking for the study... and found one regarding cell phone frequencies that was conducted in Japan, but also published in the British Journal of Cancer:
<http://www.nature.com/bjc/journal/v98/n3/full/6604214a.html>

The threshold where they noticed a slight measurable increased risk was 10 watt-hours/Kg exposure.

I'm not about to try to interpret their study; there are way too many factors that determine increased risks, including family history, stress, specific genetics, proximity to soft tissue/organ areas that may be more sensitive, time away from expose, cumulative exposure, peak exposure, duration of peak exposure, repetitiveness of peak exposure, age...

But at least it is one recent "reference point". The study was published Feb 5, 2008.

February 26 2014  1 



user6064703

189 contributions

Pasadenan, they actually do link to those studies: <http://www.cancer.org/cancer/cancercauses/othercarcinogens/athome/cellular-phones>

However, you are 100% correct in saying that Mercola is a quack. He's a favorite of bored mommy bloggers, nothing more.

February 25 2014  0 



Blue Nile

38718 contributions

Some people consider Dr Mercola a quack.



Regardless, they only exist to sell "*nutrition products*".

I have no use for their articles or "studies". They are more "useless" than the American cancer society previously linked.

There are good longitudinal studies on the effects of extensive cell phone usage, and the slight increase of risk of forming brain tumors (a form of cancer). But you are not going to find those linked on either of those two sites.

And as already mentioned, even in close proximity to a tower, the exposure for most people from the tower will be LESS than 1 hr per day of cell phone usage (unless of course one doesn't hold the phone to the ear, doesn't keep the phone transmitting near the waist, and doesn't use blue-tooth devices attached to the ear).

If in doubt, measure it yourself. The meters are available for rent.

February 25 2014  1 





Laura Nichols, "The DFW Realtor" Agent

49 contributions

★★★★★ (6 reviews)

I would NOT!! When clients ask me about the dangers of EMFs from power lines and cell phone towers I direct them to mercola.com. I always tell people, there will be something better without the possible health risk. I wouldn't take the chance with my health and the health of my family.

February 25 2014  0 



Dan Tabit, "Dan Tabit" Premier Agent

2731 contributions

★★★★★ (14 reviews)

Philip,



As the argument continues you can see that there are no clear answers. People are passionate about the issue on both sides so your consideration should be:

<http://www.zillow.com/advice-thread/is-living-near-a-cell-phone-tower-dangerous/529880/>

9/8/2016

Is living near a cell phone tower dangerous | Zillow

issue on both sides, so your consideration should be, where are you comfortable on the issue and at resale time are you prepared for any consequences that may come such as a longer marketing time and potentially lower appreciation?

February 25 2014  0 



Blue Nile

38718 contributions

The list they give of radiation is not at all complete; they are mostly listing EMF; and have ignored Alpha Particles, Beta particles, and Neutron radiation.

All forms of radiation HAS been shown to cause cancer in high enough doses for extended time periods.

And even Low frequency EMF ionizes the air around high voltage 60 hertz power lines. And for DC transmission? Zero EMF, zero hertz; but it still causes ionization. Negative ions in the air has generally been considered to have positive health effects. Live stock around high voltage DC lines tend to have strange behavioral patterns.

Anyway, it doesn't much matter what cancer societies and cancer institutes think. They exist to collect money to do perpetual research. If they ever did anything "useful", they would put themselves "out of business", so they don't. Besides, as 501C3 non profit tax exempt organizations, a very large portion of the money they receive never goes to cancer research nor treatments; it goes to "fund-raising" which they call "outreach" as part of their "educational" mission.

So the article linked really states there is absolutely no risk of any kind from exposure to microwave radiation??? Nor infrared radiation? Oh, they mean if you get "cooked" or "burned", or atoms re-aligned, that is not a "health risk" and not cancer, and not cancer causing?

And radiation is not the only cause of cancer; chemical exposure and viruses can cause it too.

As stated, you are free to do your own research....

February 25 2014  0 



user6064703

189 contributions

Pasadenan:

Many forms of radiation have not been linked with cancer. If you disagree with me, maybe you'll believe the American Cancer Society, which says "But there are different types of radiation, and many of them are not linked to cancer." I believe you are confusing ionizing radiation with non-ionizing radiation.

Source: <http://www.cancer.org/cancer/cancercauses/othercarcinogens/medicaltreatments/radiation-exposure-and-cancer>

It's obvious that you are talking about a topic on which you have no actual knowledge. You shouldn't come onto a public forum and spread nonsense when there's no scientific backing for your claims.

February 25 2014  0 



Blue Nile

38718 contributions

"many of those have not been shown to cause cancer." -


No form of radiation has ever been shown to "not cause cancer" when given in sufficient doses for extended periods of time... not even "green light".

Sure, you are welcome to do the "studies" and spend the next 350 years and \$250 billion dollars doing so. Some would call that "cruelty to animals". Regardless, it is a very inefficient method of knowing something "today" that people don't even want to pay to test for "tomorrow".

Industry is not going to pay for and do the studies unless it "demonstrates" their products are "safe" under normal usage conditions. Government is not going to pay for and do the studies when their debt exceeds the gross national product and when it is a

exceeds the gross national product and when it is a low priority for the politicians and the voters.

Universities are not going to do the studies unless they can get funding for them.

February 25 2014  0 




user6064703

189 contributions

Pasadenan is speaking some hogwash. There are many types of radiation, and many of those have not been shown to cause cancer. Also, a defect in DNA is not necessarily the same as cancer. Cancer is unconstrained mitosis. Many DNA defects either have no effect or have effects that are far different from cancer. Either way, it's a leap to assume that cell phone cause DNA changes. One certainly DOES need a scientific study in order to support that claim.

The truth is that there have been studies done, and none of those have shown a significant link between cell phones and cancer. However, that doesn't mean that one doesn't exist or that living by a tower doesn't come with risk.

February 25 2014  0 



Blue Nile

38718 contributions



"I would focus on the visibility of tower from your building site and find out the wattage of the tower. Then weigh for yourself what the risk to you actually is based on the site and on your gut feeling about it." -

I certainly would focus on the visibility, and affect on "views". But not only the wattage of the tower is of concern, but orientation of the antennas and relative height of the antennas. If one was "really concerned", it would probably be easier to just go and rent a meter, and measure the radiation in the frequencies of interest, at the specific site locations of interest. And one wants to do that when call volume is high; the power transmission will be less if no one is receiving communication from the tower.

The towers are supposed to be high enough to clear obstacles on the transmission and reception. But often local codes and design review and public comment limit the height. If one is on a hill next to the tower, the living room "could" be the same height as the antennas. One can easily go to the site location and measure the relative height of the antennas. And if one was concerned about excessive EMF radiation and was building "new" one could put in some additional shielding, if it was a concern.

Sorry about the typo on my previous post; there are **10 TONS** of nukes for every person in the U.S. Really, how many people would want to have 10 tons of dynamite stored in their garage? And yet we do the equivalent.

As for health effects of radiation? One doesn't need a scientific study or published report to figure that out. The DNA sequence has "redundancy", so changes to the DNA are not a "simple process"; but viruses and radiation cause mutations in the DNA. In most cases, the body can deal with a small number of these "changes", and remove the defects. But if it gets "overwhelmed"? That is what we call "cancer". Many different kinds of cancer, and many different parts of the body have different susceptibilities to various cancers. And different people have different risks and susceptibility to cancer. And diet, and exercise, and stress also play a factor on cancer growth or cancer remission. It is all "statistically measurable", but in practice, that is not the way people make decisions.

February 25 2014  0 



sunnyview

35301 contributions

There is radiation from cell phone towers. The cell industry has many studies "implying" no long term health effects at all. The cell phone tower opponents have many studies "implying" scattered health effects that vary from study to study. The state DPH agencies imply safety, but warn of possible issues. Not very

neptui.

The truth is that no one really knows what the effects might be. Based on what I have read, the effects for a normal tower are probably fairly low, but not nonexistent. Every choice has risk. For example, buying on a high traffic street or near a highway can increase a child's risk for asthma. Not every child on those streets will get asthma, but the risk in that population increases overall due to airborne particulates.

I wish I could provide you with quality research, but much of the research I've seen is carries significant bias. I would focus on the visibility of tower from your building site and find out the wattage of the tower. Then weigh for yourself what the risk to you actually is based on the site and on your gut feeling about it.

February 25 2014  2 





user6064703

189 contributions

It seems as though everyone here is dodging your question. And one or two of these people might be lunatics.

According to the National Cancer Institute, no consistent link has been established between cell phones and cancer. However, it's doubtful that the scope of the studies encompassed the amount of waves one would be exposed to when living next to a tower.

February 25 2014  0 



Blue Nile

38718 contributions

"If you really wanted to be save you'd need to move very far out" -

If you **"really"** wanted to be safe... you would need to leave the U.S. ... the U.S. has the largest stock-pile of weapons of mass destruction in the world... Chemical, Biological and Nuclear 3 TONS of Nukes for every

<http://www.zillow.com/advice-thread/is-living-near-a-cell-phone-tower-dangerous/529880/>

biological, and nuclear. It does not make for every person living in the U.S.; over 5110 nuclear warheads, and that doesn't include the full stock of "retired" weapons that were supposed to be dismantled that weren't, nor does it include all the "nuclear waste" that the government is responsible for storing and securing. Nor does it include exposed uranium from mining operations. And the U.S. keeps building MORE nuclear weapons; supposedly to replace those they plan to retire; all "approved" by Congress.

And EMF radiation of various frequencies doesn't even begin to address alpha radiation, beta radiation, and gamma radiation, nor the chemical pollutants that the government intentionally puts in the air and in the water, nor the lack of regulations on mega business that use such chemicals or radiation or biological hazards.

The U.S. Government has never cared about the health of individuals; they only care about being able to threaten other countries for the benefit of the mega U.S. corporations and financial interests of billionaires.

The sad part is that hackers in both India and China already know how to detonate the U.S. weapons remotely, so the U.S. has set ourselves up for "suicide".

But where do you go? If a nuclear war, the nuclear fallout will cover the entire northern hemisphere. Antarctica is not only too cold, but insufficient food and energy supply to survive there alone without imports, especially in the "winter" which is our "summer". Australia? They are part of the 5-eyes as well.

And even if you take care all the chemical, biological, and radiation risks, there are still volcanoes, tornadoes, hurricanes, typhoons, floods, mudslides, earthquakes, fires, and car and truck collisions.

Yes, it is easy to "calculate the risks"... but when it comes right down to it, people don't, and they don't care; it is a "choice" not a probability theory exercise

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care, it's a choice, not a probability theory exercise, nor an insurance industry actuarial table.

February 25 2014  0 



Kary Krismer, "Krismer" Agent

2948 contributions

☆☆☆☆☆ Write a review

I've lived near towers for years, and seemingly it causes hair loss, GERDS, memory loss and an overall loss of physical condition. Either that, or I'm getting old.

Seriously, as others have mentioned there's really no way of knowing, or if there is, this scientific news has not yet reached real estate agents. I would add that there are a lot of other similar types of electromagnetic (or whatever) exposure. You have TV and radio signals, wi-fi for you and your neighbors, and even wireless mice. Each type of signal might have different risks, but depending on your location, the cell phone tower signals might be weaker than other signals. Or if in a remote location, your overall exposure to cell phone signals still might be weaker than other places because not all the companies would have good coverage in that area. If I had to guess, the worse location possible for this issue would be downtown Seattle office buildings, where you'd be blasted by at least 5 TV signals, countless radio signals, satellite signals and a ton of cell phone coverage. Your one acre lot probably gets a lot less total signal (but again, different signals may pose different risks--no one really knows).

My point is simply that there may be a lot of variables to take into account which are not as obvious because they don't have the tower present to alert you to the issue. If you really wanted to be safe you'd need to move very far out (or at least behind a large hill), and then you'd only need to worry about DirecTV, SiriusXM, etc.

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Cellular Phone Towers

Cellular (cell) phones first became widely available in the United States in the 1990s, but since then their use has increased dramatically. The widespread use of cell phones has led to cell phone towers being placed in many communities. These towers, also called *base stations*, have electronic equipment and antennas that receive and transmit radiofrequency (RF) signals.

How do cellular phone towers work?

Cell phone base stations may be free-standing towers or mounted on existing structures, such as trees, water tanks, or tall buildings. The antennas need to be high enough to adequately cover the area. Base stations are usually from 50-200 feet high.

Cell phones communicate with nearby cell towers mainly through radiofrequency (RF) waves, a form of energy in the electromagnetic spectrum between FM radio waves and microwaves. Like FM radio waves, microwaves, visible light, and heat, they are forms of **non-ionizing radiation**. This means they do not directly damage the DNA inside cells, which is how stronger (**ionizing**) types of radiation such as x-rays, gamma rays, and ultraviolet (UV) light are thought to be able to cause cancer.

At very high levels, RF waves can heat up body tissues. (This is the basis for how microwave ovens work.) But the levels of energy used by cell phones and towers are much lower.

When a person makes a cell phone call, a signal is sent from the phone's antenna to the nearest base station antenna. The base station responds to this signal by assigning it an available radiofrequency channel. RF waves transfer the voice information to the base station. The voice signals are then sent to a switching center, which transfers the call to its destination. Voice signals are then relayed back and forth during the call.

How are people exposed to the energy from cellular phone towers?

As people use cell phones to make calls, signals are transmitted back and forth to the base station. The RF waves produced at the base station are given off into the environment, where people can be exposed to them.

The energy from a cellular phone tower antenna, like that of other telecommunication antennas, is directed toward the horizon (parallel to the ground), with some downward scatter. Base station antennas use higher power levels than other types of land-mobile antennas, but much lower levels than those from radio and

television broadcast stations. The amount of energy decreases rapidly as the distance from the antenna increases. As a result, the level of exposure to radio waves at ground level is very low compared to the level close to the antenna.

Public exposure to radio waves from cell phone tower antennas is slight for several reasons. The power levels are relatively low, the antennas are mounted high above ground level, and the signals are transmitted intermittently, rather than constantly.

At ground level near typical cellular base stations, the amount of RF energy is thousands of times less than the limits for safe exposure set by the US Federal Communication Commission (FCC) and other regulatory authorities. It is very unlikely that a person could be exposed to RF levels in excess of these limits just by being near a cell phone tower.

When a cellular antenna is mounted on a roof, it is possible that a person on the roof could be exposed to RF levels greater than those typically encountered on the ground. But even then, exposure levels approaching or exceeding the FCC safety guidelines are only likely to be found very close to and directly in front of the antennas. If this is the case, access to these areas should be limited.

The level of RF energy inside buildings where a base station is mounted is typically much lower than the level outside, depending on the construction materials of the building. Wood or cement block reduces the exposure level of RF radiation by a factor of about 10. The energy level *behind* an antenna is hundreds to thousands of times lower than in front. Therefore, if an antenna is mounted on the side of a building, the exposure level in the room directly behind the wall is typically well below the recommended exposure limits.

Do cellular phone towers cause cancer?

Some people have expressed concern that living, working, or going to school near a cell phone tower might increase the risk of cancer or other health problems. At this time, there is very little evidence to support this idea. In theory, there are some important points that would argue against cellular phone towers being able to cause cancer.

First, the energy level of radiofrequency (RF) waves is relatively low, especially when compared with the types of radiation that are known to increase cancer risk, such as gamma rays, x-rays, and ultraviolet (UV) light. The energy of RF waves given off by cell phone towers is not enough to break chemical bonds in DNA molecules, which is how these stronger forms of radiation may lead to cancer.

A second issue has to do with wavelength. RF waves have long wavelengths, which can only be concentrated to about an inch or two in size. This makes it unlikely that the energy from RF waves could be concentrated enough to affect individual cells in the body.

Third, even if RF waves were somehow able to affect cells in the body at higher doses, the level of RF waves present at ground level is very low – well below the recommended limits. Levels of energy from RF waves near cell phone towers are not significantly different from the background levels of RF radiation in urban areas from other sources, such as radio and television broadcast stations.

Studies in people

Very few human studies have focused specifically on cellular phone towers and cancer risk.

In one large study, British researchers compared a group of more than 1,000 families of young children with cancer against a similar group of families of children without cancer. They found no link between a mother's exposure to the towers during pregnancy (based on the distance from the home to the nearest tower and on the amount of energy given off by nearby towers) and the risk of early childhood cancer.

In another study, researchers compared a group of more than 2,600 children with cancer to a group of similar children without cancer. They found that those who lived in a town that could have exposed them to higher than average RF radiation from cellular phone towers in the previous 5 years had a slightly higher risk of cancer, although not of any certain type of cancer (like leukemia or brain tumors). This study estimated the children's possible exposure based on the number of towers in their town and how strong

the signals were from the towers. It did not look at actual exposure of any individual child based on how far their home or school was from a tower. This limitation reduces confidence in the results of the study.

One study looked for signs of DNA and cell damage in blood cells as a possible indicator of cancer-causing potential. They found that the damage was no worse in people who lived near a cell phone tower as compared with those didn't.

The amount of exposure from living near a cell phone tower is typically many times lower than the exposure from using a cell phone. About 30 studies have looked at possible links between cell phone use and tumors in people. Most studies to date have not found a link between cell phone use and the development of tumors, although these studies have had some important limitations. This is an area of active research. For more information, see *Cellular Phones*.

Studies done in the lab

Laboratory studies have looked at whether the types of RF waves used in cell phone communication can cause DNA damage. Most of these studies have supported the idea that the RF waves given off by cell phones and towers don't have enough energy to damage DNA directly. Because of this, it's not clear how cell phones and towers might be able to cause cancer, but research in this area continues.

Some scientists have reported that RF waves may produce other effects in human cells (in lab dishes) that might possibly help tumors grow. However, these studies have not been verified, and these effects weren't seen in a study that looked at the blood cells from people living near a cellular phone tower.

Several studies in rats and mice have looked at whether RF energy might promote the development of tumors caused by other known carcinogens (cancer-causing agents). These studies did not find evidence of tumor promotion, but this is still an area of research.

A large study by the US National Toxicology Program (NTP) exposed groups of lab rats and mice to RF energy over their entire bodies for about 9 hours a day, starting before birth and continuing for up to 2 years. The NTP recently released partial findings from this study, which found increased (although still low) risks of brain and heart tumors in male rats exposed to RF radiation, although there was no increased risk among female rats. Some aspects of this study, such as the high doses of RF radiation and the long amount of time the rats were exposed to it, make it hard to know just how well these results might be applied to people. Still, the results add evidence to the idea that the signals used in cell phone communication might potentially impact human health.

What expert agencies say

About cell phone towers

The 3 expert agencies that usually classify cancer-causing exposures (carcinogens) – the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), and the US Environmental Protection Agency (EPA) – have not classified cell phone towers specifically as to their cancer-causing potential.

The **US Federal Communications Commission (FCC)** has said this about cell phone towers near homes or schools:

"Radiofrequency emissions from antennas used for cellular and PCS [personal communications service] transmissions result in exposure levels on the ground that are typically thousands of times below safety limits. These safety limits were adopted by the FCC based on the recommendations of expert organizations and endorsed by agencies of the Federal Government responsible for health and safety. Therefore, there is no reason to believe that such towers could constitute a potential health hazard to nearby residents or students."

About RF radiation

Some of the agencies that classify cancer-causing exposures have, however, made statements about radiofrequency radiation.

The **International Agency for Research on Cancer (IARC)** has classified RF fields as "possibly carcinogenic to humans," based on limited evidence of a possible increase in risk for brain tumors among cell phone users, and inadequate evidence for other types of cancer. (For more information on the IARC classification system, see *Known and Probable Human Carcinogens*.) IARC also noted that exposure to the brain from RF fields from cell phone base stations (mounted on roofs or towers) is less than 1/100th the exposure to the brain from mobile devices such as cell phones.

The **Environmental Protection Agency (EPA)** states:

"At very high levels, RF energy is dangerous. It can heat the body's tissues rapidly. However, such high levels are found only near certain equipment, such as powerful long-distance transmitters. Cellphones and wireless networks produce RF, but not at levels that cause significant heating. In addition, RF energy decreases quickly over distance. At ground level, exposure to RF from sources like cellphone towers is usually very low.

Some people are concerned about potential health effects, especially on the developing brains and bodies of children. Some studies suggest that heavy long-term use of cellphones could have health effects. Other studies don't find any health effects from cellphone use. Long-term studies on animals exposed to the RF found in wireless networks (Wi-Fi) have, so far, found no health effects. Scientists continue to study the effects of long-term exposure to low levels of RF."

Can I limit my exposure?

Cell phone towers are not known to cause any health effects. But if you are concerned about possible exposure from a cell phone tower near your home or office, you can ask a government agency or private firm to measure the RF field strength near the tower (where a person could be exposed) to ensure that it is within the acceptable range.

What should I do if I've been exposed to cellular phone towers?

There is no test to measure whether you have been exposed to RF radiation from cellular phone towers. But as noted above, most researchers and regulatory authorities do not believe that cell phone towers pose health risks under ordinary conditions. If you have additional health concerns, you might want to talk with your doctor.

Additional resources

More information from your American Cancer Society

The following related information may also be helpful to you. These materials may be viewed on our website or ordered from our toll-free number, at 1-800-227-2345.

Cellular Phones

Does This Cause Cancer?

Known and Probable Human Carcinogens

Microwaves, Radio Waves, and Other Types of Radiofrequency Radiation

Other organizations and websites*

Along with the American Cancer Society, other sources of information and support include:

Environmental Protection Agency

Home page: www.epa.gov

Understanding radiation: www.epa.gov/radiation/understanding-radiation-overview.html

Federal Communications Commission

RF Safety Program, Office of Engineering and Technology

Website: www.fcc.gov/oet/rfsafety

Food and Drug Administration

Home page: www.fda.gov

Radiation-emitting products: Cell phones: www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm

National Cancer Institute

Toll-free number: 1-800-422-6237 (1-800-4-CANCER)

Home page: www.cancer.gov

Cellular telephone use and cancer risk: www.cancer.gov/cancertopics/factsheet/Risk/cellphones

National Institute of Environmental Health Sciences

Home page: www.niehs.nih.gov

Electric and magnetic fields: www.niehs.nih.gov/health/topics/agents/emf/index.cfm

World Health Organization

Electromagnetic fields and public health: base stations and wireless technologies

Website: www.who.int/mediacentre/factsheets/fs304/en/index.html

** Inclusion on this list does not imply endorsement by the American Cancer Society*

No matter who you are, we can help. Contact us anytime, day or night, for information and support. Call us at 1-800-227-2345 or visit www.cancer.org.

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