

FCC Comments on Notification of Inquiry,

ET Docket No. 13-84, Reassessment of Federal Communications
Commission Radiofrequency Exposure Limits and Policies

ET Docket No. 03-137, FCC Proposes Changes in the
Commission's Rules and Procedures Regarding Human Exposure
to RadioFrequency Electromagnetic Energy.

Submitted by Diane Schou, P.O. Box 99, Green Bank, West Virginia 24944
**Electromagnetic radiation added to our environment can trigger people to
unintentionally error, possibly causing accidents.**

and

Diane Schou is harmed by exposure to electromagnetic radiation. (page 2)

and

**Medical care / testing is NOT accessible to people harmed or disabled by
electromagnetic radiation.** (page 5)

**Electromagnetic radiationⁱ added to our environment can trigger people to
unintentionally error, possibly causing accidents.**

What levels of electromagnetic radiation were present when:

- A) Airport control tower operators fell asleep?ⁱⁱ
- B) Pilots forgot to land at the Minneapolis Airport?ⁱⁱⁱ
- C) Vehicle accidents in buses, trucks, cars, trains, boats, and aircraft
occurred?^{iv}
- D) Control tower errors were made when planes were too close to each
other?^v
- E) Three healthy marathon^{vi} runners died; two of them at the EXACT
LOCATION and two of them died within one minute.
- F) Suicides by military personnel who were not deployed have increased
substantially.^{vii}
- G) Serious surgical errors increased at a hospital?^{viii}

Were electromagnetic radiation emissions a possible or likely factor? Harm can
be direct, indirect, or both.

Can any exposure effect their responses? The value of avoiding harm
should be more important than technology. *“People who are chronically exposed
to low-level, wireless antenna emissions report symptoms such as problems in
sleeping (insomnia), as well as other symptoms that include fatigue, headache,
dizziness, grogginess, lack of concentration, memory problems, ringing in the
ears (tinnitus), problems with balance and orientation, and difficulty in
multitasking . . . Cognitive impairment, loss of mental concentration, distraction,
speeded mental function, but lowered accuracy, impaired judgment, delayed
reaction time, spatial disorientation, dizziness, fatigue, headache, slower motor
skills and reduced learning ability . . . have all been reported”*^{ix}

From personal experiences and observations exposures to very small levels of some electromagnetic radiation can cause injury. Many of us question incidences where peoples' behavior could have been triggered by electromagnetic radiation (as noted earlier – see A through G events listed above).

Symptoms provoked by electromagnetic radiation may seriously affect airport control operators, pilots, vehicle drivers, military personnel, medical responders, and many others. **The environmental emissions may be influencing them to unintentionally make mistakes, therefore indirectly harming others.**

Diane Schou is harmed by exposure to electromagnetic radiation.

I became a victim from exposure. For me, electromagnetic radiation^x triggered and still triggers headaches^{xi}, fatigue, a decreased ability to think clearly; writing or speaking words or numbers may be wrong; sometimes it hurts to think; and my vision changes. I became gluten intolerant, experienced chest pains, and began having elevated blood sugar levels^{xii}. When I am not exposed, the pain and symptoms lessen or disappear, I can think clearly, blood sugar^{xiii} levels drop to normal. If I can have time to recover (i.e. 3 months), some electromagnetic radiation in an environment can be tolerated for a short time (a few minutes, i.e. to quickly go into a store and hopefully make a purchase before accosted by electromagnetic radiation) – or a few days (to attend my father's funeral with my mother). Continued exposure produces more and more symptoms which seem to get worse with each exposure.^{xiv}

To be without pain and to be able to think, I live with little to no exposure. I live away from crowds (especially people carrying or using electronic devices), and especially cities. Do all cities except (except Green Bank, WV) have cell towers (base stations), wireless emissions and contaminated electricity? I avoid traffic with electronic and wireless devices, and roads near overhead power lines.

My life has become severely isolated and includes avoiding exposure from wireless devices. I am physically harmed if I go into environments with electromagnetic radiation.

Recently, I received a notice for jury duty. I am capable; only if accommodations at the courthouse could be made. *I wish to serve, but I have a special need or consideration and shall require the following accommodation or auxiliary aid:* “No exposure to electromagnetic radiations. (cell towers within 10 miles, power lines, vacuum cleaners, motors, wireless communication devices, cell phones, wi-fi, fluorescent lights, CFL lights, etc.)” Even if all of these accommodations were made, there is a strong chance that I would still be exposed to emissions coming from outside.

I appreciate that the court excused me, not forcing me to be there. But it is discouraging that electromagnetic radiation in the environment excludes me. I have the right to participate in a jury of my peers contained in the 6th Amendment of the U.S. Constitution. I am being denied my right to participate fully in a democratic society.

I am physically harmed if I go into grocery stores, community centers, or universities (where I would like to work, attend a conference, or obtain professional training for a service needed in my community). I am unable to go into many churches and there are places that do not, cannot or will not make accommodations, and therefore access is denied. I have lost many freedoms guaranteed by the U.S. Constitution.

People injured by electromagnetic radiation often forego technology and live in primitive conditions. Escaping electromagnetic radiation means relinquishing comforts most Americans have taken for standard: hot water, warmth, access to food, running water, a shelter, a home, a bed, a toilet, friends, family, occupation or career, a telephone^{xv}, our dreams, and a future.

Survival is the primary concern. Initially, I tried to put up with the severe headache and other symptoms. Could the emissions from the cell tower be turned off? If it was causing harm to a human being? I doubted it. And, the FCC was not amenable even to measuring the emission levels. My second solution was to escape, leave home and live in remote areas in my vehicle. It was challenging to be without water, without my husband, not knowing where to go or where we would sleep (I tried to tell my husband where I was so he could join me. Or he took the time to look for a safe place to be with me for the day. We relied on payphones for contact (many pay phones no longer work)..

Our third solution was to live in a Faraday cage, a shielded box, something like a dog cage. The end walls, ceiling and floor are Reflectix (bubble wrap with foil on each side). The sides are covered with a metal insect screen. The Reflectix and metal insect screen serve to block frequencies from wireless communication, provided there are no leaks.



Does a prison cell have better accommodations? Due to my own experience, and my observation of others, it is my opinion that people injured by electromagnetic radiation are forced to live in conditions that are close to being inhuman. Worse yet, deterioration of health from un-natural, invisible, far-reaching, permeating electromagnetic radiation is torture.

The solution, to date, has been to live in the radio quiet zone in West Virginia. It feels good to have a home base again, but there is a void when my husband is not here. We have a business that could not be moved here. The house we bought was unfinished (wall studs). Most walls are now in, floors are in, trim is not finished. Kitchen cabinets have not been selected. I am using a cooler with ice for refrigeration (need a refrigerator with *low* electromagnetic radiation emissions), a sink is sitting on cinderblocks, many kitchen food preparation items

are in boxes (my husband packed, so I don't know which one), so I am still in camping mode.

Costs for my family and me are enormous. They include not being able to work, not being able to help in our business, not being able to go home, and costs for consequences if I did. Sadly, we sold a large portion of our income-producing farm so I could have a safer place to live. There are costs for my husband to commute 2000 miles round trip to be with me. There have been costs for constructing adaptations to a living structure: putting electrical wires in conduits, burying the distribution cable, putting electrical appliances at the end of the house and farthest distance away from the living space, a switch to turn off refrigerator (when I want to access it). Fluorescent lights were removed from the basement because the electromagnetic radiation permeates the ceiling (through the floor of the room above) and injures me.

The costs continue: costs for being in pain and disabled because of exposure, costs for loss of health, increase in medical bills, costs for being unable to do things and costs for stress and efforts to keep alive. The costs for stress not knowing where to sleep without harm, costs for loss of liberty, and costs for loss of dreams and future. There were also costs for my son. Knowing his mother was homeless during the early period of my injury caused him tremendous stress (and the people he was around).

There are costs for not being able to communicate with spouse daily especially during meals and times not working, for not being able to oversee their safety late at night, for not being able to run errands, for not being able to maintain and improve things, for not giving input for which is the better selection (from my knowledge, therefore my education and experience are not utilized), for not being able to volunteer and be a social support, and for not being able to coordinate needs. There are costs for loss of support for self and to spouse (i.e. concern for safety of each other, the stress and concern for safety when husband spends many hours farming and doing research – the plants do not wait and the weather has an unpredictable window. There are costs for preparing separate meals; the cost of stress, for example, of hearing about a closed secret meeting about cell towers. When I heard (an untrue) rumor of possible cell towers coming here, I felt stressed, distressed, and felt a loss of hope for a future. There are costs for being prohibited from doing things because of ridicule, harassment^{xvi}, bullying, threats, exclusion, and physical harm, stress when I and visitors (refugees) got sick from electromagnetic radiation intermittently emitted by my neighbors.

There is the cost of using much time doing what I am doing now – fighting for survival and for a safer environment (I had never taken part in protests, I never questioned our government, its decisions were right, I trusted American citizens lives were valued. It is becoming increasingly aware that everyone can be affected). What I am doing is foreign. There are the costs of obtaining research papers verifying effects from electromagnetic radiation emissions; costs and stress in educating contractors, costs in not having a home completed and jobs not done. The costs of feeding refugees visiting. The costs for not being able to be with and help family and friends. The costs and stress of no place to turn to for support.

If the assaulting emissions from the cell tower had been turned off, lessened, or aimed in another direction, I would have likely been living at home with my husband and following our dreams. Instead, I was harmed, became disabled and sought safety, as a refugee. It is possible this could happen to anyone as these triggers are real and statistically validated for one's specific exposure frequency.^{xvii}

A need for NO EXPOSURE is what people harmed by electromagnetic have in common. Victims of electromagnetic radiation urgently need designated wireless-free, White Zones. (To date, I am unaware of any support or protection from the FCC with the help of EPA and our government.)

Please, ban, turn off or lower electromagnetic radiation emissions. Please, ban or put a moratorium on new frequencies, new emissions, and new antennas. Protected zones from current technology are urgently needed. Newer technologies will create desperate situations for the sensitive and will likely affect the health of everyone.

Medical care / testing is NOT accessible to people harmed or disabled by electromagnetic radiation

When there becomes a need to go to a clinic or hospital (when myself or someone else is injured or very ill), which is the *least harmful*?^{xviii}

- A) no exposure, hence no medical care for the emergency health issue?
- B) medical attention and the likelihood of being injured from electromagnetic radiation exposure? (Many doctors have noted heart problems, abnormal EKG, elevated blood sugar, seizures when patients are exposed to wireless and electromagnetic radiation in their clinics and hospitals.)

I contacted 14 hospitals to inquire about access for persons with EHS and not one expressed any ability to accommodate that population. This response from the facilities director at a major university hospital in Michigan was typical:

“Reading the documentation that was sent makes it clear that anyone with a sensitivity to high frequency electromagnetic radiation should stay far away from the [name of medical institution] because we emit a lot of it between the various electronic systems that are in use.”

University of Iowa Hospital and Clinic *“Absolutely no way will we be able to accommodate EMS people”*

While these statements acknowledge the condition, it makes it impossible to enter the hospital for treatment.

An accident occurred. A relative was cut badly, likely needing stitches. Who to drive to the hospital? Me. The Michigan hospital said to stay far away.

Already suffering from exposure, I did not take the injured person to emergency, and the relative did not get emergency care.

When another accident occurred, I was taken to emergency to the very hospital that told me to stay far away. In the X-ray room, I experienced acute pain identical to my symptoms from electromagnetic radiation exposure and said so. The medical staff told me *the X-ray room was the safest place in the hospital*. The medical staff behaved as if they did not believe me. I stated again, something in the room was wrong! I was having a painful headache likely from something in the room. I asked to reduce delays and to get me out quickly. A hospital person entered the room, heard me and remembered that a week earlier Nextel had installed an antenna for wireless communication in the X-ray room. Here was an unplanned double-blind study. It took days to recover from this exposure.



Another time, when I became ill; I had a sore throat and the neck below my jaw was painful to touch. By arrangement to accommodate my electromagnetic radiation sensitivity to fluorescent lights (for that appointment), I waited outdoors which became over one-half hour in 14 degree cold.

Eventually

someone came outside and led me into a treatment room where there was warmth and I turned the room fluorescent lights off. After a period of time, the doctor came into the unlit room and switched on the lights. I pointed to the incandescent lamp in the corner, and asked for that to be used. The doctor refused. The doctor told me the fluorescents lights had to be on for an examination. So much for a prior arrangement. I again said that fluorescent lights gave me a severe headache, dizziness, and a new symptom: chest pain. I asked her to please hurry. The doctor then stated that the clinic could not accommodate me, and I should go elsewhere. In this remote area, there was nowhere else. Does this violate the Hippocratic oath? The incandescent lamp was used after grumbling by the doctor and I felt unwelcome due to the unwillingness to deal with me. It was as if the doctor had been prepped with a negative attitude prior to my arrival; I felt this because her uncooperative demeanor was so immediate.

When my husband had a triple by-pass surgery, I was unable to go and be there with him as the electromagnetic radiation exposure in the hospital setting would have injured me. I felt some of the staff ignored my disability and insisted for me to be there; I could not.

Where there is electromagnetic radiation, people who are harmed try to avoid exposure. When I suspected I had a broken toe, I did not go to emergency. The cell towers, cell phones, fluorescent lights, computers, and wireless communication would have likely caused greater damage. I did not obtain medical care when I had a red, itchy eye (a person with conjunctivitis had visited three days earlier). I did not obtain medical care when I had a fever, a cough and a sore throat (I suspect it was something many people including the mayor had and the university sports teams did not come nor travel away)

I did obtain medical care when I discovered a lump in my breast. Consequences of hospital experience were: mammography showed no cancer, but I had three days with diarrhea, five days with tender breasts, and seven days with a very bad headache.

When exposed, a new symptom is chest pain. A local doctor referred me to a heart center for tests. Prior to going, I alerted the heart center that electromagnetic radiation harmed me. I asked if the procedure would harm me. They responded they had no incandescent lights and I would have to bring my own. My husband went with me. In the waiting room, they refused to turn off the fluorescent lights, even though my husband and I were the only patients there. I went outdoors and waited in the car. When they came with an injection, I again asked how people harmed by electromagnetic radiation reacted; did people's body reject the radiation that will be going into the blood? They did not know. I asked what were the typical side effects? They did not know about side effects and they said they could not get this information. I did not risk the procedure.

Please establish a medical code to recognize health conditions (i.e. pain, injury, harm, disability, health effects) from electromagnetic radiation exposure and from the second-hand effects (others effected, therefore affecting others).

Searching for medical care in West Virginia, the West Virginia Institute of Occupational Medicine responded: "*I am not able to locate any medical facilities that meet your needs. I am sorry and hope that you have recovered from your cut.*"

Solution: For those disabled by electromagnetic radiation, home visits or turning off fluorescent lights and wireless devices in clinics and hospitals would help.

In conclusion

Because *very small* exposure to some electromagnetic radiation injure *me*, I am alerted to many issues, and I question many incidences where peoples' behavior could have been triggered by electromagnetic radiation (as stated in cases A through G listed above). Medical care / testing is not accessible to people harmed or disabled by electromagnetic radiation. The solution is to have home visits or to turn off harmful electromagnetic radiation. The present standards are not conducive to human health. They did not protect me, they do not protect people directly, they do not protect people indirectly.

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ⁱ Electrical fields, magnetic fields, ground currents, non-ionizing radiation frequencies. One device likely does not emit all frequencies. People may react to some frequencies, some fields, and not to other frequencies. A need for NO exposure is what we have in common. I am aware of some devices to measure emissions (an electrical meter, a gauss meter, and a spectrum analyzer), but there is still a void (electromagnetic radiation people feel but the utility companies or telephone companies cannot or will not identify). Many meters are not sensitive enough. Some people injured by electromagnetic radiation can feel emissions (meters cannot or before meters do detect such as when an aircraft is approaching or reacting to emissions from a cell tower before we round the curve and it becomes visible). Thermal standards do not measure electromagnetic radiation emissions in the environment. Please measure electrical fields, contaminated electrical fields, magnetic fields, ground currents, stray voltage, non-ionizing radiation, and more.

Fiber optic systems are faster, more reliable, less expensive (than copper), keep data for further distances, have more bands, are safer, and more secure. Remove sources of contamination: wireless communication, broadband over power or telephone lines, copper lines. Copper lines are susceptible to interference, are slower, less secure, cost more, have a shorter life span, loose power with distance, emit line noise or pulsing, and are susceptible to moisture. **Promote, install and use fiber optics.**

- ⁱⁱ Lucas, S. (Writer). (2011). Asleep in the tower, *NBC Nightly News April 16, 2011*. NBC.
- ⁱⁱⁱ Lowy, J., Freed, J., Karnowski, S., Forliti, A., & Koenig, D. (2009, October 23). Pilots missed Twin Cities by 150 miles_ but how? Washington: The Associated Press.
- ^{iv} Perhaps due to slow reacting, less able to multitask, vision change or faulty judgment of altitude or speed. Perhaps from equipment installed, equipment carried on, the area traveled through or the truck, bus, train, aircraft, car, or boat drivers accumulation of exposure?
- ^v Halsey, A. (Writer). (2011). Plane carrying Michelle Obama aborts landing because of controller error: The Washington Post.
- ^{vi} Autopsies expected after 3 die during Detroit race (2009). Associated Press Mon Oct 19, 2009 5:54 AM EDT.
- ^{vii} CNN News Update (11-17-2009) 4 PM EST
- ^{viii} R.I. Hospital fined for wrong-side surgery. (2009), *CBS News, November 2, 2009*. Providence, R.I.: The Associated Press.
- ^{ix} Sage, C., & Carpenter, D. O. (2009). Public health implications of wireless technologies.
- ^x Emissions from a new cell tower gave me headaches when I was home but not when I was away. I contacted both the FCC and the cell tower company, about reacting to the emissions from a cell tower 1/3 mile away. I expected protection and the problem (health effects correlated to the tower's emission) resolved, my complaint was dismissed, and I was told they (the emitting cell-

tower antenna emission company) had never heard of health effects and (from the FCC) health effects were not possible. They repeated this statement when other calls were made.

The exposure continued, I became more ill, more injured, and disabled. When I was away, I became better; when home, symptoms reappeared; when away, symptoms lessened or disappeared; simply driving by the tower near my home, symptoms reappeared. The injury morphed to include emissions from other cell towers (when driving, in other locations, and when an antenna in a shopping mall was inappropriate) and cell phones (when people used them), then electrical appliances (vacuum cleaners, refrigerators, coffee makers), inverters, converters, fluorescent lights, notebook computers, and overhead power lines. Later, symptoms occurred after being near wireless microphones, cordless telephones, cellphones (even in pockets not being used), cellphones inside parked vehicles not being used, wi-fi, compact fluorescent lights, contaminated electricity, generators, and motors. There could be errors in the order of occurrence. The most recent: has been symptoms from desktop computers and electronic books. There may be more, but I hope not.

I listed the items that provoke radiation sickness symptoms for me while others may become ill from them too – harming them and/or possibly triggering them to make unintentional mistakes.

^{xi} I am not prone to headaches and headaches were and still are rare, unless wounded by electromagnetic radiation. Sometimes the injury may not be felt instantly. It could be compared to sun exposure, where one becomes sunburned and feels it later. When severely sunburned, a little bit of sun, or hot water or heat from an appliance is too much. An amazingly very small amount of electromagnetic radiation (too little for many meters to measure) can injure.

One night, I had a throbbing headache. A spectrum analyzer screen displayed pulsing frequency spikes. I could turn the scientific instrument off, but the pounding headache did not go away.

^{xii} From my observation, others are affected too. For a good resource focused on the medical field see Bevington, M. (2010). *Electromagnetic - Sensitivity and Electromagnetic - Hypersensitivity (also known as Asthenic Syndrome, EMF Intolerance Syndrome, Idiopathic Environmental Intolerance - EMF, Microwave Syndrome, Radio Wave Sickness) - A Summary*. MK18 5EH UK: Capability Books.

Although our symptoms differ, what afflicted persons have in common is that some symptoms lessen with NO exposure.

^{xiii} Havas, M. (2008). Dirty electricity elevates blood sugar among electrically sensitive diabetics and may explain brittle diabetes. *Electromagn Biol Med*, 27(2), 135-146. doi: [10.1080/15368370802072075](https://doi.org/10.1080/15368370802072075)

^{xiv} When pain became almost unbearable (it hurt so much, I cried) from coffee makers, power lines, to aircraft flying overhead, my husband sent me to Scandinavia. Electricity is different, with 50 Hertz (Hz) in Europe (60 Hz in the U.S.A.). I met many people living in isolated areas, living under

conditions they unwillingly (and I needed to) adapted to. A book Granlund-Lind, R., & Lind, J. (2005). *Black on White: Voices and Witnesses about Electrohypersensitivity. The Swedish experience* (J. Ganellen, Trans.). Sala, Sweden: Mimers Brunn Kunskapsförlaget PDF on-line: www.feb.se/feb/blackonwhite-complete-book.pdf or www.wavr.org/blackonwhite.pdf. is a summary of first hand testimonies from people harmed by electromagnetic radiation.

- ^{xv} Standing to talk at an outdoor payphone (a common resource): Exposed to inclement weather such as in down-pouring rain is logically wet and chilling but note taking on soaked paper (or exposing legal documents needed at the phone for reference) adds another challenge



The photo showing access problems, a pay phone in the snow, was taken at Easter time in 2007. Communication with family via telephone during this special day has to be important. When the pay phone works, it is used often, even in bad weather. Access to telephone communication is a problem for electromagnetic radiation sensitive persons. Using telephones are painful and injure; it seems it would be obvious that **communication via telephones by electromagnetic radiation injured people are not simple nor friendly social calls.**

- ^{xvi} I telephoned the community senior center; spoke to the county director about a problem of harassment (from one of their board members, by one of their cooks, and no response from the director himself) I hoped there was a misunderstanding to people harmed by electromagnetic radiation. I am not the only person encountering a negative reaction. The director told me the senior center won't do anything; electromagnetic radiation harm is not a disability recognized by West Virginia ADA. I asked for a written statement on this segregation. His response was he didn't have time to discuss this, [click].

- ^{xvii} Rea, W. J., Pan, Y., Yenyves, E. J., Sujisawa, I., Samadi, N., & Ross, G. H. (1991). Electromagnetic field sensitivity. *J Bioelectr*, 10, 241-256.

- ^{xviii} Doctors and emergency responders need to be trained to diagnose electromagnetic radiation injury and precautions for people injured by it. We are all being exposed to electromagnetic radiation and we are getting incrementally weakened from electromagnetic radiation whether we know it or not. A side note, the functioning of medical personnel may be impaired by

their exposure; they need to take precautions for themselves so they don't indirectly make errors.

The functioning of medical personnel may be impaired by their exposure. An unexpected observation/experience led to my awareness of how staff could be unwittingly affected by electromagnetic radiation.

A dentist and the assistant both commented how relaxed each felt doing the dental work (a tooth had broken and needed repair). They noted this comfortable/relaxed feeling was unusual. What was different? They made accommodations for me. They had turned off all the compact fluorescent lights, keeping on only the incandescent operation light and the dentist's LED head gear, to accommodate my electromagnetic radiation disability in this minor emergency. These two professionals were unaware they may be electromagnetic radiation sensitive, yet each noticed their health was better without CFL lights. A second visit about a year later, evoked the same response.

A new dental office opened in town. I tried it. Accommodations to my sensitivities were made and fluorescent lights were turned off. Lighting was from a large window, the dentists' headgear, and the operation light. Cleaning up after the work in my mouth, they both discussed how good they felt. These were volunteered comments and not something asked by me.