

Thank you for requesting comments on this crucially important topic. I have structured my responses based on your questions.

2: I am responding as an individual severely injured by RF/EMF. My spouse is capturing my responses as I am unable to use a computer for any length of time without getting sick.

3a: As to my history with RF/EMF...I am now 62 years old. I have been living with a debilitating EMF sensitivity since 2010 when a wireless transmitting “smart meter” was installed on my house. I am now sensitive to all radio frequency wireless, magnetic fields, electric fields. This includes but is not limited to any wireless device (cell phone, smart watch, any “smart” internet of things (IOT) device, any bluetooth speakers – any bluetooth device, “smart” electric meters, water meters, etc.). I am sensitive to infrastructure including cell towers, wi-fi, radio towers – any wireless transmitting device I am sensitive to magnetic fields generated by all electronic devices, most motors, components located in cars, etc. I am sensitive to electric fields generated by standard unshielded wiring in homes and businesses.

3b: The installation of the smart meter in 2010 triggered my sensitivities, but since 2010 my level of sensitivity has increased dramatically such that I am impacted almost constantly as it is almost impossible today to get away from wireless radiation. The nature of the health impacts is proportionate to the amount of time I am exposed to EMF radiation and the strength of the source from experiencing a migraine for a day when I spend 10 minutes in an environment with wi-fi to having severe brain fog, digestion issues and a debilitating migraine headache for multiple days when I have to go into a city for a doctor or dentist appointment.

3c: My adverse health impacts include migraine headaches, brain fog, fatigue, digestive issues and insomnia. I have also developed chemical sensitivity and many food allergies as a result of EMF exposure. The impact on my life because of wireless radiation is enormous. I had to leave my teaching job when exposure on campus resulted in debilitating migraine headaches which made teaching automotive technology in a live auto shop environment to high school students too hazardous. I had to stop going out of my house and spent many hours laying on the concrete next to a retaining wall at the back of my house to minimize exposure to cell towers and neighbors wi-fi. I cannot travel. I cannot go to the store. I cannot go to a restaurant. When the smart meter was first installed I had migraine headaches over 15 days in a month and some level of headache all the time. I was miserable. Wireless radiation forced myself and my wife to move to a remote property to escape proximity to cell towers, neighbors, wireless infrastructure.

3d: My adverse health effects first appeared immediately upon the installation of the electric “smart” meter on my home by Pacific Gas and Electric (over my objections to the installer) in 2010 and have not stopped since. As stated above, the nature of the health impacts is proportionate to the amount of time I am exposed to EMF radiation and the strength of the source from experiencing a migraine for a day when I spend 10 minutes in an environment with wi-fi to having severe brain fog, digestion issues and a debilitating migraine headache and insomnia for multiple days when I have to go into a city for a doctor or dentist appointment.

3e: I saw multiple medical doctors and specialists with over 100 visits with multiple providers across multiple disciplines (general practitioners, neurologists, functional medicine, homeopathy, physical therapy, massage, etc.) I was desperate to find some relief. Eventually, I found a medical professional who also had Electromagnetic Hypersensitivity (EHS). She was able to diagnose my condition and provided a letter documenting my sensitivity to electromagnetic radiation. I did not have any other illness or condition that caused my symptoms.

3f: Many, many steps were and continue to be taken to reduce my exposure. I have spent hundreds of thousands of dollars to help me reduce my exposure and improve my health including:

- Many communications and interactions with Pacific Gas and Electric (PG&E) to have the smart meter removed from our home (which they did not do until ordered by the California Public Utilities Commission (CPUC))
- Spoke at CPUC in support of an opt-out of smart meters and eventually CPUC forced PG&E to provide an opt-out for customers (at an additional cost)
- Hired an EMF specialist to evaluate EMF in our home and make recommendations for reducing EMFs.
- Purchased multiple meters that identify EMFs in order to find safe places to be
- Hired additional EMF consultants to assist in communications to CPUC and PG&E
- As mentioned above – I sought out and continue to seek practitioners who can help reduce my symptoms
- I have gone through two neural retraining programs
- I have purchased RF shielding material and used it to reduce the level of RF in structures and vehicles
- I had to leave my job as a high school teacher to avoid the wi-fi and cell phone exposure
- I cannot be around people unless they have no wireless devices. I cannot go to public places.

- I had to sell cars that have high fields and purchase vehicles that have less technology, lower magnetic fields and the ability to turn off wi-fi and bluetooth to enable me to travel in a vehicle.
- With the development of chemical sensitivities due to EMF exposure, I have had to carefully screen every product in my house for toxicity and often spend more for products that do not make me sick
- I had to sell my house in Marin County, CA and move to rural Plumas County to find a home that was far enough away from neighbors, cell towers, etc.
- I had to hire an EMF electrical engineer and EMF specialist to direct a local electrician to rewire the electrical system my new home so the home would be low EMF. I was symptom free in my new home until a cell tower was installed on a mountain peak that now radiates my property.
- I had to purchase a cargo van and modify it as a shielded faraday cage in order to travel any distance from home and sleep in any other location other than my current home.

After all this...the only thing that relieves my symptoms is avoidance of any source of EMF radiation – which is nearly impossible in today's world.

There are many studies that show the connection between health impacts and RF/EMF radiation. I have attached just a few of the many. I encourage HHS to do their own review of all the literature and studies available. Critically important is to trace the funding source of the study as not surprisingly, those studies funded by the wireless industry claim there are no ill health impacts from their products. Just as the tobacco companies did.

With regard to recommendations to HHS, I would share the following:

- Based on my interactions with others who have EHS, there is no one “symptom pattern”. Some people have chest pain, some have tinnitus, some have severe insomnia, some anxiety, cancer, impaired childhood development, etc. Don't try to treat the symptoms – treat the cause which is poorly and often unregulated wireless.
- The wireless industry is very wealthy and powerful (just as the tobacco industry was) and they are very invested in selling technology and the infrastructure to support it. Pushing higher bandwidth via technology that results in higher power transmitters that are more densely deployed without any regulation or oversight will expose and sicken even more people. Just as with tobacco, the government has to step in to warn and protect the public.
- Create regulations that every house has access to wired internet and copper landline telephones

- People like me – highly sensitive to wireless radiation are the “canaries in the coal mine” wireless radiation is harmful to everyone; my reaction is just quicker and more obvious. Creating “tiers” of populations (e.g. children, elderly, pregnant women, those of us who suffer obvious injury, etc.) and producing regulations that differ by populations does not help in that everyone is impacted whether they know it now or not
- Maybe one avenue is better coordination and sharing of infrastructure – does every entity need its own radio/cell tower? Can’t the infrastructure be designed to have the fewest radiating devices needed?
- EMF free zones would be awesome for those of us who have already been injured by wireless radiation. The US only has one in West Virginia and it is already “polluted” by allowing some wi-fi.
- All vehicles should be required to have a “shut off” for wireless transmissions (wi-fi, bluetooth, cell/satellite) and vehicle manufacturers should not use wireless components in vehicles.
- Like tobacco and the opioids producers – make generators of wireless radiation liable for the damages they have caused
- A public campaign to educate and warn people of the dangers of wireless radiation