Background Info about Electromagnetic Sensitivity

As a consultant, I have worked with hundreds of individuals reporting serious health problems and sensitivities with electromagnetic fields (EMFs). The information offered here is anecdotal, based on my 22 years of professional experience with sensitive clients.*

Symptoms of Electromagnetic Sensitivity:
A variety of symptoms are reported by people with health issues related to EMFs. Common symptoms include sleep problems, headaches, fatigue, nausea, dizziness, anxiety, irritability, “brain fog” including difficulties concentrating and memory problems, feeling electrically shocked, itchy or burning skin, uncomfortable sensations of inflammation, heat or pressure inside the head, body or nerves, muscle weakness, tinnitus and other mysterious sound phenomena, increased heart rate, changes in blood pressure, heart arrhythmias, seizures, weak immunity, and more.*

Who is Electrosensitive?
From the studies so far, somewhere between 2 to 5 per cent of the general population will report having serious health issues from Electromagnetic Sensitivity. This condition is also sometimes referred to as “Electrosensitivity”, “Electromagnetic Hypersensitivity” and similar terms.* In addition, it appears that a much larger percentage of the population may also be affected by EMFs, but are generally unaware of EMFs as a potential contributor to their health issues.

How Do You Know If You Are Sensitive to EMFs?
If you tend to feel better when you are out in nature and away from EMFs, during a power outage, or when you turn off or get away from certain EMF sources, you may be sensitive to electromagnetic fields. If you experience any adverse symptoms near cell towers, cell phones, computers, Wi-Fi routers, power lines, fluorescent lights, electrical wiring or any other electrical devices, you are probably sensitive to electromagnetic fields.

Definition of Electromagnetic Sensitivity:
If your symptoms can be relieved by simply getting away from EMFs or turning off EMF sources, then you are probably sensitive to EMFs. Sensitivity is confirmed if your symptoms return again after the EMF exposure is reintroduced. The best way to test for EMF sensitivity is to spend several consecutive days in an EMF-free environment — for example a couple of days camping in nature, or turning off all the electricity and devices in your home for several days. If your symptoms noticeably decrease, but return again after the EMFs are reintroduced, EMF sensitivity is strongly indicated.*

Why Does it Take Several Days to Check for EMF Sensitivity?
For most sensitive people, once your exposure to EMFs has been stopped, it can take a significant amount of time before the nervous system recovers and the symptoms decrease. For young healthy people this may only take a few hours, sometimes a day. For older people with
chronic health issues, this may take several days, and often a week or more. Thus for an accurate test to determine EMF sensitivity, a significant amount of time must be spent away from the EMFs to allow the adverse symptoms to actually be relieved.*

**What is the Cause of EMF Sensitivity?**
Looking back, many people can find one particular EMF exposure that may have been the “straw that broke the camel’s back” with their own health. For one person, this might have been moving into a new home with strong magnetic fields from a nearby power line. For another, it might have been high electric fields emitted from the electrical wiring near their bed at night. And for yet another, it may have been the digital radio frequency fields from a new computer, cell phone, wireless router or smart meter. However in general, the underlying causes of EMF sensitivity often seem to be from a combination of long-term exposures to all the different EMFs, along with other important life stresses including chronic illness and emotional stress.

**What Kind of Person is Likely to Become EMF Sensitive?**
While sensitivity can develop for anyone, it generally appears that EMF sensitivity is more likely to occur in people who already have highly sensitive nervous systems and bodies. These are the same sensitive individuals who generally react more strongly to foods, chemicals, toxins, cigarette smoke, heat, cold, sounds, vibrations, and even the emotions of others — as well as people with a chronic illness, autoimmune disease, Lyme disease, chemical sensitivity, chronic fatigue or other health challenge.

**EMF Sensitivity Varies Greatly:**
One person may be strongly affected by the magnetic fields from a nearby power line, while another may appear to have serious sleep issues from the electric fields emitted by the wiring in their bedroom. Yet another may experience severe headaches and nausea from the radio frequency fields emitted by a nearby cell tower, wireless router or smart meter. In other words, the reported symptoms and sensitivities vary greatly from one person to another. And even for the same individual, their own EMF sensitivity can vary greatly over time, perhaps being influenced by other important life factors including emotional stress, sleep, diet, age and illness.

**Which EMFs Are the Most Troublesome?**
While one particular source of EMF may appear to be the biggest problem for a particular person, most sensitive people will ultimately find that they are sensitive to many other kinds of EMFs as well. In fact, sensitive people will often discover that they are actually most severely affected by the “total exposure load” of all of the different EMF sources combined. Thus to reduce symptoms, most sensitive people will find that they need to reduce all the various exposures to EMFs — including the sources of magnetic fields, electric fields, and radio frequency fields — as much as possible.

**What is a Safe Level of Magnetic Fields?**
People often report being sensitive to relatively low exposure levels. A typical client of mine might appear to have symptoms from ELF magnetic fields as low as only 0.2 or 0.3 milligauss (mG). Since the average home is already around 0.5 to 1.0 milligauss, sensitive individuals will often need to reduce their home exposure to less than the “average” or “normal” level, probably down to 0.1 mG or less. Sensitive people also need to take extra care to avoid the VLF magnetic fields emitted from fluorescent lights, LEDs, televisions, computers and other electronics, typically down to levels of 0.01 mG or less.
What is a Safe Level of Electric Fields?
Using the body voltage test method, sensitive people usually need to reduce their ELF electric fields down to around 0.1 Volt or less. So again, sensitive people may need to reduce their exposures down to levels far below that found in the "average" or "normal" home (which is typically between 0.5 to 3.0 volts). It is important to note that reducing the electric fields is especially important for sensitive individuals. Our human skin is already a natural antenna for receiving electric fields, and thus this is the particular EMF that is the easiest for the body to feel and sense, and perhaps be affected by. Also, this is the main EMF component that actually transports the "dirty electricity" RF signals from nearby electrical wiring onto the body.

What is a Safe Level of Radio Frequency Fields?
Many sensitive people also report health effects from relatively low levels of radio frequency (RF) fields. And the worst symptoms are usually experienced from the pulsed digital microwaves emitted by modern wireless devices such as cell phones, Wi-Fi routers and smart meters. To reduce symptoms, sensitive individuals usually need to reduce RF exposures down to at least 0.0001 microwatt per centimeter squared. (The equivalent measurement in European units is 1.0 microwatt per meter squared.) And with the increased use of complex digital technologies such as 4G/LTE cellular and DECT cordless phones, many sensitive people find that they need to reduce their RF exposures even further, often down to less than 0.00001 microwatts per centimeter squared (or in European units, 0.1 microwatt per meter squared.)

General Advice to Relieve Symptoms of EMF Sensitivity:
For sensitive people, it is critical to reduce all of the various sources and kinds of EMFs around them. In general, the first step is to (a) completely remove all wireless devices, (b) unplug all unneeded electrical cords and equipment, and (c) determine which electrical circuits cause high electric fields in the bedroom and shut off those circuits at night. The next step is to actually measure the EMFs with the proper test meters, because it is difficult to know and predict all of the possible sources of EMFs. For example, many consumer devices such as refrigerators and TVs are now being manufactured with wireless capability, so it is important to test with a wide-spectrum RF meter to be sure that there are no remaining wireless RF sources in the vicinity.

What is the Most Important Location to Avoid EMFs?
Many experts feel that the most important place to reduce EMFs is in the bedroom at night. Sleep is a crucial time for the health, rejuvenation and repair of our bodies. It is also a critical time for the proper operation of our immune functions. For example, scientific studies show that EMFs can suppress the pineal gland's secretion of melatonin at night. Melatonin is an important hormone that regulates our daily wake/sleep cycles, and is also one of the body's strongest and most important natural cancer fighting chemicals. Reduced melatonin has been linked to increased risks for several types of cancer, suppression of the immune system, sleep problems, and depression and psychological disorders.

How to Establish a “Safe Haven” Location:
Many people find relief by creating a special "safe haven" room or section of their home, where great care has been taken to reduce all the EMFs. In some cases, the electrical wiring, lights and appliances can be shielded, disconnected, or simply turned off to reduce the EMFs sufficiently. Other people build a separate shielded room outside with little or no electricity as a special place to retreat and rejuvenate in. Some people move to a more remote location, and get further distance from cell towers, power lines and neighbors' wireless devices. Some choose to live with little or no electricity for a certain period of time to help with their recovery. In most cases, it is
critical to remove all wireless devices within about 300 feet of the home, and to stay at least a mile distance or more from the nearest cell tower.*

**What Do the Latest Research Studies Say?**
Thousands of research studies have reported important biological effects related to electromagnetic fields. But there is still great controversy about these potential health effects, especially for sensitive people. In the US, the EMF health concerns are still largely unappreciated and unrecognized by the mainstream health care system. In contrast, Sweden and some parts of Europe have taken initial steps to provide special care for EMF-sensitive individuals. Please search for the most up-to-date information on EMFs and consult with your own health care professional, to help make your own decisions regarding EMF exposures and any treatments for electromagnetic sensitivity.*

* Important Notice: The information included here is based upon my own professional and anecdotal experience with hundreds of highly sensitive clients over the last 22 years. This information is meant for educational purposes only. Please note that I am not a medical doctor or a certified health professional, and I cannot (and do not intend to) diagnose or treat any EMF-related health concerns. Please refer to your own doctor or other health professional for specific guidance and treatment for any EMF sensitivity issues and related health symptoms.

**Further Assistance:**
As part of my professional work, I provide telephone consultations, and help people with their own specific needs regarding the testing and reduction of EMFs. My company also provides the proper EMF test instruments for sale or rental, so that you can self-test for EMFs. In addition, for northern California, I can sometimes assist with an on-site EMF testing/consultation. For further assistance, please contact my office at 707-578-1645.