



Welcome to Sage Living! We're honored to have you in our community. We're here to offer insight and useful, easy steps that will start you on your way to developing a healthy low-EMF lifestyle.

We're starting that journey with this free downloadable EMF fact sheet is a one-stop, comprehensive resource for you to learn more about EMF. We're here to offer insight and useful, easy steps that will start you on your way to developing a healthy low-EMF lifestyle.



What is EMF anyway?

EMF stands for electromagnetic fields. It includes radiofrequency radiation from wireless technologies too. For thousands of years, humans have evolved with naturally occurring EMF frequencies that are present on Earth and in space.

Why should we care?

Modern life has introduced all kinds of artificial EMF (think wireless devices, electrical power lines and appliances, etc). These sources can overwhelm the body's defenses with unnatural EMFs.

Today, EMF and wireless health effects on the human body are recognized to be significant global issues. The World Health Organization has classified both as Possible Human Carcinogens (a carcinogen is a cancer-causing agent). Lead and DDT are also in this category. The increased risk for glioma, a malignant brain cancer associated with cell phone use is the reason wireless is included.

A handful of impactful studies have been released this year (2016), including a study conducted by the U.S National Toxicology Program (part of the US Dept. of Health & Human Services). This study found that cell phone radiation causes cancer in rats. Read the full article [here](#). It is anticipated that these results will help to define new public health policy and provide updated advice to consumers.

We know that reading these reports could feel overwhelming to you, and you're not alone. Know that our mission is to make take the overwhelm out of living a healthy lifestyle, including integrating steps to achieve a low-EMF lifestyle.



How does a person get familiar with where EMF comes from?

It's invisible to the eye, but not invisible to the human body, since we know that our health is tied to electromagnetic fields that come from the Earth. We are biological beings but it's the electrical connections between our hearts and brains that allow our bodies to function.

As a child, I assumed that all was well as long as I stayed away from the microwave when it was in use. Years later, I had an "aha" moment when I realized that my daily EMF exposure came from multiple sources. I have a strong sense from talking with my community that I wasn't alone in not realizing just how omnipresent EMF can be in our lives.

What follows are a few definitions you should know describing the sources of EMF (including wireless radiation):

Electric and magnetic fields:

EMF means electromagnetic fields. EMF is generated when electricity travels through electric wiring, household appliances and from power lines.

Dirty Electricity:

'Dirty electricity,' or low-kilohertz frequency EMF, is an electromagnetic pollutant from everyday electronics. It can be created by compact fluorescent lights, dimmer switches on lights, variable speed motors and switch-mode battery devices (like your cell phone).

Radio-frequency radiation (RF):

RF is emitted by wireless technology including smartphones, tablets, WIFI, wireless baby monitors and wireless "smart meters."

I've always found visuals helpful in understanding topics that are new or complex. I thought this [visual](#) showing where EMF is located on the electromagnetic spectrum (the range of light that exists), would really help provide clarity.

Looking at the visual, you'll see that only a small portion of the waves on the spectrum are visible to the human eye. EMF is not among the visible waves.

SOURCES OF EMF

(EXTREMELY LOW FREQUENCY ELF-EMF) IN THE HOME, WORKPLACE AND SCHOOL.

- HIGH-VOLTAGE TRANSMISSION LINES (LARGE POWER LINES ON METAL POLES OR TOWERS)
- PAD-MOUNTED GROUND TRANSFORMERS (LARGE GREEN BOXES LABELED "HIGH VOLTAGE" THAT SIT OUTSIDE BUILDINGS)
- APPLIANCES (MICROWAVE OVENS, WASHERS AND DRYERS, COMPUTERS, TELEVISIONS, RADIOS, ETC.)
- APPLIANCES WITH RADIO FREQUENCY (RF) POWER TRANSMITTERS FOR WIRELESS SMART METERS
- LIGHTING (SPECIFICALLY COMPACT FLUORESCENT BULBS (CFBS) AND OTHER FLUORESCENT LIGHTING)
- ELECTRICAL PANELS (MAIN PANELS OUTSIDE AND SUB PANELS INSIDE)
- ELECTRICAL WIRING IN THE WALLS (IF IMPROPERLY WIRED)
- HOME HEATING AND AIR-CONDITIONING UNITS
- ELECTRIC AND HYBRID CARS
- SMARTPHONES (THE BATTERY SWITCHING PRODUCES ELF-EMF PULSES)
- ANY LARGE ELECTRIC MOTOR OR GENERATOR
- COMPUTERS OR OVERHEAD PROJECTORS IN CLASSROOMS

SOURCES OF RF

(RADIOFREQUENCY WIRELESS RADIATION) IN THE HOME, WORKPLACE AND SCHOOL:

- WIRELESS UTILITY METERS ("SMART" METERS)
- WIRELESS NETWORKS, WIFI HOT-SPOTS, CITYWIDE WIRELESS NETWORKS
 - WIRELESS LAPTOPS
 - SMARTPHONES, BLUETOOTH HEADSETS
- WIRELESS WHITE BOARDS USED IN CLASSROOMS
- FM TRANSMITTERS WORN BY TEACHERS TO SUPPORT HEARING-IMPAIRED STUDENTS IN SCHOOLS
- NEST OR ANY OTHER WIRELESS HOME AUTOMATION SERVICES
 - WIRELESS HOME SECURITY SYSTEMS
- WIRELESS BABY MONITORS (BOTH AUDIO AND WEB-CAM MONITORS)
 - WIRELESS HEADSETS OR HEADPHONES
- FASTRAK OR ELECTRONIC TOLL COLLECTION SYSTEM
 - BLUETOOTH IN THE CAR
- CELLULAR ANTENNAS (USUALLY MOUNTED ON BUILDINGS OR FREE-STANDING TOWERS)
 - CORDLESS PHONES

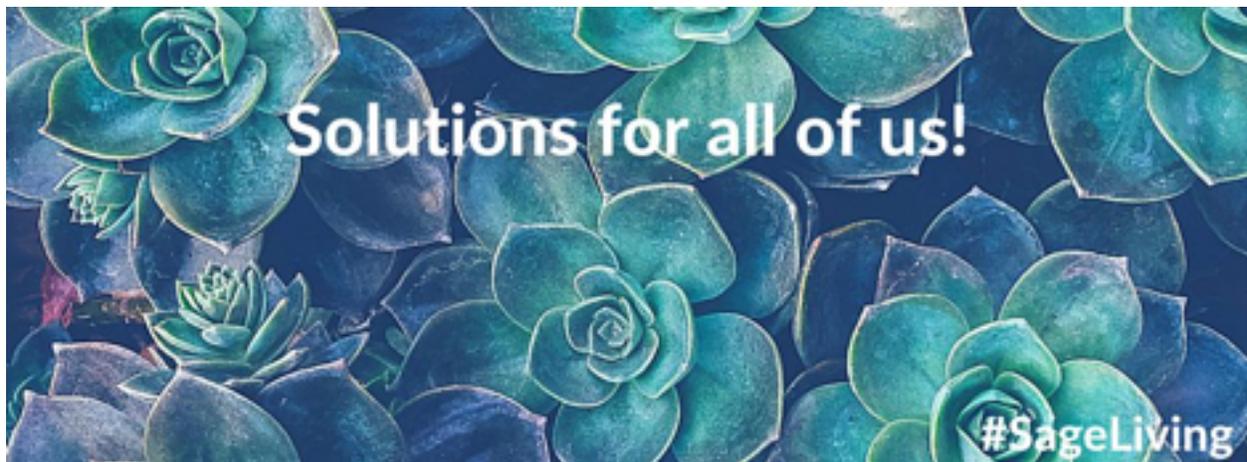
Symptoms of EMF

EMF exposure can cause symptoms that include insomnia, headaches, dizziness, fatigue, memory problems and immune system dysfunction. Recent studies already link whole-body exposure to wireless RF with headaches, and memory, concentration and behavior problems in children, with altered fetal brain development, and reproductive and genetic damage in adults.

According to the [Canadian Initiative for Safe Wireless, Electric and Electromagnetic Policy](#), some people can develop Electrohypersensitivity (EHS), a physiological condition characterized by neurological and immunological symptoms that noticeably flare or intensify upon or following exposure to EMF.

Having Electromagnetic Field Sensitivity means experiencing recurring stress or illness when near active EMF sources. Symptoms normally diminish with distance from these sources but typically require considerable time to vanish after exposure. The World Health Organization identifies this collection of symptoms and triggers as Electrohypersensitivity or EHS, also referred to as Electrosensitivity.

“The number of people who claim to have EHS varies by country, from 8 percent of the population in Germany to 3.5 percent, or about 11 million people, in the U.S.” (April 2015 issue of Popular Science, under the title "Greetings From The Quiet Zone.”)



Solutions for All of Us:

First of all, please don't despair!

This sounds like a lot but remember, we're all on a journey together. None of us are perfect, nor should we try to be. We simply can challenge ourselves to be more mindful and to commit to taking the steps that will support a low-EMF lifestyle.

Understanding the sources of EMF pollution and learning how to reduce your exposure is a lot to absorb – I so get it! If you're feeling that you just don't know what to do or where to start, please know that's completely normal. Not only have I been there in my life, I'm still there today with my family.

And let's be realistic. Our society has a widespread reliance on wireless technology.

Most people carry a smartphone or a tablet. I'm not recommending you give up your devices (although, it would be great if you could!). Rather I'm offering a few options to use your wireless technology wisely.

Here are a few simple tips that you can put into practice to begin your journey toward a low-EMF lifestyle:



Top Tips to reduce EMF exposure:

- Always choose a wired connection over wireless, regardless of the device. Wired internet is safer and faster, but if you still have a household wireless network (Wi-Fi) unplug the power cord when not in use, and always unplug it at night.
- Use a wired headset or speakerphone every time you use your mobile phone. Do your best to keep your mobile phone away from your head and body at all times, and avoid carrying your phone in your bra (a cancer risk) or in your pocket.
- Put your smartphone on 'airplane mode' whenever possible (not do not disturb mode).
- Text instead of talk.
- Call your utility to 'opt out' of a wireless 'smart meter.' Swap out a wireless 'smart meter' for an analog meter.
- Keep your wireless devices out of the bedroom. No charging it, no putting it under the pillow.
- Use a battery-powered alarm clock.
- Use an Ethernet cable with your computer (instead of Wi-Fi). Go wired.
- Consider if it's worth letting your children use screens at a young age. If you do allow smart phones or tablets, download all content (like videos) first via a wired connection and activate airplane mode before use.
- Opt for a wired baby monitor, not a wireless one.
- At home and work, use a landline with a corded (not a cordless) phone. All US cordless phone setups unfortunately radiate all the time, not just when you talk. The RF is high and can travel throughout the house at levels which can disturb clear thinking and deep sleep.
- Keep your laptop and your tablet out of your lap.
- If you use your tablet as an e-reader, download via a wired connection and switch it 'airplane mode' before use.

Another bit of wisdom is to remember that proximity is an important factor in exposure.

Generally, the farther away you are from an EMF source, the lower your exposure. Sign up for the Sage Living [newsletter](#) for more tips on how to live a low-EMF lifestyle!