The True Science of EMF Protection

We are all exposed to harmful EMFs (Electromagnetic Fields) in our homes.

Now you have an opportunity to reduce your EMF exposure greatly, with an EMF Home Inspection. We measure your ‘Dirty Electricity’ and all other human-made frequencies invading your home, help you understand their significance, install specialized filters for your ‘Dirty Electricity’ and give you a written report with all the details.

1. Measure ‘Dirty Electricity’

We begin by measuring your ‘Dirty Electricity’ with the Graham-Stetzer Microsurge Meter in Graham-Stetzer Units on each circuit in your home, of a high frequency EMF called ‘Dirty Electricity’ that may be contaminating your home’s electrical wiring.

‘Dirty Electricity’ has been on the rise as we continue to add devices to our household grids. Many things in a modern home create this type of dangerous high frequency EMF including low-voltage and energy-efficient lighting, treadmills, dimmer switches, electronic equipment such as microwaves, multiple computers, printers and plasma TVs and entertainment systems, and virtually all modern electronic devices.

The EMF created by ‘Dirty Electricity’ radiates several feet into a room, even when the electricity is not being used. We are capacitively coupled to this dangerous energy simple by being in a building.

2. EMF Education

Understanding the associated health risks can be difficult, so our EMF trained professionals will provide education for you as well.

To help you discern the significance of our findings, our consultants will supply you with the latest scientific data. They’ll explain to you how EMFs are produced, how they impact your health and how you can avoid exposure.
3. EMF Survey & ‘Dirty Electricity’ Mitigation

Using a proprietary methodology designed in conjunction with some of North America’s leading EMF scientists and experts, the consultants from EMF Solutions Canada can survey for and then remediate much of the harmful EMF energy in your home, thus reducing your ongoing exposure to this toxic pollutant.

Electric and magnetic fields (EMF) are invisible lines of force that surround any electrical device. A “field” is the area in which charges interact with other charges. Electromagnetic fields consist of electric (E) and magnetic (H) waves traveling together. They travel at the speed of light and are characterized by a frequency and a wavelength.

**We’ll Measure Your Home For:**

**A. Electric Fields** - Electric fields are always present on charged electrical wires and devices plugged into outlets and are created by differences in voltage. AC electric fields are present any time an electric device or power cord is plugged in to an electric outlet. An electric field will exist even when there is no current flowing.

Energy-efficient bulbs, laptop computers, electric blankets, metal lamps and clock radios are all common source points.

European research shows that prolonged exposure to electric fields can cause depression, restless leg syndrome, allergies, insomnia, and chronic fatigue, all due to disruption of cellular bioelectric function. We are actually exposed to this harmful field wherever we are within a house all day and night because electric fields can extend up to ten to fifteen feet, but its harmful effect is especially disruptive when we try to rest and rejuvenate during the night.

Sleeping in a high electric field environment keeps you from having deep, restful “Stage four and five” sleep. When it comes to EMF exposure electric fields are the more ominous factor to consider. Lately more evidence has accumulated that the electric field is having more impact on health then originally thought.
B. Magnetic Fields - Using a Gauss meter and other scientific instruments, we can find 60HZ EMFs in your electrical system that are primarily caused by damaged or poorly installed wiring that can create dangerous "hot spots" in a home. Plumbing current, wiring and grounding errors are more common than one would expect and entirely correctable.

The greater the current you have, the stronger the magnetic field. If current does flow, the strength of the magnetic field will vary with power consumption but the electric field strength will be constant.

High-voltage lines, power lines and common items such as transformers, laptops and computers, CRT monitors, energy-efficient lighting and power cords can also produce strong electric and magnetic fields. We will show you how to minimize the risk these devices pose to you and your family.

C. Radio Frequency (RF) - This type of EMF is produced primarily by wireless devices and cell towers and travels through the air. We'll measure for RF being emitted by near-by cell towers and from the new, popular "always on" DECT cordless phones, now banned from schools in parts of Europe. We'll also look for EMF sources located in and outside your home, things such as pulsing cordless phones, wireless networks and PDAs.

When a current flowing through the wire is made to oscillate at a very rapid rate (3 KHz or greater), the floating electromagnetic field will break free and be launched into space. At the speed of light, the energy will radiate outward in a pulsating pattern, much like the waves in the pond. Mankind has harnessed much of the radio spectrum for communication purposes such as Wi-Fi, cell phones, radio signals, satellite TV and radar.

D. ‘Dirty Electricity’ Filter Installation - Graham-Stetzer filters have been proven in numerous well-conducted scientific studies, to relieve or reduce symptoms related to Electrical Hypersensitivity, while preventing exposure to this dangerous energy. Others show remarkable improvements in their overall health.

These GS filters, "capacitors", attenuate much of the most significant (4kHz to 100 kHz completely, as tested by Health Canada) of the dangerous high frequency energy riding on your home's wires.

It usually takes a number, perhaps 20 strategically placed GS filters to effectively "clean-up" the average home.

The green area in the oscilloscope display shown above represents ‘Dirty’ power that contaminates normal (60 Hertz) electricity.
4. EMF Consultation

You will receive a comprehensive list of important common-sense suggestions to help you reduce your ongoing exposure to this dangerous, new environmental toxin while at home, school and in the workplace.

Our knowledgeable consultants will discuss with you any further options available to lower the levels of dangerous ‘Dirty Electricity’, RF emissions and other EMFs in your residential living environment.

5. Detailed EMF Report

Our consultants prepare your detailed report showing you where all the dangerous levels of EMF "energy" are located in your home – so that you can practice "prudent avoidance" and we can take additional immediate action, if essential.

Other corrective measures may be required, where our recommended electricians, or other outside contractors, or the utility company may be needed to be called in to deal with the problem. All of these areas will be covered in your comprehensive EMF Home Inspection report.

Electrical Hypersensitivity

Today, more and more people are experiencing adverse health effects as a result of ongoing exposure to Electric and Magnetic Fields (EMF).

According to a World Health Organization statement in December 2005,

“Electrical Hypersensitivity (EHS) is a growing world wide health concern”.

EHS can be very difficult to diagnose. Many doctors and other health professionals in North America are not yet aware of the recent scientific evidence surrounding Electromagnetic energy and its detrimental effect on human health.

Scientific studies have shown that electrical pollution affects children more than adults and women are at least twice as susceptible as men. The huge increase in electromagnetic energy in today's modern electronic-charged environment coincides with an alarming increase in ailments such as Chronic Fatigue Syndrome, Chronic Pain, Tinnitus, Depression, Hormone Dysfunction, Alzheimer’s disease and Leukemia, and the huge spike in childhood cancers.

Also, EMFs have been linked to many serious diseases including ALS, brain tumours and miscarriages and have been shown to exacerbate a number of chronic illnesses including Tinnitus, Diabetes and Multiple Sclerosis.
EMF Health Facts

- Sweden, which recognized Electromagnetic Hypersensitivity as a fully-functional impairment in 2001, now lists Electromagnetic Fields (EMF) as Class 2 Carcinogens, right along with tobacco.

- Professor Magda Havas at Trent University in Peterborough, Ontario found significant links between 'Dirty Electricity' in homes and schools and diseases including Multiple Sclerosis, Diabetes, Asthma, Autism and ADD/ADHD in children.

- The US Environmental Protection Agency (EPA) recommends that EMFs be classified as a Class B carcinogen – a "probable human carcinogen and joined the ranks of formaldehyde, DDT, dioxins and PCBs and warns: "There is reason for concern" and advises "prudent avoidance."

- Martin Halper, the EPA's Director of Analysis and Support says, "I have never seen a set of epidemiological studies that remotely approached the weight of evidence that we're seeing with EMFs. Clearly there is something here."

- Research indicates that EMFs suppress the immune system's response to ongoing processes such as tumor growth. David Carpenter, Dean at the School of Public Health, State University of New York believes it is likely that up to 30% of all childhood cancers come from exposure to EMF.

- In women there is strong scientific evidence linking ongoing exposure to EMFs and the huge increase in breast cancer in recent years. In men, EMFs reduced testosterone – a male hormone, a drop that has been linked to increased testicular and prostate cancers.

Following are 10 Tips to Protect You and Your Family from EMF Exposure and our guidelines to find your EMF Sources In and Around Your Home.

Reduce your family's in-home EMF exposure by up to 95% with an EMF survey, site inspection and report. Call 416.551.7259 now to book your EMF Home Inspection.

Wishing You and All your Loved Ones the Best of Health,

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10 Tips to Protect You and Your Family from EMF Exposure

EMF exposure is linked to many acute and chronic illness conditions and Electrical Sensitivities are a serious emerging public health concern, in which most doctors have no training. Everyday we are exposed to Electromagnetic Fields (EMF) from a number of common sources found around the home, in our work environment and in our sleeping quarters. Here are some common-sense tips:

The Office and Computing Area

1. If possible, avoid working on a laptop computer.

If you must use one, never put a laptop on your lap, especially when it's plugged in. Many laptop computers produce a strong EMF, especially when plugged into an electrical outlet, as they are charging a battery in close proximity to where you rest your hands.

2. When replacing your computer monitors (or TV) buy a new LCD (Liquid Crystal Display).

LCDs emit much less radiation than the old CRT style monitors that use three Electron Guns (for red, green and blue) to excite the phosphor dots on the screen.

3. Clean up the electrical power cords and transformers around your computer and desk and reroute them away from your feet and seating area.

Transformers and power bars around your feet while you work on your computer can be a huge EMF exposure point, especially if you spend a lot of time on your computer.

Wireless Technology

4. Don't install a wireless network (Wi-Fi).

In October of 2007 the German Government advised the public in that country to avoid using wi-fi because of the possible health risks they pose.

Wireless routers emit electromagnetic radiation even when you are not using them.

5. Don't buy a DECT cordless portable phone.

In 2005 the German Government also nixed these new DECT cordless portable phones. The base station of these phones constantly transmits a strong RF signal, even when the handset is not in use just sitting idle in the cradle. If you have one, get rid of it. DECT technology is also used in some baby monitors.
6. Limit the time you spend talking on a cordless phone and cell phone and let children under 14 use wireless phones for short periods of time only when absolutely necessary.

Lately we've been hearing about the possible health risks associated with cell phone radiation. It's important to understand that cordless phones use electromagnetic radiation to communicate – just like cell phones – and radiation exposure is cumulative, no matter what the source.

Electrical Wiring and Devices

7. Unplug all electrical power cords and devices that are not in use and limit the use of electrical devices in the bedroom.

All devices plugged into live electrical outlets including innocuous lamps and clock radios emit an electric field when plugged into a live electrical outlet. If an electrical device is unplugged it will not produce an electric or a magnetic field. EMFs suppress melatonin; so clean up the electrical cords and devices around your bed and get a battery-operated clock radio.

Lighting

8. Avoid installing low-voltage (12 volt) halogen, florescent tube and energy-efficient Compact Fluorescent Lighting (CLF).

Virtually all of these so-called energy-efficient technologies create ‘Dirty Electricity’ and at the same time can throw a nasty Electromagnetic Field from the ballast or transformer. Cleaner LCD lighting technology is just around the corner so wait for it to develop and come down in price before you do major lighting upgrades.

9. Replace all the dimmer switches in your house with regular switches.

Even when turned completely on to full power, a dimmer chops-off part of the electrical current; then it discards in the form of a strong Electromagnetic Field. Dimmer switches also create ‘Dirty Electricity’ that can contaminate a home's electrical wiring with this dangerous high-frequency energy.

‘Dirty Electricity’

10. Remediate Your ‘Dirty Electricity’.

The most important thing you can do to avoid ongoing exposure to EMF is to install Graham-Seltzer (GS) filters in your home and office to reduce the amount of high frequency radiation (known as ‘Dirty Electricity’) emitting from electrical wiring and electrical devices.
EMF Sources In and Around Your Home

Magnetic Field Exposure Points

All power lines
Electrical transformers (both large and small)
Electrical distribution wires
Plumbing Current
Net Current
Faultily electrical wiring and grounding
Knob and tube wiring
Unbalanced electrical loads
CRT computer monitors and TVs

Electric Field Exposure Points

Electrical wiring and power cords such as operating toaster, electric kettle
Fluorescent/Compact Fluorescent
Poorly grounded electrical system
Bedside AC lamps, clocks and electrical cords
Electric heating pad, electric blanket, or waterbed heater
Laptop computers
Rechargers

Devices that Contribute to ‘Dirty Electricity’

Fluorescent / Compact Fluorescent / 12-Volt halogen lighting
Dimmer switches
Computers/laptops
Television sets
Microwave ovens
Treadmills and furnaces that have variable speed motors
Nearby neighbours’ activities

Radio Frequency (RF) Sources

Wireless Networks
DECT Cordless phones and baby monitors
Cellular phones and PDAs
Cell towers’ antennae
FM / TV antennae, other communication microwave transmitters’ antennae
Wireless gaming systems
Remote controls, remote car keys, remote starters
Nearby neighbours’ activities
Security systems