

What are electromagnetic fields?

Electromagnetic fields (EMFs) are invisible forces in our environment that occur from natural and man-made sources. Canadians are exposed to EMFs at extremely low frequencies (ELFs) daily through items such as household wiring, lighting, hair dryers, computers and power tools. According to Health Canada, the term “extremely low” is described as any frequency below 300 hertz. EMFs produced by power lines fall into this category. The World Health Organization has not found any conclusive evidence indicating that low level long-term exposure to EMFs from power lines is harmful.

- **Electric fields** are produced by differences in voltage and can be caused by natural sources, like thunderstorms, and man-made sources, such as electrical sockets, cell towers and x-ray machines. Electric fields are measured in kilovolts per meter and are present even when no electric current is flowing. The higher the voltage, the stronger the electric field. Electric fields are weakened by objects like buildings and trees and the strength of the field decreases with distance.
- **Magnetic fields** are produced by electrical currents and are only present when power is flowing through a device or wire. Magnetic fields are measured in microtesla or milligauss and the stronger the current, the stronger the magnetic field. Magnetic fields are not weakened by objects like buildings and trees, but the strength of the field decreases with distance.

OUR APPROACH

ENMAX is committed to staying informed about any changes to research or guidelines related to EMFs, and to maintaining an ongoing dialogue with our customers and the public.

For further information, or to schedule an in-home magnetic field measurement, call us at **403-514-1471** or email emf@enmax.com.

REFERENCES AND ADDITIONAL INFORMATION

ENMAX Power

www.enmax.com/emf

Health Canada

www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/power-lines-electrical-appliances.html

Electricity Canada

www.electricity.ca/knowledge-centre/the-grid/transmission/there-has-been-great-public-interest-in-the-risks-associated-with-electric-magnetic-fields-emfs/

World Health Organization

www.who.int/health-topics/electromagnetic-fields#tab=tab_1

National Institute of Environmental Health Sciences

www.niehs.nih.gov/health/topics/agents/emf/