

Power Lines

Electric and Magnetic Fields

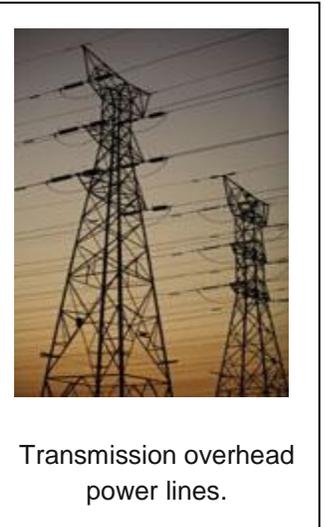
Electromagnetic fields (EMF) are a combination of electric and magnetic fields of energy that surround any electrical device that is plugged in and turned on.

- Scientific experiments have not clearly shown whether or not exposure to EMF increases cancer risk. Scientists continue to conduct research on the issue.
- The strength of electromagnetic fields fades with distance from the source. Limiting the amount of time spent around a source and increasing the distance from a source reduces exposure.

About Electric and Magnetic Fields

Electromagnetic fields (EMF) are a combination of electric and magnetic fields of energy that surround any electrical device that is plugged in and turned on. Electromagnetic radiation consists of waves of electric and magnetic energy moving together through space. Electric fields are produced by electric charges and magnetic fields are produced by the flow of current through wires or electrical devices.

EMFs are found near power lines and other electronic devices such as smart meters. Electric and magnetic fields become weaker as you move further away from them. The fields from power lines and electrical devices have a much lower frequency than other types of EMF, such as microwaves or radio waves. EMF from power lines is considered to be extremely low frequency. Scientific studies have not clearly shown whether exposure to EMF increases cancer risk. Scientists continue to conduct research on the issue.



Transmission overhead power lines.

Rules and Guidance

In the United States, there are no federal standards limiting electromagnetic fields from power lines and other sources to people at work or home. Some states set standards for the width of right-of-ways under high-voltage transmission lines because of potential for electric shock.

What you can do

There is no clear scientific evidence that electromagnetic fields affect health. However, if you are concerned about possible health risks from electric and magnetic fields you can reduce your exposure by:

- **Increasing the distance between yourself and the source** - The greater the distance between you and the source of EMF, the less your exposure.
- **Limiting the time spent around the source** - The less time you spend near EMF, the lower your exposure.

Where to learn more

You can learn more about electric and magnetic fields by visiting the resources available on the following webpage: <http://www3.epa.gov/radtown/electric-magnetic-fields.html#learn-more>.