

Electromagnetic pollution

Everyday life is pervaded by artificially-made electromagnetic radiation: food is heated in microwave ovens, airplanes are guided by radar waves, television sets receive electromagnetic waves transmitted by broadcasting stations, and infrared waves from heaters provide warmth. The spectrum of frequencies of electromagnetic radiation extends from very low values of radio waves, television waves, and microwaves to visible light and beyond to the substantially higher values of ultraviolet light, X-rays, and gamma rays.



Ultraviolet light represents a kind of electromagnetic radiation that can be harmful to life. Such is also true of X-rays, which are important in medicine as they allow physicians to observe the inner parts of the body but exposure to which should be kept to a minimum. Less familiar are gamma rays, which come from nuclear reactions and radioactive decay and are part of the harmful high-energy radiation of radioactive materials and nuclear weapons.

Most of us are used to the electronic conveniences of modern life, but few of us are aware of the possible health risks presented by these devices. Our power lines, mobile phones, microwaves, Wi-Fi routers, computers, and other appliances send out a stream of invisible energy waves. Electric and magnetic fields (EMFs) are produced anywhere electricity is used, including at home and in the workplace. Possible human health effects from exposure to EMFs have not yet been determined with precision and accuracy, but some symptoms that some studies have suggested range from sleep disturbances, headache, tiredness, lack of concentration to irritability and anxiety. The best approach is to be aware that EMFs exist and be careful about our exposure.

This is a developing field of research that will undoubtedly expand because our use of wireless devices is going to increase more and more.

(Adapted from <https://www.healthline.com/health/emf#takeaway>)

1 Read the text and fill in the table.

<p>A. Spectrum of frequencies of electromagnetic radiation</p>	<p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p> <p>e.</p> <p>f.</p> <p>g.</p>
<p>B. Possible human health effects from EMFs exposure</p>	<p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p> <p>e.</p> <p>f.</p>

2 Read the text again and answer the following questions.

1. Where can electromagnetic radiation be found in our everyday life?
2. What electromagnetic radiations are considered harmful to human life?
3. Why are gamma rays so dangerous?
4. Why may X-rays be dangerous but are very important at the same time?
5. Where are electric and magnetic fields (EMFs) produced?
6. What is the best approach to this problem?

