

# Facts About Radiofrequency Energy From Your Cell Phone and Your Health



#### Cell phones send radiofrequency energy.

Cell phones work by sending and receiving signals to and from cell phone towers. These signals are a form of electromagnetic radiation called radiofrequency (RF) energy. RF energy is also called RF radiation.

**RF** energy is different from other types of radiation that we know can be harmful. Forms of ionizing radiation (like x-rays) are known to be harmful. Ionizing radiation can damage DNA and tissue in humans and living things. DNA damage can lead to cell death or mutation (cancer). **RF** radiation is not a form of ionizing radiation.

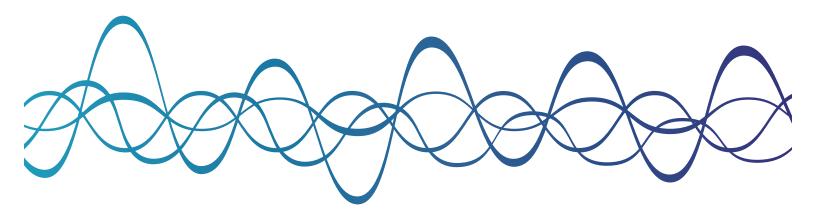
Some scientists and public health officials believe RF energy may affect human health. We don't know for sure if RF radiation from cell phones can cause health problems years later.

There have been many studies to see if RF energy from cell phones can harm health. Some studies are still ongoing. To date, there is no evidence showing that health problems are linked to RF energy from cell phone use.

The International Agency for Research on Cancer (IARC) has classified RF radiation as a "possible human carcinogen" (Group 2B). A carcinogen is something that causes cancer. The IARC categories indicate how strong the evidence is that something causes cancer. The IARC uses "possible human carcinogen" when there is some evidence that it can cause cancer in humans, but the evidence is not conclusive. It is also used when a cause-and-effect relationship is considered credible, but the relationship could be a result of chance, bias, or confounding.

The World Health Organization (WHO) is currently looking into how cell phones may affect some types of tumors (a lump or growth), our eyes, sleep, memory, and headaches.

Some people have reported a variety of health problems that they relate to exposure to electromagnetic fields, including cell phones. This is generally called "electromagnetic hypersensitivity." The symptoms vary person-to-person and may include fatigue, tiredness, difficulty concentrating, redness and tingling of the skin, and more. This sensitivity can be disabling for some people. It is important to know that electromagnetic hypersensitivity is not a medical diagnosis, but the symptoms people experience are real. These symptoms may be related to other causes. A trusted healthcare professional can help people experiencing electromagnetic hypersensitivity take steps to find the cause and address the symptoms. According to WHO, no scientific basis currently exists for a connection between electromagnetic hypersensitivity and exposure to electromagnetic fields.



## People concerned about RF energy from cell phones can consider their risks and benefits.

While studies are still ongoing, we do not have the science at this time to link health problems to RF energy from cell phone use. In an urgent or emergency situation, a cell phone can be helpful – and can even save lives.

Studies have shown that spending too much time using a cell phone may have negative effects on physical and mental health and wellbeing, especially for children and young adults. These effects have not been tied to exposure to RF energy.

### If you are worried about cell phone use, follow these tips to reduce your exposure to RF radiation:

#### Keep your phone away from your body:

- Get a hands-free headset that connects directly to your phone.
- Use speakerphone more often.
- Consider sending a text message instead of talking on the phone.
- Carry your cell phone in a backpack, briefcase, or purse.

## Avoid using your cell phone when it is sending out high levels of RF energy. This mainly happens when:

- You see only one or two bars displayed.
- You are in a fast-moving car, bus, or train.
- You are streaming audio or video or downloading or sending large files.

In the past, RF radiation interfered with the operation of some pacemakers. If you have a pacemaker and are concerned about how your cell phone use may affect it, contact your healthcare professional.



Questions? Call the Health Information Line at 401-222-5960