

# The Unsettling Rise of Microwave Syndrome

EMF: The Invisible Hazard (Part 2)  
FEATURED [Other Conditions](#)

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Jul 22 2023

A 1981 report prepared for NASA had already warned of adverse effects from microwave radiation.  
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Courtney Gilardi's 10-year-old daughter never had problems sleeping. But in August 2020, the morning after a 5G cell tower was installed within 450 feet of their Pittsfield, Massachusetts, home, she woke up complaining of headaches, dizziness, a buzzing in her head, and general malaise.

Normally, she gets up at 8 a.m. But on that day, she didn't come downstairs till the afternoon.

"She didn't look well, and she said that she was headachy, dizzy, fuzzy. Those are not words that she has ever used to describe how she's been feeling before," Ms. Gilardi said.

The girl, her sister, and Ms. Gilardi herself, who said she started experiencing sleep disturbances, rapid heart rates, and migraines, were soon diagnosed with microwave syndrome, a condition known to develop after a person is exposed to electromagnetic fields (EMFs) emitted by wireless technologies.

The doctor's advice was simple: Stay away from your home.

## Microwave Syndrome: What Is It and How Does It Harm You?

Microwave syndrome refers to sensitivity and symptom development caused by environmental microwave radiation. This type of radiation is used to heat food in microwave ovens.

People are primarily exposed to microwave radiation through wireless devices and antennas. Cell phone towers, Wi-Fi modems, phones, tablets, smart wearables, and smart home appliances continuously emit these waves 24 hours a day, 365 days a year.

Symptoms of microwave radiation exposure include insomnia, headaches, fatigue, stress, pain, and even skin rashes. Individuals with chronic diseases may experience a worsening of preexisting symptoms as part of microwave syndrome, [according to research](#).

# Microwave Radiation's Health Effects: Current Findings

Microwave radiation's health effects have long been debated, with industry-funded studies often concluding no link between exposure and health.

Randomized human studies are lacking due to ethical considerations, but prospective studies on humans, and animal and cell studies suggest potentially harmful biological effects.

## Naval Medical Research

In 1971, researchers at the Naval Medical Research Institute published a report on the biological effects of electromagnetic fields, including radio frequency and microwave radiation ([pdf](#)). The report examined their effects on humans, animals, and cells.

Professor Martin Pall from Washington State University, who specializes in chronic fatigue syndrome, multiple chemical sensitivity, and the effects of low-intensity microwave frequency electromagnetic fields on the human body, [summarized the biological effects](#) as follows:

- Forty neuropsychiatric effects, including changes in brain structure, brain function, psychological responses, and behavior.
- Eight hormonal effects, including hyperthyroidism and pituitary dysfunction.
- Cardiac effects, including decreased heart activity and changes in heart rhythm.
- Chromosome breaks and changes to chromosome structure.
- Histological changes to the testes.
- Cell death, an important process in neurodegenerative diseases.

Other biological effects included changes to metabolism and digestion.

## The Bioinitiative Report

The Bioinitiative Report, coauthored by Dr. David Carpenter, professor of environmental health sciences at the University at Albany's School of Public Health, investigated the correlation between EMFs and health. It found that adverse biological reactions can be triggered even at levels far below the industry standards of maximum body exposure, set at 1.6 watts per kilogram ([pdf](#)).

The current standard is based on the assumption that microwave radiation affects the body solely through heat, disregarding its nonthermal effects.

However, exposure to nonthermal EMF radiation at a chronic level of 0.00034 microwatts through mobile phones has been linked to a significant reduction in sperm count. Microwatts represent a millionth of a watt.

Furthermore, children and adolescents exposed to 0.02 microwatts for a short period reported symptoms like headaches, irritation, and difficulties with concentration in school, according to the report.

“There is really no level that you could say with absolute confidence that it was safe for everybody,” Dr. Carpenter told The Epoch Times.

He added that setting a standard with no biological effects is unrealistic given the rapid growth in wireless technology use since the report’s publication in 2007, leading to increased microwave radiation exposure for individuals.

While the report faced scrutiny for its lack of peer review, all of its included studies were subject to peer review.

## **The Moscow Signal**

Before the introduction of cellphones and wireless devices, the Moscow Signal report documented microwave transmissions by the Soviet Union from 1953 to 1976, ranging from 2.5 to 4.4 gigahertz (GHz), which aligns with the frequency range of today’s Wi-Fi and 4G networks.

Although the U.S. government eventually determined the exposure was an espionage attempt with no significant health effects on embassy staff, this conclusion has been disputed.

In 1975, Walter Stoessel, the U.S. ambassador to the Soviet Union, became sick, experiencing bleeding from the eyes and later succumbing to leukemia. Other embassy personnel also developed cancer, fueling the controversy surrounding the link between microwave radiation and cancer.

A year later, the U.S. Department of State [commissioned a study](#) comparing the health outcomes of Moscow embassy staff and their families to counterparts from Eastern European cities, who were assumed to have not been subjected to the same exposure. The study found that the staff in Moscow suffered no significant ill effects from the microwave exposure.

A [2019 review](#) of the epidemiological study suggested that the original findings were toned down by the Department of State and that some key questions remain unanswered.

## **More People Likely Suffering From Microwave Syndrome Than Previously Thought**

EMF sensitivity affects an estimated [1.5 to 13.3 percent](#) of the population internationally, according to population-based surveys in various countries.

However, the actual prevalence of sensitive individuals is likely higher than expected, Cecelia Doucette, an advocate for public education about the harms of EMF, told The Epoch Times.

The rapid proliferation of wireless devices and smart appliances has significantly increased EMF exposure in people’s surroundings, amplifying the potential risks associated with this radiation, Magda Havas, who has a doctorate in environmental toxicology and is an emerita professor specializing in the health effects of electromagnetic radiation at Trent University, told The Epoch Times.

Since most of microwave syndrome's symptoms are pretty vague and common, many people may be sensitive to electromagnetic radiation emitted from wireless devices but are simply unaware of it, she added.

A 2009 [letter to the editor](#) of the Electromagnetic Biology and Medicine journal highlighted that only 0.06 percent of the Swedish population was EMF-sensitive in 1985. However, this figure rose to 9 percent in 2003, and it was estimated that by 2017, around 50 percent of the population could be affected.

[A 2019 report](#) observing more than 435,000 UK residents gave the most recent estimation of the prevalence of EMF sensitivity. The author estimated that 5 to 30 percent of the population has mild sensitivities, 1.5 to 3 percent has moderate sensitivities, and less than 1.5 percent has severe cases of sensitivity.

There has also been an increase in sensitivity following the switch from analog to smart digital meters, and the emergence of Wi-Fi in schools has raised concerns about children's cases, according to Ms. Havas. "More recently, I'm hearing that as the [5G] small cells are being erected, more people are feeling unwell in their own homes," she added.

She points to [a case study](#) published by Swedish doctors in January that revealed that participants started experiencing symptoms after their apartments' 4G antennas were replaced with 5G antennas.

"Levels of exposure were much higher, and both the number and the severity of symptoms increased dramatically with the 5G antennas," Ms. Havas said.

The severity of microwave syndrome varies from person to person. Some people can tolerate a certain level of EMF exposure, while others experience such severe adverse reactions that they are unable to use electronic devices, even those not emitting wireless radiation.

## Who Is Most Vulnerable to Microwave Syndrome?

Studies have [shown that children](#) and [women are more susceptible](#) to developing EMF sensitivity than men.

Individuals with chronic diseases, including chronic fatigue and multiple chemical sensitivity, or previous injuries or traumas, are also at a higher risk. Previous injuries can include physical incidents or intense exposures to environmental toxins such as mold, chemicals, and EMFs.

"If you have one of these kinds of diseases, you're much more likely to have others," Dr. Carpenter said.

Additionally, any form of damage to the central nervous system heightens susceptibility to radiation. This sort of damage affects people with diseases like Lyme disease, individuals taking certain medications, or those with compromised immune systems, according to Ms. Havas.

"People with multiple sclerosis, Parkinson's disease, or any kind of neurodegenerative disease typically experience worse symptoms in electromagnetically exposed environments," she added. "Conversely,

their symptoms subside to a certain degree when they are in an electromagnetically clean environment.”

## **Tips to Alleviate Microwave Sensitivity**

Some people with EMF sensitivity may experience such severe symptoms that they find it challenging to venture beyond their room or home. However, there are treatment options to help them, Dr. Elizabeth Seymour, a family medicine specialist at the Environmental Health Center in Dallas, told The Epoch Times.

### **Reduce Environmental Pollutants**

Taking measures to prevent exposure to EMFs is the initial step in addressing sensitivity. This approach helps reduce symptoms and allows the body to rest.

Here are some commonly recommended strategies, the details of which will be discussed in later parts of the series:

1. Turn off Wi-Fi, smart devices, and switch to airplane mode while sleeping.
2. Use wired connections, such as Ethernet modems, instead of Wi-Fi to connect to the internet.
3. Keep a clean living environment. EMF sensitivity can be triggered or exacerbated by factors like mold, chemical sensitivity, and heavy metal toxicity.
4. Use an EMF meter. It can identify the frequencies you are sensitive to.

### **Improve Individual Health**

Some people may need more help in restoring their bodies to a normal state. The following are actions that can help improve overall health:

1. Undergo detox therapies to address mold, chemical, and heavy metal toxicities, if present alongside EMF sensitivity.
2. Supplement with vitamin C and melatonin, Dr. Seymour suggests. These antioxidants help neutralize the oxidation EMF causes in the body.
3. Implement therapies aimed at rebalancing the immune system.
4. Get regular exercise and stay hydrated.
5. Improve dietary habits by consuming clean, wholesome food.

## **Health Issues Persist as Residents Battle Cell Tower Controversy**

Residents in Ms. Gilardi’s neighborhood, too, have been experiencing nausea, insomnia, and headaches since the installation of a nearby cell phone tower.

They began fighting to have Verizon move the tower, but it continues to operate as legal proceedings are ongoing.

Meanwhile, residents' symptoms worsened. Ms. Gilardi's daughters resorted to keeping a bedside bucket in case they vomited, while the youngest developed rashes.

"I just remember this one night when my youngest daughter said that she felt like her skin was crawling," Ms. Gilardi said. "She asked me to look at her skin, but there was nothing on her ... I went upstairs and checked her bed, her sheets ... and there was literally nothing."

Finally, in April 2021, the family members sought refuge in their century-old rundown cottage, lacking essential amenities. Despite its dilapidated state and pest problem, to Ms. Gilardi's surprise, her daughters slept peacefully the first night without requiring assistance.

"I was like, wow, it was such a marked improvement," she said.

*Next: Electromagnetic radiation, also known as electromagnetic fields or EMFs, is one of four fundamental forces of nature, along with gravity, strong nuclear force, and weak nuclear force. There is a key difference between natural EMFs and manmade wireless EMFs.*

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