Public Comment to the U.S. Department of Health and Human Services

Docket HHS-OASH-2026-0397
Re: Electromagnetic Fields, Radiofrequency Radiation, and Wireless Radiation Exposure

I am submitting this comment as a mother, a concerned citizen, and someone who has spent considerable time researching and personally measuring radiofrequency (RF) exposure.

I am deeply concerned about the increasing density of wireless infrastructure, the difficulty of avoiding exposure, the potential long-term consequences for human health, and the effects on wildlife and our natural environment. I would like HHS to investigate how environmental RF levels and exposure patterns have changed over time, including the potential implications of chronic and simultaneous exposure from multiple sources.

The Increasing Difficulty of Avoiding Exposure

Before the widespread deployment of 5G infrastructure, cellular antennas in my area were generally located on fewer, taller, more widely spaced towers. Today, wireless installations are increasingly present on water towers, hospitals, schools, utility poles, churches, and near parks, residential neighborhoods, and apartment complexes. Through my own RF measurements using the TriField TF2 EMF reader and personal observations, I have become increasingly concerned about how our exposure environment has changed.

My family experiences significant symptoms from current-day RF radiation. In the past, we could generally manage exposure and avoid locations that presented higher exposure. Today, that has become considerably harder, and we suffer for it.

Our children's educational options are affected and limited. Traveling, taking vacations, flying, and even visiting public parks can leave us feeling unwell for hours after exposure. Ordinary activities have become difficult for my family. These experiences have affected our quality of life and our ability to participate in everyday activities. Though currently I am a stay-at-home mom, I worry about my ability to participate in the workforce in the future.

I also hear reports from other people describing symptoms similar to ours. However, the difference is that I am able to directly associate our symptoms with RF exposure. Our home is located far from cellular towers, and we have eliminated wireless devices from our household. This allows us to compare how we feel in our low-exposure home environment with how we feel in locations with greater RF exposure. The difference is unmistakable. Others without the benefit of a low-exposure home environment do not have the opportunity to correlate what is making them ill. This leads me to my next point.

Cell Phones, Involuntary Exposure, and Public Awareness

Another major concern is the widespread use of cell phones and the public's limited understanding of RF radiation.

Even when my family is nowhere near an obvious cellular tower, we are surrounded by people carrying and using wireless devices. Cell phones are present in classrooms, restaurants, airplanes, stores, hospitals, churches, parks, and nearly every other public space. For families attempting to limit RF exposure, turning off our own wireless devices is no longer sufficient. We cannot control the devices operating around us. I am especially concerned that the average American may not realize how long the existing federal RF exposure limits have been in place.

However, even when individuals are aware of the potential dangers and choose to use their wireless devices around others, they may be exposing those nearby to biological risks without their knowledge or consent. I believe RF radiation is becoming the new secondhand smoke: an exposure people cannot always choose to avoid. I challenge HHS to consider this important aspect and create solutions to protect those who wish to limit their exposure.

The FCC's core RF exposure limits were established in 1996—30 years ago.

Since then, wireless technology has changed dramatically. Cell phones have become nearly universal and, in many situations, practically required. Wi-Fi has become commonplace in homes and schools, and wireless infrastructure has expanded substantially. Yet the public continues to receive generally reassuring messages about wireless safety, often without meaningful discussion of the age of existing regulatory standards, scientific studies raising concerns about RF exposure, or the symptoms exposure has been known to cause.

Even ChatGPT, a resource increasingly used by the public to understand complex subjects, may initially reassure users by emphasizing that RF radiation is “non-ionizing,” with little discussion of research documenting non-thermal biological effects. This distinction matters. Non-ionizing does not automatically mean safe.

In 2021, the U.S. Court of Appeals for the District of Columbia Circuit found that the FCC had not adequately explained its decision to retain existing exposure limits with respect to certain potential health effects unrelated to cancer.

The court directed the FCC to address issues involving children, long-term exposure, the widespread presence of wireless devices, technological developments, environmental impacts, and cell-phone compliance testing.

How many Americans know this?

How many parents understand what the existing exposure limits evaluate, or how those limits relate to chronic, real-world exposure?

Americans deserve transparent, accessible information about RF radiation, including what is known, what remains uncertain, the symptoms associated with RF exposure, and how individuals can reduce unnecessary exposure.

Public health agencies should help people make informed decisions, not leave them to spend years independently researching scientific studies and regulatory history.

Human Health and Long-Term Biological Effects

There is peer-reviewed research raising legitimate questions about the biological effects of RF radiation.

A 2025 systematic review by Mevissen and colleagues, partially funded by the World Health Organization, examined 52 laboratory animal studies and reported high-certainty evidence of increased malignant heart schwannomas and brain gliomas in male rats.

A separate 2025 study examining residents near cellular base stations in India reported associations between higher measured RF exposure and an increased prevalence of several categories of health symptoms.

Research on prenatal and early-life exposure has also raised questions about potential neurological and developmental effects.

The existing exposure standards do not sufficiently address chronic exposure, cumulative exposure patterns, vulnerable populations, or the non-thermal biological effects of RF radiation.

I urge HHS to evaluate the full body of scientific literature, including evidence that challenges existing assumptions, and to investigate unresolved questions rather than dismissing them.

Hormonal Health, Puberty, and Reproductive Development

I am also extremely concerned about the possibility that chronic RF exposure could affect the endocrine and reproductive systems.

As a mother and a woman, I believe this area deserves considerably more attention.

We are seeing concerns about early puberty, including girls beginning menstruation at very young ages, alongside questions about fertility, hormonal health, and the timing of menopause.

I understand that genetics, nutrition, environmental chemicals, metabolic health, and numerous other factors may influence these outcomes. I am not suggesting that RF exposure has been established as their cause.

However, experimental research has reported changes in certain hormone levels and hormonal regulatory pathways following RF exposure.

Much of this research involves **male** laboratory animals. These findings cannot establish how RF exposure might affect female reproductive development, menstrual cycles, ovarian function, or menopause.

That limitation should be a reason to investigate these questions directly.

I urge HHS to prioritize long-term research examining:

- The potential effects of chronic RF exposure on puberty timing and hormonal development in girls.
- Estrogen, progesterone, and the hypothalamic-pituitary-gonadal axis.
- Ovarian function, fertility, and reproductive aging.
- Potential endocrine effects during pregnancy and early childhood.

Research should include female subjects, objective hormonal measurements, carefully characterized exposure levels, and consideration of other contributing factors.

We should not have to wait until an entire generation has experienced decades of exposure before thoroughly investigating these questions.

Wildlife and Environmental Protection

My concerns extend beyond human health, although wildlife and environmental effects absolutely impact humans.

Wireless infrastructure is increasingly present in natural environments, where birds, insects, pollinators, and other wildlife have no ability to choose or avoid their exposure.

Peer-reviewed studies have reported changes in honeybee homing behavior and reduced flower visitation by bumblebees under particular RF exposure conditions.

Other experiments have demonstrated disruption of magnetic compass orientation in migratory birds exposed to certain electromagnetic frequencies.

These findings raise important questions about potential ecological effects.

Pollinators and migratory birds perform essential functions in our ecosystems. Changes in navigation, foraging, reproduction, or other behaviors may have consequences extending beyond individual animals.

A systematic evidence map published in 2023 identified hundreds of studies involving RF exposure and animals or plants, while also highlighting significant research gaps and the need for better-quality studies in natural environments.

I urge HHS to collaborate with environmental agencies and independent researchers to investigate potential ecological effects of RF exposure.

Particular consideration should be given to wildlife habitats, migration corridors, pollinator populations, conservation areas, and other natural environments.

Protecting wildlife should be an essential part of evaluating the environmental consequences of expanding wireless infrastructure.

What I Am Asking HHS to Do

I respectfully request that HHS:

1. Conduct a comprehensive, transparent review of the scientific evidence concerning RF radiation, including potential biological effects beyond tissue heating.

2. Investigate long-term and combined environmental exposure from multiple wireless sources, including cell phones, Wi-Fi, and increasingly dense cellular infrastructure.

3. Prioritize research involving children, pregnancy, female reproductive health, hormonal development, and long-term health outcomes.

4. Support independent research into potential effects on wildlife, pollinators, migratory birds, and ecosystem health.

5. Evaluate whether current exposure standards adequately address the relevant findings and remaining scientific uncertainties.

6. Provide accurate, accessible public information about RF radiation, existing regulatory standards, and practical ways individuals can reduce exposure if they choose. Safety warnings and exposure-reduction recommendations should be clearly communicated to consumers, not buried in fine print or hidden within lengthy product manuals.

7. Encourage the availability of wired technologies and meaningful reduced-exposure options in schools, healthcare facilities, and public environments.

8. Work with the Department of Justice and other appropriate agencies to establish clear protections and reasonable accommodations under the Americans with Disabilities Act (ADA)

for individuals experiencing debilitating electromagnetic sensitivity. This should include access to reduced-RF environments in schools, healthcare facilities, workplaces, and public spaces, so individuals and families are not excluded from education, medical care, employment, or everyday activities because of symptoms associated with RF exposure. Everyone deserves the right to work, learn, and live in an environment that does not compromise their health.

I am not opposed to technological progress. I am asking that technological advancement be accompanied by responsible scientific investigation, transparency, and meaningful consideration of the people and wildlife affected by its deployment. Advancement should not come at the cost of our health, and the absence of definitive evidence about every potential long-term consequence should not be mistaken for proof that those consequences are impossible.

Our children, our families, and the natural world deserve thoughtful consideration and protection as wireless technology continues to expand.

Thank you for the opportunity to voice and submit my concerns.

Sincerely,

J. Johnson

Scientific References

Human Health

1. Mevissen M, et al. (2025). *Effects of radiofrequency electromagnetic field exposure on cancer in laboratory animal studies, a systematic review.* Environment International. https://doi.org/10.1016/j.envint.2025.109482

2. Sailo L, et al. (2025). *Greater prevalence of symptoms associated with higher exposures to mobile phone base stations in a hilly, densely populated city in Mizoram, India.* Electromagnetic Biology and Medicine. https://doi.org/10.1080/15368378.2025.2513900

3. Ezgin N. (2026). *Prenatal and Early-Life Exposure to Electromagnetic Fields: Impacts on Neurodevelopment and Behavior.* Current Approaches in Psychiatry. https://doi.org/10.18863/pgy.1851473

4. *The Effect of 2.45 GHz Radiofrequency Electromagnetic Radiation on Components of the Hypothalamic-Pituitary-Gonadal Axis in Male Rats.* (2026). https://pubmed.ncbi.nlm.nih.gov/42196560/

5. *Effects of 900 MHz electromagnetic field on TSH and thyroid hormones in rats.* (2005). https://pubmed.ncbi.nlm.nih.gov/15917150/

Environmental Exposure

6. Thielens A, et al. (2026). *Urban Radio-Frequency Electromagnetic Field Exposure in New York City.* Environmental Research. https://doi.org/10.1016/j.envres.2026.125040

Wildlife and Ecology

7. Treder M, et al. (2023). *Defined exposure of honey bee colonies to simulated radiofrequency electromagnetic fields (RF-EMF): Negative effects on the homing ability, but not on brood development or longevity.* Science of the Total Environment. https://doi.org/10.1016/j.scitotenv.2023.165211

8. *Radiofrequency electromagnetic fields reduce bumble bee visitation to flowers.* (2025). Environmental Pollution. https://pubmed.ncbi.nlm.nih.gov/40669659/

9. Engels S, et al. (2014). *Anthropogenic electromagnetic noise disrupts magnetic compass orientation in a migratory bird.* Nature. https://doi.org/10.1038/nature13290

10. *What evidence exists on the impact of anthropogenic radiofrequency electromagnetic fields on animals and plants in the environment: a systematic map.* (2023). Environmental Evidence. https://doi.org/10.1186/s13750-023-00304-3

Regulatory and Legal References

11. Federal Communications Commission. (1996). *Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation.* FCC 96-326. https://docs.fcc.gov/public/attachments/FCC-96-326A1.pdf

12. *Environmental Health Trust v. Federal Communications Commission.* (2021). U.S. Court of Appeals for the D.C. Circuit. https://law.justia.com/cases/federal/appellate-courts/cadc/20-1025/20-1025-2021-08-13.html