Protect Our Children First: Urgent Call for Updated, Science-Based Wireless Radiation Safety Standards

To: Federal Communications Commission (FCC) and U.S. Department of Health and Human Services (HHS)

My name is Zen Honeycutt, and I am the Founder and Executive Director of Moms Across America, a national educational nonprofit organization dedicated to empowering mothers and families to create healthy, non-toxic environments for our children.

On behalf of Moms Across America, I am calling upon the Federal Communications Commission (FCC), in coordination with the Department of Health and Human Services (HHS), to undertake an immediate, comprehensive, and transparent reassessment of federal radiofrequency (RF) radiation exposure standards, with particular attention to children's developing bodies, long-term exposures, and potential biological effects beyond tissue heating.

The FCC's current RF exposure limits were adopted in 1996 and subsequently retained. Although these standards address established adverse effects associated with RF exposure, they have not been comprehensively revised to reflect the enormous changes in wireless technology and patterns of human exposure over the past three decades.

Today, children routinely encounter wireless devices in classrooms, homes, and public spaces. They may experience exposures from multiple sources over many years, beginning during prenatal development.

The fact is that close and constant exposure, such as routers in homes, wireless access points in schools, and hot spots in hospitals, causes harm to human health.

We believe this exposure environment warrants renewed scientific scrutiny, independent research, and reasonable precautionary protections.

The federal courts have already recognized the need for greater accountability.

In *Environmental Health Trust et al. v. FCC* (2021), the U.S. Court of Appeals for the D.C. Circuit found that the FCC had not adequately explained its decision to retain existing RF exposure guidelines with respect to potential harmful effects unrelated to cancer.

The court directed the FCC to address several important issues, including:

- Potential effects of RF exposure on children
- Pulse variations and possible changes which could reduce harm
- Health implications of long-term exposure
- The widespread use of wireless devices and technological developments

- The adequacy of existing device-testing procedures
- Potential environmental impacts on trees, animals, aquatic life, and insects

This decision provides a compelling legal and public-health basis for renewed review of existing federal protections.

1. Children Deserve Special Consideration

Children are not simply smaller adults. Their anatomy, physiology, and developmental stages differ from those of adults, and these differences are relevant to evaluating environmental exposures.

Dosimetric studies, including research by Gandhi and colleagues, have examined how RF energy absorption can differ between children and adults. Some models have identified higher localized absorption in particular tissues under specified exposure conditions.

Although the magnitude of these differences varies by age, frequency, anatomy, and device configuration, these findings support careful evaluation of whether existing exposure assessments adequately account for children.

Research examining associations between RF exposure and children's neurological development has produced mixed findings. For example, Guxens and colleagues (2016) reported inconsistent associations between residential and personal RF exposure sources and cognitive outcomes in young children.

Rather than dismissing these findings or treating them as definitive evidence of harm, federal agencies should prioritize rigorous, long-term research focused on developmental outcomes, including cognition, attention, sleep, and neurological health.

2. Animal Research Raises Important Questions About Cancer and Biological Effects

The National Toxicology Program (NTP), part of the National Institutes of Health, conducted an extensive research program examining the effects of RF radiation in laboratory animals.

In its 2018 findings, the NTP reported:

- **Clear evidence** of an association between RF exposure and malignant heart schwannomas in male rats
- **Some evidence** of an association with malignant brain gliomas in male rats
- Additional findings involving other tissues and biological endpoints

These findings are significant and deserve continued scientific examination.

Importantly, the NTP experiments involved relatively high, controlled whole-body exposures and technologies representative of earlier generations of cellular communication. The findings cannot be directly translated into estimates of cancer risk from ordinary human wireless-device use.

Nevertheless, they demonstrate why carefully designed experimental research remains important.

Independent research conducted by the Ramazzini Institute in Italy also reported findings involving heart schwannomas in rats exposed to simulated environmental RF emissions. Differences in study design, exposure levels, and statistical findings must be considered when interpreting the results.

We recognize that epidemiological evidence has not consistently demonstrated increased cancer risks associated with mobile phone use. A 2024 systematic review conducted as part of the World Health Organization's RF health assessment found that mobile phone exposure likely does not increase the risk of several investigated brain tumors.

However, uncertainties remain regarding some exposure patterns, biological mechanisms, and long-term outcomes. We urge federal agencies to evaluate the full body of evidence, including animal experiments, epidemiological research, and mechanistic studies, rather than relying on any single category of evidence.

3. Potential Non-Thermal Biological Effects Require Continued Investigation

The potential biological effects of RF radiation at exposure levels that do not produce substantial tissue heating remain an important area of scientific investigation.

A review by Yakymenko and colleagues, published online in 2015, examined 100 studies involving oxidative effects of low-intensity RF exposure and reported that 93 identified oxidative effects in their experimental systems.

Oxidative stress is biologically relevant because excessive production of reactive oxygen species can contribute to cellular damage under certain conditions.

However, findings of oxidative changes in laboratory experiments do not, by themselves, establish adverse health effects in humans at typical environmental exposure levels.

Other researchers have examined possible neurological, cellular, and reproductive effects, with findings that vary across studies and experimental methods.

Moms Across America urges federal agencies to commission independent, reproducible investigations into these potential mechanisms and evaluate their relevance to real-world human exposures.

4. Reported Symptoms and Environmental Exposure Concerns Deserve Respectful Investigation

Moms Across America hears from families concerned about headaches, sleep disturbances, difficulty concentrating, and other symptoms that they associate with wireless technologies in their homes and schools.

Multiple reports of increased mold exposure due to wireless radiation exposure well explain the increase of mold in our homes and schools, causing lifelong psychological effects that rob our children and family members of their well-being and potential.

These reports deserve to be heard and evaluated respectfully.

We recognize that controlled research has not established that ordinary RF exposure causes the collection of symptoms commonly described as electromagnetic hypersensitivity (EHS). Nevertheless, the symptoms experienced by affected individuals may be significant and warrant appropriate medical evaluation.

We urge HHS to support well-designed research that objectively measures environmental exposures, evaluates potential contributing factors, and investigates reported health outcomes without prematurely assuming or dismissing a particular cause.

5. Reproductive and Prenatal Health Warrant Further Study

Reproductive health and fetal development are especially important concerns for mothers and families.

A 2014 systematic review and meta-analysis by Adams and colleagues reported an association between mobile phone exposure and reduced sperm motility, with less certain findings for some other sperm-quality measures.

Additional experimental studies have examined possible effects of RF exposure on reproductive cells and developing organisms.

For example, Aldad and colleagues (2012) reported behavioral and neurophysiological changes in mice exposed to cellular-phone RF radiation during gestation. The exposed offspring demonstrated increased activity and impaired performance on certain memory tests.

A study by Hairulazam et al. shows a concerning impact of wireless radiation on sperm count, which has halved in the past two generations, and is a major contributing factor to the decline in fertility as described in Dr. Shawna Swann’s book, Countdown.

These animal findings raise research questions but do not establish that comparable effects occur in human pregnancies.

Given the importance of reproductive and developmental health, we believe continued independent investigation is warranted.

Moms Across America Calls for Immediate Federal Action

1. Conduct a comprehensive review of RF exposure standards.

The FCC, working with HHS and appropriate independent scientific experts, should reassess existing RF exposure guidelines using current scientific evidence, including research involving non-thermal biological effects, pulse variations, chronic exposure, and potentially vulnerable populations.

Where reliable evidence demonstrates risks not adequately addressed by current standards, the FCC should revise its limits accordingly.

2. Establish special safeguards for children.

Federal agencies should evaluate whether additional protections are warranted for schools, childcare facilities, playgrounds, and other environments where children spend substantial time.

We advocate precautionary siting policies for wireless infrastructure near schools and childcare facilities, informed by objective exposure measurements, independent scientific review, and meaningful community input.

3. Prioritize hardwired infrastructure where practical.

Schools and public institutions should be encouraged to use books and paper as much as possible - and when electronics are necessary, use fiber-optic and wired Ethernet connections where practical, particularly for stationary computers and classroom equipment.

Families and schools should have access to reliable information about options for reducing unnecessary wireless exposure without compromising educational access or essential communications.

4. Modernize device-testing and disclosure requirements.

The FCC should reevaluate whether current compliance-testing procedures adequately reflect foreseeable real-world device use, including direct contact with the body.

We request an assessment of zero-millimeter separation testing, improved consumer disclosures, and transparent reporting of testing assumptions and results.

5. Fund independent research and improve public transparency.

HHS should coordinate a research agenda that prioritizes long-term developmental outcomes, reproductive health, cumulative exposure assessment, and replication of significant experimental findings.

Research should include clear conflict-of-interest safeguards and publicly accessible methods and results.

6. Provide a public response and implementation timeline.

We request that the FCC and HHS publicly identify the steps they will take to review current scientific evidence, address the issues raised by the D.C. Circuit, and determine whether additional safeguards are warranted.

We also request a transparent timeline for this review and opportunities for meaningful public participation.

Our Children Deserve Responsible, Science-Based Protection

Motherhood calls us to protect children from preventable harm while demanding the highest standards of scientific integrity.

We recognize the important benefits of wireless communications. However, technological convenience should not prevent federal agencies from periodically reassessing exposure standards as technologies, scientific knowledge, and patterns of use evolve.

Moms Across America calls upon the FCC and HHS to fulfill their public responsibilities through independent scientific review, transparent decision-making, and prudent protections for children and future generations.

We should not have to wait for definitive evidence of irreversible harm before examining whether reasonable, practical safeguards are warranted.

Respectfully submitted,

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Moms Across America
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