



A 1981 report prepared for NASA had already warned of adverse effects from microwave radiation.
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[Mind & Body](#)

Lawsuits Fight to Change Federal Wireless Safety Standards

Groups hope to force FCC to recognize science warning of health hazards linked to wireless radiation

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Microwave radiation can cook your food, but it also carries your calls, texts, and wireless data. Regulators set [strict guidelines on microwave ovens to prevent exposure to dangerous radiation leaks](#), but critics say the lax standards applied to wireless devices are the result of undue industry influence over the Federal Communications Commission (FCC).

According to the FCC, the dividing line between safe and unsafe exposure is basically a matter of heat. If that radiation can produce a thermal effect, like burn us, it is dangerous. The FCC does not recognize other biological impacts of microwave radiation on our bodies.

But research has found the microwave radiation from our wireless networks and devices has impacts ranging from lack of sleep to affecting the expression of DNA. Meanwhile, the FCC has avoided officially recognizing these effects while paving the way for a massive increase in our environmental exposure to microwave radiation through the rollout of [5G](#).

Outdated Standards

The FCC set its current radiation safety standard 24 years ago, with The Telecommunications Act of 1996, years before smartphones, Wi-Fi, and cell tower transmitters began to saturate our environment with radiofrequency (RF) radiation.

However, since 1996 government and other studies have shown clear evidence of harm from microwaves below the thermal threshold and many people suffer from illness resulting from sub-thermal exposure.

Before those standards were even set, a 1981 report prepared for NASA had already warned of adverse effects from microwave radiation. In the decades since the standards were set, numerous studies and reviews of those studies have identified biological effects that have nothing to do with the thermal threshold.

And much of that research was not looking at the more severe real-world impacts of that radiation, warned Ronald N. Kostoff, a research affiliate at the Georgia Institute of Technology's School of Public Policy. In his 2019 paper, "[Adverse effects of Wireless Radiation](#)."

"Most of the laboratory experiments that have been performed are not designed to elicit the more severe adverse effects reflective of the real-life operating environment in which wireless radiation is embedded," wrote Kostoff. His paper referenced dozens of studies that present adverse effects. He warned, "what has been reported is the tip of the iceberg of the full spectrum of potential adverse effects from wireless radiation."

[Hundreds of scientists](#) have already warned of widespread health problems related to current levels of wireless exposure and warn that current guidelines are not based on studies of long-term exposure. And many scientists worry that the next chapter, known as 5G, which uses higher frequency and requires far more towers, may have [devastating effects on public health and the environment, with studies showing both plants and animals are affected](#).

While findings are well-documented, regulators have been unmoved. Meanwhile, entire industries are counting on 5G—and lobbying accordingly—to create new product categories and services, ushering in a wild-west of potential new business models.

Blockade of 5G

That gold rush could be challenged by two new lawsuits that urge the FCC to reevaluate the thermal threshold safety premise.

One case is led by the [Environmental Health Trust \(EHT\)](#), a science-based think tank that has pushed for years for stricter regulations on wireless technology. EHT president Devra Davis, Ph.D., MPH says FCC’s refusal to reconsider their safety standards ignores mounting evidence of harm. “The FCC dares to propose that these outdated standards can safely be applied to 5G, a technology that did not even exist two decades ago,” Davis said in an EHT statement.

Despite the longevity of the safety standard, several scientists have cast doubt on it since its inception. Research from thousands of studies, including several from the U.S. military, revealed harm without heat. One study by Dr. Dominique Belpomme, a professor of medical oncology at Paris University, examined 700 people suffering from [electromagnetic sensitivity \(ES\)](#) and one quarter showed evidence of a broken blood-brain barrier—a hallmark of microwave exposure.

An Opportunity to Sue

The other lawsuit challenging the federal safety standard is led by [Children’s Health Defense \(CHD\)](#)—a non-profit dedicated to ending children’s chronic health conditions by eliminating harmful toxic exposures. Dafna Tachover recently joined CHD as its lead attorney and is the founder of [We are the Evidence](#)—an advocacy group dedicated to protecting those who have been injured by wireless radiation.

Tachover said it was previously impossible to sue the FCC.

“I wasn’t suing the FCC because I could not sue the FCC. There are very few ways in which you can sue the government, and I’ve been through all of them, and I couldn’t find a loophole,” she said.

The potential for a loophole opened in 2012, when the General Accountability Office (GAO) issued a [report](#) recommending that the FCC reevaluate its wireless regulations. In 2013, FCC responded with Docket [13-84](#) asking for public comment on whether a review was actually needed.

But Tachover says the docket was less of an invitation for discussion, and more of a strategy to avoid the question. Typically when a government agency opens a docket, it closes it after a month or two so the agency can consider the commentary it receives. But Docket 13-84 stayed open for six years and grew to over a thousand comments.

For the FCC, it was a way to avoid facing the GAO’s recommendation, and in the six years since, 5G towers have proliferated.

“Clearly it opened it just because it had to,” Tachover said. “It had to keep it open if it wanted to proliferate wireless technology and 5G. But if they had to review the evidence they would find they couldn’t proliferate this technology.”

The docket may have stayed open for several more years if it wasn’t for [several lawsuits](#) complaining about the installation of 5G infrastructure. Compared to previous wireless generations (3G and 4G), 5G requires a lot more equipment.

This includes thousands of new satellites and large cell towers as well as many black cylinders known as “small cells” that keep the 5G signal strong so devices can easily connect to the new network. Thousands of small cells

have already been mounted on utility poles all over the country ahead of the 5G rollout. Plans are in place to erect millions more over the next few years.

Shared Interests?

Regulators and the telecommunications industry are eager to see 5G up and running as soon as possible. To speed up the small cell build-out, the FCC enacted installation rules for states to follow, but [resistance was strong](#). At least 24 cities and counties sued the Commission because they were losing out on contracting fees. They were also forced to review applications to deploy the new devices in an unreasonably short period of time.

To avoid most of the state legal battles, FCC passed a regulation that took away the right to protest placement of small cells. But that strategy hit a snag with [Maryland's Montgomery County](#). What made Montgomery's lawsuit unique from the other suits is that it also addressed the issue of health effects that might be caused by small cells because they are often placed in close proximity to homes, schools, and businesses.

Section 704 of the 1996 Telecommunications Act says that local governments cannot deny the placement of cell towers due to health or environmental concerns, because the frequency they generate is already deemed safe.

But the Montgomery lawsuit stated that it was unreasonable for the Commission to extend the health regulations to 5G small cells when it still had an open docket that asked whether they should review their guidelines. The FCC closed their docket just a few days before the hearing and concluded that no update was necessary. In an [over 100 page](#) report from Dec. 4, 2019, the Commission stated that their 24-year-old standard was sufficient to ensure public safety, even with 5G.

“After reviewing the extensive record submitted in response to that inquiry, we find no appropriate basis for and thus decline to propose amendments to our existing limits at this time,” states the report. “We take our duty to protect the public from any potential harm due to RF exposure seriously.”

The move effectively ended the Montgomery County lawsuit without having to go to court, but it left the agency vulnerable to new legal attacks, if only for a short time.

Tachover explains that when a government agency closes a docket and publishes its order in the Federal Register, you have only 60 days to submit a lawsuit. “That’s it,” she said. “You have one very short window. If you don’t take it, you lose it, and we would not be able to challenge it again.”

Tachover hired attorney Scott McCollough to represent the CHD case. McCollough has been working in telecommunications for the past 35 years, but he says this case opened his eyes to a whole new side of the industry.

“I know the wireless industry. I know how wireless networks operate. I knew there were emissions requirements. But I never knew there were health concerns,” McCollough said.

The idea may be hidden by design. In researching the case, McCollough found evidence of a concerted effort to silence any concerns that might suggest that the frequency currently used to carry wireless communications could be harmful to health.

“It looks like there has been an alliance between aspects of the federal bureaucracy, perhaps military, and the wireless industry going as far back since we’ve had mobile service to play keep away with any real ability to deal with serious health concerns,” McCollough said.

“It’s much like they did with asbestos, and similar to the way it went down with tobacco. They’re just using every trick in the book.”

In 2016, the National Toxicology Program (NTP) released a report from its 10-year, \$25 million study funded by the Food and Drug Administration (FDA)—a study explicitly designed to be the final word in deciding whether wireless radiation exposure caused harm.

The study examined the health impacts of cell phones used in close proximity to rodents. In the initial report, researchers stated that the microwave field these devices produced were “proven to be harmful to humans and the environment.” Effects include increased cancer risk, a rise in harmful free radicals, genetic damage, structural and functional changes to the reproductive system, learning and memory deficits, neurological disorders, and a negative impact on general well-being.

However, after all that money and time spent to find an answer, the FDA concluded that the NTP study wasn’t sufficient to change safety standards because the research didn’t show adverse effects to humans, only rodents. The FCC followed suit.

“NTP’s findings should not be applied to human cell phone usage, the available scientific evidence to date does not support adverse health effects in humans due to exposures at or under current limits,” states the FCC report. “NTP has not suggested in its findings what this research may mean relative to human beings, including anything that would help to indicate appropriate exposure levels, and its research work is ongoing at this time.”

McCollough says regulators refuse to recognize problematic research in order to alleviate themselves of the burden of proof.

Sick from Wireless

It may seem hard to fathom that wireless exposure could really be so harmful. After all, virtually everyone carries a cell phone these days, and Wi-Fi, cell towers, smart meters, and other RF radiation-emitting equipment are found nearly everywhere. We’re literally bathing in microwave radiation 24/7, so how bad could it be?

But just as not everyone develops cancer from smoking, not everyone gets sick from microwave or EMF radiation.

Some people, however, [are more affected](#). Those with [Electromagnetic Sensitivity \(ES\)](#)— a condition recognized by the International Code of Diseases, can actually feel [wireless devices and transmitters](#). They show biochemical reactions, including lower melatonin levels which may explain their trouble sleeping. ES is virtually identical to what the U.S. Navy dubbed “microwave sickness,” a condition suffered by soldiers who had been working with technologies such as radar for extended periods of time.

ES is a spectrum condition where some experience manageable symptoms, while others endure debilitating effects. Symptoms include headaches, tingling in the hands, difficulty sleeping, cognitive and memory

problems, heart palpitations, fatigue, persistent flu-like symptoms, skin rashes, auditory effects, nausea, noise sensitivity, nosebleeds, and more.

Petitioners who are part of the CHD case include parents of children who have contracted ES, and doctors who regularly see evidence of harm in patients exposed to wireless fields.

The official position of the FCC is that there are no harms caused by subthermal exposure. But the Americans with Disabilities Act (ADA) recognizes ES as a legitimate disease. The Access Board (the government agency that instructs how to accommodate people with disabilities in federal buildings) has since the early 2000s considered making standards to accommodate those who suffer from ES.

A 2005 [report](#) contracted by the Access Board determined that, “People with electromagnetic sensitivities can experience debilitating reactions... from electromagnetic fields emitted by computers, cell phones...” and “...public and commercial buildings are required to provide reasonable accommodations for those disabled by electromagnetic sensitivities.”

But even 15 years later, rules for accommodation have never materialized.

“They acknowledge that it exists, they say they’re going to come up with some standards, but they never do,” McCollough said.

Environmental Safety Standards

The U.S. Environmental Protection Agency (EPA) began the process of finding environmentally related standards back in 1996, but McCollough said Congress shut down the project before it was completed.

“They took away all the money they were using to do it. It was about the same time they made the 1996 revisions to the Communications Act,” McCollough said.

The Epoch Times sent the FCC a list of questions for this report and followed up, giving the regulator over a month to respond:

Does the FCC contend that the current standards are safe for everyone, including those who have medical proof of sickness caused by wireless radiation? Have standards not been updated simply because the science has not yet been strong enough?? If so, what sort of evidence would be necessary to enact an update?

No response was given.

In its December 2019 report, the FCC did address the proposal for safer limits recommended by the [Bio-Initiative Report](#), an extensive review of the science of harms caused by wireless exposure often cited in the comments for Docket 13-84. The report looks at 3,200 studies on the effects of non-thermal levels of RF radiation.

Regulators say the Bio-Initiative Report specifies impossibly low limits for RF exposure that are “millions to billions times more restrictive than FCC limits.” Adding that, “No device could reliably transmit any usable level of energy by today’s technological standards while meeting those limits. Further, there is no scientific

evidence in the record that such restrictive limits would produce any tangible benefit to human health, or provide any improvement over current protections against established risks.”

Status of Law Suits

It’s not clear when petitioners of either suit will see their day in court, or which court will hear the cases. EHT was the first to submit their case to the DC Circuit Court. CHD submitted their case a few days later to the Ninth Circuit in California. The FCC submitted a motion to consolidate the cases, but CHD filed a motion to block it.

Tachover explains that all this legal wrangling is the FCC’s attempt to get the cases thrown out on a technicality. Whenever a government agency issues an order or rule, it only goes into effect after they publish it to the Federal Register. However, when the FCC released their December 2019 report, it did not publish it. Tachover says it’s all part of the strategy to avoid litigation.

“What they planned is to dismiss these cases by not publishing in the Federal Register, and claim that the cases are premature,” Tachover said. “So we submitted a motion saying that the courts should force the FCC to say whether or not the decision on this issue should be published in the Federal Register. The FCC responded that they did submit the documents to the Federal Register, but they sent it only after we demanded that it be done. It’s all very evil and purposeful.”

McCollough says the case is extremely important, but a win still won’t bring the ultimate solution petitioners seek.

“What really needs to happen is for Congress, FDA, OSHA, and EPA to come up with reasonable, sufficiently protective standards. The standards were truly about health effects, to begin with,” he said. “Or else what sadly is going to happen is all of a sudden we’re going to have some really big outbreak where it becomes just painfully evident that when the small cells go up, people nearby all of a sudden start getting sick.”

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