



P.O. Box 233, Richmond, ME 04357 www.fomb.org

**Further Testimony in Support of LD 878
Ed Friedman, Chair, Friends of Merrymeeting Bay (FOMB) via Electronic Filing 3/26/25**

Resolve, to Study the Effects of 5G Technology on Bird, Bee and Insect Populations and the Effects of Long-term Exposure on Children

Senator Lawrence, Representative Sachs & members of the EUT Committee,

Continuing in support of LD 878, FOMB brings to your attention the following two recently published papers one from 2023 and the other, February of this year.

Davis D, Birnbaum L, Ben-Ishai P, Taylor H, Sears M, Butler T, Scarato T. [Wireless technologies, non-ionizing electromagnetic fields and children: Identifying and reducing health risks](#). *Curr Probl Pediatr Adolesc Health Care*. 2023 Mar 16:101374. doi: 10.1016/j.cppeds.2023.101374. PMID: 36935315.

Thank you,
Ed Friedman, Chair

The paper includes sections on:

1. The science documenting children's unique vulnerability
2. Scientific evidence indicating a myriad of adverse effects at levels compliant with FCC and ICNIRP
3. How FCC and ICNIRP limits are inadequate.
4. International policies to reduce children's exposure and mitigate risk
5. Medical and public health organization actions
6. Recommendations on how to reduce exposure in homes, schools and hospitals
7. Recommendations for clinicians and medical organizations.

It makes the case for protecting children.

New Scientific Paper on Wireless and Children's Health: Renowned Experts Call for Physicians to Address Family Wireless Exposures as Part of Well-Child Visits

New comprehensive paper links wireless radiation exposures to cancer and impacts on brain development, memory and reproduction. Prevention includes reducing exposure.

— A state-of-the-art assessment on the scientific evidence of wireless radiation impacts on children's health published in the journal *Current Problems in Pediatric and Adolescent Health Care* concludes that the medical community has a critical role to play to prevent harm from wireless radiation. "[Wireless Technologies, Non-ionizing Electromagnetic Fields and Children: Identifying and Reducing Health Risks](#)" is written by distinguished experts in medicine, epidemiology, toxicology, physics, biochemical engineering and public health who collectively have published more than 1,000 papers.

The paper references numerous studies that associate wireless exposure to effects including oxidative stress, DNA damage, cardiomyopathy, carcinogenicity, sperm damage, memory damage and neurological effects. The American Academy of Pediatrics has long [advocated](#) for U.S. government regulations to be updated to address children's vulnerability. Pregnancy, infancy and childhood are periods of critical susceptibility, especially for the brain, which is rapidly developing.

“Current government safety limits are outdated and do not reflect the latest science nor the way children use wireless technology today,” stated [Linda Birnbaum Ph.D.](#), former Director of the National Toxicology Program and National Institute for Environmental Health Sciences, regarding this critical examination of experimental and epidemiological evidence.

“We highly recommend educating parents on why and how to reduce wireless radiation exposures, *especially during pregnancy*,” stated [Hugh Taylor MD](#), Professor and Chair of the Department of Obstetrics and Gynecology at Yale University, whose [research](#) has found increased hyperactivity and damage to memory in mice prenatally exposed to cell phone radiation.

“The science indicates that wireless radiation acts like a classic endocrine disruptor,” stated [Devra Davis Ph.D., M.P.H.](#), founder and former president of [Environmental Health Trust](#), pointing to “substantial evidence” linking wireless exposures to impaired memory, behavior, fertility and brain development, as well as cancer and neurological illness.

Noting that human exposure limits for wireless radiation have not been updated for more than two decades, the distinguished authors recommend policies that reduce wireless exposures. The paper details how clinicians can integrate a preventive approach into their clinical practice by educating patients and families on simple measures to minimize exposure. It also offers specific measures to reduce exposure in schools and steps for professional medical and public health organizations to take to educate and motivate their members to advocate for more protective regulations.

The American Academy of Pediatrics recommends parents minimize their children’s cell phone use with [ten tips for families](#) which includes distancing the cell phone from the brain and body, and when watching videos on a device parents can pre-download movies and then turn the wireless antennas off before handing the device to the child, “in order to avoid unnecessary radiation exposure.”

Other U.S. public health entities’ recommendations to reduce children’s exposures include [the California Department of Public Health cell phone advisory](#) and the Maryland State Children’s Environmental Health and Protection Advisory Council [guidelines to reduce wireless radiation at home and school](#).

Theodora Scarato, Executive Director of [Environmental Health Trust](#), highlights the [international policies](#) to reduce children's exposure, such as France and Belgium's bans on the sale of cell phones designed for young children and the numerous countries that have restrictions on Wi-Fi exposure in classrooms. She states that, “US government limits allow radiation emissions 10 to 100 times higher than numerous countries such as Switzerland, Italy, China, Russia and India. Many countries have more stringent laws to protect children and restrict cell towers near homes and schools.”

The Environmental Health Trust has a website dedicated to educating parents and caretakers on how to reduce children's wireless radiation exposure at [healthytechhome.org](#) as well as [a campaign to elevate the issue](#) at the federal level.

"Decades of research on the biological effects of microwave radiofrequency radiation (RFR) provide clear evidence of a variety of risks to the health and well-being of adults and, particularly, children from everyday, low-level exposure to wireless devices such as smartphones, tablets, laptops, and other WiFi-enabled wireless electronics. [My research](#) demonstrates how the FCC and the ICNIRP placed the needs of the ICT industry above the protection of children. Parents, clinicians and policymakers have been lulled into a false sense of security about the safety of childhood RFR exposure." stated Tom Butler PhD, Professor of Information Systems at University College Cork and former satellite and microwave telecommunications engineer.

“A false presumption that wireless radiation is only harmful when tissue is over-heated has blocked progress in health protection in many (but not all) countries for decades. One mechanism that initiates harms, including cancers, is well known by chemical engineers and commercialized as ‘microwave catalysis,’” stated Meg Sears Ph.D., Chair of [Prevent Cancer Now](#), and Research Associate at the Ottawa Hospital Research Institute

(Canada). Sears works in environmental health, following studies in biochemical engineering and applied chemistry.

“Non ionizing radiation can have impacts at the cellular level that include impacts on cell homeostasis, on mitochondrial processes critical to cellular energy and metabolism. The assumption that only ionizing radiation can cause harm is outdated and incorrect,” stated Paul Ben Ishai Ph.D of the Department of Physics, Ariel University, Ariel, Israel, head of the laboratory of Terahertz Dielectric Spectroscopy.

The second paper, hot off the press is [Safety of Wireless Technologies: The Scientific View](#). February 2025
DOI:[10.13140/RG.2.2.18625.06242](#)

The authors, Lear and Reese write:

In 1971, the U.S. Navy reviewed the global science on microwave radiation from wireless signals. Lt. Colonel. Zorach Glaser, PhD documented the global science in the meta-study, [“Reported Biological Phenomena \(Effects\) and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation”](#).² Glaser found 2,311 studies that link low-intensity microwave signals and other EMR with biological impacts. The paper cites 132 different biological effects, symptoms and diseases associated with wireless exposures. The majority of studies examined microwave signals in the 1 to 4 gigahertz (GHz) range at low intensities. These types of wireless exposures are virtually identical with those from modern devices and wireless sources such as cell phones, WiFi, Bluetooth, smart meters, GPS, wearables, and wireless infrastructure

“Of the 36 chronic diseases and conditions that more than doubled (1990-2015), the U.S. Navy study warned us of the connection between wireless radiation and twenty-three of those chronic diseases, predicting what has indeed happened to the health of Americans.” “By ignoring the earlier science, U.S. regulators failed to protect the American people from the dangers of wireless technologies. In doing so, they imposed millions of unnecessary chronic exposure conditions on the American public. By 2015, the 23 diseases the U.S. Navy predicted may have added more than \$2 trillion in annual health care costs to the U.S. economy due to their negligence.”

.

Ed Friedman
Friends of Merrymeeting Bay
LD 878
LD 878 Testimony Part 2