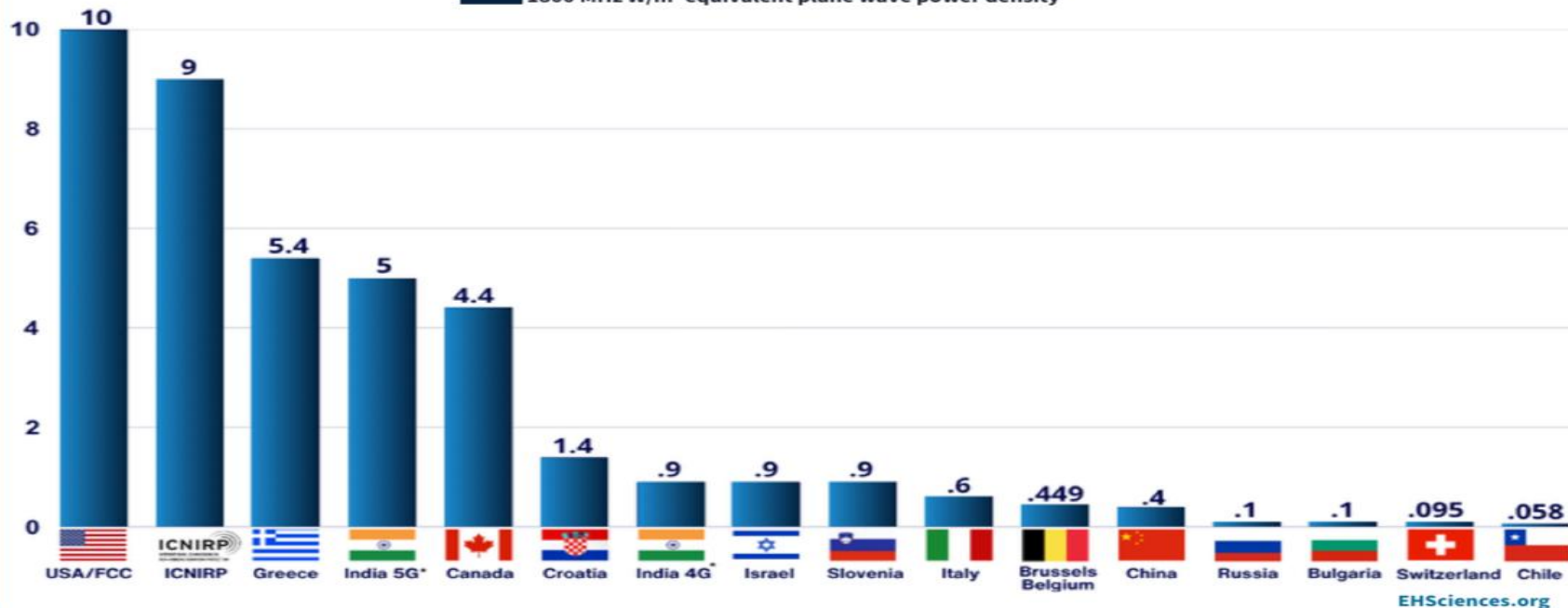


Alison Despathy, Danville VT
Vermonters for a Clean Environment
Community and Environmental Health Director
Senate Finance Committee
Testimony H.527
May 5, 2026

COUNTRY COMPARISON OF WIRELESS RF RADIATION LIMITS

for Ambient Exposures That Apply to Schools and/or Homes (1800 MHz)
Environmental Sources: Cell Towers, Wi-Fi Networks, Cell Antennas

■ 1800 MHz W/m² equivalent plane wave power density



Wireless and EMF Program
Environmental Health Sciences

RESEARCH
Science and Policy
BRIEF

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued January 25, 2021

Decided August 13, 2021

No. 20-1025

ENVIRONMENTAL HEALTH TRUST, ET AL.,
PETITIONERS

v.

FEDERAL COMMUNICATIONS COMMISSION AND UNITED
STATES OF AMERICA,
RESPONDENTS

Consolidated with 20-1138

On Petitions for Review of an Order
of the Federal Communications Commission

W. Scott McCollough argued the cause for petitioners.
With him on the joint briefs were *Edward B. Myers* and *Robert F. Kennedy, Jr.*

Sharon Buccino was on the brief for *amici curiae* Natural Resources Defense Council and Local Elected Officials in support of petitioners.

On August 13, 2021

[Environmental Health Trust](#)

(EHT) won a landmark case

resulting in a federal court

ordering the Federal

Communications Commission

(FCC) to explain why it ignored

scientific evidence showing harm

from wireless radiation.

[Environmental Health Trust et al v. FCC](#)

The National Institute of Environmental Health Sciences also published the [National Toxicology Program \(2\)](#) study which assessed tumors and heart damage in rats due to radiofrequency radiation. They concluded that the FCC limits should be strengthened up to 200-400 times the current level in order to protect children.

[National Toxicology Program- NIH](#)



New Hampshire Commission on 5G, Health and Environment 2020 Final Report of Majority

15 recommendations to the state to
protect the public after a year of
investigation

- Reduce exposure to the public.
- 1,600 foot setbacks for cell towers from schools and homes
- Address lack of accountability in federal government.

Final Report of the

**Commission to Study
The Environmental and Health Effects of
Evolving 5G Technology**

(HB 522, Chapter 260, Laws of 2019, RSA 12-K:12-14)

Membership

<u>Name</u>	<u>Organization/Representing</u>
Rep. Patrick Abrami (Chair)	NH House of Representatives
Rep. Kenneth Wells	NH House of Representatives
Rep. Gary Woods	NH House of Representatives
Sen. James Gray	NH Senate
Sen. Tom Sherman	NH Senate
Denise Ricciardi	Public
Brandon Garod, Esq.	Attorney General's Office
Carol Miller	Department of Business and Economic /
David Juvet	Business and Industry Association
Kent Chamberlin, PhD	University of New Hampshire
Bethanne Cooley	CTIA – wireless communications industr
Michele Roberge	Department of Health and Human Servi
Paul Héroux, PhD	McGill University Medicine

November 1, 2020

[NH Final Report of the Commission to study the environmental and health effects of evolving 5g technology](#)

In 2000, the Ecolog Institute Report
commissioned by T-Mobile
recommended an exposure limit 1,000
times lower than the FCC's current
power density limit.

[Mobile Telecommunications and Health ECOLOG-
Institut 2000](#)

Dr. Henry Lai has compiled studies on non-ionizing electromagnetic fields (EMF), including RF radiation since 1990 and found the majority reported significant effects. As of May 2025, his review—posted on Dr. Joel Moskowitz’ SaferEMR site –: Ph.D., School of Public Health at the University of California, [Welcome to EMR Safety - Electromagnetic Radiation Safety](#)

89% of 407 oxidative stress studies since 1997 show harm.

72% of 511 genetic studies since 1990 found effects.

78% of 480 neurological studies since 2007 found harm.

85% of 380 reproductive/developmental studies since 1990 showed impact.

242 studies reported harm from low-intensity RF (SAR < 0.40 W/kg).

American Academy of Pediatrics letters to FCC

“Children are disproportionately affected by environmental exposures, including cell phone radiation.”

“Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children. It is essential that any new standard for cell phones or other wireless devices be based on protecting the youngest and most vulnerable populations to ensure they are safeguarded throughout their lifetimes.”

[original article](#) > article

Original Article | Published: 19 October 2016

Radiofrequency-electromagnetic field exposures in kindergarten children

[Radiofrequency-electromagnetic field
exposures in kindergarten children](#)

“A study found that kindergarten children attending schools near cell towers had over three times higher total RF exposure than those attending a school without a close proximity cell tower, as measured by personal RF radiation measurement devices worn throughout the day.”

[Environmental Health Sciences](#)

VNRC

Published by the Vermont Natural Resources Council, Inc.

Vermont

Environmental Report

SIEGE ON OUR SUMMITS:

TECHNOLOGIES PUSH DEBATES ON
LAND USE AND COMMUNITY HEALTH

March
1997

“Yet, as scientists, advocates, and attorneys pointed out at the Killington conference, technology, driven more often than not by financial opportunism, often outpaces our understanding. We know enough science to get us our inventions, but not enough to know, until too late, what we have wrought. It’s an old story, perhaps..... But we will know the consequences in time, for as Dr. Paul Heroux, a research scientist from Quebec, pointed out, a body of evidence is accumulating day by day. “In the future, you will all be using..cellular phones,” he told his audience, “and that may solve the research problem.” “Oh, I see,” said VNRC’s Acting Executive Director Steve Holmes, nudging his neighbor in the audience. “The bodies of evidence will be us.”

Peer-reviewed research articles recommend keeping cell towers at least 500 meters (approximately 1,500 feet) away from populated areas to reduce health risks, including:

- [Environmental Research](#)
- [International Journal of Science Environmental Research and Public Health](https://pubmed.ncbi.nlm.nih.gov/20662418/nal)
- [Science of the Total Environment](#)
- [Environmental Reviews](#)
- [International Journal of Occupational Environmental Health](#)

Turkey, Greece, Chile, Bangladesh, Australia, Israel, New Zealand, and Russia prohibit cell towers on school grounds. Australia capped radiation emission limits at 1% of federal levels near schools. Turkey mandates ongoing monitoring and compliance of radiation levels at schools and hospitals. Bangladesh banned cell towers on residential buildings, schools, colleges, playgrounds, and in high density areas. Chile prohibits cell antennas in sensitive places such as kindergartens, hospitals and nursing homes. Toronto, Canada advises radiation limits set 100 times lower than federally accepted levels.

Addressing Cell Towers at Schools as Primary Prevention

Other countries have developed transparent accountability frameworks through monitoring and compliance enforcement to provide protections for communities, the environment and vulnerable populations.

For example, in 2015, [France](#) passed [legislation](#) to ban Wi-Fi and wireless devices in nursery schools, reduce WiFi in schools, require cell tower radiation compliance, offer tools for citizens to verify radiation measurements near homes and establish an agency to evaluate research on health effects from radiation exposure and handle compliance and enforcement of this law.



RUSSIA: Cell towers and base stations are no longer permitted near schools, with a national plan in place to relocate existing sites away from schools.

TURKEY: Cell antennas must be distanced from schools and playgrounds.

GREECE: Towers are banned on school grounds. Stricter RF limits apply within a 300-meter radius around kindergartens, schools, hospitals, and elderly care facilities.

BANGLADESH: Cell towers are prohibited on residential properties, schools, colleges, playing fields, densely populated areas, and heritage sites.

ISRAEL: Minimum setback of 100 meters required for cell towers near schools and homes.

CHILE: Cell antennas not allowed in “sensitive areas” (kindergartens, hospitals, and nursing homes).

QUEENSLAND, AUSTRALIA: New cell towers prohibited on school property, with a 200-meter setback and emissions capped at no more than 1% of federal guidelines.

NEW ZEALAND: Cell towers prohibited on school property with 50 meter setback from schools.

TORONTO, CANADA: “Prudent Avoidance Policy” recommends keeping RF exposures at least 100 times below Health Canada’s guidelines.

INDIA: Mumbai, Zilla Parishad, Rajasthan & Karnataka: Cell towers are prohibited/removed near schools, colleges, orphanages, and old age homes.

*Williamson County
Planning Commission
Meeting*



February 2024

**Williamson County Tennessee
Planning Commissioners**

**voted unanimously in favor of a 1,500 foot cell
tower setback for schools.**



Communities with large setbacks for wireless antennas from homes and/or schools

- Palo Alto, California: 1,500 feet
- Copake, New York :1500 feet
- Los Altos , California: 500 feet
- Walnut City, California: 1,500 feet
- Bar Harbor, Maine: 1,500 feet
- Sallisaw, Oklahoma: 1,500 feet
- Shelbourne , Massachusetts: 1,500 feet
- Stockbridge, Massachusetts: 1,500 feet
- San Diego County California 1,000 feet

[Environmental Health Sciences](#)

U.S. School Boards Restricting Cell Towers

Ban on new towers on school property

- Los Angeles Unified, CA
- Palo Alto Unified, CA
- West Linn-Wilsonville OR
- Temecula Valley Unified, CA
- Loudoun County, VA- the wealthiest county in the country.

School districts that reversed course

- Montgomery County MD no more towers on elementary schools
- Portland OR ended consideration of new leases for towers.
- Prince George's County MD decided not to renew master cell tower school leasing agreement with Milestone Communications





INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS

Since 2004, the International Association of Firefighters has officially opposed cell towers on their stations.

“until a study with the highest scientific merit and integrity on health effects of exposure to low-intensity RF/MW radiation is conducted and it is proven that such sitings are not hazardous to the health of our members.”

Doctor and Scientist on Cell Tower Radiation Health Effects

Dr. Martin Blank, Columbia University

Dr. David Carpenter, University of Albany

Dr. Davis Ph.D. and Dr. Anthony Miller

Dr. Linda Birnbaum, Ph.D, Former Director, National Institute of Environmental Health Sciences and National Toxicology Program

Dr. Paul Héroux, Ph.D

Dr. Ron Powell Ph.D, The Health Argument against Cell Phones and Cell Towers

Dr. Kent Chamberlin, University of New Hampshire

Dr. James Rochester Letter on Cell Towers at the Hampfield School District

Dr. Magda Havas

Physicians For Safe Technology Dr. Cindy Russell

Dr. Dennis Booth on Cell Towers at Hempfield School District Letter

Scientists' Letter to the Ontario Minister of Education

Dr. David Carpenter

[David Carpenter MD ICBE-EMF Commissioner - International Commission on the Biological Effects of Electromagnetic Fields](#)

David O. Carpenter is a public health physician and Director of the Institute for Health and the Environment, a Collaborating Centre of the World Health Organization, at the University at Albany.

After receiving his MD degree from Harvard Medical School he chose a career of research and public health. Dr. Carpenter' research was initially basic neuroscience, and since has become the more general question of environmental causes of human disease, both those directly caused by chemical exposure and those mediated via endocrine disruption. He has more than 500 peer-reviewed scientific publications and has edited six books.

His involvement in issues related to electromagnetic fields (EMFs) dates from his arrival in Albany, NY in 1980 when he was given responsibility for the administration of the New York State Powerline Project, a 5 million dollar study of biological and health effects of EMFs. This project confirmed elevations in rates of childhood leukemia in children living in homes with elevated magnetic fields. After the program was completed Dr. Carpenter served as the spokesperson on EMFs for New York State until he left employment in the Department of Health and moved to the University at Albany.

Dr. Paul Heroux

Dr. Paul Heroux

Paul Héroux | Epidemiology, Biostatistics and Occupational Health - McGill University

<https://www.mcgill.ca/epi-biostat-occh/paul-heroux>

Dr. Paul Héroux is a scientist with experience in physics (BSc, MSc and PhD), engineering (15 years), and the health sciences (30 years). He started his research career at Institut de Recherche d'Hydro-Québec in Varennes, Québec, an internationally reputed electro-technical laboratory. After rounding out his formation with courses in Biology and Medicine, he became interested in public health, and was appointed Associate Professor at McGill University's Faculty of Medicine and also Medical Scientist in the Department of Surgery of the McGill University Health Center.

Frank Clegg

Frank Clegg

Longtime President of Microsoft Canada and now CEO of Canadians For Safe Technology, a not-for-profit coalition whose mission is to 1) educate and inform Canadians and policy makers about the dangers of exposure to unsafe levels of radiation from technology; and 2) to work with all levels of government to create healthier communities for children and families. <https://www.c4st.org/>

Theodora Scarato

Theodora Scarato, MSW

Director of the Wireless and EMF Program at [Environmental Health Sciences](#).
[Theodora Scarato - Environmental Health Sciences](#)

Theodora Scarato is a leading expert in environmental health policy related to wireless devices including smart meters. She has co-authored several [scientific papers](#) and serves as a Special Expert to the International Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF). Having previously long served as Executive Director of Environmental Health Trust, Scarato led a [landmark federal case](#) against the FCC in which the court mandated the agency explain how its 1996 cell tower radiation exposure guidelines were adequate. She has filed [numerous scientific submissions](#) to the FCC and is involved in current efforts to get the FCC to respond to the [2021 DC Circuit Court mandate](#).