Public Health Policies and Wireless Radiation

Presented on behalf of Hartford Coalition for Safe Technology (Last updated April 2023)

Rachael D. Stephens Joint Ph.D. Candidate in Anthropology and Education, UPenn M.A. Anthropology and Education, Teachers College, Columbia University rstep@upenn.edu rachaelstephesn127@gmail.com

Policy and Practice

What are other countries, states, and municipalities doing to protect the public from the health dangers of electromagnetic interference?

International Actions

At least 28 countries have RF limits 10-100 times below FCC limits or policies to reduce exposure near homes and schools

RF limits 10-100 times below FCC limits

• Italy, Switzerland, India, China, Turkey, Bulgaria, Brussels

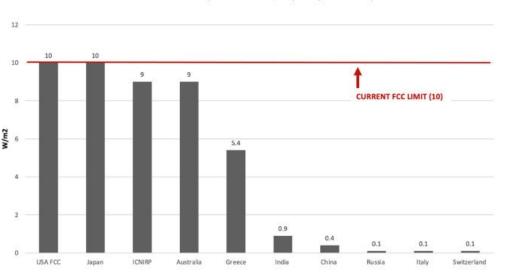
Wifi banned/minimized in nurseries, kindergartens, or elementary schools

 France, Israel, Ghent Belgium, French Polynesia, Cyprus, Hospitalet Spain

Cell antennas/towers prohibited in "sensitive areas" (e.g., kindergartens, nursing homes, hospitals)

- Lithuania; Chile; Bangladesh; Israel
- Some municipalities within Australia and India

Radio Frequency Exposure Limits for the General Public, Schools, Homes & Playgrounds For Cell Towers & Wireless Networks.



Allowable exposure at 1800 MHz W/m2 equivalent plane wave density

*Switzerland & Italy: at places of sensitive use such as apartment buildings, schools, hospitals, permanent workplaces and children's playgrounds and where people stay for hours.

China: Standard cities precautionary principal, encourages companies to take measures to reduce public exposures. Greece: Limit for 300 meter radius around kindergartens, schools, hostials, and elderly care homes.

©ENVIRONMENTAL HEALTH TRUST

https://ehtrust.org/policy/international-policy-actions-on-wireless/

U.S. Federal, State, and Local Policies that limit "Local Control"

Federal Level

 2018/19 FCC policies voted to fasttrack 4G/5G deployment and to limit local communities rights to restrict the buildout

State Level

- About 30 states have "small cell legislation" laws that
 - fast tracks installations (e.g., streamline application process to access public rights of way)
 - discourage local control (e.g., tightens timelines for consideration of cell siting applications)

Local Level

• Ordinances that remove or reduce existing setbacks that for large cell towers

And yet, some states are fighting back....

- Restore local control
 - Massachusetts (S.129 disclosure of radio frequency notifications)
 - California Governor vetoes SB 649, a bill that streamlined 5G and 4G wireless facilities
 - Proposed: California (S.2012 H.R.530), Illinois (HB 4653, HB 5818), Connecticut Bill HB 5107
- Limit exposure for children/schools
 - Proposed: New York A07173 prohibits towers/antennas on school property (new and existing)
- Limit exposure for other "sensitive areas"
 - California (AB57 and SB 649) exempts fire stations from having to install cell antennas
- Smart Meter "Opt-Outs"
 - Proposed: Massachusetts Bill SD.1508 and Connecticut Bill HB 5107
- Acts requiring further research
 - Alaska, New Hampshire, Oregon, Louisiana, Hawaii, Mass., New York (proposed)

Municipalities are fighting back, too...

Ordinances restricting towers/antennas near "sensitive areas" (e.g., homes, schools, hospitals, parks)

- Installation Setback Restrictions
 - Los Altos, California -- Prohibits installation of small cells on public utility easements in residential neighborhoods and establishes 500 foot setbacks from schools and from multi-family residences in commercial districts
 - Shelburne, MA no new wireless antennas in residential zones and no wireless antennas within 3,000 feet of schools and within 1,500 feet of homes
 - **Copake, NY** no wireless facility may be within **1,500 feet** from homes, schools, churches, or other buildings containing dwelling units.
 - Stockbridge, MA no towers built less than 1000 feet from a school, park or athletic field and 600 feet from any residence.
 - Sallisaw, OK no commercial wireless telecommunications towers within 1,500 feet of homes.
 - Calabasas, CA no "Tier 2" wireless telecommunications facilities within 1,000 feet of homes and schools.
 - Bedford, NH No wireless antennas within 750 feet from nearest residentially-zoned property.
 - Scarsdale, NY No wireless facilities within 500 feet from homes, schools, parks, and houses of worship.
 - Davis, CA no freestanding wireless facilities within 500 feet of residential zone and schools.
 - Westlake Village, CA no facilities within 500 feet of homes.
 - Randolph, MA no wireless antennas within 500 feet of homes and businesses.
 - Petaluma, CA no "small cell" antennas within 500 feet of homes.
 - Suisin City, CA no "small cell" antennas within 500 feet of homes.
 - Contra Costa County, CA no new high-visibility facilities or towers within 300 feet of residential zones.
 - Ithaca, NY any small cell wireless facility shall be 250 feet or more from any residence, school, or day care facility

Restoring local control over installation

- These ordinances address the
 - **Application Process:** instate automatic time limits for permits, require annual recertification fees, establish the right to hire independent consultants at the applicant's expense
 - **Legal Responsibility:** require permittees to assume legal responsibility for any liabilities arising from small cell installations
 - *Notification*: require notification of residents within a certain distance
- Examples
 - *Greendale, Wisconsin*: The Board of Trustees passed Resolution R2018-20 in November 2018 in opposition to the FCC's September 26, 2018 Order because
 - "the Order is an unprecedented attack on local control of Greendale's largest asset, the public rights-of-way, for 5G technology; threatens the Village's responsibility to protect the health, safety and welfare of its residents; and threatens the Village of Greendale's designation as a National Historic Landmark"
 - Warren, Connecticut: ordinance designed
 - "to locate towers and/or antennas in a manner which protects property values, as well as the general safety, health, welfare and quality of life of the citizens...."
 - **Pittsfield, Massachusetts** S 7.855 issues that telecom companies must: prove preferred site/existing structure does not work; fulfill above ground aesthetic requirements, sound and light restrictions; and prove compliance
 - "The Zoning Board of Appeals, together with the Community Development Board ...finds that it is necessary and beneficial for the health, safety and welfare of the community to update the regulations for development of Wireless Communications Facilities ...in the City ..."

Exercising local control to halt installation further 5G deployment and/or called on state/federal governments to do so

• Hawai'i County 5G Resolution

 The Hawaii County Council voted on July 22 to halt 5G developments on the Big Island until the controversial technology is proven safe

• Farragut, Tennessee 5G Resolution May 14, 2020

- Farragut, Tennessee City Council approved a resolution calling on state and federal governments to halt 5G until health risks are evaluated by "sound science."
- Keene New Hampshire halts 5G, March 2020
 - New Hampshire City Council of Keene approves temporary 5G ban
- Santa Barbara, California City Council Pauses 5G, March 2020
 - Delays Vote on Verizon Licensing Agreement,
- **Easton, Connecticut issues cease and desist "5G Resolution" (May 7 2020)
 - ban 5G technology rollout citing lack of research, testing

We, the Hartford Coalition for Safe Technology, are asking Hartford's Department of Health and Human Services to:

 (1) Support and help to pass CT House Bill (HB)
 5107, "An Act Concerning Small Cell Siting and Smart Meter Opt-In"

(2) Educate Hartford residents on the health risks of radiation

CT House Bill (HB) 5107, "An Act Concerning Small Cell Siting and Smart Meter Opt-In"

"To give municipalities different options in conducting the siting for small cell installations and to prohibit electric utilities from installing smart meters if the customer does not opt in and consent to the installation." (https://www.cqa.ct.gov/asp/cqabillstatus/cqabillstatus.asp?selBIIType=BIIRbill_num=HB-5107)

Current Status: On 1/9/23 it was referred to Joint Committee on Energy and Technology, where it stagnated

What's Needed: The next step is to advocate for the bill to be given a public hearing and for testimonies to be given in its support.

Advantages of HB 5107

- Restores local control over small cell installation
- Provides customers with the right to opt-out of smart meters (thereby reducing RF levels)
- Creates jobs (utilities companies will have to hire folks to manually collect the data from each meter)

Will you write a letter of support for HB 5107 ? Will you provide testimony in favor of its passing?

Educate the public on the risks of wireless radiation

Cell Phones: Questions and Answers about Safety

Environmental & Occupational Health Assessment Program • May 2015

- All cell phones emit radiofrequency radiation (radiofrequency energy).
- Radiofrequency energy can be absorbed by parts of the body closest to where the phone is held.
- Current scientific research does not show a clear or consistent link between cell
 phone use and harmful health effects.



- There are limitations in the science. More research is needed in order to fully
 understand the health risks from cell phone use, particularly in children.
- It is wise to reduce your exposure to radiofrequency energy from cell phones whenever possible
 Use a hands-free device or speakerphone as much as possible.
- Use a hands-free device or
 Text instead of talking.

DPH

- Avoid sleeping next to your cell phone. Keep it at least several feet from the bed
- When your phone is powered on, try to carry it away from your body in a purse, briefcase or backpack rather than in your pocket.

Radio Frequencies & the Electromagnetic Spectrum

All cell phones emit radiofrequency (RF) energy, or radiations RF energy is part of the electromagnetic spectrum. Energy on the electromagnetic spectrum is described in terms of its frequency. Frequency is unumber of waves emitted each second and is sepressed in Herrer (LE).

number of waves emitted each second and is expressed in Herz (Uz). Other sources of R Penety include radio and relevision broadcasts, microwave ovens, GPS and Bluetooth devices, radar, buty monitors, wireless networks (viii).

and cordless phones RF energy is **non**-ionizing. This means that it does not have a high enough frequency to damage cells in the body the way that ionizing radiation can. X-rays and sunlight are examples of ionizing radiation.

Connecticut Department of Public Health PO Box 340308, Hartford, CT 06134-0308 <u>http://www.ct.gov/dph</u>

https://portal.ct.gov/-/media/Departments-an d-Agencies/DPH/dph/environmental_health/e oha/Toxicology_Risk_Assessment/050815Cell PhonesFINALpdf.pdf?la=en

- In 2018, Connecticut's Department of Public Health became one of the first in the country to issue specific recommendations for how to limit RF radiation from cell phones
- While the Fact Sheet maintains much of the FCC's narrative, it nonetheless notes the "need for further research" and asserts that:
 - "It is wise to reduce your exposure to radiofrequency energy ...whenever possible."

Will Hartford's Department of Health and Human Services follow CT's Department of Public Health in educating the public of the risks of RF radiation?

Works Cited

Connecticut Department of Public Health recommends reducing cell phone exposure. Environmental Health Trust. (2022, June 16). Retrieved April 6, 2023, from https://ehtrust.org/connecticut-department-public-health-recommends-reducing-cell-phone-exposure/

Database of worldwide policies on cell phones, Wireless and Health. Environmental Health Trust.. Retrieved April 6, 2023, from https://ehtrust.org/policy/international-policy-actions-on-wireless/

Physicians for Safe Technology. (2023, January 23). *Conversion Chart, World Exposure Limits, human exposures EMR/EMF*. Physicians for Safe Technology. Retrieved April 6, 2023, from https://mdsafetech.org/conversion-and-exposure-limits-emr-emf/

RF Exposure Guidelines. EMF Education and EMF. (n.d.). Retrieved April 6, 2023, from https://safelivingtechnologies.com/emf-exposure-rf-exposure-guidelines/

Thank you!

Please do not hesitate to reach out to us if you have any further questions or would like to continue this conversation.