

LD 697 Resolve, to Study the Effects of 5G Technology on Bird, Bee and Insect Population and the Effects of Long-term Exposure on Children

Testimony of Bill Sponsor Rep. Tracy Quint of Hodgdon

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LD 697 tasks the University of Maine with investigating the effects of so-called 5G technology on bird, bee and insect populations, and long-term effects on children.

My young adult children and several constituents brought this issue to my attention when they learned there are questions of biological harm from today's wireless technology. When I looked into it, I discovered the State of Maine has no science-based technology safety information to provide to the public.

As some of you are aware, I have been a registered nurse for 25 years so I looked for the science. I was surprised by what I did not know.

The Science and Risks

Let me start with the environmental studies. I have learned that the earth's natural electromagnetic field, which is meant to regulate the electrical systems of all living cells, pulses just 7.83 times per second, that's measured in Hertz.

Currently our wireless signals carry our data back and forth using man-made microwaves that pulse at a *million* times per second in the Megahertz range, and a *billion* times per second in the Gigahertz range. Again, the earth pulses at just *7 times* per second. Invisible man-made radiation overpowers that.

Our birds, bees and pollinators have built-in navigation systems that are meant to be synchronized with the earth's electromagnetic field, that's how they get back and forth to their nests and hives. The science shows the increasing electropollution is dysregulating their navigation systems.

4G, or fourth generation technology, uses long waves to carry data and signals. 5G, or fifth generation, uses these longer waves too but is now

adding an *additional layer* of short millimeter waves that are about the same size as many of our pollinators. Studies show these man-made frequencies are a leading cause of bee colony collapse and disappearing species.

I found the non-industry funded science on the biological impact to you and I and our children to be concerning.

The U.S. National Toxicology Program at the National Institutes of Health is the global gold standard for toxics research. They have completed a \$30-million-dollar study that concludes “clear evidence” cell phone radiation causes cancer and DNA damage.

Our biological cells cannot keep up with the damage done by this radiation. Repeated studies around the world document wireless radiation causes infertility, neurotoxicity, immunosuppression and more.

The science explains several mechanisms of harm and I'll share four with you:

1. First, this radiation causes blood cells to clump together, known as the Rouleau Effect(pubmed.nlm.nih). Our red blood cells should be free floating to bring oxygen to our organs and when the blood cells coagulate together, they cannot deliver the oxygen to where it needs to be. Those in the medical field know that oxidative stress is a precursor to many chronic illnesses.
2. Second, our cells communicate to each other through electrical impulses. It is these electrical signals we are measuring when we do an EKG of the heart or an EEG of the brain. Science shows the radiation pulses from wireless technology dysregulates our body's electrical signaling and can cause a host of downstream illnesses.
3. Third, we have a membrane called the blood-brain-barrier to keep toxins from entering the brain. The science shows these pulsations of microwave radiation are penetrating and can cause permeability of the blood-brain barrier.
4. Fourth, our circadian rhythm is synchronized to the earth's natural light cycles. In the hours of darkness during sleep, our brain releases melatonin from the pineal gland to regulate sleep and aid in cell

repair and regeneration. Unfortunately, the brain cannot distinguish between natural daylight and this man-made light energy form of wireless radiation. So, the brain thinks it's daylight when we are surrounded by wireless signals at night and doesn't properly release melatonin. This helps to explain why we have a lot of people, including children, who are not sleeping properly anymore. This can have neurological and cognitive effects.

Why We Don't Know

Although wireless harm may be news to you and I, since 2002 the United States Access Board's Indoor Environmental Quality Project has indicated electromagnetic sensitivities may be considered **disabilities** under the Americans with Disabilities Act. They even have recommended accommodations posted on-line.

The World Health Organization in 2011 already classified this radiation as a Group 2B Possible Human Carcinogen. Now that the animal studies have been completed, scientists are calling for this radiofrequency microwave radiation to be reclassified as Group 1: Carcinogenic to Humans. The WHO has reopened their investigation but it will take years to complete.

Harvard Law School Center for Ethics published a report called Captured Agency: How the Federal Communications Commission is Dominated by the Industries it Presumably Regulates. Harvard documents how the FCC, which is supposed to set safety standards, is run by former telecom employees looking out for wireless industry interests instead of public safety. They liken wireless industry tactics to the big tobacco playbook. The wireless industry dominates messaging and keeps the public in the dark while they promote convenience from their toxic products.

What Other States are Doing

New Hampshire is on the cutting edge with the wireless issue. In 2019 they passed a law to investigate. At the end of 2020 they issued a groundbreaking Final Report on Commission to Study the Environmental and Health Effects of Evolving 5G Technology. They document the FCC and the FDA's refusal to answer their questions.

New Hampshire makes 15 recommendations to educate the public on wireless risks and preventive measures. The New Hampshire report is being heralded by the European Parliament as a good model to follow.

Please know that New Hampshire, Massachusetts, Vermont, Connecticut, New York and others this session have legislation addressing wireless radiation so we are in good company in addressing concerns.

A Word of Caution

I'd like to ask that we be very careful to focus on non-industry funded peer-reviewed science, and fact-check with independent experts what the wireless industry lobbyists tell us. New Hampshire discovered they routinely provide disinformation and half-truths.

At the same time New Hampshire was investigating, a law was passed in Oregon to assess wireless impact on children in schools. Oregon used university resources to prepare a fact-based draft report that was submitted to the Oregon Health Authority. Unfortunately, a journalist's expose reveals corruption at the Oregon Health Authority. They removed the important facts of harm from their final report.

It's also important to know the FCC was sued in 2021 for ignoring 11,000 pages of evidence of harm. Yet they have done nothing to address the court order to update their hazardous public radiation exposure limits.

Closing Remarks

Technology is progressing so rapidly and Maine citizens deserve to have answers to their questions and concerns. Like me, they should not have to search through mountains of information. As representatives, we should demand to have this information readily available proving that we have done our due diligence in addressing this public health issue. Title 22, Chapter 160 shows that our state at one time had an Advisory Committee on Radiation. In this amended version, I would like to request, that instead of the University compiling this study, we have a Commission to do this study.