Presentation to
Executive Policy Committee, City of Winnipeg
Tuesday, July 8, 2025 Meeting

Item 5. Opt-Out Program for the Advanced Metering System in the REPORT OF THE STANDING POLICY COMMITTEE ON WATER, WASTE, AND ENVIRONMENT DATED JUNE 27, 2025



Shelley Wright

- Retired Teacher (29 years)
- Director, Canadian Educators for Safe Technology
- Leadership Team Member, Canadians for Safe Technology

Accessible wired high-tech home:
Husband – Mechanical Engineer (P. Eng.)
Daughter – Environmental Engineer
Son – Website App Developer

Who can become
Electromagnetically Disabled?

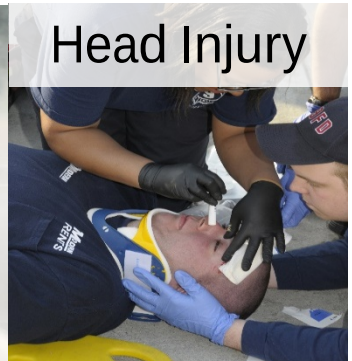
Winnipeg residents who have:

- Environmental toxin load
- Concussion or head injury
- Heart arrhythmia
- Lyme disease (tick bite)
- Multiple Sclerosis
- Autism
- Parkinson's disease
- Electrical exposures
- Chemical exposures
- Immune deficiencies
- Accidental electrical exposure
- Accidental chemical exposure









Physical Injury and Mental Distress due to Wireless microwave radiofrequency radiation

Non-wireless home environments can significantly reduce microwave sickness/electromagnetic hypersensitivity symptoms:

- Irregular heartbeat/ heart failure
- Headaches, migraines
- Difficulty concentrating, memory lapses
- Disorientation, dizziness, vertigo
- Sleep disturbances or insomnia
- Tinnitus (ringing in the ears)
- Skin rashes, tingling/prickly skin
- Nausea
- Fatigue



Medical Doctors (such as those at the Environmental Health Clinic of Women's College Hospital in Toronto) **diagnose this chronic debilitating disability.**

Belpomme and Irigaray (2020). **Electrohypersensitivity as a Newly Identified and Characterized Neurologic Pathological Disorder: How to Diagnose, Treat, and Prevent It.** https://pubmed.ncbi.nlm.nih.gov/32168876/

Wireless Meters emit Extremely High Levels of Microwave Radiation



Water meter broadcast 15,000 µW/m²

Wireless Water Meter Levels, Grand Bend, Ontario

150 times higher than my tolerance level

My hometown, population 45,000. No medical note required for utility meter opt-out: installed non-wireless electric meter wired to landline phone.

Ideal would have been: Mechanical non-digital meter, self-read meter readings happily submitted monthly.

Helped relieve my Microwave Sickness Symptoms:

- Sharp posterior head pain
- Building head pressure
- Migraines for hours/days
- Loss of executive functioning (focus, communication, multiple tasks)
- Slurred speech
- Skin bubbles/rashes



Safe shelter unattainable **= Precarious Housing**

Accessible, non-wireless utility services are required, otherwise persons and their dependants face:

- **exclusion**
- **illness**
- **homelessness**

Which can quickly cause grave perilous losses in:

- **education**
- **employment**
- **income**
- **food security**
- **quality-of-life.**



Some Foundational Human Rights

Bodily autonomy to preserve health, safety, and ability to fully participate in a home environment without harm, and without fear of harm.

Accessible Canada Act
Prioritized: Dignity, privacy, inclusion

Accessibility for Ontarians with Disabilities Act (AODA) and Ontario Human Rights Code (OHRC)

* Opt-out fees violate the principles of equality and accommodation.
* Proof-of-need documentation is a discriminatory barrier and not required for accommodations for public services.
* Institutions must bear responsibility of removing barriers.

Electromagnetic Hypersensitivity is a Recognized Disability



- Global Recognition: EHS is listed in the International Code of Diseases, from non-ionizing radiation, ICD-10
- Sweden: Functional Impairment – EHS is recognized as a long-term disability, 2002. USA: Americans for Disability Act, 2002



- Canadian Human Rights Commission, 2007
- Canada: "The Medical Perspective on Environmental Sensitivities" report to Canadian Human Rights Commission





- EMF Medical Conference qualifies as CME credits

Transparent, Penalty-Free

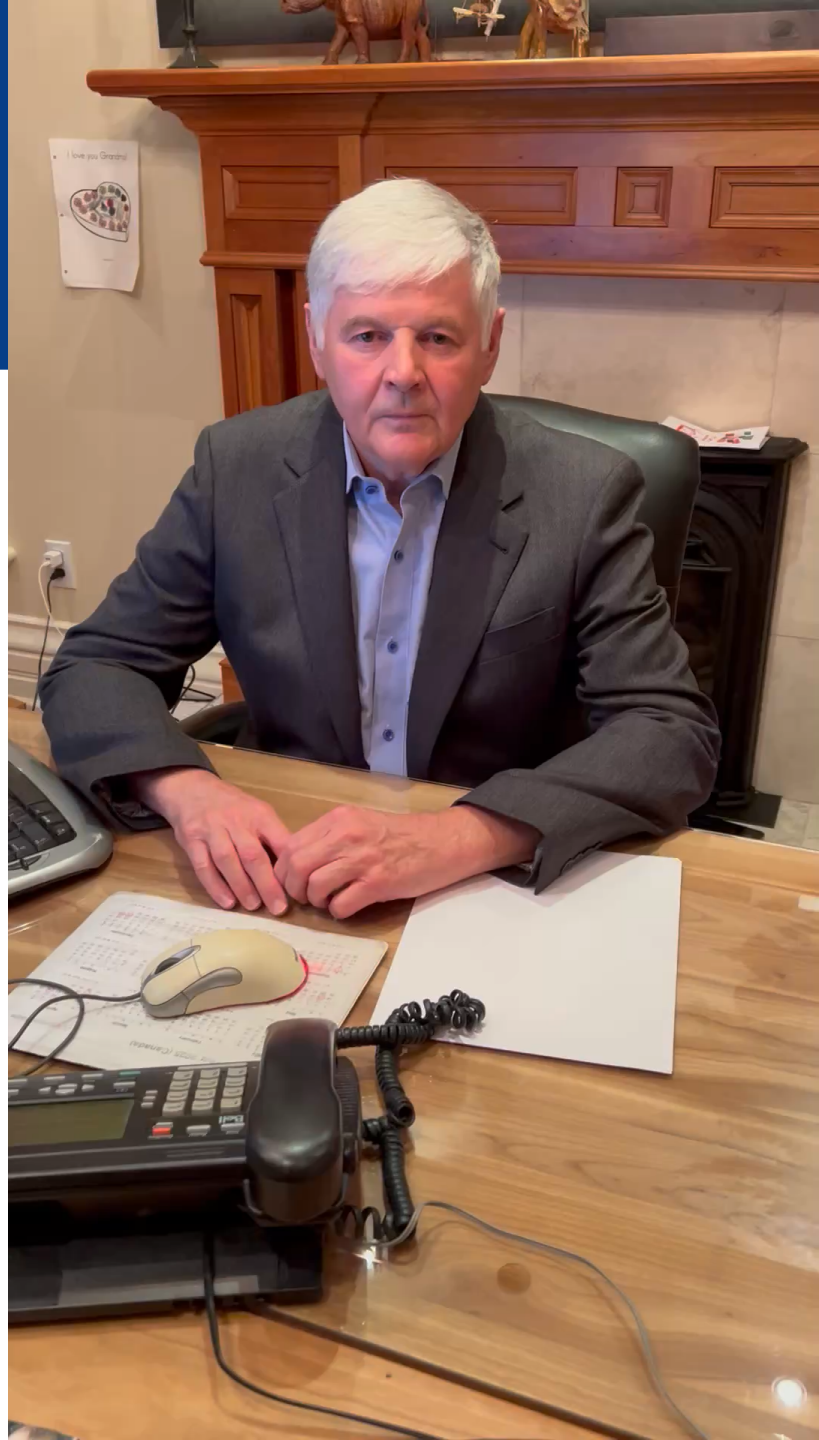
Opt-out Policy

An Opt-out policy supports public health inclusion human rights

- **No fees** nor penalties for opting out.
- **Prompt and full access for renters and homeowners** who need non-wireless options, **regardless of prior installations**.
- **Acceptance of letters from any licensed Canadian physician/healthcare provider.**
- **No charges** to the resident **for relocation of antennas or meters, nor for alternative meters or other accommodation(s).**
- **Protection for residents in adjacent dwellings** from neighbouring wireless emissions.
- **Flexibility for residents who develop health issues after installation**.

Frank Clegg
Past President of Microsoft Canada

Frank Clegg, Past President of Microsoft Canada shares his concerns and solutions regarding wireless smart meter.



C4ST
CANADIANS FOR SAFE TECHNOLOGY
CANADIENS POUR UNE TECHNOLOGIE SÉCURITAIRE

END of PRESENTATION

Additional information in the slides below.

Canadian Educators for Safe Technology

C4ST

CANADIANS FOR SAFE TECHNOLOGY

CANADIENS POUR UNE TECHNOLOGIE SÉCURITAIRE

Contacts:

Shelley Wright's Bio

- **Canadians for Safe Technology, Leadership Team member.**
- **Director, Canadian Educators for Safe Technology,** promoting inclusive wired technology and safety for persons living with electromagnetic disabilities.
- **Work with Canadians, electromagnetically injured.**
- **Guest speaker regarding EMF (Electromagnetic Fields) at two accredited medical symposiums**
  sponsored by Women's College Hospital, Toronto.
- **At Elementary Teachers' Federation of Ontario (ETFO) Annual Meetings wrote and passed inclusive wired/safe tech resolutions**, annually for 7 years, with 800 teachers present.
- **I work with individuals across Canada who are electromagnetically injured.**

Fully Wired High Tech Home

High-Tech Family, Fully Wired Home

* Husband, retired Mechanical Engineer
* Daughter, Environmental Engineer
* Son, Computer Science Student

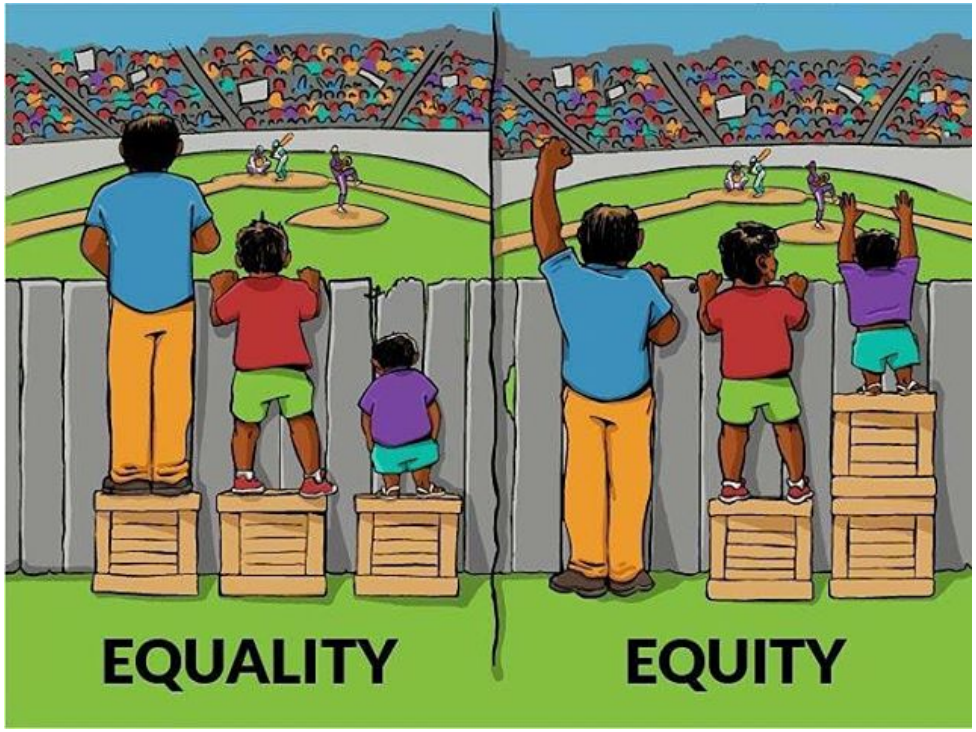
* No wireless, all devices fully wired (adaptors, powerline ethernet adaptors)
* Visitors turn off phones/airplane mode with Cellular, Wi-Fi, and Bluetooth disengaged.

Exclusionary Consequences





Equality vs Equity



Informative Websites

* Tech Safe Schools
* Parents for Safe Schools
* Moms who Care
* Electrosensitive Society
* Physicians for Safe Technology
* Canadians for Safe Technology
* The Childsafe School
* Electromagnetic Pollution Illnesses Canada
* Massachusetts for Safe Technology

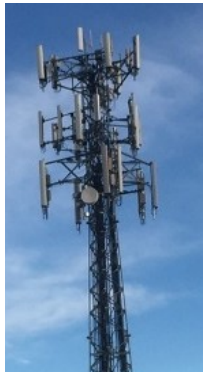
Electromagnetic Sources Trigger EHS



Symptoms are significantly worsened & can become debilitating around…

- **Wireless meters**
- **Cell phone calls & texts (>50 ft – stronger signal)**
- **Wi-Fi hotspots & routers & bluetooth (>50 ft)**
- **Fitness trackers, smart watches, most smart items**
- **All wireless devices**
- **Cell tower antennas (within 1 km)**
- **Smaller network antennas on rooftops & street poles**







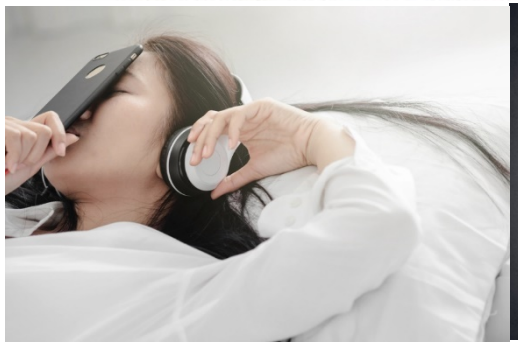


Indoor or Outdoor Equipment Can Cause Debilitating Symptoms

- ***Duration*** **of exposure**
- ***Proximity*** **to the** ***source***
- **Wireless** ***signal strength***



My symptoms disappear within hours or 3 days after the triggers are removed.





For some children and adults, symptoms can last a week or longer, or be permanent.

More people have Electromagnetic Sensitivities than Peanut Allergies

Estimates inform us that at least 3% **of Canadians** are electrosensitive.

one million Canadians

2.7% are peanut sensitive.

Canadian Educators for Safe Technology

Shelley Wright
Director, CE4ST

July 7, 2025

To: The Executive Policy Committee, City of Winnipeg

To: Mayor Scott Gillingham, mayor@winnipeg.ca
Evan Duncan, eduncan@winnipeg.ca
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Re: Meeting Agenda Item No. 5, Request for a Transparent, Equitable, Accessible Opt-Out Program for the Advanced Metering System (AMS)

My name is Shelley Wright. I am a retired teacher. I have worked with people across Canada who have become electromagnetically injured.

My submission conveys the concerns, recommendations, and support for the AMS Opt-Out Program on behalf of two national non-profit organizations, medically vulnerable Winnipeg residents, and families requesting safer options. Residents are not opting out for convenience, but to preserve their health, safety, and ability to fully participate in their home environment without harm.

Firstly, I am a member of the leadership team for Canadians for Safe Technology (C4ST). (See Appendix A). I work with individuals across Canada who are seeking wireless-reduced communities that offer healthier information and communication technology (ICT) services including wired and fiber-optic services. Some of these C4ST members have medical or genetic vulnerabilities and diagnoses from physicians as requiring reduced exposure to electromagnetic radiation emissions in the radiofrequency (RF) microwave frequency and extremely low frequency (ELF) ranges.

Secondly, as the founder and director of Canadian Educators for Safe Technology (CE4ST), I work closely with students, teachers, staff, and parents who have been adversely impacted, or permanently injured, by radiofrequency electromagnetic radiation (RF-EMR) exposures in schools.

Both organizations work with healthcare professionals and scientists who are experts in electromagnetic fields (EMF). These experts have extensive and current knowledge that would support Committee goals to provide essential services to persons with medical vulnerabilities.

The Canadian Human Rights Commission references two reports regarding electromagnetic sensitivities attributed to wireless signals: The Medical Perspective on Environmental Sensitivities, Margaret Sears https://publications.gc.ca/collections/collection_2008/chrc-ccdp/HR21-74-2007E.pdf; and Accommodation for Environmental Sensitivities: Legal Perspective, Cara Wilkie and David Baker https://publications.gc.ca/collections/collection_2008/chrc-ccdp/HR21-76-2007E.pdf.

Informed consent and democratic choices are foundational principles that should be upheld by the Standing Policy Committee on Water, Waste and Environment, Mayor, and City Council. If the Advanced Water Metering System (AMS) is to "promote and maintain the welfare of all residents," a clear, comprehensive opt-out program is paramount. Humane consideration must be given to intentionally protect persons who would be adversely impacted by wireless meter antenna(s) and/or electronic components.

Winnipeg's Corporate vision is to be a vibrant and healthy city which places its highest priority in quality of life for all its citizens. Your **Corporate mission:** Working together to achieve affordable, responsive and innovative public service.[1] [2]

You have assumed responsibility to ensure residents are not harmed by your decisions. We recognize this is a difficult job and a huge responsibility, protecting public safety and developing public trust. Opt-outs are essential and must be easily attainable for persons who have disabilities.

Humane consideration must be given to intentionally protect persons in a timely manner, who are aware they would be adversely impacted by exposure to electromagnetic emissions from wireless meters and/or their electronic components, regardless of possession of a medical note or disability tax exemption. Requiring individuals to present a medical note or Disability Tax Credit (DTC) status to access accommodations can constitute a barrier to accessibility under human rights legislation.

Any policy or practice that makes accommodations conditional upon a specific form of documentation (such as a tax exemption or doctor's note) should be critically examined. It risks creating discriminatory barriers for individuals with disabilities and contravenes the principle that the onus is on institutions to remove barriers—not on individuals to "prove" their limitations.

1. Unnecessary Gatekeeping
   The onus is on institutions to remove discriminatory barriers. Mandating proof such as a formal diagnosis or tax documentation places an undue burden on individuals, especially those with invisible or environmentally triggered disabilities, such as electromagnetic hypersensitivity (EHS).

[1] Our Winnipeg 2025 https://www.winnipeg.ca/building-development/city-planning-design/ourwinnipeg/ourwinnipeg-2045
[2] Our Winnipeg 2045 Development Plan, Corporate Vision, Corporate Mission https://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=1&DocId=8222

These conditions are often under-recognized and difficult to diagnose due to gaps in medical education.

2. Financial and Systemic Inequities
   Not all individuals have access to a supportive medical practitioner who is informed and able to document EMF-related illness. Applying for tax credits or navigating medical systems can be costly, time-consuming, and emotionally exhausting. This disadvantages people who have limited income, marginalized identities, or complex chronic conditions.
3. Inconsistency with Human Rights Principles
   Human rights law in Canada, including the Manitoba Human Rights Code and the The Accessibility for Manitobans Act https://accessibilitymb.ca/accessibility/the-accessibility-for-manitobans-act.html, emphasizes that accommodations must be provided unless undue hardship can be demonstrated. The duty to accommodate is not contingent upon possessing a particular form of documentation. Instead, it is rooted in the individual's self-identification and the barriers they experience in accessing services or participating in public life.
4. Exclusionary Consequences
   When access is denied, individuals may be excluded from essential services, education, housing, and employment—directly violating their right to equal participation in society. Further, such refusals to accommodate may further stigmatize people who live with lesser known environmentally-triggered conditions.

Transparent, equitable, and accessible opt-out process that provides safer, non-invasive options must be granted, ensuring all people—regardless of age, income, ethnicity, disability, or medical vulnerability—have equitable access to affordable, safer, RF-reduced housing.

To uphold the principles of inclusion and public health, the opt-out policy should include the following provisions:

- City of Winnipeg representatives must promptly and efficiently assist with the opt-out process and remove systemic barriers to access medical notes (provide names of Environmental Doctors who could diagnose their medical condition (e.g., Dr. Riina Bray, Director Women's College Hospital, https://www.riinabraymd.ca/our-practice)
- No fees or penalties for opting out. Fees to access options creates systemic barriers (financial hardship) to fully participate in home without harm and reinforces inequalities.
- Full ongoing opt-out access for renters and home owners, not limited to pre-installation of AMS meters, to accommodate a change in health status, or new household members
- Medical exemptions accepted verbally (preferred) or with a non-disclosure note (... has a medical condition requiring a non-wireless meter) from any licensed healthcare professional or physician in Canada (not limited to MDs practicing in a specific province).
- No cost to relocate antennas or infrastructure for residents seeking alternatives that mitigate health impacts.
- Wireless emissions from meters must not infringe on the public right of way or impact medically vulnerable persons in adjacent/nearby dwellings.

This policy reflects the precautionary principle and prioritizes health, inclusion, and informed consent.

Canadians for Safe Technology – As a member of the Canadians for Safe Technology Leadership Team, I am writing at the request of Winnipeg residents who are living with Electromagnetic disabilities who require RF-absent homes and access to essential services. They would like to keep their current, non-wireless, non-digital, mechanical meter. As a physician-diagnosed electromagnetically disabled person with ten years, lived experience I understand the importance of a safe home.

Finding affordable RF-reduced (absent) homes has become increasingly difficult, for some, extremely challenging, or for others impossible. Homes with non-wireless utility services are a special commodity that needs protection to offer services that meet varying public needs. Access to water is essential.

Many people chronically injured or disabled by wireless (RF/microwave frequency) emissions are unable to participate fully in their community or work or afford monthly fees for wireless opt-out services.

Some individuals may experience electromagnetic sensitivity to utility meter signals, especially if they have underlying medical conditions such as immune deficiencies, heart arrhythmias, Multiple Sclerosis, Autism, Parkinson's disease, head injuries, cancer, and others, or have been exposed to other environmental toxins such as Lyme Disease, or electrical or chemical workplace exposures.

Unable to tolerate wireless radiation, some people may have limited or no access to essential services, or they have become homeless. A few have used MAiD (Medical Assistance in Dying) because living with chronic microwave radiation sickness has become intolerable. Multiple wireless-emitting transmitters in multi-unit dwellings can significantly increase microwave exposures, potentially amplifying health impacts for residents living in these dwellings. Transmitters located near bedrooms, or other frequently used spaces, can have an intensified impact due to prolonged exposure. If wireless exposures increase, more people will likely be adversely affected.

Ten years ago, I was diagnosed with electromagnetic hypersensitivity (EHS), by the Director of the Environment Clinic, Women's College Hospital, Toronto. I require RF-reduced environments to function. I experience debilitating microwave sickness symptoms linked to radiofrequency radiation exposures in the microwave range which include sharp head pains, building head pressure, and migraines when RF levels approach or exceed 100 $\mu W/m^2$. Health Canada's Safety Code 6 suggests 1 million $\mu W/m^2$ is safe. This is 10,000 times more radiation than I can tolerate. Wireless emitting devices can send a searing pain through the posterior part of my head. I can experience loss of executing function, skin bubbles and subsequent rashes. When I'm not around wireless signals. I feel healthy.

I live in a small township with a population of. 45,000 residents. In a meeting with our Utility Provider, I told them I had a medical condition and required a wired, RF-absent electric utility meter and that I was diagnosed by the Director of the Environmental Clinic at Women's College Hospital. A medical note was not required. Our utility provider installed a meter with a wired-phone line connection. I volunteered to provide monthly readings over the phone to help reduce collection costs. For our convenience (to avoid calling in readings) we pay a $15 monthly fee, and have a meter read by a phone service. For some who are unable to work, this additional cost could represent a significant financial burden.

My utility company recently transitioned to wireless water meters as well. My request to reduce RF exposure was adequately addressed. I secured an exclusion (note in my file) that permits me to retain my manual water meter. The company explained that some residents have opted out, leading it to assign someone specifically for reading manual meters. **Canadian Educators for Safe Technology** – As the founding director of Canadian Educators for Safe Technology, I am also speaking on behalf of parents in Winnipeg who have expressed concern about the exposures of their children to radiofrequency (RF) radiation from smart water meters the City of Winnipeg is proposing for dwellings. The rollout of wireless smart meters in or on homes, and schools, has implications for health, security, and costs.

Children today are exposed to wireless radiofrequency (RF) as never before and many parents are diligent about making their homes as low RF as possible using wired (non-wireless) connections whenever possible.

Children are more physiologically vulnerable to microwave radiation emissions than adults. They have thinner skulls (deeper RF penetration), rapidly developing bodies, developing and vulnerable nervous systems, a high density of stem cells that are sensitive to modulated, digitally pulsed (biologically active) RF in the microwave range. They will experience longer, cumulative RF exposures than every previous generation.[3]

Children can be adversely affected by exposures to wireless radiofrequency radiation such as that emitted from wireless equipment such as smart meters. Physician-diagnosed students, and staff, (including myself) experience "microwave sickness". Depending on the signal strength, duration of exposure, and proximity to the signal, common symptoms can include debilitating migraines, loss of executive functioning, disabling vertigo or disorientation, and cardiac symptoms including pressure in the chest and an irregular heartbeat.[1]

We urge you to provide parents and caregivers the choice to opt-out of the AMS water meter program. This is particularly needed for those children who are electrosensitive or have medical conditions that make them more susceptible to being adversely affected. It is also important to provide this option for parents and caregivers who want to be proactive in protecting their children's health by minimizing their exposures to RF radiation. As many families with children are struggling to make ends meet, it is important that this be a no-cost option.

Health Canada's track record has been poor in responding in a timely manner to other harmful agents. This has cost Municipalities dearly, because HC waited 100 years to ban asbestos. Health Canada's Safety Code 6 guidelines are not designed to protect against biological effects below thermal thresholds.

[3] Wireless technologies, non-ionizing electromagnetic fields and children: Identifying and reducing health risks https://pubmed.ncbi.nlm.nih.gov/36935315/

The World Health Organization's International Agency for Research on Cancer has classified RF radiation as a Class 2B *possible* human carcinogen and has RF radiation listed as a high priority for re-evaluation.[4] This evaluation will include several high-quality large-scale animal studies. One of these studies, a $10 million study by the USA government-funded National Toxicology Program, determined there was "clear evidence of carcinogenicity." Health Canada also know there is a "high certainty" of evidence linking cell phone radiation with cancer in animals. This compelling evidence may move radiofrequency radiation to the Group 1, known human carcinogen, along with cigarette smoke and asbestos.

Based on new evidence, this type of radiation should now be classified as a *known* human carcinogen, according to some highly respected medical doctors and scientists.[5] [6]

Winnipeg Residents are asking key questions: Will the City of Winnipeg provide full disclosure through a public education program regarding new knowledge of wireless risks? Is the City of Winnipeg assuming risk of litigation when the AMS program is implemented? Would the staff investigate this and make that available to you and the residents of Winnipeg in its next report?

Non-wireless connections are safer for medically vulnerable persons, pregnant women (fetuses), and young children. Wired connections are also typically more resilient than wireless in adverse weather conditions and protect data privacy.

Please ensure that parents who want to err on the side of caution and want to be proactive in reducing their children's exposures can opt out of the AMS meter program with a simple request to do so and at no cost.

Everyone needs reliable access to clean, sufficient water for survival and daily needs. Residents would like a non-invasive water meter system that has no known health risks. It is both a moral and social responsibility to ensure that no one is penalized, harmed, or excluded from safe, non-wireless emitting water meters. Providing safe, accessible, inclusive water affirms your commitment to dignity and well-being.

Our team is willing to work with the Committee to assist with a transparent, comprehensive, accessible opt-out program that will support persons who are medically vulnerable and who wish to protect their health.

Sincerely,

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[4] International Agency for Research on Cancer. May, 2011 IARC Classifies Radiofrequency Electromagnetic Fields as Possibly Carcinogenic to Humans https://www.iarc.who.int/wp-content/uploads/2018/07/pr208_E.pdf

[5] Cancer epidemiology update, following the 2011 IARC evaluation of radiofrequency electromagnetic fields (Monograph 102). https://pubmed.ncbi.nlm.nih.gov/30196934/

[6] Comments on the US National Toxicology Program technical reports on toxicology and carcinogenesis study in rats exposed to whole-body radiofrequency radiation at 900 MHz and in mice exposed to whole-body radiofrequency radiation at 1,900 MHz. https://pubmed.ncbi.nlm.nih.gov/30365129/

Shelley Wright

Shelley Wright, B.A., B.Ed.
Founder and Director,
Canadian Educators for Safe Technology
email:

Appendix A

Canadians for Safe Technology (C4ST)

Canadians for Safe Technology is a national, non-profit organization with a credible reputation in Ottawa whose mission is to raise awareness about he risks of exposure to unnecessary, and unsafe levels of radiofrequency radiation from wireless technology and to work with all levels of government to create healthier communities.

Canadians for Safe Technology https://c4st.org/candidateswhocare/ , https://c4st.org/

Canadian Educators for Safe Technology (CE4ST)

Canadian Educators for Safe Technology is a non-profit, national organization actively promotes a balance of optimal health and the use of safe technology in a variety of educational settings. Through a rigorous review of independent science, CE4ST strives to raise awareness about the health risks associated with microwave radiation from wireless sources near school property and in classrooms, and to educate and empower schools and educational communities to use and promote safe technology strategies which fosters optimal health and learning environments.

Safe Technology in School Communities https://www.safetechschools.ca/

Additional Resources

Supporting information can be found at these websites:

Physicians for Safe Technology: https://mdsafetech.org/

Tech Safe Schools: https://www.techsafeschools.org/

Safe In School: http://www.safeinschool.org/

The Child Safe School: https://www.thechildsafeschool.org/wireless-in-schools

Electrosensitive Society: https://www.electrosensitivesociety.com/

Environmental Trust: https://ehtrust.org/

Wireless Education: https://www.wirelesseducation.org/about-us/

Canadians for Safe Technology https://c4st.org/candidateswhocare/ , https://c4st.org/

Massachusetts for Safe Technology: https://www.ma4safetech.org/

Less Screen More Green: https://www.lessscreenmoregreen.org/media

Additional Key Notes:

According to the Director of the Environment Clinic at Women's College Hospital an estimated 3% of the population can be adversely impacted by microwave frequency radiation, emitted by radio frequency, wireless devices.

Metro area population of Winnipeg in 2024, 849,000. 25,470 people could be either mildly, moderately, or severely impacted.

Studies have linked RF exposure to insomnia, heart irregularities, cognitive issues (migraines, cognitive impairment), and electromagnetic syndrome. Symptoms disappear in a clean environment. Initially many residents, unaware of the symptoms of microwave sickness, may not know what is causing their adverse symptoms.

The American Academy of Environmental Medicine has called for a moratorium on smart meters due to health risks.

Utility Smart Meters: Quebec has an opt-out system for everybody related to electricity smart meters: we send in our own readings, once or twice a year someone comes to measure and then the difference is calculated.

In The Netherlands, Electromagnetic Hypersensitivity (EHS) is an official disability " the UN Convention on Disability applies for people with EHS" https://esc-info.eu/en/step-by-step-recognition-of-ehs-in-the-netherlands/

Resident questions:

Is the council ready to assume liability for people who will NOT be able to opt-out because they are not damaged yet?

Should staff budget for costs for litigation, even working hours for dealing/ communicating with people who oppose against the meter but not because they are already disabled?

Should council and staff take into account that if it only provides an opt-out for already officially disabled people that it will erode trust in the (tax-paid) public service and municipal politics, because it mostly seems to serve itself and not the people it is supposed to serve? In a time when trust is already eroded when it comes to public officials?

What is more important: pushing a new system for measuring water usage or provide a basic public good: e.g., water through a non-invasive water meter system that has no known health risks?