



What's so smart about 'SmartMeters'?



The Clean Energy Act of May 2010 mandates that BC Hydro replace every conventional electric meter with a 'SmartMeter' by 2012.

SmartMeters allow BC Hydro to monitor electrical use in detail, control energy supply to 'Smart' appliances and implement time-of-use pricing. Customers get real-time feedback of energy usage.

Section 17 specifies that installation can be done **"without the consent of the owner."** There will be no process for public input. The Act strips the BC Utilities Commission of the power to review the project.



Health Alert

Surveys in Canada and Europe show about 3% are severely sensitive to electromagnetic radiation (EMR), and another 35% experience moderate to mild sensitivity. Involuntary exposure to the short, powerful and frequent bursts of EMR from wireless SmartMeters is devastating to these people.

Symptoms from SmartMeters reported in Ontario and the U.S. include:

- difficulty sleeping •headache •dizziness •ear pressure and tinnitus
- memory problems •difficulty concentrating •weakness and fatigue •skin burning •agitation •nausea and vomiting •heart palpitations •seizures.

People with no apparent symptoms also care about the emerging evidence of **long term health consequences**.

Animal, cell culture & human research studies point to **systemic health effects**:

- sleep disorder •memory impairment •learning difficulties •an increase in seizures •blood-brain barrier leakage •increased heart rate •reparable and irreparable DNA damage •lower sperm count •damaged sperm •impaired nervous system •childhood leukemia •accelerated aging •abnormal cell proliferation •cancer.

Children, with thinner skulls and developing nervous systems, are the most vulnerable.

"DNA, our precious genetic material, is particularly sensitive to electromagnetic fields. If we are to protect our genetic code, it is critical that we take steps as a society to protect DNA from damage".

Martin Blank, PhD, Columbia University, Dept. of Physiology and Cellular Biophysics

A Mayor's Warning

"...the ambient electromagnetic and radio wave fields that will come as a result of having these things at every house running constantly is an unforeseen health risk.

For people who are sensitive to electromagnetic radiation, it's going to be a living nightmare."

Mayor Lew Tremaine, Fairfax, California

Wireless SmartMeter EMR Exposure is 24/7, involuntary and virtually unavoidable.

Effects accumulate from :

- **Powerful microbursts of pulsed signal EMR, considered more damaging than steady signal EMR.**
- **Near constant EMR as each meter transmits data, and receives and repeats signals from nearby homes.**
- **Signals from neighbourhood hubs.**
- **Home Area Network transmissions.**
- **Additional loads of 'dirty electricity' which typically enter the house wiring through the meter and re-radiate throughout the home day and night.**

"The Safety Code 6 limits don't even come close to keeping Canadians safe. The research done in other countries shows definitively that there are non-thermal effects from this type of radiation"

Magda Havas, PhD,
Environmental and Resource Studies
Trent University



What's so Smart...?

- **Privacy & Security:** Wireless transmissions of personal data, and information about what kind of appliances you own, when you use them and what you are doing at any moment can be intercepted by market researchers, insurance investigators, saboteurs, would-be burglars, etc.
 - InGuardians, a cyber security firm, tested 5 different brands of SmartMeters and found they could all be easily hacked into.
 - In the Netherlands, wireless SmartMeters are no longer mandatory since they violate the right to privacy, as guaranteed by Article 8 of the European Convention on Human Rights.
- **Electromagnetic interference:** SmartMeters can interfere with electronics and appliances, as PG&E of California admitted after numerous complaints.
- **Higher utility bills:** A survey by Toronto Hydro confirms that SmartMeters have increased hydro bills for about 80% of consumers, with no real gains in conservation.
- **No public hearings:** Installation is being fast-tracked before the public has a chance to examine the impacts, including the reported health effects.

----- People Speaking Up -----



The U.S.

- Excessive rate increases led to lawsuits in California and Texas.
- Public utility regulators in Hawaii, Maryland, and Indiana have all rejected SmartMeter proposals.
- Westerville, Ohio City Council turned down a federal grant due to strong public opposition to SmartMeters.
- New Mexico Gas is honouring medical waivers.

• Scarborough, Maine has voted for a SmartMeter moratorium because of health concerns.

• Chattanooga, Tennessee will use FTTH (fiber optic) for their SmartGrid.

• California Public Utilities Commission has received more than 2,000 health complaints.

At least 18 cities and 3 counties have demanded a halt to the SmartMeter program, following a groundswell of protest over privacy and health concerns.

Talk to your neighbours.....Safer technology is available. SmartMeters connected by fiber optic, shielded cable or phone lines both protect privacy and avoid harmful radiation.



Who benefits?

Who pays?

Who cares about public health?

Citizen & Customer Rights

Contacts

- **B.C. Utilities Commission**
604-660-4700
Complaints@bcuc.com
- **BC Hydro** 604-224-9376
SmartMeters@bchydro.com
- **City council members**
www.civicinfo.bc.ca/11.asp

Politicians

- Your MLA
- Steve Thomson,
BC Energy Minister
250-387-5896
EMPR.Minister@gov.bc.ca
- John Horgan, NDP Energy Critic
250-391-2801
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Health Agencies

- Perry Kendall, Provincial Health Officer
250-952-1330
Perry.Kendall@gov.bc.ca
- Your local Environmental Health Officer
Service BC: 604-660-2421
- **Civil Rights** groups.
- **Environmental** groups.

To Do...

- ❖ **Moratorium** on 'SmartMeter' installation until the health, safety & security issues are resolved.
- ❖ **Choice to Opt-Out.**
- ❖ **Safer (wired) options** for meters.
- * **Get the media involved** *