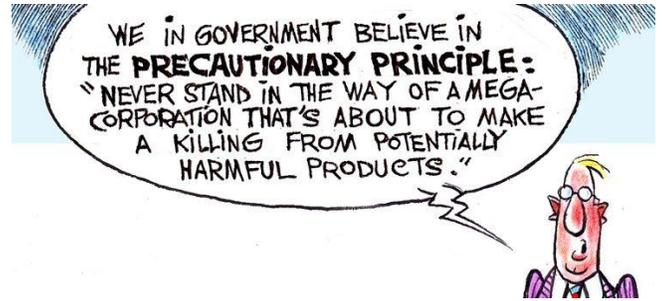


12 Things to Know When You Are Told That Smart Meters Are “Safe”

1. US industry does not recognize adverse health impacts addressed by safety standards in other countries. For example, “In Russia, limits for specific frequency ranges are set in subsequent 'Hygienic-epidemiological requirements'. The exposure limit for power density for EMF with frequencies between 300 megahertz and 300 gigahertz is 2% of the reference levels in the European Recommendation. The reason is to prevent biological effects that are not generally seen as a health risk in Western countries.” http://ec.europa.eu/health/electromagnetic_fields/docs/emf_comparison_policies_en.pdf



2. Radiofrequency exposure limits in the US are much more lax than in other nations *Source: JustProvelt.net*

NATION	EXPOSURE LIMITS FROM WIRELESS TRANSMITTERS
USA standard	580 microwatts
Russia	10 microwatts
China	6 microwatts
Italy	5 microwatts
Switzerland	4.2 microwatts
Salzburg, Austria	.1 microwatt
Lichtenstein	.1 microwatt

3. Industry states smart meters are safe because they do not exceed FCC limits, which are inadequate.
4. RF limits were set by the military in the Western Alliance nations; Canada, Australia, UK, NZ, US.
5. In the US, guidelines for radiofrequency exposures are not based on epidemiological studies.
6. Guidelines in the US do not consider chronic prolonged exposures to non-ionizing radiation.
7. Guidelines in the US do not consider non-thermal biological impacts.
8. Guidelines in the US do not consider the fetus, children, women, the aged, or the medically vulnerable.
9. Smart meters emit short sharp intermittent microbursts of pulse modulated signals 24/7/365.
10. The US has not funded any research or monitored smart meter deployments for health or environmental impact, despite reports of evidence of harm.
11. Using similar tactics to the tobacco industry, “weight of evidence” arguments attempt to indicate that there is a lack of scientific consensus. Industry funded vs. independent research comparison shows bias.
12. The World Health Organization classified radiofrequencies, including those emitted by smart meters, as a Class 2B possible human carcinogen in 2011.

HaltMAsmartmeters.org

StopSmartMetersMassachusetts.org

SmartGridAwareness.org

Access this document/links on line: <http://haltmasmartmeters.org/torc/>

Dirty Dozen: 12 Misleading Concepts from the Worcester Health Report

See also http://haltmasmartmeters.org/worcester/worcester_city_council/ for more “misinformation out there”

1. “Through this two way communication system information is read from the smart meter about once every fifteen minutes and is communicated back to the electric utility center using radiofrequency RF or electronic and magnetic frequency EMF” **incorrect terminology, obscures true rate of micro-pulses**
2. “Participation in the program is not mandatory and households have the ability to opt out” **not from the exposure to radiofrequencies from the network, neighbor’s meters, or 242 antennas; and, in the future there will be surcharges**
3. “This data is consistent with the information received from John Orr Professor of Electrical and Computer Engineering at Worcester Polytechnic Institute who stated that these frequencies are forms of non-ionizing radiation similar to AM radios, cell phones, and microwave ovens” **Radio and microwave oven is not a transmitter, cellphone use is voluntary, not 24/7 or when person is asleep, smart meter RF is involuntary and inescapable**
4. “However the radiation emitted from smart meters is Extremely Low Frequency ELF radiation which is not at the level of intensity that damages tissue” **incorrect terminology, ignores non-thermal biological impacts**
5. “In 2011 the International Agency for Research on Cancer IARC listed RF EMF as possibly carcinogenic to humans Group 2B stating an increased risk for glioma a malignant type of brain cancer is associated with wireless phone” **misleads by misrepresenting WHO classification as only pertaining to cellphones, limits focus to brain tumors**
6. “The BioInitiative Report published after the IARC statement explains that though studies of long term exposure to low levels of RF radiation and brain tumors exist they have been occupational studies. As previously explained occupational exposure limits are higher than public exposure limits and therefore a causal relationship between smart meters and brain tumors has not been established” **Mis-representation of Bio-initiative Report, extrapolated from 1 out of 1800 studies**
7. “Non-ionizing EMF radiation as previously explained has a thermal effect which heats living tissue when the tissue is exposed to certain levels of intensity however the radiation emitted from smart meters is ELF radiation and therefore not harmful. “ **ELF statement is incorrect and mis-leading, smart meters emit non-ionizing radiation.**
8. “Professor Orr explained that the radiation from smart meters is lower on the electromagnetic spectrum than light and therefore he believes that smart meters do not negatively impact the health of the public.” **Radiation emitted by the sun falls into the categories of visible light, infrared and ultraviolet in the electromagnetic spectrum and is a natural part of our universe, to which ALL LIFE has adapted over eons. Man-made wireless signals in the microwave range of the electromagnetic spectrum are pulsed, ultra-high frequency emissions, released in bursts, at regular intervals, in rapid succession. Imposed on these pulsed, ultra high frequency microwaves are extremely low frequency (ELF) modulations of the radiofrequency carrier waves. Carrier waves transport data and are also referred to as Information Carrying Radio Waves. Unnatural microwave radiofrequency radiation emissions cannot be compared to the naturally occurring and biologically compatible radiation produced by the sun. Man-made radiation penetrates buildings, and bodies.**
9. “Tell published an article in November 2011 regarding Itron smart meters in which he stated that after testing radiation from Itron smart meters under virtually any realistic condition of deployment with the meters operating as designed the RF power densities of their emissions will remain far below FCC MPE levels for the general public” **FCC limits are irrelevant to the issue of non-thermal impacts.**
10. “Professor Orr stated that no evidence has been found that radiation below the FCC limit has negative effects on health but cautioned that scientists cannot test the negative and therefore cannot say for sure that as research progresses no health implications will be found”. **Many nations disagree**
11. From Definitions: “Advanced Metering Infrastructure, AMI Electronic device that records consumption of electric energy in intervals of one hour or less and communicates that information at least daily back to the utility for monitoring and billing purposes” **issue is frequency of micropulses thousands of times per day**
12. From definitions: “Electronic and Magnetic Frequency EMF Invisible areas of radiation that are associated with the use of electrical power EMTs are typically characterized by wavelength or frequency into one of two radioactive categories” **Babblespeak,, EMF = Electromagnetic Fields**