### **INFORMATIONAL CORRESPONDENCE - August 25, 2014**

- 1. Corporate Officer Letter dated August 13, 2014 Volunteer Parking for Roots and Blues Festival
- 2. Corporate Officer Letter dated August 13, 2014 October Artisan Market at Ross Street Plaza
- 3. R. D. Roberts Letter dated July 30, 2014 Flag Flying at Marine Park
- 4. H. Hallett Letter dated August 2, 2014 Canadian Doctors Call for Protection
- 5. C. Moore Letter dated August 13, 2014 Specific Referral for Sidewalk
- 6. G. Cole Letter dated August 12, 2014 Public Works Department Thank You
- 7. R. Riach Letter dated August 14, 2014 Replace Health Canada Standards with Independent Scientific Guidelines
- 8. BC Green Party Email dated August 12, 2014 Thank you and UBCM Meeting Invitation
- 9. Ministry of Transportation and Infrastructure Email dated August 12, 2014 Ministry of Transportation and Infrastructure Cycling Program 2014
- 10. Committee for the Republic of Canada Letter dated August 17, 2014 Invitation to Participate in the CRC's August 29<sup>th</sup> Conference
- 11. SILGA -Email dated August 18, 2014 SILGA Luncheon at UBCM In Memorium
- 12. UBCM President Letter dated August 12, 2014 Gas Tax Agreement Community Works Fund Payment
- 13. MIABC Letter dated August 8, 2014 MIABC Voting Delegate Invitation
- 14. Green Communities Committee Letter dated August 9, 2014 Corporate Greenhouse Gas Emissions for 2013
- 15. BC Hydro Email dated August 15, 2014 2014 Community Champions Program
- 16. BC Hydro Email dated August 18, 2014 Funding Available for Electric Beautification Projects
- 17. Fire Chiefs' Association of BC Letter dated July 22, 2014 Extended Thank You to Fire Chief Brad Shirley
- 18. L. Onsorge Letter dated August 3, 2014 with attachments The Increasing Incidence of Electrosensitivity in our Community What You Can Do!
- 19. Mayors for Peace Secretariat Email dated August 5, 2014 The City of Hiroshima Peace Declaration
- 20. Mayors for Peace Secretariat Email dated August 8, 2014 Nagasaki Peace Declaration 2014
- 21. Mayors for Peace Secretariat Email dated August 13, 2014 Appeals for Termination of Armed Conflict in Gaza Strip of Israel
- 22. Coalition to Stop Smart Meters Media Release dated July 30, 2014 BC's Energy Minister admits Smart Meter Fires, but will do nothing

**City of Salmon Arm** 500 - 2 Avenue NE Mailing Address: Box 40 Salmon Arm, BC V1E 4N2 Tel: 250.803.4000 Fax: 250.803.4041 www.salmonarm.ca



August 13, 2014

Salmon Arm Folk Music Society PO Box 21 Salmon Arm, BC V1E 4N2

Attention: Jay Scott

Dear Mr. Scott:

Re: Volunteer Parking for Roots and Blues Festival

I am pleased to advise that at the August 11, 2014, Regular Meeting of Council for the City of Salmon Arm the following Resolution was adopted:

THAT: Council authorize the Salmon Arm Roots and Blues Festival to use the JL Jackson soccer fields (Lot 4) for volunteer parking on August 15, 16 and 17, 2014.

Please note that this approval is subject to the provision of adequate supervision and Comprehensive General Liability Insurance with a limit of not less than \$2,000,000.00 inclusive per occurrence for bodily injury (including death, personal injury and property damage) with the City of Salmon Arm named as an "Additional Insured". Confirmation of liability insurance must be submitted to the City of Salmon Arm prior to the event.

If you have any questions please do not hesitate to contact the undersigned at 250-803-4029 or via e-mail at ejackson@salmonarm.ca.

Yours truly,

Érin Jackson Corporate Officer

c.c. R. Niewenhuizen, Director of Engineering & Public Works

City of Salmon Arm 500 - 2 Avenue NE Mailing Address: Box 40 Salmon Arm, BC V1E 4N2 Tel: 250.803.4000 Fax: 250.803.4041 www.salmonarm.ca



August 13, 2014

Downtown Salmon Arm 402 - 251 Trans-Canada Highway NW Salmon Arm, BC V1E 3B8

Attention: Lindsay Wong

Dear Ms. Wong:

Re: October Artisan Market at Ross Street Plaza

I am pleased to advise that at the August 11, 2014, Regular Meeting of Council for the City of Salmon Arm the following Resolution was adopted:

THAT: Council authorize the use of the Ross Street Plaza for the Artisan Market held on each Saturday during the month of October 2014.

Please note that this approval is subject to the provision of adequate supervision and Comprehensive General Liability Insurance with a limit of not less than \$2,000,000.00 inclusive per occurrence for bodily injury (including death, personal injury and property damage) with the City of Salmon Arm named as an "Additional Insured". Confirmation of liability insurance must be submitted to the City of Salmon Arm prior to the event.

If you have any questions please do not hesitate to contact the undersigned at 250-803-4029 or via e-mail at ejackson@salmonarm.ca.

Yours truly,

Erin Jackson Corporate Officer

c.c. R. Niewenhuizen, Director of Engineering & Public Works



July 30, 2014 To: Jour Worship Mayor Nancy Cooper City Hall Solmon Arm, B.C. RECEIVED JUL 31 2014 City OF SALMON ARM Dear Ms. Cooper: I am writing this to inform you of the deplorable flag flying at marine Park, Our Canadian Flag is faded & sipped and needs replacing. I would hope you could deal with this matter as soon as possible as it reflects poorly upon Salmon arm. yours truly, A. D. Roberts 4381-13th St. N.E. Solmon arm, B.C. (250) 832 -4169 , \$

### Mr. Howard Hallett

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STY OF SALMON ARE

6491 - 70<sup>th</sup> Avenue, N.E. Salmon Arm, B.C. V0E 1K0

August 2, 2014

Mayor Nancy Cooper & Council Members City Hall, Salmon Arm

**Dear Mayor and Council Members:** 

Re: Canadian Doctors Call for Protection

It is with great concern that I continue to have lack of confidence in the process you have undertaken with regard to the completion of a Salmon Arm Cell Tower Siting & Consultation Policy.

In the attached "Doctors Call for Protection from Radiofrequency Radiation Exposure" it is clearly stated,

### "There is considerable evidence and research from various scientific experts that exposure to microwave radiation from wireless devices......can have an adverse impact on human physiological function".

Reliance on Health Canada's Safety Code 6, which is based on industry funded studies, is no longer acceptable as a protection mechanism for the public. To continue to allow unlimited harmful exposure under the mantra of "it is safe" is no longer appropriate. There are now six major cell towers in your jurisdiction which need to be relocated, as these are far too close and are causing cumulative health damages to all exposed in the vicinity.

The Doctors further state

"....energy from wireless devices may be causatively linked to various health problems, including reproductive compromise, developmental impacts, hormonal dysregulation and cancer. In fact, in 2011 the World Health Organization listed microwave radiation as a Class 2B possible carcinogen and subsequent research

# strengthened the evidence that a stronger designation may be justified."

I insist that you live up to your responsibilities and the oaths that you took when you came to office, and use the power vested in you <u>to protect the people of Salmon</u> <u>Arm.</u>

The only way to do this is with a cell tower siting policy which protects every man, woman and child under your care, where you use the advice of <u>non-industry funded</u> <u>scientists, concerned doctors, and the public that you serve</u>.

You must recognize immediately that your inaction to protect the public is placing children and youth at significant risk, and damaging their chances of a healthy future. In all possibly dangerous situations, it is the adults' obligation to protect the child first and foremost. (United Nations Declaration of the Child).

Health Canada is recognized as failing to protect the people of Canada in this instance. That should not be your failing also.

Let's make Salmon Arm a leader in safe communities by instituting a protective Cell Tower Policy which puts people first.

Please provide me with a written reply, and confirmation that this letter was circulated to all council members.

Sincerely,

H Mallut

Howard Hallett Mailing Address: Box 361, Canoe, B.C. V0E 1K0

#### Declaration: Doctors Call for Protection from Radiofrequency Radiation Exposure

#### Physicians Call for Health Canada to Provide:

- i) Wireless safety standards that are more protective of the health of Canadians; and
- ii) Guidelines and resources to assist Canadian physicians in assessing and managing health problems related to microwave radiation.

There is considerable evidence and research from various scientific experts that exposure to microwave radiation from wireless devices; Wi-Fi, smart meters and cell towers can have an adverse impact on human physiological function.<sup>1 2</sup> Many recent and emerging studies from university departments and scientific sources throughout the world support the assertion that energy from wireless devices may be causatively linked to various health problems including reproductive compromise, developmental impacts, hormonal dysregulation and cancer. In fact, in 2011 the World Health Organization listed microwave radiation as a Class 2B possible carcinogen<sup>3</sup> and subsequent research strengthened the evidence that a stronger designation may be justified.<sup>4 5 6</sup>

### Out of sincere concern for the health of Canadians at all stages of life – from the developing fetus through childhood and into adulthood – we respectfully request that:

- i) Health Canada develop and support strategies to raise awareness about microwave radiation impacts and to minimize prolonged exposure to microwave radiation in schools and other places where children are regularly exposed.
- ii) As Health Canada has acknowledged that a full literature review was not part of its latest update of Safety Code 6 (the safety guideline for wireless exposure pertaining to thermal effects on the tissue of adult males) we request a comprehensive literature review for all age ranges with less reliance on industry-funded studies.
- iii) Health Canada provide guidelines and resources to assist Canadian physicians in becoming apprised of microwave exposure and related health problems and clinical presentations that may be associated with over-exposure or sensitivity (similar to the 2012, "Guideline of the Austrian Medical Association for the diagnosis and treatment of EMF related health problems and illnesses.") (Note; this guideline is under review with an update expected.)

Dr. John Barnhill, MD, FRCS(C), CCFP, Richmond, BC

**Dr. Warren Bell**, BA MD CM CCFP FCFP; Board member and Past Founding President, CAPE (Canadian Association of Physicians for the Environment); Member and Past Founding President, WA:TER (Wetland Alliance: The Ecological Response); Founding member, HUESSS (Health Uranium Environment Sustainability Survival Solidarity); Rural Preceptor, Faculty of Medicine, UBC, Vancouver, BC

**Dr. Alison C. Bested**, MD, FRCPC, Clinical Associate Professor, Faculty of Medicine, University of British Columbia, BC

- More to Follow -

**Dr. Jennifer Armstrong**, MD, DIBEM, BSc, Past President, American Academy of Environmental Medicine, OEHC Ottawa Environmental Health Clinic, Ottawa, ON

Dr. Claire Astley, MD, DrTCM, Medical Acupuncture Practice, Victoria, BC

Dr. Robert Banner, MD, CCFP, FCFP, FRCP, Dip AAPM, Dip CAPM, ABIHM, London, ON

#### Declaration: Doctors Call for Protection from Radiofrequency Radiation Exposure - page 2

Dr. Mel Borins, MD, Toronto, ON Dr. Jody Bowle-Evans, BA, MD, CGPP, Creemore, ON Dr. Riina Bray, BASc MSc MD, FCFP MHSc, Assistant Professor, Department of Family and Community Medicine, University of Toronto, ON Dr. Phillip Bright, MD, G.P, Kitchener, ON Dr. Adam Chen, MD, CCFP, Mississauga, ON Dr. John Cline, MD, Family Doctor / General Practitioner, Nanaimo, BC Dr. Cara Flamer, BSc, MD, CCFP, Toronto, ON Dr. Jonathan Fox, MD, Fall River, NS Dr. Robert W Henderson, MD, CCFP, FCFP, Campbellford, ON Dr. Steven Herr, MD, BSeH, MC, CCFP(EM), FCFP, Huntsville, ON Dr Veronica Kekosz BA, BSc, MD, FRCP(C), Toronto, ON Dr. Kathleen Kerr MD, Family Physician, Toronto, ON Dr. Robert F. Kidd, MD, CM, Renfrew, ON Dr. Veronica Koopmans, MD, CCFP, Thornhill, ON Dr. Tom Kouroukis, MD, MSc, FRCPC, Associate Professor, McMaster University, Hamilton, ON Dr. Sonja Kusta, MD, North York, ON Dr. Stephen Malthouse. MD Family Practice; Past-president, Canadian Complementary Medical Association, Denman Island, BC Dr. Lynn Marshall, MD, Toronto, ON Dr. Ross Mickelson, MD., B.Sc., Ottawa, ON Dr. Anne Marie Mingiardi, MD, BSc (Hon), Kitchener, ON Dr. John Molot, MD CCFP FCFP, Family Physician, Toronto, ON Dr. Richard Nahas, MD CCFP, Assistant Professor Department of Family Medicine, University of Ottawa, ON Dr. Jennifer Pearlman, MD, CCFP, NCMP, FAARM, Toronto, ON Dr. Peter Petrosniak, MD, Lindsay, ON Dr. Barbara Powell, MD, Ottawa, ON Dr. Barbara Power, MD FRCPC, Associate Professor of Medicine, University of Ottawa, ON Dr. Maria Schleifer, MD, Toronto, ON Dr. Hugh E Scully, BA, MD, MSc, FRCS[C], FACS, FACC, FAHA, Professor of Surgery and Health Policy, University of Toronto, Consultant Cardiac Surgeon, UHN Toronto General Hospital. Past-President, Ontario Medical Association; Canadian Medical Association; Canadian, Cardiovascular Soc.; Former Council [Board], Royal College of Physicians and Surgeons of Canada; World Medical Assoc.; Former Governor of the American College of Surgeons; Member, Health Policy Advocacy Group, American College of Surgeons, Toronto, ON Dr. Dugald Seely, ND, MSc, FABNO; Founder & Executive Director; Ottawa Integrative Cancer Centre; Director;

Research & Clinical Epidemiology; Canadian College of Naturopathic Medicine; Affiliate Investigator; Ottawa Hospital Research Institute, Ottawa, ON

Dr. Sabrina Stables, Family Doctor / General Practitioner, Toronto, ON

**Dr. Eleanor Stein**, MD FRCP(C), Psychiatrist in Private Practice and Assistant Clinical Professor, University of Calgary, Calgary, AB

Dr. Adil Vasanji, Family Doctor / General Practitioner, Edmonton, AB

#### Date of Issuance: July 16, 2014

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<sup>&</sup>lt;sup>1</sup> Genuis SJ. Fielding a current idea: exploring the public health impact of electromagnetic radiation. Public Health. 2008 Feb;122(2):113–24.

<sup>2</sup> Eger H, Jahn M. Specific symptoms and radiation from mobile base stations in Selbitz, Bavaria, Germany: evidence for a dose-effect relationship (original article in German). Umw Med Ges. 2010;23(2):130–9.

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<sup>3</sup> International Agency for Research on Cancer (IARC). Non-Ionizing Radiation, Part 2: Radiofrequency Electromagnetic Fields [Internet]. 2013 [cited 2013 Sep 2]. Available from: http://monographs.iarc.fr/ENG/Monographs/vol102/index.php

<sup>4</sup> Coureau G, Bouvier G, Lebailly P, Fabbro-Peray P, Gruber A, Leffondre K, et al. Mobile phone use and brain tumours in the CERENAT case-control study. Occup Environ Med. 2014 May 9; oemed-2013-101754.

<sup>5</sup> Hardell L, Carlberg M. Using the Hill viewpoints from 1965 for evaluating strengths of evidence of the risk for brain tumors associated with use of mobile and cordless phones. Rev Environm Health. 2013 Oct 11.

<sup>6</sup> Davis DL, Kesari S, Soskolne CL, Miller AB, Stein Y. Swedish review strengthens grounds for concluding that radiation from cellular and cordless phones is a probable human carcinogen. Pathophysiology. 2013 Apr; 20(2):123–9.

Dear Mayor Cooper and Council,

#### Re: Specific referral for sidewalk

I am writing to request that a sidewalk be built on the north side of Okanagan Ave from 30<sup>th</sup> st NE to the stairs across from 27<sup>th</sup> st NE.

Although there is an existing sidewalk on the other side of Okanagan Ave I feel it is dangerous for children crossing to and from 29<sup>th</sup> st NE and the homes along Okanagan from 29<sup>th</sup> down to the stairs. There is quite a bit of vehicle congestion at peak walking times (beginning and end of school days) and no safe place for these children to cross. There are 3 driveways on the south side of Okanagan which are very busy at the peak times – the exit from the middle school, the driveway to the District Music and Tech Center and the District Education Center (DEC) parking lot.

The top of Okanagan Ave at 30<sup>th</sup> st NE would benefit from having a sidewalk on both sides. This area is busy enough without having children crossing unsafely, creating further confusion for drivers.

Thank you for considering this request,

amen Moore 250-833-0256 C.a. moore @ Shaw.ca amen

AUG 13 2014

CITY OF SALMON ARM





230 –25<sup>th</sup> Street NE Salmon Arm, BC V1E 2A8

August 12th 2014

City of Salmon Arm Municipal Hall 500 – 2<sup>nd</sup> Avenue NE Salmon Arm, BC

Dear Staff and Councillors

I would like to say a sincere thank you to your Public Works Department crews for their timely and efficient removal of a troublesome willow tree on city property in front of my home. They were great!

Thank you so much.

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Gillian (Gill) Cole

<u>Copy to</u> Public Works 100 – 30<sup>th</sup> Street SE Salmon Arm, BC



#### Richard Riach 551 2 St. SE, Salmon Arm, BC V1E 4H3 (250) 832-7444 email: dickriach@gmail

August 14, 2014



Ms. Nancy Cooper, Mayor & Council Members City of Salmon Arm Salmon Arm, BC

Dear Mayor and Council:

#### Re: Replace Health Canada Standards with independent Scientific Guidelines

Health Canada refuses to acknowledge that damaging biological effects occur below the thermal level from microwave radiofrequency radiation exposure, with adverse effects that include cancer, alzheimers, brain tumours, acoustic neuromas, autism, electrosensitivity, leukemia, and more.

This makes Health Canada obsolete in setting safety standards for protecting the public in the matter of wireless device use and exposure, and derelict in their duty.

The science is here evidencing multiple health damages. Anyone relying on Health Canada's misleading guidelines after they have become aware of doctors and scientists calling for immediate protective changes, are also derelict in their duty. A person doesn't have to know all the details of the risk and damage, just that it can and is occurring.

Some regulators would rather sit quietly even knowing this truth, hiding behind Health Canada's stance. But times are rapidly changing as the truth is becoming more widely known, which means anyone supporting Health Canada's non protection of the public is running out of time and is on the wrong side of history. Note that Health Canada has a dismal history of protecting the public first – think of thalidomide, asbestos, lead, tainted blood – the list goes on. Late action from early warnings is the modus operandi of Health Canada.

Many countries are now using the Bioinitiative Report 2012 to remove, relocate and reduce microwave radiation. You, as Mayor and Council, elected as first and foremost to be representatives of the public, have the freedom, power and responsibility to decide which regulations you will follow. We know Health Canada is derelict, we know that you can choose to institute precautionary measures, and this is exactly what we are asking you to do, no matter how inconvenient that may be for you.

Please review very carefully the attached Bioinitiative Report 2012 which is a collection of peer reviewed and published science evidencing adverse health effects. The independent scientists who gathered this science together to produce the report did so in order to warn the public and give guidelines to regulators who wish to protect the public instead of protecting industry profits.

In light of the scientific evidence, I ask you, on behalf of thousands of concerned citizens, to enact the <u>Precautionary Principle</u> in Salmon Arm, disallow any new cell towers, and relocate those already erected away from living and working areas.

The Precautionary Principle is described as follows:

"When human activities may lead to **morally unacceptable harm** that is **scientifically plausible but uncertain,** actions shall be taken to avoid or diminish that harm. Morally unacceptable harm refers to harm to humans or the environment that is -threatening to **human life or health,** or -serious and effectively **irreversible**, or

....... 2

-inequitable to present or future generations, or

-imposed without adequate consideration of **the human rights of those affected**. Actions are interventions that are undertaken before harm occurs that seek to avoid or diminish the harm.

The above definition of the precautionary principle is currently enshrined in the 1999 Canadian Environmental Protection Act (CEPA 1999):

"Whereas the Government of Canada is committed to implementing the precautionary principle that, where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

As further backup for you to take charge of the drive to make Salmon Arm a low microwave radiation safe zone, please review the second attachment, which is a summary Chateauguay court decision granting rights of placement to the municipality.

Please share this information and add these concerns to your documentation on the cell tower siting policy for Salmon Arm. Please be accountable for receiving and reading this information.

Yours truly,

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**Richard Riach** 

#### **BIOINITIATIVE 2012 - CONCLUSIONS Table 1-1**

Overall, these 1800 or so new studies report abnormal gene transcription (Section 5); genotoxicity and single-and double-strand DNA damage (Section 6); stress proteins because of the fractal RF-antenna like nature of DNA (Section 7); chromatin condensation and loss of DNA repair capacity

in human stem cells (Sections 6 and 15); reduction in free-radical scavengers - particularly melatonin (Sections 5, 9, 13, 14, 15, 16 and 17); neurotoxicity in humans and animals (Section 9), carcinogenicity in humans (Sections 11, 12, 13, 14, 15, 16 and 17); serious impacts on human and animal sperm morphology and function (Section 18); effects on offspring behavior (Section 18, 19 and 20); and effects on brain and cranial bone development in the offspring of animals that are exposed to cell phone radiation during pregnancy (Sections 5 and 18). This is only a snapshot of the evidence presented in the BioInitiative 2012 updated report.

#### **BIOEFFECTS ARE CLEARLY ESTABLISHED**

Bioeffects are clearly established and occur at very low levels of exposure to electromagnetic fields and radiofrequency radiation. Bioeffects can occur in the first few minutes at levels associated with cell and cordless phone use. Bioeffects can also occur from just minutes of exposure to mobile phone masts (cell towers), WI-FI, and wireless utility 'smart' meters that produce whole-body exposure. Chronic base station level exposures can result in illness.

#### **BIOEFFECTS WITH CHRONIC EXPOSURES CAN REASONABLY BE PRESUMED TO RESULT IN ADVERSE HEALTH EFFECTS**

Many of these bioeffects can reasonably be presumed to result in adverse health effects if the exposures are prolonged or chronic. This is because they interfere with normal body processes (disrupt homeostasis), prevent the body from healing damaged DNA, produce immune system imbalances, metabolic disruption and lower resilience to disease across multiple pathways. Essential body processes can eventually be disabled by incessant external stresses (from system-wide electrophysiological interference) and lead to pervasive impairment of metabolic and reproductive functions.

#### LOW EXPOSURE LEVELS ARE ASSOCIATED WITH BIOEFFECTS AND ADVERSE HEALTH EFFECTS AT CELL TOWER RFR EXPOSURE LEVELS

At least five new cell tower studies are reporting bioeffects in the range of 0.003 to 0.05  $\mu$ W/cm2 at lower levels than reported in 2007 (0.05 to 0.1 uW/cm2 was the range below which, in 2007, effects were not observed). Researchers report headaches, concentration difficulties and behavioral problems in children and adolescents; and sleep disturbances, headaches and concentration problems in adults. Public safety standards are 1,000 – 10,000 or more times higher than levels now commonly reported in mobile phone base station studies to cause bioeffects.

# **EVIDENCE FOR FERTILITY AND REPRODUCTION EFFECTS: HUMAN SPERM AND THEIR DNA ARE DAMAGED**

Human sperm are damaged by cell phone radiation at very low intensities in the low microwatt and nanowatt/cm2 range (0.00034 - 0.07 uW/cm2). There is a veritable flood of new studies reporting sperm damage in humans and animals, leading to substantial concerns for fertility, reproduction and health of the offspring (unrepaired de novo mutations in sperm). Exposure levels are similar to those resulting from wearing a cell phone on the belt, or in the pants pocket, or using a wireless laptop computer on the lap. Sperm lack the ability to repair DNA damage.

Studies of human sperm show genetic (DNA) damage from cell phones on standby mode and wireless laptop use. Impaired sperm quality, motility and viability occur at exposures of 0.00034 uW/cm2 to 0.07 uW/cm2 with a resultant reduction in human male fertility. Sperm cannot repair DNA damage.

Several international laboratories have replicated studies showing adverse effects on sperm quality, motility and pathology in men who use and particularly those who wear a cell phone, PDA or pager on their belt or in a pocket (Agarwal et al, 2008; Agarwal et al, 2009; Wdowiak et al, 2007; De Iuliis et al, 2009; Fejes et al, 2005; Aitken et al, 2005; Kumar, 2012). Other studies conclude that usage of cell phones, exposure to cell phone radiation, or storage of a mobile phone close to the testes of human males affect sperm counts, motility, viability and structure (Aitken et al, 2004; Agarwal et al, 2007; Erogul et al., 2006). Animal studies have demonstrated oxidative and DNA damage, pathological changes in the testes of animals, decreased sperm mobility and viability, and other measures of deleterious damage to the male germ line (Dasdag et al, 1999; Yan et al, 2007; Otitoloju et al, 2010; Salama et al, 2008; Behari et al, 2006; Kumar et al, 2012). There are fewer animal studies that have studied effects of cell phone radiation on female fertility parameters. Panagopoulous et al. 2012 report decreased ovarian development and size of ovaries, and premature cell death of ovarian follicles and nurse cells in Drosophila melanogaster. Gul et al (2009) report rats exposed to stand-by level RFR (phones on but not transmitting calls) caused decrease in the number of ovarian follicles in pups born to these exposed dams. Magras and Xenos (1997) reported irreversible infertility in mice after five (5) generations of exposure to RFR at cell phone tower exposure levels of less than one microwatt per centimeter squared  $(\mu W/cm^2)$ .

#### EVIDENCE THAT CHILDREN ARE MORE VULNERABLE

There is good evidence to suggest that many toxic exposures to the fetus and very young child have especially detrimental consequences depending on when they occur during critical phases of growth and development (time windows of critical development), where such exposures may lay the seeds of health harm that develops even decades later. Existing FCC and ICNIRP public safety limits seem to be not sufficiently protective of public health, in particular for the young (embryo, fetus, neonate, very young child).

The Presidential Cancer Panel (2010) found that children '*are at special risk due to their smaller* body mass and rapid physical development, both of which magnify their vulnerability to known carcinogens, including radiation.'

The American Academy of Pediatrics, in a letter to Congressman Dennis Kucinich dated 12 December 2012 states "Children are disproportionately affected by environmental exposures, including cell phone radiation. The differences in bone density and the amount of fluid in a child's brain compared to an adult's brain could allow children to absorb greater quantities of RF energy deeper into their brains than adults. It is essential that any new standards for cell phones or other wireless devices be based on protecting the youngest and most vulnerable populations to ensure thay are safeguarded through their lifetimes."

#### FETAL AND NEONATAL EFFECTS OF EMF

Fetal (*in-utero*) and early childhood exposures to cell phone radiation and wireless technologies in general may be a risk factor for hyperactivity, learning disorders and behavioral problems in school.

**Fetal Development Studies:** Effects on the developing fetus from *in-utero* exposure to cell phone radiation have been observed in both human and animal studies since 2006. Divan et al (2008) found that children born of mothers who used cell phones during pregnancy develop more behavioral problems by the time they have reached school age than children whose mothers did not use cell phones during pregnancy. Children whose mothers used cell phones during pregnancy had 25% more emotional problems, 35% more hyperactivity, 49% more conduct problems and 34% more peer problems (Divan et al., 2008).

Common sense measures to limit both ELF-EMF and RF EMF in these populations is needed, especially with respect to avoidable exposures like incubators that can be modified; and where education of the pregnant mother with respect to laptop computers, mobile phones and other sources of ELF-EMF and RF EMF are easily instituted.

Sources of fetal and neonatal exposures of concern include cell phone radiation (both paternal use of wireless devices worn on the body and maternal use of wireless phones during pregnancy). Exposure to whole-body RFR from base stations and WI-FI, use of wireless laptops, use of incubators for newborns with excessively high ELF-EMF levels resulting in altered heart rate variability and reduced melatonin levels in newborns, fetal exposures to MRI of the pregnant mother, and greater susceptibility to leukemia and asthma in the child where there have been maternal exposures to ELF-EMF.

A precautionary approach may provide the frame for decision-making where remediation actions have to be realized to prevent high exposures of children and pregnant woman.

(Bellieni and Pinto, 2012 - Section 19)

#### EMF/RFR AS A PLAUSIBLE BIOLGICAL MECHANISM FOR AUTISM (ASD)

• Children with existing neurological problems that include cognitive, learning, attention, memory, or behavioral problems should as much as possible be provided with wired (not wireless) learning, living and sleeping environments,

• Special education classrooms should observe 'no wireless' conditions to reduce avoidable stressors that may impede social, academic and behavioral progress.

• All children should reasonably be protected from the physiological stressor of significantly elevated EMF/RFR (wireless in classrooms, or home environments).

• School districts that are now considering all-wireless learning environments should be strongly cautioned that wired environments are likely to provide better learning and teaching environments, and prevent possible adverse health consequences for both students and faculty in

environments, and prevent possible adverse health consequences for both students and faculty in the long-term.

• Monitoring of the impacts of wireless technology in learning and care environments should be performed with sophisticated measurement and data analysis techniques that are cognizant of the non-linear impacts of EMF/RFR and of data techniques most appropriate for discerning these impacts.

• There is sufficient scientific evidence to warrant the selection of wired internet, wired classrooms and wired learning devices, rather than making an expensive and potentially health-harming commitment to wireless devices that may have to be substituted out later, and

• Wired classrooms should reasonably be provided to all students who opt-out of wireless environments. (Herbert and Sage, 2012 – Section 20)

Many disrupted physiological processes and impaired behaviors in people with ASDs closely resemble those related to biological and health effects of EMF/RFR exposure. Biomarkers and indicators of disease and their clinical symptoms have striking similarities. Broadly speaking, these types of phenomena can fall into one or more of several classes: a) alteration of genes or gene expression, b) induction of change in brain or organismic development, c) alteration of phenomena modulating systemic and brain function on an ongoing basis throughout the life course (which can include systemic pathophysiology as well as brain-based changes), and d) evidence of functional alteration in domains such as behavior, social interaction and attention known to be challenged in ASD.

Several thousand scientific studies over four decades point to serious biological effects and health harm from EMF and RFR. These studies report genotoxicity, single-and double-strand DNA damage, chromatin condensation, loss of DNA repair capacity in human stem cells, reduction in free-radical scavengers (particularly melatonin), abnormal gene transcription, neurotoxicity, carcinogenicity, damage to sperm morphology and function, effects on behavior, and effects on brain development in the fetus of human mothers that use cell phones during pregnancy. Cell phone exposure has been linked to altered fetal brain development and ADHDlike behavior in the offspring of pregnant mice.

Reducing life-long health risks begins in the earliest stages of embryonic and fetal development, is accelerated for the infant and very young child compared to adults, and is not complete in young people (as far as brain and nervous system maturation) until the early 20's. Windows of critical development mean that risk factors once laid down in the cells, or in epigenetic changes in the genome may have grave and life-long consequences for health or illness for every individual.

All relevant environmental conditions, including EMF and RFR, which can degrade the human genome, and impair normal health and development of species including homo sapiens, should be given weight in defining and implementing prudent, precautionary actions to protect public health.

Allostatic load in autism and autistic decompensation - we may be at a tipping point that can be pushed back by removing unnecessary stressors like EMF/RFR and building resilience.

The consequence of ignoring clear evidence of large-scale health risks to global populations, when the risk factors are largely avoidable or preventable is too high a risk to take. With the epidemic of autism (ASD) putting the welfare of children, and their families in peril at a rate of one family in 88, the rate still increasing annually, we cannot afford to ignore this body of evidence. The public needs to know that these risks exist, that transition to wireless should not be presumed safe, and that it is very much worth the effort to minimize exposures that still provide the benefits of technology in learning, but without the threat of health risk and development impairments to learning and behavior in the classroom.

(Herbert and Sage, 2010 - Section 20)

#### THE BLOOD-BRAIN BARRIER IS AT RISK

The BBB is a protective barrier that prevents the flow of toxins into sensitive brain tissue. Increased permeability of the BBB caused by cell phone RFR may result in neuronal damage. Many research studies show that very low intensity exposures to RFR can affect the blood-brain barrier (BBB) (mostly animal studies). Summing up the research, it is more probable than unlikely that non-thermal EMF from cell phones and base stations do have effects upon biology. A single 2-hr exposure to cell phone radiation can result in increased leakage of the BBB, and 50 days after exposure, neuronal damage can be seen, and at the later time point also albumin leakage is demonstrated. The levels of RFR needed to affect the BBB have been shown to be as low as 0.001 W/kg, or less than holding a mobile phone at arm's length. The US FCC standard is 1.6 W/kg; the ICNIRP standard is 2 W/kg of energy (SAR) into brain tissue from cell/cordless phone use. Thus, BBB effects occur at about 1000 times lower RFR exposure levels than the US and ICNIRP limits allow. (Salford, 2012 - Section 10)

If the blood-brain barrier is vulnerable to serious and on-going damage from wireless exposures, then we should perhaps also be looking at the blood-ocular barrier (that protects the eyes), the blood-placenta barrier (that protects the developing fetus) and the blood-gut barrier (that protects proper digestion and nutrition), and the blood-testes barrier (that protects developing sperm) to see if they too can be damaged by RFR.

# **EPIDEMIOLOGICAL STUDIES CONSISTENTLY SHOW ELEVATIONS IN RISK OF BRAIN CANCERS**

Brain Tumors: There is a consistent pattern of increased risk of glioma and acoustic neuroma associated with use of mobile phones and cordless phones.

"Based on epidemiological studies there is a consistent pattern of increased risk for glioma and acoustic neuroma associated with use of mobile phones and cordless phones. The evidence comes mainly from two study centres, the Hardell group in Sweden and the Interphone Study Group. No consistent pattern of an increased risk is seen for meningioma. A systematic bias in the studies that explains the results would also have been the case for meningioma. The different risk pattern for tumor type strengthens the findings regarding glioma and acoustic neuroma. Meta-analyses of the Hardell group and Interphone studies show an increased risk for glioma and acoustic neuroma. Supportive evidence comes also from anatomical localisation of the tumor to the most exposed area of the brain, cumulative exposure in hours and latency time that all add to the biological relevance of an increased risk. In addition risk calculations based on estimated absorbed dose give strength to the findings. (Hardell, 2012 – Section 11)

"There is reasonable basis to conclude that RF-EMFs are bioactive and have a potential to cause health impacts. There is a consistent pattern of increased risk for glioma and acoustic neuroma associated with use of wireless phones (mobile phones and cordless phones) mainly based on results from case-control studies from the Hardell group and Interphone Final Study results. Epidemiological evidence gives that RF-EMF should be classified as a human carcinogen.

Based on our own research and review of other evidence the existing FCC/IEE and ICNIRP public safety limits and reference levels are not adequate to protect public health. New public health standards and limits are needed.

#### **EVIDENCE FOR GENETIC EFFECTS**

Eighty six (86) new papers on genotoxic effects of RFR published between 2007 and mid-2012 are profiled. Of these, 54 (63%) showed effects and 32 (37%) showed no effects.

Forty three (43) new ELF-EMF papers and two static magnetic field papers that report on genotoxic effects of ELF-EMF published between 2007 and mid-2012 are profiled. Of these, 35 (81%) show effects and 8 (19%) show no effect.

#### **EVIDENCE FOR NEUROLOGICAL EFFECTS**

One hundred fifly five (155) new papers that report on neurological effects of RFR published between 2007 and mid-2012 are profiled. Of these, 98 (63%) showed effects and 57 (37%) showed no effects.

Sixty nine (69) new ELF-EMF papers (including two static field papers) that report on genotoxic effects of ELF-EMF published between 2007 and mid-2012 are profiled. Of these, 64 (93%) show effects and 5 (7%) show no effect.

#### **EVIDENCE FOR CHILDHOOD CANCERS (LEUKEMIA)**

With overall 42 epidemiological studies published to date power frequency EMFs are among the most comprehensively studied environmental factors. Except ionizing radiation no other environmental factor has been as firmly established to increase the risk of childhood leukemia.

Sufficient evidence from epidemiological studies of an increased risk from exposure to EMF (power frequency magnetic fields) that cannot be attributed to chance, bias or confounding. Therefore, according to the rules of IARC such exposures can be classified as a Group 1 carcinogen (Known Carcinogen).

There is no other risk factor identified so far for which such unlikely conditions have been put forward to postpone or deny the necessity to take steps towards exposure reduction. As one step in the direction of precaution, measures should be implemented to guarantee that exposure due to transmission and distribution lines is below an average of about 1 mG. This value is arbitrary at present and only supported by the fact that in many studies this level has been chosen as a reference.

Base-station level RFR at levels ranging from less than 0.001 uW/cm2 to 0.05 uW/cm2. In 5 new studies since 2007, researchers report headaches, concentration difficulties and behavioral problems in children and adolescents; and sleep disturbances, headaches and concentration problems in adults.

#### **MELATONIN, BREAST CANCER AND ALZHEIMER'S DISEASE**

#### MELATONIN AND BREAST CANCER

<u>Conclusion</u>: Eleven (11) of the 13 published epidemiologic residential and occupational studies are considered to provide (positive) evidence that high ELF MF exposure can result in decreased melatonin production. The two negative studies had important deficiencies that may certainly have biased the results. There is sufficient evidence to conclude that long-term relatively high ELF MF exposure can result in a decrease in melatonin production. It has not been determined to what extent personal characteristics, e.g., medications, interact with ELF MF exposure in decreasing melatonin production

<u>Conclusion</u>: New research indicates that ELF MF exposure, in vitro, can significantly decrease melatonin activity through effects on MT1, an important melatonin receptor.

#### ALZHEIMER'S DISEASE

There is strong epidemiologic evidence that exposure to ELF MF is a risk factor for AD. There are now twelve (12) studies of ELF MF exposure and AD or dementia which. Nine (9) of these studies are considered positive and three (3) are considered negative. The three negative studies have serious deficiencies in ELF MF exposure classification that results in subjects with rather low exposure being considered as having significant exposure. There are insufficient studies to formulate an opinion as to whether radiofrequency MF exposure is a risk or protective factor for AD.

There is now evidence that (i) high levels of peripheral amyloid beta are a risk factor for AD and (ii) medium to high ELF MF exposure can increase peripheral amyloid beta. High brain levels of amyloid beta are also a risk factor for AD and medium to high ELF MF exposure to brain cells likely also increases these cells' production of amyloid beta.

There is considerable in vitro and animal evidence that melatonin protects against AD. Therefore it is certainly possible that low levels of melatonin production are associated with an increase in the risk of AD. (Davanipour and Sobel, 2012 – Section 13)

#### STRESS PROTEINS AND DNA AS A FRACTAL ANTENNA FOR RFR

DNA acts as a 'fractal antenna' for EMF and RFR.

The coiled-coil structure of DNA in the nucleus makes the molecule react like a fractal antenna to a wide range of frequencies.

The structure makes DNA particularly vulnerable to EMF damage.

The mechanism involves direct interaction of EMF with the DNA molecule (claims that there are no known mechanisms of interaction are patently false)

Many EMF frequencies in the environment can and do cause DNA changes.

The EMF-activated cellular stress response is an effective protective mechanism for cells exposed to a wide range of EMF frequencies.

EMF stimulates stress proteins (indicating an assault on the cell).

EMF efficiently harms cells at a billion times lower levels than conventional heating.

Safety standards based on heating are irrelevant to protect against EMF-levels of exposure. There is an urgent need to revise EMF exposure standards. Research has shown thresholds are very low (safety standards must be reduced to limit biological responses). Biologically-based EMF safety standards could be developed from the research on the stress response.

#### EVIDENCE FOR DISRUPTION OF THE MODULATING SIGNAL HUMAN STEM CELL DNA DOES NOT ADAPT OR REPAIR

Human stem cells do not adapt to chronic exposures to non-thermal microwave (cannot repair damaged DNA), and damage to DNA in genes in other cells generally do not repair as efficiently.

Non-thermal effects of microwaves depend on variety of biological and physical parameters that should be taken into account in setting the safety standards. Emerging evidence suggests that the SAR concept, which has been widely adopted for safety standards, is not useful alone for the evaluation of health risks from non-thermal microwave of mobile communication. Other parameters of exposure, such as frequency, modulation, duration, and dose should be taken into account.

Lower intensities are not always less harmful; they may be more harmful.

Intensity windows exist, where bioeffects are much more powerful.

A linear, dose-response relationship test is probably invalid for testing of RFR and EMF (as is done in chemicals testing for toxicity).

Resonant frequencies may result in biological effects at very low intensities comparable to base station (cell tower) and other microwave sources used in mobile communications. These exposures can cause health risk. The current safety standards are insufficient to protect from non-thermal microwave effects.

The data about the effects of microwave at super-low intensities and significant role of duration of exposure in these effects along with the data showing that adverse effects of non-thermal microwave from GSM/UMTS mobile phones depend on carrier frequency and type of the microwave signal suggest that microwave from base-stations/masts, wireless routers, WI-FI and other wireless devices and exposures in common use today can also produce adverse effects at prolonged durations of exposure.

Most of the real signals that are in use in mobile communication have not been tested so far. Very little research has been done with real signals and for durations and intermittences of exposure that are relevant to chronic exposures from mobile communication. In some studies, so-called "mobile communication-like" signals were investigated that in fact were <u>different</u> from the real exposures in such important aspects as intensity, carrier frequency, modulation, polarization, duration and intermittence.

New standards should be developed based on knowledge of mechanisms of non-thermal effects. Importantly, because the signals of mobile communication are completely replaced by other signals faster then once per 10 years, duration comparable with latent period, epidemiologic studies cannot provide basement for cancer risk assessment from upcoming new signals.

In many cases, because of ELF modulation and additional ELF fields created by the microwave sources, for example by mobile phones, it is difficult to distinguish the effects of exposures to ELF and microwave. Therefore, these combined exposures and their possible cancer risks should be considered in combination.

As far as different types of microwave signals (carrier frequency, modulation, polarization, far and near field, intermittence, coherence, *etc.*) may produce different effects, cancer risks should ideally be estimated for each microwave signal separately.

The Precautionary Principle should be implemented while new standards are in progress.

It should be anticipated that some part of the human population, such as children, pregnant women and groups of hypersensitive persons could be especially sensitive to the non-thermal microwave exposures.

#### N. EFFECTS OF WEAK-FIELD INTERACTIONS ON NON-LINEAR BIOLOGICAL OSCILLATORS AND SYNCHRONIZED NEURAL ACTIVITY

A unifying hypothesis for a plausible biological mechanism to account for very weak field EMF bioeffects other than cancer may lie with weak field interactions of pulsed RFR and ELF-modulated RFR as disrupters of synchronized neural activity. Electrical rhythms in our brains can be influenced by external signals. This is consistent with established weak field effects on coupled biological oscillators in living tissues. Biological systems of the heart, brain and gut are dependent on the cooperative actions of cells that function according to principles of nonlinear, coupled biological oscillations for their synchrony, and are dependent on exquisitely timed cues from the environment at vanishingly small levels (Buzsaki, 2006; Strogatz, 2003). The key to synchronization is the joint actions of cells that co-operate electrically - linking populations of biological oscillators that couple together in large arrays and synchronize spontaneously. Synchronous biological oscillations in cells (pacemaker cells) can be disrupted by artificial, exogenous environmental signals, resulting in desynchronization of neural activity that regulates critical functions (including metabolism) in the brain, gut and heart and circadian rhythms governing sleep and hormone cycles (Strogatz, 1987). The brain contains a population of oscillators with distributed natural frequencies, which pull one another into synchrony (the circadian pacemaker cells). Strogatz has addressed the unifying mathematics of biological cycles and external factors disrupt these cycles (Strogatz, 2001, 2003). "Rhythms can be altered by a wide variety of agents and that these perturbations must seriously alter brain performance" (Buzsaki, 2006).

"Organisms are biochemically dynamic. They are continuously subjected to time-varying conditions in the form of both extrinsic driving from the environment and intrinsic rhythms generated by specialized cellular clocks within the organism itself. Relevant examples of the latter are the cardiac pacemaker located at the sinoatrial node in mammalian hearts (1) and the circadian clock residing at the suprachiasmatic nuclei in mammalian brains (2). These rhythm generators are composed of thousands of clock cells that are intrinsically diverse but nevertheless manage to function in a coherent oscillatory state. This is the case, for instance, of the circadian oscillations exhibited by the suprachiasmatic nuclei, the period of which is known to be determined by the mean period of the individual neurons making up the circadian clock (3–7). The mechanisms by which this collective behavior arises remain to be understood." (Strogatz, 2001; Strogatz, 2003)

Synchronous biological oscillations in cells (pacemaker cells) can be disrupted by artificial, exogenous environmental signals, resulting in desynchronization of neural activity that regulates critical functions (including metabolism) in the brain, gut and heart and circadian rhythms governing sleep and hormone cycles. The brain contains a population of oscillators with distributed natural frequencies, which pull one another into synchrony (the circadian pacemaker cells). Strogatz has addressed the unifying mathematics of biological cycles and external factors disrupt these cycles.

#### EMF AND RFR MAKE CHEMICAL TOXINS MORE HARMFUL

EMF acts on the body like other environmental toxicants do (heavy metals, organic chemicals and pesticides). Both toxic chemicals and EMF may generate free radicals, produce stress proteins and cause indirect damage to DNA. Where there is combined exposure the damages may add or even synergistically interact, and result in worse damage to genes.

#### EMF IS SUCCESSFULLY USED IN HEALING AND DISEASE TREATMENTS

"The potential application of the up-regulation of the HSP70 gene by both ELF-EMF and nanosecond PEMF in clinical practice would include trauma, surgery, peripheral nerve damage, orthopedic fracture, and vascular graft support, among others. Regardless of pulse design, EMF technology has been shown to be effective in bone healing [5], wound repair [11] and neural regeneration [31,36,48,49,51,63,64,65,66]. In terms of clinical applica- tion, EMF-induction of elevated levels of hsp70 protein also confers protection against hypoxia [61] and aid myocardial function and survival [20,22]. Given these results, we are particularly interested in the translational significance of effect vs. efficacy which is not usually reported by designers or investigators of EMF devices. More precise description of EM pulse and sine wave parameters, including the specific EM output sector, will provide consistency and "scientific basis" in reporting findings."

"The degree of electromagnetic field-effects on biological systems is known to be dependent on a number of criteria in the waveform pattern of the exposure system used; these include frequency, duration, wave shape, and relative orientation of the fields [6,29,32,33,39,40]. In some cases pulsed fields have demonstrated increased efficacy over static designs [19,21] in both medical and experimental settings." (Madkan et al, 2009)

# ELF-EMF AND RFR ARE CLASSIFIED AS POSSIBLE CANCER-CAUSING AGENTS -- WHY ARE GOVERNMENTS NOT ACTING?

The World Health Organization International Agency for Research on Cancer has classified wireless radiofrequency as a Possible Human Carcinogen (May, 2011)\*. The designation applies to low-intensity RFR in general, covering all RFR-emitting devices and exposure sources (cell and cordless phones, WI-FI, wireless laptops, wireless hotspots, electronic baby monitors, wireless classroom access points, wireless antenna facilities, etc). The IARC Panel could have chosen to classify RFR as a Group 4 – Not A Carcinogen if the evidence was clear that RFR is not a cancer-causing agent. It could also have found a Group 3 designation was a good interim choice (Insufficient Evidence). IARC did neither.

### NEW SAFETY LIMITS MUST BE ESTABLISHED - HEALTH AGENCIES SHOULD ACT NOW

Existing public safety limits (FCC and ICNIRP public safety limits) do not sufficiently protect public health against chronic exposure from very low-intensity exposures. If no mid-course corrections are made to existing and outdated safety limits, such delay will magnify the public health impacts with even more applications of wireless-enabled technologies exposing even greater populations around the world in daily life.

## SCIENTIFIC BENCHMARKS FOR HARM PLUS SAFETY MARGIN = NEW SAFETY LIMITS THAT ARE VALID

Health agencies and regulatory agencies that set public safety standards for ELF-EMF and RFR should act now to adopt new, biologically-relevant safety limits that key to the lowest scientific benchmarks for harm coming from the recent studies, plus a lower safety margin. Existing public safety limits are too high by several orders of magnitude, if prevention of bioeffects and minimization or elimination of resulting adverse human health effects. Most safety standards are a thousand times or more too high to protect healthy populations, and even less effective in protecting sensitive subpopulations.

#### SENSITIVE POPULATIONS MUST BE PROTECTED

Safety standards for sensitive populations will more likely need to be set at lower levels than for healthy adult populations. Sensitive populations include the developing fetus, the infant, children, the elderly, those with pre-existing chronic diseases, and those with developed electrical sensitivity (EHS).

#### **PROTECTING NEW LIFE - INFANTS AND CHILDREN**

Strong precautionary action and clear public health warnings are warranted immediately to help prevent a global epidemic of brain tumors resulting from the use of wireless devices (mobile phones and cordless phones). Common sense measures to limit both ELF-EMF and RFR in the fetus and newborn infant (sensitive populations) are needed, especially with respect to avoidable exposures like baby monitors in the crib and baby isolettes (incubators) in hospitals that can be modified; and where education of the pregnant mother with respect to laptop computers, mobile phones and other sources of ELF-EMF and RFR are easily instituted.

Wireless laptops and other wireless devices should be strongly discouraged in schools for children of all ages.

#### STANDARD OF EVIDENCE FOR JUDGING THE SCIENCE

The standard of evidence for judging the scientific evidence should be based on good public health principles rather than demanding scientific certainty before actions are taken.

#### WIRELESS WARNINGS FOR ALL

The continued rollout of wireless technologies and devices puts global public health at risk from unrestricted wireless commerce unless new, and far lower exposure limits and strong precautionary warnings for their use are implemented.

#### EMF AND RFR ARE PREVENTABLE TOXIC EXPOSURES

We have the knowledge and means to save global populations from multi-generational adverse health consequences by reducing both ELF and RFR exposures. Proactive and immediate measures to reduce unnecessary EMF exposures will lower disease burden and rates of premature death.

#### **DEFINING A NEW 'EFFECT LEVEL' FOR RFR**

On a precautionary public health basis, a reduction from the BioInitiative 2007 recommendation of 0.1 uW/cm2 (or one-tenth of a microwatt per square centimeter) for cumulative outdoor RFR down to something three orders of magnitude lower (in the low nanowatt per square centimeter range) is justified.

A scientific benchmark of 0.003 uW/cm2 or three nanowatts per centimeter squared for 'lowest observed effect level' for RFR is based on mobile phone base station-level studies. Applying a ten-fold reduction to compensate for the lack of long-term exposure (to provide a safety buffer for chronic exposure, if needed) or for children as a sensitive subpopulation yields a 300 to 600 picowatts per square centimeter precautionary action level. This equates to a 0.3 nanowatts to 0.6 nanowatts per square centimeter as a reasonable, precautionary action level for chronic exposure to pulsed RFR.

These levels may need to change in the future, as new and better studies are completed. We leave room for future studies that may lower or raise today's observed 'effects levels' and should be prepared to accept new information as a guide for new precautionary actions.

# Telecommunications towers dossier: Court of appeal gives nod to City of Châteauguay

#### Monday, 2 June, 2014

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In a judgment handed down on Friday, May 30, the Québec Court of Appeal ruled in favour of the City of Châteauguay right down the line regarding the implementation of telecommunications towers on its territory.

In a first judgment dated July 2, 2013, Québec Superior Court ruled in favour of the City concerning its request made to Rogers Communications Inc. to install a telecommunications tower on a lot acquired through expropriation at 50 Industrial Blvd. But the same court also affirmed that the City had acted in bad faith regarding the lot belonging to Mrs. Christina White. The judgment of last Friday confirms the right of the City to the expropriation and reverses the original decision which stipulated that the City had acted in bad faith.

In her judgment, Judge Julie Dutil indicates that the Law on Cities and Towns grants municipalities the power to possess immovables for the purposes of land claims and expropriation. The Council can, by conforming to the provisions of articles 571 and 572, and to the expropriation procedures prescribed by law, appropriate all buildings or part of a building or servitude if needed for municipal purposes.

Judge Dutil continues: [While examining the expropriation notices and the reserve as a whole (...), I am of the opinion that the judge (of the first ruling) erred by concluding that Châteauguay had acted in bad faith.] The judge recognizes (paragraph 77) that [Châteauguay imposed a notice of reserve in order to protect the well-being of its citizens, which is a municipal purpose.] Further on, Judge Dutil emphasizes that the City in no way wishes to prevent the installation of a new tower on its territory and that the object of the Law on radiocommunication is to permit the deployment of the telecommunications networks while respecting the local population.

For Châteauguay Mayoress Nathalie Simon, the Court of Appeal's decision is a great victory for all municipalities. "The Court of Appeal is clear: the cities can decide what type of development that it wishes to have on their territory. It is also a beautiful victory for the citizens whose opinion was a determining factor in this decision."

 <u>COM54 Jugement Rogers.pdf</u> (76.85 KB), <u>COM54A Jugement Rogers.pdf</u> (77.03 KB) Last update: 2014-06-03 13

#### **Caylee Simmons**

From:	BCGP leader [leader@greenparty.bc.ca]
Sent:	Tuesday, August 12, 2014 2:50 PM
Subject:	Re: Thank you and meeting invitation from the BC Green Party

Dear Mayor and Council,

Thank you for your service to your community over the past term in office. As a former Councillor in the District of Central Saanich, I understand the level of commitment and dedication it takes to serve your community; I commend you for your work!

The upcoming local government elections are an important time to reinvigorate democracy in British Columbia. Over the coming months, many of you will be campaigning and asking people to support you for re-election. Differences aside, the one thing we all have in common is a desire to strengthen our democracy.

I understand the ongoing fiscal struggle of local government. Conditional grant programs propel provincial priorities onto municipal governments, and downloads from senior governments continue to add to your work building healthy and safe neighbourhoods, communities and strengthening local economies more difficult.

Over the past year, Dr. Andrew Weaver and I have been learning about new opportunities for our party and, frankly, for all British Columbians. What we have learned is very exciting, and we look forward to sharing it with you.

I am honoured to be able to introduce the BC Green Party as a point of access to the decision-making process of our provincial government. We are committed to non-partisan, solution-based governance and we will work with you to represent your constituents and all British Columbians.

The UBCM conference is the best opportunity for many local government officials to connect with the provincial government. We will be at the upcoming Union of BC Municipalities conference in Whistler, BC and we want to meet with you!

If you wish to meet with my colleagues and I during UBCM, please contact my assistant (<u>leader@greenparty.bc.ca</u>) to schedule a time.

Finally, I would like to wish you the best of luck in the upcoming elections and we look forward to working with you and your community in building a stronger British Columbia.

Best Regards,

×

Adam Olsen Leader, B.C. Green Party

T: @adampolsen F: /Olsen4MLA From: Tekano, Murray TRAN:EX [mailto:Murray.Tekano@gov.bc.ca] Sent: August 12, 2014 10:57 AM Subject: MoTI Cycling Program 2014

Good morning,

I have attached a recent public announcement regarding cycling infrastructure cost sharing with the our ministry, for your information.

Regards,

· · · ·

Murray

#### W. Murray Tekano

District Manager, Transportation - Okanagan Shuswap District British Columbia Ministry of Transportation and Infrastructure **Phone: (250) 712-3629** 

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### **NEWS RELEASE**

For Immediate Release 2014TRAN0055-001151 August 9, 2014

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Ministry of Transportation and Infrastructure

#### Cycling, healthy living get funding boost from BikeBC

VICTORIA – The Government of B.C. is investing \$3.61 million in BikeBC this year, to expand and build new cycling lanes, trails and paths for healthier B.C. families and communities.

BikeBC is a cost-sharing program between the Province and local governments. This year's investment will help create more than \$7.22 million in cycling infrastructure. Since 2001, the B.C. government has committed more than \$150 million for cycling infrastructure, creating new bicycle lanes and trails in over 95 communities across the province.

\$500,000 of this new funding is available to Lower Mainland communities to link their cycling paths and lanes to the Gateway Program cycling network. Local governments interested in this program can apply online at: <u>http://www.th.gov.bc.ca/BikeBC/gatewaycycling.html</u>

\$1.31 million in funding is available from the Provincial Cycling Investment Program (PCIP). This program focuses on significant new cycling infrastructure, which is of substantial size and demonstrates financial need. Local governments interested in this program can contact the ministry at: <a href="mailto:motocycling@gov.bc.ca">motocycling@gov.bc.ca</a>

In addition, \$1.8 million is available to help B.C. communities with smaller scale projects, such as bike lanes and paths through the Cycling Infrastructure Partnerships Program (CIPP). Local governments interested in this program can apply online at: <a href="http://www.th.gov.bc.ca/BikeBC/CIPP.html">www.th.gov.bc.ca/BikeBC/CIPP.html</a>

To be considered for funding, local governments must describe how the project benefits the community and contributes to increased physical activity and healthy living, as part of their municipality's active community plans. The deadline for applications is Sept. 30, 2014. If communities have questions regarding the BikeBC funding program they can contact the Ministry of Transportation and Infrastructure at: motcycling@gov.bc.ca

Cycling is a key component of the B.C. government's strategy for encouraging healthy living and addressing climate change, in conjunction with the Climate Action Plan and the Provincial Transit Plan.

#### Quote:

#### Minister of Transportation and Infrastructure Todd Stone –

"Our BikeBC program helps local governments throughout the province enhance opportunities for healthy-living activities in their communities. More British Columbians are getting out of their cars and onto their bikes, and we want to make it easier and safer to embrace cycling as a viable transportation option."

#### Learn More:

For more information about BikeBC, visit: <a href="http://www.th.gov.bc.ca/BikeBC">www.th.gov.bc.ca/BikeBC</a>

#### Media Contact:

Government Communications and Public Engagement Ministry of Transportation and Infrastructure 250 356-8241

Connect with the Province of B.C. at: www.gov.bc.ca/connect

From: Committee for the Republic of Canada [mailto:crcbclarouche@gmail.com] Sent: August-17-14 9:36 PM To: Nancy Cooper Subject: CRC August 29th Conference Invitation

Committee for the Republic of Canada

P.O. Box 3011

Youville Station

Montreal, QC H2P 2Y8

www.committeerepubliccanada.ca

514-461-1557

August 15, 2014

Nancy Cooper, Mayor of the City of Salmon Arm, B.C.

Re: Invitation to participate in the CRC's August 29th Conference

Dear Mayor Nancy Cooper and Council,

We at the CRC have been contacting you over the last year on the urgency of going back to the development of the physical economy by asking you first to sign the Appeal for a Global Glass-Steagall.(1) While support for the necessary first step in the *Appeal*, the restoration in all nations of the Trans-Atlantic region of a law separating commercial banks from investment/speculative banks, has gained increasing support over the last year in the United States, Italy, the U.K., and Canada (2-6); the policy in place across the Trans-Atlantic sector remains, unfortunately, "bail-in" – the sacrifice of people's savings and pensions to an insolvent banking system.(7)

But now that situation has changed, with the BRICS (Brazil, Russia, India, China and South Africa) establishing a New Development Bank (8) to fund large infrastructure projects such as high-speed rail, a new inter-oceanic canal across Nicaragua, and nuclear power. China has returned to the Moon to mine helium-3, (9) the ideal fuel for

thermonuclear fusion which will provide clean nearly limitless power for Earth while opening up the resources of the solar system for exploration and development. Our country has natural links with Asia and Europe by way of the Arctic and through collaborative efforts in space. Russia and China have both proposed collaboration with Canada and the United States on the construction of the Bering Strait Rail Tunnel.(10)

We have been sending out invitations to scientists, industrialists and elected officials to attend our conference following the Pacific Basin Nuclear Conference 2014 in Vancouver. Given British Columbia's close economic ties to Asia we thought that some of the presentations at our conference would be of interest to you.

While I do not have the exact titles for the presentations at this time, I can tell you that there are two afternoon/evening panels. The first panel, which runs from 2:00 pm to 4:10 pm, will open with a strategic overview of the global situation, and a discussion of the polices required, beginning with Glass-Steagall. The second panel, runs from 4:20 pm to 6:40 pm, and will begin with a presentation by Liona Fan-Chiang on the implications of China's commitment to mine the Moon for helium-3. The second speaker, internationally renowned Engineering consultant Dr. Hal Cooper will discuss Energy, Water and Transportation Infrastructure Needs for the Pacific Rim and West Coast Corridors. The final presentation before closing remarks will be by myself, on how an understanding of the solar processes influencing global moisture flows ("atmospheric rivers") can increase our ability to understand and potentially mitigate destructive flooding and droughts. (11)

#### Canada and the Coming Trans-Pacific Fusion Economy

Vancouver Public Library

+

350 W Georgia St, Vancouver, BC V6B 6B1

Alma VanDusen Room

August 29th - 2pm - 7pm

Please feel free to contact me if you have questions, or would like to attend the event.

Best Regards,

Robert Hux

Committeefor the Republic of Canada E-mail: roberthux7@gmail.com

Cell phone : <u>438-936-1557</u>

1.5.

### **Background material**

- 1. Appeal For A Global Glass-Steagall Now!
- 2. Nearly 600,000 Sign for Glass-Steagall; Petitions Delivered to U.S. Senate
- 3. <u>All U.S. Regulators Admit: Banks Are Too Complex To Fail, May Have To Be</u> Broken Up
- 4. Tuscany, Italy: First Green Light for Glass-Steagall Draft Bill
- 5. Liam Halligan: There Is an Overwhelming, Pressing Need for Glass-Steagall
- 6. The City of Burnaby, BC, Calls for Glass-Steagall
- 7. Transatlantic Banks Don't Lend, So Again Confiscation of Savings Is 'Suggested'
- 8. <u>BRICS Summit Issues Fortaleza Declaration: the New Development Bank and</u> <u>Contingent Reserve Arrangement Are Born</u>
- 9. Chinese Set a New Definition of Super Power: Thermonuclear Fusion
- 10. <u>State-run China Daily promotes Eurasian Land-Bridge and a Bering Strait rail</u> <u>tunnel to Canada and the United States</u>
- 11. Expanding NAWAPA XXI: Weather Modification To Stop Starvation
| Caylee Simmons        |  |  |
|-----------------------|--|--|
| From:<br>Sent:<br>To: | ALISON SLATER [alislater@shaw.ca]<br>Monday, August 18, 2014 8:18 AM<br>Heidi Frank; Town of Osoyoos; Caylee Simmons; joni heinrich; Lorraine Williston; District<br>of Barriere; Squamish-Lillooet R.D.; Thompson-Nicola R.D.; Town of Osoyoos;<br>Thompson-Nicola R.D.; City of Enderby; Village of Keremeos; Town of Oliver; Village of<br>Ashcroft; City of Armstrong,; City of Kamloops,; City of Kelowna,; City of Merritt,; City of<br>Penticton,; City of Revelstoke,; City of Vernon,; District of Clearwater,; District of<br>Coldstream,; District of Lake Country,; District of Lillooet,; District of Logan Lake,; District<br>of Peachland,; District of Summerland,; District of West Kelowna,; Central Okanagan<br>R.D.,; Okanagan-Similkameen R.D.,; Town of Princeton,; Township of Spallumcheen,;<br>Village of Cache Creek,; Village of Chase,; Village of Clinton,; Village of Lumby,; Village of<br>Lytton,; Columbia Shuswap R.D.,; North Okanagan R.D.,; sun peaks municipality, |  |
| Subject:              | SILGA luncheon at UBCM - in memorium   |  |

Hello all,

~ -

Each year at the SILGA luncheon, we remember any current or former politicians in the SILGA region who passed away during the previous year. If you know of anyone that was lost to us this year, could you please send me all their details, including a picture (or access to a website).

Thanks very much,

Alison



Administration provided By UBCM

Funding provided by: Government of Canada



In partnership with: The Province of BC



Gas Tax Program Services

Local Government House 525 Government St. Victoria BC V8V 0A8

Phone: 250-356-5134 Fax: 250-387-5119

Website:

www.ubcm.ca under Funding Programs, Renewed Gas Tax Agreement

## **Gas Tax Program Services**

...delivering the federal gas tax agreement funding in British Columbia

August 12, 2014

Mayor & Council City of Salmon Arm PO Box 40 Salmon Arm, BC V1E 4N2



Dear Mayor & Council:

#### **RE: GAS TAX AGREEMENT COMMUNITY WORKS FUND PAYMENT**

I am pleased to advise that UBCM is in the process of distributing the first of two Community Works Fund (CWF) payments for fiscal 2014/15. An electronic transfer of \$381,750.46 is expected to occur on **Friday, August 15<sup>th</sup> 2014**. These payments are made in accordance with the contribution provisions set out in your CWF Agreement with UBCM (see Section 4 of your Agreement).

CWF are made available to eligible local governments by the Government of Canada pursuant to the Administrative Agreement on the Gas Tax Fund in British Columbia (Gas Tax Agreement). Funding under the program may be directed to local priorities that fall within one of the eligible project categories.

UBCM is also making an additional payment towards CWF funding from interest accumulated over the term of the first Gas Tax Agreement. This will be delivered twice annually for two years, and coincide with your CWF payment for 2014/15 and 2015/16.

2014/15 July CWF payment: \$369,879.99 2014/15 July interest payment: \$11,870.47 Total EFT transfer: \$381,750.46

Further details regarding use of CWF and project eligibility are outlined in your CWF Agreement and details on the renewed Gas Tax Agreement can be found on our web site at <u>www.ubcm.ca</u>.

For further information, please contact Brant Felker, Gas Tax Policy and Program Manager, by e-mail at <u>bfelker@ubcm.ca</u> or by phone at 250-356-0893.

Sincerely

Rhona Martin UBCM President

CC: Monica Dalziel

City of Salmon Arm-CWF-2014/15-PaymentRelease-1

From: Lisa Storoshenko [mailto:lstoroshenko@miabc.org] Sent: August-08-14 3:50 PM To: Erin Jackson Subject: MIABC Voting Delegate

The 27th Annual General Meeting of the Subscribers of the Municipal Insurance Association of British Columbia is scheduled to take place at 3 PM on Tuesday, September 23rd in the Emerald Ballroom, Westin Resort, Whistler. The MIABC will be hosting a reception following the AGM also in the Emerald Ballroom, Westin Resort, Whistler, until 6pm. Directions enclosed.

At the AGM there will be two resolutions to expand coverage, a third resolution to approve the property insurance policy wording, and a fourth resolution to delegate authority to the Board to set the parameters of the experience rating formula. There will also be an election for five directors for a three year term: Group A Director population to 2,000, Group B Director population 2,001 to 5,000, Group C Director population 5,001 to 25,0000, Group D Director over 25,0000 population and Regional District Representative. Interested candidates should contact Director Glenn McLaughlin, Chair of the Nominating Committee, c/o the MIABC office.

In accordance with Article 6.13 of the Reciprocal Agreement, the following Delegate and two Alternates have been registered with the MIABC to vote your interests. Any change to this information shall require a resolution of Council/Board to be forwarded to the MIABC by September 11th, 2014. Also, to improve communications, can you please provide us with e-mail addresses for the delegate and alternates at your earliest convenience?

Voting Delegate: Mayor Nancy Cooper Email address: <u>ncooper@salmonarm.ca</u>

Alternate #1: Email address:

Alternate #2: Email address:

Regards, Lisa Storoshenko

(13

# MIABC

**Providing Trusted Civic Solutions** 

## **You Are Invited**

Come visit us to hear about the the launch of the MIABC's new property insurance program.

Learn how the MIABC is becoming the "one-stop shop" for BC local governments' insurance needs.

## Tuesday, September 23, 2014

Annual General Meeting 3:00 - 5:00 p.m. Emerald Ballroom A

#### Reception

5:00 - 6:00 p.m. Emerald Ballroom B/C Westin Resort & Spa, 4090 Whistler Way



CONVENTION 2014



## DIRECTIONS TO THE EVENT

After exiting the Whistler Conference Centre, turn left on to Whistler Way and walk south for about three minutes. The Westin Resort & Spa will be on your left.

info@miabc.org 390 - 1050 Homer Street Vancouver, BC V6B 2W9 
 Phone:
 604-683-6266

 Fax:
 604-683-6244

 Toll Free:
 1-855-683-6266





Ref: 156222

August 9, 2014

Her Worship Mayor Nancy Cooper and Members of Council City of Salmon Arm Box 40 Salmon Arm, BC V1E 4N2

Dear Mayor Cooper and Councillors:

On behalf of the joint Provincial-Union of BC Municipalities (UBCM) Green Communities Committee (GCC), we would like to extend our congratulations for your successful efforts to measure and reduce your corporate greenhouse gas emissions for the 2013 reporting year.

As a signatory to the Climate Action Charter (Charter), you have demonstrated your commitment to work with the Province and UBCM to take action on climate change and to reduce greenhouse gas emissions in your community and corporate operations.

Climate change is a global challenge. The work that your local government has undertaken to measure and reduce its corporate emissions demonstrates strong climate leadership and sets the stage for broader climate action in your community. This leadership and commitment is essential to ensuring the achievement of our collective climate action goals.

As you are likely aware, the GCC was established under the Charter to support local governments in achieving their climate goals. In acknowledgement of the efforts of local leaders, the GCC is again recognizing the progress and achievements of local governments such as yours through the multi-level Climate Action Recognition Program. A description of this program is attached to this letter for your reference.

As a Charter signatory who has completed a corporate carbon inventory for the 2013 reporting year and has demonstrated familiarity with the Community Energy and Emissions Inventory, you have been awarded Level 2 recognition – 'Measurement.'

In recognition of your achievements, the GCC is very pleased to provide you with 'green communities' branding for use on official websites and letter heads. An electronic file with the 2013 logo will be provided to your Chief Administrative Officer. Also included with this letter is a 2013 Green Communities window decal, for use on public buildings.

.../2

Her Worship Mayor Nancy Cooper and Members of Council Page 2

Congratulations again on establishing your corporate emissions inventory and your overall progress. We wish you continued success in your ongoing commitment to the goal of corporate carbon neutrality and your efforts to reduce emissions in the broader community.

Sincerely,

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.....

É an

Jay Schlosar Assistant Deputy Minister Local Government Division

Hory 49405

Gary MacIsaac Executive Director Union of British Columbia Municipalities

Enclosures



### **GCC** Communiqué on the Climate Action Recognition Program

In acknowledgment of the ongoing efforts of local leaders, the joint Provincial-UBCM Green Communities Committee (GCC) is pleased to be continuing the Climate Action Recognition Program for BC local governments for the 2013 reporting year. This is a multi-level program that provides the GCC with an opportunity to review and publicly recognize the progress and achievements of each *Charter* signatory.

Recognition is provided on an annual basis to local governments who demonstrate progress on their *Charter* commitments, according to the following:

#### Level 1: Progress on Charter Commitments

All local governments who demonstrate progress on fulfilling one or more of their *Charter* commitments will receive a letter from the GCC acknowledging their accomplishments.

#### Level 2: Measurement

Local governments who have completed a corporate carbon inventory for the reporting year and demonstrate that they are familiar with the Community Energy and Emissions Inventory (CEEI) will receive a 'Climate Action Community 2013' logo, for use on websites, letter head and similar.

#### Level 3: Achievement of Carbon Neutrality

Local governments who achieve carbon neutrality in the reporting year will receive a 'Climate Action Community – Carbon Neutral 2013' logo, for use on websites, letter head and similar.

To be eligible for this program, local governments will need to complete a Climate Action Revenue Incentive Program (CARIP)/Carbon Neutral Progress Report and submit it to the Province in accordance with the program guidelines. Determination of the level of recognition that each community will receive will be based on the information included in each community's annual CARIP report. Additional information on CARIP reporting is available online at: www.cscd.gov.bc.ca/lgd/greencommunities/carip.htm. From: Dayle Hopp [mailto:dayle.hopp@bchydro.com] Sent: August 15, 2014 12:39 PM To: Carl Bannister Subject: BC Hydro Community Champions Program

Dear Mayor and Council,

On August 15<sup>th</sup>, BC Hydro launches the 2014 edition of our Community Champions Program.

BC Hydro is looking for non-profit organizations from across BC to submit video entries that tell us what they are doing to make their community more sustainable. Videos will be accepted until September 30<sup>th</sup>.

Up to 15 finalists will be selected for public voting between October 15<sup>th</sup> and November 30<sup>th</sup>. Results of the public voting will determine the five winners, each of which will receive \$10,000 to continue their sustainability-based project. The five winners will be announced December 8, 2014.

If you are aware of any non-profit groups in your community that would be interested in this opportunity, please encourage them to participate.

We also encourage all participants to share the story of their conservation initiative or show support for their favourite non-profit on social media using the hashtag **#BCHCommunityChampions.** 

For more information on the Community Champions Program, please visit: <u>www.bchydro.com/communitychampions</u>

Regards,

Dag Sharman Community Relations Manager Thompson/Okanagan/Columbia Phone: 250 549-8531 dag.sharman@bchydro.com

Jen Walker-Larsen Stakeholder Engagement Advisor Upper Columbia Phone: 250 814-6645 jennifer.walker-larsen@bchydro.com

Sabrina Locicero Stakeholder Engagement Advisor Lower Columbia Phone: 250 365-4565 <u>sabrina.locicero@bchydro.com</u>



From: Dayle Hopp [mailto:dayle.hopp@bchydro.com]
Sent: August 18, 2014 10:51 AM
To: Carl Bannister
Subject: BC Hydro - Funding Available for Electric Beautification Projects

Dear Mayor and Council:

#### Subject: Funding Available for Electric Beautification Projects

Each year, BC Hydro budgets one million dollars to help support municipal beautification projects. Municipalities wanting to place existing overhead distribution lines underground to address environmental concerns, improve visual aesthetics or accommodate community redevelopment projects are welcome to apply for funding.

For selected beautification projects, BC Hydro will fund one-third of the total project costs based on the cost estimated by BC Hydro as long as the original project scope is delivered. Additional details regarding the Beautification Program and application form can be found at the following website: <u>http://www.bchydro.com/community/in\_your\_region.html#beautification</u>

If you are considering a beautification project, an application form must be returned by **October 1**<sup>st</sup>, **2014** that includes description of the project, a map showing the extent of the project and an explanation of the project's objectives. Proposals for Beautification participation should be forwarded to BC Hydro's District Office in your area.

After receiving your application, BC Hydro will prepare a "ballpark" estimate of cost for your municipality to consider. The municipality will be asked to confirm intent to fund two-thirds of the project's estimated cost and to confirm that the telephone utility has been advised of the project details. This confirmation must be received at BC Hydro by **November 15<sup>th</sup>, 2014** to be reviewed by our VP, Field Operations. BC Hydro expects to notify successful applicants in February 2015. All accepted projects must begin within the fiscal year that they are approved and be completed within 12 months.

Sincerely,

Dag Sharman Community Relations Manager Thompson/Okanagan/Columbia Phone: 250 549-8531 dag.sharman@bchydro.com

Jen Walker-Larsen Stakeholder Engagement Advisor Upper Columbia Phone: 250 814-6645 jennifer.walker-larsen@bchydro.com

Sabrina Locicero Stakeholder Engagement Advisor Lower Columbia Phone: 250 365-4565 sabrina.locicero@bchydro.com





FIRE CHIEFS' ASSOCIATION OF BC 871 Oakview Street Coquitlam, BC V3J 4T6 Phone: 604-492-3080 Email: <u>admin@fcabc.ca</u>



July 22, 2014

Mayor Nancy Cooper and Council City of Salmon Arm Box 40 Salmon Arm, BC V1E 4N2

Dear Mayor Cooper and Council:

On behalf of the FCABC Executive Board and membership, I wish to extend our thanks for Fire Chief Brad Shirley's dedication and contribution to the Association as Zone 3 Director during his 2013 – 2014 term. His leadership in Zone 3 was evidenced by his reelection as Zone 3 Director during our AGM held in June.

We thank Chief Shirley for his support and commitment to the success of the Association. His valuable time is appreciated. We are delighted to have him continue on the Executive Board for another term as our Zone 3 Director.

Sincerely,

Fire Chief Timothy Pley, CFO FCABC President

cc: Fire Chief Brad Shirley

AUG 0 6 2014

August 3, 2014

Ms. Lori Onsorge 3802 Parri Road White Lake Sorrento, B.C. V0E 2W1

**Dear Mayor Nancy and Council:** 

#### Re: The Increasing Incidence of Electrosensitivity in our Community - What You Can Do!

A few years ago, I had never heard of anyone who was sensitive to the emissions from wireless devices which pulse microwave radiofrequency radiation, and would never have guessed my cell phone use or living close to a cell tower could increase my risks of cancer and other diseases.

It is a whole different story today. (see Women's College Hospital News Release) Now, I am personally aware of numerous contacts just in our Salmon Arm Community who can no longer shop with ease, go to school, go to work and even participate with freedom in community activities due to the condition of electrosensitivity. They were not born with this condition; it has developed over time as a result of cumulative exposure to all the wireless emissions from towers to smart meters and everything in between. It is important to note, that children do not have the benefit of a childhood free from this exposure and longer, and I have personal knowledge of several children who cannot even attend school due to the ubiquitous wi-fi routers in every classroom.

Given the exponential increase in this condition, if your family and friends are not yet challenged by electrosensitivity, it is only a matter of time before someone you know will become sensitive, even to the point of being disabled. (see document "Will We All Become Electrosensitive" attached which predicts 50% of population noticeably affected by 2017).

Common EHS Health effects include vertigo, headaches & migraines, tinnitus, insomnia, digestive disorders, fatigue, anxiety, depression and heart irregularities.

And the story doesn't end there. Science is showing that the shocking increase in autism and related attention deficit disorders may also be linked to and certainly mirrors the increase in wireless microwave radiation exposure. (see Harvard Medical School letter and Baby Safe brochure).

I have spent my life working with youth and the public, and I am seeing changes in health and learning which are very disturbing and not easily explained away. All of us know these changes are not normal.

Why am I writing to you about this? Well, I believe everyone needs to be protected without waiting for more studies, more sickness, more cancers, more lost lives of our youth and children, and the most important work for you to engage in now is the creation of a healthy and safe cell tower siting policy for Salmon Arm and area. Keep the cell towers away from our schools, homes, shops and workplaces, and relocate those that are already too close.

Involve the public in an educational forum where we are not told what to think, but elicits the views of independent, non-industry funded scientists. The public will benefit and thank you for the opportunity to learn more about how to keep themselves and their families safe in this rapidly developing risk situation.

Other mayors and councils around Canada and the world have recognized EHS in their communities (see Colwood Mayor's Message as an example).

We need to keep our city and area safe for everyone. The legacy you leave will depend on your actions today. Make Salmon Arm Safe for Everyone.

Please circulate this letter and documents to all members of council, and attach to any policy siting portfolio. I look forward to hearing from you on this most important matter, and please let me know how I can be of assistance in this endeavour.

Yours truly

sorge Lori Onsorge

#### HARVARD MEDICAL SCHOOL



#### MASSACHUSETTS GENERAL HOSPITAL

Martinos Center for Biomedical Imaging 149 13<sup>th</sup> Street, Room 10.018 Boston, Massachusetts 02129 Phone: (617) 724-5920 Fax: (617) 812-6334

Martha R. Herbert, Ph.D., M.D. Assistant Professor, Pediatric Neurology Director, TRANSCEND Research Program www.transcendresearch.org

TO: Los Angeles Unified School DistrictFROM: Martha R Herbert, PhD, MDRE: Wireless vs. Wired in ClassroomsDATE: February 8, 2013

I am a pediatric neurologist and neuroscientist on the faculty of Harvard Medical School and on staff at the Massachusetts General Hospital. I am Board Certified in Neurology with Special Competency in Child Neurology, and Subspecialty Certification in Neurodevelopmental Disorders.

I have an extensive history of research and clinical practice in neurodevelopmental disorders, particularly autism spectrum disorders. I have published papers in brain imaging research, in physiological abnormalities in autism spectrum disorders, and in environmental influences on neurodevelopmental disorders such as autism and on brain development and function.

I recently accepted an invitation to review literature pertinent to a potential link between Autism Spectrum Disorders and Electromagnetic Frequencies (EMF) and Radiofrequency Radiation (RFR). I set out to write a paper of modest length, but found much more literature than I had anticipated to review. I ended up producing a 60 page single spaced paper with over 550 citations. It is available at http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec20\_2012\_Findings\_in\_Autism.pdf.

In fact, there are thousands of papers that have accumulated over decades – and are now accumulating at an accelerating pace, as our ability to measure impacts become more sensitive – that document adverse health and neurological impacts of EMF/RFR. Children are more vulnerable than adults, and children with chronic illnesses and/or neurodevelopmental disabilities are even more vulnerable. Elderly or chronically ill adults are more vulnerable than healthy adults.

Current technologies were designed and promulgated without taking account of biological impacts other than thermal impacts. We now know that there are a large array of impacts that have nothing to do with the heating of tissue. The claim from wifi proponents that the only concern is thermal impacts is now definitively outdated scientifically.

EMF/RFR from wifi and cell towers can exert a disorganizing effect on the ability to learn and remember, and can also be destabilizing to immune and metabolic function. This will make it harder for some children to learn, particularly those who are already having problems in the first place.

Powerful industrial entities have a vested interest in leading the public to believe that EMF/RFR, which we cannot see, taste or touch, is harmless, but this is not true. Please do the right and precautionary thing for our children.

Treatment Research And NeuroSCience Evaluation of NeuroDevelopmental Disorders



Pathophysiology 20 (2013) 191-209

ISP PATHOPHYSIOLOGY

www.elsevier.com/locate/pathophys

## Autism and EMF? Plausibility of a pathophysiological link – Part I

Martha R. Herbert<sup>a,\*</sup>, Cindy Sage<sup>b</sup>

<sup>a</sup> TRANSCEND Research Program Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02129, USA <sup>b</sup> Sage Associates, Santa Barbara, CA, USA

Received 10 February 2013; received in revised form 6 May 2013; accepted 15 July 2013

#### Abstract

Although autism spectrum conditions (ASCs) are defined behaviorally, they also involve multileveled disturbances of underlying biology that find striking parallels in the physiological impacts of electromagnetic frequency and radiofrequency exposures (EMF/RFR). Part I of this paper will review the critical contributions pathophysiology may make to the etiology, pathogenesis and ongoing generation of core features of ASCs. We will review pathophysiological damage to core cellular processes that are associated both with ASCs and with biological effects of EMF/RFR exposures that contribute to chronically disrupted homeostasis. Many studies of people with ASCs have identified oxidative stress and evidence of free radical damage, cellular stress proteins, and deficiencies of antioxidants such as glutathione. Elevated intracellular calcium in ASCs may be due to genetics or may be downstream of inflammation or environmental exposures. Cell membrane lipids may be peroxidized, mitochondria may be dysfunctional, and various kinds of immune system disturbances are common. Brain oxidative stress and inflammation as well as measures consistent with blood-brain barrier and brain perfusion compromise have been documented. Part II of this paper will review how behaviors in ASCs may emerge from alterations of electrophysiological oscillatory synchronization, how EMF/RFR could contribute to these by de-tuning the organism, and policy implications of these vulnerabilities. Changes in brain and autonomic nervous system electrophysiological function and sensory processing predominate, seizures are common, and sleep disruption is close to universal. All of these phenomena also occur with EMF/RFR exposure that can add to system overload ('allostatic load') in ASCs by increasing risk, and worsening challenging biological problems and symptoms; conversely, reducing exposure might ameliorate symptoms of ASCs by reducing obstruction of physiological repair. Various vital but vulnerable mechanisms such as calcium channels may be disrupted by environmental agents, various genes associated with autism or the interaction of both. With dramatic increases in reported ASCs that are coincident in time with the deployment of wireless technologies, we need aggressive investigation of potential ASC - EMF/RFR links. The evidence is sufficient to warrant new public exposure standards benchmarked to low-intensity (non-thermal) exposure levels now known to be biologically disruptive, and strong, interim precautionary practices are advocated. © 2013 Elsevier Ireland Ltd. All rights reserved.

Keywords: Autism; EMF/RFR; Cellular stress; Oxidative stress; Mitochondrial dysfunction; Oscillatory synchronization; Environment; Radiofrequency; Wireless; Children; Fetus

#### 1. Introduction

The premise of this review is that although scant attention has been paid to possible links between electromagnetic fields and radiofrequency radiation exposures (EMF/RFR) and Autism Spectrum Conditions (ASCs), such links probably exist. The rationale for this premise is that the physiological impacts of EMF/RFR and a host of increasingly well-documented pathophysiological phenomena in ASCs have remarkable similarities, spanning from cellular and

\* Corresponding author. E-mail address: drumathaberbert@gmail.com (M.R. Herbert). Reviewing these similarities does not prove that these parallels imply causality. Moreover, the physiological processes affected by EMF/RFR are also impacted by other environmental factors, and are known to be present in myriad other chronic illnesses. A set of in-depth reviews on the

oxidative stress to malfunctioning membranes, channels and barriers to genotoxicity, mitochondrial dysfunction, immune abnormalities, inflammatory issues, neuropathological disruption and electrophysiological dysregulation – in short, multi-scale contributors to de-tuning the organism. Additional support may be found in the parallels between the rise in reported cases of ASCs and the remarkable increases in EMF/RFR exposures over the past few decades

<sup>0928-4680/\$ –</sup> see front matter © 2013 Elsevier Ireland Ltd. All rights reserved. http://dx.doi.org/10.1016/j.pathophys.2013.08.001

science and public health policy implications of EMF/RFR has been published in a special issue of Pathophysiology 16 (2,3) 2009. This two-volume special issue of Pathophysiology offers a broad perspective on the nature of health impacts of man-made EMFs, documenting biological effects and health impacts of EMFs including genotoxicity, neurotoxicity, reproductive and developmental effects, physiological stress, blood-brain barrier effects, immune system effects, various cancers including breast cancer, glioma and acoustic neuroma, Alzheimer's disease; and the science as a guide to public health policy implications for EMF diseases [1]. Many of these reviews have been updated in the BioInitiative 2012 Report [2], with 1800 new papers added. Further reinforcement is published in seminal research reviews including the two-volume Non-Thermal effects and Mechanisms of Interaction between Electromagnetic Fields and Living Matter, Giuliani L and Soffritti, M (Eds.), ICEMS, Ramazzini Institute, Bologna, Italy (2010) [3]; the World Health Organization INTERPHONE Final Report (2010) [4]; and the WHO International Agency for Research on Cancer RFR Monograph [5] designating RFR as a Group 2B Possible Human Carcinogen. The National Academy of Sciences Committee on Identification of Research Needs Relating to Potential Biological or Adverse Health Effects of Wireless Communication Devices (2008) [6] called for health research on wireless effects on children and adolescents and pregnant women; wireless personal computers and base station antennas; multiple element base station antennas under highest radiated power conditions; hand-held cell phones; and better dosimetric absorbed power calculations using realistic anatomic models for both men, women and children of different height and ages. Yet EMF/RFR does not need to be a unique contributor to ASCs to add significantly to system overload ('allostatic load') and dysfunction [7]. Even so these pathophysiological overlaps do suggest that the potential for an EMF/RFR-ASC connection should be taken seriously, and that their biological fragility may make many with ASCs more likely to experience adverse EMF/RFR impacts. This is a sufficient basis to recommend that precautionary measures should be implemented, that further research should be prioritized, and that policy level interventions based on existing and emerging data should be designed and pursued. Moreover, pursuing this link could help us understand ASCs better and find more ways to improve the lives of people with ASCs and of so many others.

This paper is divided into two parts. Part 1 (http://dx.doi.org/10.1016/j.pathophys.2013.08.001) describes the pathophysiology and dynamism of common behavioral manifestations in autism, and pathophysiological damage to core cellular processes that is associated both with ASCs and with impacts of EMF/RFR. Part II (http://dx.doi.org/10.1016/j.pathophys.2013.08.002) reviews how behaviors in ASCs may emerge from alterations of electrophysiological oscillatory synchronization and how EMF/RFR could contribute to these by de-tuning the organism. Part II also discusses public health implications,

and proposes recommendations for harm prevention and health promotion.

## 2. Physiological pathogenesis and mechanisms of autism spectrum conditions

#### 2.1. How are biology and behavior related?

Appreciating the plausibility of a link between ASCs and EMF/RFR requires considering the relationship between ASC's behavioral and biological features. ASCs were first labeled as 'autism' in 1943 by Leo Kanner, a child psychiatrist who extracted several key behavioral features, related to communication and social interaction challenges and a tendency toward restricted interests and repetitive behaviors [8]. There has been some modification of the characterization of these behavioral features, but ASCs are still defined behaviorally, although sensory issues such as hypo- or hyper-reactivity have recently been included in the diagnostic criteria (Diagnostic and Statistical Manual of Mental Disorders or DSM-V) [9, 10].

## 2.1.1. Transduction is fundamental but poorly understood

To evaluate how an environmental factor such as EMF/RFR could lead to autism and/or influence its severity or incidence, we examine how effects of EMF/RFR exposure may be transduced into changes in nervous system electrical activity, and how these in turn generate the set of behaviors we have categorized as 'autism.'[11] This means not taking behaviors as given, or as purely determined by genetics, but exploring the full range of biology that generates these features and challenges.

#### 2.1.2. More than brain

Although 'autism' has long been considered to be a psychiatric or neurological brain-based disorder [12,13], people diagnosed with ASCs often have many biological features including systemic pathophysiological disturbances (such as oxidative stress, mitochondrial dysfunction and metabolic and immune abnormalities) [14–17] as well as symptomatic medical comorbidities (such as gastrointestinal distress, recurrent infections, epilepsy, autonomic dysregulation and sleep disruption) [18–26] in addition to the core defining behaviors [27]. Because of variability among individuals, the relevance of many of these biological features has been dismissed as secondary and not intrinsically related to the 'autism.'

## 2.1.3. Heterogeneity: more genetic and environmental than physiological

Presently large numbers of genes and environmental contributors to ASCs are under consideration. Over 800 genes have been associated with ASCs, and over 100 different rare genetic syndromes are frequently accompanied by ASCs, but



**CITY OF COLWOOD** 

3300 Wishart Road, Colwood, B.C. V9C 1R1 Telephone: 250-478-5999 / Facsimile: 250-478-7516 mayor@colwood.ca www.colwood.ca

## MAYOR'S MESSAGE

PRESS RELEASE FOR COUNCIL RE: EMS SENSITIVITY MONTH

COLWOOD, BRITISH COLUMBIA, FIRST CANADIAN COMMUNITY TO PROCLAIM ELECTROMAGNETIC SENSITIVITY MONTH -- AUGUST

I David Saunders, Mayor of the City of Colwood am proud to announce that the City has proclaimed August as Electromagnetic Sensitivity Awareness Month. This is a first for Canada, as it joins many other countries in recognizing this new environment-related illness.

The proclamation states that people in Colwood and throughout the world have developed Electromagnetic Sensitivity (EMS) as a result of exposure to electromagnetic pollution.

EMS is a painful, chronic illness of hypersensitive reactions to electromagnetic radiation for which there is no known cure. The symptoms of this disease include but are not limited to dermatitis, acute numbness and tingling, arrhythmia, muscular weakness, overwhelming fatigue, sensitivity to light, and severe neurological problems.

Relief can be obtained only by eliminating exposure to radiation-emitting devices such as cell phones, wireless technology, FM and cell transmitters, and CFL light bulbs, resulting in major lifestyle changes.

EMS is recognized by the Canadian Human Rights Commission, the Canadian Government as an Environmental Sensitivity, the Americans with Disability Act, and numerous other international commissions.

The health of the general population is at risk from chronic, long-term exposures to electromagnetic radiation. This illness may be prevented through reduction in radiation exposure levels both indoor and outdoor. Further medical research and education is needed as is the support and understanding of family, friends and society as these people struggle with this poorly understood new environmental disease.

Sincerely,

David Saunders, Mayor City of Colwood



PROCLAMATION

#### ELECTROMAGNETIC SENSITIVITY AWARENESS MONTH

- WHEREAS people of all ages in Colwood and throughout the world have developed the illness of Electromagnetic Sensitivity (EMS) as a result of global electromagnetic pollution; and
- WHEREAS Electromagnetic Sensitivity is a painful chronic illness of hypersensitive reactions to electromagnetic radiations for which there is no known cure; and
- WHEREAS The symptoms of Electromagnetic Sensitivity include dermal changes, acute numbness and tingling, dermatitis, flushing, headaches, arrhythmia, muscular weakness, tinnitus, malaise, gastric problems, nausea, visual disturbances, severe neurological respiratory, speech problems, and numerous other physiological symptoms; and
- WHEREAS Electromagnetic Sensitivity is recognized by the Canadian Human Rights Commission. The Canadian Government as an Environmental Sensitivity, the Americans with Disabilities Act, and many other national and international commissions; and
- WHEREAS this illness may be preventable through the reduction or avoidance of electromagnetic radiation in both indoor and outdoor environments and by further medical research;
- **NOW THEREFORE** I, David Saunders, Mayor of the City of Colwood, hereby proclaim the month of August 2009 as:

#### ELECTROMAGNETIC SENSITIVITY AWARENESS MONTH

MAYOR



Electromagnetic Biology and Medicine, 25: 189–191. 2006 Copyright © Informa Healthcare ISSN 1536-8378 print DOI: 10.1080/15368370600873377

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## Letter to the Editor: Will We All Become Electrosensitive?

#### ÖRJAN HALLBERG<sup>1</sup> AND GERD OBERFELD<sup>2</sup>

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Dear Editor,

Each year an increasing number of people claim to suffer from electrosensitivity (see, e.g., compilation of references given in Table 1), also known as being electrically hypersensitive (EHS). There are also other diseases, such as fibromyalgia and burn-out syndrome, that have symptoms similar to those exhibited by people suffering from electrosensitivity.

In Sweden, electrosensitivity is recognized as a handicap, but there is still controversy surrounding the diagnosis of the disease. The mainstream view by governmental and medical authorities is that this handicap is a psychological phenomenon with no basis in physical or medical mechanisms (Swedish National Board of Health and Welfare, SNBHW, 1995), whereby perpetuating the misconception that only a small fraction of the population is concerned about electrosensitivity or the proximity of new radio transmission masts.

The number of reported cases of electrosensitivity has been steadily increasing since it was first documented in 1991. Data presented here are estimates and are based on large sample inquiries where different sets of questions have been used. To determine whether the statistics indicate a sub-population of electrosensitivity or if the total population is at stake, we plotted reported prevalence estimates over time in a normal distribution diagram (Table 1 and Figure 1).

Contrary to the views of mainstream medical authorities, Figure 1 shows that the group of electrosensitive people around the world, including Sweden, is not just a small fraction that deviates from the rest of the healthy population. Instead, it points at the possibility that electrosensitivity will be more widespread in the near future. The extrapolated trend indicates that 50% of the population can be expected to become electrosensitive by the year 2017.

Data presented here were collected in Austria, Germany, Great Britain, Ireland, Sweden, Switzerland, and the United States.

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Measured year	% El sensitive	Country, reported year	Ref. No.
1985	0.06	Sweden 1991 (0.025-0.125%)	National Encyclopedia Sw., 1991
1994	0.63	Sweden 1995	Anonymous est., 1994
1995	1.50	Austria 1995	Leitgeb N. et al., 1995, 2005
1996	1.50	Sweden 1998	SNBHW, Env. report, 1998
1997	2.00	Austria 1998	Leitgeb N. et al., 1998, 2005
1997	1.50	Sweden 1999	Hillert L. et al., 2002
1998	3.20	California 2002	Levallois P., 2002
1999	3.10	Sweden 2001	SNBHW, Env. report, 2001
2000	3.20	Sweden 2003	Sw Labour Union Sif, 2003
2001	6.00	Germany 2002	Schroeder E., 2002
2002	13.30	Austria 2003 (7.6-19%)	Spiß B., 2003
2003	8.00	Germany 2003	Infas, 2003
2003	9.00	Sweden 2004	Elöverkänsligas Riksförbund, 2005
2003	5.00	Schweiz 2005	Bern, Medicine Social, 2005
2003	5.00	Ireland 2005	This is London, 2005
2004	11.00	England 2004	Fox E., 2004
2004	9.00	Germany 2005	Infas, 2004
2017	50.00	Extrapolated to 50%	

 Table 1

 Estimated prevalence of electrosensitive people in different years and countries



**Figure 1.** The prevalence (%) of people around the world who consider themselves to be electrosensitive, plotted over time in a normal distribution graph. The endpoint at 50% is an extrapolated value. Variation explained is 91%, the endpoint not included.

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Anonymous estimate: 50,000 in 1994.

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## WOMEN'S COLLEGE HOSPITAL Health care for women REVOLUTIONIZED

## The effects of invisible waves

June 11, 2012

The world is becoming dominated by wireless technology which is constantly emanated as micro, radio and extremely low frequency waves through the air. Researchers are studying the effects of constant exposure to these waves and how it impacts the human body.

Cell phones, cell phone towers, wireless internet routers, cordless phones and power lines of all sorts have all been recognized as possible contributors to an environmental health condition called electromagnetic hypersensitivity (EMS) caused by significant exposure from radio waves.

EMS symptoms include poor sleep, fatigue, headache, nausea, dizziness, heart palpitations, memory impairment and skin rashes. Patients' reactions vary, some requiring life-altering changes to minimize exposures as much as possible.

The first step for patients having these symptoms is to see their family physician. From there, they are usually referred to a specialist, like those in the Environmental Health Clinic at Women's College Hospital (WCH). Our experts understand sensitivities like EMS and are diligently trying to further delineate its complexities, educate the medical establishment and manage patients.

That's why on May 23, our Environmental Health Clinic hosted physicians, experts and patients at WCH for a day of interactive lectures, to share and discuss ideas about the issues surrounding EMS.

"We need to create more awareness about this condition," said Dr. Riina Bray, medical director, Environmental Health Clinic, WCH. "Health-care practitioners need to better understand EMS so they can help their patients prevent and manage their symptoms. The public needs to know how to protect themselves from the broad range of health impacts electromagnetic fields have on their minds and bodies."



Dr. Magda Havas of Trent University

Dr. Magda Havas, associate professor of environmental and resource studies, Trent University, presented Electromagnetic sensitivity: Is it psychological or physiological? She challenged the critics' suggestion that symptoms are solely psychological by providing real examples of patients whose symptoms subsided when wireless technology was removed from their environment. Scientifically sound guidelines for safety were also reviewed, with the knowledge that the standards in North America fall abysmally short of those elsewhere.

A grand rounds lecture featuring Dr. Ray Copes, chief, environmental and occupational health, Public Health Ontario, discussed EMS from a public health perspective. Dr. Copes cited the difficulties in comparing research because there is no one universally-accepted definition of the condition.

In the afternoon, participants had the opportunity to interact in small groups and discuss next steps for patient care, government action and community collaboration.

"Women's College Hospital is leading the way by hosting workshops like this," said Dr. Bray. "Working together is the first step to creating a mutual understanding of electromagnetic hypersensitivity and being able to care for and treat patients in the best way possible."

http://www.womenscollegehospital.ca/news-and-events/connect/the-effects-of-invisible-waves

What You Need to Know About Wireless Radiation and Your Baby

1.



The BabySafe Project

#### INTRODUCTION

The beautiful and awe-inspiring process by which a few cells develop into a new life is truly miraculous. As if following some invisible instructions, the intricate and complex steps for the creation of a new life unfold, forming delicate organs and vital systems and making billions of important connections and patterns in the brain alone.

Your body is the first home for this new life, and pregnancy triggers some instructions for you as well. Your body provides a protected and warm space for your baby to grow, sharing important nutrients and preparing you to nourish your baby beginning immediately after birth.

Protecting your baby from any possible harm is a strong and natural instinct. Every stage of your baby's development will be affected by the choices you make and the environments in which you live. And those choices you make are at the same time becoming more difficult and more important.



Today, scientists and medical professionals around the world are working to understand more about how a developing human life is affected by environmental exposures in the food we eat, the air we breathe, the water we drink and the surroundings in which we live and work. Identifying and avoiding all of them can seem overwhelming, but knowing the risks and the steps you can take to reduce your exposure is something you can do.

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While there are many things yet to be discovered about the important relationship between your developing baby and your own environmental exposures, we do know that your body can provide only a certain degree of protection. Another thing we know is that the impact can depend on the amount and timing of the exposure.

One focus of current research is wireless radiation, also referred to as microwave radiation or radio frequency radiation (RFR). Wireless radiation is emitted by the myriad of wireless devices we encounter every day. It was once thought to be relatively harmless. Decades ago, when exposure thresholds were established, the thermal or heating effects on human tissue were the main concern.

However, we now know that wireless radiation can cause non-thermal biological effects as well, including damage to cells and DNA, even at low levels. The International Agency for Research on Cancer (IARC) of the World Health Organization (WHO) recently classified wireless radiation as possibly carcinogenic to humans, and numerous animal studies have shown neurological effects, including behavioral disorders, that may lead to long-term health consequences. All of this suggests that taking certain precautions around wireless radiation is appropriate for our most vulnerable populations, including pregnant women.

"It is so simple to move your cell phone away from your abdomen when you're pregnant. Why not do it? There's essentially no downside to being cautious and protecting your baby."

- Dr. Hugh Taylor, Yale University

Generally speaking, *proximity* is the most important factor in determining the amount of wireless radiation to which you and your baby are exposed. Radiation levels fall off dramatically as you distance yourself from the source.

#### **Reducing Your Exposure to Wireless Radiation**

• Avoid carrying your cell phone on your body (e.g. don't carry it in a pocket or bra).

• Avoid placing your cell phone, wireless laptop or tablet on your abdomen. Don't talk or text while holding a phone against your body.

• Talk on speaker setting or with an "air tube" headset.

Avoid using your cell phone in cars, trains and elevators.

• Avoid using cordless phones (which also expose you to wireless radiation), especially where you sleep. Corded phones do not emit RFR.

• Streaming videos and playing games results in higher levels of RFR exposure. Download and then view or play with the device in "airplane" mode. Download your email and then disconnect from WiFi, allowing you to read and respond without being exposed.

• Whenever possible, connect wired cables to a router or modem and turn off the WiFi feature on the router, modem and your personal device(s).

• Unplug your home WiFi router when not in use (e.g. at bedtime).

• Avoid prolonged or direct exposure to WiFi routers at home, school or work. If your job requires you to use a computer, position yourself so that you are not sitting close to the router and not between the router and your computer.

• If your home or apartment or close neighbor has a wireless utility meter (i.e. a "smart" meter), sleep in a room as far away from it as possible.

#### MORE ABOUT WIRELESS RADIATION

Radio frequency waves have been used for more than a hundred years to carry signals from transmitting towers to distant receivers. This technology has informed and entertained millions of people around the world.

However, the technology offered today by the wireless industry puts powerful transmitters as well as receivers much closer to users of all ages than ever before. This two-way communication, and the increased radiation needed to support it, is reason for concern. Indeed, manufacturers of wireless devices warn consumers to keep their phones, tablets, baby monitors or other devices away from their bodies.

Consumer demand for connectivity everywhere has resulted in the installation of many more powerful local wireless transmitters

and receivers, and now hundreds of thousands of rooftop, pole-mounted and tower transmitters (antennas) are placed in close proximity to private homes, apartments, schools, office buildings, retail and recreation areas. "Free WiFi" is commonly advertised to attract customers at bars, restaurants, hotels and coffee shops. Wireless routers in public spaces are very powerful because they are intended to power many laptops or tablets simultaneously.



This ubiquitous and ever-growing wireless world that we live in means that wireless radiation is all around us. But you can still make some personal choices that can reduce your exposure. As mentioned previously, keeping a safe distance from transmitters or antennas and keeping your personal wireless devices away from your body is relatively easy to do. The amount of time you spend using wireless devices is also important. Remember that exposure adds up over time.

We hope that you will take the time to learn more about wireless radiation by visiting our website, www.BabySafeProject.org.



"Most pregnant women understand that they should stay away from cigarette smoke, avoid alcohol and be careful about eating potentially contaminated foods of any kind. The weight of evidence clearly supports the need to protect pregnant women from wireless radiation exposures as well."

- Dr. Devra Davis, University of California at Berkeley

#### MORE ABOUT THE SCIENCE

A recent study (Aldad, et al 2012) conducted at Yale University found that pregnant laboratory mice exposed to ordinary cell phone radiation produced offspring that were more hyperactive and had poorer memories compared to a control group that was not exposed.

Dr. Hugh Taylor, Chair of the Department of Obstetrics, Gynecology and Reproductive Sciences at Yale University School of Medicine and his team of researchers concluded that cell phone radiation had damaged neurons in the prefrontal cortex of the brain.

The work of the Yale researchers followed a steady progression of scientific studies that demonstrated health and behavioral effects from wireless radiation. Twenty years ago, a review of the scientific literature on radiofrequency/microwave radiation conducted by the U. S. Air Force Materiel Command (Bolen 1994) concluded that "behavior may be the most sensitive biological component to RF/Microwave radiation." Scientists at the University of Washington demonstrated DNA breaks in brain cells of rats resulting from exposure to microwave radiation (Lai, et al 1995).

Over the next decade, numerous studies were conducted regarding the safety of RF radiation with varying results, and controversy remained about the relevance of animal studies to humans.

Of particular importance was the work of researchers at the University of Kentucky where they were able to show how exposure to wireless radiation can damage or even destroy brain cells (Zhao, et al 2007). Researchers in Samsun, Turkey published findings that rats prenatally exposed to cell phone radiation developed impaired learning and also showed damage to those parts of the brain involved in memory and learning (Inkinci, et al 2013). In yet another study, rats prenatally exposed to wireless radiation also had damaged spinal cords (Odaci, et al 2013).

Regarding human impacts of wireless radiation, UCLA researchers (Divan, et al 2008) studied 13,000 mothers and children and found that prenatal exposure to cell phones was associated with a higher risk for behavioral problems and hyperactivity in children.

Scientists continue to conduct research on the human impact of wireless radiation exposure. While we wait for the scientific process to provide us with a deeper understanding of this issue, and for government agencies to adopt appropriate exposure thresholds, a precautionary approach to exposures, especially during pregnancy, seems warranted.

For a listing of scientific studies regarding wireless radiation and its biological effects, please visit our web site BabySafeProject.org.

Government agencies, professional societies and public health organizations around the world calling for further research on wireless radiation include:

United States Environmental Protection Agency (EPA) American Academy of Environmental Medicine (AAEM) National Cancer Institute (NCI) American Academy of Pediatrics (AAP) American Cancer Society (ACS) National Institute of Environmental Health Sciences (NIEHS) International Agency for Research on Cancer (IARC) International Commission for Electromagnetic Safety (ICES) European Parliament and European Environment Agency (EEA)

"Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children. It is essential that any new standards for cell phones and other wireless devices be based on protecting the youngest and most vulnerable population to ensure they are safeguarded throughout their lifetimes."

- American Academy of Pediatrics 2013

## Joint Statement on Pregnancy and Wireless Radiation

We join together as physicians, scientists and educators to express our concerns about the risks that wireless radiation poses to pregnancy and to urge pregnant women to limit their exposures.

We recognize that the exquisite systems that direct the development of human life are vulnerable to environmental insults, and that even minute exposures during critical windows of development may have serious and life-long consequences.

We know that the scientific process demands a thorough and exhaustive examination of the possible impact of wireless radiation on health; however, we believe substantial evidence of risk, rather than absolute proof of harm, must be the trigger for action to protect public health.

We call on the research community to conduct more studies to identify the mechanisms by which a fetus could be affected by wireless radiation. We call on our elected leaders to support such research and to advance policies and regulations that limit exposures for pregnant women. We call on industry to implement and explore technologies and designs that will reduce radiation exposures until such research is carried out.

We affirm our role as health and science professionals to inform the public about the potential dangers associated with early-life exposures to wireless radiation, and invite all professionals engaged in obstetric, pediatric, and environmental health advocacy to join us in our quest to ensure the safety and health of future generations.

For a current list of medical doctors, researchers and health advocates who have signed the Joint Statement, please visit BabySafeProject.org For more information about pregnancy and wireless radiation and to obtain additional copies of this brochure please visit

## BabySafeProject.org

#KnowYourExposure



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## ENVIRONMENTAL HEALTH CONSULTANTS

Residential report for Jane & John Doe, West Kelowna, British Columbia

Radio Frequency (RF) Pollution: Building Biology Institute safe level is below 5 µW (microwatts)

There are numerous sources of RF pollution in homes. Some are *internal*, coming from inside the home and some are *external*, entering the home from sources nearby or quite distant from the house. This dwelling has minor extrinsic RF pollution sources. The front of the house showed readings of over 40  $\mu$ W likely arising from a cell phone tower. At the rear left of the house the readings were over 70  $\mu$ W also likely arising from cell phone towers. These readings throughout the house were all above normal safety levels.

There were numerous internal RF pollution sources detected. The major challenges with radiofrequency pollution were the cordless phones and Wi-Fi router. There were three locations and a total of four cordless phone bases is in the house. Two were in the dining room, one in the master bedroom and two were downstairs in the auxiliary kitchen. All of these had levels between 250 and 300  $\mu$ W. Sleeping space safety is of prime importance when dealing with this type of pollution. The amount and quality of sleep that we get is a paramount requirement. A safe sleeping space is necessary for good health. There were significant levels above 5  $\mu$ W in all of the sleeping spaces in this dwelling. All of the wireless devices including laptops, tablets and cell phones will produce levels significantly higher than normal safety limits. Even wireless printers produce signals that are transmitted every 6 seconds or so and are significantly above normal limits within a reasonable distance.

The Wi-Fi router was emitting significant levels of RF pollution. It's proximity to the workspace at the computer is of extreme importance. Not only is the Wi-Fi router operating 24/7 and exposing the whole house to Wi-Fi radiation, it is also an extreme danger to the workspace because of the high levels that close to the emitter.

There were no significant cordless phone and Wi-Fi signals coming in from adjoining residences. This can be one of the main challenges in this type of living situation. We do not have control over what our neighbors do on the other side of the wall. Please keep in mind that all of these energy pollution levels are cumulative. The more we are exposed the worse the situation gets. If we are exposed long enough we may end up with an actual health challenge as a result. It is much easier to be proactive and work on a preventive level with energy pollution than it is to be corrective once a health challenge has started. **Recommendations:** Many of these challenges are very simple to correct. Replace the cordless phones with corded phones. Cordless phones cannot be shielded and must be replaced. It is actually quite simple to hardwire all of the computers. Adapters are available so that any computer including tablets with a USB port can be wired to the Internet. That means without an Ethernet port a computer can still be hardwired. The D Link Power line ADV 500 from an electronics shop will allow for simple and effective hardwiring of the Internet throughout the house. Once this is installed you can have the wireless turn off on your router. This will allow you to be wireless free and still have incredible conductivity and I believe that includes streaming video for your television. Unfortunately Apple and android tablets cannot be hardwired to the Internet. If one wishes to use Wi-Fi on their smart phone one must have the Wi-Fi router transmitting. It may be necessary to simply turn off all of the wireless at night so that the sleeping spaces in this house can be safe.

Turning off the wireless on the printer would be advisable if possible.

These recommendations should clean up the wireless pollution in your residence quite effectively.

Dirty Electricity: readings below 50 mV(millivolts) are advisable and below 100 mv acceptable.

Simply put, Dirty Electricity is the presence of abnormal secondary wave forms traveling on the electrical circuits producing magnetic and electric toxic fields in the living space. North Americans are well adapted to 60 cycles per second alternating current traveling through our electrical wiring systems. Virtually all of us grew up in homes where this AC current was present. The advent of modern electronic devices and numerous other factors have introduced polluting waveforms into our homes. Our systems are not adapted to these toxic waveforms which are interpreted by our bodies as an assault. This can put us in a state of defensive physiology which may eventually leads to stress diseases.

Levels were well above 150 mV in the master bedroom and the living room. This was easily corrected the high frequency Greenwave filters. This brought the readings down to well below 20 mV in both rooms.

**Recommendations:** This situation is easily corrected by making sure there are no compact fluorescent bulbs in the house. No dimmer switches were detected as these are a major source of dirty electricity. Installing one high-frequency green wave filter in the circuit that supplies both of the bedrooms brings the readings down by 98% to well within safe levels. These are available from Safespace. Disconnecting the unused device in the bar circuit in the bunkbed room is suggested. It would be advisable to get them electrician to do this.

#### Electric Field Pollution: readings above .3 volts per meter are considered unsafe

Below is a nine point electric field reading of the sleeping space in the master bedroom. Ideally these readings will all be .3 mV or below and dark green in color. This reading was taken with the circuit breaker turned off.



Note the highest readings at the head of the bed which is near an electrical wire in the wall.

Below is a nine point electrical field measurement with the circuit breaker turned on.



Once again, notice the highest readings at the head of the bed near the electrical wires and outlets and the substantial increase in the electrical field with power running in the walls.



Below is a nine point reading of the electrical fields on the couch in the living room.

Notice that the highest level of electrical field is on the end of the couch nearest the electrical outlet.

Below is a nine point measurement of the sleeping space in basement bedroom one.



The readings in this sleeping space were significantly better than seen above with slight increases into the red in the vicinity of electrical plugs.

Below is a nine point sleeping space in valuation from the bed in basement bedroom two.



The levels of this sleeping space were significantly higher especially along the far wall where an electrical wire was running very close to the bed space.

Below is a six point pattern of the electrical fields of the chair workspace at the computer in the dining room.


These levels are less than might be expected considering the number of electrical appliances in close proximity to that chair.

Significant fields were found around the television, the stove and other kitchen appliances. These areas are not frequented and therefore probably do not need attention.

Significant fields were found around a number of lamps with two prong plugs. All these levels were above 70 V per meter squared.

**Recommendations:** Turning off the circuit breaker to the bedrooms at night or even during naps would be highly advisable. Another option would be the installation of demand switches for the bedrooms. The good electrician can inexpensively install switches to turn off the Hydro for the circuits in the bedrooms at low cost. Having all the inhabitants of this dwelling sleep in the least EMF pollution possible would be highly advisable. It is extremely important that this dwelling be properly grounded in its electrical circuitry. This will be discussed at length under that category. The on grounding of most of the upper floor is a significant challenge for magnetic and electric fields and needs to be addressed. It would be advisable to have all lamps with two prong plugs grounded with three prong circuitry.

Magnetic Field Pollution: levels above .2 mA (milliGauss) are considered unsafe.

Magnetic fields are produced by high-voltage lines and electronics, wiring errors, AC current flowing on plumbing, low voltage lighting appliances, electrical motors, power Transformers, baseboard heaters and fluorescent lights both large and compact. Constant exposure to significant magnetic fields can have a drastic impact on the health of people. The sleeping space is especially important as it is occupied for many hours at a time.

Below is a nine point magnetic measurement of the master bedroom sleeping space with the electrical power turned off.



Below is the magnetic field pattern of the master bedroom sleeping space the power turned on.



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All the readings are slightly higher although still in the cautionary zone only.

Below is a magnetic field reading of the couch in the living room.



These readings are significantly higher at the left end of the couch nearest electrical outlet.

Below are the magnetic readings for the sleeping space in bedroom one.



Below are the readings for magnetic pollution in the sleeping space of basement bedroom two.



Once again the magnetic readings are higher along the wall nearest electrical wire.

Below are the readings for magnetic disturbance in the workspace chair in the dining room.



These are extremely high magnetic readings resulting likely from all of the electrical devices in close proximity to that chair.

**Recommendations**: simply follow the recommendations for the electric field pollution and the magnetic fields should all diminish dramatically. They are intimately interconnected.

## **Electrical Circuitry:**

All accessible plugs were tested with an **Amprobe** computerized circuit tester. Kitchen plugs were excellent upstairs. Unfortunately, the remainder of the upper floor has three prong plugs without the grounding plug being connected. This is a significant challenge and can be a major factor in the production of magnetic and electric fields. It is also a significant danger if an appliance should ever be shorted out and grounding actually be needed. This will be discussed under recommendations.

All of the plugs on the lower floor were grounded and many of the plugs furthest from the electrical panel had line drop of more than 5%. Downstairs GFCI plugs functioned normally.

The electrical panel had moderate magnetic and electric fields however the inhabitants of this house would not likely be in close proximity to these.

This house does not have a smart meter and therefore any of the above findings cannot be attributed to the analog meter.

There were minor issues with excessive line drop that these should not cause any major problems. All ground fault circuit interrupters were working perfectly.

### **Recommendations:**

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The number one problem with ungrounded outlets is possible shock hazard. The whole point of ground wire is to make sure the circuit breaker trips and prevents shock (hurts) or electrocution (fatal). With no ground wire, items plugged into two wire receptacles can become hazardous. When a short circuit occurs in an appliance with no ground wire the metal parts can become energized......but what makes the situation deadly is that the circuit breaker won't trip in this case. Instead the metal parts of the appliance become a booby-trap waiting for the next person to make contact and complete the path to ground.

If you leave a bar of soap under a faucet with a drip and come back in a day you won't notice much, but if you come back in a week there will be a hole through the middle. This is what can happen over time with sensitive electronics that are fed dirty power from two-prong outlets. The ground wires is a drain for electrical interference and "dirty power". Ungrounded systems force all the dirty power to pass right into your sensitive, computers, TV's and anything with a circuit board. This may not cause noticeable problems right away, but can lead to premature failure over time.

Surge protectors operate by draining large excess voltages to ground. In fact, most surge protector manufacturers will not honor their product warranty to protect items in your home if you are plugged into ungrounded two-prong outlets. Under normal circumstances these devices can be real life savers, but if no ground wire is present then they simply cannot perform their job.

The best way to eliminate the problems completely is to re-wire the circuit with new modern house wiring that has a ground. The down side to this solution is that is can be costly. But the bottom line is that this really is the only way to completely and totally solve the problem.

Please keep in mind that the effects of all of the above are cumulative. This means that the longer one is exposed, the more detrimental the effects. It is not unlike cigarette smoke in that you do not get sick until you have been exposed continually, sometimes for years. Children and adolescents are far more sensitive than adults as their central nervous system development has not completed. Studies have shown that the effects on their nervous systems are significantly greater than those for adults. The scientific evidence that energetic pollution is damaging is now irrefutable. Please take steps to limit your exposure as soon as possible. A retest of these parameters can be done once corrective measures have been taken.

**DISCLAIMER:** Dr. Ross Andersen, Safespace Protection and Health Activation Services take no responsibility for actions or inaction based upon this report. The information contained in this report is for educational purposes only and is not intended to diagnose or treat any health condition. The information in this report is based on sound scientific evidence. If you have concerns about a health condition, see your healthcare practitioner of choice.

Thank you for the opportunity to inspect your home. Dr. Ross Andersen for Safespace Protection

## **Caylee Simmons**

From:	mayors@pcf.city.hiroshima.jp
Sent:	Tuesday, August 05, 2014 5:45 PM
То:	Karen Juul-Andersen
Subject:	The City of Hiroshima Peace Declaration
Attachments:	Peace_Declaration2014.pdf

Let me express our heartfelt gratitude for your continued support for the activities of Mayors for Peace.

Today, the 69th anniversary of the atomic bombing of Hiroshima, Mayor Matsui of Hiroshima delivered this year's Peace Declaration at the Hiroshima Peace Memorial Ceremony. Please find attached copy of the Peace Declaration in PDF file for your reference.

If you are unable to open this file, please visit the City of Hiroshima website at: <u>http://www.city.hiroshima.lg.jp/www/contents/000000000000000/1317948556078/index.html</u> This year's Peace Declaration is available in text and a video clip of it being delivered by Mayor Matsui.

I close with best wishes for your continued good health and happiness.

Sincerely,

Shinichiro Murakami Division Director Mayors for Peace Secretariat 1-5 Nakajima-cho, Naka-ku, Hiroshima 730-0811 JAPAN Tel: +81-82-242-7821 Fax: +81-82-242-7452 Email: <u>mayorcon@pcf.city.hiroshima.jp</u>



### PEACE DECLARATION August 6, 2014

Summer, 69 years later. The burning sun takes us back to "that day." August 6, 1945. A single atomic bomb renders Hiroshima a burnt plain. From infants to the elderly, tens of thousands of innocent civilians lose their lives in a single day. By the end of the year, 140,000 have died. To avoid forgetting that sacred sacrifice and to prevent a repetition of that tragedy, please listen to the voices of the survivors.

Approximately 6,000 young boys and girls died removing buildings for fire lanes. One who was a 12-year-old junior high student at the time says, "Even now, I carry the scars of war and that atomic bombing on my body and in my heart. Nearly all my classmates were killed instantly. My heart is tortured by guilt when I think how badly they wanted to live and that I was the only one who did." Having somehow survived, *hibakusha* still suffer from severe physical and emotional wounds.

"Water, please." Voices from the brink of death are still lodged in the memory of a boy who was 15 and a junior high student. The pleas were from younger students who had been demolishing buildings. Seeing their badly burned, grotesquely swollen faces, eyebrows and eyelashes singed off, school uniforms in ragged tatters due to the heat ray, he tried to respond but was stopped. "Give water when they're injured that bad and they'll die, boy,' so I closed my ears and refused them water. If I had known they were going to die anyway, I would have given them all the water they wanted." Profound regret persists.

People who rarely talked about the past because of their ghastly experiences are now, in old age, starting to open up. "I want people to know the true cruelty of war," says an A-bomb orphan. He tells of children like himself living in a city of ashes, sleeping under bridges, in the corners of burned-out buildings, in bomb shelters, having nothing more than the clothes on their backs, stealing and fighting to eat, not going to school, barely surviving day to day working for gangsters.

Immediately after the bombing, a 6-year-old first grader hovered on the border between life and death. Later, she lived a continual fearful struggle with radiation aftereffects. She speaks out now because, "I don't want any young people to go through that experience." After an exchange with non-Japanese war victims, she decided to convey the importance of "young people making friends around the world," and "unceasing efforts to build, not a culture of war, but a culture of peace."

The "absolute evil" that robbed children of loving families and dreams for the future, plunging their lives into turmoil, is not susceptible to threats and counter-threats, killing and being killed. Military force just gives rise to new cycles of hatred. To eliminate the evil, we must transcend nationality, race, religion, and other differences, value person-to-person relationships, and build a world that allows forward-looking dialogue.

Hiroshima asks everyone throughout the world to accept this wish of the *hibakusha* and walk with them the path to nuclear weapons abolition and world peace.

Each one of us will help determine the future of the human family. Please put yourself in the place of the *hibakusha*. Imagine their experiences, including that day from the depths of hell, actually happening to you or someone in your family. To make sure the tragedies of Hiroshima and Nagasaki never happen a third time, let's all communicate, think and act together with the *hibakusha* for a peaceful world without nuclear weapons and without war.

We will do our best. Mayors for Peace, now with over 6,200 member cities, will work through lead cities representing us in their parts of the world and in conjunction with NGOs and the UN to disseminate the facts of the bombings and the message of Hiroshima. We will steadfastly promote the new movement stressing the humanitarian consequences of nuclear weapons and seeking to outlaw them. We will help strengthen international public demand for the start of negotiations on a nuclear weapons convention with the goal of total abolition by 2020.

The Hiroshima Statement that emerged this past April from the ministerial meeting of the NPDI (Non-Proliferation and Disarmament Initiative) called on the world's policymakers to visit Hiroshima and Nagasaki. President Obama and all leaders of nuclear-armed nations, please respond to that call by visiting the A-bombed cities as soon as possible to see what happened with your own eyes. If you do, you will be convinced that nuclear weapons are an absolute evil that must no longer be allowed to exist. Please stop using the inhumane threat of this absolute evil to defend your countries. Rather, apply all your resources to a new security system based on trust and dialogue.

Japan is the only A-bombed nation. Precisely because our security situation is increasingly severe, our government should accept the full weight of the fact that we have avoided war for 69 years thanks to the noble pacifism of the Japanese Constitution. We must continue as a nation of peace in both word and deed, working with other countries toward the new security system. Looking toward next year's NPT Review Conference, Japan should bridge the gap between the nuclear-weapon and non-nuclear-weapon states to strengthen the NPT regime. In addition, I ask the government to expand the "black rain areas" and, by providing more caring assistance, show more compassion for the *hibakusha* and all those suffering from the effects of radiation.

Here and now, as we offer our heartfelt consolation to the souls of those sacrificed to the atomic bomb, we pledge to join forces with people the world over seeking the abolition of the absolute evil, nuclear weapons, and the realization of lasting world peace.

MATSUI Kazumi Mayor The City of Hiroshima

# **Caylee Simmons**

From:	mayors@pcf.city.hiroshima.jp
Sent:	Friday, August 08, 2014 7:53 PM
То:	Karen Juul-Andersen
Subject:	Nagasaki Peace Declaration 2014
Attachments:	Nagasaki Peace Declaration 2014.pdf

Dear member cities of Mayors for Peace,

Let me express our heartfelt gratitude for your continued support for the activities of Mayors for Peace.

Today, on the 69th anniversary of the atomic bombing of Nagasaki, Mayor Taue of Nagasaki delivered this year's Peace Declaration at the Nagasaki Peace Ceremony. We have attached a copy of the Peace Declaration in PDF format for your inspection.

The Peace Declaration in a PDF file may also be downloaded from the link below. (English, Chinese and other languages are also available) <a href="http://www1.city.nagasaki.nagasaki.jp/peace/english/appeal/archives.html">http://www1.city.nagasaki.nagasaki.jp/peace/english/appeal/archives.html</a> If you are unable to open this file, please visit the City of Nagasaki website at: <a href="http://www1.city.nagasaki.nagasaki.jp/peace/english/appeal/index.html">http://www1.city.nagasaki.nagasaki.jp/peace/english/appeal/archives.html</a>

I close with best wishes for your continued good health and happiness.

Mayors for Peace Secretariat 1-5 Nakajima-cho, Naka-ku, Hiroshima 730-0811 JAPAN Tel: +81-82-242-7821 Fax: +81-82-242-7452 Email: mayorcon@pcf.city.hiroshima.jp

## Nagasaki Peace Declaration

At this precise moment, 69 years ago, the sky over this hill was covered with a pitch black nuclear cloud. The single atomic bomb, dropped by a United States bomber, blew away houses and engulfed the city in flames. Many fled for their lives through streets littered with charred bodies. 74,000 precious lives were lost to the terrible blast, heat rays and radiation. A further 75,000 people were wounded. Those who narrowly survived were inflicted with deep mental and physical wounds that will never heal, even though 69 years have now passed.

Today, there are more than 16,000 nuclear warheads in existence. The *hibakusha*, atomic bomb survivors, who personally know the horror of nuclear weapons, have continued to desperately warn us that they must never be used again. The *hibakusha* and their appeal have prevented the repeated use of nuclear weapons since the bombings of Hiroshima and Nagasaki.

What would happen to the world if nuclear weapons were to be used in war today?

In February, the "Second Conference on the Humanitarian Impact of Nuclear Weapons" was held in Mexico. There, representatives of 146 states examined the impact of nuclear weapons from various perspectives, such as the human body, the economy, the environment, and the climate. Their findings revealed just how inhumane these weapons are, and they made terrifying predictions regarding the consequences of a nuclear war. Not only would it be impossible to save the injured, but the advent of a "nuclear winter" would cause food supplies to run out. This means that more than 2 billion people around the world would starve.

Nuclear weapons are a continuing danger that threatens the present and future of our entire world. The terror that they bring is not confined to Hiroshima and Nagasaki's past.

The nations which are focusing on the inhumanity of these weapons have begun to consider treaties, such as a nuclear weapons convention, which would have them banned. However, nuclear weapon states, and those that are under a nuclear umbrella, have been unable to relinquish the idea that they can protect their national security with nuclear weapons. They are attempting to postpone the ban. If we cannot overcome this opposition, then next year's "Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)", which is held every 5 years, will come to nothing.

I appeal to the nuclear weapon states, and to all states that are under a nuclear umbrella, to take the first step in overcoming this conflict. I ask that you create a forum for discussion with those countries which seek to legally ban nuclear weapons. Please discuss what has to be done, and by when, in order to realize a "world without nuclear weapons". As the country that best understands the inhumanity of nuclear weapons, I ask that the government of Japan take the lead in these efforts.

One regional method of protecting the future from nuclear war is the creation of "Nuclear-Weapon-Free Zones". Currently, more than half of our Earth's landmass is already covered by such a Zone. I suggest that along with enacting the Three Non-Nuclear Principles, Japan should investigate a "plan for a Northeast Asia Nuclear-Weapon-Free Zone". This would be one method for protecting the Republic of Korea, the Democratic People's Republic of Korea, and Japan from nuclear weapons. The leaders of more than 500 Japanese local governing bodies support this concept, and this circle of agreement will continue to grow.

Due to the debate over the right to collective self-defense, there are currently many opinions being exchanged regarding ways to guarantee Japan's national security as a "Nation of Peace".

Nagasaki has continued to cry, "No more Nagasaki!" and "No more war!" The oath prescribed in the Japanese Constitution that Japan shall "renounce war" is the founding principle for post-war Japan and Nagasaki; a country and a city which suffered the atomic bomb.

The *hibakusha* have continued to communicate this principle of pacifism by speaking of their personal experiences. However, the rushed debate over collective self-defense has given rise to the concern that this principle is wavering. I urgently request that the Japanese government take serious heed of these distressed voices.

In Nagasaki, young people are thinking about nuclear weapons for themselves, conducting discussions, and initiating new activities. Our university students have begun spreading networks overseas. Our high school students have collected over one million signatures for a petition which they presented to the United Nations calling for the abolition of nuclear weapons. These high school students have a motto; "We are weak but not powerless". These words remind us that civic society, which is made up of many individuals, is a source of great strength. As a member of civic society, we, Nagasaki, will increase the number of our partners and continue our activities towards realizing a world free of nuclear weapons. We will join forces with NGOs, and cooperate with the UN and other countries that share our goal. Citizens of the world, let us give the next generation a "world without nuclear weapons".

Three years have passed since the accident at the Fukushima Daiichi Nuclear Power Plant operated by Tokyo Electric Power Company, Inc. Even today, there are many people being forced to live their lives in unease. Nagasaki continues to provide various forms of support to Fukushima in the hope that the region will achieve full recovery as soon as possible.

Next year will be the  $70^{th}$  anniversary of the atomic bombings of Hiroshima and Nagasaki. As the *hibakusha* continue to age, we desire support befitting their present situation, such as improvement of the recognition system for atomic bomb diseases.

We pray that between now and the 70<sup>th</sup> anniversary that we will make great advances towards our goal, which is shared by all peace-loving people, to achieve "a world without nuclear weapons". We also offer our most heartfelt condolences to those who lost their lives to the atomic bomb.

I declare that together with the city of Hiroshima, we shall continue to strive to achieve the abolition of nuclear weapons, and to achieve everlasting world peace.

Tomihisa Taue Mayor of Nagasaki August 9, 2014

From:	mayors@pcf.city.hiroshima.jp
Sent:	Wednesday, August 13, 2014 3:13 AM
То:	Karen Juul-Andersen
Subject:	Appeals for termination of armed conflict in Gaza Strip and Israel
Attachments:	CATALAN MAYORS FOR PEACE pdf; Letter from Sarajevo.pdf

Dear Mayors for Peace member cities,

Regarding the armed conflict between Israel and Palestine in the Gaza Strip, the Mayors for Peace member cities in the affected area have reported on the catastrophic damage. On July 21, the Catalan Section of Mayors for Peace, Spain, issued the attached message calling for an immediate halt to the armed conflict in Gaza and similarly on July 24, the City of Sarajevo, Bosnia and Herzegovina also issued the attached appeal based on the Conclusions of Sarajevo City Council on July 23.

It is extremely regrettable that many innocent people have been killed and injured by the use of armed force.

Mayors for Peace is therefore sending the above-mentioned message and appeal to all its member cities, in order to together find ways to achieve our shared goal of realizing a peaceful world free of conflict.

Sincerely yours,

August 13, 2014

Yasuyoshi Komizo Secretary General of Mayors for Peace

# CATALAN MAYORS FOR PEACE CALL FOR AN IMMEDIATE STOP OF THE ARMED CONFLICT IN GAZA

For weeks, the Palestinian population of Gaza are suffering the consequences of an armed conflict that seems to have no end. The bombings of the Israeli army have killed hundreds of people, many of whom are children. Hamas rockets also caused Israeli casualties. Whole families had to leave their homes and bombings have caused damage to vital infrastructure. The vast majority of victims are civilians.

With borders closed, citizens cannot escape and become innocent victims of this situation. Note that the direct attack on civilian targets, furthermore to be unacceptable and reprehensible, is considered a war crime under international law. These facts, therefore, need to be investigated and prosecuted.

As mayors, which our primary function is to ensure the welfare of citizens, we strongly condemn any use of force and we are in full sympathy with the people of Gaza. As members of the international network of Mayors for Peace, an organization with more than 6,000 member cities around the world committed to peace, we cannot remain indifferent to these facts. There is no justification for using violence to resolve conflicts. We urge to stop all bombing against villages and cities.

We call on governments to work towards a peaceful solution for the conflict. We ask not attack populated areas and require that do not use weapons against defenceless civilian population. We ask the international community to act immediately to stop all bombings, protect civilians and initiate good faith negotiations leading to a peaceful resolution of the conflict.

July, 21th, 2014

Catalan section of Mayors for Peace

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Number: 01-45-3446/14 Sarajevo, July 24<sup>th</sup>, 2014

MAYORS FOR PEACE SECRETARIAT Mr. Matsui Kazumi, President Mayor of Hiroshima 1-5 Nakajima-cho, Naka-ku, Hiroshima JAPAN

Subject: Appeal for termination of armed conflict in Gaza Strip and Israel

### Dear Mr. Kazumi,

In accordance with the Conclusions of Sarajevo City Council, issued at its 16th Assembly held on July 23rd 2014, in my capacity as Mayor of the City of Sarajevo I am obliged to appeal to your esteemed international association, of which City of Sarajevo is a member, with a request to send an appeal through the United Nations to the governments of Palestine and Israel to terminate the conflict immediately and renew political and diplomatic negotiations on permanent resolution of the longlasting crisis in the region.

Furthermore, I kindly ask you to forward the appeal to all other member cities of the association in order that they could join us the condemnation of the attack of civilian population.

Having in mind the sacredness of human lives especially that of innocent children, we all should take over responsibility and use our authority to take strong and decisive action to terminate the bloodshed in the Gaza Strip and Israel. Harshly condemning all kinds of violence I express my belief that the world is once again put to the test and that global peace relies heavily on the efficient resolution of this matter.

Sarajevo- a suffering city, which went through a four-year Calvary, suffered a great loss of human life and most brutal destruction, strongly rejects violence as a method of resolution of political issues and calls for dialogue and compromise.

City of Sarajevo which has harboured the spirit of tolerance and coexistence for centuries wishes to send messages of peace and appeals to the Middle Eastern cities to become like Sarajevo, symbols of struggle for life over death, tolerance, coexistence and democracy.

Yours sincerely,

or of Sarajevo

o Komšić, Ph.D.



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# JULY 30, 2014 • FOR IMMEDIATE RELEASE

# BC's Energy Minister admits Smart Meter FIRES ... but will do nothing

Energy Minister Bill Bennett admits to smart meter fires in British Columbia, but rather than do anything, he expresses disappointment that Saskatchewan is taking action to protect its citizens.

On July 30 Saskatchewan Energy Minister Bill Boyd called a halt to the smart meter program, demanding removal of 105,000 meters after 8 "failures", that include fires and exploding meters.

www.globalnews.ca/news/1483134/saskpower-ordered-to-remove-all-smart-meters-in-the-province/

"I think the concerns about safety are paramount here, the concerns are significant enough, anytime families are at risk in Saskatchewan, actions have to be taken and that's why we've directed SaskPower accordingly," said Minister Boyd.

In British Columbia, where we've had more "failures", which have also included fires and exploding meters, Bill Bennett and BC Hydro consistently have refused to acknowledge the danger and, instead, put the blame on homeowners' meter bases and wiring. It doesn't matter why a home burns after a smart meter has been installed – whether it was because the inexperienced installer damaged the base or that the meter heated up due to design flaws. The fact is that property and lives have been put at risk and our government is refusing to protect us.

Bennett is sorry that Saskatchewan is taking this action. ""It's unfortunate that Saskatchewan is doing what it's doing..." Why? Because it shows that some provincial governments are more concerned about their citizens than others. It puts BC to shame. www.cknw.com/2014/07/30/while-saskatchewan-yanks-its-smart-meters-bc-wont-do-the-same/

Finally Bennett is admitting there have been fires due to smart meters in BC. This is a first, but it's way too late. Fires have been occurring for the last 3 years, and Hydro and Liberals have denied it. The evidence has been hidden and people have been living with a fire hazard on their bedroom walls. He's told Hydro to find out how many have occurred. That may be difficult because no agency is tracking them.

Why is Bennett asking for a count? Is it just because he feels he must do something? Saskatchewan doesn't know why the meters have caused fires – they are taking action because fires have occurred. We have had many fires and incidents in BC, and nothing has been done to protect us. Instead the program has been protected with lies and cover-ups. Do we not deserve the same precautionary action as Saskatchewan?

The Coalition to Stop Smart Meters asks, "Please tell us, Mr. Bennett, what is the right number, how many homes must burn before you will stop this dangerous program??"

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# For Media Contact only:

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# www.stopsmartmetersbc.ca