

Llamamiento de Reikiavik sobre la tecnología inalámbrica en las escuelas

Traducción al castellano de Pedro Belmonte (Ecologistas en Acción) para la PECCEM. Original en: <http://www.stralskyddsstiftelsen.se/wp-content/uploads/2017/03/Reykjavik-Appeal-170224-2.pdf>

Nosotros, los abajo firmantes, manifestamos nuestra preocupación por la salud y el desarrollo de nuestros niños/as en las escuelas con la aplicación de la tecnología inalámbrica para la enseñanza. Una gran cantidad de estudios científicos evidencian considerables riesgos médicos debidos a la exposición a largo plazo a la radiación de radiofrecuencias (RFR) de redes y dispositivos inalámbricos; muy por debajo de los niveles de referencia recomendados por la Comisión Internacional de Protección contra las Radiaciones No Ionizantes (ICNIRP). Pedimos a las autoridades que asuman su responsabilidad por la salud y el bienestar futuros de nuestros niños y niñas.

En mayo de 2011, la Agencia Internacional para la Investigación del Cáncer (IARC) de la Organización Mundial de la Salud (OMS) clasificó la radiación de radiofrecuencias (RFR) como carcinógeno del Grupo 2B; es decir, "posiblemente" carcinógeno para los seres humanos. Desde entonces, más estudios científicos sobre la exposición a RFR en humanos, animales y material biológico han fortalecido su asociación a un mayor riesgo de cáncer, especialmente de tumores cerebrales. Varios estudios de laboratorio han demostrado efectos mecánicos en la carcinogénesis como el estrés oxidativo, la regulación a la baja del ARN mensajero y el daño al ADN con roturas de una sola cadena. La clasificación de cancerígeno por la IARC incluye todas las fuentes de RFR. La exposición procedente de estaciones base de telefonía móvil, puntos de acceso Wi-Fi, teléfonos inteligentes, ordenadores portátiles y tabletas puede darse a largo plazo, a veces en todo momento, tanto en casa como en la escuela. Para los niños/as este riesgo se puede acentuar debido al efecto acumulativo de su uso a lo largo del resto de su vida. Además, las células en desarrollo e inmaduras pueden ser más sensibles a la exposición a RFR. Ningún organismo de salud ha determinado ningún nivel seguro de esta radiación y, por lo tanto, no tenemos garantías de seguridad.

Además del riesgo de cáncer, las RFR también pueden afectar a la barrera hematoencefálica haciendo que se abra y permita la entrada de moléculas tóxicas en el cerebro, dañar neuronas del hipocampo (el centro cerebral de memoria), regular al alza o a la baja las proteínas del cerebro esenciales para el metabolismo, la respuesta al estrés y la neuroprotección del cerebro y afectar a los neurotransmisores. Se han observado en los espermatozoides expuestos al Wi-Fi más defectos en su cabeza y daños en su ADN. Las RFR pueden incrementar el estrés oxidativo en las células y llevar a un aumento de las citoquinas¹ pro-inflamatorias y reducir la capacidad para reparar roturas de cadenas de ADN simples o dobles.

¹ Las citoquinas son un conjunto de proteínas que regulan interacciones de las células del sistema inmune.

También se han demostrado deficiencias cognitivas en el aprendizaje y la memoria. Los resultados de las encuestas de PISA de la OCDE en lectura y matemáticas muestran resultados decrecientes en los países que más han invertido en introducir computadoras en la escuela. Muchas tareas simultáneas, demasiadas horas delante de la pantalla, menos tiempo para contactos sociales y actividades físicas, riesgo de dolores de cuello y espalda, sobrepeso, problemas de sueño y adicción a las tecnologías de la información y comunicación (TIC) son algunos de los riesgos conocidos y efectos secundarios de las TIC. Todos ellos en marcado contraste con los tan proclamados, pero en gran medida no probados, posibles beneficios.

Pedimos a las autoridades escolares de todos los países que adquieran conocimientos sobre los riesgos potenciales de las RFR para el crecimiento y desarrollo de los niños/as. La promoción de tecnologías educativas cableadas es una solución más segura que la potencialmente peligrosa exposición a la radiación inalámbrica. Les pedimos que sigan el principio ALARA (tan bajo como razonablemente sea posible) y la [Resolución 1815 del Consejo de Europa](#) para adoptar todas las medidas razonables para reducir la exposición a RFR.

Reglas prácticas para las escuelas con respecto a los niños/as y la tecnología inalámbrica:

- No debe haber redes inalámbricas en preescolar, guarderías y escuelas.
- Se recomienda una conexión directa por cable en cada aula para uso del profesor durante las clases.
- Dar preferencia a los teléfonos fijos para el personal de preescolar, guarderías y escuelas.
- Dar preferencia a la conexión por cable a Internet y a impresoras en las escuelas y desactivar la configuración Wi-Fi en todos los equipos.
- Dar preferencia a los ordenadores portátiles y tabletas que se pueden conectar por cable a Internet.
- No se debe permitir que los estudiantes usen teléfonos móviles en las escuelas. Pueden dejarlos en casa o que el profesor los recoja en modo apagado antes de la primera clase de la mañana.

Conferencia internacional de Reykjavik (Islandia) sobre las niñas y niños, el tiempo de permanencia ante las pantallas y la radiación inalámbrica, del 24 de febrero de 2017 (Children, Screen time and Wireless Radiation – International Conference Reykjavik). [Ver vídeos de la jornada en: <https://ehtrust.org/science/key-scientific-lectures/2017-reykjavik-conference-technology-wireless-radiation-childrens-health/>]

Firmantes:

Lennart Hardell, MD, PhD (speaker)

Department of Oncology, Faculty of Medicine and Health,
Örebro University, SE-701 82 Örebro, Sweden.

E-mail: lennart.hardell@regionorebrolan.se

Cris Rowan, BScOT, BScBi, SIPT (speaker)

CEO Zone'in Programs Inc. and Sunshine Coast Occupational Therapy Services Inc.
6840 Seaview Rd, Sechelt, BC Canada V0N3A4

Tarmo Koppel, PhD candidate (speaker)

Department of Labour Environment and Safety

Tallinn University of Technology,

SCO351 Ehitajate tee 5, 19086 Tallinn, Estonia

E-mail: tarmo.koppel@ttu.ee

Iceland

Sveinn S. Kjartansson, Formaður, Félag foreldra leikskólabarna, Chairman,
Association of parents of preschool children in Reykjavik, Island

Valdemar Gisli Valdemarsson, Electronic technician/manager, Island

Sweden

Lena Hedendahl, MD, Independent Environment and Health Research Luleå, Sweden

Michael Carlberg, MSc, Department of Oncology, Faculty of Medicine and Health,
Örebro University, Sweden

Mikko Ahonen, PhD, Sweden Adamantia Fragopoulou, PhD, Department of
Neuroscience, KI, (Karolinska Institute), Sweden Olle Johansson, PhD, Department of
Neuroscience, KI, Sweden

Johan Wilhelmson, MD, Sweden

Ulrika Åberg, MD, Sweden Gabriella Ahlgren, Chairman, Vågbrytaren, Against
insanitary electromagnetic radiation, Sweden

Gunilla Ladberg, PhD, Vågbrytaren, Sweden

Marianne Ketti, Chairwoman, FEB Sweden (The Swedish Association for the
ElectroHyperSensitive)

Per Segerbäck, Scientific Advisor, FEB Sweden

Mona Nilsson, Chairman, Swedish Radiation Protection Foundation, Sweden

Bertil Arting, Teacher (former), Sweden

Kristina Arting, Teacher (former), Sweden

Linda Niewenhuizen, Teacher, Sweden

Gertrud Öjbrandt, Teacher (former), Sweden

Finland

Marjukka Hagström, Senior Specialist, LL.M., M.Soc.Sc., Finland

Rainer Nyberg, EdD, Professor emeritus, Finland

Norway

Solveig Glomsrød, Chairman, Association of electro-hypersensitive, Norway

Sissel Halmøy, Chair, International EMF Alliance, Norway

Thomas Middelthon, Chairman, Citizens' Radiation Protection, Norway

Austria

Piero Lercher, MD, Consultant for environmental medicine in the Viennese medical chamber, Austria

Gerd Oberfeld, MD, Public Health Dept. Salzburg Government, Austria

Thomas Szekeres, a.o. Univ.-Prof. Dr. President of the Viennese medical chamber, Austria

Belgium

Ernesto Burgio, MD, Pediatrician, ECERI, European Cancer and Environment Research Institute Bruxelles, Belgium

Cyprus

Stella Canna Michaelidou, Dr, President of the National Committee on Environment and Children's Health, Nicosia, Cyprus.

Alexia Sakadaki, Organizing Manager, Cyprus Greens – Citizens' Cooperation, Cyprus

France

Dominique Belpomme, MD, MS, Professor, Oncology, Paris University Hospital, France, and European Cancer and Environment Research Institute (ECERI), Brussels, Belgium.

Christine Campagnac, Hospital Director, seconded from Assistance Publique-Hôpitaux de Paris (AP-HP), Paris, France; and ECERI, Brussels, Belgium

Philippe Irigaray, PhD, ARTAC, Paris, France

Etienne Cendrier, Spokesman for Robin des Toits, France

Janine Le Calvez, Chairman of the French NGO, Priartem, France

Sophie Pelletier, Collectif des Electrosensibles de France, France

Germany

Franz Adlkofer, Professor, Germany

Peter Hensinger, M.A., diagnose:funk, German consumer-rights organization, Germany

Markus Kern, Dr. med., Kempten, Germany

Peter Ohnsorge, Dr. Med., European Academy for Environmental Medicine, Member of the Board, Wuerzburg, Germany

Greece

Theodore Metsis, PhD, Electrical-Mechanical-Environmental Engineer-Consultant, Athens, Greece

Stelios A Zinelis, MD, BA, Hellenic Cancer Society of Kefallonia and Ithaki, Greece

Italy

Fiorella Belpoggi, Dr, Director, Research Department, Cesare Maltoni Cancer Research Center, Ramazzini Institute, Bologna, Italy

Dott. Morando Soffritti, Presidente Onorario, Istituto Ramazzini e Segretario Generale, Collegium Ramazzini, Bologna, Italy

Russia

Oleg A. Grigoriev, DrSc., PhD, Head of the Scientific Department of Non-Ionizing Radiation, Federal Medical Biophysical Center of Federal Medical Biological Agency of Russia, Moscow, Russia.

Yury G. Grigoriev, Professor, M. Dr Sci. President, Russian National Committee on Non-Ionizing Radiation Protection, Moscow, Russia

Spain

Enrique A. Navarro, Professor, Universitat de València, Spain

Pedro Belmonte, Area of electromagnetic pollution of Ecologistas en Acción, Spain

Julio Carmona, Coordinating Group of the PECCEM (Citizen Platform Against Electromagnetic Pollution in the Spanish state), Spain.

Minerva Palomar, President of Electro and Chemical Sensitive for the Right to Health, Spain

Slovak Republic

Igor Belyaev, Dr.Sc. Cancer Research Institute, BMC SAS, Slovak Republic

United Kingdom

David Gee, Visiting Fellow, Institute of Environment, Health and Societies, Brunel University, UK

Paula Healy, MSc., (neuroscience), UK

Erica Mallery-Blythe, MD, BMBS (Soton), PHIRE Medical (Physicians' Health Initiative for Radiation and Environment), UK

Alasdair Philips, BSc, DAgE, Director of Powerwatch (UK NGO), UK

Sarah Starkey, PhD, Independent Neuroscience and Environmental Health Research, UK

Michael Bevington, Electrosensitivity UK, United Kingdom

Eileen O'Connor, Director, EM Radiation Research Trust, and PHIRE, Board Member International EMF Alliance, UK

Nicola Kingsley, School secretary (retired). UK

Gabriel Millar, Teacher, activist organizer of 6 public meetings on the subject of wireless radiation in Stroud, Gloucestershire, UK

Israel

Gadi Lissak, Dr, Behavioral Gadi medicine psychologist, Israel

Yael Stein, Dr, MD, Hadassah Medical Center, Jerusalem, Israel

Iris Atzmon, MPH, Author, Israel.

Brazil

Alvaro Augusto de Salles, PhD, Professor, Federal University of Rio Grande do Sul – UFRGS, Porto Alegre, Brazil.

Colombia

Carlos Sosa, MD, Medellin, Colombia,

Canada

Daniel Berman, MSW, Vancouver, Washington, Board Member, Wireless Education Action, Canada

Anthony B. Miller, MD, FRCP, Professor Emeritus, Dalla Lana School of Public Health, University of Toronto, Canada

Heather Dawn Gingerich, MSc, International Medical Geology Association and AAAS Science & Human Rights Coalition, Canada

Melissa Chalmers, Director, Electromagnetic Pollution Illnesses Canada Foundation (EPIC), Canada

Janis Hoffmann, Parents for Safe Schools, Canada

Jean Hudon, Co-founder, Quebec's Coalition Against Electromagnetic Pollution , Quebec, Canada

Lucie Montpetit, Occupational therapist with EHS, ME and FM patients, Canada

Sharon Noble, Director, Coalition to Stop Smart Meters, Director, Citizens for Safe Technology, Victoria, British Columbia, Canada

Barbara Payne, Director' Electromagnetic Pollution Illnesses Canada Foundation (EPIC), Canada

Marcus & Benita Schluschen, Canadians for Safe Technology, British Columbia, Canada

Pedro Gregorio, M.Eng, Canada

Vladimir Gagachev, P.Eng., Electrical Engineer, Canada

Petrina Gregson, B of Mus, MA, Retired teacher, Clearwater, BC, Canada

Sheila Pratt, BA, Retired teacher, Canada

Cathy Veris, Community Mediation Coordinator, Mississauga, Ontario, Canada

Shelley Wright, Teacher, Canada

USA

David O. Carpenter, MD, Director, Institute for Health and the Environment. A Collaborating Centre of the World Health Organization, University at Albany, NY, USA
Scott Eberle, MD, Medical Director, Hospice of Petaluma, CA, USA

Dan O. Harper, MD, Solana Beach, CA, USA James Huff, PhD, Guest Researcher, Formerly, Associate Director for Chemical Carcinogenesis, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina , USA

Peter F. Infante, D.D.S, Dr.P.H., F.A.C.E. USA

Toril Jelter, MD, MDI Wellness Center in Walnut Creek, CA, USA

Elizabeth Kelley, MA, Former Managing Director, International Electromagnetic Safety Alliance, USA

Ann Yeawon Lee, MD, USA

L. Lloyd Morgan, Senior Research Fellow, Environmental Health Trust, USA Ronald M. Powell, PhD, USA

Camilla Rees, MBA, ElectromagneticHealth.org., USA

Cindy Sage, MA, Sage Associates, Co-Editor, BioInitiative Reports, USA

Theodora Scarato, MSW, Environmental Health Trust, USA

Barry Castleman, ScD, Environmental Consultant, USA

Mary Beth Brangan, Ecological Options Network, USA

Patricia Burke, HaltMASmartmeters.org., USA

Galilee Carlisle, M.Ed., Heads Up! for Public Health' Chehalis, WA, USA

Elizabeth Doonan, Maryland for Safe Technology, USA

Cecelia Doucette, Technology Safety Educator, USA

Lee Emerson, President, Lee F. Emerson & Associates Inc., Mill Spring, NC, USA

Arthur Firstenberg, President, Cellular Phone Task Force, Santa Fe, NM, USA

Diane Hickey, Co-founder, National Association For Children and Safe Technology, USA

Desiree Jaworski, Executive Director, Center for Safer Wireless, USA

Ellie Marks, Director, California Brain Tumor Association, San Francisco, CA, USA

Sandi Maurer, Director, EMF Safety Network, USA

Sam Parish, Forensic Engineer, Providence, RI, USA

Katie Singer, Author, An Electronic Silent Spring, EMR Radiation Policy Institute, USA

Angela Tsiang, Engineer, USA

Gary Vesperman, Clean Energy Inventions, Boulder City, Nevada, USA

Dianne Wilkins, Paralegal, Maine, USA Mary Anne Tierney, RN, MPH, Fairview, NC USA

Australia

Don Maisch, PhD, Member of the Australasian Oceania Radiofrequency Scientific Advisory Association (ORSAA), Australia

Steven Weller, B.Sc., Australia Karen Adler, EHS group network, Sydney, Australia

Linda Jones, Stop Smart Meters Australia, Victoria, Australia Greg Jones, Stop Smart Meters Australia, Victoria, Australia

Lyn McLean, Director, EMR Australia PL Sarah Benson, Retired teacher, Australia

Firmas adicionales después de la conferencia:

Germany

Jan Gerhard, MD, Pediatrician, Youth-Psychiatrist, Bünsdorf, Germany

Dietrich Moldan, Dr, Moldan Umweltanalytik, Iphofen, Germany

Claus Scheingraber, Dr. med dent., Chairman German Working Group Electro-Biology, Germany

Sonja Tamm, Baubiologin IBN, Germany

Ortwin Zais, Dr, Managing Chairman, EUROPAEM e.V. European Academy for Environmental Medicine e.V. Germany

Italy

Sparer Armin, Fach. Ing., Bozen, Italy

Netherlands

Peter van der Vleuten, Stichting Kennisplatform Elektromagnetische Straling and Brainport Biotech Solutions BV, The Netherlands

Switzerland

Peter Schlegel, M.Sc., Esslingen, Switzerland Markus Lauener, Präsident (chairman), Dachverband Elektromog Schweiz und Liechtenstein (Swiss Umbrella Organization for EMF protection), Switzerland

Argentina

Liliana Palancio, Presidente Asociación Civil Aletheia por la vida Personería Jurídica. Buenos Aire, Argentina.

Canada

Paul Héroux, PhD, Occupational Health Program Director, Department of Epidemiology, Biostatistics and Occupational Health, McGill University Medicine, Montreal, Canada

Martin Weatherall, Co-Director WEEP Initiative, Canada

Apéndice para lectura adicional.

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Yakymenko I, Tsybulin O, Sidorik E, Henshel D, Kyrylenko O, Kyrylenko S. Oxidative mechanisms of biological activity of low-intensity radiofrequency radiation. Electromagn Biol Med. 2016;35:186-202.