

Chamamento de Reikiavik sobre a tecnoloxía sen fíos nas escolas

Versión galega da APDR para a PECCEM. Orixinal en <http://www.stralskyddsstiftelsen.se/wp-content/uploads/2017/03/Reykjavik-Appeal-170224-2.pdf>

Nós, os abaixo asinantes, manifestamos a nosa preocupación pola saúde e o desenvolvemento dos nosos nenos/as nas escolas coa aplicación da tecnoloxía sen fío para o ensino. Unha gran cantidade de estudos científicos evidencian considerables riscos médicos debidos á exposición a longo prazo á radiación de radiofrecuencias (RFR) de redes e dispositivos sen fíos; moi por baixo dos niveis de referencia recomendados pola Comisión Internacional de Protección contra as Radiacións Non Ionizantes (ICNIRP). Pedimos ás autoridades que asuman a súa responsabilidade pola saúde e o benestar futuros das nosas e nosos.

En maio de 2011, a Axencia Internacional para a Investigación do Cancro (IARC) da Organización Mundial da Saúde (OMS) clasificou a radiación de radiofrecuencias (RFR) como carcinóxeno do Grupo 2B; é dicir, "posiblemente" carcinóxeno para os seres humanos. Desde entón, máis estudos científicos sobre a exposición a RFR en humanos, animais e material biolóxico han fortalecido a súa asociación a un maior risco de cancro, especialmente de tumores cerebrais. Varios estudos de laboratorio demostraron efectos mecánicos na carcinoxénese como o estrés oxidativo, a regulación á baixa do ARN mensaxeiro e o dano ao ADN con roturas dunha soa cadea. A clasificación de canceríxeno pola IARC inclúe todas as fontes de RFR. A exposición procedente de estacións base de telefonía móbil, puntos de acceso Wi-Fi, teléfonos intelixentes, ordenadores portátiles e tabletas pode ser a longo prazo, ás veces en todo momento, tanto en casa como na escola. Para os nenos/as este risco pódese acentuar debido ao efecto acumulativo do seu uso ao longo do resto da súa vida. Ademais, as células en desenvolvemento e inmaturas poden ser máis sensibles á exposición a RFR. Ningún organismo de saúde determinou ningún nivel seguro desta radiación e, polo tanto, non temos garantías de seguridade.

Ademais do risco de cancro, as RFR tamén poden afectar á barreira hematoencefálica facendo que se abra e permita a entrada de moléculas tóxicas no cerebro, danar neuronas do hipocampo (o centro cerebral de memoria), desregular as proteínas do cerebro esenciais para o metabolismo, a resposta ao estrés e a neuroprotección do cerebro e afectar aos neurotransmisores. Observáronse nos espermatozoides expostos ao Wi-Fi máis defectos na súa cabeza e danos no seu ADN. As RFR poden incrementar o estrés oxidativo nas células e levar a un aumento das citoquinas¹ pro-inflamatorias e reducir a capacidade para reparar roturas de cadeas de ADN simples ou dobres.

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

Tamén se demostraron deficiencias cognitivas na aprendizaxe e a memoria. Os resultados das enquisas de PISA da OCDE en lectura e matemáticas mostran resultados decrecentes nos países que máis investiron en introducir computadoras na escola. Realizar moitas tarefas simultaneamente, demasiadas horas diante da pantalla, dedicar menos tempo para contactos sociais e actividades físicas, risco de dores de pescozo e costas, sobrepeso, problemas de sono e adicción ás tecnoloxías da información e comunicación (TIC) son algúns dos riscos coñecidos e efectos secundarios das TIC. Todos eles en marcado contraste cos tan proclamados, pero en gran medida non probados, posibles beneficios.

Pedimos ás autoridades escolares de tódolos países que adquiran coñecementos sobre os riscos potenciais das RFR para o crecemento e desenvolvemento dos nenos/as. A promoción de tecnoloxías educativas por cable é unha solución máis segura que a potencialmente perigosa exposición á radiación sen fíos. Pedímoslles que sigan o principio ALARA (tan baixo como razoablemente sexa posible) e a [Resolución 1815 do Consello de Europa](#) para adoptar todas as medidas razoables para reducir a exposición a RFR.

Regras prácticas para as escolas con respecto aos nenos/as e a tecnoloxía sen fíos:

- Non debe haber redes sen fíos en preescolar, gardarías e escolas.
- Recoméndase unha conexión directa por cable en cada aula para uso do profesor durante as clases.
- Dar preferencia a los teléfonos fijos para el personal de preescolar, guarderías y escuelas.
- Primar á conexión por cable a Internet e as impresoras nas escolas e desactivar a configuración Wi-Fi en tódolos equipos.
- Dar preferencia aos ordenadores portátiles e tabletas que se poden conectar por cable a Internet.
- Non se debe permitir que os estudantes usen teléfonos móbiles nas escolas. Poden deixalos en casa ou que o profesor recóllaos en modo apagado antes da primeira clase da mañá.

Conferencia Internacional de Reykjavik (Islandia) sobre as nenas e nenos, o tempo de permanencia ante as pantallas e a radiación sen fíos, 24 de febreiro de 2017 (Children, Screen time and Wireless Radiation – International Conference Reykjavik). [Ver vídeos da xornada en: <https://ehtrust.org/science/key-scientific-lectures/2017-reykjavik-conference-technology-wireless-radiation-childrens-health/>]

Asinantes:

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

Sinaturas adicionales despois da 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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