



US and International Policy Update & Medical Recommendations on Children and Wireless and Health

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Environmental Health Trust



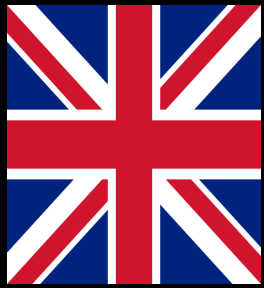


- [REDACTED]
- [REDACTED]
- [REDACTED]
- Walmart and other companies are seeking to eliminate risk by eliminating hazard, rather than by minimizing exposure, which is often much more difficult to control.
- Clinicians, health care institutions have a critical role to play.
- “Above all, political will is needed.”

[Kriebel 2016](#)

Health Agencies Advise **Reducing** Cell Phone Radiation

Often Contradictory Public Policy



United Kingdom



Russia



Switzerland



Finland



Ireland



Germany



Belgium



Greece



Israel



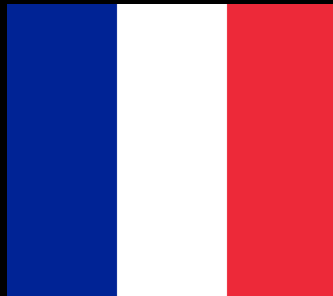
Turkey



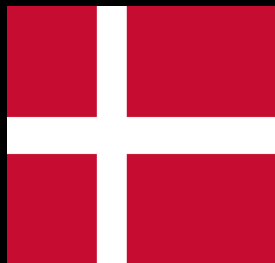
Austria



Singapore



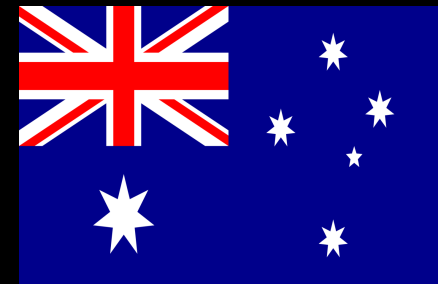
France



Denmark



India



Australia



Who is Responsible for EMF ?

Transparent Systematic Review ?

Panic Prevention or Public Health Protection?

Maryland State Children's Environmental Health and Protection Advisory Council, 19 Members

Purpose: To identify environmental hazards that may affect children's health and recommend solutions/guidelines to reduce and eliminate hazards.

Maryland Governor appoints 10 Members

Representatives of:

The Departments of Health

Department of the Environment,

Department of Agriculture,

Department of Education,

Department of the Environment,

Department of Agriculture,

Human Resources, and Housing,

MD Senate and House appointments.

Special Secretary of the Governor's Office for Children, Youth, and Families

Health providers and environmental scientists- Epidemiologist, Environmental

Toxicologist, Economist, Pediatrician



Maryland State Children's Environmental Health & Protection Advisory Council

2016 Report: Recommendations on School Wi-Fi

The First US State Body To Issue Recommendations

“The Council recommends limiting exposures as much as feasibly practical.”

The Maryland State Department of Education

- “Should consider using wired devices in classrooms”
- “If a new classroom is to be built... network cables can be added at the same time, providing wired network access.”

The Maryland Department of Health and Mental Hygiene

- Provide suggestions to the public on ways to reduce exposure
- Ask the United States Department of Health and Human Services to formally petition the FCC ensure the FCC exposure limit is protective of children’s health and that it relies on current science.

USA Public Schools Reducing Wi-Fi in Schools



**Petaluma California
Onteora New York
Ashland Massachusetts**

A Step in the Right Direction

Best Practices for Mobile Devices

- ❖ Turn off the device when not in use.
- ❖ Turn ~~wifi~~ on only when needed.
- ❖ Always place the mobile device on a solid surface.
- ❖ Viewing distance should be a minimum of 12 inches from the screen.

Ashland Massachusetts School District Best Practices

TEAMBCPS creating a culture of deliberate excellence



Enter Search Term



OUR SCHOOLS

STUDENTS

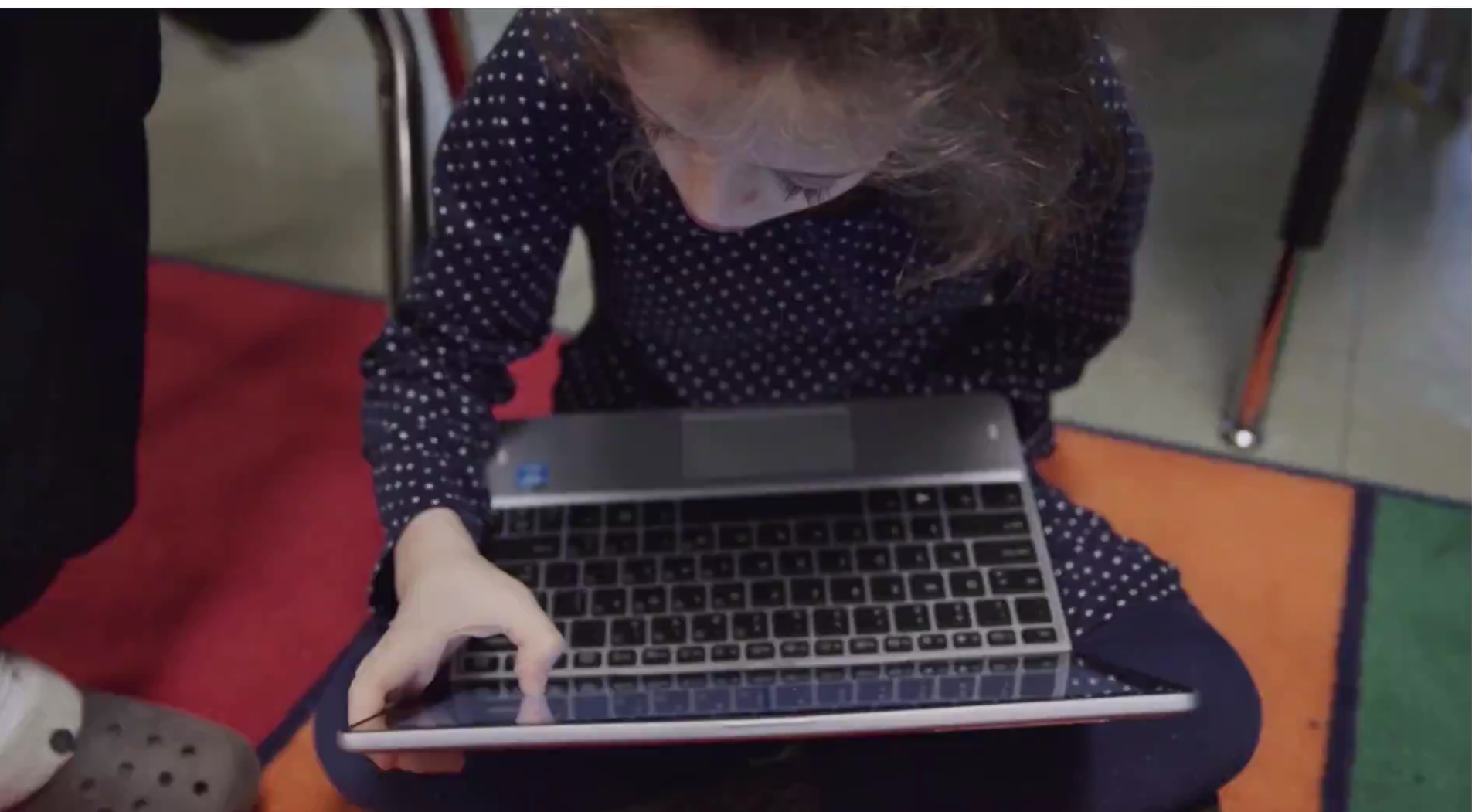
PARENTS

COMMUNITY

CALENDAR

LEADERSHIP

OUR SYSTEM



Taking Down the Wi-Fi Router, St. Augustine School, Italy 2014





Collaborative For High Performance Schools Low EMF Criteria

“It is important in school environments with children to apply the precautionary principle “as low as reasonably achievable (ALARA)”

Low EMF Criteria developed in 2014

- *Wired local area network
- *Ethernet port on devices
- *Correct wiring problems
- *Wired Phones



2014 US-CHPS

Criteria

New Construction
and Renovation

Belgium

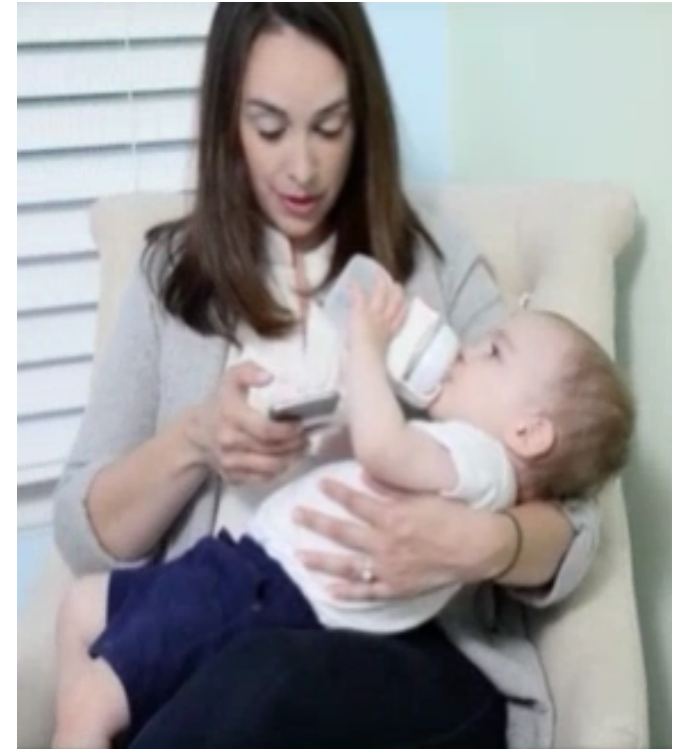


“Experts – including those on the Superior Health Council – advise everyone to limit their exposure to mobile phone radiation.”

- Ban on mobile phones for young children- under 7 years old.
- Ban on mobile phone advertising for under 7: magazines, journals, TV
- Ghent Municipality: Wi-Fi is banned from spaces that cater to children between 0 and 3 years.
- Belgium Health Council Webpages on EMF with Tips to Reduce Exposure

“Think about your health – use your mobile phone moderately, make your calls wearing an earpiece and choose a set with a lower SAR value.”

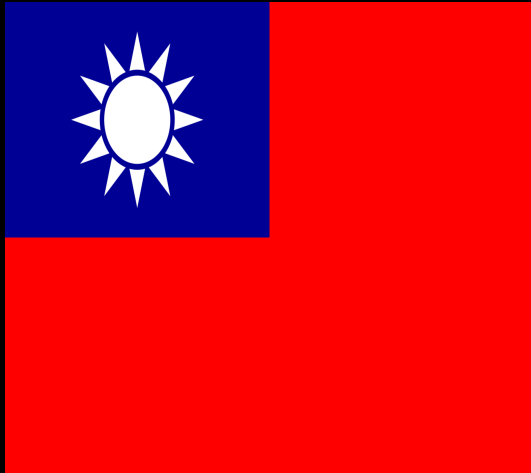
-Warning on Phones



Images from Swipe and Feed Kickstarter video



The Swipe & Feed



Taiwan

Protection of Children and Youths Welfare and Rights Act

- Complete ban on children under the age of two from using electronic devices such as iPads, televisions and smartphones.
- Parents can be fined NT \$50,000 (about \$1600 US Dollars)
- The new law also states that parents must ensure that under-18s only use electronic products for a 'reasonable' length of time.



France



The City of Lyon, Poster 2011

2015 National Law:

- Wi-Fi banned from nursery schools.
- Wi-Fi routers to be turned off in school classrooms (default setting) unless necessary for specific instruction.
- Cell Phone Ads *must* recommend headsets to *reduce* radiation to the head, 75,000 Euro fine.
- Wi-Fi hotspots labeled.
- Cell Antennae Maps: Towns with cell towers may request RF levels and levels will be publicly available.
- ElectrohyperSensitivity Report to Parliament
- Cell Tower Emission levels verified.

2011 Cell Phone Statute:

- Merchants must display Phone SAR .
- All phones must be sold with a headset.
- Ban on cell phone ads -children younger than 14.
- Phones made for children under 6 are banned.

French National Agency of Health Security of Food, Environment and Labour

2016 ANSES Report: “*Radiofrequency Exposure and The Health of Children*”



All wireless devices, including tablets, cordless phones, wireless toys and baby monitors should be subjected to the same regulatory obligations and public information as cell phones.

Exposure limits for RF-EMF should ensure large safety margins to protect the health and safety of the general population, particularly children.

Reliance on the specific absorption rate (SAR) should be re-evaluated and replaced with adequate assessment metric.

[2015 ANSES Press Release](#)

Largest group of US Pediatricians Issues Recommendations To Reduce Children's Exposure

AAP News

DEDICATED TO THE HEALTH OF ALL CHILDREN™

May 27, 2016

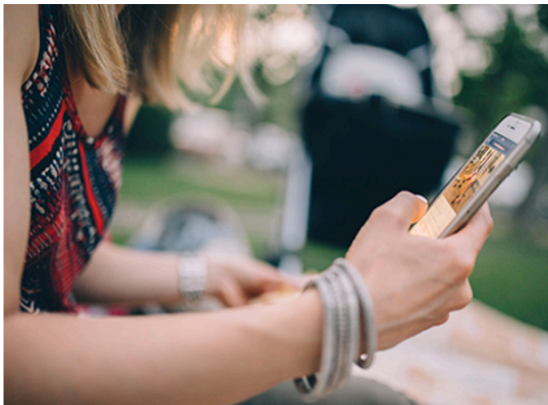
AAP responds to study showing link between cell phone radiation, tumors in rats

Melissa Jenco, News content editor

Some rats developed tumors after being exposed to cell phone radiation, according to preliminary results of a study released Thursday.

In light of the findings, the Academy continues to reinforce its recommendation that parents should limit use of cell phones by children and teens.

"They're not toys. They have radiation that is emitted from them and the more we can keep it off the body and use (the phone) in other ways, it will be safer," said Jennifer A. Lowry, M.D., FAACP, FAAP, chair of the AAP Council on Environmental Health Executive Committee.



[AAP Webpage](#)

American Academy of Pediatrics 10 New Safety Tips for Cell Phones

"If you plan to watch a movie on your device, download it first, then switch to airplane mode while you watch in order to avoid unnecessary radiation exposure."



healthychildren.org
Powered by pediatricians. Trusted by parents.
from the American Academy of Pediatrics

Search for safety

Cell Phone Radiation & Children's Health: What Parents Need to Know

- Children are not just little adults; their growing minds and bodies make them uniquely vulnerable to the effects of the environment around them, including cell phone radiation.

Because technology is being adopted by children at younger ages



California Medical Association

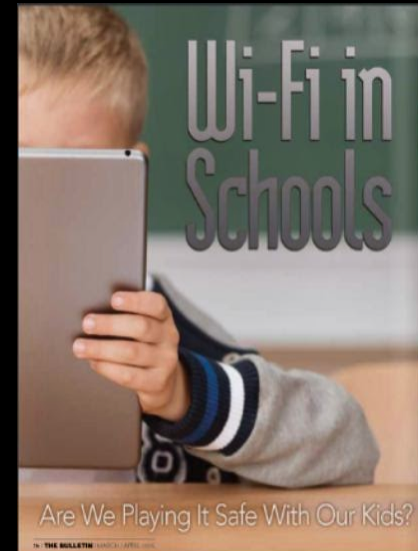
Resolution on Wireless Standards Reevaluation 12/2014

Resolved, That CMA support efforts to implement new safety exposure limits for wireless devices that do not cause human or environmental harm”

“Peer reviewed research has demonstrated the following adverse biological effects of wireless EMF....

Biological Effects

- “Single and double stranded DNA breaks
- Creation of reactive oxygen species
- Immune dysfunction,
- Cognitive processing effects
- Stress protein synthesis in the brain
- Altered brain development
- Sleep and memory disturbances
- ADHD
- Sperm dysfunction
- Brain tumors”



Santa Clara Medical
Association Bulletin

Vienna Medical Association

The radiation from mobile phones or smartphones is most likely not as safe as cell phone providers claim it to be.

Therefore, the Ärztekammer Wien (Vienna Medical Association) has decided to do the responsible thing and inform the Austrian public about possible adverse effects from a medical perspective.



Medical Rules For Cell Phone Use

- In general, keep calls short and as few as possible.
- Children and teenagers under the age of 16 should carry mobile phones for emergencies only!
- “Distance is your friend.” Keep the phone away from your body and head.
- Do not keep the phone directly on your body when using a headset or the built-in speakerphone. Pregnant women should be especially cautious.
- Do not use in vehicles (car, bus, train). Without an external antenna, the radiation inside the vehicle is higher.
- Make phone calls at home and at work via a hardwired network. Constantly radiating DECT cordless phones, Wi-Fi access points, data sticks and LTE modems should be avoided!
- Work offline more often or put your phone in airplane mode.
- Fewer apps means less radiation. Minimize the number of apps and disable the most unnecessary background services on your smartphone.
- Avoid making calls in places with poor reception (basement, elevator and the like).

Excerpts From 1/2016 10 Medical Rules

City and State Actions To Reduce Exposure



Italy

Turin Mayor Chiara Appendino “Cut back on Wi-Fi”

Borgofranco d'Ivrea Mayor ordered Wi-Fi to be turned off in schools.

South Tyrol State Parliament Vote to Allow Precautionary Principle

Piemonte Region Resolution to limit EMF exposure.

Italian Supreme Court ruled man's brain tumor caused by mobile phone use.

The Italian Society for Preventive and Social Pediatrics has officially called to prohibit cell phones for children under 10 years old.



Spain

The Parliament of Navarra: Vote to apply precautionary principle.

The Vitoria City Council: Approved Precautionary Principle

Basque Parliament: Resolution joining European Council, called for awareness

High Court of Madrid recognized “Electrosensitivity” as grounds for disability-

City of Tarragona Municipal Government “Institutional Declaration of support for people with Central Sensitivity Syndromes”

2017 Maryland Screen Safety Legislation Introduced

State Agencies to Develop Medical Guidelines for Computer Use in School



“I was shocked to learn that the Maryland State Department of Education had no medically sound health guidelines in place before they put so many of our children in front of a computer every day . . .”

-Cindy Eckard



UNITED STATES DEPARTMENT OF LABOR

Occupational Safety and Health Administration Checklist for Computer Workstation

- Top of monitor at or just below eye level
- Head and neck balanced and in-line with torso
- Shoulders relaxed
- Elbows close to body and supported
- Lower back supported
- Wrists and hands in-line with forearms
- Adequate room for keyboard and mouse
- Feet flat on the floor

Technology Program at Baltimore County Public Schools



Excerpts from Youtube Video of CEO Discovery Education Visiting Baltimore Public Schools



Juhi Chawla receiving the Indira Gandhi Award



India

2012 Exposure Limits at 1/10 of the ICNIRP level
SAR labeling on phones.

2013: Supreme Court of India upheld the High Court of the State of Rajasthan decision to remove all cell towers from the vicinity of schools, hospitals and playgrounds because of radiation “hazardous to life.”

Zilla Parishad: removal of all cellphone towers near schools

Municipal Corporation of Greater Mumbai, no cell towers on playgrounds, recreational grounds, gardens and parks.

Ministry of Communications/ Technology EMF Webpage

12 Guidelines for Reducing Cell Phone Radiation

Use Headsets or Speakerphones

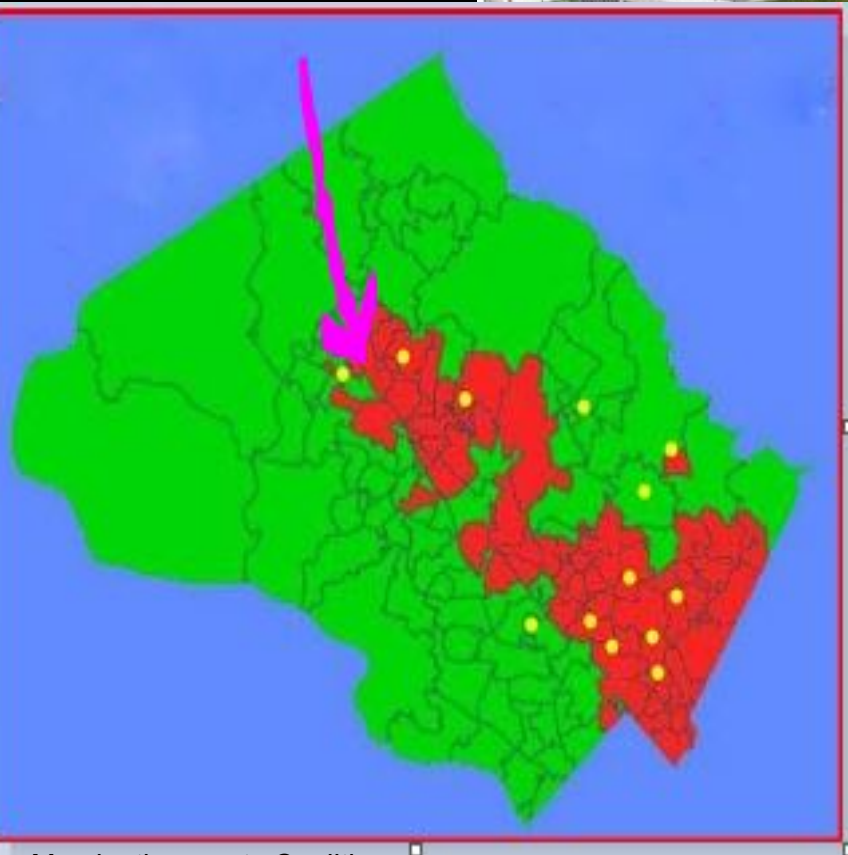
Limit cell use

Increase distance from devices

Choose landlines for calls

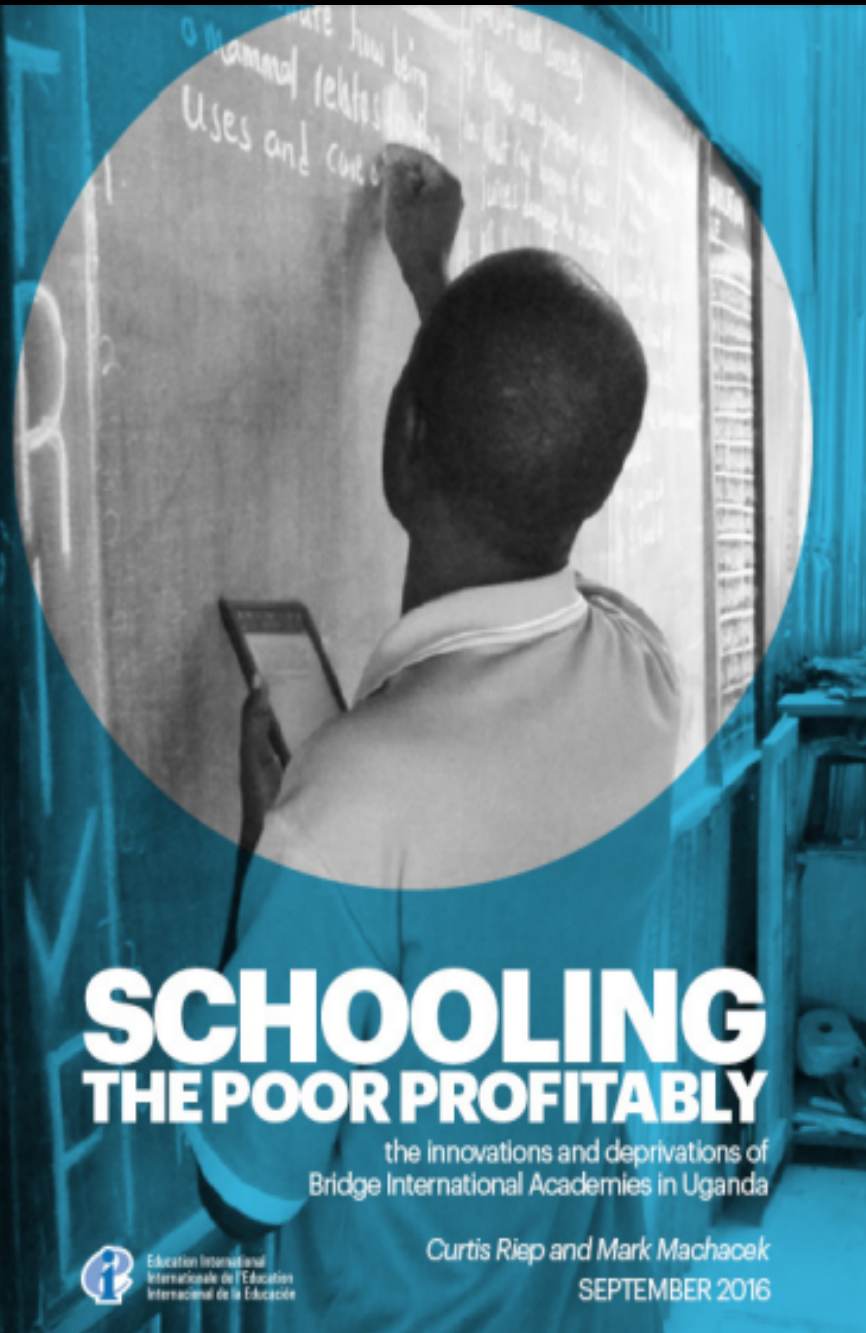


Cell Towers Increasingly Built on US School Grounds



Map of Montgomery County MD showing cell towers are more often placed on schools with higher minority/higher poverty rates.

Red = Higher Poverty/Minority Areas



BBC



NEWS

Uganda court orders closure of low-cost Bridge International schools [11/2016](#)

Bridge Schools- Largest chain of for profit private

Academy in a box

- Lesson notes on e readers and tablets.
- Teachers use tablet computers 'teacher-computers' to deliver scripted instructions.
- Smartphones manage operations- one admin employee.

Education International Report states:

- Poor quality education
- Unsafe and unhygienic buildings
- Families investing 25% income
- "A form of neocolonialism"

"Populations living in poverty in the global South are increasingly seen by multinational firms as new sources of revenue that provide an immense, yet largely untapped, market opportunity"

SCHOOLING THE POOR PROFITABLY

the innovations and deprivations of
Bridge International Academies in Uganda



Education International
Internationale de l'Éducation
Internacional de la Educación

Curtis Riep and Mark Machacek

SEPTEMBER 2016

LA California Classrooms in Disrepair Amidst 1.3 Billion \$ iPad Contract

Facebook page “Repairs Not iPads” started by Los Angeles California teachers in protest of prioritizing tech over hygiene and building repair needs (2014),.



Images of Los Angeles School District Schools from *Repairs not iPads* Facebook Page

The Pen is Mightier Than the Keyboard: Advantages of Longhand Over Laptop



“The present research suggests that even when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing. In three studies, we found that students who took notes on laptops performed worse on conceptual questions than students who took notes longhand”.

Pam A. Mueller Princeton University, Daniel M. Oppenheimer Univ of CA. Psychol Sci. 2014

21st Century Science Should Inform 21st Century Policy

Lessons from History *Best Available Science * Health Cost/ Benefit



A modern advertisement for Xfinity WiFi. The top image shows a man and a woman in winter clothing looking at a smartphone. Below this, the text reads "XFINITY WIFI BRINGS JOY TO YOUR TOYS." followed by a paragraph of fine print. To the right, there is an illustration of a laptop with the word "JOY" on its screen, surrounded by various electronic devices. At the bottom, the text says "Home is where the hotspot is" above an illustration of a house with three wireless signal icons emanating from its roof. A vertical banner on the left side of the bottom section reads "XFINITY WIFI".

Technology Creates E-Waste



Image by [Bert van Dijk](#) Guiyu e-waste

Women, children and men work under terrible conditions to extract all the precious metals from circuit boards, computers, ic's and other electronics.

<https://www.flickr.com/photos/zilpho/2995063344/in/album-72157608592358765/>

E- Waste

42 Million Tons 2014 * 15% Formally Collected * 85% Lost

Migrant child from Hunan province sits atop one of countless piles of unrecyclable computer waste imported from around the world.

[Baselactionnetwork](#) Childon_garbage_pic

<https://www.flickr.com/photos/basel-action-network/9260624833/in/album-72157634596510160/>

Hands That Held My Phone Before Me

The Human Cost of Electronics

Cobalt , Gold, Tantalum, Tungsten, Tin, Conflict Minerals, Factory Chemical Exposures



Image from Fairphone
Creuseurs at Gecamines, Kolwezi



Image by Enough Project Conflict minerals 4 - Lezhnev



Image by Fairphone Batteries being
assembled at second tier supplier 3SUN

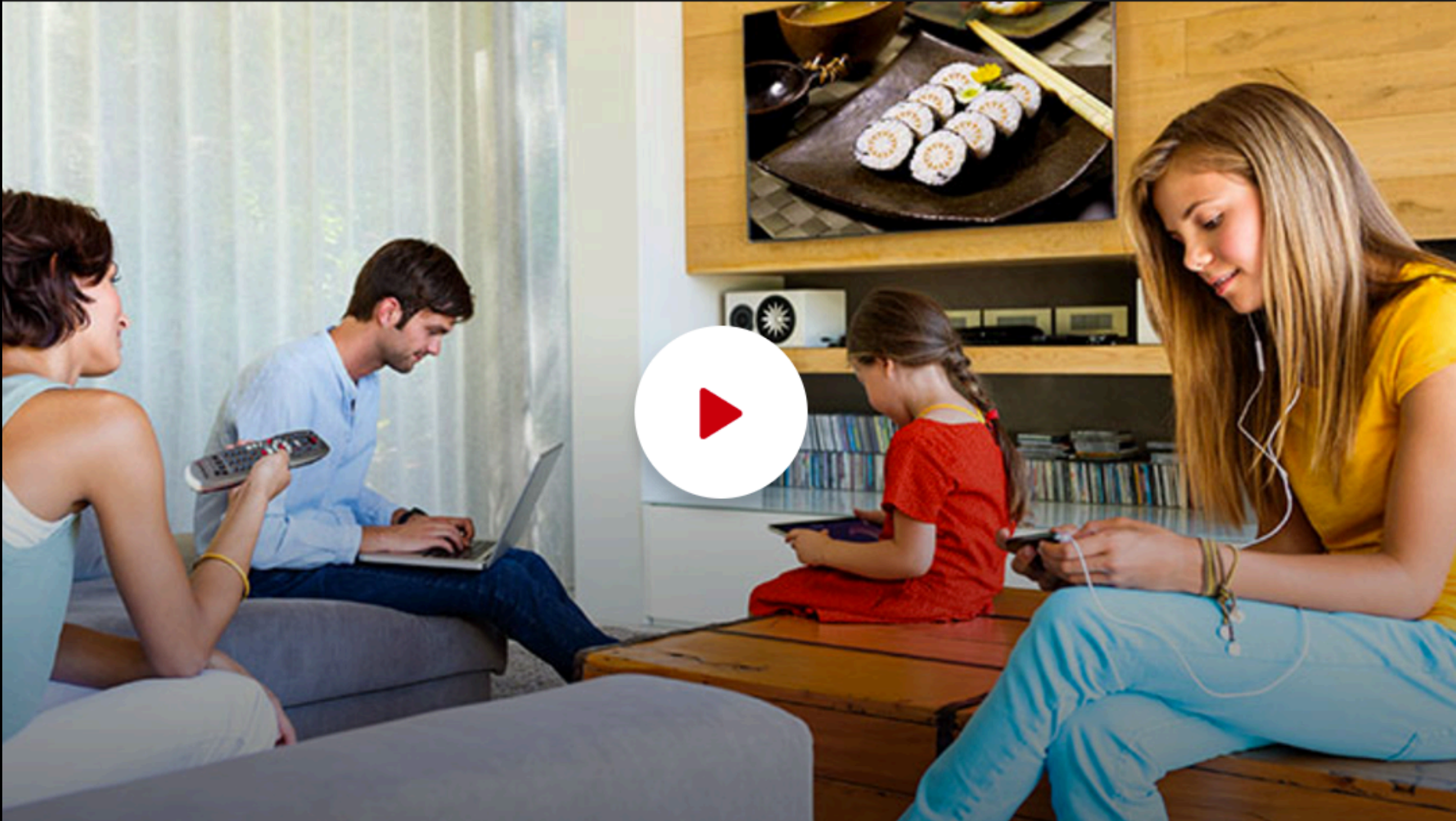



**BUT THE SEARCH CARRIES A HIGH
HUMAN TOLL.**

SCROLL DOWN ↓

Skype

Washington Post: THE COBALT PIPELINE Tracing the path from deadly hand-dug mines in Congo to consumers' phones and laptops---September 30 2016



COMCAST
SPOTLIGHT
SUCCEED ON SCREEN



Credit Ed Tech Stanford University Img 4975 Flickr

2015



A Blueprint

for Protecting Children's Environmental Health:
An Urgent Call to Action



CHILDREN'S
ENVIRONMENTAL
HEALTH
NETWORK



CHILDREN'S ENVIRONMENTAL HEALTH NETWORK

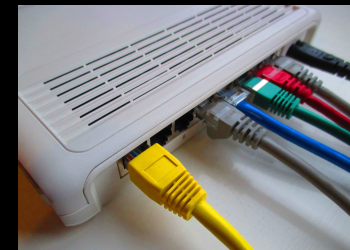
A healthy environment for all children

“We believe that it is our moral obligation to protect and nurture our children’s health.

And we believe that their health is a state of physical, mental, and social well-being, not merely the absence of disease.



The most important human endeavor is the striving for morality in our actions.
-Albert Einstein



Slides for Discussion



The Cell Phone Right To Know Ordinance

Alameda County California

May 2015: US city voted unanimously to require cell phone retailers provide a fact sheet.

"The City of Berkeley requires that you be provided the following notice:

To assure safety, the Federal Government requires that cell phones meet radio frequency (RF) exposure guidelines. If you carry or use your phone in a pants or shirt pocket or tucked into a bra when the phone is ON and connected to a wireless network, you may exceed the federal guidelines for exposure to RF radiation. Refer to the instructions in your phone or user manual for information about how to use your phone safely."

Radiofrequency Exposure in the Neonatal Medium Care Unit



RF-EMF Findings

Spot measurement (dosimeter) mean 1.51 ± 0.48 V/m.
Higher values in proximity to window and to the incubator.
Mean field strength (17 h) was $0.81 (\pm 0.07)$ V/m.
Maximum value was 1.58 V/m for long-term in incubator.
Night period values were higher than daytime.

[Calvente et al. 2017](#)

Children Are Wearing Metal Glasses Despite Warnings That Metal so Close to Brain and Phone Could Intensify Radiation

“Spectacle frame can cause SAR increase up to 70% in relation to human head model without spectacle frame.”

[BIENKOWSKI et al 2013](#)



The **ASUS Zen Phone 2 Manual** states: Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified, and use of such accessories should be avoided.

http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE550ML/e10509_ze550ml_ze551ml_em_0601.pdf



from Youtube video <https://www.youtube.com/watch?v=mKrbDKO5f08>

BEST PRACTICES IN THE USE OF WIRELESS TECHNOLOGY
Dr. Robert S. Knorr Director, Environmental Epidemiology Program
Bureau of Environmental Health
Massachusetts Department of Public Health

“Below are common recommendations and include those for both cell phone and non-cell phone sources:

- Use wired communication devices instead of wireless devices
- Limit children’s use of cell phones except for emergencies
- Keep cell phones and other sources at a distance

If using wireless devices like computers, laptops, tablets, and printers, place the wireless router away from where children and adults usually spend time.

Severe psychological disorders has tripled

This is your brain online: The impact of technology on mental health

Presented to the MSU Pre-College Program Faculty and Staff Workshop, March 25, 2015
Scott Becker, Ph.D.
Acting Director
MSU Counseling Center

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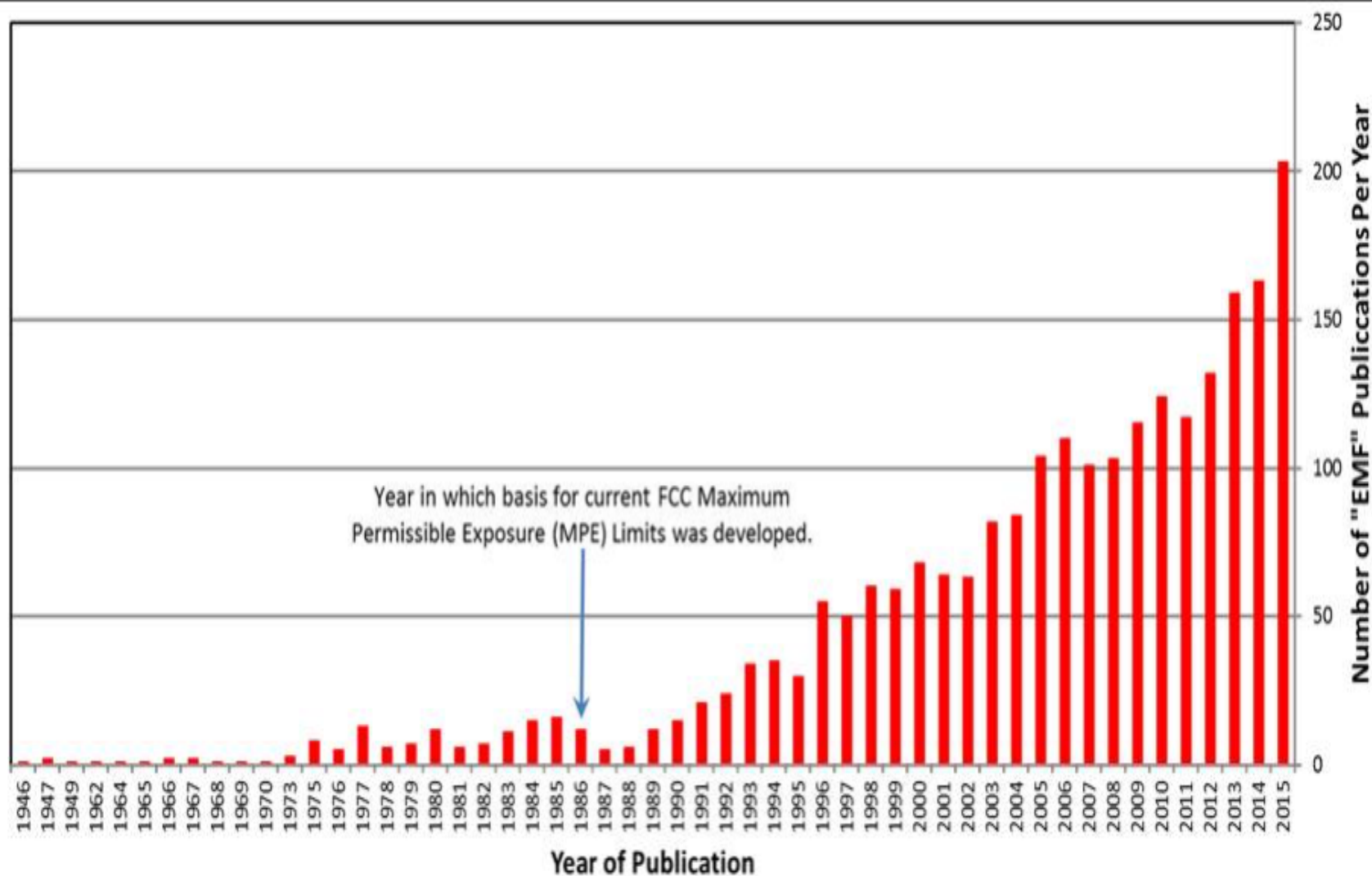


Connecticut Department of Health

“Scientists also agree that it is wise to reduce exposure to RF energy from cell phones whenever possible, particularly in children.”

- Use a hands-free device or speakerphone as much as possible.
- Text instead of talking.
- Avoid sleeping next to your cell phone. Keep it at least several feet from the bed.
- When your phone is powered on, try to carry it away from your body in a purse, briefcase or backpack rather than in your pocket.

Number of "EMF" Publications Per Year on NIH's Pubmed Database



Ref: <http://www.ncbi.nlm.nih.gov/pubmed/?term=emf> as of 2/24/2016

Safe use of technology

Your guide



**Queensland
Government**

“Wireless devices — smart/mobile phones, tablets, slates, monitors etc — all emit low levels of electromagnetic radiation and should be used correctly.

When using electronic devices, the department recommends you follow WiFi/3G/4G best practice:

- follow the manufacturer’s usage guideline operate from a table or bench — not on your lap
- use ‘hands-free’ devices to keep smart/mobile phones away from your head and body during phone calls
- limit the number and length of calls
- position the device antenna away from your body
- do not sit within 0.5 m of a wireless router
- use smart/mobile phone in areas of good reception to reduce exposure.”

[2015 Factsheet](#)

Safe use of technology

Get the facts



Queensland
Government

“The department has a number of measures in place to ensure staff and student safety in regards to the use of WiFi and portable devices...”

“compliance with network infrastructure standards

“health and safety guides and information sheets for staff, parents and students
“

International EMF Project Dr. Michael Repacholi is quoted

“International safety guidelines have been stable for 15 years which should engender confidence in the standards setting process and that they are a sound basis to protect the population.”



AT&T

2014 Annual Report

“Unfavorable litigation or governmental investigation results could require us to pay significant amounts...

As we deploy newer technologies, especially in the wireless area, we also face current and potential litigation relating to alleged adverse health effects on customers or employees who use such technologies including, for example, wireless handsets.

We may incur significant expenses defending such suits or government charges and may be required to pay amounts or otherwise change our operations in ways that could materially adversely affect our operations or financial results.”



Telstra reminder msg. For information on mobile use, Electromagnetic Energy and tips to reduce exposure visit: <http://telstra.com.au/mobiletips>

[“Mobiles and Your Health](#)

The WHO provides the following information on how to reduce mobile phone exposure:

1. Use 'hands-free' devices to keep mobile phones away from the head and body during phone calls.
2. Limit the number and length of calls.
3. Use the phone in areas of good reception, which reduces exposure as the phone will transmit at reduced power.”

<https://crowdsupport.telstra.com.au/t5/General-Mobiles-KB/Mobile-advice-and-tips/ta-p/175972>

EQUIPMENT PROTECTION PROGRAMS

Total Equipment Coverage
Wireless Phone Protection
Extended Warranty

ENROLL TODAY!
YOU HAVE 30 DAYS
FROM ACTIVATION
TO ENROLL!



LOSS • THEFT • DAMAGE
LIQUID DAMAGE • MALFUNCTION

asurion  verizon wireless

Insurance Protects The Phone *But Not the Person*

However- damage to the phone is excluded *if it is from EMFs.*

“Coverage Excludes Pollution.”

“Pollution is defined as “The discharge, dispersal, seepage, migration, escape or presence of pollutants. Pollutants means any solid, liquid, gaseous, or thermal irritant or contaminant including smoke, vapor, soot, fumes, acid, alkalis, chemicals, artificially produced electric fields, magnetic field, electromagnetic field, sounds waves, microwaves, all artificially produced ionizing or non-ionizing radiation and/or waste.”

https://www.phoneclaim.com/doc_list/doc_download/754-verizon-lookup-all-brochure-12309

 ENVIRONMENTAL
HEALTH TRUST

2.45 GHz (Wi-Fi)
34 Year Old Male
Notebook on Lap



Fernandez 2017
Environmental Health Trust

EMR/RFR is associated with immune changes

Autism is associated with disturbed Immune Function

EMF/RFR Impacts



- Association with large immunohistological changes in mast cells
 - E.g., increased histamine, chymase, tryptase
- Relation to cellular damage and impaired tissue repair
- Benchmark immune indicators occur under low level exposures


Autism

- Genetic and epigenetic contributors
- Heterogeneous manifestations
 - Some autoimmune
 - Some rarely get sick
 - Rashes, eczema, allergies, psoriasis common
- Neuroinflammation and glial activation
- Association of immune response of infection in pregnancy to autism risk
- Immune and behavior changes associated

As Low As Reasonably Possible ALARA

“Make every reasonable effort to maintain exposures to radiation as far below the dose limits as practical.”



**5°C** P/CLOUDY
TOKYO (8 a.m.)
MARKETS 114.81 ¥/\$ (5 p.m.)

The Japan Times

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NEWS

MENUCITY GUIDE

Q

NATIONAL / SCIENCE & HEALTH

Low-dose radiation exposure slightly increases leukemia risk: study

KYODO

nature International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Authors

Archive > Volume 523 > Issue 7558 > News > Article

NATURE | NEWS

عربي

Researchers pin down risks of low-dose radiation

Large study of nuclear workers shows that even tiny doses slightly boost risk of leukaemia.

THE BALTIMORE SUN





Credit: Papua New Guinea: Gaire One Laptop per Child

Public Health Response

Eliminate risk by eliminating hazard.
Minimize residual exposure.

ALARA

As Low As Reasonably Possible



New Jersey Educational Association

1 Million Young People in 11 Countries



ASUS Zen Phone 2 -Google Expeditions Smartphone

RF Exposure Information

“To reduce exposure to RF energy, use a hands-free accessory or other similar option to keep this device away from your head and body.”

“Carry this device at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels. http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE550ML/e10509_ze550ml_ze551ml_em_0601.pdf

Virtual Reality with Smartphone





UPPER STURT PRIMARY SCHOOL POLICIES

WiFi and Wireless Devices



UPPER STURT PRIMARY SCHOOL POLICIES

WiFi and Wireless Devices

Purpose

Upper Sturt Primary School is committed to providing a safe and healthy learning environment for our children. Unplanned prolonged term exposure to wireless computer networks (WIFI) and wireless communication devices in school may present a potential health and safety risk or hazard for children and staff.

WiFi and wireless communication devices such as mobile phones and tablets use microwave radiofrequency. The World Health Organisation's International Agency for Research on Cancer (IARC) classified microwave radiofrequency electromagnetic fields as Group 2B "possibly carcinogenic to humans" (May 2011).

The Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) Fact Sheet 14: How to reduce exposure from mobile phones and other wireless devices recommends reducing unnecessary exposure to radiofrequency emissions from mobile and cordless phones, other wireless devices and wireless computer networks (WIFI).

As a precautionary approach, Upper Sturt Primary School uses wired computers to safely access the internet. Wired smart boards and telephones have also been installed for educational and administrative purposes.

The Precautionary Principle

"When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically." http://www.ohse.org/Voluntar_3_1.html

Operations: To reduce exposure to unnecessary microwave radiofrequency emissions.

Roles and Responsibilities:

Leaders	Teachers & SSO	Students	Parents
<ul style="list-style-type: none"> Inform staff, parents and students of WiFi and Wireless Devices Policy provide access to wired computers and telephones (no cordless DECT phones) ensure new buildings (if internet access required) include a fully wired ethernet infrastructure use powerline ethernet adapters which use existing electrical wiring to extend a network recommend mobile phones be switched to flight/airplane mode when not in use and iPods and tablets be used in flight/airplane mode restrict use of microwave ovens around children 	<ul style="list-style-type: none"> limit use of mobile phone on school grounds and use landline where possible turn off mobile phone or switch to flight/airplane mode when not in use keep connected phone away from children wireless devices (tablets/iPads) used for teaching must be in flight/airplane mode avoid use of microwave ovens when children are present 	<ul style="list-style-type: none"> turn off mobile phone or switch to flight/airplane mode when not in use wireless devices (tablets/iPads) used for learning purposes must be in flight/airplane mode 	<ul style="list-style-type: none"> limit use of mobile phone and wireless devices on school grounds turn off mobile phone or switch to flight/airplane mode if spending extended time at school with children eg. during children's read

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“As a precautionary approach, Upper Sturt Primary School uses wired computers to safely access the internet.”

The Precautionary Principle

"When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."

Wired devices in classes * Airplane mode * Minimize mobile phone
Prefer landline Phones *Wired Smartboards